

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>ALABAMA, North Central</u>									
Madison County									
New Market	01	1550CST			0	0	3K	0	Thunderstorm Wind (G50) A few large trees and power lines were blown down near New Market.
Madison County									
Huntsville	01	1600CST			0	0	2K	0	Thunderstorm Wind (G50) A few trees and power lines were blown down in the western part of Huntsville.
Dekalb County									
Fyffe	01	1605CST			0	0	0	0	Hail(1.00) Quarter size hail was reported in Fyffe.
Shelby County									
Vandiver	02	1244CST			0	0	1K	0	Hail(1.00) Quarter size hail was reported covering the ground in Vandiver.
Jefferson County									
Gardendale	02	1310CST			0	0	0	0	Hail(0.75) Dime size hail was observed in Gardendale.
Talladega County									
Sylacauga	02	1324CST			0	0	3K	0	Thunderstorm Wind (G55) A few trees, several large limbs, and some power lines were blown down around the Avondale Mills Property in Sylacauga.
Chilton County									
Clanton	02	1410CST			0	0	3K	0	Thunderstorm Wind (G50) Trees and power lines were knocked down just south of Clanton. A few trees and power lines were also knocked down near Verbena.
Walker County									
Jasper	02	1426CST			0	0	2K	0	Thunderstorm Wind (G50) Several trees were blown down on SR 269 and on US 78 near Jasper.
Marion County									
Hackleburg	02	1450CST			0	0	0	0	Hail(0.75) Dime size hail was reported in Hackleburg.
Tuscaloosa County									
Countywide	02	1500CST			0	0	50K	0	Lightning Several thunderstorms moved across west-central Alabama. These thunderstorms produced frequent lightning strikes. One home was struck by lightning in Northport and a subsequent fire ensued. No injuries were reported. During the height of the storm activity, nineteen thousand customers were temporarily without power.
Etowah County									
Rainbow City	02	1508CST			0	0	0	0	Hail(0.75) Dime size hail was reported in Rainbow City.
Marshall County									
Boaz	02	1519CST			0	0	3K	0	Thunderstorm Wind (G50)
Marshall County									
Highpoint	02	1519CST			0	0	0	0	Hail(0.75) Trees and power lines were blown down in Boaz. Dime size hail also fell in the Highpoint area.
Etowah County									
Attalla	02	1520CST			0	0	3K	0	Hail(1.75) Quarter to golf ball size hail was observed in and around Attalla.
Winston County									
Haleyville	02	1520CST			0	0	0	0	Hail(0.75)
Winston County									
Haleyville	02	1520CST			0	0	5K	0	Lightning
Winston County									
Haleyville	02	1520CST			0	0	10K	0	Thunderstorm Wind (G55) Numerous trees were knocked down in and around Haleyville. A few of the trees landed on homes causing damage. One home sustained major garage damage. Lightning strikes caused two fires in the area with one utility building destroyed. Dime size hail

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ALABAMA, North Central

was also reported with this storm.

Marion County

Countywide	02	1535CST 1600CST			0	0	15K	0	Thunderstorm Wind (G55)
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Numerous trees and power lines were blown down across Marion county. Several of the fallen trees temporarily blocked roadways.

Lawrence County

11 SW Moulton	02	1554CST			0	0	0	0	Hail(0.75)
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Dime size hail fell across the southwest parts of Lawrence County in the Bankhead National Forest.

Lamar County

Detroit	02	1615CST			0	0	7K	0	Thunderstorm Wind (G55)
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Numerous trees were blown down in and around Detroit.

Pickens County

Carrollton	02	1630CST			0	0	25K	0	Thunderstorm Wind (G60)
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The roof was blown off the Carriage House Antiques in downtown Carrollton. In addition, several trees and power lines were blown down in isolated locations across the county.

Lauderdale County

Rogersville	02	1737CST			0	0	2K	0	Thunderstorm Wind (G50)
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A few trees and power lines were knocked down in and around Rogersville. A few trees were also blown down near Lexington.

Chilton County

Clanton	04	1515CST			0	0	3K	0	Thunderstorm Wind (G50)
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Several trees were blown down near mile marker 210 on Interstate 65.

Shelby County

Pelham	04	1550CST			0	0	2K	0	Thunderstorm Wind (G50)
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Several trees were knocked down in Pelham.

Montgomery County

Montgomery	04	1630CST			0	0	15K	0	Lightning
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Thunderstorms produced frequent lightning across the city of Montgomery. Lightning strikes caused power outages and several power lines were knocked down.

Randolph County

Roanoke	04	1705CST 1715CST			0	0	0	0	Hail(0.75)
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Randolph County

5 NW Roanoke	04	1705CST 1715CST			0	0	2K	0	Thunderstorm Wind (G50)
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Dime size hail was reported in Roanoke. Dime size hail also fell in several other locations around Randolph County. Trees were blown down just northwest of Roanoke in the Pinshop community.

Shelby County

3 E Harpersville	07	1645CST			0	0	0	0	Hail(1.00)
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Dime to quarter size hail was reported just east of Harpersville on CR 85. One very large pine tree was knocked down and several large limbs were broken during this same storm.

Lawrence County

Moulton	09	1745CST			0	1	0	0	Lightning
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One person was struck by lightning and sustained minor injuries just north of SR 157 near Moulton.

St. Clair County

Countywide	11	1200CST			0	0	20K	0	Lightning
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Two homes were struck by lightning in St. Clair County. Both homes had subsequent fires that caused damage. No injuries were reported.

Chilton County

4 SSW Maplesville	11	1235CST			0	0	2K	0	Lightning
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Lightning struck a tall pine tree next to a residence along SR 22 south-southwest of Maplesville and exploded the tree with debris being blown as much as 100 feet from the tree. The lightning caused about \$2000 worth of damage to the residence primarily to electrical appliances and the telephones. All of the telephone wiring was burned and had to be replaced. The pine tree, normally containing lots of sap, was bone dry.

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ALABAMA, North Central

St. Clair County

Odenville	11	1235CST 1340CST			0	0	2K	0	Flash Flood
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Several roads were temporarily impassable due to localized flooding in Odenville.

Jefferson County

Birmingham	11	1830CST 1930CST			0	0	4K	0	Flash Flood
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Heavy rainfall in a short period of time caused some flooding in the Birmingham Metropolitan area. Several roads were temporarily impassable due to the high water.

Jefferson County

Birmingham	12	1630CST			0	0	8K	0	Lightning
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Thunderstorms produced frequent lightning across the Birmingham metropolitan area. Several power lines were knocked out across the city due to lightning strikes.

Jefferson County

Countywide	12	1825CST 2200CST			0	0	25K	0	Flash Flood
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Very heavy rainfall in a short period of time occurred mainly on the east side of the Birmingham Metropolitan area. Radar estimated 4 to 6 inches of rain over a three hour period. Some local gage locations reported 3 to 4 inches in one hour and 4 to 5 inches in two hours. Several local creeks and their tributaries, including Five Mile Creek, Shades Creek, Shades Creek Branch, Turkey Creek and Village Creek, ran at or over bankfull. Several swift water rescues were made by local fire departments. Numerous vehicles were stranded in the high water and many roads were closed and impassable. Several homes and a few businesses received water damage.

Rainfall Totals (Most rain was short duration and heavy):

Birmingham Airport	7/11	1.79
	7/12	2.86
Pinson	7/11	1.19
	7/12	3.51
Huffman (Coop)	7/11	3.30
	7/12	4.05
Huffman	7/11	2.01
	7/12	4.18
Ketona	7/11	0.75
	7/12	3.86
Village Creek 86th St.	7/11	2.29
	7/12	2.71
Turkey Creek	7/11	1.22
	7/12	3.07

Autauga County

Autaugaville	12	1905CST			0	0	4K	0	Thunderstorm Wind (G55)
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Several trees were blown down on CR 45 and on CR 19 near Autaugaville.

Winston County

Countywide	19	1335CST 1350CST			0	0	5K	0	Thunderstorm Wind (G50)
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Several trees were blown down or uprooted mainly in the eastern half of the county.

Blount County

1,3 SSW Bangor to 5 E Remlap	19	1442CST 1458CST			0	0	8K	0	Thunderstorm Wind (G60)
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A strong thunderstorm moved east-southeast across the southern portion of Blount County downing trees and power lines. A few structures were damaged, some with lost shingles or a few when trees fell on them. This same storm continued into St. Clair County producing a brief tornado there. The area of damage was approximately 6 miles wide from just southwest of Bangor to east of Remlap. Damage was reported to be the most severe in the Hayden area.

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					Killed	Injured	Property	Crops	
<u>ALABAMA, North Central</u>									
St. Clair County									
3.7 NW Springville to 3.2 NE Wattsville	19	1458CST 1530CST			0	0	4K	0	Thunderstorm Wind (G55)
A strong thunderstorm moved east-southeast from Blount County into St. Clair County producing downed trees in a path about 5 miles wide from northwest of Springville to northeast of Wattsville. Most of the damage consisted of downed trees and power lines.									
St. Clair County									
7.9 ESE Springville to 8.3 ESE Springville	19	1522CST	0.4	50	0	0	1K	0	Tornado (F0)
Meteorologists from the National Weather Service Warning and Forecast Office in Birmingham completed a storm survey of the damage in St. Clair County. Much of the damage consisted of scattered downed trees and power lines. However, 7.9 miles east-southeast of Springville, meteorologists identified a short path of downed trees with evidence of rotation.									
The damage path began 7.9 miles east-southeast of Springville on the west side of US 411. The path extended for about 4 tenths of a mile and was approximately 50 yards wide. The area where the tornado touched down was mostly open fields, however, a few trees were downed along with several large limbs and the tops of some trees. Orientation to the downed trees was consistent with the presence of a weak rotation. The tornado was rated an F0 on the Fujita Scale for tornado classification. Beg.: 33 45.042/86 20.186 End: 33 44.980/86 19.730									
St. Clair County									
Springville	19	1545CST			0	0	5K	0	Hail(2.00)
Two inch diameter size hail was reported near Springville.									
Sumter County									
York	20	1345CST			0	0	3K	0	Thunderstorm Wind (G50)
Several trees were knocked down across Interstate 20 near York.									
Pickens County									
7 W Reform	21	1530CST			0	0	2K	0	Thunderstorm Wind (G50)
A few trees were knocked down across CR 35 near the McShan community.									
Talladega County									
Sylacauga	21	1545CST			0	0	4K	0	Thunderstorm Wind (G55)
Trees and power lines were blown down in Sylacauga.									
Blount County									
2 W Blount Spgs	22	1500CST			0	0	2K	0	Thunderstorm Wind (G50)
Several trees were blown down just west of Blount Springs near the Mulberry Branch of the Warrior River.									
Madison County									
Countywide	22	1600CST			0	0	15K	0	Lightning
Three homes were struck by lightning across Madison County. Minor damage was reported.									
Lee County									
Opelika	23	2045CST			0	0	75K	0	Lightning
A lightning strike caused significant damage to an Opelika Power Substation. The lightning set a fire in the substation in which flames reached heights of over 50 feet. Six hundred gallons of mineral oil subsequently leaked out of the substation.									
Blount County									
Oneonta	29	1730CST			1	0	0	0	Lightning
A two-year-old boy was struck by lightning and eventually died from the injuries. The injury occurred as the boy was outside helping his family in the garden about 4.5 miles west of Oneonta. M2OU									
Tuscaloosa County									
Tuscaloosa	30	1515CST			0	1	0	0	Lightning
One person was struck by lightning in Tuscaloosa and had sustained minor injuries.									
Madison County									
Huntsville	30	1635CST			0	0	15K	0	Thunderstorm Wind (G59)^M
One large tree fell into an auto business causing damage in the city of Madison. Wind gusts measured at the Huntsville International Airport reached 68 miles an hour at 535 PM local time.									
Franklin County									
Red Bay	30	1715CST			0	0	1K	0	Thunderstorm Wind (G50)

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ALABAMA, North Central

A few trees were blown down near Red Bay and roadways were temporarily blocked.

Winston County

Arley	30	1830CST			0	0	2K	0	Lightning
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Lightning struck the Dairy Barn near Arley. The business sustained minor damage.

Jackson County

Skyline	31	1535CST			0	0	0	0	Hail(0.75)
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Dime size hail was reported in Skyline. One tree was also blown down in the same area.

Coosa County

Weogufka	31	1730CST			0	0	0	0	Hail(1.00)
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Quarter size hail was reported in Weogufka.

ALABAMA, Southeast

Houston County

Rehobeth	07	1720EST			0	0	1K		Thunderstorm Wind
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Several downed trees reported by the Houston County Sheriff.

Houston County

Cottonwood	20	1700EST			0	0			Hail(0.75)
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Dime size hail reported by NWS Mobile.

Geneva County

10 E Geneva	20	1720EST 1725EST			0	0	2K		Thunderstorm Wind
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Downed trees on County Roads 16 and 61, as well as Highway 167. Reported by the Geneva County EMA.

Houston County

6 E Cottonwood	20	1720EST			0	0			Hail(0.75)
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Dime size hail reported by NWS Mobile.

Houston County

Ashford	20	1725EST			0	0			Hail(0.75)
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Dime size hail reported by NWS Mobile.

Houston County

3 N Cottonwood	20	1725EST			0	0	20K		Thunderstorm Wind
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Downed power lines. A barn was destroyed. Reported by NWS Mobile.

Dale County

Daleville	20	1840EST			0	0			Hail(0.75)
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Dime size hail reported by the Dale County Sheriff.

Dale County

Clopton	21	1810EST			0	0			Hail(0.75)
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Dime size hail reported by a SKYWARN spotter.

Dale County

Skipperville	21	1909EST			0	0	1K		Thunderstorm Wind
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Downed trees reported by the Dale County EMA.

Coffee County

Southeast Portion	24	1200EST 1205EST			0	0	1K		Thunderstorm Wind
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Several trees down across County Roads 450, 461 and 606 between Opp and Enterprise. Reported by the Coffee County EMA.

ALABAMA, Southwest

Baldwin County

Summerdale	01	1630CST 1635CST			0	0	5K		Thunderstorm Wind (G55)
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A strong thunderstorm blew down several trees about 4 miles northeast of Summerdale on County Road 36, just to the east of County Road 83.

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					Killed	Injured	Property	Crops	
<u>ALABAMA, Southwest</u>									
Escambia County									
Brewton	03	1317CST 1322CST			0	0			Hail(0.75)
Conecuh County									
Evergreen	06	1815CST 1817CST			0	0	8K		Thunderstorm Wind (G50)
Several trees were blown down by high winds from a thunderstorm.									
Crenshaw County									
Luverne	07	1830CST 1832CST			0	0	10K		Thunderstorm Wind (G50)
Trees and power lines were blown down by winds from a thunderstorm near Luverne.									
Choctaw County									
Pennington to Lisman	07	2000CST 2005CST			0	0	10K		Thunderstorm Wind (G50)
Several trees were blown down between Pennington and Lisman as thunderstorms moved through the area.									
Wilcox County									
Camden	11	1415CST 1417CST			0	0	8K		Thunderstorm Wind (G50)
Trees were blown down by high winds from a thunderstorm near Camden.									
Mobile County									
Bayou La Batre	11	1800CST			0	2			Lightning
Two young boys were struck by lightning while playing outside. A thunderstorm had moved through the area earlier and the boys had went back out to play. They were likely hit by the last strike from the storm. A passing motorist saw a blue flash and the two boys were knocked to the ground. One of the boys was wearing a necklace and it burned his neck. Both were taken to the hospital and were kept for several days before being released.									
Mobile County									
Dauphin Is	13	1300CST			0	2			Rip Currents
Two children were rescued after nearly drowning in rough surf near Dauphin Island. Both were taken to a local hospital and were kept for several days									
Mobile County									
Theodore	13	1600CST 1602CST			0	0	8K		Thunderstorm Wind (G50)
Trees were blown down by high winds from a thunderstorm.									
Washington County									
St Stephens	15	1640CST			0	0	40K		Lightning
Lightning struck a home near St Stephens. The home caught on fire and was destroyed.									
Clarke County									
Fulton	15	1645CST 1647CST			0	0	8K		Thunderstorm Wind (G50)
Trees were blown down near Fulton by high winds from a thunderstorm.									
Wilcox County									
Camden	15	1745CST 1747CST			0	0	8K		Thunderstorm Wind (G50)
High winds from a thunderstorm blew down several trees near Camden.									
Choctaw County									
Pennington	19	1410CST 1412CST			0	0	15K		Thunderstorm Wind (G50)
High winds from a thunderstorm blew down several trees near Pennington. One of the trees fell on a truck and damaged it. Penny size hail was also reported.									
Washington County									
Mc Intosh	19	2015CST			0	0	8K		Lightning
Lightning struck a home near McIntosh and started a small fire which was quickly put out. The home suffered minor damage.									
Washington County									
Mc Intosh	19	2015CST 2017CST			0	0	10K		Thunderstorm Wind (G50)
High winds from a thunderstorm blew down trees near McIntosh.									

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<u>ALABAMA, Southwest</u>									
Clarke County									
Barlow Bend	20	1450CST 1452CST			0	0	8K		Thunderstorm Wind (G50)
High winds from a thunderstorm blew down several trees near Barlow Bend.									
Covington County									
Andalusia	20	1535CST 1537CST			0	0	10K		Thunderstorm Wind (G50)
Trees and power lines were blown down by high winds from a thunderstorm near Andalusia.									
Covington County									
Andalusia	20	1550CST 1552CST			0	0	8K		Thunderstorm Wind (G50)
High winds from a thunderstorm blew down several trees south of Andalusia. Dime size hail was also reported.									
Crenshaw County									
Luverne	20	1550CST 1557CST			0	0	10K		Thunderstorm Wind (G50)
Trees were blown down and a roof was damaged at a local Flea Market by high winds from a thunderstorm near Luverne.									
Crenshaw County									
Brantley	20	1615CST 1617CST			0	0	10K		Thunderstorm Wind (G50)
Trees were blown down near Brantley by high winds from a thunderstorm. Dime size hail was also reported with the storm.									
Covington County									
Floralia	20	1620CST 1621CST			0	0			Hail(0.75)
Conecuh County									
Evergreen	20	1630CST 1632CST			0	0	8K		Thunderstorm Wind (G50)
Trees were blown down by high winds from a thunderstorm near Evergreen.									
Conecuh County									
Evergreen	20	1650CST 1730CST			0	0			Flash Flood
Heavy rains in a short period of time caused part of I-65 near Evergreen to flood. Part of the lanes had to be temporarily closed until the rain stopped and the road drained.									
Washington County									
Millry	21	1100CST 1101CST			0	0			Hail(0.75)
Covington County									
5 SW Andalusia	23	1755CST 1757CST			0	0	8K		Thunderstorm Wind (G50)
Trees were blown down west of Carolina near County Road 31 by high winds from a thunderstorm.									
Conecuh County									
Castleberry	23	1900CST 1902CST			0	0	8K		Thunderstorm Wind (G50)
High winds from a thunderstorm blew down several trees south of Castleberry.									
Escambia County									
7 NW Mc Cullough	28	1245CST 1247CST			0	0	8K		Thunderstorm Wind (G50)
Several trees were blown down by high winds from a thunderstorm just north of Booneville.									
Washington County									
Vinegar Bend	30	1042CST 1044CST			0	0	8K		Thunderstorm Wind (G50)
Several trees were blown down near Vinegar Bend by high winds from a thunderstorm.									

ALASKA, Northern

AKZ203>204	Central Beaufort Sea Coast - Eastern Beaufort Sea Coast				0	0			High Wind (G49) ^M
	01	1153AST							
	02	0738AST							

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ALASKA, Northern

A 994 mb low pressure center moved east-northeast over the north slope on the early morning of the 2nd, curving toward Banks Island in Northwest Canada by mid-morning. Strong west winds followed behind the low for several hours.

High Winds reported at:
 Zone 203:
 Deadhorse ASOS peak gust 48 kt
 Colville Co-op observer: Max wind 50 kt

Zone 204:
 Barter Island AWOS peak gust 49 kt

AKZ222

Middle Tanana Valley

04	0229AST								
05	1055AST				0	0			Flood

Between 1 inch and 1.71 inches of rain fell over the upper Chena Basin in the 24 hours ending on the evening of July 3rd. This produced flooding of Chena Hot Springs Road at mile 37 enough to make the road impassible for low-clearance vehicles (about 10 to 15 inches of water).

Denali

Central Portion

06	0430AST								
	1020AST				0	0			Flash Flood

Heavy Rains on the night of the 5th caused mudslides on the Parks Highway at mile 238.5, closing the highway briefly, and causing it to be only one lane for a large portion of the day thereafter. Denali National Park dispatch also reported some visitors were stranded on a river island due to the high water.

Middle Tanana Valley

**Fairbanks to
Ester**

18	1545AST								
	1645AST				0	0	13K		Thunderstorm Wind (G50)

A Thunderstorm moved across Fairbanks bringing up to 1.5 inches of rain, and wind gusts estimated to 58 mph. The track of the thunderstorm was north of the Fairbanks Airport, which recorded a maximum wind gust on the ASOS of 39 mph. One mobile home was severely damaged when 6 spruce trees toppled onto it. One of these spruce trees hit a nearby travel trailer. At another home, fallen trees blocked the main entrance, requiring rescue workers to attend to the situation. Property damage is estimated sum of damage to the mobile home (\$10,000) and travel trailer (\$3000). There was also unknown property damage related to quite a few fallen trees on either properties or on power lines. The thunderstorm delivered between 300 and 500 lightning strikes, a large number for a single cell.

AKZ224

Upr Tanana Vly Fortymile

30	1207AST								
31	1045AST				0	0			Flood

Heavy rains occurred over the Upper Tanana valley, bringing minor flooding to a campground along the Tok River; bank erosion was noted along the Tanana River. The Chisana River at the Northway Road and the Tanana River at Tanacross reached flood stage. Water levels dropped during the night of the 30th due to cooling off of the upper elevations of the eastern Alaska Range which had been feeding the rivers with increased snowmelt from the rains.

ALASKA, Southeast

Northern Lynn Canal

10 N Skagway

23	0530AST								
	1030AST				0	0	450K		Flood

The West Creek flood inundated the small, remote community of Dyea on this date. A 700-foot high moraine above the West Creek Glacier collapsed during the early morning hours of Tuesday, July 23rd. This landslide collapsed into the glacial lake below, causing an estimated six foot rise in the lake level. Official estimates of between 536-766 million cubic yards of material slid into the lake. The displaced water volume surged downstream into the West Creek in a tsunami-like manner. The community of Dyea (10 miles north of Skagway) has about 20 year-round residents. With tourists in the area...35 people total had to be evacuated. Major flood, mud and silt damage resulted in Dyea. The flood waters receded a mere 5 hours after the initial flood wave gushed through...again indicating a tsunami-like flash flood due to the landslide. The main problem now is the silt and mud left behind. Fortunately no deaths nor major injuries occurred.

ALASKA, Southern

NONE REPORTED.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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AMERICAN SAMOA

Tutuila

Countywide	21 25	1500SST 1500SST			0	0			Rip Currents
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High surf advisories were posted for all south shores of American Samoa due to heavy surf actions generated by wind driven seas and swell brought about by an intensive high pressure which persisted south of the islands for more than a week. These surfs were at times as high as 20 feet. There were no damages reported from this high surf episode, as widespread advisories were issued for the public.

ARIZONA, Central and Northeast

Navajo County

Cibecue to Clay Spgs	01 08	0000MST 1800MST			0	0			Wild/Forest Fire
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The Chediski-Rodeo Complex burned more than 450,000 acres along Arizona's eastern Mogollon Rim from June 18 to July 8. Over 450 structures and homes were lost. The picture on the left is a trailer park in the community of Overgaard. The picture on the right is from the southwest portion of the fire looking east. The large smoke plume in the distance is about 15 miles away. The area between is "in the black" where the fire burned. Both pictures were taken by a Tucson Helitack crew member.

The Rodeo fire was human caused on June 18 about 10 miles northeast of Cibecue on the lower slopes of the Mogollon Rim. The Chediski Fire was human caused June 20 about 12 miles to the west of the Rodeo Fire. The fires merged and became the Chediski-Rodeo Complex which burned 468,638 acres before it was contained at 6:00 PM on Saturday July 6th. The fire also burned 426 structures and homes. Over 30,000 people were evacuated from Show Low, Summer Pines, Pinetop-Lakeside, Linden, Pinedale, Clay Springs, McNary, Hon-Dah, Forestdale, Heber, Overgaard, Forest Lakes, and Aripine during the peak of the fire. Four Type I Incident Command Teams were assigned to the fire with close to 4,500 fire fighting personnel. Resources assigned to the Chediski-Rodeo fire included 18 Type I Hot Shot crews and 77 Type II crews, 30 helicopters, 245 engines, 90 bull dozers, 92 water tenders, and 11 air tankers. During the fire, all roads in the area were closed to the public including State Road 260, US 60, Highway 377, and Highway 277. Flame lengths were observed in the 300 to 400 foot range during some of the major uphill runs.

Yavapai County

Prescott to Dewey	03	1157MST 1205MST			0	0			Thunderstorm Wind (G53)^M
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A severe thunderstorm produced damaging wind as it moved through central Yavapai county. The ASOS at the Prescott airport had a peak wind gust of 61 MPH. Shingles blew off the roof and 20 inch diameter branches were blown down at a Prescott golf course. A spotter in Dewey estimated 60 MPH wind gusts.

Navajo County

Cibecue	09	1700MST 2359MST			0	0			Flash Flood
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A Forest Service employee reported that Salt Creek Road about 7 miles northwest of Cibecue washed out between 5:00 PM and midnight. Logs and boulders covered the road and heavy equipment was needed to clear the road. This location is downstream from where the Chediski-Rodeo Fire burned over 450,000 acres in late June and early July.

Yavapai County

Prescott	13	1530MST 1645MST			0	0			Heavy Rain
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A spotter in Prescott reported 1.47 inches of rain between 3:30 PM and 4:45 PM. One quarter inch hail also fell during the thunderstorm.

Yavapai County

Prescott	13	1535MST			0	0			Hail(1.00)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
ARIZONA, Central and Northeast									
One inch hail was reported in Prescott.									
Yavapai County									
Paulden	13	1555MST			0	0			Hail(1.00)
One inch hail was reported in Williamson Valley 3 miles west of Paulden or 10 miles north of Prescott.									
Yavapai County									
Bagdad	13	1700MST 1800MST			0	0			Thunderstorm Wind (G50)
Trees were blown down in Bagdad between 5:00 PM and 6:00 PM. Some of the trees fell onto power lines.									
Coconino County									
Flagstaff	14	1325MST 1335MST			0	0			Thunderstorm Wind (G57)^M
A thunderstorm produced wind gusts to 66 MPH in Doney Park. A wooden fence with metal supports blew down in the storm.									
Yavapai County									
Camp Verde	14	1810MST 1812MST			0	0			Hail(1.25)
A Camp Verde Police officer reported golf ball sized hail in Camp Verde.									
Yavapai County									
Cordes	14	1920MST			0	0			Heavy Rain
Arizona Department of Transportation reported several vehicle accidents on I-17 between mileposts 267 and 268 from hydroplaning in heavy rain.									
Coconino County									
Flagstaff	15	1500MST 1530MST			0	0			Heavy Rain
A spotter in Doney Park reported 0.64 inches of rain in just 30 minutes.									
Apache County									
Mc Nary	15	2050MST 2150MST			0	0			Heavy Rain
A spotter two miles north of McNary reported 1.58 inches of rain in just one hour.									
Gila County									
Payson	15 16	2345MST 0145MST			0	0			Urban/Sml Stream Fld
Street flooding was reported in Payson by Payson Police Department.									
Navajo County									
Cibecue	16	0040MST 0130MST			0	0			Urban/Sml Stream Fld
The water level in Cibecue Creek rose to 5 feet above normal level in the town of Cibecue. This flooded a low water crossing in town.									
Apache County									
Window Rock	18	1446MST 1515MST			0	0			Urban/Sml Stream Fld
A wash was flowing over a road 10 miles north of Window Rock.									
Coconino County									
Grand Canyon Arpt	19	1410MST 1440MST			0	0			Heavy Rain
The visitors center at the north rim of the Grand Canyon reported 0.94 inches of rain in just 30 minutes. The Phantom Ranch campground at the bottom of the Grand Canyon was evacuated. The Bright Angel and Kaibab Trails on the south side of the Colorado River sustained minor flood damage.									
Coconino County									
Williams	19	1615MST 1700MST			0	0			Urban/Sml Stream Fld
Heavy rain caused flooding in Coconino County 2 miles north of Ash Fork (Ash Fork is in Yavapai county). Double A Ranch Road and Lore Way were closed because of the flooding. Two cars were stuck in knee deep water for a short period of time. A spotter reported 1.76 inches of rain in 1 hour with this storm.									
Navajo County									
Polacca to Keams Canyon	22	1630MST 1730MST			0	0			Urban/Sml Stream Fld
Law enforcement officials and fire fighters reported that flowing water in washes made several roads impassable in the Polacca									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARIZONA, Central and Northeast

and Keams area. The water receded within an hour.

AZZ005

Marble Canyon And Glen Canyon

22	1845MST 1900MST				0	0			Dust Storm
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Outflow wind from a thunderstorm caused a dust storm from Lee's Ferry to Page. The visibility dropped one eighth of a mile or less. The peak wind gust at the Page airport was 48 MPH.

Coconino County

Supai

24	1550MST 1850MST				0	0			Urban/Sml Stream Fld
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Heavy rain caused Havasu Creek to peak about 5 feet above normal. This prompted the Supai campground to be evacuated. Some campers were stranded. No injuries or structural damage was reported. Many washes and smaller creeks in the area also experienced high water levels.

Navajo County

Clay Spgs

25	1423MST				0	0			Urban/Sml Stream Fld
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The Cottonwood Wash rose 20 feet where it passed under Highway 260 near Clay Springs. No structures were threatened.

Coconino County

Flagstaff

25	1515MST 1700MST				0	0			Urban/Sml Stream Fld
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Heavy rain (1.45 inches in 2 hours) caused street flooding in Doney Park. About 10 inches of water covered one street.

Apache County

Chinle

27	1430MST 1530MST				0	0			Hail(1.75)
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A thunderstorm at Canyon de Chelly produced 0.67 inches of rain in an hour with golf ball sized hail at one time.

ARIZONA, Northwest

Mohave County

Temple Bar Marina

10	2009PST				0	0	1K		Thunderstorm Wind (G50)
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Strong winds from a thunderstorm damaged a boat dock at Temple Bar Marina in the Lake Mead National Recreation area.

Mohave County

Kingman

12	1437PST				0	4	400K		Thunderstorm Wind (G67)^M
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Strong thunderstorm winds blew through Kingman destroying 16 homes and damaging 36. Most of the damaged and destroyed homes were mobile homes in the Kingman Shadows subdivision. Four people received minor injuries from flying debris. Several powerlines were also blown down knocking out power to an estimated 3,000 to 4,000 people.

Mohave County

Kingman

13	0634PST 0701PST				0	0	10K		Thunderstorm Wind (G55)^M
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Strong winds from thunderstorms pushed through Kingman knocking down powerlines causing minor roof damage to several homes around town. A 3-foot diameter tree was also knocked down by the winds.

Mohave County

Chloride

13	1900PST				0	0	5K		Thunderstorm Wind (G87)
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Thunderstorm winds estimated at 100 mph blew the roof off a horse coral.

Mohave County

Hualapai

16	1615PST				0	0			Heavy Rain
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A local storm chaser reported 1 inch of rain fell in 8 minutes.

ARIZONA, South

Graham County

Pima

08	1600MST 1645MST				0	0	3K	0	Thunderstorm Wind
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Strong winds from a severe thunderstorm, over the town of Pima, downed several power poles and a large tree. A newspaper reported a fence blown down in the backyard of a residents home in the town of Pima. Three portions of the fence were flown into the neighbors yard and damages were estimated to 3,500 dollars. The strong winds also peeled portions of a roof off at a Mini Mart, which later caused leaking.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARIZONA, South

Cochise County

Tombstone	08	1939MST 2000MST			0	0	2K	0	Thunderstorm Wind
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High pressure over Utah allowed for deeper moisture to be pulled into southeastern Arizona, which resulted in strong afternoon thunderstorms developing over Cochise county. Thunderstorms in the Tombstone area caused damaging winds as two power poles were blown down in the city at 7:39 pm MST. At 8:14 pm MST a spotter reported strong winds during the event and a storm total precipitation of .60 inches.

Cochise County

Tombstone	08	2040MST 2115MST			0	0	0	0	Thunderstorm Wind
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Another batch of severe thunderstorms moved through the town of Tombstone producing strong winds. At 8:40 pm MST, a spotter reported a large tree blown down in a next door neighbors yard.

AZZ033

Tucson Metro/Marana/Green Valley

	09	1515MST 1525MST			0	0	10K	0	Dust Storm
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A dust storm began over the southeast side of Tucson as a result of a collapsing thunderstorm and a outflow boundary from a previous storm. The dust cloud moved over Davis Monthan AFB with visibilities reducing to near zero and 49 mph wind gusts reported at the Tucson International Airport. Reduced visibilities caused a 5 vehicle accident on Interstate 10 near east Valencia Road. No one was injured in the accident, but four cars were towed away. A quarter mile visibility was reported at the Tucson NWS office on the University of Arizona campus.

AZZ030

Upper Gila River Valley

	10	1525MST 1540MST			0	0	0	0	Dust Storm
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A dust storm reduced visibilities to less than a quarter mile at the Safford Airport. Wind gusts of 46 mph was reported at the Safford ASOS.

Graham County

Safford Arpt	12	1654MST			0	0	0	0	Thunderstorm Wind (G69)^M
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Thunderstorms developed over the White Mountains and moved southwest toward the city of Safford. The ASOS at the Safford airport reported peak wind gusts of 69 mph at 4:54 pm MST. The temperature sensor recorded a 21 degree drop in 21 minutes as the storm moved through the area.

Greenlee County

Duncan	12	1720MST 1730MST			0	0	40K	0	Thunderstorm Wind
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A severe thunderstorm developed and moved over the town of Duncan. At 5:25 pm MST, spotters reported shingles being blown off roofs and roofs being blown off of two houses.

Pima County

Tucson	12	1920MST 1930MST			0	0	20K	0	Thunderstorm Wind
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Thunderstorms moved across central Tucson producing damaging winds. The K-mart store received structural damage due to the strong winds on Broadway and Kolb roads.

Santa Cruz County

Patagonia	14	1401MST 1415MST			0	0	0.30K	0	Thunderstorm Wind
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A severe thunderstorm produced strong winds that knocked down a sign in the town of Patagonia. Most residents and spotters reported hail size of a half of an inch. The storm total precipitations for spotters ranged from .40 to 1.7 inches.

AZZ030

Upper Gila River Valley

	14	1601MST 1620MST			0	0	0	0	Dust Storm
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Outflow boundaries from several thunderstorms in the Safford area caused a dust storm. Visibilities were reduced to less than a quarter of a mile and wind gusts of 51 mph was reported at the ASOS at the Safford airport.

Graham County

12 S Safford	14	1615MST			0	0	0.50K	0	Thunderstorm Wind
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Severe thunderstorms produced damaging winds across an area 12 miles south of Safford. A spotter reported shingles being ripped off his roof by strong winds.

AZZ035

Cochise County

	14	1705MST 1745MST			0	0	0	0	Dust Storm
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Outflow boundaries from several thunderstorms in central Cochise county produced a dust storm. At 5:05 pm MST, a spotter in

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

ARIZONA, South

Sunsites reported visibilities less than a quarter of a mile and wind gusts of 50 mph. Another spotter in the Tombstone area reported less than a quarter of a mile visibilities at 5:37 pm MST.

Pima County

Tucson	14	1730MST 1900MST			0	0	72K	0	Tstm Wind/Hail
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A line of thunderstorms extended from Marana, through Tucson, to Green Valley. A majority of the damage from the thunderstorms occurred on the south side of Tucson. First reports of came in from Tucson International Airport with hail size of 3/8 inch in diameter at 530 pm MST. A spotter on the south side of Tucson recorded peak wind gust of 79 mph with an anemometer at 530 pm MST. Between 540 pm and 610 pm several reports of damage flowed into the NWS office. A chimney was blown off the roof of Davis Monthan AFB. Several large trees were blown down in Kennedy Park near Mission Road and west Ajo Road. Another report of a large tree was blocking the intersection of Grant and First Avenue, with a metal parking light pole bent over in the street. A roof was blown off a house on the south side of Tucson. Five power poles were knocked down on North Greasewood Road, with another 10 power poles downed on Valencia and Mission roads. Throughout the city, a total of 25 power poles were reported knocked down by the strong winds. The Tucson International Airport received .96 inches of rainfall throughout the event, with a spotter receiving 1.17 inches on the south side of Tucson. There was only one report of a swift water rescue on Santa Clara near Interstate 10.

AZZ029

Southeast Pinal County

	14	1930MST 2015MST			0	0	0	0	Dust Storm
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Outflow boundaries from surrounding thunderstorms in the Tucson area caused a dust storm along Interstate 10 in Pinal County. Law enforcement in Eloy reported near zero visibilities on Interstate 10 as dust pushed northward towards Phoenix.

AZZ035

Cochise County

	16	1418MST 1440MST			0	0	0	0	Dust Storm
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Outflow boundaries from several thunderstorms produced a dust storm near San Simon area. A DPS officer reported near zero visibilities on Interstate 10 at mile post 384.

Cochise County

20 E Elfrida	21	1300MST 1545MST			0	0	0	0	Flash Flood
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A thunderstorm produced heavy rainfall over Rucker Canyon. A spotter reported 4.7 inches of rainfall, with 4.0 inches falling within one hour. The hydrologist of Cochise county reported water flowing over a bridge with debris on the road at milepost 15.7 on Rucker Canyon Road.

Pima County

Tucson	22	1700MST 1745MST			0	0	0	0	Flash Flood
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Thunderstorms moved across Tucson from the east producing moderate rainfall across the city. The fire department received two calls of motorists stuck in rushing water. One was on the east side of Tucson and another in mid town. However, no swift water rescues were necessary. Storm total precipitation for the event ranged from .83 inches to 1.55 inches.

Cochise County

Benson	25	1715MST 1720MST			0	0	12K	0	Thunderstorm Wind
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A severe thunderstorm moved across the city of Benson producing damaging winds. At 515 pm MST, a spotter reported 4 power poles downed. Also, the roof of a Safeway store was damaged.

Santa Cruz County

Nogales	26	1525MST 1640MST			0	0	30K	0	Flash Flood
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Thunderstorms produced heavy rainfall across the Nogales area. The Nogales wash rose 7 to 8 feet, with 3 to 4 feet out of its banks. Reports from officials stated some bank erosion occurred. Rushing water also washed cars into a fence along the Mexico border.

Pima County

Green Vly	26	2000MST 2100MST			0	0	2K	0	Thunderstorm Wind
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A severe thunderstorm moved through Green Valley and Sahuarita area, producing damaging winds. The strong winds knocked down a power pole causing a power outage for several hours. The storm also produced over an inch of precipitation. However, there were no reports of flooding.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
ARIZONA, Southwest									
Pinal County									
Apache Jct	09	1736MST 1740MST			0	0	5K		Thunderstorm Wind
Gusty winds over 50 mph tore branches off trees in Gold Canyon and blew an awning off a home in Apache Junction. Winds gusted to 52 mph at nearby Williams Gateway Airport.									
Maricopa County									
7 E Mesa to Queen Creek	09	1800MST 1820MST			0	0	80K		Thunderstorm Wind (G52)
Dense blowing dust accompanied winds that gusted to about 60 mph. A small airplane was damaged while trying to land at Falcon Field. Thunderstorms developed over the East Valley, and microburst winds struck in Mesa, along University Drive between Extension and Country Club. About 20 power poles were blown down leaving 7,500 homes without power in this area.									
Pinal County									
Sacaton to Casa Grande	09	1829MST 1905MST			0	0	500K		Thunderstorm Wind (G69)
Damage from strong winds extended over a large area of north central and northwest Pinal County. Trees were uprooted in Coolidge and homes were damaged in Florence. Winds were clocked at 55 mph on an automatic weather station 20 miles south of Queen Creek. A spotter reported two roofs ripped off maintenance buildings at the Sacaton Middle School, where winds were estimated as high as 80 mph. Another spotter driving along I-10 near Casa Grande reported freeway signs blown down as dense blowing dust hit the area. A power pole was also blown down across McCartney Road just south of Casa Grande. Eight mature trees were uprooted at the Central Arizona College with power and telephone outages lasting into Wednesday morning.									
Maricopa County									
Phoenix	09	1915MST 1946MST			0	0	50K		Thunderstorm Wind
Several trees uprooted and blown across roads and streets in Ahwatukee. Patio roof damaged by winds.									
Pinal County									
Eloy	09	1920MST 1930MST			0	0	2K		Thunderstorm Wind
A line of severe thunderstorms moved across southeast Pinal county. Damaging winds downed 2 power poles and ripped off small porches and awnings in a trailer park in the Eloy area.									
Pinal County									
Kohatk	10	1555MST			0	0	10K		Thunderstorm Wind
Thunderstorm winds blew the roof off a house in the town of Kohatk.									
Maricopa County									
(Phx)Sky Harbor Arpt	13	0227MST			0	0			Thunderstorm Wind (G53) ^M
Maricopa County									
Paradise Vly	13	0237MST			0	0	50K		Lightning
Lightning struck a home in the 5600 block of N. Saguaro Road,.									
Pinal County									
Oracle	13	1740MST 1800MST			0	0	2K		Thunderstorm Wind
Thunderstorm winds downed 2 power poles in the town of Oracle.									
AZZ028									
Central Deserts									
	14	1920MST 1948MST			0	0			Dust Storm
Near zero visibility with blowing dust and sand spread across a wide area of northwest Pinal County. Southerly winds reached as high as 45 to 50 mph.									
Maricopa County									
(Phx)Sky Harbor Arpt	14	2020MST 2025MST			0	0	20M		Thunderstorm Wind (G87)
The first of two microburst events occurred on the airport at 1300 Airline Blvd.									
Maricopa County									
(Phx)Sky Harbor Arpt	14	2040MST 2045MST			0	0	30M		Thunderstorm Wind (G91)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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ARIZONA, Southwest

The second of two microburst events struck on the airport at the Postal facility and the West economy parking lot. A large thunderstorm complex, with strong microburst winds estimated at 100 mph struck Sky Harbor International Airport. Southerly winds and dense blowing dust initially spread across the East valley and converged with a fast-moving thunderstorm in North Phoenix. These merging systems developed into a severe thunderstorm with winds that uprooted trees, took down power poles and damaged homes and businesses near the airport. Several hangars sustained major damage. Flying debris damaged five commercial aircraft, several private planes and hundreds of cars in the nearby parking lots. Numerous flights were diverted during the overnight hours due to the debris that was scattered on the runway.

Maricopa County

Phoenix

14 2047MST 0 0 20M Thunderstorm Wind (G60)

Microburst winds heavily damaged the Arizona Public Service power sub-station at 7th Ave and Thomas. Widespread damage was reported across the greater Phoenix metropolitan area caused by the storm's high winds and heavy rainfall with up to 2 inches in 90 minutes. Utility companies reported that 22 power poles were downed, leaving at least 47,000 homes and businesses without power electricity for many hours. Homes in Scottsdale and Ahwatukee were struck by lightning and set on fire.

AZZ028

Central Deserts

23 1727MST 0 0 Dust Storm
1850MST

Widespread dense blowing dust and sand cut the visibility to near zero over much of northwest Pinal County. Peak winds were 52 mph from an automatic weather station near Queen Creek.

Maricopa County

Chandler Arpt

23 1847MST 0 0 Thunderstorm Wind (G59)^M

Winds toppled about 10 power poles near Lindsay and Pecos roads.

Maricopa County

Scottsdale to Glendale

23 2027MST 0 1 200K Thunderstorm Wind (G52)
2115MST

At least 2 trees blown down in north Scottsdale. Heavy rain and lightning were blamed for the collapse of a section of a roof of the Goodwill store in south Scottsdale. One man inside the store suffered minor injuries. Trees and cactus blown down in Glendale.

ARKANSAS, Central and North Central

Dallas County

Dalark

02 1200CST 0 0 Hail(0.75)

Pulaski County

Mc Almont

02 1640CST 0 0 Thunderstorm Wind (G50)

Thunderstorm winds downed several power poles.

Boone County

2 S Bergman

12 1215CST 0 0 Hail(0.75)

Boone County

Harmon

12 1230CST 0 0 Hail(0.75)

Arkansas County

2 W Gillett

12 1415CST 0 0 Hail(0.75)

Yell County

Ola

12 1500CST 0 0 Hail(0.75)

Logan County

Delaware

12 1500CST 0 0 Thunderstorm Wind (G50)

Thunderstorm winds blew down a large tree.

Yell County

7 NW Dardanelle

12 1510CST 0 0 Hail(0.75)

White County

West Pt

12 1600CST 0 0 Thunderstorm Wind (G50)

Thunderstorm winds downed a few large trees.

Garland County

10 NW Hot Spgs

12 1620CST 0 0 Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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ARKANSAS, Central and North Central

Numerous trees and large limbs were knocked down. Several boat docks were blown around, with damage to several boats and the dock structure. A large swim dock was pushed onto the shoreline with major damage caused to the dock itself. A number of canoes, paddleboats and waverunners were pushed onto shore by the strong winds. Several outbuildings suffered minor damage.

Saline County									
East End	12	1700CST			0	0			Thunderstorm Wind (G50)
			Several trees were blown down.						
Saline County									
7 W Benton	12	1700CST			0	0			Thunderstorm Wind (G50)
			Thunderstorm winds blew down a few trees.						
Hot Spring County									
Malvern	12	1730CST			0	0			Thunderstorm Wind (G50)
			Several large trees were knocked down.						
Cleveland County									
Rison	12	1835CST			0	0			Thunderstorm Wind (G50)
			Several large trees were knocked down.						
Cleveland County									
Rison	12	1840CST			0	0			Hail(0.75)
Grant County									
North Portion	14	1100CST 1230CST			0	0			Flash Flood
			Heavy rains resulted in flash flooding over the northern portions of Grant County. Several county roads between Ico and Tull were covered by high water for a short period of time.						
Jefferson County									
Jefferson	14	1120CST			0	0			Hail(0.75)
Saline County									
Countywide	14	1130CST 1300CST			0	0			Flash Flood
			Heavy rains caused flash flooding to occur on several county roads between Haskell and Paron.						
Faulkner County									
Conway	14	1205CST			0	0			Hail(0.75)
Pulaski County									
3.5 WSW Roland to 5 WSW Roland	14	1245CST 1250CST	1.5	50	0	0			Tornado (F0)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARKANSAS, Central and North Central



A waterspout was spawned over Lake Maumelle (Pulaski County) during the afternoon of 07/14/2002. The photo is courtesy of Jill Gray and is used by permission.

A waterspout touched down on Lake Maumelle and traveled westward for about 1.5 miles before lifting. No damage occurred. The waterspout was observed by nearby boaters who were already ashore.

Logan County 5 S Corley	14	1250CST			0	0			Hail(0.88)
Logan County 5 S Corley	14	1250CST			0	0			Thunderstorm Wind (G50)
Several large limbs were blown down.									
Yell County Waveland	14	1255CST			0	0			Hail(0.75)
Clark County Arkadelphia	14	1430CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed a few trees and large tree limbs around Arkadelphia...with one tree limb falling through a windshield of a van.									
Clark County Arkadelphia	14	1430CST			0	0			Hail(1.00)
Saline County 8 NW Owensville	17	1310CST			0	0			Thunderstorm Wind (G50)
Thunderstorms downed several trees, blew over a swing set and knocked down a large tree onto a house in Hot Springs Village.									
Saline County 8 NW Salem	17	1335CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some trees.									
Lonoke County England	17	1505CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed some large tree limbs and power lines.									
Clark County Arkadelphia	17	1530CST			0	0			Lightning
Lightning struck some conduit containing a power line, with the conduit split. Fire was sent through the main electrical line into a nearby home, with flames spreading quickly through the upper level of the structure.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARKANSAS, Central and North Central

Pope County

2 S Pelsor	18	0930CST 1130CST			0	0			Flash Flood
Heavy rains caused some flash flooding 2 miles south of Pelsor, with 2 county roads flooded for a couple of hours .									

Baxter County

Clarkridge	18	1440CST			0	0			Thunderstorm Wind (G50)
Some large tree limbs were blown down.									

Boone County

3 N Lead Hill	18	1440CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds gusted to 60 mph and knocked down some large tree limbs in the Diamond City area.									

Marion County

Oakland	18	1445CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed a few large trees.									

Baxter County

Whiteville	18	1500CST			0	0			Thunderstorm Wind (G50)
A large tree was blown down.									

Yell County

8 W Danville	18	1515CST			0	0			Hail(0.88)
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Yell County

Mt George	18	1515CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some power lines.									

Yell County

Centerville	18	1530CST			0	0			Thunderstorm Wind (G50)
Power lines blown down.									

Newton County

Hasty	18	1540CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed some large tree limbs.									

Stone County

Fifty Six	18	1540CST			0	0			Thunderstorm Wind (G50)
A large tree was blown down.									

Searcy County

Marshall	18	1545CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some large tree limbs.									

Izard County

Mt Olive	18	1600CST			0	0			Thunderstorm Wind (G50)
Several large trees were knocked down.									

White County

10 N Searcy	18	1745CST			0	0			Thunderstorm Wind (G50)
Trees down.									

Yell County

4 N Rover	18	1935CST			0	0			Thunderstorm Wind (G50)
A weather spotter reported some large tree limbs blown down.									

Pulaski County

2 SSW Scott	18	2158CST			0	0			Thunderstorm Wind (G50)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARKANSAS, Central and North Central



Damaging winds downed a tree onto a house near Scott (Pulaski County) around 11 pm CDT on 07/18/2002. Thunderstorm winds downed some large trees, one of which fell on a house. Numerous tree limbs were also taken down and a carport roof sustained damage.

Independence County

Batesville

19	0830CST 0900CST	0	0	Flash Flood
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Heavy rains resulted in flash flooding around Batesville. Several roads were covered by high water.

Jackson County

Newport

19	0850CST 1030CST	0	0	Flash Flood
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Streets were flooded in Newport (Jackson County) after more than 6 inches of rain fell in the area on 07/19/2002. The picture is courtesy of David

Heavy rains caused flash flooding to occur in Newport. Several roads were covered by high water for a short period of time .

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>ARKANSAS, Central and North Central</u>									
Jackson County									
Grubbs	19	1100CST 1300CST			0	0			Flash Flood
Heavy rains fell over Jackson County. Flash flooding resulted with numerous roads covered by high water around Grubbs and Highway 14 was flooded in several locations.									
Jackson County									
South Portion	19	1300CST 1345CST			0	0			Flash Flood
Independence County									
Oil Trough	19	1200CST 1330CST			0	0			Flash Flood
Heavy rains caused flash flooding to occur over portions of Independence County. Several roads were covered by high water around the Oil Trough area and Highway 14 was flooded for a period of time.									
Independence County									
South Portion	19	1300CST 1345CST			0	0			Flash Flood
Saline County									
Bryant	19	1515CST			0	0			Hail(0.75)
Cleveland County									
2 N Rison	19	1540CST			0	0			Hail(0.75)
Cleveland County									
2 N Rison	19	1540CST			0	0			Thunderstorm Wind (G50)
A large tree was blown down.									
Lincoln County									
Star City	19	1615CST			0	0			Hail(0.75)
Lincoln County									
6 S Star City	19	1625CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds knocked down some large tree limbs and power lines.									
Pulaski County									
2 SSW Scott	19	2158CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed several large trees and limbs. One of the trees fell onto and house and caused some minor damage. A carport also sustained some roof damage.									
Independence County									
2 S Cave City	20	1252CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed some trees.									
Pulaski County									
Gravel Ridge	20	1410CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some trees and large tree limbs.									
Pulaski County									
Macon	20	1410CST			0	0			Thunderstorm Wind (G50)
Scott County									
Waldron	23	1430CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds knocked down some trees and large tree limbs in Waldron. Some of the tree limbs fell on houses, with a few reports of roof damage.									
Scott County									
Waldron	23	1430CST			0	0			Hail(0.75)
Van Buren County									
Scotland	23	1535CST			0	0			Thunderstorm Wind (G50)
Several large trees were blown down.									
Logan County									
4 E New Blaine	23	1549CST			0	0			Thunderstorm Wind (G50)
Some large tree limbs were knocked down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARKANSAS, Central and North Central

Logan County

4 E New Blaine 23 1549CST 0 0 **Hail(0.75)**

Logan County

5 NW Delaware 23 1549CST 0 0 **Thunderstorm Wind (G50)**
Thunderstorm winds blew down some large tree limbs.

Pulaski County

2.5 SW Ferndale 23 1558CST 0 0 **Thunderstorm Wind (G50)**
Thunderstorm winds downed some trees.

Saline County

6 N Avilla 23 1558CST 0 0 **Thunderstorm Wind (G50)**
Thunderstorm winds blew down some trees near the Saline/Pulaski County line.

Pulaski County

(Lrf)Little Rock Afb 23 1633CST 0 0 **Thunderstorm Wind (G69)^M**



Is it a wall cloud or a downburst? At any rate, there was a lowering of the cloud base in Pulaski County during the afternoon of 07/23/2002...with a 79 mph wind gust to follow at the Little Rock Air Force Base. The photo is courtesy of George Wilken and is used by permission.

Pulaski County

1 NW Runyan Acres 23 1635CST 0 0 **Thunderstorm Wind (G52)**

Faulkner County

Naylor 23 1700CST 0 0 **Thunderstorm Wind (G50)**
Thunderstorm winds blew down some trees and power lines.

Faulkner County

Vilonia 23 1700CST 0 0 **Thunderstorm Wind (G50)**
Some power lines were blown down near Vilonia.

ARZ056

Jefferson

30 1100CST 1 1 **Excessive Heat**

An 83 year old woman was found deceased in her home, in Pine Bluff, as a result of heat-related stress. The woman's 81 year old sister was also found unconscious in the home and was taken to the hospital for treatment. The temperature inside the house was 101 degrees when medical personnel arrived. The house did have air-conditioning, but it was not being used.

F83PH

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>ARKANSAS, East</u>									
Mississippi County Blytheville	02	1815CST 1820CST			0	0	0.01K		Hail(0.75)
Mississippi County Blytheville	02	1815CST 1820CST			0	0	5K		Thunderstorm Wind
Some trees were knocked down.									
Mississippi County Gosnell	02	1840CST 1845CST			0	0	0.01K		Hail(0.75)
St. Francis County Forrest City	10	2000CST 2005CST			0	0	15K		Thunderstorm Wind
A fence was damaged. Several trees and power poles were knocked down. One tree fell on a shed.									
ARZ026 Craighead	13	1200CST 1205CST			0	0	10K		High Wind (G35)
Winds gusts estimated at 40 mph knocked a second story wall at an apartment building under construction at Arkansas State University in Jonesboro.									
Lawrence County Black Rock	19	0500CST 0600CST			0	0	1K		Flash Flood
One home had water reach up to its steps.									
Craighead County Brookland	30	1215CST 1220CST			0	0	5K		Thunderstorm Wind
A few trees were blown down.									
Poinsett County Trumann	30	1230CST 1235CST			0	0	50K		Lightning
The Providence Baptist Church in Trumann was destroyed by a fire started by lightning.									
<u>ARKANSAS, Northwest</u>									
Washington County Johnson	12	1415CST			0	0			Thunderstorm Wind (G61)
Carroll County 2 NW Eureka Spgs	18	1354CST			0	0			Hail(0.88)
Carroll County 3 ENE Beaver	18	1427CST			0	0			Hail(0.75)
Dime size hail was reported at Holiday Island.									
Madison County 3 N Hindsville	18	1600CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew trees down onto Highway 45.									
Washington County Winslow	23	1556CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.									
Crawford County 8 N Mountainburg	23	1600CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARKANSAS, Southeast

Chicot County

Lake Vlg	12	2045CST			0	0	2.5K		Thunderstorm Wind
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Thunderstorm winds blew down a tree which, in turn, knocked over several powerlines.

Ashley County

Hamburg	20	1615CST			0	0	1K		Thunderstorm Wind
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A few trees were blown down in the city. The same thunderstorm also produced pea-sized hail.

ARKANSAS, Southwest

Miller County

3 E Genoa	12	1720CST			0	0			Hail(1.00)
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Miller County

Genoa	12	1725CST			0	0			Thunderstorm Wind (G52)
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Numerous trees down across Hwy 196.

Union County

Junction City	14	1817CST			0	0			Thunderstorm Wind (G58)
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Several large trees down in town.

ATLANTIC OCEAN

ANZ50

9 E Bar Harbor	03	2204EST	Eastport Me To Stonington (Deer Isle) Me Out 25Nm		0	0			Marine Tstm Wind (G44)
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Wind gusts to 44 knots reported at Prospect Harbor.

ANZ537

Lewisetta	09	1715EST	Tidal Potomac Cobb Is Md To Smith Pt Va		0	0			Marine Tstm Wind (G35)
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A wind gust of 39 MPH was recorded.

ANZ535

Rnld Reagan Natl Arpt	09	1913EST	Tidal Potomac Key Bridge To Indian Hd Md		0	0			Marine Tstm Wind (G35)
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A wind gust of 39 MPH was recorded.

ANZ531

7 W Riviera Beach	09	1914EST	Chesapeake Bay Pooles Is To Sandy Pt Md		0	0			Marine Tstm Wind (G42)
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A wind gust of 48 MPH was recorded at BWI Airport.

ANZ534

Patuxent River Nas	09	1934EST	Chesapeake Bay Drum Pt To Smith Pt Va		0	0			Marine Tstm Wind (G43)
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A wind gust of 49 MPH was recorded.

ANZ530

2 N Aberdeen Proving G	09	2000EST	Chesapeake Bay N Of Pooles Is Md		0	0			Marine Tstm Wind (G35)
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Winds strong enough to down trees in Bel Air moved onto the bay.

ANZ335

2 N New Haven Harbor	09	1719EST	Long Island Sound W Of New Haven Ct To Port Jefferson Ny		0	0			Marine Tstm Wind (G49)
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The anemometer at WTNH-TV 8 in West New Haven reported a peak wind of 49 knots at 619 pm.

ANZ453

Cape May	09	2130EST	Great Egg Inlet To Cp May Nj Out 20Nm		0	0	0		Marine Tstm Wind (G42)
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Cape May Harbor recorded a wind gust to 42 knots (48 mph). On the beach the thunderstorm damaged beach tents and a lifeguard boat.

ANZ250

Rockport	15	1900EST	Merrimack River Ma And Out 20Nm To Plymouth Ma And Out 40Nm		0	0			Marine Tstm Wind (G43)
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Gloucester Buoy

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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ATLANTIC OCEAN

ANZ50 28 SE Bar Harbor	Eastport Me To Stonington (Deer Isle) Me Out 25Nm 15 1900EST				0	0			Marine Tstm Wind (G35) Wind gusts to 35 knots reported at the Mount Desert Rock Lighthouse.
ANZ455 Bethany Beach	Cp Henlopen To Fenwick Is De Out 20Nm 19 1322EST				0	0	0		Marine Tstm Wind (G75) A severe thunderstorm produced a measured wind gust to 75 knots (86 mph) at Bethany Beach.
ANZ652 Chincoteague to Paramore Island	Chincoteague To Parramore Is Va Out 20Nm 19 1820EST				0	0			Marine Tstm Wind (G35) Wind gust of 35 knots measured at MFV.
ANZ50 18 SE Bar Harbor	Eastport Me To Stonington (Deer Isle) Me Out 25Nm 23 1430EST				0	0			Marine Tstm Wind (G37) Wind gusts to 37 knots reported at the Eastern Maine Shelf Buoy.
ANZ250 Rockport	Merrimack River Ma And Out 20Nm To Plymouth Ma And Out 40Nm 23 1458EST				0	0			Marine Tstm Wind (G35) Beverly ASOS
ANZ230 Boston Light	Boston Harbor 23 1509EST				0	0			Marine Tstm Wind (G40) Boston ASOS
ANZ234 Bzzrds Bay Ent Tower	Buzzards Bay 23 1515EST				0	0			Marine Tstm Wind (G40) WSR-88D
ANZ250 Stellwagen Bank	Merrimack River Ma And Out 20Nm To Plymouth Ma And Out 40Nm 23 1515EST				0	0			Marine Tstm Wind (G40) WSR-88D
ANZ236 Newport	Narragansett Bay 23 1515EST				0	0			Marine Tstm Wind (G40) WSR-88D
ANZ235 Bzzrds Bay Ent Tower	Rhode Island Sound 23 1515EST				0	0			Marine Tstm Wind (G40) WSR-88D
ANZ231 Brewster	Cape Code Bay 23 1556EST				0	0			Marine Tstm Wind (G36) Hyannis ASOS
ANZ150 Rye Beach	Stonington (Deer Isle) Me To Merrimack River Ma Out 25Nm 23 1510EST				0	0			Marine Tstm Wind (G52) Winds gusted to 52 knots at the Isles of Shoals observing station as severe thunderstorms moved through the area.
ANZ455 1.5 S Bethany Beach	Cp Henlopen To Fenwick Is De Out 20Nm 27 1640EST				0	0			Marine Tstm Wind (G40) A thunderstorm knocked down a couple of small tree limbs in South Bethany.
ANZ237 Point Judith	Block Island Sound 28 2345EST				0	0			Marine Tstm Wind (G40) WSR-88D
ANZ234 Bzzrds Bay Ent Tower	Buzzards Bay 28 2345EST				0	0			Marine Tstm Wind (G40) WSR-88D
ANZ236 Newport	Narragansett Bay 28 2345EST				0	0			Marine Tstm Wind (G40) WSR-88D

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

ATLANTIC OCEAN

ANZ235	Rhode Island Sound								
Bzzrds Bay Ent Tower	28	2345EST			0	0			Marine Tstm Wind (G40)
		WSR-88D							

CALIFORNIA, Extreme Southeast

NONE REPORTED.

CALIFORNIA, North Central

NONE REPORTED.

CALIFORNIA, Northeast

Mono County

June Lake	12	1230PST 1245PST			0	0	0.50K		Thunderstorm Wind (G58)
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Downburst winds from thunderstorm estimated at 65-70 mph caused damage to docks on south side of June Lakes. Flying debris was observed but no injuries were reported.

Lassen County

32 ENE Susanville	12	1630PST 1730PST			0	0	0	0	Thunderstorm Wind (G63) ^M
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73 mph wind gust

A line of severe thunderstorms moved across Lassen County CA between 5:30 pm and 6:30 pm PDT. An automated weather station measured a 73 mph wind gust during this time.

Plumas County

8 E Beckwourth	17	1245PST 1330PST			0	0	0	0	Hail(1.06)
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A series of severe thunderstorms moved through southeastern Plumas and extreme southeast Lassen Co., CA. A spotter near Beckwourth, CA reported 1 1/16 inch hail and nearly 1/2 inch of rain in an hour in association with the storms.

Lassen County

7 SE Scotts	18	1130PST 1145PST			0	0	0	0	Hail(1.75)
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1 3/4 inch hail

Lassen County

8 S Doyle	18	1250PST 1350PST			0	0			Flash Flood
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A line of severe thunderstorms moved across southern Lassen Co., CA. Reports of golf-ball sized hail (1 3/4 inch) and flash flooding with mud flowing across highway 395.

Nevada County

5 NE Truckee/Tahoe Arj	18	1145PST 1245PST			0	0			Flash Flood
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Nevada County

5 W Truckee	18	1200PST 1500PST			0	0			Urban/Sml Stream Fld
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Nevada County

6 W Truckee	18	1215PST 1230PST			0	0			Hail(1.00)
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Severe thunderstorms moving through Nevada Co., CA cause flash flooding with 3 to 4 inches of water running down the roads in Hirschdale, CA. and flooding along Trout Creek. Spotter reports of 1 inch hail also accompanied these storms.

El Dorado County

South Lake Tahoe	18	1230PST 1330PST			0	0			Urban/Sml Stream Fld
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Heavy rain from thunderstorms cause street flooding in South Lake Tahoe, CA.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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CALIFORNIA, Northeast

Mono County

10 W Lee Vining	18	1345PST 1800PST			0	0	1K		Flash Flood
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CALTRANS reports highway 120 closed at Tioga Pass due to brief heavy downpours leading to flash flooding and rock slides as thunderstorms move across the region.

CALIFORNIA, Northwest

CAZ003>004-076

North Coast Interior - Upper Trinity River - Mendocino Interior

10	1200PST				0	0			Excessive Heat
12	1800PST								

Record setting heat occurred on three consecutive days across the interior of northwest California. Ukiah set a record on the 10th of 110 degrees. A few other locations and peak temperatures: Weaverville 115, Laytonville 111, and Big Bar 114.

Del Norte County

25 NE Crescent City	13 31	1200PST 1200PST			0	0			Wild/Forest Fire
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The Sour Biscuit Fire started by lightning in southwest Oregon and spread into California. By the end of the July, 19,513 acres had been burned in California - primarily in the Smith River National Recreation Area of Six Rivers National Forest. The fire continued into August. No injuries were reported or structures damaged in July.

CALIFORNIA, South Central

Tulare County

18 ENE Porterville	04 05	2200PST 1700PST			0	0			Wild/Forest Fire
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Powerhouse wildfire...details unknown at time of filing 7/5/02.

CAZ089>092

W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley

09	1530PST				2	0			Excessive Heat
15	2000PST								

Strong high pressure over the Western United States coupled with subtropical moisture flowing northwestward into Central California produced near-record high temperatures, record high minimum temperatures, and Heat Index readings above 105F in locations throughout the Central and Southern San Joaquin Valley during this period. As an example on one of the hottest days, the 11th, the highest temperatures included 108F at Lemoore, Bakersfield, and Taft, 109F at Fresno and Arvin, 110F at Delano, and 111F at Wasco. In other areas of California, Southern Oregon, and Nevada numerous high and low temperature records were set during this time period. M60OU, M65OU

Mariposa County

9.5 NNW Yosemite Vlg	11 31	1400PST 2359PST			0	0			Wild/Forest Fire
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The Wolf Fire was a lightning caused fire. Inside Yosemite National Park it was managed as a resource burn through the remainder of July, through August, and had burned approximately 1150 acres through September 16th. No structures were lost nor were there any injuries.

Mariposa County

15 NE Yosemite Vlg	12	1317PST 1357PST			0	0			Thunderstorm
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A radar signature denoted a strong thunderstorm was observed at the crest of the Southern Sierra Nevada between Tioga Pass and Tuolumne Meadows within Yosemite National Park.

Tulare County

25 NE Johnsondale	17	1540PST 1715PST			0	0			Thunderstorm
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As denoted by radar signature, a strong thunderstorm cell likely provided heavy rainfall in a remote, sparsely populated area of the Tulare County Mountains during the late afternoon of the 17th.

Kern County

.5 SW Bodfish to 1 E Lake Isabella	21 24	1140PST 1800PST			0	0	3.8M		Wild/Forest Fire
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The Deer Fire was man-caused, was pushed by the typically strong up-valley southwest wind through the Kern River Canyon, and burned 1800 acres. The cost to contain the fire was \$1.3M. However there were 47 primary residences, 1 commercial building, and 46 out-buildings lost due to this fire with an estimated value of \$2.5M. There were no fatalities.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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CALIFORNIA, South Central

Tulare County

4 SSE Johnsondale to 9 NE Johnsondale	21 31	1315PST 2359PST			0	0	14.3M		Wild/Forest Fire
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The McNally Fire was started by an illegal campfire. It charred 90,500 acres through July 31st and ultimately charred 150,696 acres. The fire was located in Tulare County near the town of Johnsondale and is the largest fire in Sequoia Park history. This fire threatened some of the park's historic Giant Sequoia Groves although they were successfully protected. There were 14 structures lost. At one time over 2,000 firefighters plus air support were being used to fight the fire. Cost to contain the fire was in excess of \$14M by 7/31/02. The final cost assigned to this fire was \$45.7M at containment on August 29th.

Mariposa County

2 ESE Yosemite Vlg	24 26	1200PST 1800PST			0	0			Wild/Forest Fire
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The Deltoid Fire burned an estimated 15 acres adjacent to Half Dome within Yosemite National Park. There were no injuries or damage reported from this apparently man-started fire.

CALIFORNIA, Southeast

San Bernardino County

Yermo	24	1400PST 1430PST			0	0	20K		Thunderstorm Wind (G50)
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Strong thunderstorm winds knocked down several trees and powerlines and blew the roof off a garage. A 50-foot antenna was also blown down by the wind.

CALIFORNIA, Southwest

San Diego County

3 NE Lakeside to 5 N Lakeside	01	0000PST 1700PST			0	0			Wild/Forest Fire
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A brush fire that began the afternoon of June 30, was brought under control after burning 130 acres. No structures were destroyed nor injuries reported.

Riverside County

Norco	01	0000PST 1100PST			0	0			Wild/Forest Fire
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A brush fire, that began in the Santa River Valley on June 30, continued to smoulder until late morning.

San Diego County

Miramar to 1 N Miramar	06	1300PST 1600PST			0	0	25K		Wild/Forest Fire
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A 5 acre brush fire burned part of the roof of a large grocery store.

CAZ055

San Bernardino County Mountains

	08 11	1200PST 1800PST			0	9			Excessive Heat
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The third day of temperatures over 100 degrees Fahrenheit, led to 9 people being admitted to the hospital for heat exhaustion. A smog alert was also in effect due to the hot stagnant air over the area.

San Bernardino County

Colton	10	1300PST 1500PST			0	0			Wild/Forest Fire
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Three acres of brush burned.

San Bernardino County

Colton	10	1500PST 2030PST			0	2			Wild/Forest Fire
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Seventy acres of brush was burned in the Santa Ana River bed. Two firefighters were hospitalized with heat exhaustion.

San Diego County

10 E Pine Vly to 25 NE Pine Vly	13 16	1400PST 1700PST			0	0			Wild/Forest Fire
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Named the "Garnet" Fire, it began in the mountains ten miles east of Pine Valley. The fire actively burned down the east slopes toward the desert floor with spotting up to 1/4 mile ahead of the fire. It was contained three days later after 1166 acres had burned. No structures were lost. The cost of fighting the fire was \$925,000 and 110 fire fighters were involved.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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CALIFORNIA, Southwest

CAZ061	Coachella Valley	15	1200PST 1800PST		1	1			Excessive Heat
									Temperatures of 110 degrees Fahrenheit, inside a condominium in the Coachella Valley, led to the death of one woman and heat exhaustion of another. F77PH
San Diego County	3 E Mt Laguna Afs to 5 SE Agua Caliente Spgs	15	1545PST 1745PST		0	0			Flash Flood
									Heavy showers, 1.6 inches of rain in 60 minutes, from thunderstorms over the wilderness area of the Sawtooth Mountains in east San Diego County, flooded Storm Canyon Wash, Canebrake Wash, Vallecito Creek, Bow Willow Creek, Carrizo Creek, and several unnamed and normally dry washes. These in turn washed over County Road S2 in several locations. Standing water was still present 24 hours later in the Agua Caliente Springs area.
CAZ062	San Diego County Deserts	16 25	1200PST 0830PST		1	0			Excessive Heat
									During this period, daytime maximum temperatures over the desert areas ranged between 104 and 109 degrees Fahrenheit with early morning minimum temperatures ranging between 81 and 92 degrees. One man, separated from his companions on or before July 16, succumbed to heat exhaustion. His body was found the morning of July 25, near the Interstate 8 freeway off ramp to Jacumba at approximately 3200 feet M.S.L.. M21OU
Orange County	Costa Mesa	16	1400PST 1630PST		0	0			Wild/Forest Fire
									A 30 acre brush fire spread throughout Talbert Regional Park.
San Bernardino County	Lucerne Vly	16	1410PST 1515PST		0	0	50K		Flash Flood
									Heavy showers from thunderstorms over the San Bernardino Mountains flooded washes draining down the north and east slopes, which overflowed Highway 247 in several locations, and washed out Highway 18 near the intersection with Camp Rock Road.
Riverside County	Temecula	17	1130PST 1600PST		0	1			Wild/Forest Fire
									A ten acre brush fire near Interstate 15, jumped across the freeway, tying up traffic for most of the afternoon. One firefighter was treated for heat exhaustion.
San Bernardino County	6 S Crestline	17	1420PST 2100PST		0	0			Wild/Forest Fire
									Two brush fires consumed 37 acres along and just off of Highway 18 at the west end.
Riverside County	Corona	20	1200PST 1400PST		0	0			Wild/Forest Fire
									A 3 acre brush fire closed the intersection of Highways 71 and 91.
San Bernardino County	Hesperia	22	1457PST 1500PST		0	0	55K		Wild/Forest Fire
									Strong winds and extremely dry conditions fanned a house fire. As a result five outbuildings were destroyed.
CAZ048	San Bernardino County Valley/The Inland Empire	23	1230PST 1620PST		1	0			Excessive Heat
									A young girl, left inside a van, died from heat stroke. Outside air temperatures reached 102 degrees Fahrenheit. F3VE
San Bernardino County	Chino	23	1630PST 2000PST		0	0			Wild/Forest Fire
									A brush fire in Carbon Canyon, threatened several homes before being brought under containment. About 5 acres were burned, and no structures were damaged or lost.
San Bernardino County	Victorville	24	1300PST 1500PST		0	0	3K		Wild/Forest Fire
									A signal flare fired during military exercises started a brush fire that damaged six abandoned structures on the Southern California

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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CALIFORNIA, Southwest

Logistics Airport.									
San Diego County									
5 N Santa Ysabel to 6 N Santa Ysabel	25 26	1834PST 1800PST			0	0			Wild/Forest Fire
Brush fire burned 75 acres on the Santa Ysabel Indian reservation. Six residents were evacuated. Motor vehicle traffic on Highways 76 and 79 was halted for 11 hours.									
Riverside County									
1.5 E Moreno Valley	26	1916PST 2359PST			0	0			Wild/Forest Fire
Brush fire.									
San Diego County									
.8 NW San Ysidro	26	2251PST 2300PST			0	0			Wild/Forest Fire
Brush fire on hillside.									
San Bernardino County									
.5 N Crestline	28	0512PST 0700PST			0	0			Wild/Forest Fire
Brush fire.									
San Bernardino County									
4 N San Bernardino	29	0753PST 0813PST			0	0			Wild/Forest Fire
Brush fire at junction of Highway 30 and Interstate 215.									
Orange County									
3 SW Garden Grove	29	0850PST 0854PST			0	0			Wild/Forest Fire
Brush fire along State Road 22, just west of Newland Avenue..									
San Diego County									
2 E Julian to San Felipe	29 31	1308PST 2359PST			0	0	2M		Wild/Forest Fire
Named the "Pines Fire", it began when a helicopter nipped a power line. The resulting sparks started the fire. As July closed, the fire was only 15% contained, had burned 21 structures and 17,600 acres. The cost of fighting the fire in July alone was \$2.9 million and 2149 personnel had been assigned to the fire.									

CALIFORNIA, Upper

Siskiyou County									
Tulelake	23	1700PST			0	0			Tstm Wind/Hail
See below.									
A spotter for a local TV station reported 1 inch hail in a thunderstorm near Tulelake during the afternoon of 07/23/02. The report was received by this station several hours after the event. No warning was issued based on radar evidence and no other spotter reports were received.									
The spotter reported extensive damage to her vegetable garden and minor damage to her car. She also reported that a farmer neighbor lost on 80 acre mint crop, and another neighbor has extensive damage to his potato crop.									

CALIFORNIA, West South Central

NONE REPORTED.

CALIFORNIA, Western

CAZ007	Alameda / Contra Costa Counties								
	10	0800PST			0	0	50K		Blizzard

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>CARIBBEAN SEA AND TROPICAL ATLANTIC</u>									
AMZ454			St Augustine To Flagler Beach Fl Out 20Nm						
5 N Crescent Beach to 5 NE Crescent Beach	01	1130EST 1200EST			0	0			Waterspout
			2 Waterspouts reported.						
AMZ651			Deerfield Beach To Ocean Reef Fl						
3 SE Government Cut	01	1452EST			0	0			Waterspout
			A boater sighted a waterspout in the Atlantic just east of Crandon Park on Key Biscayne.						
AMZ651			Deerfield Beach To Ocean Reef Fl						
5 NW Miami Beach	02	1032EST			0	0			Waterspout
			Several waterspouts were sighted in the Atlantic off both northeast Miami-Dade and southeast Broward counties.						
AMZ651			Deerfield Beach To Ocean Reef Fl						
2 SE Port Everglades	03	0813EST			0	0			Waterspout
			Two waterspouts were sighted in the Atlantic, one southeast of Fort Lauderdale and the other 10miles offshore Miami Beach.						
AMZ158			Cp Lookout To Surf City Nc Out 20Nm						
North Topsail Beach	05	2030EST			0	0			Marine Tstm Wind (G46)
AMZ370			S Santee R Sc To Savannah Ga 20 To 40Nm						
41 SE Folly Beach	06	0200EST			0	0			Marine Tstm Wind (G35)
AMZ374			Savannah Ga To Altamaha Sd Ga 20 To 60Nm						
45 SE Tybee Island	06	0530EST			0	0			Marine Tstm Wind (G35)
AMZ670			Jupiter Inlet To Deerfield Beach Fl 20 To 60Nm						
15 E Jupiter Inlet	07	0715EST			0	0			Waterspout
			A pilot sighted a waterspout in the Atlantic.						
AMZ550			Flagler Beach To Cocoa Beach Fl Out 20Nm						
5 N Cape Canaveral	13	1255EST			0	0	0	0	Marine Tstm Wind (G44)
			A wind gust to 44 knots was reported at a NASA weather tower.						
AMZ550			Flagler Beach To Cocoa Beach Fl Out 20Nm						
5 N Cape Canaveral	13	1819EST			0	0	0	0	Marine Tstm Wind (G39)
			A thunderstorm wind gust to 39 knots was reported at a NASA weather tower.						
AMZ252			Cp Fear To Little R Inlet Nc Out 20Nm						
Little River Inlet	14	1535EST 1550EST			0	0			Waterspout
			Public reported a waterspout off the coast of Carolina Beach.						
AMZ650			Jupiter Inlet To Deerfield Beach Fl Out 20Nm						
20 SE Jupiter Inlet	17	0807EST			0	0			Waterspout
			A pilot saw a waterspout in the Atlantic.						
AMZ651			Deerfield Beach To Ocean Reef Fl						
5 E Miami Beach	18	0834EST			0	0			Waterspout
			A SKYWARN spotter reported a waterspout in the Atlantic.						
AMZ555			Cocoa Beach To Jupiter Inlet Fl Out 20Nm						
4 W Melbourne Beach	20	1430EST			0	0	0	0	Marine Tstm Wind (G45)
			A thunderstorm wind gust to 45 MPH was reported at Melbourne International Airport.						
AMZ354			Savannah Ga To Altamaha Sd Ga Out 20Nm						
20 SE Tybee Island	20	1800EST			0	0			Marine Tstm Wind (G35)
AMZ550			Flagler Beach To Cocoa Beach Fl Out 20Nm						
5 N Cape Canaveral	21	1640EST			0	0	0	0	Marine Tstm Wind (G39)
			Thunderstorm winds produced winds gusts to 43 MPH at the Cape Canaveral NASA forecast facility.						
AMZ550			Flagler Beach To Cocoa Beach Fl Out 20Nm						
5 N Cape Canaveral	22	1845EST			0	0	0	0	Marine Tstm Wind (G39)
			A thunderstorm wind gust to 45 MPH was recorded at a NASA weather tower.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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CARIBBEAN SEA AND TROPICAL ATLANTIC

AMZ354	Savannah Ga To Altamaha Sd Ga Out 20Nm								
20 SE Tybee Island	26	1829EST			0	0			Marine Tstm Wind (G38)
AMZ158	Cp Lookout To Surf City Nc Out 20Nm								
Beaufort Inlet	27	1800EST			0	0			Marine Tstm Wind (G35)
AMZ670	Jupiter Inlet To Deerfield Beach Fl 20 To 60Nm								
20 S Jupiter Inlet	28	0753EST			0	0			Waterspout
	A waterspout was sighted in the Atlantic just offshore Briny Breezes.								
AMZ651	Deerfield Beach To Ocean Reef Fl								
Port Everglades	30	1046EST			0	0			Waterspout
	A SKYWARN spotter reported a waterspout in the Atlantic just offshore Fort Lauderdale.								
AMZ158	Cp Lookout To Surf City Nc Out 20Nm								
Bogue Inlet	31	1605EST			0	0			Marine Tstm Wind (G40)
AMZ550	Flagler Beach To Cocoa Beach Fl Out 20Nm								
4 N Cape Canaveral	31	1822EST			0	0	0	0	Marine Tstm Wind (G39)
	Thunderstorm winds produced a gust to 45 mph at a NASA weather tower.								

COLORADO, Central and Northeast

Washington County									
28 SSE Akron	01	1950MST	0.1	50	0	0	0	0	Tornado (F0)
	A tornado touched down briefly but did no damage.								
Elbert County									
13 S Agate	02	1830MST			0	0			Hail(1.00)
Arapahoe County									
4 W Littleton	02	2245MST			0	0			Hail(1.75)
Denver County									
Denver	02	2259MST			0	0			Hail(1.75)
Jefferson County									
South Portion	03	1300MST 1330MST			0	0			Flash Flood
	Locally heavy rainfall in the Hayman burn area washed out a secondary road. Debris associated with the runoff, blocked a culvert, forcing the water to wash out the road.								
Weld County									
4 W Keenesburg	03	1322MST			0	0			Hail(0.75)
Weld County									
12 E Gilcrest	03	1323MST			0	0			Thunderstorm Wind (G52)
Weld County									
Greeley Arpt	03	1335MST			0	0			Thunderstorm Wind (G67) ^M
Weld County									
Kersey	03	1336MST			0	0			Hail(0.88)
Weld County									
Greeley Arpt	03	1345MST			0	0			Thunderstorm Wind (G70) ^M
Weld County									
5 SW Greeley	03	1350MST			0	0			Hail(0.75)
Douglas County									
7 S Castle Rock	03	1351MST			0	0			Hail(0.75)
Douglas County									
Castle Rock	03	1357MST			0	0			Hail(0.75)
Weld County									
2 E Greeley	03	1359MST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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COLORADO, Central and Northeast

Strong thunderstorm winds below the roofs of a barn and shed.

Douglas County									
6 N Larkspur	03	1400MST 1500MST			0	0			Flash Flood

Heavy rain washed out a frontage road. The Mountain Ranch subdivision was also flooded.

Weld County									
4.5 E Johnstown	03	1404MST			0	0			Hail(0.75)
Weld County									
3 W Greeley	03	1416MST			0	0			Hail(0.88)
Weld County									
5 E Windsor	03	1440MST			0	0			Hail(0.75)
Larimer County									
6 SE Ft Collins	03	1445MST			0	0			Hail(0.75)
Larimer County									
7 E Ft Collins	03	1450MST			0	0			Hail(1.50)
Larimer County									
1 NE Ft Collins	03	1518MST			0	0			Hail(1.00)
Douglas County									
Southwest Portion	04	1610MST 1800MST			0	0			Flash Flood
Jefferson County									
South Portion	04	1610MST 1800MST			0	0			Flash Flood

Heavy rain again caused flooding problems in the Hayman burn area. In Jefferson County, Gulch Road, which connects to Forest Service Road 211 was washed out. In Douglas County, high water washed out some smaller access roads as well, east of a line extending from Signal Butte to Deckers.

Douglas County									
West Portion	10	1300MST 1500MST			0	0			Flash Flood
Jefferson County									
South Portion	10	1300MST 1500MST			0	0	10K		Flash Flood

Runoff from heavy rainfall in the Hayman burn area flooded Lost Creek Ranch with up to 18 inches of water, just off of State Highway 126. Floodwaters ruined a very expensive rug in the lodge. Also, a driveway to another local residence was washed out. In Douglas County, runoff damaged some of the smaller access roads in the Turkey Creek Drainage.

Jefferson County									
6 SW Deckers	10	1348MST			0	0			Hail(0.75)
Douglas County									
3 S Sedalia	10	1408MST			0	0			Hail(0.75)
Douglas County									
5 SSE Parker	10	1437MST			0	0			Hail(1.00)
Douglas County									
6 SE Parker	10	1440MST			0	0			Hail(3.00)
Arapahoe County									
1 N (Apa)Englwood Ara	10	1507MST			0	0			Hail(2.00)
Arapahoe County									
1 NW (Apa)Englwood A	10	1510MST			0	0			Hail(1.25)
Arapahoe County									
1 E (Apa)Englwood Ara	10	1515MST			0	0			Hail(0.75)
Broomfield County									
Broomfield	10	1647MST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

COLORADO, Central and Northeast

Elbert County									
8 WSW Agate	10	1649MST			0	0			Hail(0.75)
Adams County									
8 SW Henderson	10	1702MST			0	0			Hail(0.75)
Denver County									
Denver	10	1710MST			0	0			Hail(0.75)
Elbert County									
4 NE Matheson	10	1716MST			0	0			Hail(1.25)
Arapahoe County									
2 E Deer Trail	10	1724MST			0	0			Hail(0.75)
Adams County									
4 SW Brighton	10	1727MST			0	0			Hail(0.75)
Morgan County									
13 S Wiggins	10	1834MST			0	0			Hail(1.00)
Lincoln County									
20 S Boyero	10	1908MST			0	0			Hail(0.75)
Adams County									
14 NNE Bennett	21	1559MST			0	0	0	0	Hail(0.75)
Adams County									
11 NNE Bennett	21	1659MST			0	0			Hail(0.75)
Douglas County									
West Portion	21	2000MST 2145MST			0	0			Flash Flood
Heavy rain caused flash flooding problems in the Hayman burn area. South Deckers Road, State Highway 126, had to be closed as 4 feet of water inundated a section of the roadway. The forest service had to remove 40 truck loads of sediment from the area. Also, in southwest Douglas County, a secondary service road was washed out by heavy debris flow.									
Jefferson County									
South Portion	21	2000MST 2145MST			0	0			Flash Flood
Adams County									
13 NNW Bennett	23	1440MST	0.1	50	0	0	0	0	Tornado (F0)
A small tornado touched down briefly but did no damage.									

COLORADO, East Central

COZ090>092									
Yuma County - Kit Carson County - Cheyenne County									
01		0000MST			0	0			Drought
31		2359MST							
Drought conditions worsened from extreme to exceptional during the month of July across east-central Colorado. Hot temperatures and much below normal rainfall during the month continued to stress crops and livestock in the area.									
Kit Carson County									
9 S Flagler	02	1345MST			0	0			Hail(0.75)
Cheyenne County									
2 W Firstview	10	2050MST 2056MST			0	0			Hail(1.00)
Kit Carson County									
2 E Vona	28	1520MST			0	0			Thunderstorm Wind (G70)
Kit Carson County									
7 S Burlington	28	1555MST			0	0			Thunderstorm Wind (G52)
Kit Carson County									
4 S Burlington	28	1559MST			0	0			Thunderstorm Wind (G54) ^M

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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COLORADO, South Central and Southeast

COZ058>081

Eastern Lake County / Western Mosquito Range Above 11000 Ft - Leadville Vicinity / Lake County Below 11000 Ft - Eastern Sawatch Mountains Above 11000 Ft - Western Chaffee County Between 9000 & 11000 Ft - Central Chaffee County Below 9000 Ft - Eastern Chaffee County / Western Mosquito Range Above 9000 Ft - Saguache County West Of Continental Divide Below 10000 Ft - Saguache County East Of Continental Divide Below 10000 Ft - La Garita Mountains Above 10000 Ft - Upper Rio Grande Valley / Eastern San Juan Mountains Below 10000 Ft - Eastern San Juan Mountains Above 10000 Ft - Del Norte Vicinity / Northern San Luis Valley Below 8500 Ft - Alamosa Vicinity / Central San Luis Valley Below 8500 Ft - Southern San Luis Valley - Northern Sangre De Cristo Mountains Between 8500 & 11000 Ft - Northern Sangre De Cristo Mountains Above 11000 Ft - Southern Sangre De Cristo Mountains Between 7500 & 11000 Ft - Southern Sangre De Cristo Mountains Above 11000 Ft - Northwest Fremont County Above 8500 Ft - West / Central Fremont County Below 8500 Ft - Westcliffe Vicinity / Wet Mountain Valley Below 8500 Ft - Wet Mountains Between 8500 And 10000 Ft - Wet Mountains Above 10000 Ft - Teller County / Rampart Range Above 7500 Ft / Pikes Peak Between 7500 & 11000 Ft

01	0000MST								Drought
31	2359MST				0	0			

A long term drought, which began to affect Colorado in earnest in May, continued through July. Conditions were described as severe to extreme during May, June, and through July. Snow pack had essentially melted by early May. Streams and rivers were flowing a very low levels, if at all. The affect on agricultural interests and recreation (rafting and kayaking) increased into and through July. The threat for major wildfires continued, but windy conditions subsided and some rain fell in July. Water conservation measures were implemented in nearly all communities in the area in June, and continued through July.

Rio Grande County

2 SSW South Fork to
5 E South Fork

01	0001MST								Wild/Forest Fire
04	1300MST				0	0	11M		

Continued from the previous month. The Million Fire was contained on Independence Day, after consuming 9300 acres.

Teller County

8 NNW Florissant to
8 NNW Woodland Park

01	0001MST								Wild/Forest Fire
02	1500MST				0	2	6M		

The Hayman Fire, largest in Colorado this century, was fully contained on July 2nd.

Pueblo County

11 NE Boone

02	1650MST								Hail(0.75)
	1655MST				0	0			

Pueblo County

11 NE Boone

02	1657MST								Hail(0.75)
	1702MST				0	0			

El Paso County

4 SW Calhan

02	1920MST								Hail(0.75)
	1925MST				0	0			

El Paso County

2 NE Monument

02	2109MST								Hail(0.75)
	2114MST				0	0			

Teller County

11 NNW Woodland Park

03	1445MST								Flash Flood
	1515MST				0	0			

Heavy rain over portions of the Hayman Fire Burn area caused ash and water to rush across roadways in the Turkey Creek Drainage.

Teller County

10 NW Woodland Park

04	1540MST								Flash Flood
	1620MST				0	0			

Heavy rainfall over portions of the Hayman Fire Burn area in the vicinity of Turkey Creek and West Creek drainages caused fire fighters to go to higher ground and washed out some forest roads.

Prowers County

15 SE Lamar to
Granada

05	1740MST								Flash Flood
	1940MST				0	0			

Very heavy rainfall in excess of six inches caused flash flooding of Wolf Creek...Granada Creek and Plum Creek drainage basins in central Prowers county. A bridge over Wolf Creek just north of Granada was damaged. No dollar amount to fix the bridge was available at this time.

Baca County

10 S Springfield

05	1900MST								Flash Flood
	2100MST				0	0			

Very heavy rainfall in excess of six inches caused some flooding of county roads and low areas in the Sand arroyo basin.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>COLORADO, South Central and Southeast</u>									
El Paso County									
1 S Colorado Spgs to 8 S Colorado Spgs	05	2100MST 2330MST			0	0			Flood
Slow moving thunderstorms dropped from 1 to 3 inches of rainfall over much of Colorado Springs...causing some brief and minor flooding of Fountain Creek in and south of Colorado Springs. Their was no known damage.									
Huerfano County									
Walsenburg	06	1800MST 1830MST			0	0			Flash Flood
Rainfall of 1 to 3 inches in a short time frame caused flooding of irrigation and other ditches as well as areas of deep water in parking lots in the vicinity of Walsenburg.									
Saguache County									
15 SW Saguache	07	1603MST 1630MST			0	0			Hail(1.00)
Pueblo County									
Pueblo West	09	1353MST 1358MST			0	0			Hail(0.75)
Teller County									
10 NW Woodland Park	10	1245MST 1400MST			0	0			Flash Flood
Heavy rain forced incident crews in the Hayman Fire Burn area to head for safe spots. Reports of water and debris washing across the roadways were noted.									
El Paso County									
Ft Carson	10	1302MST 1307MST			0	0			Hail(0.75)
El Paso County									
Ft Carson	10	1333MST 1338MST			0	0			Hail(0.75)
El Paso County									
6 SSW Colorado Spgs	10	1405MST 1410MST			0	0			Hail(0.75)
El Paso County									
5 NW Colorado Spgs	10	1452MST 1457MST			0	0			Hail(1.00)
El Paso County									
10 NNE Colorado Spgs	10	1505MST 1510MST			0	0			Hail(1.00)
Pueblo County									
Pueblo West	10	1505MST 1510MST			0	0			Hail(1.00)
Pueblo County									
Pueblo West	10	1509MST 1514MST			0	0			Hail(1.00)
Pueblo County									
5 N Beulah	10	1555MST 1600MST			0	0			Hail(0.75)
El Paso County									
5 SW Ramah	10	1616MST 1621MST			0	0			Hail(1.75)
Kiowa County									
Haswell	10	1929MST 1934MST			0	0			Hail(1.50)
Prowers County									
Lamar	10	2025MST			0	0			Thunderstorm Wind (G55)^M
Baca County									
2 E Vilas	11	2120MST 2125MST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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COLORADO, South Central and Southeast

Las Animas County

6 SE Kim	14	1515MST 1520MST			0	0			Hail(1.00)
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Chaffee County

6 WSW Buena Vista to 9 SW Buena Vista	22	1900MST 2015MST			0	2	100K		Flash Flood
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Intense rainfall and hail due to slow moving thunderstorms fell on steep slopes composed of loose soil and rock. The worst rock and landslides in decades occurred on county road 306, which is in the Cottonwood Creek drainage north of Mt. Princeton. The debris on county road 306 was one mile long and over 10 feet deep in spots. An elderly couple was swept to the side of county road 306, and mud and rock flowed into their van. They suffered hypothermia and abrasions and bruises. County road 306 was closed for clean up for two weeks. County road 162, in the Chalk Creek drainage south of Mt. Princeton also experienced several mud and rock flows.

Kiowa County

10 S Sheridan Lake	28	1730MST 1735MST			0	0			Hail(0.88)
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Prowers County

8 N Granada	28	1744MST 1749MST			0	0			Hail(0.75)
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Custer County

15 SE Westcliffe	29	1447MST 1457MST			0	0			Hail(1.00)
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Custer County

1 S Rosita	29	1530MST 1535MST			0	0			Hail(0.75)
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COLORADO, West

COZ001>014-017>023

Lower Yampa River Basin - Central Yampa River Basin - Roan And Tavaputs Plateaus - Elkhead And Park Mountains - Upper Yampa River Basin - Grand Valley - Debeque To Silt Corridor - Central Colorado River Basin - Grand And Battlement Mesas - Gore And Elk Mountains/Central Mountain Valleys - Central Gunnison And Uncompahgre River Basin - West Elk And Sawatch Mountains - Flattop Mountains - Upper Gunnison River Valley - Uncompahgre Plateau And Dallas Divide - Northwestern San Juan Mountains - Southwestern San Juan Mountains - Paradox Valley / Lower Dolores River Basin - Four Corners / Upper Dolores River Basin - Animas River Basin - San Juan River Basin

01	0000MST	0	0	Drought
31	2359MST			

Extreme to exceptional drought conditions continued throughout western Colorado during the month of July. Water restrictions became common across much of the area. The persistent drought continued a heightened risk for wildfires and caused problems for agricultural interests. See the August 2002 Storm Data publication for a continuation report on the drought in western Colorado.

Garfield County

10 N Glenwood Spgs	01 10	0000MST 2359MST			0	0	3.5M		Wild/Forest Fire
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The Coal Seam fire which began in early June (see the June 2002 Storm Data publication) was contained on July 10th. The fire destroyed 29 residences and 14 other buildings. Nearly 3000 people were evacuated from that area. The cost of fighting the fire was in excess of 7 million dollars.

La Plata County

2.5 ENE Hermosa to 14 NNE Bayfield	01 17	0000MST 2359MST			0	0	8M		Wild/Forest Fire
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The Missionary Ridge fire began in early June (see the June 2002 Storm Data publication) and was contained on July 17th. The fire destroyed approximately 50 homes and 22 other structures. The fire consumed over 70,000 acres. The cost of fighting the fire exceeded 40 million dollars.

Archuleta County

17 NW Chimney Rock to 17 NNW Chimney Rock	01 17	0000MST 2359MST			0	0			Wild/Forest Fire
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The Missionary Ridge Fire burning in La Plata county moved into the northwest corner of Archuleta county at the end of June (see the June 2002 Storm Data publication). Containment of the wildfire was on the 17th of July. Several hundred acres of forest were consumed.

Gunnison County

7 NNE Sapinero to 9 NNW Sapinero	01 02	0000MST 2359MST			0	0			Wild/Forest Fire
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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COLORADO, West

The Soap Creek Fire was ignited by lightning in late June (see the June 2002 Storm Data publication). This wildfire burned several hundred acres of vegetation before it was contained on July 2nd.

Moffat County

13 NNW Massadona to 15 NNW Massadona	01 04	0000MST 2359MST			0	0			Wild/Forest Fire
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The Bear Fire in Dinosaur National Monument began in late June (see the June 2002 Storm Data publication) and was contained on July 4th. The fire consumed 4,800 acres of vegetation. The cost of fighting the fire was 1.1 million dollars.

San Miguel County

15 WSW Telluride to 12 WSW Telluride	01	0000MST 2359MST			0	0			Wild/Forest Fire
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The West Beaver Fire began in mid June (see the June 2002 Storm Data publication) and was contained on July 1st. Lightning ignited the fire on the forested east slope of Lone Cone Mountain and consumed 580 acres. The cost of fighting the fire was 1.5 million.

Moffat County

9 SSE Elk Spgs to 10 SSE Elk Spgs	01	0000MST 2359MST			0	0			Wild/Forest Fire
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The Pinyon Ridge Fire began in mid June (see the June 2002 Storm Data publication) and was contained on July 1st. The fire consumed 2,400 acres of vegetation. The cost of fighting the fire was 800 thousand dollars.

Garfield County

7 N New Castle to 10 N New Castle	01 21	0000MST 2359MST			0	0			Wild/Forest Fire
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Lightning ignited the Spring Creek Fire in mid June (see the June 2002 Storm Data publication) and was contained on July 21st. 62 homes, 40 other buildings, and the town of Newcastle's only water supply were threatened by the fire. A total of 13,490 acres of forest were consumed. The cost of fighting the fire was 6.9 million dollars.

Gunnison County

3 N Gunnison to 6 N Gunnison	01 02	0000MST 2359MST			0	0			Wild/Forest Fire
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The Wiley Ridge Fire which began in mid June (see June 2002 Storm Data publication) was contained on July 2nd. The fire burned over a thousand acres of forest land and cost nearly 200 thousand dollars to fight.

La Plata County

3 SSW Hermosa to 4 SW Hermosa	01 17	0000MST 2359MST			0	0	2.5M		Wild/Forest Fire
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The Valley Fire was ignited by lightning in the Falls Creek area adjacent to the Animas Valley in late June (see June 2002 Storm Data publication). 22 homes in the Falls Creek subdivision were destroyed. The Valley Fire consumed 400 acres and became part of the Missionary Ridge Fire Complex. The complex was contained on July 17th.

Garfield County

37 N Glenwood Spgs to 38 N Glenwood Spgs	05 31	1800MST 2359MST			0	0			Wild/Forest Fire
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This lightning caused wildfire became known as the Big Fish fire and occurred in the Flat Tops Wilderness area of the White River National Forest. This fire continued to burn through the end of July and was included as part of the Lost Green Complex near the end of the month. See the August 2002 Storm Data Publication for a continuation on this fire.

La Plata County

16 ENE Durango	09	1330MST 1430MST			0	0			Urban/Sml Stream Fld
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Heavy rains resulted in minor mudslides which covered County Road 501 just south of Vallecito Reservoir. The road was closed temporarily until the mud and debris was removed.

San Miguel County

5 SW Norwood to 7 W Norwood	09 21	1800MST 1200MST			0	0			Wild/Forest Fire
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This wildfire was named the Burn Canyon fire and occurred in the Uncompahgre National Forest. The fire consumed 31,300 acres of forest. The cost of fighting the fire was 35.3 million dollars. Several structures were threatened and residences in the community of Redvale were evacuated.

Routt County

23 N Steamboat Spgs	12 31	1800MST 2359MST			0	0			Wild/Forest Fire
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This lightning caused wildfire occurred in the Routt National Forest and was named the Hinman fire. Several residences and commercial structures were threatened by the fire. The fire continued to burn through the end of July. See the August 2002 Storm Data publication for a continuation on this fire.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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COLORADO, West

Gunnison County

10 W Gunnison	12 16	1800MST 1800MST			0	0			Wild/Forest Fire
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This lightning caused wildfire was named the Stueben Fire and occurred in the Gunnison National Forest. The fire consumed 693 acres of forest. The cost of fighting the fire was 768 thousand dollars. Livestock and campers were evacuated from the area.

Routt County

15 SE Steamboat Spgs to 14 SE Steamboat Spgs	13 31	1800MST 2359MST			0	0			Wild/Forest Fire
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This lightning caused wildfire occurred in the Routt National Forest and was named the Green Creek Fire. Three hundred residences were threatened by this fire. 2,370 acres of forest were consumed by the fire before becoming part of the Lost Green Complex on the 20th of July. This fire continued to burn through the end of July. See August 2002 Storm Data Publication for a continuation on this fire.

Rio Blanco County

40 E Meeker to 41 E Meeker	13 31	1800MST 2359MST			0	0			Wild/Forest Fire
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This lightning caused wildfire occurred in the Flat Tops Wilderness area of the Routt National Forest and was named the Lost Lakes Fire. 1,650 acres of timber were consumed by the fire prior to becoming part of the Lost Green Complex on July 20th. This fire continued to burn through the end of the month. See the August 2002 Storm Data Publication for a continuation on this fire.

Mesa County

Orchard Mesa	14	1537MST 1545MST			0	0	3K		Thunderstorm Wind (G65)
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Strong outflow from a thunderstorm blew down three power poles and a number of trees in Orchard Mesa. Power was restored to the community about an hour after the power lines went down.

Mesa County

(Gjt)Walker Arpt	14	1641MST			0	0			Thunderstorm Wind (G59) ^M
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Outflow from a thunderstorm picked up 900 pounds of tie downs at Walker Field Airport and threw them across the ramp.

Montezuma County

15 S Cortez	14 20	1700MST 1200MST			0	0	30K		Wild/Forest Fire
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This lightning caused wildfire was named the East Marble fire. The fire consumed 366 acres of forest and destroyed one structure. The cost of fighting the fire was 261 thousand dollars.

Montezuma County

Stoner	15	1500MST 1510MST			0	0	25K		Hail(1.00)
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Hail stones up to one inch in diameter damaged several RVs, campers, and trailers at the Stoner Creek campground.

Garfield County

New Castle to Rifle	16	1640MST 1840MST			0	0			Urban/Sml Stream Fld
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Nuisance flooding and mudslides occurred along interstate 70 in New Castle.

Garfield County

Rifle	18	1800MST 2100MST			0	0	158K		Flash Flood
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Flash flooding in Hubbard Gulch and Government Creek damaged 11 buildings, including homes and businesses, and tore out a section of a road and a culvert. The fairgrounds were also damaged. The flooding was designated an event which occurs only once every 400 years in the Rifle area.

Garfield County

Rifle	19	1815MST 2000MST			0	0			Urban/Sml Stream Fld
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A thunderstorm produced heavy rain over the Roan Plateau north of Rifle with heavy runoff flowing into Government Creek. One and a half inches of rain was estimated to have fallen in a half hour. Minor flooding occurred in parks and open fields.

San Miguel County

3 E Telluride to 3 ESE Telluride	22	1240MST 1330MST			0	0			Flash Flood
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Several high mountain roads were washed out.

La Plata County

15 ENE Durango	22	1450MST 1900MST			0	0			Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage			Character of Storm
					Killed	Injured	Property	Crops	

COLORADO, West

A flash flood trapped 30 vehicles north of County Road 240 on County Road 501 as a portion of County Road 501 washed out below Red Creek. 400 pound boulders and large trees were deposited onto the road.

La Plata County
6 W Durango

22 1530MST
 1615MST 0 0 **Heavy Rain**

A heavy rain shower produced 1.50 inches of rain within a 45 minute period in the West Durango subdivision .

La Plata County
3 N Ignacio

22 1600MST
 1800MST 0 0 2K 2K **Urban/Sml Stream Fld**

An irrigation ditch overflowed due to heavy rain and flooded a farmyard and fields with water 2 to 3 feet deep. A barn, garage, and corral sustained minor damage.

La Plata County
11 NE Durango to
14 NE Durango

23 1915MST
 2330MST 0 0 400K **Flash Flood**

Flash floods with heavy debris content cascaded across County Road 240, near where the road intersects with County Road 243. A wall of water 12 to 15 feet high came roaring down Shearer Creek. Further down the road from Shearer Creek, five vehicles (four with occupants) were swept off the road and into flooded streams. The flash flood waters were accompanied by large trees up to 2 feet in diameter and boulders up to 4 feet in diameter. Debris up to 8 feet deep was deposited on the road and private properties. Debris four feet deep covered a bridge. At least one house was damaged and a parked truck was heavily damaged. The force of the water and debris tore out a 50 foot section of reinforced steel guard rail and carried away concrete road barricades. No injuries were reported, though at least 35 people had to be rescued or evacuated. Additional flash floods in the Missionary Ridge burn area occurred later in the evening and also produced large amounts of debris which closed many roads. The later flash flooding also resulted in some property damage in the Vallecito Lake community.

La Plata County
6 N Durango to
10 N Durango

23 2230MST
 2345MST 0 0 **Flash Flood**

Flash floods deposited up to two feet of mud and rocks across County Road 250 along the east side of the Animas Valley.

Ouray County
6 S Ouray

25 1300MST
 1315MST 0 0 **Flash Flood**

Heavy rainfall resulted in a mudslide which closed U.S. Highway 550 over the San Juan Mountains for about five hours. The mud covered both lanes up to 4 feet deep along a 100 foot stretch of road.

Routt County
30 SW Steamboat Spgs

26 1200MST
31 2359MST 0 0 **Wild/Forest Fire**

This lightning caused wildfire occurred in the Routt National Forest and was named the Big Fish Fire. This fire was included into the Lost Green Complex. See the Lost Green Complex storm data entry for a continuation on this fire.

Montrose County
7 NNW Paradox

28 1630MST 0 0 **Funnel Cloud**

Montezuma County
9 SE Cortez

29 1800MST
31 2359MST 0 0 **Wild/Forest Fire**

This lightning caused fire started in Mesa Verde National Park and was named the Long Mesa Fire. Mesa Verde National Park was closed and evacuated. Eighty residences and several of the National Park's offices and management buildings were threatened. This fire continued into the month of August. See the August 2002 Storm Data Publication for a continuation on this wildfire.

Rio Blanco County
20 E Rangely

30 0000MST
31 2359MST 0 0 **Wild/Forest Fire**

This lightning caused fire was named the North Barcus Fire. This fire continued into the month of August. (See the August 2002 Storm Data publication for a continuation of this wildfire report)

Garfield County
7 NE Carbondale to
8 NE Carbondale

31 0000MST
 2359MST 0 0 1M **Wild/Forest Fire**

A construction crew sawing through rebar ignited a forest fire which became known as the Panorama Fire. The rate of fire spread increased to nearly 1000 acres per hour due to moderate winds. 2400 acres of trees were consumed by the end of the day. Four houses were destroyed and another was damaged in the Spring Creek Reservoir area. More than 300 people were evacuated from over 200 homes in five subdivisions. The Panorama Fire continued into the month of August. See the August 2002 Storm Data publication for a continuation of this wildfire report.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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CONNECTICUT, Northeast

Hartford County

Farmington to Glastonbury	15	1630EST 1710EST			0	1	20K		Thunderstorm Wind (G52) ^M
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Severe thunderstorms moving through Hartford County downed a large tree onto a pickup truck in Farmington, which resulted in one injury. The storms also downed trees and wires in West Hartford, Hartford, and Glastonbury. A Skywarn spotter in Wethersfield measured a wind gust to 60 mph as the storms moved through.

Hartford County

Canton to Burlington	19	1530EST			0	0	2K		Thunderstorm Wind (G50)
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Hartford County

Windsor	19	1535EST			0	0			Hail(1.00)
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An isolated severe thunderstorm downed large branches in Canton and Burlington. Quarter sized hail fell in Windsor.

Tolland County

Somers	23	1430EST			0	0	3K		Thunderstorm Wind (G50)
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Hartford County

Simsbury	23	1445EST			0	0	5K		Thunderstorm Wind (G50)
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Severe thunderstorms downed wires in Somers and large trees in Simsbury.

CONNECTICUT, Northwest

CTZ001

Litchfield

05 07	2000EST 2359EST			0	0			Smoke
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Smoke, from many forest fires across the Nemiscau region of northern Quebec, became trapped under a subsidence inversion, and was transported south across northwestern Connecticut from the evening hours of July 5, to the late evening of July 7. The forest fires were sparked by exceptionally hot and dry weather over that part of Canada followed by an unusual amount of thunderstorm activity, resulting in many lightning strikes. The circulation between high pressure over Hudsons Bay and a low pressure off the Canadian Maritimes transported the smoke southward. The smoke obscured the sky, and even reduced surface visibilities to as low as one mile, especially on the early morning of July 7. Advisories were issued warning people with respiratory problems to remain indoors and all individuals to curb outside activity. No major problems were reported to the National Weather Service as a result of this smoke. By late Sunday, July 7, the low pressure weakened and moved further east, allowing the wind to back into more of a westerly direction, finally dissipating the smoke.

Litchfield County

Goshen	19	1445EST			0	0	5K		Thunderstorm Wind
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Thunderstorms erupted ahead of cold front, on the afternoon of July 19 across Litchfield County. One of the storms became briefly severe as it moved across the town of Goshen. The winds from the storm knocked down some trees in that town.

Litchfield County

Salisbury	23	1345EST			0	0	25K		Thunderstorm Wind
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Litchfield County

New Milford	23	1436EST			0	0	5K		Thunderstorm Wind
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A cold front, working southeast across the Empire State, triggered scattered thunderstorms across Litchfield County during the early afternoon of July 23. Since the air mass ahead of the front was hot and humid, and winds aloft rather strong, two of the storms became severe. Thunderstorm winds knocked down many trees and wires in the town of Salisbury. One of the trees fell onto a store selling antiques, causing minimal damage to that structure. Another tree fell on a car, partially crushing it. Later, a few trees were also blown down by a separate storm in the town of New Milford. The storms temporarily knocked out power to about 1,000 customers in northwest Connecticut.

CONNECTICUT, Southern

CTZ005>010

Northern Fairfield - Northern New Haven - Northern Middlesex - Northern New London - Southern Fairfield - Southern New Haven

02 04	1200EST 1700EST			1	0			Excessive Heat
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Temperatures rose into the mid and upper 90s across interior Southern Connecticut and into the lower and mid 90s along the shores of Long Island Sound. High temperatures and humidities combined to produce heat indices from 100 to 105 degrees across

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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CONNECTICUT, Southern

the region, but especially across interior Southern Connecticut. In Greenwich, News Radio 88 (WCBS) reported that a 92 year old man died in his apartment, which was not air conditioned.

M92PH

Fairfield County									
Greenwich	09	1633EST			0	0			Thunderstorm Wind (G52)

Fairfield County									
Easton	19	1730EST			0	0			Thunderstorm Wind (G50)

A spotter reported that severe thunderstorm winds knocked over a 12 inch diameter tree.

New London County									
Lebanon	19	1736EST			0	0			Thunderstorm Wind (G50)

Law Enforcement reported that thunderstorm high winds downed tree limbs.

Fairfield County									
Shelton	19	1830EST			0	0			Urban/Sml Stream Fld

A spotter reported up to one foot of water across most of Route 8 at Exit 16 in Shelton, which resulted in traffic limited to one lane.

New Haven County									
Orange	19	1830EST			0	0			Thunderstorm Wind (G50)

A spotter reported a tree down and power outages along Route 1.

Fairfield County									
New Canaan	23	1620EST			0	0			Thunderstorm Wind (G50)

Local police reported numerous trees down as a result of strong winds during a severe thunderstorm.

DELAWARE

DEZ001>004									
		New Castle - Kent - Inland Sussex - Delaware Beaches							
	01	0000EST			0	0	0		Drought
		2359EST							

The combination of an unseasonably warm July and below normal monthly precipitation intensified the drought across Delaware. On a county weighted average July monthly precipitation was 2.3 inches in Sussex County, 3.3 inches in Kent County and 1.8 inches in New Castle County. Normal is around 3.9 inches. Monthly precipitation totals at the New Castle County Airport was 1.40 inches and in Georgetown (Sussex County) was 2.14 inches. The drought warning remained in effect for the state. Governor Ruth Ann Minner continued to ask residents to voluntarily conserve water by restricting all non-essential uses such as washing cars and using wise water habits such as running the dishwasher and clothes washer with full loads. On July 18th the State Drought Advisory Committee urged residents and businesses to voluntarily cut water usage by 10 percent to stave off restrictions, especially in the northern half of New Castle County. Demand for water dropped after this request. Nevertheless, without adequate precipitation low streamflow daily records were being set for the Brandywine and White Clay Creeks. Groundwater monitoring wells were all near or at record lows for the calendar day. Even streamflow in tidal sections of the Nanticoke River (Sussex County) were at their lowest levels since the 1950s. For emergency use, the Hoopes Reservoir in New Castle County was at capacity. The continued dry conditions forced Sussex County officials to ban all outdoor burning on the 19th.

The unseasonably hot July combined with inadequate rainfall during the critical pollination phase devastated the state's corn crop. It was estimated that 75 percent of the corn crop has been hurt by the drought. Yields in Sussex County for unirrigated corn fields was expected to be 10 bushels per acre versus the normal yield of 120 bushels per acre. The National Agriculture Statistics Service report for Sussex County crops toward the end of the month indicated how much the drought has intensified. Forty-four percent of the county's corn crop was rated as very poor and only 36 percent was either in fair or good condition. Forty percent of the county's

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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DELAWARE

soybean crop was also in very poor condition with only 29 percent in fair or good condition. Eighty-two percent of all farmland was rated as being very short of moisture. Normal is only 9 percent. State officials were considering declaring the corn crop a disaster.

The Delaware River Basin Commission continued its drought emergency declaration for the entire Delaware River drainage basin. The New York City Reservoirs which feed the Delaware River fell from 89.0 percent of capacity on July 1st to 77.1 percent of capacity on July 31st.

DEZ001>004

New Castle - Kent - Inland Sussex - Delaware Beaches

01	0900EST								
04	1800EST				0	0			Excessive Heat

July started with unseasonably hot and humid weather across Delaware. The hottest and most humid weather occurred on Independence Day before a cold front quietly moved through the region during the night of the 4th. Highest temperatures were near 100 degrees and heat indices reached around 105 degrees. Highest temperatures included 100 degrees in Greenwood (Sussex County) and Milford (Kent County), 99 degrees in Georgetown (Sussex County), 96 degrees at the Dover Air Force Base and the New Castle County Airport and 95 degrees in Wilmington (New Castle County Airport).

Sussex County
2 W Laurel to
3 E Delmar

03	1529EST								
	1605EST				0	0			Hail(1.75)

Sussex County
4 NE Delmar

03	1545EST								
					0	0			Thunderstorm Wind (G50)

A severe thunderstorm dropped a swath of quarter to golf ball size hail across southwest Sussex County from Laurel south to Delmar. The same storm also knocked down a couple of trees in Little Creek Hundred. One downed tree blocked the intersection of County Roads 64 and 66 in the Ward section of the hundred.

DEZ001>004

New Castle - Kent - Inland Sussex - Delaware Beaches

06	1200EST								
07	1800EST				0	0	0	0	Smoke

A northerly flow of air through the lower half of the atmosphere pushed smoke from forest fires in northern Quebec across Delaware. The smoke reduced visibilities and could be smelled from the afternoon of the 6th into the afternoon of the 7th. Winds started to shift from north on the 7th to the west on the 8th and pushed the smoke farther to the east. In all about 50 fires were burning near James Bay about 500 miles north of Montreal in Quebec Province. The fires consumed about 150,000 acres and caused the evacuation of the Native American village of Nemaska.

New Castle County
Newark

09	2030EST								
					0	0			Thunderstorm Wind (G50)

A severe thunderstorm knocked down a tree and several large limbs in Newark. About 250 Conectiv Power Delivery customers lost power in New Castle County.

Kent County
Hartly

09	2030EST								
					0	0			Thunderstorm Wind (G52)

A severe thunderstorm knocked down a few trees in Hartly.

DEZ001>004

New Castle - Kent - Inland Sussex - Delaware Beaches

15	0900EST								
19	1800EST				0	0			Excessive Heat

Another work week of hot weather affected Delaware from the 15th through the 19th. High temperatures reached into the 90s in most areas each day. The highest temperatures mainly occurred on the 17th. Humidity levels were high for most of the week, except for the 16th when a weak back door cold front moved through the region. A second stronger front moved through the state during the first half of the 20th and ended the string of 90 degree high temperatures. Highest temperatures included 96 degrees in Salisbury (Wicomico County in Maryland), Georgetown (Sussex County) and Milford (Kent County), 95 degrees in Greenwood (Sussex County) and 92 degrees in Wilmington and at the New Castle County Airport.

Sussex County
Bethany Beach to
Millville

19	1310EST								
	1330EST				0	0	250K	0	Lightning

Thunderstorms produced considerable cloud-to-ground lightning across southeastern Sussex County. The resulting strikes caused several fires from Bethany Beach to Millville. In Millville, six homes were struck by lightning. Two suffered significant damage. One home had its entire interior singed. In Ocean View, a garage was destroyed. In Bethany Beach, two units of the Sea Colony Townhouses suffered moderate to severe fire damage. Witnesses saw lightning strike the roof of one of the townhouses. In downtown Bethany Beach, lightning struck the transformer at the back of one store. It knocked out the power to the store and its phone service was out until the next day. The liquor store next door could not get its computer or register to work properly until the 22nd. No serious injuries were reported.

Sussex County
Bethany Beach

19	1322EST								
					0	0	0	0	Thunderstorm Wind (G75)^M

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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DELAWARE

A severe thunderstorm produced a measured wind gust to 86 mph in Bethany Beach.

Sussex County

Bethany Beach

19	1330EST 1630EST				0	0			Flash Flood
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Very slow moving thunderstorms with very heavy rain inundated the Bethany Beach area of southeastern Sussex County with copious amounts of rain. Doppler Radar storm total estimates reached about 10 inches in Bethany Beach. Two ground truth rainfall reports from Bethany Beach recorded 7.41 inches and 6.00 inches. Most of the rain fell between 2 p.m. and 4 p.m. EDT. Every road east of Delaware State Route 1 was flooded. All side streets in Bethany Beach were flooded and closed. There was up to two feet of water in the downtown area. The Bethany Fire Department rescued occupants of two vehicles that were swept by the flood waters into ditches. They also rescued an elderly man and woman who drove their vehicle into a pond near the Sea Colony Resort. The intersection of Delaware State Route 1 and Jefferson Bridge Road became a pond. One driver floated into a ditch at this intersection. Residents were using rafts as a means of transportation along Pennsylvania Avenue. Emergency services responded to 13 weather related calls in the town. Even the fire department was not immune: the heavy rain flooded the first floor of the fire station, soaked the furniture and caused the carpeting to float. Thirty feet of an embankment along the Loop Canal was washed away. The flooding forced the cancellation of the evening town meeting. No serious injuries were reported.

Sussex County

Rehoboth Beach to Fenwick Is

25 26	0700EST 2200EST				0	0	0	0	Rip Currents
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A high pressure system building across New England produced a northeast flow along the Delaware Beaches and increased both the number and intensity of rip currents along the beach. Dozens of rescues were performed because of the currents, but there were no reported injuries. In Bethany Beach, there were 25 water rescues alone during the morning high tide on the 25th. Dewey Beach restricted bathers to waist deep waters. As the high pressure system moved farther offshore, winds slowly turned to the southeast and then south on the weekend (the 27th and 28th). This reduced the intensity and number of rip currents.

Sussex County

1.5 S Bethany Beach

27	1640EST				0	0			Tstm Wind/Hail
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A thunderstorm knocked down a couple of small tree limbs in South Bethany.

Sussex County

4 SW Ellendale to Bethany Beach

27	1730EST 1900EST				0	0			Flash Flood
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Slow moving thunderstorms with heavy rain produced poor drainage flooding and flooding of creeks in parts of the eastern two-thirds of Sussex County. Adjusted Doppler Radar Storm total estimates averaged between 1 to 3 inches across much of this area. But storm total estimates reached between 4 and 5 inches at the conjunction of Nanticoke, Cedar Creek and Georgetown Hundreds. Roadway flooding was reported near and along the coasts on Delaware State Routes 1, 26 and 54.

DEZ001>004

New Castle - Kent - Inland Sussex - Delaware Beaches

28 30	0900EST 1800EST				0	0			Excessive Heat
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Another hot and very humid air mass moved into Delaware on the 28th. In most areas this hot spell produced some of the highest heat indices of the summer as they reached between 105F and 110F during the afternoon of the 29th. A cold front moved through the region during the night of the 30th. While temperatures on the 31st still reached into the 90s, dew point temperatures and the moisture content of the air mass was considerably lower. The apparent temperature (or heat index) matched and did not exceed afternoon high temperatures. More humid air again moved in during the start of August. The string of days with high temperatures of 90 degrees or higher did not end until August 6th. County office buildings in Sussex County were available for senior citizens to keep themselves cool. There were no reports of heat related illnesses in either Kent or Sussex County. The hot weather and high humidity levels taxed electric utilities and the PJM Interconnection issued a usage advisory.

For most places the highest temperatures with the July part of this hot spell occurred on the 29th and included 97 degrees at the New Castle County Airport, Georgetown (Sussex County) and Salisbury, Maryland (Wicomico County), 96 degrees in Milford (Kent County), 95 degrees in Greenwood (Sussex County) and 94 degrees at the Dover Air Force Base (Kent County) and Wilmington (New Castle County). The hot spell at the end of July cemented the month as being above normal. Monthly mean temperatures averaged between 1 and 2 degrees warmer than normal. The July monthly mean temperature at the New Castle County Airport was 77.5 degrees, 0.9 degrees warmer than normal and in Georgetown was 78.4 degrees, 2.1 degrees warmer than normal. At Georgetown, 18 of the 31 days in July had high temperatures of 90 degrees or higher. At the New Castle County Airport, it was 13 days.

DISTRICT OF COLUMBIA

DCZ001

District Of Columbia

02 04	1000EST 2000EST				0	0			Excessive Heat
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High pressure remained stationary off the Delmarva coastline during the 1st week of July. This resulted in a prolonged period of

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

DISTRICT OF COLUMBIA

hot and humid weather across the Mid Atlantic region. Between July 2nd and 4th, high temperatures rose into the lower to middle 90s and dew points reached into the lower 70s. This resulted in heat index values reaching 100 to 110 degrees during the afternoon. In addition, heat index value only dropped into the lower 80s overnight on the 4th and 5th, resulting in little relief for people without air conditioning. These conditions led to a number heat related illnesses, especially in people already suffering from pre-existing medical conditions. Thousands of people attended 4th of July activities on the Mall on July 4th. A handful of people on the grounds were overcome by heat during the day. On-site medical staff treated 150 people for heat exhaustion, including 83 people who were transported to area hospitals.

DCZ001	District Of Columbia								
	22	1000EST			0	0			Excessive Heat
	23	2000EST							

Another round of hot and humid weather occurred in the Washington D.C. metropolitan area on July 22nd and 23rd. Heat indexes rose to 103 degrees on the 22nd and 105 degrees on the 23rd.

DCZ001	District Of Columbia								
	28	1000EST			0	0			Excessive Heat
	29	2000EST							

A large area of high pressure sat off the Mid-Atlantic coast during the last week of July. This caused a warm and moist south wind to blow into the region for several days, resulting in another heat wave. The hottest days were the 28th and 29th of July when temperatures rose into the 90s and heat index values reached 100 to 110 degrees. Local power companies reported record electricity use on the 29th. City officials reported a number of heat-related medical emergency calls during the week.

FLORIDA, East Central

Brevard County									
Scottsmoor	04	1412EST			0	0	0	0	Hail(0.75)

Volusia County									
Daytona Beach	04	1500EST			0	0	20K		Lightning

Lightning started a fire that damaged an apartment building in Daytona Beach.

Volusia County									
Daytona Beach	04	1600EST			0	8	0	0	Lightning

Eight spectators were struck and injured by lightning at Daytona Beach International Speedway. Two of the victims were hospitalized. Six were treated and released at the scene.

Lake County									
Groveland	12	1135EST			0	0	0	0	Funnel Cloud

Lake County sheriff's office reported a funnel cloud south of Groveland.

Brevard County									
Titusville	20	1457EST			0	0	0	0	Hail(1.00)

Orange County									
Apopka	20	1708EST			0	0	0	0	Thunderstorm Wind (G50)

Large trees were blown down at Wekiva Springs State Park.

Lake County									
Leesburg	20	1750EST			0	0	0	0	Funnel Cloud

A funnel cloud was reported by the Lake County Sheriff's Office in Leesburg.

Lake County									
Leesburg	20	1806EST			0	0	0	0	Hail(0.75)

Orange County									
Orlando	21	1600EST			0	0	0	0	Urban/Sml Stream Fld

Heavy thunderstorm rains produced flooding of roads in south Orlando.

Osceola County									
Kissimmee	21	1630EST			0	0	0	0	Urban/Sml Stream Fld

Heavy thunderstorm rains produced widespread street flooding in Kissimmee.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

FLORIDA, East Central

Seminole County

Sanford Arpt	22	1710EST			0	0	0	0	Thunderstorm Wind (G52) ^M
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Thunderstorm winds of 60 MPH were recorded at Sanford Airport.

Lake County

Tavares	26	1700EST			0	1	0	0	Lightning
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A 19 year old man was struck and seriously injured by lightning while riding on a personal water craft.

St. Lucie County

Ft Pierce	27	1105EST	0.1	30	0	0	100K	0	Tornado (F1)
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An F1 tornado touched down in Ft. Pierce and remained nearly stationary for about one minute. It destroyed the service bay roof of a car dealership, and damaged 70 cars.

Orange County

Orlando Intl Arpt	30	2010EST			0	0	0	0	Thunderstorm Wind (G55) ^M
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A wind gust to 63 MPH was reported by sensors at Orlando International Airport.

FLORIDA, Extreme Southern

NONE REPORTED.

FLORIDA, Northeastern

Baker County

Olustee	03	1500EST			0	0	2K		Thunderstorm Wind
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Large trees down near Interstate 10.

Baker County

Taylor	03	1500EST			0	0	2K		Thunderstorm Wind
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Large trees down.

Alachua County

4 NW Gainesville	03	1515EST			0	0			Hail(0.75)
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Also reported by spotter.

Columbia County

14 S Lake City	03	1700EST			0	0	2K		Thunderstorm Wind
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Large trees down along County Road 18.

Suwannee County

Hildreth	03	1730EST			0	0	2K		Thunderstorm Wind
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Large trees down.

Union County

Worthington Spgs	03	1730EST			0	0			Urban/Sml Stream Fld
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Flooding on Highway 796.

Gilchrist County

Trenton	03	1837EST			0	0	2K		Thunderstorm Wind
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Large trees down. SE 80th Ave.

St. Johns County

Fruit Cove	04	1155EST			0	0	3K		Thunderstorm Wind
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3 Large oak trees down. Report by retired NWS Employee.

Suwannee County

3 S Live Oak	04	1545EST			0	0	2K		Thunderstorm Wind
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Large trees on power lines.

St. Johns County

5 W Vermont Hgts	04	1630EST			0	0	2K		Thunderstorm Wind
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Large trees down on power lines.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>FLORIDA, Northeastern</u>									
St. Johns County									
Bakersville	04	1638EST			0	0	2K		Thunderstorm Wind
									Large trees down. Unconfirmed reports of a tornado.
Duval County									
5 E Herlong Arpt	04	1802EST			0	0			Hail(1.00)
Marion County									
Reddick	05	0948EST			0	0			Funnel Cloud
Alachua County									
Gainesville	10	1330EST			0	0	5K		Tstm Wind/Hail
									Three pine trees down, one on a house. Damage to tool shed behind house at 3330 NW 31st Street.
Flagler County									
Favorita	19	1545EST			0	0			Tstm Wind/Hail
									1 large tree down.
Putnam County									
East Palatka	19	1605EST			0	0			Hail(0.75)
Clay County									
Orange Park	19	1645EST			0	0	2K		Thunderstorm Wind
									Large trees down onto power lines.
Clay County									
Orange Park	19	1645EST			0	0			Urban/Sml Stream Fld
									Street flooding near Orange Park Mall.
Clay County									
Middleburg	19	1650EST			0	0			Hail(0.75)
St. Johns County									
Hastings	19	1800EST	0	0	0	0	10K		Tornado (F0)
									Tore roof off of a barn.
Columbia County									
Lake City	20	1355EST			0	0	2K		Thunderstorm Wind
									Large trees down across power lines.
Baker County									
7 N Sanderson	20	1400EST			0	0	2K		Thunderstorm Wind
									Large trees down between Sanderson and Taylor along highway 250.
Duval County									
Jacksonville	20	1425EST			0	0	20K		Thunderstorm Wind
									Numerous trees down. Scaffolding down at beaches construction site.
Duval County									
Jacksonville	20	1430EST 1630EST			0	0			Urban/Sml Stream Fld
									Numerous streets flooded with road closures.
Clay County									
Orange Park	20	1500EST			0	0	2K		Thunderstorm Wind
									Large trees down on highway 17.
Clay County									
1 NE Keystone Hgts	20	1500EST			0	0	10K		Thunderstorm Wind
									Roof ripped off barn.
Bradford County									
Starke	20	1522EST			0	0	2K		Thunderstorm Wind
									Large trees down. Reports of trees down in Brooker.
Alachua County									
Alachua	20	1600EST	0	0	0	0	5K		Tornado (F0)
									Brief touchdown in traveler's camp.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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FLORIDA, Northeastern

Putnam County

1 E Bostwick	20	1700EST			1	0	20K		Tstm Wind/Hail
Bass boat would not start as thunderstorm approached and was taken under tow by a pontoon boat. Bass boat filled with water and sank. Victim could not be located due to low visibility, wind and waves. Victim was not wearing a life jacket.									
M51BO									

Duval County

Central Portion	22	1700EST			1	0			Lightning
Homeless man took shelter in a wooded lot during storm. tree behind him was struck first.									
M51UT									

Putnam County

Palatka	24	1415EST			0	0			Tstm Wind/Hail
Pea sized hail and one tree down across power lines.									

Marion County

Ocala	24	1425EST			0	0			Tstm Wind/Hail
Marble sized hail reported by Deputy.									

Marion County

Ocala	24	1540EST			0	0			Hail(1.00)
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Marion County

Belleview	24	1600EST			0	0			Tstm Wind/Hail
One tree down.									

Marion County

Ocala	24	1622EST			0	0	5K		Thunderstorm Wind
Hickory trees down, one across fence. Tool shed overturned 10450 SE 32nd Ave.									

Alachua County

(Gnv)Gainesville Arp	25	1507EST			0	0			Hail(0.75)
Reported by FAA observer.									

Duval County

Arlington	25	1530EST 1545EST			0	0			Tstm Wind/Hail
Pine trees down on Girvin Rd.									

Putnam County

Welaka	25	1600EST			0	0	10K		Thunderstorm Wind
Boat shed on Crescent Lake destroyed.									

Bradford County

1 W Starke	25	1614EST			0	0	10K		Thunderstorm Wind
Large trees down on house and power lines down. Crosby Lake Subdivision. Trees down crossing 160th Street.									

Clay County

Orange Park	25	1645EST			0	0	10K		Thunderstorm Wind
Large trees down on house.									

Clay County

Green Cove Spgs	25	1645EST			0	0			Lightning
911 center struck by lightning and down for an hour.									

Putnam County

Crescent City	25	1655EST			0	0			Hail(0.75)
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Putnam County

Crescent City	25	1655EST			0	0	2K		Thunderstorm Wind
Large trees down.									

Putnam County

Crescent City	25	1730EST			0	0	10K		Thunderstorm Wind
Two sheds damaged.									

Flagler County

Andalusia	25	1740EST			0	0			Tstm Wind/Hail
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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FLORIDA, Northeastern

			Large tree down, blocking highway 100.						
Clay County									
5 N Middleburg	26	1700EST			0	0			Hail(1.00)
Duval County									
5 S (Jax)Jacksnville Int	26	1725EST			0	0			Hail(0.75)
Duval County									
Mandarin	26	1740EST			0	0	1K		Thunderstorm Wind
			Large limbs and power lines down near 1616 Augustine Road.						
Duval County									
New Berlin	26	1810EST			0	0	2K		Thunderstorm Wind
			Large trees down on power lines, Hacksher Drive near Hess Terminal.						
Duval County									
Arlington	26	1813EST			0	0	2K		Thunderstorm Wind
			Large limbs and power lines down, 5268 Arlington Drive.						
Flagler County									
Central Portion	27	1445EST			0	0			Funnel Cloud
			West of Interstate 95.						
Nassau County									
Callahan	27	1515EST			0	0			Hail(1.00)
			Near A1A.						
Flagler County									
5 N Flagler Beach	27	1530EST			0	0			Hail(0.75)
Putnam County									
Florahome	27	1635EST			0	0			Thunderstorm Wind (G60)
			Estimated wind.						
Putnam County									
Interlachen	27	1635EST			0	0	10K		Thunderstorm Wind
			Large trees down on house.						
Bradford County									
Lawtey	28	1700EST			0	0	80K		Lightning
			House struck by lightning and destroyed by subsequent fire.						
St. Johns County									
Fruit Cove	29	2122EST			0	0			Lightning
			House struck.						
St. Johns County									
Fruit Cove	29	2138EST			0	0	10K		Lightning
			Second house struck. Power pole and transformer on fire.						
Columbia County									
Lake City	30	1452EST			0	0	2K		Thunderstorm Wind
			Power lines down Ashley Street and Highlands Court.						
Columbia County									
12 S Lake City	30	1453EST			0	0			Lightning
			Bush fire started by lightning off county road 349.						
Union County									
Worthington Spgs	30	1730EST			0	0	2K		Thunderstorm Wind
			Large trees and power lines down.						

FLORIDA, Northwest

Bay County									
Panama City Beach	01	1500EST			1	0			Rip Currents

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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FLORIDA, Northwest

A man drowned while attempting to escape a severe rip current. Reported by the Bay County EMA.
M50IW

Bay County

Panama City	02	1530EST			0	0			Hail(0.75)
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Dime size hail reported by a SKYWARN spotter.

Walton County

3 NW Santa Rosa Beach	03	1415EST			0	0			Hail(0.75)
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Dime size hail reported near the south side of Choctawhatchee Bay by the public.

Franklin County

Carrabelle	03	1540EST			0	0	3K		Thunderstorm Wind
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A few fences and a shed were blown over. A few trees were down. Reported by the Franklin County EMA.

Lafayette County

5 W Mayo	03	1700EST			0	0	10K		Thunderstorm Wind
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A few chicken houses were destroyed. A few large trees were down. Reported by the Lafayette County Sheriff.

Jackson County

Greenwood	04	1507EST			0	0	1K		Thunderstorm Wind
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Several downed trees reported by the Jackson County EMA.

Jackson County

Malone	07	1610EST			0	0	1K		Thunderstorm Wind
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Several downed trees on State Roads 2 and 135, and along Butler Road. Reported by the Jackson County Sheriff.

Leon County

Southeast Portion	08	1615EST			0	0	2K		Thunderstorm Wind
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A few downed trees and power lines at Natural Bridge off Highway 363. Reported by the public.

Madison County

8 SW Madison to 8 S Madison	18	2100EST 2115EST			0	0	50K		Thunderstorm Wind
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A hog barn was destroyed, and the roof off a neighboring barn was ripped off. Several headstones and the graveyard were damaged by a downed tree at the Bethlehem Missionary Baptist Church. From County Road 158 to Highway 14, there were numerous downed trees. Reported by the Madison County EMA.

Taylor County

Salem	19	1530EST 1540EST			0	0	10K		Thunderstorm Wind
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An awning was blown off a building on U.S. Highway 19 and a Wendy's restaurant sign was blown out. The tops of several trees were blown off. Reported by the Taylor County EMA.

Liberty County

Telogia	19	1650EST			0	0	15K		Thunderstorm Wind
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A 150 X 70-yard swath of large trees were uprooted along Telogia Creek just south of Highway 20. A mobile home sustained minor damage from a fallen tree. Reported by the Florida Emergency Operations Center.

Wakulla County

12 W Crawfordville	20	1330EST			0	0	2K		Thunderstorm Wind
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Downed trees on power lines along Smith Creek Highway. Reported by the Wakulla County EMA.

Wakulla County

3 E Crawfordville	20	1350EST			0	0			Hail(0.75)
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Dime size hail reported by a SKYWARN spotter.

Wakulla County

3 E Crawfordville	20	1350EST			0	0	2K		Thunderstorm Wind
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Downed trees and power lines reported by a SKYWARN spotter.

Lafayette County

5 E Mayo	20	1430EST 1445EST			0	0	5K		Thunderstorm Wind
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Numerous trees were blown over. One shed had its tin roof torn off and another shed was tossed. Reported by the Lafayette County Sheriff.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>FLORIDA, Northwest</u>									
Taylor County									
Countywide	20	1500EST 1515EST			0	0	2K		Thunderstorm Wind
Numerous downed trees reported by the Taylor County Sheriff.									
Jackson County									
10 NE Marianna	20	1710EST			0	0	1K		Thunderstorm Wind
Several downed trees on Neals Landing Road. Reported by the Jackson County EMA.									
Washington County									
Greenhead	20	1830EST			0	0	1K		Thunderstorm Wind
Numerous downed trees reported by the Washington County EMA.									
Washington County									
Vernon	20	1830EST			0	0	1K		Thunderstorm Wind
Numerous downed trees reported by the Washington County EMA.									
Walton County									
Paxton	23	1702EST 1713EST			0	0			Hail(0.75)
Dime size hail reported by a SKYWARN spotter.									
Walton County									
Paxton	23	1702EST 1710EST			0	0	50K		Thunderstorm Wind (G63) ^M
A weather spotter recorded 55-mph sustained winds for 5 minutes with a peak gust of 73 mph. A bleacher from a neighboring baseball field damaged the town hall. One of the concrete dugouts was blown apart. Several trees and power lines were blown down on U.S. Highway 331 in Paxton. Reported by a SKYWARN spotter.									
Walton County									
2 S Paxton	23	1713EST			0	0	10K		Thunderstorm Wind
Two 50-foot red oak trees fell, with one on the roof of a weather spotter's home. Reported by a SKYWARN spotter.									
<u>FLORIDA, Southern</u>									
Broward County									
Lighthouse Pt	03	1400EST			0	0	10K		Thunderstorm Wind (G70)
A pool enclosure was damaged, tiles were taken off of a roof and large trees were uprooted. A SKYWARN spotter estimated winds above 60 mph.									
Miami - Dade County									
Miami Shrs	03	1405EST			0	0			Hail(1.25)
Dime to golf ball-size hail was reported in northeast Miami-Dade County.									
Miami - Dade County									
Miami	03	1500EST			1	0			Lightning
A man holding an umbrella was struck and killed by lightning. It was raining heavily at the time as the man walked from a house to his car.									
M57OU									
Miami - Dade County									
Homestead	04	1400EST			1	1			Lightning
Two men walking through a nursery in the Redlands were affected by lightning. One man was killed instantly and the other injured and treated at a local hospital. It had just started raining at the time the lightning struck.									
M37OU									
Miami - Dade County									
Hialeah	05	1306EST			0	0			Hail(0.75)
Dime-size hail was reported by a SKYWARN spotter.									
Broward County									
Hollywood	05	1335EST			0	0			Hail(0.75)
A SKYWARN spotter reported dime-size hail near Sheridan Street and U.S. 441.									
Glades County									
5 S Moore Haven	07	1835EST			0	0			Funnel Cloud

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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FLORIDA, Southern

The Sheriff's Office reported a funnel cloud near the intersection of U.S. 80 and CR 833.

Broward County

(Fxe)Ft Laudrdl Exec	10	0842EST			0	0			Funnel Cloud
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Personnel of Fort Lauderdale Executive Airport evacuated the control tower when a funnel cloud approached.

FLZ074

Coastal Dade	16	1500EST			0	0			Excessive Heat
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Sixteen children at a day camp at Tropical Park were treated on the scene by paramedics after suffering heat exhaustion.

Collier County

15 E Naples	17	1455EST			0	0			Thunderstorm Wind (G50)
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The public estimated wind gusts of 60 mph or higher on Alligator Alley.

Miami - Dade County

Miami	17	1900EST			0	1			Lightning
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A 14-year old girl was injured when lightning struck a palm tree as she walked nearby. She stopped breathing but was resuscitated and transported to the hospital. Frequent lightning was being observed.

Broward County

3 W Cooper	18	1200EST			0	1			Lightning
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A 41-year old man standing in his nursery in Southwest Ranches was injured when lightning struck a timing clock about 30 feet away.

Glades County

2 W Palmdale	20	1650EST			0	0			Funnel Cloud
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The Sheriff's Office reported a funnel cloud.

Miami - Dade County

Sunny Is	23	1230EST			1	1			Rip Currents
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A man and woman visiting from New York were caught in a rip current near 172nd Street. The man drowned and the woman was hospitalized.
M711W

Glades County

Ortona	25	1400EST			0	0	20K		Lightning
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A lightning-initiated fire destroyed a mobile home.

Collier County

2 W Immokalee	25	1602EST			0	0			Funnel Cloud
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The Florida Highway Patrol reported a funnel cloud.

Glades County

1 E Moore Haven to Moore Haven	29	1435EST	1	20	0	0	20K		Tornado (F1)
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A tornado formed along the southeast shore of Lake Okeechobee and moved west northwest. Sporadic damage along the track consisted of a pool enclosure blown into a canal and the roof of a Catholic Church being partially blown off.

FLORIDA, West Central

Hillsborough County

Tampa	01	1645EST			0	0	60K		Lightning
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Lightning caused a fire to a home on Lambright Street.

Pasco County

Land O Lakes	04	1230EST			0	0	20K		Thunderstorm Wind
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Emergency Management reported roof damage to three units and numerous tree limbs down.

Citrus County

5 W Crystal River	05	0900EST			1	0			Lightning
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Lightning knocked victim out of the boat. A second man in the boat jumped into the water and pulled his friend back in but could not revive the victim.
M41BO

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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FLORIDA, West Central

Hardee County

Wauchula	06	1600EST			0	0	10K		Thunderstorm Wind
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Roof damage to three homes with tin roofs and several trees down.

Levy County

2 SW Otter Creek	09	1330EST			0	0			Thunderstorm Wind (G60)
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Emergency Management reported several large pine trees uprooted.

Pinellas County

Treasure Is	11	1330EST	0.5	40	0	0	20K		Tornado (F0)
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Brief tornado caused roof to be blown off of the Florida Room and additional minor roof damage to nearby structures.

Polk County

5 E Winter Haven	11	1414EST			0	0			Funnel Cloud
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Pinellas County

Largo	12	0730EST	0.5	40	0	0	1K		Tornado (F0)
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SKYWARN spotter reported a weak tornado with winds estimated at 50 mph. The tornado blew debris around in parking lot and damaged a skylight at drug store.

Polk County

Lake Wales	13	0933EST			0	0			Thunderstorm Wind (G60)
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Charlotte County

.5 E Charlotte Harbor	13	1030EST 1032EST	0.5	40	0	0			Tornado (F0)
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Tornado began as a waterspout over the Peace River and moved onshore near the Fisherman's Village.

Levy County

5 SW Bronson	17	0830EST			0	0			Tstm Wind/Hail
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Tree limbs downed several power lines.

Lee County

Lehigh Acres	18	1545EST			0	0	90K		Lightning
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Lightning induced fire destroyed a stilt wood frame house.

Levy County

Williston	18	1840EST			0	0	10K		Tstm Wind/Hail
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Two large trees and limbs down knocked out power to some residents on the east side of the city.

Hernando County

Brooksville	22	1300EST			0	0	20K		Lightning
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Lightning started a business on fire.

Pinellas County

Palm Harbor	24	1228EST			0	0			Lightning
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A home was struck but little damage was reported.

Pinellas County

Clearwater	24	1700EST			0	0			Lightning
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Struck a business and destroyed the phone system.

Lee County

Bonita Spgs	25	1329EST 1336EST			0	0	10K		Thunderstorm Wind
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Gusty winds downed tree limbs that brought power lines down near Arroyo Road. Dime size hail was also reported.

Citrus County

Beverly Hills	25	1337EST			0	0			Hail(1.75)
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Reported by emergency management.

Hillsborough County

10 NNW Tampa	25	1517EST			0	0			Hail(0.75)
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Hillsborough County

3 W Tampa	25	1536EST			0	0			Hail(1.00)
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Broadcast media reported hail on the Courtney Campbell Causeway.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>FLORIDA, West Central</u>									
Manatee County									
5 W Bradenton to Ellenton	25	1538EST 1557EST			0	0			Hail(0.75)
Hillsborough County									
2 N Citrus Park	25	1550EST			0	0			Hail(1.75)
Sheriff report of golf ball size hail with power and traffic lights out.									
Lee County									
Lehigh Acres	25	1606EST 1616EST			0	0			Funnel Cloud
Hillsborough County									
Plant City	25	1630EST			0	0			Thunderstorm Wind (G50)
TECO reported downed power lines due to wind damage to numerous trees.									
Polk County									
Highland City	25	1645EST	1	40	0	0	20K		Tornado (F0)
Tornado damaged roof of a former fire station and downed or damaged nearby trees.									
Polk County									
Highland City	25	1747EST			0	0			Hail(0.75)
Charlotte County									
Port Charlotte	26	1400EST			0	0			Lightning
Lightning caused at least four brush fires in the Englewood area.									
Manatee County									
Bradenton	27	1423EST			0	0	5K		Lightning
Lightning caused a hole in a house and started a fire.									
Polk County									
Mulberry	27	1815EST			0	0			Hail(0.75)
Manatee County									
4 NNE Ellenton	28	2025EST			0	0			Lightning
Lightning struck and disabled a vehicle on I75 near the I275 interchange.									
Sarasota County									
North Port	29	1433EST			0	0			Thunderstorm Wind (G50)
Multiple trees down and several businesses signs down.									
Manatee County									
8 SE Bradenton to 10 E Bradenton	29	1537EST 1542EST	2	60	0	0	5K		Tornado (F0)
Fire and rescue reported that many trees were down due to the tornado in the Lakewood Ranch and Gray Hawk subdivisions.									
Manatee County									
Parrish	29	1545EST			0	0			Thunderstorm Wind (G50)
Strong winds dropped trees and power lines.									
Hillsborough County									
Sun City	29	1555EST			0	0			Thunderstorm Wind (G50)
Several trees and numerous limbs down.									
Polk County									
Ft Meade	29	1625EST			0	0			Thunderstorm Wind (G50)
Numerous oak and orange trees uprooted, widespread limbs down, and power lines down.									
Lee County									
Lehigh Acres	29	1638EST	0.5	40	0	0			Tornado (F0)
Fire department reported tornado damage to huge trees and picnic tables in park.									
Hillsborough County									
Seffner	29	1641EST			0	0			Hail(0.75)
Pasco County									
4 SE New Port Richey to Port Richey	29	1735EST 1745EST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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FLORIDA, West Central

Pasco County

New Port Richey	29	1740EST			0	0			Thunderstorm Wind (G60)
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Many trees and power lines down near the corner of Ceclia Drive and Madison.

Pasco County

Hudson	29	1745EST			0	0			Hail(0.88)
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Pasco County

Port Richey	29	1745EST			0	0	20K		Thunderstorm Wind
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Strong winds downed trees and billboards, tore the roof off a mobile home, and part of a roof of a permanent home.

Pasco County

5 N Port Richey	29	1800EST			0	0	5K		Thunderstorm Wind
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Strong winds downed trees which damaged a duplex in the Jasmine Estates area.

Hernando County

10 W Brooksville	29	1810EST			0	0			Hail(0.75)
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Hernando County

8 W Brooksville to Brooksville	29	1810EST 1820EST			0	0			Thunderstorm Wind (G60)
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Numerous trees and power lines down, especially near Highway 50 and Fort Dade Avenue.

Citrus County

1 W Homosassa	29	1836EST 1845EST			0	0			Thunderstorm Wind (G71) ^M
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Greater than 50 knot wind occurred for nine minutes and was measured by coastal marine station at the mouth of the Homosassa river. Peak wind was at 6:42 PM EST.

FLORIDA, West Panhandle

Santa Rosa County

Berrydale	01	1455CST 1500CST			0	0	5K		Thunderstorm Wind (G55)
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Strong thunderstorm winds blew down several trees near Berrydale.

Okaloosa County

Ft Walton Beach	02	2215CST			0	0	1K		Lightning
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Lightning struck the roof of a home and started a fire near Cinco Bayou. The fire was quickly put out with only minimal damage to the home.

Okaloosa County

Ft Walton Beach	02	2230CST			0	0	10K		Lightning
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Lightning struck a home and started a fire. The fire was extinguished but the home suffered damage.

Okaloosa County

Destin	03	1230CST 1235CST			0	0			Hail(1.00)
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Santa Rosa County

Milton	03	1400CST 1401CST			0	0			Hail(0.75)
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Santa Rosa County

Munson	04	1445CST			0	2			Lightning
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Two people were outside barbequing at a local campground when they were struck by lightning. They were both taken to a local hospital, examined and later released.

Escambia County

Pensacola	04	1830CST			0	0	50K		Lightning
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Lightning struck the roof of a church and started a fire. The fire burned for six hours before being put out. There was considerable damage to a roof over a sanctuary and smoke damaged most of the church. No one was in the building near where the strike occurred.

Escambia County

Pensacola Beach	07	1715CST			0	0	40K		Lightning
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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FLORIDA, West Panhandle

Lightning struck an apartment complex on Pensacola Beach and started a fire. Significant damage was done to the apartment before the fire was put out. No one was injured in the blaze.

Santa Rosa County

Allentown	08	1340CST			0	1			Lightning
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A male was outside when he was hit by lightning. No information about how or exactly where he was at when the strike occurred was known. He was taken to a local hospital, examined and later released.

Santa Rosa County

Berrydale	19	1355CST 1357CST			0	0	8K		Thunderstorm Wind (G50)
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Trees were blown down near Berrydale by high winds from a thunderstorm.

Santa Rosa County

Bagdad	19	1420CST			0	1			Lightning
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A female went outside to roll up her automobile windows as a thunderstorm was approaching. She was hit by lightning when a strike hit a nearby tree, went through the root system of the tree and hit her. She was taken to a local hospital, examined and released.

Okaloosa County

Crestview	20	1620CST 1621CST			0	0			Hail(0.75)
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Santa Rosa County

Gulf Breeze	21	1645CST 1647CST			0	0	8K		Thunderstorm Wind (G50)
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Several trees were blown down near Gulf Breeze by high winds from a thunderstorm.

Okaloosa County

10 SE Crestview	22	1300CST 1302CST			0	0	8K		Thunderstorm Wind (G50)
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Trees were blown down along State Highway 285 east of Duke Field by high winds from a thunderstorm.

Santa Rosa County

Pace	26	0754CST			0	1			Lightning
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A male was working on a bridge in a high rise crane, when lightning hit the crane and injured him. He was life lighted to a local hospital. He was kept for a few days for observation and was later released.

Escambia County

Pensacola	27	1400CST			0	1			Lightning
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A male was indirectly struck by lightning near Pensacola. Little information was available about how he was struck. He was taken to a local hospital and was kept for a few days before being released.

GEORGIA, East Central

Richmond County

Augusta	30	1740EST			0	0	0		Thunderstorm Wind (G55)
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Sheriff reported trees down on Glen Mills Drive, Toms Drive, and the 3300 block of Milledgeville Road.

Columbia County

4 W Appling	31	1640EST			0	0	0	0	Thunderstorm Wind (G55)
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Sheriff reported trees down on several roads in the Appling area.

GEORGIA, Lower

Wayne County

Odum	01	1740EST 2255EST			0	0			Hail(0.75)
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Coffee County

Douglas	01	1900EST			0	0			Tstm Wind/Hail
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Tree down.

Camden County

5 NW Silco	03	1600EST			0	0	2K		Thunderstorm Wind
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Large trees down on County Road 40.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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GEORGIA, Lower

Clinch County									
Homerville	03	1930EST 2030EST			0	0			Urban/Sml Stream Flo
Extensive street flooding.									
Atkinson County									
Willacoochee	04	1930EST			0	0	2K		Thunderstorm Wind
Large trees down on power lines.									
Jeff Davis County									
Hazlehurst	06	1845EST			0	0	80K		Thunderstorm Wind
Numerous large trees down. Power lines down. Large truck trailer overturned. Concrete block structure destroyed.									
Appling County									
Baxley	06	1900EST			0	0	5K		Thunderstorm Wind
Large trees and power lines down across city.									
Coffee County									
Chatterton	06	2000EST			0	0			Hail(0.75)
Coffee County									
Nicholls	06	2000EST			0	0			Hail(0.75)
Charlton County									
St George	20	1420EST			0	0	2K		Thunderstorm Wind
Large trees snapped and down across power lines.									
Brantley County									
2 S Nahunta	20	1630EST			0	0			Hail(0.88)
Glynn County									
St Simons Is	20	1700EST			0	0	2K		Thunderstorm Wind
Several large trees down across power lines.									
Camden County									
St Marys	20	1720EST			0	0			Hail(0.75)
Camden County									
St Marys	20	1720EST			0	0	10K		Thunderstorm Wind
Large oak trees down on houses.									
Camden County									
St Marys	20	1800EST			0	0	10K		Thunderstorm Wind
Oak trees down. Hickory trees snapped and uprooted. Tree down on a house at 802 Bay Tree Circle.									
Clinch County									
Dupont	21	1530EST			0	0			Tstm Wind/Hail
Large pine tree down across highway 84.									
Camden County									
Kingsland	23	1645EST			0	0	2K		Thunderstorm Wind
Large trees and power lines down on Springhill Road.									
Camden County									
5 E Woodbine	26	1635EST			0	0	2K		Thunderstorm Wind
Large trees down across power lines.									
Ware County									
10 SE (Ays)Ware Co Arp	28	1710EST			0	0			Tstm Wind/Hail
Two pine trees down. Reports of a possible tornado. Radar indicated two intersecting outflow boundaries, possible gustnado.									

GEORGIA, North and Central

Cobb County									
1 SE Kennesaw	01	1530EST			0	0	175K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, North and Central

The Cobb county Emergency Management Director reported that a thunderstorm microburst caused extensive damage to two Preferred Jet Center Hangers at McCollum field, just southeast of Kennesaw. The walls were moved in. However, no aircraft were damaged. While the tower at the field only reported 45 mph winds, a localized microburst was suspected with winds up to 100 mph.

Hall County

**Clermont to
Lula**

01	1600EST 1605EST				0	0	3K		Thunderstorm Wind
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The Times Newspaper of Gainesville and the Hall county 911 center reported that trees were blown down in Clermont and Lula. The trees also knocked down some power lines, leaving up to 1200 residents without power through the evening. Power lines were down near the Lee-Gilmer Memorial Airport, where a downed tree also blocked the entrance to a resident's home, and a large tree was down near the intersection of Old Cornelia Highway and Georgia Highway 52 in Lula.

Hall County

Clermont

01	1605EST				0	0			Hail(0.88)
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The Hall county 911 center reported nickel size hail.

Paulding County

Dallas

01	1615EST				0	0			Hail(1.00)
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Several reports were received from the public of dime to quarter size hail.

Hall County

Lula

01	1626EST 1632EST				0	0			Hail(1.00)
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An amateur radio operator reported nickel to quarter size hail and the public reported nickel size hail.

Forsyth County

**Cumming to
5 N Cumming**

01	1640EST 1700EST				0	0			Hail(1.00)
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Amateur radio operators, a storm spotter, Fox 5 News of Atlanta, and the public all reported dime to quarter size hail in the Cumming area.

Whitfield County

Dalton

01	1650EST				0	0			Hail(0.75)
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A volunteer fireman reported dime size hail.

Carroll County

Countywide

01	1700EST				0	0	100K		Lightning
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The Times Georgian newspaper of Carrollton reported that three separate homes across the county were struck by lightning, with damage ranging from minor to moderate. No injuries or deaths were reported.

Lumpkin County

Dahlonega

01	1730EST				0	0	75K		Lightning
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The Dahlonega Nugget newspaper reported that lightning struck a 66-year old home in town starting a fire which destroyed the house and all possessions. No injuries were reported as the lone 88-year old resident was able to escape from the house before it was destroyed by the fire.

Gwinnett County

**Suwanee to
Buford**

01	1740EST 1750EST				0	0			Hail(1.00)
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Numerous reports of hail, ranging in size from dimes to quarters, were received from the public and several amateur radio operators.

Gwinnett County

Suwanee

01	1740EST 1750EST				0	0	2K		Thunderstorm Wind
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The public and several amateur radio operators reported that several trees were blown down in at least two different locations in Suwanee.

Whitfield County

1 E Dalton

01	1740EST				0	0			Hail(0.75)
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The Whitfield county 911 center reported dime size hail.

Dawson County

8 W Dawsonville

01	1750EST				0	0			Tstm Wind/Hail
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The public reported pea size hail.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>GEORGIA, North and Central</u>									
Rockdale County									
Conyers	01	1805EST			0	0			Hail(0.75) The public reported dime size hail.
Dawson County									
Dawsonville	01	1812EST			0	0	1K		Lightning The Dawson county 911 center reported that lightning struck a tree, causing the tree to split and fall, as well as simultaneously knocking out an electrical transformer.
Murray County									
Chatsworth	01	1812EST			0	0			Hail(0.75) The Murray county 911 center reported dime size hail.
Gwinnett County									
5 NE Suwanee	01	1815EST			0	0	0		Thunderstorm Wind A National Weather Service storm spotter reported that several large tree limbs were blown down.
Floyd County									
Armuchee	01	1910EST			0	0			Hail(0.75) A storm spotter reported dime size hail.
Houston County									
Perry	02	1350EST			0	0	0.50K		Thunderstorm Wind The Houston county 911 center reported that two trees were blown down.
Dawson County									
Dawsonville	02	1405EST 1410EST			0	0			Hail(1.00) The Dawson county Emergency Management Director and the public reported dime to quarter size hail.
Union County									
Blairsville	02	1415EST			0	0			Hail(1.75) The Union county 911 center reported golf ball size hail and the public reported nickel size hail.
Union County									
Blairsville	02	1415EST			0	0	5K		Lightning The public reported that lightning set a house on fire. No injuries were reported and damage estimates were not provided.
Union County									
Blairsville	02	1415EST			0	0	1K		Thunderstorm Wind The Union county 911 center and the public reported that at least four trees were blown down by thunderstorm winds.
Hall County									
Clermont to 3 SE Clermont	02	1420EST			0	0			Hail(0.88) Three reports of nickel size hail were received from the public.
Forsyth County									
Coal Mtn	02	1440EST			0	0			Hail(0.88) The Forsyth county 911 center reported nickel size hail.
Hall County									
Clermont	02	1530EST			0	0			Urban/Sml Stream Fld The Clermont Fire Department reported that low lying areas were flooded because of heavy rain.
Heard County									
Franklin	02	1530EST			0	0			Hail(0.75) The Heard county 911 center reported dime size hail.
Fulton County									
Crabapple to Roswell	02	1542EST 1545EST			0	0			Hail(0.88) The Chief Meteorologist from FOX 5 News in Atlanta and the public reported dime to nickel size hail from Crabapple to Alpharetta, and the public reported dime size hail in Roswell.
Baldwin County									
Countywide	02	1600EST			0	0	3K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, North and Central

The Union Recorder of Milledgeville and the county 911 center reported that trees were blown down across the county. Much of the damage was focused in the Airport Road area. In this area, in addition to a downed power pole and trees, a home's deck and its steps were crushed when a large oak tree was blown down on the structure.

Cobb County

**Marietta to
1 SE Kennesaw**

02	1605EST 1615EST				0	0	175K		Thunderstorm Wind (G52)
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A variety of news media, including WXIA TV and FOX 5 TV of Atlanta, the Marietta Daily Journal newspaper, and the Cobb county Emergency Management Director reported extensive damage at McCollum field, just southeast of Kennesaw, apparently caused by a microburst. At least four aircraft were damaged. An old Cessna-172 was totaled, two single-engine aircraft were pushed into each other, and one aircraft broke free from its tiedowns and was moved, but stayed upright. Damage to the aircraft alone was estimated at \$100,000. Additional damage to homes and businesses occurred further southeast near Marietta. Amateur radio operators reported that the roof was blown off the antebellum 154-year old Marietta Lighting Company near the Marietta Square Shopping Center. The roof and chimney from the building damaged employee cars in the lot below. The chief meteorologist from FOX 5 TV in Atlanta reported that a roof was blown off a house, information which was further confirmed by the Marietta Daily Journal. Amateur radio operators, the Marietta Daily Journal and the Cobb county 911 center also reported that large tree limbs and some trees were blown down in Marietta. Tree debris littered much of the Marietta Downtown Market Square. A 25-foot limb from a 100-year old oak tree crashed onto South Park Square, blocking traffic and damaging parked vehicles. Another large tree branch crushed a Volvo near the Square. Much of the Marietta area, 6000 or more residents, was without power throughout the evening, and another 600 residents were without power in the Kennesaw area.

Cobb County

Marietta

02	1605EST 1610EST				0	0			Hail(1.00)
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Amateur radio operators reported quarter size hail. The public and a CNN meteorologist reported nickel size hail.

Carroll County

Bowdon

02	1615EST				0	0	300K		Lightning
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The Times Georgian newspaper of Carrollton reported that lightning struck two homes. In both instances, the homes were completely destroyed and the families lost all of their possessions.

Gwinnett County

**Lilburn to
1 S Mechanicsville**

02	1615EST 1629EST				0	0			Hail(1.00)
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Amateur radio operators reported dime size hail at two separate locations in Lilburn, while quarter size hail was reported on Interstate 85 just south of Mechanicsville near the Gwinnett-Dekalb county line.

Carroll County

Roopville

02	1620EST				0	0			Hail(0.75)
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The public reported dime size hail.

Chattahoochee County

Cusseta

02	1620EST				0	0			Hail(0.75)
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The Chattahoochee county 911 center reported dime size hail.

Gwinnett County

Lilburn

02	1623EST				0	0			Urban/Sml Stream Fld
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An amateur radio operator reported localized street flooding on U.S. Highway 29/Georgia Highway 8, Lawrenceville Highway, in Lilburn.

Jones County

Haddock

02	1629EST				0	0			Tstm Wind/Hail
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An amateur radio operator reported that a tree was blown down on Georgia Highway 22 near at Haddock.

Cherokee County

Canton

02	1630EST				0	0	0.50K		Thunderstorm Wind
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The public reported that some trees were blown down.

Muscogee County

Ft Benning Jct

02	1630EST 1635EST				0	0			Hail(0.88)
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The public reported nickel size hail.

Putnam County

Eatonton

02	1630EST				0	0			Hail(0.88)
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The public reported nickel size hail.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, North and Central

Wilkinson County

Gordon	02	1640EST			0	0	0.50K		Thunderstorm Wind
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The Wilkinson county 911 center reported that two trees were blown down.

De Kalb County

Countywide	02	1643EST 1645EST			0	0			Hail(0.75)
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The public reported dime size hail at several locations across the county.

Fulton County

2.5 E Atlanta to Hapeville	02	1645EST 1722EST			0	0			Hail(1.00)
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Numerous reports were received from amateur radio operators and the public of hail ranging in size from dimes to nickels from the Inman Park, Grant Park, Midtown, and the Little Five Points areas of Atlanta in the extreme eastern portion of Fulton county near the DeKalb county line. The public reported dime to quarter size hail in the Hapeville area.

Fulton County

2.5 E Atlanta	02	1650EST 1730EST			0	0	0.50K		Thunderstorm Wind
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The public reported that trees were blown down at Turner Field, just south of downtown Atlanta, and the Georgia Emergency Management Agency reported that large tree branches were blown down.

Clayton County

Jonesboro	02	1653EST			0	0			Hail(1.50)
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The public reported half-dollar size hail.

Clayton County

Forest Park to Riverdale	02	1710EST 1721EST			0	0			Hail(1.75)
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Two reports of quarter size hail in Forest Park were received from FOX 5 TV of Atlanta, while numerous reports of hail, ranging in size from dimes to golf balls, were received from the public in Forest Park. FOX 5 TV also relayed a report of quarter size hail on Aviation Parkway on the south side of the Atlanta Hartsfield International Airport near the intersection of Georgia Highway 139 and Georgia Highway 314. In addition, nickel size hail was reported by the public at Riverdale.

Paulding County

Hiram	02	1710EST 1725EST			0	0			Hail(1.75)
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Three reports of hail were received from the public. One report was of dime size hail, another nickel size hail, and a third was golf ball size.

Polk County

Cedartown	02	1710EST			0	0			Hail(0.88)
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The Polk county 911 center reported nickel size hail.

Fayette County

Fayetteville to 5 S Fayetteville	02	1721EST 1750EST			0	0			Hail(1.00)
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Several reports of hail, ranging in size from dimes to quarters, were received from the public and amateur radio operators. Hail was reported at the intersection of Georgia Highways 85 and 92, four miles south of town on Georgia Highway 92, and five miles south of Fayetteville at the White Water Middle School complex.

Monroe County

Bolingbroke to Forsyth	02	1722EST 1740EST			0	0			Hail(1.00)
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The public and an amateur radio operator reported dime to quarter size hail.

Bibb County

Skipperton	02	1730EST			0	1			Lightning
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An amateur radio operator reported that a person was struck and injured by lightning.

Douglas County

5 W Winston to Douglasville	02	1730EST 1750EST			0	0			Hail(1.50)
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Several reports of hail, ranging in size from dimes to ping-pong balls, were received from the public and amateur radio operators. In one instance in Douglasville, the larger hail was interspersed within a ten minute period of dime-size hail, which covered the ground.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>GEORGIA, North and Central</u>									
Monroe County									
Forsyth	02	1738EST			0	0	0.50K		Thunderstorm Wind
The public reported that some limbs were blown down and shingles were blown off the roof of a house.									
Douglas County									
1 SW Winston	02	1739EST			0	0	0.50K		Thunderstorm Wind
An amateur radio operator reported that some trees were down near Interstate 20 and Post Road.									
Clayton County									
Riverdale	02	1745EST			0	0	25K		Lightning
The News Daily of Jonesboro reported that lightning struck a home setting fire to the structure. Quick action of the homeowner limited the amount of damage. Nonetheless, damage was extensive enough that repairs were expected to take two to three months. Nearly 7000 residents of the county were without power much of the evening either because of cloud-to-ground lightning strikes or wind damage.									
Carroll County									
Villa Rica	02	1749EST			0	0	3K		Thunderstorm Wind
The Carroll county 911 center reported that trees and power lines were down.									
Bibb County									
Macon	02	1750EST			0	0	15K		Lightning
An amateur radio operator reported that a house was struck and set on fire by lightning.									
Henry County									
Stockbridge	02	1815EST			0	0	0.50K		Thunderstorm Wind
The Henry county 911 center reported that two trees were blown down.									
Upson County									
Thomaston	02	1820EST			0	0			Hail(0.75)
The Upson county 911 center reported dime size hail.									
Wilkes County									
Washington	02	1830EST			0	0	0.50K		Thunderstorm Wind
The Wilkes county 911 center reported that three trees were blown down.									
Upson County									
Thomaston	02	1838EST			0	0			Hail(1.00)
An amateur radio operator reported quarter size hail.									
Carroll County									
Villa Rica	02	1840EST			0	0			Hail(0.75)
The Carroll county 911 center reported dime size hail.									
Meriwether County									
2 E Warm Spgs	02	1850EST			0	0	0.50K		Thunderstorm Wind
An amateur radio operator reported that two trees were blown down.									
Upson County									
5 N Thomaston	02	1850EST			0	0			Thunderstorm Wind (G52)
An amateur radio operator estimated winds of 60 to 65 mph.									
Polk County									
Rockmart	02	1901EST			0	0			Hail(0.75)
An amateur radio operator reported dime size hail.									
Upson County									
Atwater	02	1905EST			0	0	25K		Lightning

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, North and Central

The Upson county 911 Emergency Management Director and the Thomaston Times Newspaper reported that two homes were struck by lightning and set on fire. At one home the lightning traveled on the electrical system causing a short and resultant fire in a lamp. Damage to the room with the lamp was extensive, but the fire was quickly put out before further damage to the house occurred. At the other home, the lightning once again traveled in on the electrical line, but damage to the house was very minor. At the 911 center in Thomaston, a power surge, caused by a nearby lightning strike, disabled the communications equipment. Lightning was also believed to have caused a gas surge at a gas pumping station in Thomaston. Numerous reports of lightning related damage were received from all over the county, such as electrical sockets being blown out of walls, electrical panels and meters blown out, and many computer and modem related damage calls.

Upson County

2 N Thomaston

02	1905EST				0	0			Hail(0.75)
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An amateur radio operator reported dime size hail.

Whitfield County

Dalton

02	1910EST				0	0			Tstm Wind/Hail
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An amateur radio operator reported pea size hail.

Bartow County

Cartersville

02	1915EST				0	0			Hail(0.75)
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An amateur radio operator reported dime size hail.

Meriwether County

Warm Spgs

02	1920EST				0	0	5K		Thunderstorm Wind
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The Meriwether county 911 center reported that twelve trees were blown down and some power lines as well.

Upson County

Thomaston

02	1925EST				0	0			Urban/Sml Stream Fld
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An amateur radio operator reported that very heavy rain from a thunderstorm caused flooding in some stores in the North Creek Shopping Center. Up to four inches of water was reported in some stores.

Upson County

4 N Thomaston

02	1930EST				0	0	5K		Tstm Wind/Hail
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The public reported that a tree fell down on a mobile home.

Clarke County

**6 E Whitehall to
Athens**

02	2000EST 2040EST				0	0	10K		Thunderstorm Wind
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The Athens Daily News reported that trees were down all across the southeast portion of Clarke county, including the Athens area. The trees brought down many power lines as well, causing nearly 5000 residents to be without power during the evening hours. Much of the damage occurred in the Cedar Creek Subdivision. Some of the downed trees blocked roads, including Midway road, on which both lanes of traffic were blocked, and on Oglethorpe Avenue near the entrance to the U.S. Navy Supply Corps School, where both lanes were blocked as well.

Floyd County

1 N Mt Berry

02	2000EST				0	0	4K		Lightning
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The Rome News Tribune reported that two thoroughbred geldings (horses) were killed when they were struck by lightning. The horses were used by the school's equestrian team Hunter-Jumper for competitions. They were killed while standing near a tree during the thunderstorm.

Floyd County

**Silver Creek to
Rome**

02	2000EST 2030EST				0	1	55K		Thunderstorm Wind
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The Rome News Tribune reported that thunderstorm winds wreaked havoc on downtown Rome. The Civil War constructed Brock's Greek Revival Mansion, often referred to as "Sherman Oaks", was severely damaged when two 100-foot tall oak trees crashed through the roof. Nearby on the same street, debris from another storm damaged tree caused significant damage to a Ford Expedition. At the Knight's Tower Hill Apartment building, also constructed during the Civil War, a downed tree caused significant damage to a parked vehicle. Another large tree was toppled at the historic Myrtle Hill Cemetery. The tree fell near the cemetery's apex and caused damage to a wall at the Hight gravesight. The public reported that some power lines were down in the southeast part of Floyd county near Silver Creek. One person was injured as a result. Over 8000 residents in the county were without power much of the evening, either from downed power lines or lightning strikes to power lines.

Oconee County

Countywide

02	2000EST 2030EST				0	0	5K		Thunderstorm Wind
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The Athens Daily News reported that several trees were blown down across the county.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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GEORGIA, North and Central

Oglethorpe County

Lexington to Arnoldsville	02	2000EST 2030EST			0	0	5K		Thunderstorm Wind
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The Athens Daily News reported that several trees were blown down in the county, mainly near U.S. Highway 78. The downed trees also knocked down several power lines. At least two trees were blown down on U.S. Highway 78.

Morgan County

Madison	02	2030EST			0	0	0.50K		Thunderstorm Wind
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The Morgan county Emergency Management Director reported that two trees were blown down.

Polk County

6.5 W Rockmart to Rockmart	02	2030EST 2050EST			0	0	3K		Thunderstorm Wind
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The public reported that numerous trees were blown down on a farm west of Rockmart. An amateur radio operator reported that several tree limbs were blown down on power lines in Rockmart.

Polk County

Aragon	02	2048EST			0	0			Hail(0.88)
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The Polk county 911 center reported nickel size hail.

Catoosa County

8 SW Ringgold	02	2225EST			0	0			Hail(1.00)
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The public reported quarter size hail in Ringgold and the Catoosa county Sheriff reported dime size hail near the Catoosa-Walker county line.

Dawson County

5 NW Emma	03	1345EST			0	0			Hail(0.75)
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The Amicalola State Park reported dime size hail.

Pickens County

Nelson	03	1410EST			0	0			Hail(0.75)
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The public reported dime size hail.

Pickens County

Jasper	03	1430EST			0	0			Hail(0.75)
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The public reported dime size hail.

White County

Sautee	03	1430EST			0	0			Hail(0.75)
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The public reported dime size hail.

Cherokee County

Woodstock	03	1450EST 1505EST			0	0			Hail(1.50)
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Several reports of hail, ranging in size from nickels to half-dollars, were received from the public.

Cherokee County

Holly Spgs to Canton	03	1515EST 1527EST			0	0	3K		Thunderstorm Wind
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The Cherokee county Emergency Management Director reported that numerous trees were blown down.

Emanuel County

Swainsboro	03	1519EST			0	0	0.50K		Thunderstorm Wind
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The Emanuel county 911 center reported that two trees were blown down.

Cobb County

Kennesaw	03	1525EST			0	0	2K		Thunderstorm Wind
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The Marietta Daily Journal and a tree service company reported that numerous trees were down.

Cherokee County

Holly Spgs	03	1527EST			0	0			Hail(0.75)
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A storm spotter reported dime size hail.

Cobb County

Smyrna	03	1545EST			0	0	2K		Thunderstorm Wind
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The Marietta Daily Journal and a tree service company reported that numerous trees were blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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GEORGIA, North and Central

Fulton County

Atlanta to Alpharetta	03	1550EST			0	0	0.50K		Thunderstorm Wind
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The Fulton county 911 center reported that two trees were down in Alpharetta and one tree in Atlanta.

Cobb County

Countywide	03	1558EST 1615EST			0	0	250K		Lightning
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The Marietta Daily Journal reported that six homes were struck by lightning. Two of the homes sustained major damage and the residents had to be relocated to alternative housing. No injuries or deaths were reported.

Toombs County

Lyons	03	1558EST			1	0			Lightning
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The Advance Progress Newspaper of Vidalia reported that lightning struck and killed a 45-year old man while on a construction site at the Toombs County Middle School on Center Road. The individual was part of a crew of construction workers at the school. While the others had sought shelter in their vehicles during the thunderstorm, the worker killed had returned to the construction site to retrieve some tools. It was while doing this that he was struck and killed by lightning. M45OU

Cobb County

Marietta	03	1600EST			0	0			Urban/Sml Stream Fld
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AM Radio Station 750 reported that there was water, as much as three feet deep, at the intersection of Delk and Johnson Ferry Road.

Cobb County

Smyrna	03	1600EST			0	0			Hail(0.75)
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The public reported dime size hail.

Gordon County

Calhoun	03	1615EST 1620EST			0	0			Tstm Wind/Hail
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The Gordon county 911 center reported that some tree limbs were down and the public reported pea size hail.

De Kalb County

2 NW Druid Hills to 1 NW Druid Hills	03	1622EST			0	0			Urban/Sml Stream Fld
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An amateur radio operator reported street flooding at the Interstate 85 and Shallowford/Clairmont Road exits in the Briarcliff community area.

Madison County

Colbert	03	1730EST			0	0			Hail(0.75)
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The public reported dime size hail.

Jones County

5.5 W Griswold	03	1847EST			0	0			Urban/Sml Stream Fld
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An amateur radio operator relayed a report from a local public service radio station that a stopped up drain was causing flooding of U.S. Highway 129 near the Bibb/Jones county line.

Pike County

Zebulon	04	1525EST			0	0	0.50K		Thunderstorm Wind
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The Pike county 911 center reported that two trees were blown down.

Meriwether County

Greenville	04	1555EST			0	0	0.50K		Thunderstorm Wind
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The Meriwether county 911 center reported that two trees were blown down.

Coweta County

5 SW Newnan	04	1645EST			0	0	0.50K		Tstm Wind/Hail
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The Coweta county 911 center reported that a tree was down across Corinth and Millard-Farmer Road.

Heard County

Franklin	04	1650EST			0	0			Lightning
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Lightning struck a transformer in the county and set it on fire.

Heard County

Glenloch	04	1740EST 1746EST			0	0	1K		Thunderstorm Wind
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The Heard county 911 center reported that trees were down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, North and Central

Carroll County

Bowdon Jct	04	1830EST			0	0	1K		Thunderstorm Wind
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The Carroll county 911 center reported that trees were down.

Carroll County

Mt Zion	04	1900EST			0	0	75K		Lightning
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The Times Georgian newspaper of Carrollton reported that lightning struck and destroyed a Mt Zion home. All of the residents were across the street at the time of the incident, thus no injuries or deaths were reported.

Webster County

Weston	06	1545EST			0	0			Hail(0.88)
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The Meritt Pecan Farm reported dime to nickel size hail.

Emanuel County

Canoochee to Summertown	06	1630EST			0	0	0.50K		Thunderstorm Wind
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The Emanuel county 911 center reported that two trees were blown down, one in Canoochee and one in Summertown.

Johnson County

Wrightsville	06	1630EST			0	0	0.50K		Thunderstorm Wind
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The Wrightsville Fire Department/Rescue Squad reported that some trees were blown down.

Johnson County

7 W Wrightsville	06	1640EST			0	0			Hail(0.75)
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The public reported dime size hail.

Washington County

Harrison	06	1640EST			0	0	0.50K		Thunderstorm Wind
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The Harrison Fire Department/Rescue Squad reported that trees were blown down on Georgia Highway 231.

Houston County

Warner Robins to Bonaire	06	1715EST 1725EST			0	0			Hail(1.00)
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The public reported nickel to quarter size hail in Warner Robins and dime size hail in Bonaire.

Johnson County

Wrightsville	06	1720EST			0	0			Hail(1.00)
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The Johnson county sheriff reported quarter size hail.

White County

Helen to Sautee	06	1720EST			0	0	5K		Thunderstorm Wind
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The White county 911 center reported that numerous trees were down across the eastern part of the county, from Helen eastward.

Houston County

Warner Robins	06	1722EST			0	0	0.50K		Thunderstorm Wind (G61)
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The public reported that some trees were blown down. Winds were estimated by an amateur radio operator at 70 mph.

Toombs County

Countywide	06	1740EST			0	0	60K		Thunderstorm Wind
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The Advance Progress newspaper of Vidalia reported that extensive damage was caused by thunderstorm winds to homes and businesses in the city. A canopy was ripped off a food store in town and carried some 100 feet in the air before landing on a Jeep Cherokee at a car sales lot causing considerable damage to the vehicle. Roof and other structural damage was reported to a number of homes and businesses in the downtown area. One brick building lost its roof and the walls caved in. The Toombs county 911 center reported that trees and power lines were down across the county.

Jefferson County

Wrens	06	1803EST			0	0			Hail(1.75)
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The Wrens police department reported golf ball size hail.

Telfair County

Lumber City	06	1830EST 1900EST			0	0	3K		Thunderstorm Wind
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The Lumber City police department reported that two power lines were down, two railroad crossing arms were damaged, and a few trees were also blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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GEORGIA, North and Central

Wheeler County

Jordan to 8 S Jordan	06	1835EST			0	0	2K		Thunderstorm Wind
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The Wheeler county 911 center reported that trees and power lines were down along Georgia Highway 19 from Jordan south to the Telfair county line, near Lumber City.

Dooly County

Unadilla	06	1910EST			0	0	1K		Thunderstorm Wind
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The Dooly county 911 center reported that several trees were blown down.

Dooly County

Pinehurst	06	1919EST			0	0	0.50K		Thunderstorm Wind
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The Dooly county 911 center reported that a few trees were blown down.

Houston County

Elko	06	1920EST			0	0			Hail(1.00)
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The Houston county 911 center reported quarter size hail.

Dooly County

Pinehurst	06	1927EST			0	0			Hail(0.75)
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The Dooly county 911 center reported dime size hail.

Fayette County

1 W Fayetteville	06	2000EST			0	0	2K		Thunderstorm Wind
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The Fayette county 911 center and the public reported that numerous trees were blown down just west of the downtown square. One power line was down as well. Tree limbs were reported down on Walker Street.

Meriwether County

Cove to Durand	06	2320EST 2330EST			0	0	7K		Thunderstorm Wind
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The Meriwether county 911 center reported that several trees were blown down across the southern part of the county from Cove to Durand. In addition, a tree fell on a mobile home in Durand.

Harris County

5 ESE Pine Mtn	06 07	2345EST 0000EST			0	0	0.50K		Thunderstorm Wind
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An employee of the State Forestry Commission reported that some trees were down on Georgia Highway 190 in the Franklin D. Roosevelt State Park.

Toombs County

Countywide	07	1316EST			0	0	5K		Thunderstorm Wind
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The Toombs county sheriff reported that numerous trees were down across the county, especially the southern part.

Dooly County

Vienna	07	1558EST			0	0	0.50K		Thunderstorm Wind
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The Dooly county 911 center reported that two trees were down in the city.

Upson County

3 E Thomaston to 3 ENE Thomaston	07	1610EST			0	0	1K		Thunderstorm Wind
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The Upson county Emergency Management Director reported that trees were blown down.

Sumter County

4 NW Andersonville	07	1700EST			0	0	25K		Lightning
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The Americus Times-Recorder reported that lightning struck an entertainment cabin/resort referred to as the "Quack Shack". The resulting fire completely destroyed the cabin. The cabin had been used since the early 1980s as a fun place to visit and a leisurely abode for many people, including lawyers, doctors, and even the Atlanta Braves baseball team.

Taylor County

2 NE Butler	07	1730EST			0	0	1K		Thunderstorm Wind
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The Taylor County News reported that a roof was blown off a barn on a farm just northeast of Butler off Georgia Highway 137. The roof traveled nearly 300 feet before landing in the residents driveway.

Chattahoochee County

Ft Benning	07	1800EST 1815EST			0	0	3K		Thunderstorm Wind
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The Chattahoochee county 911 center reported that several large trees were down on roads within the Fort Benning Military Reservation.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, North and Central

Muscogee County

Benning Hills	07	1800EST			0	0	5K		Thunderstorm Wind The Fort Benning military police reported that numerous trees and some power lines were down in the southeast part of Columbus.
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Johnson County

2 WSW Meeks	11	1345EST			0	0	0.50K		Thunderstorm Wind The public reported that several trees had been blown down.
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Henry County

Stockbridge	11	1415EST			0	0			Tstm Wind/Hail The public reported pea size hail.
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Oconee County

Watkinsville	11	1612EST			0	0	100K		Lightning The Oconee Enterprise of Watkinsville reported that a fire was started at a home when lightning struck a pine tree and then traveled to the nearby garage. The garage caught fire and was gutted. Smoke and heat damage was also reported to neighboring parts of the home and all possessions stored in the garage were destroyed. Lightning caused problems at other locations in Watkinsville, including knocking out a transformer at a local bakery, damaging sheet rock at another home, and striking a tree which then fell onto a local road.
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Union County

6 NW Blairsville	11	2135EST			0	0			Urban/Sml Stream Fld The Union county 911 center reported that Ivy Log Creek had risen out of its banks.
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Washington County

Riddleville	21	1230EST			0	0			Hail(0.75) The Washington county 911 center reported dime size hail.
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Emanuel County

Blundale	21	1332EST			0	0			Hail(0.75) The Emanuel county 911 center reported dime size hail.
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Upson County

East Thomaston to Thomaston	21	1344EST			0	0	0.50K		Thunderstorm Wind An amateur radio operator reported that one inch tree limbs were down in East Thomaston near the intersection of Georgia Highway 36 and Georgia Highway 74. Trees were reported down in Thomaston by the public.
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Jefferson County

Wadley	21	1345EST			0	0			Tstm Wind/Hail The Wadley Fire and Police Department reported that one tree was down.
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Upson County

Thomaston	21	1350EST			0	0			Hail(0.75) The public reported dime size hail.
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Peach County

Ft Vly	21	1420EST			0	0			Hail(0.75) The public reported dime size hail.
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Muscogee County

Upatoi	21	1530EST 1550EST			0	0			Hail(1.00) The public reported that hail, ranging in size from dimes to quarters, fell for a period of 15 to 20 minutes. A rainfall estimate of four to five inches was also provided at this same location.
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Muscogee County

Upatoi	21	1530EST 1600EST			0	0			Thunderstorm Wind (G61) The public reported that large tree limbs were blown. Winds gusts were estimated at two different locations in Upatoi at 65 to greater than 70 mph.
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Talbot County

1 NW Tax Xrds	21	1600EST			0	0	20K		Thunderstorm Wind
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, North and Central

The Talbotton New Era newspaper reported that thunderstorm winds caused considerable damage in the far northern part of the county, northwest of Tax Crossroads in the Dunn Road and Magic Hill Road areas. Several large trees, one to two feet in diameter, were either uprooted or broken in half. One large tree fell on the front of a house causing considerable damage to the structure, while another tree in the same yard fell on a compact car and crushed it. Other roofs were blown off barns and cattle stables in the same general area, and other smaller trees and rooftops sustained minor damage.

Spalding County

Griffin

21	1615EST				0	0			Hail(0.75)
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The public reported dime size hail.

Muscogee County

Columbus to 4 E Upatoi

21	1620EST 1637EST				0	0	25K		Thunderstorm Wind
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The Columbus Ledger-Enquirer and several reports from the public indicated that numerous trees were blown down in the Columbus and Upatoi area. In Columbus, several large trees were blown down, some landing on homes causing minor to major damage. Trees also blocked several roads in the area. In Upatoi, a few trees were blown down and a metal awning was blown off a bay window at a home. Some trees were also blown down and minor structural damage was noted east of Upatoi in extreme eastern Muscogee county near the Talbot county line and just west of Box Springs. During the peak of the storm, some 12,000 customers were without electricity across the northern portions of Muscogee county.

Muscogee County

Upatoi to Columbus

21	1620EST 1654EST				0	0			Hail(1.00)
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The public reported dime to quarter size hail in Upatoi and dime size hail in Columbus and North Columbus.

Harris County

Ellerslie

21	1630EST				0	0	1K		Thunderstorm Wind
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The Harris county 911 center reported that some power lines were down.

Fayette County

Tyrone

21	1640EST				0	0			Hail(0.88)
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The public reported dime to nickel size hail.

Fayette County

Tyrone

21	1640EST				0	0	5K		Tstm Wind/Hail
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The Citizen newspaper of Fayetteville, reported that a large tree, blown down by thunderstorm winds, fell on a house and caused significant damage to one corner of the house.

Coweta County

5 NE Mc Collum

21	1642EST				0	0			Hail(0.75)
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An amateur radio operator reported dime size hail 3 miles north of Major, near Interstate 85 in the far northeast part of the county.

Coweta County

3 N Newnan

21	1650EST 1700EST				0	0			Hail(0.75)
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The public reported that hail, the size of nickels, fell for up to 10 minutes duration. An amateur radio operator reported dime size hail.

Coweta County

Newnan

21	1700EST				0	0			Urban/Sml Stream Fld
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An amateur radio operator reported that street flooding was observed as two inches of rain fell in about one hour.

Toombs County

Lyons

21	1700EST				0	0	0.50K		Thunderstorm Wind
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The Toombs county 911 center reported that a few trees were blown down.

Toombs County

Lyons

21	1700EST				0	0			Tstm Wind/Hail
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The Toombs county 911 center reported pea size hail.

Coweta County

Newnan to Senoia

21	1705EST				0	0	2K		Thunderstorm Wind
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The Newnan Times Herald reported that several large trees were blown down in Newnan, including a 100 foot Poplar tree. Damage was most extensive in the Bridgewater subdivision. Trees were also down on power lines in Senoia.

Cobb County

Austell

21	1725EST				0	0			Hail(0.75)
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The public reported dime size hail. The public also reported that 1.8 inches of rain fell in about 30 minutes.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>GEORGIA, North and Central</u>									
Coweta County									
Newnan	21	1800EST			0	0	0.25K		Lightning
The public reported that lightning struck a tree, causing the tree to split and fall near Georgia Highway 34.									
Douglas County									
Winston	21	1805EST 1810EST			0	0			Hail(0.75)
The public reported that dime size hail fell for five minutes. A few tree limbs were also blown down.									
Bartow County									
Cartersville	22	1800EST			0	0	1K		Thunderstorm Wind
The Bartow county 911 center reported that five trees were blown down.									
Clayton County									
Jonesboro	22	1900EST 1910EST			0	0			Hail(1.00)
The public reported dime to quarter size hail.									
Cobb County									
Macland	22	1920EST			0	0			Hail(0.75)
A storm spotter reported dime size hail. One tree was also blown down on Macland Road.									
Fayette County									
1.5 NW Kenwood	22	1920EST			0	0			Hail(0.75)
An amateur radio operator reported dime size hail at the intersection of Georgia Highways 314 and 279.									
Paulding County									
Dallas	22	1934EST 1935EST			0	0			Hail(1.75)
The public reported dime to golf ball size hail.									
Cobb County									
Acworth	22	1940EST			0	0			Hail(1.00)
The public reported quarter size hail.									
Cobb County									
Powder Spgs	22	1941EST			0	0			Hail(0.75)
A storm spotter reported dime size hail.									
Douglas County									
Douglasville	22	2000EST			0	0			Hail(0.75)
A storm spotter reported dime size hail at the Interstate20 and Chapel Hill Road interchange.									
Douglas County									
Douglasville	22	2000EST 2030EST			0	0	485K		Lightning
The Douglas county Emergency Management Director reported that three homes and one outbuilding were set on fire by lightning strikes around the county. One home and its contents were completely destroyed off Georgia Highway 166 south of Douglasville, two other homes suffered major damage, and one outbuilding was destroyed in the Marie's Lake subdivision.									
Douglas County									
Mc Whorter	22	2045EST			0	0	1K		Thunderstorm Wind
The public reported that some trees and power lines were down at the intersection of Georgia Highway 5 and Georgia Highway 166.									
Towns County									
Hiawassee	23	1500EST			0	0			Hail(0.88)
The Towns county 911 center reported nickel size hail.									
Towns County									
Hiawassee	23	1500EST			0	0	2K		Thunderstorm Wind
The Towns county 911 center reported that several trees and power lines were down.									
Fayette County									
2 W Fayetteville	23	1653EST			0	0			Hail(1.75)
An employee at the Fayette Community Hospital, west of Fayetteville, reported golf ball size hail.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>GEORGIA, North and Central</u>									
Fulton County									
5 SE Alpharetta	23	1654EST			0	0			Hail(1.00)
									The public reported quarter size hail.
Gwinnett County									
Duluth to Lawrenceville	23	1700EST 1800EST			0	0	550K		Lightning
									The Gwinnett Daily Post of Lawrenceville reported that at least four homes in Lawrenceville were struck and set on fire by lightning and the garage of another home in Duluth sustained minor damage because of a lightning strike. Literally dozens of lightning related calls were received by Gwinnett county firefighters during the one hour period. Two of the homes in Lawrenceville, one a two-story home, suffered major damage, while the other two sustained minor damage caused by attic fires. There were no injuries or deaths reported with these incidents.
Cobb County									
Smyrna	23	1707EST			0	0			Hail(0.75)
									A storm spotter reported dime size hail.
Gwinnett County									
Norcross	23	1710EST			0	0			Hail(0.75)
									The public reported dime size hail.
Bartow County									
Cartersville	23	1728EST			0	0	1K		Thunderstorm Wind
									The Bartow county 911 center reported that some trees and power lines were down.
Cobb County									
Fair Oaks	23	1730EST			0	0			Urban/Sml Stream Fld
									The public reported flooding along Olley Creek.
GAZ020									
Bartow									
	23	1730EST			0	0			Flood
									The Bartow county Emergency Management Director reported that a home was flooded from heavy thunderstorm rains with up to three inches of water reported in the home.
Gwinnett County									
Norcross	23	1730EST			0	0			Hail(0.88)
									A storm spotter reported nickel size hail.
Muscogee County									
Columbus	23	1753EST			0	0	1K		Thunderstorm Wind
									The Muscogee county 911 center reported that some trees and power lines were down.
Spalding County									
Griffin	23	1815EST			0	0	1K		Thunderstorm Wind
									The Spalding county 911 center reported that some trees and power lines were down.
Fayette County									
Brooks	23	1855EST			0	0	450K		Lightning
									The Fayette county Emergency Management Director reported that lightning struck a large two-story home near Brooks on Crabapple Road. The home was completely destroyed by the resulting fire.
Coweta County									
5 NE Mc Collum	23	1900EST			0	0	1K		Lightning
									The Newnan Times Herald reported that lightning struck a clump of four, very large, Poplar trees on the Cannongate Golf Course, near the small town of Major in extreme northeast Coweta county. The trees average around 125 feet in height. One of the trees was reduced to a 15 foot stump, another to a 40 foot miniature of itself, a third was split and splintered down the middle, and a fourth was blackened and scarred by the lightning strike. The trees were so large that it was estimated that it would take eight men, eight hours to clean up the destroyed trees.
Harris County									
Pine Mtn	24	1435EST			0	0			Hail(0.88)
									The public reported nickel size hail.
Houston County									
Centerville	24	1800EST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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GEORGIA, North and Central

The public reported dime size hail.

Morgan County

Madison	24	1815EST			0	0	250K		Lightning
The Madisonian newspaper of Madison reported that lightning struck a large two-story home in the Cedar Lakes subdivision. The lightning struck the bonus room above the garage, but fire, smoke and water left the house virtually destroyed.									

Telfair County

Mc Rae	28	1848EST			0	0			Urban/Sml Stream Fld
The Telfair county 911 center reported that a road was washed out in McRae.									

Coweta County

Countywide	30	1425EST 1440EST			0	0			Tstm Wind/Hail
The Coweta county 911 center and the public reported pea size hail at several locations around the county, particularly in the Sharpsburg area.									

Morgan County

3 SE Madison	30	1444EST			0	0			Hail(0.75)
The Morgan county 911 center reported dime size hail.									

Cobb County

Acworth	30	1729EST			0	0			Hail(0.75)
The public reported dime size hail.									

Cobb County

Marietta to 2 W Elizabeth	30	1740EST 1752EST			1	0	3K		Lightning
Several newspapers, including the Atlanta Journal-Constitution, the Marietta Daily Journal, the Columbus Ledger Enquirer, and the Macon Telegraph, as well as the Cobb county Emergency Management Agency and local Atlanta TV stations, reported on a lightning strike and subsequent death to a 49-year old woman from Marietta who was hiking in the Kennesaw National Battlefield park. The woman was hiking on Kennesaw Mountain in the National Battlefield park with her husband and dog. No rain was falling at the time, but thunderstorms surrounded the area with considerable cloud-to-ground lightning activity. The lightning struck the woman at 6:52 pm EDT while she was approximately 30 feet ahead of her husband around a bend in the trail. Her husband found her flat on the ground, immediately after the strike, unconscious, but still alive at the time. She was immediately transported to a local hospital where she was pronounced dead on arrival. In addition to this incident, two homes in the Marietta area were set on fire by lightning strikes during this same round of thunderstorms. F49UT									

Floyd County

1.5 N Mt Berry	30	1744EST			0	0	1.5K		Tstm Wind/Hail
The Floyd county 911 center reported that a tree fell down near Berry College and knocked a tree down onto a traffic signal.									

Cobb County

Acworth to 3 E Marietta	30	1800EST 1815EST			0	0			Hail(0.88)
An amateur radio operator reported dime to nickel size hail near Johnson's Ferry Road in Marietta, while the public reported dime to nickel size hail in and just east of Marietta. The public also reported dime size hail in Acworth.									

Floyd County

5 SE Rome	30	1839EST			0	0	1K		Thunderstorm Wind
The Floyd county 911 center reported that several trees were down off Georgia Highway 101.									

Polk County

2 W Rockmart to 1 N Fish	30	1950EST			0	0	2K		Thunderstorm Wind
An amateur radio operator reported that three trees were blown down, one landing on the roof of a home located just west of Rockmart off U.S. Highway 278, while yet another tree fell down on the roof of an old store in Fish Creek.									

Floyd County

Rome	30	2025EST			0	0			Hail(0.75)
The Floyd county 911 center reported dime size hail.									

Floyd County

Rome	30	2025EST			0	0	1K		Thunderstorm Wind
The Floyd county 911 center reported that several trees were blown down in the Horse Lake Creek subdivision.									

Floyd County

Rome	30	2025EST			0	0			Urban/Sml Stream Fld
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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GEORGIA, North and Central

The Floyd county 911 center indicated that street flooding was occurring in the Horse Lake Creek subdivision. In addition, water was reported in one building because of backed up drains.

Floyd County

Armuchee

31	1339EST								
			0	0					Hail(0.75)

The public reported dime size hail.

Forsyth County

Cumming

31	1520EST								
			0	0		175K			Lightning

The Forsyth county Emergency Management Director reported that lightning strikes caused several structural fires. The Forsyth County newspaper reported that lightning struck a home in the Gran Forest subdivision. The home was completely destroyed by the resulting fire. Damage to other homes was minor.

Forsyth County

3 NW Cumming to Drew

31	1530EST								
			0	0		25K			Thunderstorm Wind

The Forsyth County News and the Emergency Management Director reported that numerous trees and power lines were blown down west and northwest of Cumming, near Drew, along Georgia Highway 371 and in Cumming as well. In addition, a small portion of a roof was blown off a store and a chicken house was blown down. Two homes were damaged by the fallen trees and more than a dozen power lines were knocked down by trees. A large oak tree crushed the roof of one home and another large tree fell in front of an apartment complex in Cumming. Traffic was detoured in the city around downed power lines, wires, and trees or tree limbs and debris.

Gwinnett County

2.5 S Lawrenceville

31	1530EST								
			0	0					Hail(0.88)

The public reported nickel size hail.

Bleckley County

Countywide

31	1600EST								
			0	0		1K			Thunderstorm Wind

The Bleckley county 911 center reported that a few trees were down throughout the county.

Dodge County

3 NW Eastman

31	1600EST								
			0	0		2K			Thunderstorm Wind

The Dodge county 911 center reported that some trees and power lines were down.

Fulton County

Warsaw

31	1600EST								
			0	0		1K			Thunderstorm Wind

An amateur radio operator reported that a few trees and a utility line were down near Medlock Bridge and Bobby Jones Road at the Atlanta Athletic Club.

Gwinnett County

2 NW Duluth to Duluth

31	1600EST 1610EST								
			0	0					Hail(0.75)

The public and an amateur radio operator reported dime size hail in Duluth and northwest of Duluth on Peachtree Industrial Boulevard.

Gwinnett County

Duluth

31	1610EST								
			0	0		0.50K			Thunderstorm Wind

The public reported that a few trees were blown down.

De Kalb County

Stone Mtn

31	1615EST								
			0	0					Hail(0.75)

The public reported dime size hail.

De Kalb County

Stone Mtn

31	1615EST								
			0	0		0			Thunderstorm Wind

The public reported that a few tree limbs were blown down.

Emanuel County

Swainsboro

31	1620EST 1725EST								
			0	0		300K			Lightning

The Forest Blade newspaper of Swainsboro, as well as the Macon Telegraph, and other local media outlets reported that lightning struck several homes and the Hillcrest Baptist Church. The church was completely destroyed by the resulting fire. Damage to the homes was minor to moderate, but the church was completely destroyed. No injuries or deaths occurred with the incidents.

Rockdale County

Conyers

31	1630EST								
			0	0					Hail(0.88)

Storm Data and Unusual Weather Phenomena

July 2002

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GEORGIA, North and Central

The public reported dime to nickel size hail. Winds were estimated at 55 mph.

**Emanuel County
Swainsboro**

31 1650EST **0** **0** **Hail(0.75)**
The Emanuel county 911 center reported dime size hail.

**Newton County
Covington**

31 1700EST **0** **0** **0.50K** **Thunderstorm Wind**
The Newton county 911 center reported that a few trees were down.

**Emanuel County
Swainsboro**

**31 1715EST
1725EST** **0** **0** **0.50K** **Thunderstorm Wind**
The Emanuel county 911 center reported that some trees were down.

**Bleckley County
Countywide**

31 1720EST **0** **0** **1K** **Thunderstorm Wind**
The Bleckley county 911 center reported that a few trees were blown down throughout the county.

**Emanuel County
Swainsboro**

31 1725EST **0** **0** **Urban/Sml Stream Fld**
A local media output indicated there was some street flooding.

**Greene County
Countywide**

31 1755EST **0** **0** **2K** **Thunderstorm Wind**
The Greene county Sheriff and the county 911 center reported that several trees were down throughout the county, especially along Interstate 20 in Greensboro. Pea size hail was also reported in Greensboro.

**Jefferson County
Stapleton to
Wrens**

31 1830EST **0** **0** **1K** **Thunderstorm Wind**
The Jefferson county 911 center reported that some trees were down from Jefferson to Wrens.

**Hancock County
5 NW Sparta**

31 1840EST **0** **0** **1K** **Thunderstorm Wind**
The Hancock county 911 center reported that several trees were down along Georgia Highway 77 northwest of Sparta.

**Monroe County
Bolingbroke**

31 1855EST **0** **0** **Hail(0.88)**
The public reported that dime to nickel size hail covered the ground.

**Monroe County
4 SE Forsyth**

31 1900EST **0** **0** **2K** **Thunderstorm Wind**
The Monroe county 911 center reported that several trees and some power lines were down.

**Washington County
Sandersville**

31 1915EST **0** **0** **1K** **Thunderstorm Wind**
The Washington county sheriff and the county 911 center reported that several trees were down.

**Bibb County
Macon**

31 1920EST **0** **0** **Hail(0.75)**
The public reported dime size hail in the Barrington Hall subdivision of Macon.

**Bibb County
Macon to
2 W Lizella**

31 1920EST **0** **0** **3K** **Thunderstorm Wind**
Several reports of trees down were received from the public and the county 911 center of trees down in the Barrington Hall subdivision of Macon and five miles northwest of Macon. A lone tree was reported down west of Lizella near the Crawford county line.

**Johnson County
Wrightsville**

31 2200EST **0** **0** **25K** **Lightning**
The Wrightsville Headlight reported that lightning struck a restored, older home in town, igniting a fire, and causing considerable damage. The kitchen was heavily damaged, with much of the house suffering minor cosmetic damage because of heat and smoke. This home on North Marcus Street, was believed to be one of the oldest homes in the town, built in 1880.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GEORGIA, Northeast

Rabun County 8 S Clayton	01	1340EST			0	0			Hail(0.75)
Rabun County 8 S Clayton	01	1340EST			0	0			Thunderstorm Wind (G50) Several trees were blown down at Lake Rabun.
Habersham County 7 SE Clarkesville	01	1455EST			0	0	10K		Thunderstorm Wind (G55) Trees were blown down and a house was damaged near the Stephens County line.
Elbert County 3 SE Elberton	03	1850EST			0	0			Thunderstorm Wind (G50) Several trees were blown down.
Habersham County Clarkesville	06	1630EST			0	0			Thunderstorm Wind (G50) Trees were blown down across the county.
Habersham County 1 NE Batesville	06	1630EST			0	0			Hail(1.00)
Hart County Hartwell	10	1300EST			0	0			Hail(0.88) Hail was observed in the southeast part of town.
Habersham County 5 SW Clarkesville	10	1640EST			0	0	1K		Thunderstorm Wind (G50) Trees and powerlines were blown down. A fence was also blown down.

GEORGIA, Southeast

GAZ087>088-099>101-114>119-137>141			Jenkins - Screven - Candler - Bulloch - Effingham - Tattnall - Evans - Inland Bryan - Coastal Bryan - Inland Chatham - Coastal Chatham - Long - Inland Liberty - Coastal Liberty - Inland McIntosh - Coastal McIntosh						Drought
	01	0000EST			0	0			
	31	2359EST							Moderate to severe drought conditions continued over southeast Georgia through the month of July. Rainfall for the month was 2.89 inches below normal for the month.
Tattnall County 8 SW Reidsville	03	1450EST 1455EST			0	0			Hail(0.75)
Liberty County 4 SW Hinesville	03	1700EST			0	0			Thunderstorm Wind (G50) Numerous large limbs and power lines down across central portion of county
Bulloch County 2 N Portal	06	1515EST 1520EST			0	0			Hail(0.75)
Jenkins County 5 S Millen	06	1630EST			0	0			Thunderstorm Wind (G50) Large limbs and power lines were blown down by strong thunderstorm winds.
Screven County 8 WNW Hilltonia	06	1645EST			0	0			Thunderstorm Wind (G52) Trees and power lines were down.
Bulloch County 2 S Statesboro	06	1740EST			0	0			Thunderstorm Wind (G50) Trees and downed power lines caused power outtages for several hours.
Evans County 8 SW Claxton	06	1820EST			0	0			Thunderstorm Wind (G50) Numerous trees, limbs and power lines were down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>GEORGIA, Southeast</u>									
Bulloch County									
6 SE Denmark	06	1825EST			0	0			Thunderstorm Wind (G50)
			A tree and several large limbs downed some power lines.						
Bryan County									
Pembroke	06	1855EST			0	0			Hail(0.75)
Long County									
5 NE Ludowici	06	1855EST			0	0			Thunderstorm Wind (G50)
			Trees and power lines were down.						
Bryan County									
Pembroke	06	1913EST			0	0			Thunderstorm Wind (G52)
			Several trees were down on state road 119.						
Candler County									
Metter	07	1325EST			0	0			Thunderstorm Wind (G50)
			Several trees and power lines were down in the City of Metter.						
Tattnall County									
4 E Glennville	06	1825EST			0	0			Thunderstorm Wind (G50)
			Several trees were down.						
Evans County									
4 SE Daisy	06	1830EST			0	0			Hail(1.00)
Effingham County									
2 E Meldrim	11	1720EST			0	0			Thunderstorm Wind (G50)
Chatham County									
Savannah	11	1743EST			0	0			Thunderstorm Wind (G50)
Mcintosh County									
4 NE Darien	20	1630EST			0	0			Thunderstorm Wind (G50)
			Several trees were down.						
Bulloch County									
3 NE Nevils	21	1600EST			0	0			Thunderstorm Wind (G50)
			Several trees and power lines were down.						
Bulloch County									
Register	21	1610EST			0	0			Thunderstorm Wind (G50)
			Numerous trees and power lines were down.						
Candler County									
1 W Metter	21	1635EST			0	0			Hail(0.75)
Screven County									
6 E Sylvania	21	1640EST			0	0			Hail(0.75)
Screven County									
6 E Sylvania	21	1640EST			0	0			Thunderstorm Wind (G52)
Mcintosh County									
Crescent	26	1810EST			0	0			Thunderstorm Wind (G50)
			Large limbs and power lines were down throughout the community.						
Mcintosh County									
Eulonia	26	1815EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down on I 95 near mile marker 95. South bound lane was blocked for awhile.						
Bulloch County									
Statesboro	31	1620EST			0	0			Thunderstorm Wind (G50)
			Trees and power lines were down.						
Effingham County									
1 N Guyton	31	1645EST			0	0			Thunderstorm Wind (G50)
			Several trees were down.						

Storm Data and Unusual Weather Phenomena

July 2002

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<u>GEORGIA, Southeast</u>									
Bulloch County									
Stilson	31	1650EST			0	0			Thunderstorm Wind (G50)
			Several trees down near Highway 119.						
Screven County									
4 E Dover	31	1715EST			0	0			Thunderstorm Wind (G50)
			Large limbs and power lines down.						
Jenkins County									
Millen	31	1800EST			0	0			Thunderstorm Wind (G50)
			Trees and power lines were down.						
<u>GEORGIA, Southwest</u>									
Tift County									
Harding	03	1800EST			0	0	1K		Thunderstorm Wind
			Several downed trees reported by the Tift County Sheriff.						
Decatur County									
Bainbridge	04	1545EST			0	1			Lightning
			A man was injured when he was struck by lightning while boating on the Flint River. Reported by Decatur County 911.						
Decatur County									
Bainbridge	04	1545EST			0	0	1K		Thunderstorm Wind
			Several downed trees reported by Decatur 911.						
Calhoun County									
5 NE Turman to Turman	06	1700EST 1710EST			0	0	3K		Thunderstorm Wind
			Several downed trees and power lines reported by the Calhoun County Sheriff.						
Turner County									
2 NW Ashburn to Ashburn	06	2020EST 2025EST			0	0	10K		Thunderstorm Wind
			A few downed trees and power lines. A roof was blown off a shed. Reported by the Turner County Sheriff.						
Seminole County									
Southwest Portion	07	1600EST			0	0	1K		Thunderstorm Wind
			Several downed trees on State Road 39 near Lake Seminole. Reported by the Seminole County Sheriff.						
Thomas County									
Southeast Portion	19	1755EST 1800EST			0	0	50K		Thunderstorm Wind
			Two homes were damaged by fallen trees. Numerous downed trees and power lines with several county roads blocked by debris. Reported by the Thomas County EMA.						
Brooks County									
Dixie	19	1820EST			0	0	0.50K		Thunderstorm Wind
			A few downed trees reported by Brooks County 911.						
Miller County									
Mayhaw	20	1645EST			0	0			Hail(1.00)
			Quarter size hail reported by the Miller County Sheriff.						
Miller County									
Mayhaw	20	1645EST			0	0	5K		Thunderstorm Wind
			A roof was blown off a shelter. Reported by the Miller County Sheriff.						
Seminole County									
Southwest Portion	20	1735EST 1745EST			0	0	50K		Thunderstorm Wind
			A marina on Lake Seminole was damaged, with many boat slips torn off and flung into nearby trees. Reported by the Seminole County EMA.						
Lowndes County									
Valdosta	21	1605EST 1705EST			0	0	10K		Lightning

Storm Data and Unusual Weather Phenomena

July 2002

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GEORGIA, Southwest

Lightning damaged several electrical components and air conditioning units to a water treatment facility. Reported by the Valdosta Daily Times.

Lanier County

5 W Lakeland

21 1700EST

0 0

5K

Lightning

Lightning sparked a house fire on Georgia 122 west of Lakeland. Reported by the public.

Decatur County

15 NE Bainbridge

27 1625EST

0 0

1K

Thunderstorm Wind

Downed trees reported by Decatur County 911.

GULF OF MEXICO

GMZ230

Corpus Christi To Baffin Bay

Baffin Bay to
Corpus Christi

01 0644CST
0745CST

0 0

Marine Tstm Wind (G44)

GMZ255

Matagorda Ship Chnl To Pt Aransas Out 20Nm

Port Aransas to
Port O'Connor

01 0644CST
0745CST

0 0

Marine Tstm Wind (G44)

GMZ250

Pt Aransas To Baffin Bay Tx Out 20Nm

Baffin Bay to
Port Aransas

01 0644CST
0745CST

0 0

Marine Tstm Wind (G44)

GMZ235

Pt O'Connor To Aransas Pass

Port Aransas to
Port O'Connor

01 0644CST
0745CST

0 0

Marine Tstm Wind (G44)

GMZ230

Corpus Christi To Baffin Bay

Baffin Bay to
Port Aransas

01 0739CST
0915CST

0 0

Marine Tstm Wind (G44)

GMZ270

Pt Aransas To Baffin Bay Tx 20 To 60Nm

Baffin Bay to
Port Aransas

01 0739CST

0 0

Marine Tstm Wind (G44)

GMZ250

Pt Aransas To Baffin Bay Tx Out 20Nm

Port Aransas to
Baffin Bay

01 0739CST
0915CST

0 0

Marine Tstm Wind (G44)

GMZ31

Florida Bay

3 NW Marathon

01 1526EST
1536EST

0 0

Waterspout

Waterspout reported 2 miles north of Pigeon Key.

GMZ32

Gulf Side Of The Lower Keys Out 20Nm

5 NE Big Pine Key to
Big Pine Key

01 1548EST

0 0

Waterspout

GMZ31

Florida Bay

7 NE Duck Key to
Duck Key

01 1555EST

0 0

Waterspout

GMZ630

Mobile Bay

Alabama Port to
Daphne

01 1635CST

0 0

Marine Tstm Wind (G35)

A Special Marine Warning was issued for Mobile Bay as a thunderstorm produced a strong outflow boundary that moved across the bay waters. As the gust front approached the Eastern shore of Mobile Bay, the wind gusted to 35 knots (40 mph) at the Fairhope pier. As the gust front moved off the western shore of the bay a short time earlier, a wind gust of 38 knots (44 mph) was recorded at the Brookley Field airport near downtown Mobile.

GMZ54

W End Of The 7 Mile Bridge To Key W Out 20Nm

7 SW Big Pine Key to
Big Pine Key

01 1746EST

0 0

Waterspout

Waterspout reported by Florida Fish and Wildlife Commission 5 miles south of Summerland Key.

GMZ655

Destin To Pensacola F1 Out 20Nm

Destin

02 0950CST

0 0

Marine Tstm Wind (G34)

Storm Data and Unusual Weather Phenomena

July 2002

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<u>GULF OF MEXICO</u>									
GMZ830 Old Tampa Bay	02	1635EST			0	0			Waterspout
Waterspout offshore of Oldsmar.									
GMZ655 Destin	03	1230CST 1240CST			0	0			Waterspout
Destin To Pensacola Fl Out 20Nm A waterspout was observed near the Mid-Bay Bridge. People stopped on the bridge to watch the spout. The waterspout stayed over the bay and eventually dissipated over water.									
GMZ750 2 SE Miramar Beach	03	1400EST			0	0			Waterspout
Apalachicola To Destin Fl Out 20Nm A waterspout was sighted by the public just offshore of Miramar Beach.									
GMZ830 Old Tampa Bay	04	0912EST 0933EST			0	0			Waterspout
Tampa Bay Waterspout could be seen from the St. Petersburg airport and local TV broadcast video.									
GMZ75 5 SE Boca Grande to 8 SE Boca Grande	05	1840EST 1850EST			0	0			Waterspout
Key W To Dry Tortugas Waters Waterspout reported 5 miles southwest of Key West.									
GMZ54 5 SE Key West	05	1845EST 1857EST			0	0			Waterspout
W End Of The 7 Mile Bridge To Key W Out 20Nm Waterspout reported by FAA/Key West Air Traffic Control 1 mile south of Boca Chica Key.									
GMZ54 3 SE Key West	05	1849EST 1859EST			0	0			Waterspout
W End Of The 7 Mile Bridge To Key W Out 20Nm Waterspout reported by NWS observer and spotters.									
GMZ54 2 S Key West	05	1905EST 1935EST			0	0			Waterspout
W End Of The 7 Mile Bridge To Key W Out 20Nm Waterspout reported by NWS observer and spotters. A second brief waterspout was reported by the NWS observer and spotters in the same vicinity within the lifespan of the recorded waterspout.									
GMZ54 4 S Key West	05	1929EST 1936EST			0	0			Waterspout
W End Of The 7 Mile Bridge To Key W Out 20Nm Waterspout reported by NWS observer and spotters. A second brief waterspout also reported by the NWS observer and spotters within the lifespan of the recorded event.									
GMZ830 Old Tampa Bay	06	1755EST 1800EST			0	0			Waterspout
Tampa Bay Waterspout remained over the western part of Old Tampa Bay and dissipated as it approached land.									
GMZ856 11 WNW Bonita Beach	07	1414EST			0	0			Waterspout
Bonita Beach To Englewood Fl Out 20Nm Waterspout near Sanibel Island was reported by the broadcast media and law enforcement.									
GMZ655 Navarre	07	1825CST			0	0			Marine Tstm Wind (G42)
Destin To Pensacola Fl Out 20Nm									
GMZ555 22 SSE Biloxi	07	2130CST			0	0			Marine Tstm Wind (G41)
Pascagoula Ms To Sw Pass Of Ms R Out 20Nm The Coast Guard reported that three fishing boats were capsized.									
GMZ530 E Lake Pontchartrain	07	2240CST			0	0			Marine Tstm Wind (G42)
Lake Ponchartrain And Lake Maurepas									
GMZ52 7 S Key Largo	09	0258EST			0	0			Marine Tstm Wind (G35)
Ocean Reef To Craig Key Fl Out 20Nm Wind gust 40 mph recorded by Molasses Reef CMAN.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>GULF OF MEXICO</u>									
GMZ52 7 S Key Largo			Ocean Reef To Craig Key Fl Out 20Nm						
	09	0305EST			0	0			Marine Tstm Wind (G41)
			Wind gust 47 mph recorded by Molasses Reef CMAN.						
GMZ853 2 W St Petersburg Beach 7 NW St Petersburg Bea	09	1550EST 1625EST	Englewood To Tarpon Springs Fl Out 20Nm		0	0			Waterspout
			Weak thunderstorms produced three waterspouts and six funnel clouds all at the same time within two miles of the coast. The waterspouts did not reach land.						
GMZ52 7 S Key Largo	10	0015EST 1215EST	Ocean Reef To Craig Key Fl Out 20Nm		0	0			Marine Tstm Wind (G43)
			Wind gust 49 mph recorded by Molasses Reef CMAN.						
GMZ52 7 S Key Largo	10	0130EST	Ocean Reef To Craig Key Fl Out 20Nm		0	0			Marine Tstm Wind (G35)
			Wind gust 40 mph recorded by Molasses Reef CMAN.						
GMZ54 8 S Key West	10	1434EST	W End Of The 7 Mile Bridge To Key W Out 20Nm		0	0			Waterspout
			Two simultaneous waterspouts reported by mariners and airplane pilot.						
GMZ53 5 SW Marathon to Marathon	11	1225EST	Craig Key To The W End Of The 7 Mile Bridge Out 20Nm		0	0			Waterspout
			Waterspout reported by spotter 3 miles south of the Seven Mile Bridge.						
GMZ853 5 W St Petersburg Beach	11	1315EST	Englewood To Tarpon Springs Fl Out 20Nm		0	0			Waterspout
GMZ52 7 S Key Largo	11	1530EST	Ocean Reef To Craig Key Fl Out 20Nm		0	0			Marine Tstm Wind (G39)
			Wind gust 45 mph recorded by Molasses Reef CMAN.						
GMZ830 Middle Tampa Bay	12	1001EST	Tampa Bay		0	0			Waterspout
			Two waterspouts were reported just east of the Sunshine Skyway Bridge.						
GMZ555 22 SSE Biloxi	12	2048CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G35)
GMZ856 Charlotte Harbor	13	1028EST 1030EST	Bonita Beach To Englewood Fl Out 20Nm		0	0			Waterspout
			The waterspout developed rapidly over the mouth of the Peace River before moving onshore at the Fisherman's Village as a tornado.						
GMZ530 Lkfrnt Arpt New	13	1238CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G56)
GMZ550 20 S Venice	13	1330CST	Sw Pass Of The Ms R To Atchafalaya R La Out 20Nm		0	0			Marine Tstm Wind (G38)
GMZ555 22 SSE Biloxi	13	1453CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G35)
GMZ555 1 SE Biloxi	13	1500CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G34)
GMZ630 Point Clear	13	1650CST	Mobile Bay		0	0			Marine Tstm Wind (G40)
GMZ650 Dauphin Island	13	1650CST	Pensacola Fl To Pascagoula Ms Out 20Nm		0	0			Marine Tstm Wind (G40)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>GULF OF MEXICO</u>									
GMZ530 N Lake Pontchartrain	14	0820CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G36)
GMZ530 Mid Lke Pontchartrain	14	0830CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G36)
GMZ550 Grand Isle	14	0959CST	Sw Pass Of The Ms R To Atchafalaya R La Out 20Nm		0	0			Marine Tstm Wind (G34)
GMZ550 Grand Isle	14	1000CST	Sw Pass Of The Ms R To Atchafalaya R La Out 20Nm		0	0			Marine Tstm Wind (G35)
GMZ575 45 E Venice	14	1021CST	Pascagoula Ms To Sw Pass Of Ms R 20 To 60Nm		0	0			Marine Tstm Wind (G36)
GMZ555 22 SSE Biloxi	14	1118CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G35)
GMZ575 45 E Venice	14	1214CST	Pascagoula Ms To Sw Pass Of Ms R 20 To 60Nm		0	0			Marine Tstm Wind (G40)
GMZ54 6 S Key West	15	0625EST 0631EST	W End Of The 7 Mile Bridge To Key W Out 20Nm		0	0			Waterspout
GMZ335 14 S Texas City	16	0000CST	Galveston Bay Measured at Pleasure Pier.		0	0			Marine Tstm Wind (G35)
GMZ355 .5 S Galveston	16	0000CST	High Is To Freeport Tx Out 20Nm Measured at Pleasured Pier.		0	0			Marine Tstm Wind (G35)
GMZ355 13 W Galveston	16	0523CST	High Is To Freeport Tx Out 20Nm Measured at Jamaica Beach, 39 kt at N Jetty at 7am, 34 kt at GLS at 636am.		0	0			Marine Tstm Wind (G42)
GMZ335 15 S Texas City	16	0600CST	Galveston Bay Measured at North Jetty.		0	0			Marine Tstm Wind (G39)
GMZ335 15 S Texas City	16	1200CST	Galveston Bay Measured at North Jetty.		0	0			Marine Tstm Wind (G37)
GMZ355 1 S Galveston	16	1200CST	High Is To Freeport Tx Out 20Nm Measured at North Jetty.		0	0			Marine Tstm Wind (G37)
GMZ856 Charlotte Harbor	19	0949EST 0958EST	Bonita Beach To Englewood Fl Out 20Nm Waterspout remained near Cape Haze but did not come on shore.		0	0			Waterspout
GMZ830 Middle Tampa Bay	20	0725EST 0731EST	Tampa Bay Pilot reported waterspout 9 miles south southeast of the Albert Whitted Airport.		0	0			Waterspout
GMZ555 22 SSE Biloxi	21	0141CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G48)
GMZ555 22 SSE Biloxi	21	0159CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G52)
GMZ530 E Lake Pontchartrain	21	0525CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G38)
GMZ655 Navarre	21	0745CST	Destin To Pensacola Fl Out 20Nm		0	0			Marine Tstm Wind (G40)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>GULF OF MEXICO</u>									
GMZ555 22 SSE Biloxi	21	1442CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G35)
GMZ650 5 W Dauphin Island	21	1520CST	Pensacola Fl To Pascagoula Ms Out 20Nm		0	0			Waterspout A waterspout was observed offshore off the west end of Dauphin Island. The waterspout dissipated over the water.
GMZ530 Little Woods	21	1545CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G37)
GMZ650 2 S Dauphin Island	21	1552CST 1600CST	Pensacola Fl To Pascagoula Ms Out 20Nm		0	0			Waterspout A waterspout was observed near the Farewell Buoy south of Dauphin Island. The spout remained over the water for several minutes before dissipating over the water.
GMZ530 Lkfrnt Arpt New	21	1707CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G40)
GMZ630 Point Clear	24	1335CST 1336CST	Mobile Bay		0	0			Marine Tstm Wind (G40)
GMZ650 Dauphin Island	24	1735CST 1740CST	Pensacola Fl To Pascagoula Ms Out 20Nm		0	0			Waterspout A waterspout was observed for several minutes offshore of the east end of Dauphin Island. The spout dissipated over the water.
GMZ555 22 SSE Biloxi	24	2318CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G48)
GMZ555 22 SSE Biloxi	25	0037CST	Pascagoula Ms To Sw Pass Of Ms R Out 20Nm		0	0			Marine Tstm Wind (G36)
GMZ630 Alabama Port	25	1210CST 1215CST	Mobile Bay		0	0			Marine Tstm Wind (G40)
GMZ530 N Lake Pontchartrain	25	1345CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G35)
GMZ856 9 SE San Carlos Bay	25	1404EST	Bonita Beach To Englewood Fl Out 20Nm		0	0			Waterspout Waterspout reported by trained spotter in Estero Bay.
GMZ530 Lkfrnt Arpt New	25	1412CST	Lake Ponchartrain And Lake Maurepas		0	0			Marine Tstm Wind (G35)
GMZ830 Old Tampa Bay	25	1536EST	Tampa Bay		0	0			Marine Hail (1.00) Hail was reported on the Courtney Campbell Causeway in Old Tampa Bay.
GMZ830 Old Tampa Bay	25	1636EST	Tampa Bay		0	0			Marine Tstm Wind (G35) Wind speed recorded by the Old Tampa Bay P.O.R.T.S. equipment.
GMZ856 Charlotte Harbor	25	1715EST	Bonita Beach To Englewood Fl Out 20Nm		0	0			Waterspout
GMZ650 Perdido Key	26	0700CST 0705CST	Pensacola Fl To Pascagoula Ms Out 20Nm		0	0			Waterspout A waterspout was observed offshore south of Perdido Pass. the waterspout remained visible for several minutes before dissipating over the water.
GMZ630 Alabama Port	27	0825CST 0827CST	Mobile Bay		0	0			Waterspout A waterspout was observed over the Bay east of Alabama Port. The spout dissipated over the Bay.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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GULF OF MEXICO

GMZ655 Pensacola Beach	Destin To Pensacola Fl Out 20Nm 27	1405CST 1410CST			0	0			Waterspout
	A waterspout was observed in Escambia Bay just north of Pensacola Beach. The spout was seen from I-10. The spout dissipated over the bay.								
GMZ655 Destin	Destin To Pensacola Fl Out 20Nm 28	0845CST 0855CST			0	0			Waterspout
	A waterspout was observed over the Gulf of Mexico just offshore of Destin. Several people saw the spout, which lasted for about ten minutes. The spout dissipated over the Gulf.								
GMZ53 5 S Marathon	Craig Key To The W End Of The 7 Mile Bridge Out 20Nm 29	0337EST			0	0			Marine Tstm Wind (G41)
	Wind gust 47 mph recorded by Sombrero Key CMAN.								
GMZ52 7 S Key Largo	Ocean Reef To Craig Key Fl Out 20Nm 29	0348EST			0	0			Marine Tstm Wind (G43)
	Wind gust 49 mph recorded by Molasses Reef CMAN.								
GMZ75 10 SE Boca Grande	Key W To Dry Tortugas Waters 29	0444EST			0	0			Marine Tstm Wind (G34)
	Wind gust 39 mph recorded at Sand Key CMAN.								
GMZ755 10 SE Carrabelle to 10 E Carrabelle	Suwannee R To Apalachicola Fl Out 20Nm 29	0935EST 0945EST			0	0			Waterspout
	Several waterspouts were sighted by the public just offshore of Dog Island.								
GMZ856 Charlotte Harbor	Bonita Beach To Englewood Fl Out 20Nm 29	1358EST			0	0			Marine Tstm Wind (G40)
	The automated observing system at the Punta Gorda airport (within five miles of the bay) recorded 40 knot winds.								
GMZ830 Old Tampa Bay	Tampa Bay 29	1618EST			0	0			Marine Tstm Wind (G40)
	40 knot wind was measured by P.O.R.T.S. equipment at the St. Pete Pier and 35kt wind as measured by P.O.R.T.S. equipment at the Old Port of Tampa.								
GMZ655 Destin	Destin To Pensacola Fl Out 20Nm 29	1820CST 1825CST			0	0			Waterspout
	A waterspout was observed offshore just south of Destin. The waterspout stayed over the open Gulf for about five minutes before dissipating.								
GMZ850 Homosassa River	Tarpon Springs To Suwannee River Fl Out 20Nm 29	1830EST 1845EST			0	0			Marine Tstm Wind (G71)
	The P.O.R.T.S. equipment at the coastal marine reporting station at the mouth of the Homosassa river reported a peak wind of 71 knot at 6:42 PM EST.								
GMZ75 8 NE Boca Grande to 8 NW Boca Grande	Key W To Dry Tortugas Waters 29	1858EST 1914EST			0	0			Waterspout
	Two waterspouts reported by NWS observers.								
GMZ52 7 S Key Largo	Ocean Reef To Craig Key Fl Out 20Nm 29	2337EST			0	0			Marine Tstm Wind (G35)
	Wind gust 40 mph recorded at Molasses Reef CMAN.								
GMZ31 7 NE Duck Key	Florida Bay 31	1551EST			0	0			Marine Tstm Wind (G35)
	Wind gust 40 mph recorded at Long Key CMAN.								

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm
					Killed	Injured	Property Crops

HAWAII

Hawaii County

7 N Pahoa	04 05	1130HST 0730HST			0	0	Wild/Forest Fire
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A brushfire scorched more than 100 acres in the central coastal section of the Puna District on the island of Hawaii. The blaze, whose cause was not known, started near Railroad Avenue along the coast and burned from Hawaiian Beaches toward Hawaiian Paradise Park subdivision. The county used its helicopters to dump water on the fire because of its relative inaccessibility. However, there were no reports of serious property damage or injuries.

Honolulu County

2 E Pacific Palisades	12 14	1745HST 1000HST			0	0	Wild/Forest Fire
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A brushfire seared 35 acres just east of Pacific Palisades in south central Oahu, along the Manana Trail. The Honolulu Fire Department's Air 1 helicopter, joined by two Army UH-60 Blackhawks, dropped water on the blaze. No homes were threatened by the fire, and there were no serious injuries.

Honolulu County

3.5 ENE Waianae	24 26	0820HST 0700HST			0	0	Wild/Forest Fire
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A grass fire burned more than 1500 acres in the western part of Oahu, near the end of Waianae Valley Road. How the fire started was not known, but fire officials believed it was intentionally set.

Four helicopters, including two Army UH-60 Blackhawks, dropped water on the blaze to help contain it. A new school and some farm lots, along with rare native plants, were threatened by the fire but sustained no damage. Also, there were no serious injuries reported.

Maui County

4 NW Wailuku	26	1300HST 1600HST			0	0	Flash Flood
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Localized heavy rain embedded within a band of trade showers caused a normally shallow ford along the Waihee Stream in West Maui to rise five feet within a short amount of time. Four hikers trapped by the rising waters were rescued by the Maui Fire Department's Air One helicopter three miles up the stream.

Maui County

4 NW Hana	26	1730HST 1900HST			0	0	Heavy Rain
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Heavy trade showers caused a stream to rise 2.5 to 3 feet near Ulaino Road in the windward coastal section of East Maui. Fourteen visitors to the area who had driven down Ulaino Road were trapped by the rising waters. Twelve of the people were taken by police and fire personnel to lodging facilities in Hana, while two individuals remained with their vehicles.

Maui County

5 E Haiku	26	1800HST 2000HST			0	0	Heavy Rain
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Heavy trade showers fell over northern coastal and upslope sections of East Maui. The rain caused the Honopou Stream near Twin Falls to quickly rise and strand two men. However, Maui Fire Department's Air One helicopter was able to rescue the two.

Maui County

2 N Olowalu	28 29	1030HST 0900HST			0	0	Wild/Forest Fire
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A brushfire scorched 255 acres above Olowalu in West Maui. The cause of the fire was unknown.

The fire was primarily on state land, including a mountain slope that is part of the West Maui Natural Area Reserve. The blaze did not reach part of the reserve containing endangered plant species but did some damage to power lines on a ridge above Olowalu Store. There were no reports of serious injuries.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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IDAHO, Extreme Southeast

NONE REPORTED.

IDAHO, North

Idaho County

12 SE Dixie

19

**1400MST
1430MST**

0

0

Flash Flood

Forest Service reported flash flood on Kitchen Creek. The creek backed up with mud and debris with water level rising to 10 feet, which flooded Salmon River Road.

Lemhi County

Salmon

23

0052MST

0

0

Thunderstorm Wind (G54)^M

Lemhi County

Salmon

23

0100MST

0

0

Thunderstorm Wind (G52)

Strong thunderstorm winds caused damage in and around the Salmon, ID area. Wind gusts to 62 MPH, downed trees and power lines.

IDAHO, Northwest

NONE REPORTED.

IDAHO, Southeast

Bannock County

Pocatello

06

**2100MST
2300MST**

0

0

Wild/Forest Fire

Lightning started a 500 acre fire outside of Pocatello on the east benches between Pocatello Creek and Buckskin Roads. 60 homes had to be evacuated and families were sent to shelters. Fire was eventually contained by 7/8 with no damage to homes. The fire got as close as 100 yards to the nearest homes before being completely contained.

IDZ017>023-031>032

Eastern Magic Valley - Sawtooth Mountains - Upper Snake Highlands - Upper Snake River Plain - Lower Snake River Plain - South Central Highlands - Caribou Highlands - Big And Little Wood River Region - Lost River / Pahsimeroi

10

**1200MST
2100MST**

0

0

Excessive Heat

A heat wave encompassed all of southeastern Idaho from July 10th through the 15th. Several records were set. Pocatello set an all time record of consecutive days over 100 degrees with 4 from the 11th through the 14th and also set daily high temperature records from the 11th through the 13th. Peak temperatures through the period were the following: 108 at Shoshone and Minidoka; 107 at Massacre Rocks State Park; 105 at Malad and Malta; 104 at Idaho Falls, Richfield and Pocatello City; 103 at Rockland, Grace, McCammon and Pocatello Airport; 102 at Hamer, Howe, Lava Hot Springs, Arbon, Blackfoot, and Picabo; 101 at Soda Springs, Craters of the Moon, and Arco; 100 at Swan Valley and Rexburg; and 98 at Ketchum and Stanley.

Bingham County

Taber

14

**1515MST
1525MST**

0

0

Thunderstorm Wind (G59)^M

Jefferson County

Hamer

14

**1615MST
1625MST**

0

0

Thunderstorm Wind (G71)^M

Custer County

25 N Stanley

14

**1830MST
1850MST**

0

0

Thunderstorm Wind (G90)^M

Power County

Crystal

17

**1930MST
2030MST**

0

0

Flash Flood

Heavy rain caused a flash flood in the town of Crystal. Rattlesnake Creek exceeded its banks and flooded Upper Road. Clifton Creek exceeded its banks and flooded Myler Road.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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IDAHO, Southeast

Fremont County

Island Park	18	1420MST 1435MST			0	0	3K		Thunderstorm Wind
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Thunderstorm winds downed trees in Island Park.

Bannock County

Pocatello	19	1305MST 1315MST			0	0			Hail(0.75)
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3/4 inch hail reported at intersection of Gibson Jack Road and Banoch Highway.

Power County

10 N Pauline	19	1500MST 1600MST			0	0			Flash Flood
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Heavy rains caused flash flooding north of Pauline. Water at the confluence of Bannock and Rattlesnake Creeks covering the road at intersection of Arbon Valley Highway and Rattlesnake Road.

Teton County

Driggs	23	1425MST 1435MST			0	0			Hail(0.75)
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Bannock County

4 W Inkom	24	1450MST 1510MST			0	0			Hail(0.75)
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Oneida County

10 N Malad City	25	1355MST 1405MST			0	0			Hail(0.75)
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Bannock County

Pocatello	25	1445MST 1455MST			0	0			Hail(0.75)
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Oneida County

Juniper	25	1455MST 1505MST			0	0			Hail(0.75)
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Bannock County

4 W Inkom	25	1455MST 1505MST			0	0			Hail(0.75)
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IDAHO, Southwest

Canyon County

Caldwell	07	1045MST			1	2			Lightning
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One man was killed instantly when struck by lightning while moving an aluminum irrigation pipe on an alfalfa farm near Sunnyslope. A second man, standing about four feet away, received serious burns to the head and shoulder.
M52OU

Canyon County

3 E Notus	07	1115MST 1130MST			0	0			Thunderstorm Wind (G50)
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A line of thunderstorms swept across Owyhee, Washington, Payette and Canyon counties. Several limbs were broken off trees and sheet metal was blown from a roof under construction.

Owyhee County

7 SW Homedale	13 15	1500MST 1500MST			0	0			Wild/Forest Fire
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The Trimble Creek Fire was started by lightning in eastern Malheur County, Oregon and was quickly spread by strong winds to within 7 miles of Homedale, Idaho. A mile wide flaming front threatened several ranches and Succor Creek Campground, which were evacuated until the fire was contained on July 15th. Over 46,000 acres burned but no structures were lost.

Canyon County

Nampa	13	2115MST 2130MST			0	4			Thunderstorm Wind (G50)
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Canyon County

Countywide	13	2210MST 2340MST			0	0			Thunderstorm Wind (G50)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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IDAHO, Southwest

Gem County Countywide	13	2210MST 2215MST			0	0			Thunderstorm Wind (G50)
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Ada County 1 S Kuna	13	2212MST 2230MST			0	0			Thunderstorm Wind (G52) ^M
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Payette County 8 S Fruitland	13	2215MST 2240MST			0	0			Thunderstorm Wind (G52) ^M
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Thunderstorm winds along a gust front toppled a stack of speakers from the stage of the Idaho Center Amphitheater and into the audience. Four persons were treated for injuries at a local medical center. Outflow winds continued across Canyon County and into Payette, Gem and Ada counties, bringing numerous trees and power lines down across the four counties..

Boise County Countywide	13	2315MST 2345MST			0	0			Thunderstorm Wind (G50)
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Elmore County Countywide	13	2315MST 2345MST			0	0			Thunderstorm Wind (G50)
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Valley County Countywide	13	2320MST 2345MST			0	0			Thunderstorm Wind (G50)
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A line of thunderstorms moved eastward through Boise, Elmore and Valley counties. Numerous trees and power lines were brought down by winds. In Boise County a tree was blown down onto a house in Crouch.

Payette County Fruitland	14	1530MST 1545MST			0	0			Thunderstorm Wind (G50)
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Ada County Boise	14	1600MST 1615MST			0	0			Thunderstorm Wind (G50)
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Canyon County 5 NW Parma	14	1600MST 1615MST			0	0			Thunderstorm Wind (G51) ^M
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Boise County 17 SSE Idaho City to 12 NE Idaho City	14	1630MST 1645MST			0	0			Thunderstorm Wind (G53) ^M
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Twin Falls County 3 S Rogerson	14	1825MST 1840MST			0	0			Thunderstorm Wind (G50)
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A combination of monsoonal moisture and record-breaking heat fed afternoon thunderstorms that broke out across Southeast Oregon and Southwest Idaho. Clusters of thunderstorms marched northeastward from Malheur County, Oregon and Owyhee County, Idaho, through the Treasure Valley, Boise Foothills and Magic Valley, and then exited the county warning area. Numerous power lines were down in Payette County. A skylight was blown out of a home in southeast Boise and three inch diameter tree limbs were downed in Twin Falls County. Wind gusts to 53 knots were recorded at Lucky Peak RAWS.

Canyon County 2.5 W Middleton	15	1850MST 1910MST			0	0			Thunderstorm Wind (G52) ^M
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Gem County 4 SW Emmett	15	1905MST 1915MST			0	0			Funnel Cloud
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Payette County Fruitland	15	1905MST 1920MST			0	0			Thunderstorm Wind (G52) ^M
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Evening thunderstorms produced outflow winds across Canyon County that brought down tree limbs up to four inches in diameter in Caldwell. A funnel cloud was spotted in Gem County near the Canyon county line.

Boise County Northeast Portion	19	1800MST 1900MST			0	0			Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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IDAHO, Southwest

Valley County

Southeast Portion	19	1800MST 1900MST			0	0			Flash Flood
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A large, almost stationary thunderstorm cell produced very heavy rainfall over the southeast corner of Valley County and the northeast corner of Boise County. A two hundred foot section of Fire Rd 579 was washed out by flash flood waters near the Boise-Valley County line.

Ada County

Boise	22	2045MST 2115MST			0	0			Thunderstorm Wind (G50)
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Ada County

2 NW Boise	22	2115MST 2145MST			0	0			Flash Flood
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Boise County

Horseshoe Bend	22	2115MST 2145MST			0	0			Thunderstorm Wind (G50)
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Thunderstorms that developed in a very unstable airmass during the afternoon continued to intensify throughout the evening hours, training across parts of Ada County, through the Boise Foothills and into Boise County. Lightning strikes started numerous fires in the Boise Foothills. Trees and power lines were blown down across west Boise and Horseshoe Bend. Over an inch and a half of rain fell within 20 minutes in the city of Boise and a section of Pierce Gulch Rd. was washed out in the Boise Foothills.

Payette County

Payette	25	1545MST 1600MST			0	0			Thunderstorm Wind (G50)
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Washington County

14 W Weiser	25	1550MST 1610MST			0	0			Thunderstorm Wind (G60) ^M
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Canyon County

Nampa	25	1600MST 1615MST			0	0			Thunderstorm Wind (G50)
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Gem County

Emmett	25	1610MST 1625MST			0	0			Thunderstorm Wind (G50)
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Ada County

Meridian to Blacks Creek	25	1615MST 1645MST			0	4			Thunderstorm Wind (G54) ^M
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Thunderstorm winds brought down trees and power lines which left over 5000 homes and businesses without power. Winds also kicked up dust which reduced visibility to near zero on Interstate 84 near Blacks Creek Road. This resulted in a 12 car pileup in which four persons were injured. Wind gusts were measured at 62 mph at KTVB TV in Meridian and at 69 mph at Dead Indian RAWS in western Washington County.

ILLINOIS, Central

Shelby County

Westervelt	09	1639CST			0	0			Thunderstorm Wind (G50)
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Thunderstorm winds blew a tree onto a house in Westervelt.

Clark County

2 W Marshall to 8 NE Marshall	09	1703CST 1707CST			0	0			Thunderstorm Wind (G50)
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Two trees blown down. One west of Marshall and another northeast of Marshall.

Crawford County

Robinson	09	1743CST 1745CST			0	0			Thunderstorm Wind (G50)
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Three large trees, as well as several power lines blown down in Robinson.

Jasper County

St Marie to West Liberty	09	1820CST 1826CST			0	0			Thunderstorm Wind (G50)
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Several trees and power lines blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>ILLINOIS, Central</u>									
Richland County									
Dundas to Olney	09	1825CST 1845CST			0	0			Thunderstorm Wind (G50)
			Several trees blown down.						
Lawrence County									
Countywide	09	1830CST 1900CST			0	0			Thunderstorm Wind (G50)
			Numerous trees and power lines blown down in Chauncey, Bridgeport, and Lawrenceville.						
Scott County									
2 N Winchester	22	1610CST			0	0			Thunderstorm Wind (G50)
			A tree was blown over.						
Cass County									
Beardstown	22	1707CST			0	0			Thunderstorm Wind (G50)
			Several large tree limbs were blown down around town.						
Champaign County									
Urbana	22	1731CST			0	0			Thunderstorm Wind (G50)
			Several power lines were blown down around town and a power pole was snapped off.						
Menard County									
Countywide	22	1740CST 1815CST			0	0			Thunderstorm Wind (G50)
			Numerous trees, tree limbs, and power lines were blown down countywide.						
De Witt County									
Clinton	22	1752CST			0	0			Hail(0.75)
De Witt County									
Countywide	22	1752CST 1845CST			0	0			Thunderstorm Wind (G50)
			Numerous trees, tree limbs, and power lines were blown down around the county. Also, several thousand acres of corn were blown down.						
De Witt County									
Clinton	22	1815CST 2015CST			0	0			Flash Flood
			Street flooding was reported around town after several inches of rain fell in a short amount of time.						
Logan County									
Middletown	22	1825CST			0	0			Thunderstorm Wind (G50)
			Three large trees were blown down, one caused minor roof damage.						
Macon County									
Decatur	22	1900CST			0	0			Thunderstorm Wind (G50)
			Thunderstorm winds blew a carport over and moved it 20 yards.						
Cumberland County									
Neoga	22	1955CST			0	0			Thunderstorm Wind (G50)
			Numerous large tree limbs were blown down around town.						
Mclean County									
1 S Le Roy	22	2000CST 2200CST			0	0			Flash Flood
			Over 4 inches of rain fell in a short amount of time. Numerous roads were flooded including Illinois Route 150 near LeRoy .						
Clark County									
Martinsville	22	2030CST			0	0			Thunderstorm Wind (G50)
			A tree was blown over onto an unoccupied car, damaging it.						
Edgar County									
Kansas	22	2030CST 2230CST			0	0			Flash Flood
			Several inches of rain fell in a short amount of time, causing several roads in the Kansas area to have one to two feet of water flowing over them.						
Crawford County									
Oblong	22	2045CST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>ILLINOIS, Central</u>									
Several power lines were blown down around town.									
Peoria County Kickapoo to Peoria	26	0345CST 0400CST			0	0			Hail(2.00)
Peoria County Peoria	26	0405CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew over a small metal shed, as well as several large tree limbs.									
Tazewell County 3 E Pekin to Mackinaw	26	0410CST 0420CST			0	0			Thunderstorm Wind (G52)
Several trees and power lines were blown down.									
Tazewell County Mackinaw	26	0415CST			0	0			Hail(1.00)
Sangamon County Buffalo	26	2205CST			0	0			Thunderstorm Wind (G50)
Numerous trees were blown down in Buffalo.									
Fulton County Cuba to 5 NE Cuba	26	2215CST 2225CST			0	0			Thunderstorm Wind (G50)
Numerous large tree limbs and several trees were blown down in an area from Cuba to five miles northeast of Cuba.									
Macon County Decatur to Forsyth	27	0020CST 0035CST			0	0			Thunderstorm Wind (G55)
Numerous trees, tree limbs, and power lines were blown down. A few homes had minor roof damage due to fallen trees and tree limbs. No injuries reported.									
Sangamon County Dawson to Buffalo	27	0124CST 0330CST			0	0			Flash Flood
Several inches of rain fell in a short amount of time, causing several roads in the Buffalo and Dawson areas to become flooded.									
Logan County New Holland to 3 W Lincoln	27	0126CST 0430CST			0	0			Flash Flood
Heavy rains caused flooding on Illinois Route 10 near New Holland, as well as numerous rural roads.									
Knox County Galesburg to Williamsfield	27	0233CST 0330CST			0	0			Flash Flood
Several inches of rain fell in a short amount of time in an area from Galesburg to Williamsfield. Several rural roads were flooded.									
Peoria County 2 W Kickapoo	28	0808CST			0	0			Hail(1.75)
Mclean County Countywide	28	1400CST 1430CST			0	0			Thunderstorm Wind (G50)
Several trees and power lines were blown down.									
Mclean County 1 NE Normal	28	1430CST			0	0			Hail(0.75)
Vermilion County West Portion	28	1600CST 1800CST			0	0			Flash Flood
Several inches of rain fell in a short amount of time causing numerous rural roads to flood.									
Logan County Atlanta	28	1625CST 1930CST			0	0			Flash Flood
Over 2 inches of rain fell in a short amount of time. Numerous roads were flooded, including Interstate 55 near Atlanta for a short time.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm
					Killed	Injured	Property Crops

ILLINOIS, Northeast

ILZ014	Cook	01 0800CST 04 2000CST			12	0	Excessive Heat
<p>July 2002 began well above normal with high temperatures in the lower to middle 90s across the Chicago area with overnight low temperatures mainly in the 70s. The prolonged heat and humidity which began in late June 2002, caused several heat related fatalities in Cook county. M59PH, F53PH, F82PH, M69PH, F58PH, F46OU, F71PH, M50PH, M73PH, F60PH, M90PH, M59OT</p>							
ILZ014	Cook	07 0800CST 08 2000CST			4	0	Excessive Heat
<p>After a brief cool down on July 5th and 6th, high temperatures reached the upper 80s and lower 90s on July 7th and 8th with low temperatures in the middle to upper 60s. This short hot spell was responsible for 4 fatalities in Cook county. F85PH, M55PH, M45PH, M28OU</p>							
Ogle County	Polo to Oregon	08 1940CST 1950CST			0	0	5K Thunderstorm Wind (G57)
<p>A severe thunderstorm blew down dozens of trees in Ogle county on July 8th. Two large trees fell onto a house in Polo damaging a bedroom and pickup truck.</p>							
De Kalb County	Shabbona to Waterman	08 2045CST 2050CST			0	0	Thunderstorm Wind (G50)
<p>Numerous trees and power lines were blown down in Shabbona. A barn was blown down on Watson Street, just west of Route 23 near Waterman. A fire engine under restoration in a shed was moved 200 feet into a field after the shed was destroyed.</p>							
Du Page County	Central Portion	09 0200CST 0330CST			0	0	Flash Flood
Kane County	Central Portion	09 0200CST 0330CST			0	0	Flash Flood
<p>Heavy rain fell over DuPage and Kane counties during the early morning hours of July 9th. Street and basement flooding was reported in Wheaton and West Chicago in Dupage county. Wheaton reported 2.92 inches of rain. Street and basement flooding was also reported in Geneva and Batavia in Kane county. Some retention ponds also filled in Kane county. Batavia reported 5.60 inches of rain and Geneva reported 4.16 inches.</p>							
ILZ014	Cook	15 0800CST 22 2000CST			10	0	Excessive Heat
<p>An extended period of hot weather began on July 15th and continued through July 22nd. High temperatures ranged mainly from the upper 80s to middle 90s. July 21st was the hottest day when high temperatures reached the middle to upper 90s. Ohare Airport reported their highest temperature of the month, 96 degrees on July 21st. Heat Indices on July 21st reached the 110 to 115 degree range. One day of relief was felt on July 19th, when high temperatures only reached the lower to middle 80s. This prolonged period of heat and humidity resulted in several fatalities across Chicago and Cook county. M60PH, F71PH, M49PH, F39PH, M58PH, M37PH, M57PH, M55PH, F66PH, F78PH</p>							
ILZ014	Cook	26 0800CST 28 2000CST			2	0	Excessive Heat
<p>High temperatures between July 26th and July 28th only reached the upper 80s to near 90, but overnight low temperatures remained in the lower to middle 70s, adding to the prolonged affect of heat. Two fatalities were reported in Cook county. M50PH, M62PH</p>							
<u>ILLINOIS, Northwest</u>							
Carroll County	Chadwick	08 1914CST			0	0	Thunderstorm Wind (G61)
<p>Numerous trees blown down.</p>							
Carroll County	Lanark	08 1914CST			0	0	Thunderstorm Wind (G61)
<p>Numerous trees blown down.</p>							
Whiteside County	Sterling	08 2008CST			0	0	Thunderstorm Wind (G61)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ILLINOIS, Northwest

Numerous tree limbs and several power lines blown down.

Whiteside County 1 S Prophetstown	08	2020CST			0	0			Thunderstorm Wind (G61)
Trees blown down on Highway 78.									
Henry County 2 NE Atkinson	18	1725CST			0	0			Thunderstorm Wind (G61)
Corn crop damaged.									
Whiteside County Albany	20	1643CST			0	0			Thunderstorm Wind (G52)
Mcdonough County 1 NE Fandon	26	2150CST			0	0			Hail(0.88)
Mcdonough County 2 SE Fandon	26	2200CST			0	0			Hail(1.00)
Carroll County Mt Carroll	28	2230CST			0	0			Thunderstorm Wind (G52)
Trees blown down.									
Carroll County Savanna	28	2230CST			0	0			Thunderstorm Wind (G52)
Several trees blown down.									

ILLINOIS, South

Alexander County Olive Branch	02	1815CST			0	0	5K		Thunderstorm Wind (G50)
Several trees and a couple of power poles were blown down.									
Edwards County 6 WNW West Salem	09	2010CST			0	0			Lightning
A lightning strike caused a grass fire. Heavy rain following the initial lightning extinguished the fire.									
Williamson County Crab Orchard	10	1600CST			0	0	10K		Thunderstorm Wind (G50)
Nine power poles were blown down at the Crab Orchard Wildlife Refuge.									
Union County 5 NE Anna	10	1630CST			0	0	3K		Thunderstorm Wind (G50)
Large tree limbs were blown down. A person driving between Anna and Lick Creek had a large limb come down on her car, causing sizeable damage to it.									
Saline County Eldorado	21	1515CST			0	0	25K		Thunderstorm Wind (G55)
Numerous trees and power lines were blown down. Minor roof damage occurred to some homes. The roof was blown off a metal structure.									

ILLINOIS, Southwest

ILZ058>060-064>065-069>070-074-079-095>102	Greene - Macoupin - Montgomery - Bond - Fayette - Clinton - Marion - Washington - Randolph - Adams - Brown - Pike - Calhoun - Jersey - Madison - St. Clair - Monroe								
08	1100CST				0	0			Excessive Heat
09	2300CST								
High temperatures climbed into the middle to upper 90's with the Heat Indices from 105 to 110 degrees.									
Pike County Milton	09	1630CST			0	0			Thunderstorm Wind (G52)
The County Sheriff reported trees down in the Milton area.									
Montgomery County Hillsboro	09	1745CST			0	1			Lightning

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>ILLINOIS, Southwest</u>									
Montgomery County Hillsboro	09	1745CST			0	0			Thunderstorm Wind (G55)
Montgomery County Taylor Spgs	09	1747CST			0	0			Thunderstorm Wind (G55) The County Sheriff reported trees and power lines down in Hillsboro. A large tree in Taylor Springs fell on and damaged a house and car. A man in Hillsboro was treated for burns at a local hospital from a lightning strike.
Montgomery County 5 NW Nokomis	09	1750CST			0	0			Thunderstorm Wind (G55) The County Sheriff reported 1 square mile of corn flattened by thunderstorm wind gusts.
Montgomery County 1 W Coffeen	09	1755CST			0	0			Thunderstorm Wind (G55) The County Sheriff reported trees down blocking Highway 185.
Montgomery County Fillmore	09	1800CST			0	0			Thunderstorm Wind (G55) The County Sheriff reported trees and power lines down in Fillmore.
Fayette County 2 S Ramsey	09	1820CST			0	0			Thunderstorm Wind (G55) The County Sheriff reported trees down partially blocking Highway 51.
Fayette County St Elmo	09	1840CST			0	0			Thunderstorm Wind (G52) The County Sheriff reported power lines down.
ILZ058>060-064>065- 069>070-074-079-095>102	20 22	1100CST 2300CST			0	0			Excessive Heat Greene - Macoupin - Montgomery - Bond - Fayette - Clinton - Marion - Washington - Randolph - Adams - Brown - Pike - Calhoun - Jersey - Madison - St. Clair - Monroe High temperatures climbed to the middle to upper 90's with the Heat Indices from 105 to near 115 degrees. St. Louis hit 100 on July 22.
Adams County Payson	22	1600CST			0	0			Thunderstorm Wind (G52) Storm spotters reported a couple of large trees down in Payson.
Pike County Barry	22	1640CST			0	0			Thunderstorm Wind (G55)
Pike County New Canton	22	1645CST			0	0			Thunderstorm Wind (G55)
Pike County Perry	22	1650CST			0	0			Thunderstorm Wind (G55) The County Sheriff reported trees and power lines down in Barry, New Canton, and Perry.
Madison County Godfrey	22	1805CST			0	0			Thunderstorm Wind (G52) Amateur radio spotters reported some trees and power lines down.
St. Clair County Fairview Hgts	22	1905CST			0	0			Thunderstorm Wind (G55)
St. Clair County O Fallon	22	1915CST			0	0			Thunderstorm Wind (G55)
St. Clair County Mascoutah	22	1925CST			0	0			Thunderstorm Wind (G55) Amateur radio spotters reported trees and power lines down in Fairview Heights, O'Fallon and Mascoutah.
St. Clair County Cahokia	22	1920CST			0	0	30K		Lightning A lightning strike started a fire which destroyed a double wide mobile home in Cahokia. The woman resident along with her 3 dogs and 2 cats escaped without injury.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>ILLINOIS, Southwest</u>									
Clinton County									
Trenton	22	1945CST			0	0			Thunderstorm Wind (G55)
Clinton County									
Aviston	22	1950CST			0	0			Thunderstorm Wind (G55)
Storm spotters reported several trees and power lines down in Trenton and Aviston.									
Washington County									
Okawville	22	2003CST			0	0			Thunderstorm Wind (G55)
The County Sheriff reported several trees and power lines down.									
ILZ058>060-064>065-069>070-074-079-098>102									
Greene - Macoupin - Montgomery - Bond - Fayette - Clinton - Marion - Washington - Randolph - Calhoun - Jersey - Madison - St. Clair - Monroe									
	26	1100CST			0	0			Excessive Heat
	31	2300CST							
High temperatures climbed into the middle to upper 90's with the Heat Indices from 105 to near 115 degrees. There was a one day break in the heat as a weak cold front dropped temperatures back into the upper 80's on July 29. However temperatures quickly rebounded and remained high into August.									
<u>INDIANA, Central</u>									
Henry County									
2 SW New Castle to 2 S New Castle	09	1805EST 1809EST	2.1	100	0	0	30K		Tornado (F0)
National Weather Service survey confirmed an F0 touchdown. Minor damage to 3 homes. Trees down.									
Delaware County									
Muncie	09	1822EST			0	0			Hail(1.00)
Randolph County									
Modoc	09	1840EST			0	0			Thunderstorm Wind (G50)
Jackson County									
Seymour	09	1850EST			0	0			Thunderstorm Wind (G50)
Delaware County									
Muncie	09	1855EST 1930EST			0	0			Urban/Sml Stream Fld
Greene County									
Linton	09	1935EST			0	0	3K		Lightning
Trees down in Randolph and Jackson counties. Hail and urban flooding in Muncie.									
Clay County									
Brazil	18	1600EST			0	0	7K		Thunderstorm Wind
Trees down. Gas station sign fell on vehicle.									
Vigo County									
Riley	18	1720EST			0	0	90K		Lightning
Lightning struck a funeral home and caused extensive damage.									
Hancock County									
Greenfield	19	1509EST 1640EST			0	0	150K		Flash Flood
4.23 inches of rain fell across Greenfield. Many streets were closed and traffic rerouted by Greenfield Police. A roof also collapsed on a building due to the heavy rainfall.									
Sullivan County									
Sullivan	22	2200EST			0	0			Thunderstorm Wind (G50)
Lawrence County									
Popcorn	22	2330EST			0	0			Thunderstorm Wind (G50)
Owen County									
Spencer	22	2330EST			0	0			Thunderstorm Wind (G50)
Trees and power lines down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>INDIANA, Central</u>									
Warren County									
1 N Williamsport	22 23	2300EST 0030EST			0	0	2K		Flash Flood
Fountain County									
2 S Attica	22 23	2330EST 0030EST			0	0	2K		Flash Flood
High water was reported on state 28 near Williamsport and U.S. 41 near Attica. Doppler radar estimated between 4 and 5 inches of rain fell in less than 3 hours.									
Hamilton County									
2 N Noblesville	26	1206EST			0	0			Thunderstorm Wind (G50)
Madison County									
Anderson	26	1225EST			0	0			Thunderstorm Wind (G50)
Delaware County									
Muncie	26	1249EST 1300EST			0	0			Thunderstorm Wind (G50)
Randolph County									
Union City	26	1320EST			0	0			Thunderstorm Wind (G50)
Law enforcement reported numerous trees and power lines down as a bow echo moved across the northeastern Indianapolis forecast area.									
Fountain County									
Attica	28	1647EST 1830EST			0	0	3K		Flash Flood
Car attempted to drive across flooded roadway and stalled. Rescue was required. No injuries.									
Greene County									
Solsberry	29	1400EST			0	0			Thunderstorm Wind (G50)
Morgan County									
Mooreville	29	1400EST			0	0			Thunderstorm Wind (G50)
Owen County									
Spencer	29	1400EST			0	0			Thunderstorm Wind (G50)
Putnam County									
Greencastle	29	1410EST			0	0			Thunderstorm Wind (G50)
Clay County									
Brazil	29	1415EST			0	0			Thunderstorm Wind (G50)
Hendricks County									
Maplewood to Avon	29	1419EST 1420EST			0	0			Thunderstorm Wind (G50)
Boone County									
Lebanon	29	1425EST			0	0	5K		Thunderstorm Wind (G50)
Marion County									
Indianapolis	29	1425EST			0	0	10K		Lightning
Marion County									
Castleton	29	1430EST			0	0			Thunderstorm Wind (G50)
Tipton County									
Tipton	29	1436EST			0	0			Thunderstorm Wind (G50)
Morgan County									
Martinsville to Mooreville	29	1440EST 1444EST			0	0			Thunderstorm Wind (G50)
Greene County									
Linton	29	1444EST			0	0			Thunderstorm Wind (G50)
Hamilton County									
Carmel to Fishers	29	1445EST 1455EST			0	0	100K		Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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INDIANA, Central

Daviess County Plainville	29	1450EST			0	0			Thunderstorm Wind (G50)
Johnson County Franklin to Greenwood	29	1451EST 1454EST			0	0			Thunderstorm Wind (G50)
Martin County Indian Sprs	29	1455EST			0	0			Thunderstorm Wind (G50)
Delaware County Muncie	29	1456EST			0	0	125K		Thunderstorm Wind (G50)
Brown County Story	29	1500EST			0	0			Thunderstorm Wind (G50)
Madison County Alexandria to Anderson	29	1500EST			0	0	5K		Thunderstorm Wind (G50)
Monroe County Bloomington	29	1505EST			0	0			Thunderstorm Wind (G50)
Lawrence County 5 N Bedford	29	1520EST			0	0			Thunderstorm Wind (G50)
Shelby County Shelbyville	29	1520EST			0	0			Thunderstorm Wind (G50)
Hancock County Greenfield	29	1522EST			0	0			Thunderstorm Wind (G50)
Rush County Carthage	29	1530EST			0	0			Thunderstorm Wind (G50)
Delaware County 4 N Albany	29	1540EST			0	0			Thunderstorm Wind (G50)
Henry County New Castle	29	1545EST			0	0			Thunderstorm Wind (G50)
Bartholomew County Columbus	29	1550EST			0	0			Thunderstorm Wind (G50)
Jackson County 4 S Brownstown	29	1550EST			0	0			Thunderstorm Wind (G50)
Randolph County Deerfield	29	1550EST			0	0			Thunderstorm Wind (G50)

A squall-line moved across central Indiana during the afternoon of July 29th. 3 separate bowing segments caused widespread damage with trees and power lines down across much of the area. A home in construction collapsed near Fishers, trees fell on houses in Lebanon and Muncie, and a roof was blown off of an airplane hanger at the Delaware County Airport.

INDIANA, Northeast

Grant County Jonesboro	19	1800EST			0	0	0		Thunderstorm Wind
Newspaper report of trees and power lines down in Jonesboro.									
La Porte County La Porte	22	1634EST			0	0	0		Thunderstorm Wind
Law enforcement reported power lines down in La Porte.									
La Porte County 6 N La Porte	22	1638EST			0	0	0		Thunderstorm Wind
Law enforcement reported large trees down north of La Porte.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>INDIANA, Northeast</u>									
Steuben County 6 W Fremont	22	1650EST			0	0	1K		Thunderstorm Wind
									Trained spotter reported large trees down west of Fremont near Pleasant Lake. One of the trees was blown down on a home with minor damage.
Fulton County Akron	22	1730EST			0	0	0		Thunderstorm Wind
									Emergency management reported trees down in Akron.
Cass County Onward	22	1752EST			0	0	2K		Thunderstorm Wind
									Emergency management reported trees down and minor roof damage to houses in Onward.
Miami County 2 N Peru	22	1755EST			0	0	0		Thunderstorm Wind
									Sheriff reported trees down north of Peru.
Miami County Bunker Hill	22	1817EST			0	0	0		Thunderstorm Wind
									Emergency management reported tress down in Bunker Hill.
Adams County 4 ESE Berne	22	2000EST			0	0	0		Thunderstorm Wind
									Emergency management reported power lines down southeast of Berne.
Grant County 4 SE Marion	26	1240EST			0	0	0		Thunderstorm Wind
									Law enforcement reported large tree limbs down southeast of Marion.
Blackford County 7 ESE Hartford City	26	1250EST			0	0	0		Thunderstorm Wind
									Law enforcement reported power lines down southeast of Hartford City.
St. Joseph County 3 S South Bend	26	1545EST			0	0	0		Thunderstorm Wind
									Newspaper report of trees down south of South Bend.
Fulton County Rochester	29	1330EST			0	0	0		Thunderstorm Wind
									Law enforcement reported trees down in Rochester.
Wabash County Treaty	29	1405EST			0	0	0		Thunderstorm Wind
									Local utility reported trees on power lines causing power outages in and around the Treaty area.
Kosciusko County 1 N Pierceton	29	1415EST			0	0	0		Thunderstorm Wind
									Local utility reported trees and power lines down north of Pierceton.
Whitley County 1 W Columbia City	29	1428EST			0	0	0		Thunderstorm Wind
									HAM radio operator reported trees and power lines down west of Columbia City.
Fulton County Countywide	29	1430EST 1440EST			0	0	0		Thunderstorm Wind
									Law enforcement reported trees down countywide.
Allen County 2 NE Aboite	29	1440EST			0	0	0		Thunderstorm Wind
									Law enforcement reported power lines down near Aboite township.
Allen County Poe	29	1510EST			0	0	0		Thunderstorm Wind
									Law enforcement reported trees down on power lines in Poe.
Jay County Dunkirk	29	1830EST			0	0	0		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

INDIANA, Northeast

Newspaper report and photo of large trees down in Dunkirk.

Huntington County
Markle

29	1938EST									
					0	0	80K			Lightning

Lightning struck a home causing a fire that destroyed half of the roof. Major smoke and water damage occurred to the remainder of the dwelling.

INDIANA, Northwest

Porter County
4 N Wheeler

22	1350CST									
					0	0				Thunderstorm Wind (G50)

Trees and power lines were blown down in Portage in Porter county, 4 miles north of Wheeler.

INDIANA, South Central

Crawford County
Countywide

09	2115EST									
					0	0				Thunderstorm Wind (G50)

Trees were blown down.

Harrison County
Corydon

29	1850EST									
					0	0				Thunderstorm Wind (G50)

Floyd County
Countywide

29	1910EST									
					0	0				Thunderstorm Wind (G50)

Clark County
Clarksville

29	1940EST									
					0	0				Thunderstorm Wind (G50)

Trees and power lines were downed by thunderstorm winds across South Central Indiana.

INDIANA, Southeast

Wayne County
4 E Centerville

27	0600EST 0605EST									
					0	0	3K			Thunderstorm Wind (G50)

Two trees were blown down.

Wayne County
Countywide

29	1600EST 1610EST									
					0	0	5K			Thunderstorm Wind (G51)

Trees were blown down.

Franklin County
Brookville

29	1655EST 1705EST									
					0	0	10K			Thunderstorm Wind (G55)

Trees were blown down. A boat was capsized on Brookville Lake.

Ripley County
Batesville

29	1700EST 1710EST									
					0	0	6K			Thunderstorm Wind (G50)

Trees were blown down in the northern part of the city.

Union County
Countywide

29	1710EST 1730EST									
					0	0	6K			Thunderstorm Wind (G52)

Trees were knocked down.

Dearborn County
Countywide

29	1715EST 1725EST									
					0	0	4K			Thunderstorm Wind (G50)

A few trees were blown down across the county.

Ohio County
Rising Sun

29	1730EST 1735EST									
					0	0	5K			Thunderstorm Wind (G50)

A few trees were blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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INDIANA, Southeast

INDIANA, Southwest

Spencer County

2.5 SE Dale to
2 NW Dale

09 2000CST 0 0 15K Thunderstorm Wind (G78)

A thunderstorm microburst, containing winds estimated near 90 MPH, destroyed a two-story barn just off Highway 245 between Dale and Santa Claus. Three cattle were killed and 11 others injured. About five miles to the northwest, another barn was reportedly destroyed.

Warrick County

Newburgh

29 1700CST 0 0 Thunderstorm Wind (G50)

Several trees and limbs were blown down near Newburgh.

Spencer County

Fulda

29 1730CST 0 0 Thunderstorm Wind (G50)

Several trees were blown down over eastern portions of the county.

IOWA, Central

Poweshiek County

Montezuma

05 1852CST 0 0 5K Thunderstorm Wind (G50)^M

A very unstable airmass was in place over Iowa as deep moisture was in place under an upper level sub-tropical ridge of high pressure. During the late afternoon and early evening hours thunderstorms developed over Iowa. The storms were basically tropical in nature, producing mainly heavy rainfall. One of the storms became severe over Poweshiek County as it produced a downburst over the town of Montezuma.

Mahaska County

4 ENE New Sharon

06 1245CST 0 0 5K 13K Thunderstorm Wind (G56)

Polk County

2 SE Altoona

06 1315CST 0 0 5K 15K Hail(1.00)

Polk County

2 SE Altoona

06 1315CST 0 0 3K Thunderstorm Wind (G50)

Polk County

2 SE Altoona

06 1315CST 0 0 10K Thunderstorm Wind (G52)

Madison County

2 S Winterset

06 1430CST 0 0 20K 1K Thunderstorm Wind (G56)

The weather pattern was very similar to the previous day. Temperatures were close to 90 F. by early afternoon with surface dew point temperatures in the low to mid 70s. Thunderstorms developed in the weak flow environment rapidly. Though the initial storms were not severe and were heavy rain producers, numerous outflow boundaries resulted from the storms. A few of the storms became severe along the outflow boundaries of pre existing storms. Wind and hail damage occurred in Polk County southeast of Altoona from one of these storms. The downburst winds damaged crops, trees, and downed power lines. Another storm produced a strong downburst south of Winterset in Madison county. Several small trees were damaged and doors were ripped off of sheds and several grain bins were thrown. Downburst winds in Mahaska County caused a 6 miles stretch of damage along U.S. Highway 63 east of New Sharon. Numerous large branches were downed, crops were flattened, and a few large trees were downed. The width of the damage path ranged from a few tens of meters to nearly a kilometer wide.

Crawford County

10 W Schleswig

10 0500CST 0 0 25K 2.5M Thunderstorm Wind (G69)

Crawford County

3 N Schleswig

10 0515CST 0 0 25K 2.5M Thunderstorm Wind (G69)

Crawford County

Denison

10 0518CST 0 0 5K 2.5M Thunderstorm Wind (G52)

Crawford County

Vail

10 0520CST 0 0 10K 20K Thunderstorm Wind (G56)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>IOWA, Central</u>									
Carroll County 3.5 NW Carroll to 2 N Carroll	10	0540CST 0545CST			0	0	1.5M	1M	Thunderstorm Wind (G69)
Carroll County 5 SW Carroll	10	0540CST			0	0	5K		Thunderstorm Wind (G50)
Sac County 6 SW Odebolt	10	0540CST			0	0	5K		Thunderstorm Wind (G52)
Carroll County Carroll	10	0545CST			0	0	25K	5K	Thunderstorm Wind (G61)
Guthrie County Guthrie Center	10	0550CST			0	0	5K		Thunderstorm Wind (G62)
Carroll County Glidden	10	0551CST			0	0	5K		Thunderstorm Wind (G51) ^M
Carroll County Coon Rapids	10	0554CST			0	0	10K	5K	Thunderstorm Wind (G54) ^M
Carroll County Glidden	10	0554CST			0	0	50K	20M	Thunderstorm Wind (G83) ^M
Carroll County Templeton	10	0554CST			0	0	10K	5K	Thunderstorm Wind (G53)
Audubon County Gray	10	0600CST			0	0	25K	3M	Thunderstorm Wind (G61)
Carroll County Carroll	10	0604CST			0	0	25K	5K	Thunderstorm Wind (G54)
Carroll County Coon Rapids	10	0605CST			0	0	25K	5K	Thunderstorm Wind (G63) ^M
Audubon County 3 N Audubon	10	0610CST			0	0	5K		Thunderstorm Wind (G52)
Greene County 3 SE Scranton	10	0611CST			0	0	5K		Thunderstorm Wind (G52)
Greene County 2 S Scranton	10	0620CST			0	0	10K	5K	Thunderstorm Wind (G56)
Guthrie County Guthrie Center	10	0620CST			0	0	5K		Thunderstorm Wind (G52)
Guthrie County Panora	10	0624CST			0	0	15K	1M	Thunderstorm Wind (G63) ^M
Guthrie County Panora	10	0628CST			0	0	150K	2M	Thunderstorm Wind (G67) ^M
Dallas County Perry	10	0638CST			0	0	10K		Thunderstorm Wind (G52)
Guthrie County Panora	10	0638CST			0	0	15K	10K	Thunderstorm Wind (G61)
Dallas County Adel	10	0645CST			0	0	10K	5K	Thunderstorm Wind (G61)
Dallas County Adel	10	0655CST			0	0	10K		Thunderstorm Wind (G52)
Dallas County 1 SW Perry	10	0655CST			0	0	25K	75K	Thunderstorm Wind (G56)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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IOWA, Central

Dallas County									
Waukee	10	0658CST			0	0	10K		Thunderstorm Wind (G52)
Madison County									
12 W Winterset	10	0658CST			0	0	25K	10K	Thunderstorm Wind (G61)
Greene County									
12 W Jefferson	10	0705CST			0	0	5K		Thunderstorm Wind (G52)
Union County									
2 S Lorimor	10	0705CST 0715CST			0	0	10K	5K	Thunderstorm Wind (G52)
Madison County									
Winterset	10	0709CST			0	0	10K		Thunderstorm Wind (G52)
Polk County									
Des Moines Arprt	10	0709CST			0	0	5K		Thunderstorm Wind (G52) ^M
Madison County									
3 N St Charles	10	0720CST			0	0	5K		Thunderstorm Wind (G52)
Union County									
Lorimor	10	0720CST 0840CST			0	0	25K	10K	Thunderstorm Wind (G56)
Warren County									
1 S Norwalk	10	0720CST			0	0	5K		Thunderstorm Wind (G52)
Clarke County									
3 N Osceola	10	0730CST			0	0	20K	5K	Thunderstorm Wind (G61)

The airmass over Iowa was quite unstable during the predawn hours of the 10th with surface dew points in the 70s. In spite of the fact that a weak cold front had passed through the state, little drying of the atmosphere took place. An unseasonably strong upper level closed low pressure system moved southeast across North Dakota into west central Minnesota during the morning hours of the 10th. Several lines of thunderstorms formed over southeast South Dakota into northwest Iowa and moved southeast from there. The storms produced very heavy rainfall during the initial round of storms along with winds of 40 to 50 MPH. The thunderstorms formed into a well developed MCS by dawn with the second round of storms forming into a bow echo. Very high winds pushed from west central into central and parts of south central Iowa as the bow echo pushed southeast. Numerous reports of 60 to 70 MPH winds were received. Carroll County was especially hard hit with a 96 MPH wind gust recorded in Glidden. Carroll and Crawford Counties were the most heavily impacted. There were approximately 140 electrical transmission poles down in about a 4 mile stretch 2 miles north of Carroll and to the west. The loss of these lines disrupted large portions of western Carroll County, and eastern Crawford County. Newspaper reports received in early August indicated damage to the transmission lines at \$1,500,000. The strongest winds, those exceeding 70 MPH, extended into Guthrie County. Winds in the Panora area topped out at 77 MPH. Extensive damage was reported to grain bins. One of the largest was in Guthrie County, where a 300,000 bushel bin was collapsed on one side by the winds. Crop damage in the area was into the millions of dollars. Survey results indicated that nearly 25% of the corn crop in Carroll County was totally flattened. Damage surveys also indicated very extensive crop damage on either side of Carroll County, in Crawford and Guthrie Counties as well as the north half of Audubon County. Governor Vilsack declared Carroll and Crawford Counties disaster areas. Early reports indicated damage to 70 to 80 percent of farm fields in both counties. Although no injuries were reported, high winds overturned a semi-tractortrailer truck in Madison County west of Winterset. The bow echo continued to move south-southeast across south central Iowa. The Lorimor area of Union County was hard hit. Tree Limbs and Power Lines down in Lorimor with 3 residences receiving minor damages from tree limbs. Two cars, a pickup, and camper were damaged by tree limbs in Lorimor. In rural Lorimor the top half of a large barn was gone along with the hay stored inside. Steel grain bins were damaged by flying debris and trees, and machinery was damaged by sections of the building debris.

Cerro Gordo County

Countywide	10 11	2200CST 0230CST			0	0	50K	100K	Flash Flood
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An upper level low pressure dropped south out of Minnesota into Iowa during the night. Though the airmass over Iowa was typical of early to mid July, however the upper level low pressure was more typical of the cold season. With abundant moisture in place, rain and embedded thunderstorms developed in bands across the state. Very heavy, nearly tropical, rainfall developed. Six inches of rain fell in just a few hours time over Cerro Gordo County in north central Iowa. In spite of the generally dry conditions recently, flash flooding took place even though not as serious as one would normally expect. Some of the more serious flooding took place south of the Ventura area. A section of road about 100 meters long was washed out in the area by the heavy rain. Other damage around the county was more scattered in nature. Crop damage was somewhat widespread as the heavy rain flattened crops, some of which was beyond recovery. The general rule of thumb is if the corn is leaning more than 30 degrees from true, yield reduction will result. If greater than 45 degrees is unlikely the farmer would be able to harvest more than silage. The true

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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IOWA, Central

damage won't be known until sometime in mid to late 2003 however.

Ringgold County

6 N Mt Ayr

11 1533CST 0 0 5K Tstm Wind/Hail

An upper level low pressure dropped south across Iowa during the afternoon of the 11th. Thunderstorms developed during the heating of the day as some clearing took place over southwest Iowa. Thunderstorms developed over southwest and south central Iowa. Most of the storms were heavy rain producers, however one storm became quite strong and produced 50 MPH winds and some hail. Three reports of quarter inch diameter hail were received north of Mt. Ayr in Ringgold County for a short time before weakening and slipping southeast into Missouri.

Kossuth County

3 NE Swea City

21 1820CST 0 0 40K 10K Thunderstorm Wind (G61)

Kossuth County

4 E Bancroft

21 1830CST 0 0 3K 5K Hail(0.88)

A very unstable airmass was in place over Iowa during the afternoon of the 21st. Temperatures by mid afternoon soared into the 90s to low 100s with dew point temperatures in the mid 70s to mid 80s. The airmass was capped with 700 mb temperatures in the 11 to 13 C. range. In spite of CAPE values in the 7000 J/kg range, thunderstorms had a difficult time forming. During the early evening thunderstorms did form along a cold front moving into the state. A few of them became severe, but for the most part the storms were not able to become well organized. In Kossuth County, high winds blew down a grain bin northeast of Swea City, while nickle size hail fell east of Bancroft. Many of the storms did product gusty winds. Some minor wind damage was reported in Sac City in Sac County, however the winds were below severe levels. About 3 hours after the storms passed through, gusty winds occurred as the tops collapsed in Hancock County. Branches were broken in Britt and one garage was destroyed as a large branch fell on it.

Taylor County

5 W Bedford

26 2000CST 0 0 10K 10K Hail(1.75)

Taylor County

6 S New Market

26 2000CST 0 0 5K 5K Hail(1.00)

Taylor County

2 S New Market

26 2000CST 0 0 10K 10K Hail(1.75)

Taylor County

8 W Bedford

26 2007CST 0 0 5K 10K Hail(1.00)

Taylor County

4 S New Market

26 2007CST 0 0 5K 10K Hail(1.00)

Taylor County

Bedford

26 2020CST 0 0 25K 10K Hail(1.75)

Taylor County

Bedford

26 2020CST 0 0 5K 5K Hail(1.00)

Taylor County

5 SE New Market to
2 E Bedford

26 2029CST 7 60 0 0 10K 5K Tornado (F1)

Touched down in open country with intermittent track. Did some damage to a house east of Bedford.

A strong warm front was located across northern Kansas into northern Missouri. The airmass was quite unstable with dew point temperatures well into the 70s. Temperatures were in the 100 to 110 degree range south of the front, while to the north of it readings were only in the 80s. Thunderstorms fired by the early evening hours just to the north of the front. Within a few hours a fairly large MCS had formed over Iowa. Most of the thunderstorms were not severe, only producing brief gusty winds, small hail, and heavy rainfall. One cell became a supercell over southwest Iowa. Golf ball size hail fell in Taylor County. During the peak intensity of the storm a tornado touched down southeast of New Market and had an intermittent track to about 2 miles east of Bedford. For the most part the tornado tracked through open country causing only minor damage. One farmstead was damaged by the tornado east of Bedford.

Palo Alto County

Graettinger

28 1720CST 0 0 5K Hail(0.75)

Emmet County

2 W Wallingford

28 1800CST 0 0 2K 5K Hail(0.88)

Emmet County

4 SE Wallingford

28 1815CST 0 0 5K Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>IOWA, Central</u>									
Palo Alto County Graettinger	28	1817CST			0	0	5K	10K	Hail(1.00)
Warren County Hartford	28	1924CST			0	0	10K	5K	Thunderstorm Wind (G61)
Warren County 4 S Hartford	28	1924CST			0	0	5K	5K	Thunderstorm Wind (G61)
Marion County Swan	28	1925CST			0	0	5K	10K	Hail(1.25)
Jasper County 3 S Prairie City	28	1935CST			0	0	5K	5K	Thunderstorm Wind (G61)
Emmet County Wallingford	28	1945CST 1947CST			0	0	2K	5K	Hail(0.88)
Jasper County 2 E Colfax	28	1954CST			0	0	2K	5K	Hail(0.88)
Sac County Schaller	28	2009CST			0	0	5K		Thunderstorm Wind (G52)
Palo Alto County 5 S Cylinder	28	2100CST			0	0	5K		Thunderstorm Wind (G52)

A very unstable airmass was in place over Iowa during the afternoon of the 28th. Surface temperatures were generally in the upper 80s to mid 90s, with dew point temperatures in the 70s to low 80s. By late afternoon, CAPE values were between 4000 and 6000 J/kg with lifted indices below -10 C. Temperatures aloft were quite warm with 700 mb temperatures around +11 C. This tended to cap convection through the day. A strong MCS tracked across southern Minnesota during the afternoon. The outflow boundary from this system dropped into northwest Iowa during the early evening. Thunderstorms formed along the boundary and produced hail of three quarters of an inch to one inch in diameter during the initiation stage. The severe weather tapered off after a couple hours. Meanwhile, an area of thunderstorms lifted north out of Missouri. By early evening the intensified as they moved into the more unstable air over Iowa. They became severe for a brief period of time and produced winds of up to 70 MPH, along with one and one quarter inch diameter hail in central Iowa from Warren County, into Marion and Jasper Counties. The storms weakened after that time. A cold front moved across the state during the night, kicking off additional thunderstorms. These storms remained below severe limits.

IOWA, East Central and Southeast

Buchanan County Independence	05	1645CST			0	0			Thunderstorm Wind (G61) Garage blown off foundation, and garage door blown in on another residence.
Johnson County Shueyville	08	1740CST			0	0			Thunderstorm Wind (G61) Trees blown down.
Cedar County Stanwood	08	1840CST			0	0			Thunderstorm Wind (G61) Roof blown off a porch.
Johnson County Coralville	08	1845CST			0	0			Thunderstorm Wind (G61) Numerous trees and branches blown down.
Johnson County Iowa City	08	1845CST			0	0			Thunderstorm Wind (G61) Trees and branches blown down.
Muscatine County West Liberty	08	1920CST			0	0			Thunderstorm Wind (G61) Large tree blown down on a car. The car was unoccupied.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>IOWA, East Central and Southeast</u>									
Scott County									
Davenport	08	2015CST			0	0			Thunderstorm Wind (G52)
			Trees and limbs toppled some power lines.						
Johnson County									
Coralville	11	0044CST			0	0			Urban/Sml Stream Fld
			Numerous intersections flooded with some vehicles stalled.						
Johnson County									
Iowa City	11	0044CST			0	0			Urban/Sml Stream Fld
			Dubuque Street covered with water.						
Linn County									
Cedar Rapids	11	0410CST			0	0			Urban/Sml Stream Fld
			Prairie Chapel Road closed due to high water.						
Dubuque County									
Bankston	18	1700CST			0	0			Thunderstorm Wind (G61)
			Trees down.						
Jones County									
2 N Monticello	18	1722CST			0	0			Thunderstorm Wind (G57)
Jones County									
5 NE Monticello	18	1725CST			0	0			Thunderstorm Wind (G61)
			Car blown off Highway 151.						
Jones County									
2 S Monticello	18	1725CST			0	0			Thunderstorm Wind (G61)
			Several cars blown off road.						
Jones County									
8 W Monticello	18	1738CST			0	0			Thunderstorm Wind (G61)
			Farm buildings blown down.						
Jones County									
2 W Monticello	18	1745CST			0	0			Thunderstorm Wind (G61)
			Barn on County Road D-62 collapsed. The barn housed a tractor, self-loading wagon box and many antiques.						
Jones County									
Monticello	18	1750CST			0	0			Thunderstorm Wind (G61)
			Large tree knocked over on a camper at Central Park. Large branches also caused some damage to a pickup truck.						
Cedar County									
Tipton	18	1830CST 1900CST			0	0			Thunderstorm Wind (G61)
			Numerous trees blown down.						
Linn County									
Ely	18	1845CST			0	0			Thunderstorm Wind (G61)
			Trees down.						
Cedar County									
Tipton	18	1848CST			0	0			Thunderstorm Wind (G61)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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IOWA, East Central and Southeast

According to some, many areas in Tipton resembled a war zone. Damaging winds of 70 mph knocked down or severely damaged more than 50 trees causing thousands of dollars in damage. Some city blocks lost 2 or 3 large trees, and there was damage to several homes. Also, trees fell on at least 4 vehicles and power was knocked out in some areas. Several streets including Highway 38 were blocked by downed trees. While damage was widespread, areas along 4th and 5th Streets were hit hardest. Some nuisance flooding was also reported around 5th and Plum Streets and Cedar and 10th Streets.

Linn County

Mt Vernon	18	1850CST			0	0			Thunderstorm Wind (G61)
Numerous trees down in Mount Vernon and Palisades Kepler State Park. Downed trees on power lines produced power outages in Mount Vernon.									

Cedar County

West Branch	18	1905CST			0	0			Thunderstorm Wind (G61)
Trees blown down.									

Cedar County

West Branch	18	1905CST			0	0			Thunderstorm Wind (G61)
Trees and power lines blown down.									

Scott County

Maysville	18	1930CST			0	0			Thunderstorm Wind (G52)
Several trees blown down.									

Jones County

Center Jct	19	0430CST			0	0			Thunderstorm Wind (G61)
Power lines, trees and limbs blown down. About 30 houses suffered either minor or major damage.									

Cedar County

1 E Clarence	19	0600CST 0900CST			0	0			Urban/Sml Stream Fld
Yankee River overflowed its banks flooding some pasture.									

Cedar County

2 W Clarence	19	0600CST 0800CST			0	0			Urban/Sml Stream Fld
Roadside park flooded.									

Cedar County

Stanwood	19	0600CST 0800CST			0	0			Urban/Sml Stream Fld
Several secondary roads covered with high water north of Highway 30.									

Jones County

Center Jct	19	0600CST 0830CST			0	0			Urban/Sml Stream Fld
Nearly 20 homes had water in the basement. Rainfall totals ranged from 3 to 6 inches.									

Jones County

Morley	19	0600CST 0800CST			0	0			Urban/Sml Stream Fld
Walnut Creek overflowed its banks.									

Jones County

Olin	19	0600CST 0800CST			0	0			Urban/Sml Stream Fld
Sible Creek overflowed its banks.									

Jones County

Wyoming	19	0600CST 0830CST			0	0			Urban/Sml Stream Fld
Little Bear Creek overflowed its banks and flooded portions of town. Rainfall amounts of 5 to 6 inches were reported in Martelle and from Olin to Wyoming .									

Clinton County

Clinton	20	1630CST			0	0			Hail(1.75)
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IOWA, East Central and Southeast

Scott County

Davenport	27	0259CST 0304CST			0	0			Hail(0.75)
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Scott County

Parkview	27	0405CST			0	0			Urban/Sml Stream Fld
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Small stream out of it's banks.

Scott County

Davenport	27	0410CST			0	0			Urban/Sml Stream Fld
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Water over the wheels of a pickup truck at the intersection of Bridge and Locust Streets. Also, water over road on East 39th Street, where vehicle was stalled.

Scott County

Davenport	27	0619CST			0	0			Urban/Sml Stream Fld
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Duck Creek overflowed its banks and covered the bike path at Brady Street and also at Kimberly Road. Rainfall totals from gages along Duck Creek since midnight ranged from 2.17 inches at County Shed to 3.78 inches at Goose Creek, with 3.31 inches at both Silver Creek and Brady Street.

Louisa County

Columbus Jct	28	2009CST			0	0			Thunderstorm Wind (G52)
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Several 6 to 12 inch diameter tree limbs blown down.

Linn County

Marion	28	2107CST			0	0			Hail(0.88)
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Jones County

Anamosa	28	2112CST			0	0			Thunderstorm Wind (G61)
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Large tree blown down on power lines.

Cedar County

Tipton	28	2115CST			0	0			Thunderstorm Wind (G61)
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A large tree was blown down on a home on West 7th Street.

Linn County

Cedar Rapids	28	2120CST			0	0			Thunderstorm Wind (G52)
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Power poles and lines blown down. One power pole landed on an unoccupied vehicle on the southeast side of the city.

Linn County

Ely	28	2120CST			0	0			Thunderstorm Wind (G52)
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Power lines blown down.

Linn County

Marion	28	2120CST			0	0			Thunderstorm Wind (G52)
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Power lines and poles blown down. 3,500 homes in Cedar Rapids and Marion lost power.

Jackson County

Maquoketa	28	2200CST			0	0			Thunderstorm Wind (G61)
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A large tree limb was blown down, damaging the roof of a home on West Maple Street. Also, tree limbs knocked down several power lines resulting in scattered power outages.

Linn County

Cedar Rapids	29	0300CST			0	0			Thunderstorm Wind (G52)
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Another round of high winds knocked down more power lines and poles forcing the closure of Highway 151, and leaving another 3,500 homes and businesses without power.

IOWA, Northeast

Mitchell County

Mitchell	18	2145CST			0	0	2.5K	7.5K	Hail(2.00)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>IOWA, Northeast</u>									
Mitchell County 2 SE St Ansgar	18	2145CST			0	0	4K	15K	Thunderstorm Wind (G61)
Mitchell County Mitchell	18	2150CST			0	0	2K	10K	Thunderstorm Wind (G55)
Mitchell County 1 W Osage	18	2150CST			0	0	4.5K	12K	Thunderstorm Wind (G61)
									Straight-line winds estimated at 65 to 70 mph caused a farm shed to collapse, knocked down power poles and trees, as well as caused widespread damage to crops.
Howard County 7 S Cresco	27	1933CST			0	0	7.5K		Thunderstorm Wind (G55)
Winneshiek County Decorah	27	1942CST			0	0	1K	10K	Thunderstorm Wind (G55)
Allamakee County Waterville	27	2000CST			0	0	1.5K		Thunderstorm Wind (G56)
									Estimated wind gusts of 65 mph damaged a farm near Cresco (Howard County), snapped off and blew down several trees near Waterville (Allamakee County) and damaged corn fields near Decorah (Winneshiek County).
<u>IOWA, Northwest</u>									
Buena Vista County Storm Lake Arpt	10	0025CST			0	0			Thunderstorm Wind (G52) ^M
Buena Vista County Newell	10	0035CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds blew down numerous trees, some large. The winds also blew down power lines.
Sioux County 4 NW Rock Vly	10	0215CST			0	0			Thunderstorm Wind (G52)
Lyon County 2 SE Inwood	10	0220CST			0	0			Thunderstorm Wind (G52)
Plymouth County 5 N Hinton	10	0405CST 0415CST			0	0			Thunderstorm Wind (G57)
									Thunderstorm winds combined with heavy rain to cause severe crop damage. The amount of crop damage was not known.
Plymouth County Hinton	10	0418CST			0	0			Thunderstorm Wind (G52)
Ida County 5 S Battle Creek	10	0515CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds and heavy rain caused widespread crop damage over the southern part of Ida county. The amount of crop damage was not known.
Plymouth County 2 E Akron	21	1610CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds tore off branches and smaller tree debris.
Woodbury County Sioux City	21	1700CST			0	0			Hail(1.75)
									Large hail damaged vehicles. The amount of damage was not known.
Woodbury County Sioux City	21	1700CST			0	0			Thunderstorm Wind (G61)
Woodbury County Sioux City	21	1705CST			0	0			Hail(0.88)
Woodbury County Sioux City	21	1705CST			0	0			Thunderstorm Wind (G52)

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July 2002

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<u>IOWA, Northwest</u>									
Woodbury County 13 E Sioux City	21	1707CST			0	0			Thunderstorm Wind (G57)
									Thunderstorm winds caused tree damage, including a large tree blown down.
Woodbury County Sioux City	21	1710CST			0	0			Hail(0.88)
Plymouth County 4 E Le Mars	21	1720CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds destroyed an outdoor play set and caused tree damage.
Plymouth County Remsen	21	1720CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds blew down power lines and damaged crops. The amount of property and crop damage was not known.
Cherokee County Meriden	21	1740CST			0	0			Hail(0.75)
Woodbury County Correctionville	21	1742CST			0	0			Thunderstorm Wind (G52)
Woodbury County 4 NW Correctionville	21	1745CST			0	0	50K		Thunderstorm Wind (G52)
									Thunderstorm winds blew down power lines and caused tree damage.
Ida County Battle Creek	21	1800CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds blew down power lines and caused tree damage.
Ida County Holstein	21	1800CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds blew down power lines and caused tree damage.
Buena Vista County Linn Grove	21	1810CST			0	0			Thunderstorm Wind (G52)
Clay County 4 SE Webb	21	1825CST			0	0			Hail(0.75)
Woodbury County Lawton	24	1410CST			0	0	25K		Thunderstorm Wind (G61)
									Thunderstorm winds destroyed a boat, and also caused tree damage.
Woodbury County Sioux City	25	0225CST			0	0			Hail(0.88)
Woodbury County Sioux City	25	0233CST			0	0			Hail(1.75)
									Large hail damaged some vehicles. The amount of damage was not known.
Woodbury County Sioux City	25	0238CST			0	0			Hail(0.75)
Osceola County Harris	28	1645CST			0	0			Hail(0.88)
Dickinson County Lake Park	28	1657CST 1700CST			0	0			Hail(0.75)
Dickinson County Spirit Lake	28	1700CST			0	0	20K		Thunderstorm Wind (G69)
									Thunderstorm winds caused tree and power line damage. At least one house was damaged when a tree was blown over onto the roof.
Dickinson County 1 N Spirit Lake	28	1726CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds caused tree damage.

Storm Data and Unusual Weather Phenomena

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<u>IOWA, Northwest</u>									
Clay County									
Everly	28	1900CST			0	0			Hail(0.75)
Woodbury County									
Merville to Anthon	28	1910CST 1920CST			0	0			Thunderstorm Wind (G69)
Thunderstorm winds caused widespread tree and power line damage, with power lines blocking at least one road, and resulting power outages. The winds destroyed a shelter, garage, and outbuilding about halfway between Merville and Anthon.									
Clay County									
Fostoria	28	1925CST			0	0			Hail(0.75)
Ida County									
4 NW Ida Grove	28	1947CST			0	0			Thunderstorm Wind (G52)
Clay County									
2 N Dickens	28	1950CST			0	0			Hail(0.75)
Ida County									
3 NE Battle Creek	28	1950CST			0	0			Thunderstorm Wind (G52)
Buena Vista County									
2 S Storm Lake	28	2016CST			0	0			Thunderstorm Wind (G52)
<u>IOWA, Southwest</u>									
Monona County									
7 SW Whiting	21	1700CST			0	0			Hail(0.75)
Pottawattamie County									
Minden	21	1730CST			0	0			Thunderstorm Wind (G60)
An apparent microburst caused extensive wind in Minden. Three foot diameter trees were uprooted, power lines were downed and sporadic damage to siding was done to a few houses.									
Monona County									
Blencoe	25	0147CST			0	0			Hail(1.75)
Harrison County									
2 E Little Sioux	25	0232CST			0	0			Hail(1.50)
Harrison County									
Modale	25	0257CST			0	0			Hail(0.75)
Monona County									
Blencoe	25	0328CST			0	0			Hail(1.75)
Pottawattamie County									
1 N Council Bluffs	25	0345CST			0	0			Hail(1.75)
Monona County									
Blencoe	25	0345CST			0	0			Hail(2.50)
Harrison County									
2 NW Little Sioux	25	0355CST			0	0			Hail(1.75)
Mills County									
3 ENE Tabor	25	0405CST			0	0			Hail(1.00)
Fremont County									
Sidney	25	0409CST			0	0			Thunderstorm Wind (G60)
Thunderstorm wind gusts downed trees and power lines in Sidney.									
Harrison County									
7 E Missouri Vly	25	0420CST			0	0			Hail(1.00)
Pottawattamie County									
3 NE Treynor	25	0500CST			0	0			Hail(1.00)

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IOWA, Southwest

Page County 2 SE Coin	25	0605CST			0	0			Hail(0.75)
Page County 1 S Shenandoah	26	1914CST			0	0			Hail(1.75)
Fremont County 4 NE Farragut	26	1920CST			0	0			Hail(0.88)
Page County Clarinda	26	1933CST			0	0			Thunderstorm Wind (G55)
A ham radio operator reported thunderstorm wind gusts of around 65 mph.									
Page County 5 W Clarinda	26	1941CST			0	0			Hail(1.75)
Page County Clarinda	26	1946CST			0	0			Hail(1.00)
Page County 5 SE Clarinda to 3 SE Clarinda	26	1948CST 1953CST	1.5	400	0	0			Tornado (F1)
A tornado damaged 5 or so farmsteads and downed quite a few trees south of Clarinda. A semi was also blown off the road in that area. Damage included windows blown out, roofs ripped off of outbuildings, tractor-trailers flipped and trees stripped bare .									

KANSAS, East

KSZ008>012-020>024-026-034>040-054>056-058>059	Republic - Washington - Marshall - Nemaha - Brown - Cloud - Clay - Riley - Pottawatomie - Jackson - Jefferson - Ottawa - Dickinson - Geary - Morris - Wabaunsee - Shawnee - Douglas - Lyon - Osage - Franklin - Coffey - Anderson								
	01	0001CST			0	0			Excessive Heat
	31	2359CST							
KSZ021	Clay								
	01	0001CST			0	0	4K		Drought
	10	2359CST							
Dry weather and hot temperatures produced crop damage in various parts of Clay county.									
July 2002 was one of the hotter and drier months on record for northeast Kansas. Monthly temperatures averaged well above normal over the whole area with many days of high temperatures above 95 degrees and quite a few over 100 degrees. Precipitation was well below normal over the area although not the driest of record.									
Washington County 1 E Kimeo	06	1820CST			0	0			Thunderstorm Wind (G61)
Washington County Linn	10	1306CST			0	0			Hail(0.75)
Anderson County Garnett	10	1317CST			0	0			Hail(0.75)
Lyon County Emporia	10	1319CST			0	0			Hail(1.00)
Geary County 4 NE Junction City	10	1331CST			0	0			Hail(0.88)
Geary County Junction City	10	1335CST			0	0			Hail(1.75)
Anderson County Bush City	10	1420CST			0	0			Hail(0.75)
Lyon County 8 S Emporia	10	1435CST			0	0	2K		Thunderstorm Wind (G61)
Strong winds downed power poles south of Emporia.									
Anderson County 3 SE Welda	10	1440CST			0	0			Thunderstorm Wind (G52)

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					Killed	Injured	Property	Crops	
<u>KANSAS, East</u>									
Coffey County									
Burlington	10	1455CST			0	0			Hail(0.88)
Osage County									
2 SSW Barclay	18	1520CST			0	0			Hail(1.00)
Jefferson County									
1 N Mc Louth	19	1433CST			0	0			Hail(0.75)
Jefferson County									
Mc Louth	19	1433CST			0	0			Thunderstorm Wind (G52)
Jefferson County									
Oskaloosa	19	1444CST			0	0			Thunderstorm Wind (G57)
Douglas County									
Worden	19	1505CST			0	0			Hail(0.75)
Douglas County									
Baldwin	19	1510CST			0	0			Hail(0.75)
Douglas County									
2 ENE Worden	19	1512CST			0	0	10K		Thunderstorm Wind (G60) Strong winds destroyed a barn near Worden.
Douglas County									
Baldwin	19	1515CST			0	0	2K		Hail(2.75) Baseball size hail knocked down power lines near Baldwin.
Douglas County									
5 S Pleasant Grove	19	1516CST			0	0	4K		Thunderstorm Wind (G61) Strong winds knocked down power lines and tore the roof off of a shed.
Douglas County									
1 S Globe	19	1548CST			0	0			Hail(0.88)
Franklin County									
1 NW Centropolis	19	1551CST			0	0			Hail(0.75)
Franklin County									
1 NW Centropolis	19	1551CST			0	0			Thunderstorm Wind (G52)
Osage County									
Overbrook	19	1604CST			0	0			Thunderstorm Wind (G52)
Douglas County									
Lawrence	19	1630CST 1650CST			0	0			Flash Flood Heavy rains produced areas of flash flooding in parts of Douglas county. Thunderstorms developed over northeast Kansas at mid afternoon of the 19th and moved south into east central Kansas during the late afternoon. Many became severe and produced numerous reports of large hail and damaging winds. Damage reports were described above.
Jackson County									
1 SE Soldier	25	1720CST			0	0			Hail(0.88)
Jackson County									
Circleville	25	1731CST			0	0			Hail(0.75)
Pottawatomie County									
1 NE Havensville	25	1750CST			0	0			Hail(0.88)
Jackson County									
6 NNE Circleville	25	1815CST			0	0			Hail(0.88)
Jackson County									
6 NNE Circleville	25	1830CST			0	0			Hail(0.88)
Jackson County									
5 WNW Mayetta	25	1855CST			0	0			Hail(0.75)

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<u>KANSAS, East</u>									
Jackson County 8 NW Hoyt	25	1910CST			0	0			Hail(1.00)
Washington County Haddam	26	1705CST			0	0			Thunderstorm Wind (G52)
Republic County Belleville	26	1710CST			0	0			Thunderstorm Wind (G57)
Republic County 3 E Belleville	26	1720CST			0	0			Thunderstorm Wind (G52)
Pottawatomie County 1 E Emmett	27	1415CST			0	0			Hail(0.88)
Jackson County 6 N Delia	27	1430CST			0	0			Hail(0.88)
Jackson County 5 N Delia	27	1430CST			0	0			Thunderstorm Wind (G61)
Riley County Manhattan	27	1959CST			0	0	0.45K		Lightning
									Lightning struck a home in Manhattan and ignited a fire that did minor damage.
Pottawatomie County 1 NE Wamego	27	2017CST			0	0			Thunderstorm Wind (G61)
Pottawatomie County Belvue	27	2023CST			0	0			Thunderstorm Wind (G62)
Pottawatomie County Louisville	27	2030CST			0	0			Hail(1.25)
Jackson County 9 N Delia	27	2044CST			0	0			Thunderstorm Wind (G52)
Jackson County 5 N Delia	27	2050CST			0	0			Hail(0.75)
Riley County Manhattan	27	2127CST			0	1			Lightning
									Light struck a trailer in Manhattan and injured a woman touching the trailer.
Riley County Manhattan	27	2138CST			0	0	10K		Lightning
									Lightning struck the roof of a restaurant and ignited a fire that did serious damage.
Ottawa County 3 N Tescott	27	2155CST			0	0			Hail(0.75)
Ottawa County 8 E Tescott	27	2222CST			0	0	2K		Thunderstorm Wind (G61)
									Strong winds blew down power lines east of Tescott.
Ottawa County 3 N Bennington	27	2240CST			0	0			Thunderstorm Wind (G52)
Cloud County Jamestown	27	2245CST			0	0			Hail(1.75)
Cloud County Jamestown	27	2245CST			0	0	4K		Thunderstorm Wind (G61)
									Strong winds knocked street lights off poles.
Ottawa County Tescott	27	2255CST			0	0	2K		Thunderstorm Wind (G61)
									Strong winds knocked down power lines.

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<u>KANSAS, East</u>									
Ottawa County									
Bennington	27	2302CST			0	0			Hail(0.88)
Riley County									
Manhattan	27	2356CST			0	0	2K		Lightning
									Lightning struck the roof of a building and started a fire that did 2 thousand dollars damage.
Riley County									
Manhattan	28	0005CST			0	0			Thunderstorm Wind (G60)
Riley County									
1 SW Manhattan	28	0100CST			0	0			Thunderstorm Wind (G57)
Riley County									
Manhattan	28	0121CST			0	0	1.5K		Lightning
									Lightning struck an electrical plant and started a fire that did some damage.
Geary County									
5 NW Junction City	28	0130CST			0	0	8K		Thunderstorm Wind (G52)
									Strong winds destroyed a camper trailer.
Riley County									
1 SW Manhattan to Ogden	28	0200CST 0330CST			0	0	5K		Flash Flood
									Heavy rains caused rapid runoff that flooded some businesses between Ogden and Manhattan. Thunderstorms developed over north central and northeast Kansas during the mid afternoon hours of the 27th and continued into the early morning hours of the 28th. Some of the storms became severe and produced numerous reports of large hail and damaging winds. Lightning struck several locations doing considerable damage. There was also one report of flash flooding.
Morris County									
6 W Delavan	28	1636CST			0	0			Thunderstorm Wind (G52)
Morris County									
4 W Delavan	28	1836CST			0	0			Thunderstorm Wind (G52)
Pottawatomie County									
3 SW Olsburg	28	1850CST			0	0			Thunderstorm Wind (G52)
Morris County									
2 S White City	28	1851CST			0	0			Thunderstorm Wind (G61)
Shawnee County									
1 N Dover	28	1942CST			0	0			Thunderstorm Wind (G52)
Shawnee County									
Auburn	28	1945CST			0	0			Thunderstorm Wind (G52)
Shawnee County									
5 N Topeka	28	1948CST			0	0	2K		Thunderstorm Wind (G60)
									Strong winds broke some windows north of Topeka.
Osage County									
Osage City	28	1958CST			0	0			Thunderstorm Wind (G52)
Osage County									
Melvern	28	2019CST			0	0			Thunderstorm Wind (G61)
Douglas County									
Lawrence	28	2032CST			0	0			Thunderstorm Wind (G52)
Franklin County									
Williamsburg	28	2045CST			0	0			Hail(1.00)
									Thunderstorms developed late in the afternoon of the 28th over east central Kansas, moved east and continued into the evening hours. Some of the thunderstorms became severe and produced numerous reports of strong winds and one large hail event.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

KANSAS, Extreme Southeast

NONE REPORTED.

KANSAS, North Central

Jewell County

Burr Oak	28	1545CST			0	0	25K	500K	Thunderstorm Wind (G62)
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Jewell County

7 NW Esbon	28	1600CST			0	0	75K	1M	Thunderstorm Wind (G62)
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Jewell County

4 NE Esbon	28	1615CST			0	0	75K	1M	Hail(1.00)
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Wind driven hail broke windows at a farm north of Esbon. A swath of extensive crop damage was reported from 7 miles northwest of Esbon to 4 miles northeast of Esbon. The crops 6 miles north of town were completely wiped out.

KANSAS, Northeast

Miami County

Somerset	18	1525CST			0	0			Thunderstorm Wind (G52)
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Miami County

3 E Somerset	18	1535CST			0	0			Hail(0.75)
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Johnson County

Overland Park	19	1545CST			0	0			Hail(1.25)
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Leavenworth County

Linwood	28	2115CST			0	0			Thunderstorm Wind (G52)
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KANSAS, Northwest

KSZ001>004-013>016-027>029-041>042 Cheyenne - Rawlins - Decatur - Norton - Sherman - Thomas - Sheridan - Graham - Wallace - Logan - Gove - Greeley - Wichita

01	0000MST				0	0			Drought
31	2359MST								

Drought conditions worsened from extreme to exceptional during the month of July across northwest Kansas. Hot temperatures and much below normal rainfall during the month continued to stress crops and livestock in the area.

Sheridan County

8 SE Tasco	21	1545MST			0	0			Thunderstorm Wind (G65)
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Quansit hut pushed off foundation.

Norton County

Norton	21	1622MST			0	0	1K		Thunderstorm Wind (G60)
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House roof damaged. Debris from roof broke windows in nearby building.

Decatur County

11 NW Oberlin	21	1703MST			0	0			Hail(1.00)
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Decatur County

11 NW Oberlin	21	1703MST			0	0	0.10K		Thunderstorm Wind (G55)
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Large tree blown over by thunderstorm winds.

Rawlins County

Herndon	21	1710MST			0	0			Thunderstorm Wind (G50) ^M
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Rawlins County

Herndon	21	1710MST			0	0			Thunderstorm Wind (G50)
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Numerous 4-inch diameter tree limbs down.

Several strong, slow-moving thunderstorms developed over Decatur and Rawlins counties in northwest Kansas and moved northward into southern Nebraska. Several reports of urban and lowland flooding were reported for a short time due to rapid runoff, in addition to strong, damaging winds and small hail.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>KANSAS, Northwest</u>									
Sherman County 12 SW Goodland	28	1630MST			0	0			Thunderstorm Wind (G52)
Wallace County 6 WNW Sharon Spgs	28	1653MST			0	0			Thunderstorm Wind (G52)
<u>KANSAS, Southeast</u>									
Allen County Iola	09	1529CST			0	0			Hail(0.75)
Rice County 1 N Lyons	10	1517CST			0	0			Hail(1.00)
Montgomery County Independence	10	1635CST			0	0	5K		Thunderstorm Wind (G52) Trees and power lines downed.
Reno County 10 S Buhler	10	1645CST			0	0	5K		Thunderstorm Wind (G56) Trees and power lines downed. Unspecified damage to a garage.
Sedgwick County 3 NW Wichita	10	1654CST			0	0	15K		Thunderstorm Wind (G61) Semi-trailer overturned at K96 and 199th St. West.
Sedgwick County 5 W Bentley	10	1655CST			0	0			Thunderstorm Wind (G52) Trees downed.
Sedgwick County 2 W Bentley	10	1655CST			0	0	25K		Thunderstorm Wind (G56) Pivot irrigation unit damaged.
Sedgwick County Colwich	10	1655CST			0	0			Thunderstorm Wind (G52)
Sedgwick County Colwich	10	1700CST			0	0			Thunderstorm Wind (G52)
Cowley County 4 W Burden	10	1745CST			0	0			Thunderstorm Wind (G52)
Kingman County Spivey	10	1800CST			0	0			Thunderstorm Wind (G61)
Kingman County 2 E Zenda	10	1810CST			0	0	5K		Thunderstorm Wind (G56) Trees downed and windows blown out of house.
Harper County Anthony	10	1852CST			0	0	15K		Thunderstorm Wind (G56) Numerous power lines, power poles, and trees downed.
Harper County Danville	10	1852CST			0	0	10K		Thunderstorm Wind (G56) Power lines, power poles and trees downed.
Cowley County 1 E Arkansas City	10	1858CST			0	0			Hail(1.00)
Harper County 6 S Anthony	10	1905CST			0	0			Thunderstorm Wind (G52)
Greenwood County 5 N Eureka	18	1345CST			0	0			Hail(1.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>KANSAS, Southeast</u>									
Greenwood County									
1 N Eureka	18	1355CST			0	0			Hail(0.75)
Occurred on north side of town.									
Chase County									
Wonsevu	18	1535CST			0	0			Hail(1.50)
Chase County									
Wonsevu	18	1553CST			0	0			Hail(1.00)
Marion County									
2 NE Burns	18	1605CST			0	0			Hail(0.75)
Russell County									
11 E Milberger	18	1800CST			0	0			Thunderstorm Wind (G52)
Barton County									
8 N Claflin	18	1824CST			0	0			Thunderstorm Wind (G70)
Eight-inch limbs downed.									
Montgomery County									
Coffeyville	22	2156CST			0	0	30K		Lightning
Initially striking the roof of a house, the lightning travelled down electrical wiring inside a bedroom wall, came out a power receptacle just above the bed, and ignited bedding and the mattress against the wall. The strike also caused other unspecified structural and electrical damage to the same house.									
Russell County									
1 E Fairport	27	2100CST			0	0	10K		Thunderstorm Wind (G61)
Power poles snapped with associated power lines obviously downed.									
Russell County									
1 W Wilson Lake	27	2130CST			0	0			Thunderstorm Wind (G52)
Barton County									
3.5 N Albert	27	2145CST			0	0			Thunderstorm Wind (G54) ^M
Barton County									
Hoisington	28	0100CST			0	0	1K		Lightning
Tree struck, with wooden fence alongside having three boards blown out. In addition, cable converter in nearby house was damaged.									
Russell County									
Paradise	28	1605CST			0	0			Hail(0.75)
Russell County									
Paradise	28	1605CST			0	0			Thunderstorm Wind (G52)
Ellsworth County									
1.5 NE Lorraine	28	1650CST			0	0			Thunderstorm Wind (G52)
Ellsworth County									
10 S Ellsworth	28	1710CST			0	0			Hail(0.75)
Ellsworth County									
10 S Ellsworth	28	1710CST			0	0			Thunderstorm Wind (G52)
Rice County									
3 SE Frederick	28	1720CST			0	0			Thunderstorm Wind (G56)
Eight inch diameter limbs downed.									
Ellsworth County									
7 S Kanopolis	28	1725CST			0	0			Thunderstorm Wind (G52)
Mcperson County									
Galva	28	1758CST			0	0			Thunderstorm Wind (G61)
Reno County									
Turon	28	1820CST			0	0			Thunderstorm Wind (G61)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>KANSAS, Southeast</u>									
Marion County									
Lincolnvile	28	1825CST			0	0			Thunderstorm Wind (G52)
Mcpherson County									
5 N Mc Pherson	28	1828CST			0	0			Thunderstorm Wind (G61)
Kingman County									
2 E Cunningham	28	1842CST			0	0			Thunderstorm Wind (G52)
Harper County									
Waldron	28	2010CST			0	0			Thunderstorm Wind (G52)
Sedgwick County									
2 E Viola	28	2015CST			0	0	50K		Thunderstorm Wind (G61)
			Barn blown over. (KFDI Radio).						
Sumner County									
13 S Oxford	28	2126CST			0	0	10K		Thunderstorm Wind (G61)
			Unspecified number of sheds blown away. Trees downed.						
Labette County									
2 SW Mound Vly to 1 S Valeda	28	2200CST 2215CST			0	0	25K		Thunderstorm Wind (G52)
			Two power poles snapped and three trees fell onto power lines severing power to just over 400 residences of which about 300 were in Mound Valley.						
<u>KANSAS, Southwest</u>									
Stafford County									
Radium	10	1645CST			0	0			Hail(1.00)
Pawnee County									
4 SE Larned	10	1705CST			0	0			Hail(0.88)
Pawnee County									
5 SE Larned	10	1718CST			0	0			Hail(0.75)
Pawnee County									
5 SE Larned	10	1718CST			0	0			Thunderstorm Wind (G52)
Ford County									
9 NW Dodge City	10	1815CST			0	0	7.5K		Thunderstorm Wind
			Seven power poles blown down in this microburst. In addition, 25 pieces of sheet metal were blown off a shed.						
Ford County									
2 SW Dodge City	10	1835CST			0	0	1K		Thunderstorm Wind
			A roof was blown off a shed.						
Seward County									
5 E Liberal	10	2149CST 2150CST	0.3	25	0	0	0		Tornado (F0)
			A brief tornado occurred in an open pasture.						
Finney County									
Garden City	11	0215CST			0	0			Hail(0.88)
Finney County									
(Gck)Garden City Arpt	21	1710CST			0	0			Thunderstorm Wind (G50) ^M
Trego County									
2 SSE Cedar Bluff Res	21	1943CST			0	0			Thunderstorm Wind (G52)
Morton County									
5 N Elkhart	27	1630CST			0	0			Hail(0.75)
Ness County									
3 NW Brownell	27	1922CST			0	0			Hail(1.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>KANSAS, Southwest</u>									
Pawnee County									
4 E Rozel	27	1922CST			0	0			Thunderstorm Wind (G70)
			Four inch diameter tree limbs wer blown down.						
Ellis County									
1 S Ellis	27	1936CST			0	0			Thunderstorm Wind (G52)
Ellis County									
9 WSW Hays	27	1952CST			0	0			Thunderstorm Wind (G67) ^M
			Hail of unknown size also fell at this location, which broke out windows.						
Ellis County									
1 W Yocemento	27	2003CST			0	0			Hail(1.50)
Ellis County									
1 E Hays	27	2015CST			0	0			Thunderstorm Wind (G60) ^M
Ellis County									
Hays	27	2020CST			0	0	0.50K		Thunderstorm Wind
			A power pole was blown down which started a small fire in the back yard.						
Ness County									
10 SW Ness City	27	2214CST			0	0			Thunderstorm Wind (G54) ^M
Finney County									
Garden City	27	2216CST			0	0			Thunderstorm Wind (G56) ^M
Finney County									
2 N Garden City	27	2220CST			0	0			Thunderstorm Wind (G58) ^M
Ness County									
7 S Ness City	27	2330CST			0	0			Hail(0.75)
Lane County									
9 N Dighton	28 29	1526CST 1526CST			0	0			Thunderstorm Wind (G52)
Ness County									
12 NE Utica	28	1530CST			0	0			Hail(1.00)
Trego County									
14 WSW Trego Center	28	1530CST			0	0			Hail(1.00)
Ellis County									
9 WSW Hays	28	1532CST			0	0			Thunderstorm Wind (G62) ^M
Ness County									
9 NE Bazine	28	1615CST			0	0			Thunderstorm Wind (G52)
Hodgeman County									
Jetmore	28	1617CST			0	0			Thunderstorm Wind (G51) ^M
Ellis County									
Victoria	28	1623CST			0	0			Thunderstorm Wind (G70)
			A few small trees were uprooted.						
Stanton County									
8 W Manter	28	1630CST			0	0			Hail(0.88)
Stanton County									
10 W Johnson	28	1700CST			0	0			Hail(1.00)
Ford County									
7 SW Dodge City	28	1738CST			0	0			Hail(0.75)
Ford County									
4 SE Bucklin to 4 S (Ddc)Dodge City Arq	28	1815CST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>KANSAS, Southwest</u>									
Comanche County 3 N Buttermilk	28	1822CST			0	0			Hail(1.00)
Pratt County Pratt	28	1830CST			0	0			Lightning
									Minor damage was done to a house.
Clark County 4 SE Minneola	28	1840CST			0	0			Hail(0.75)
Kiowa County 11 S Mullinville	28	1843CST			0	0			Hail(0.75)
Hamilton County 20 SW Syracuse	28	1938CST			0	0			Hail(1.00)
Comanche County Coldwater	28	1940CST			0	0			Heavy Rain
									Water was over highway 183.
Stanton County Johnson	28	2008CST			0	0			Thunderstorm Wind (G64) ^M
Stanton County Johnson	28	2020CST			0	0			Thunderstorm Wind (G78)
									Numerous six to seven inch branches were blown down.
Comanche County 12 S Coldwater	28	2030CST			0	0			Hail(0.75)
Comanche County 8 S Coldwater	28	2050CST			0	0			Heavy Rain
									Debris was washed across the highwa.
Seward County 3 S Liberal	28	2115CST			0	0			Hail(0.75)
<u>KENTUCKY, Central</u>									
Logan County 5 SW Olmstead	02	1500EST			0	0			Thunderstorm Wind (G50)
									Trees and power lines were downed.
Clark County Winchester	02	1615EST			0	0			Hail(0.88)
Clark County Winchester	02	1630EST 1730EST			0	0			Flash Flood
									Water covered part of the Highway 1927 Bypass.
Warren County Countywide	03	0120EST 0300EST			0	0			Flash Flood
									Slow moving thunderstorms produced heavy rains over South Central Kentucky. Numerous roads around Bowling Green and Warren County were covered with water. Law enforcement.
Allen County Holland	03	1953EST			0	0			Hail(0.88)
									One tree was also blown down.
Allen County Holland	03	1958EST			0	0			Thunderstorm Wind (G50)
									Power lines were blown down.
Allen County Scottsville	03	2015EST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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KENTUCKY, Central

Allen County Scottsville	03	2015EST			0	0			Thunderstorm Wind (G50) Several large tree branches were blown down.
Allen County Scottsville	10	1315EST			0	0			Thunderstorm Wind (G50)
Barren County Countywide	10	1315EST			0	0			Thunderstorm Wind (G50)
Logan County Russellville	10	1315EST			0	0			Thunderstorm Wind (G50)
Clinton County Countywide	10	1330EST			0	0			Thunderstorm Wind (G50)
Simpson County Franklin	10	1350EST			0	0			Thunderstorm Wind (G50)
Allen County Countywide	10	1400EST			0	0			Thunderstorm Wind (G50) Numerous trees were blown down over South Central Kentucky.
Fayette County 1 S Lexington	29	1710EST			0	0			Thunderstorm Wind (G50)
Henry County 8 E Campbellsburg	29	1815EST			0	0			Thunderstorm Wind (G50)
Jefferson County Shively	29	1918EST			0	0			Thunderstorm Wind (G50)
Oldham County Countywide	29	1940EST			0	0			Thunderstorm Wind (G50)
Shelby County Countywide	29	1945EST			0	0			Thunderstorm Wind (G50)
Henry County Eminence	29	2010EST			0	0			Thunderstorm Wind (G50)
Franklin County 4 W Frankfort	29	2030EST			0	0			Thunderstorm Wind (G50) Power lines and numerous trees were blown down across North Central and East Central Kentucky.

KENTUCKY, Eastern

Pulaski County Squib	02	1310EST			0	0	0	0	Hail(1.75)
Jackson County Clover Bottom	02	1510EST			0	0	0	0	Hail(0.75)
Breathitt County 5 NW Jackson	02	1515EST			0	0	0	0	Hail(1.00)
Pike County Marrowbone	02	1800EST 1805EST			0	0	0	0	Thunderstorm Wind One tree was down in the town of Marrowbone and another tree was down in the Blackberry area, also near Marrowbone.
Letcher County Mc Roberts	02	1800EST			0	0	0	0	Hail(1.75)
Pike County Dorton	02	1833EST 2130EST			0	0	500K	0	Flash Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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KENTUCKY, Eastern

Heavy rains devastated communities in the Dorton and Beefhide areas. The deluge wracked hollows including Lick Fork of Beefhide, Marshall's Branch, and Blaze Branch, with many residents reporting a sudden wall of water that left shattered roads and destruction in its wake. On Blaze Branch Road, the blacktop was buckled and the road was broken apart in several places. Vehicles and outbuildings were tossed around and destroyed in the flash flood. Although no injuries were reported, residents said that they lost air conditioning units, bridges, and other personal property. Many homes had water damage. People in the Beefhide Creek area were cut off from leaving their property temporarily from the fast rising flood waters where 2 miles of the main road was washed out. Some people were evacuated in the Dorton area where 4 feet of water flowed over some roads.

Floyd County

Weeksbury	02	1900EST 2200EST			0	0	0	0	Flash Flood
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Water was across roads along Caleb Road and Skull Fork Road. High water was reported to be in people's yards.

Johnson County

Sitka	02	2000EST			0	0	0	0	Thunderstorm Wind
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One tree was down on Kentucky Highway 201.

Letcher County

Jenkins	02	2000EST 2130EST			0	0	0	0	Flash Flood
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Several county and city roads were closed due to flash flooding.

Letcher County

Fleming	02	2000EST 2130EST			0	0	200K	0	Flash Flood
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Heavy rains sent flood waters raging through the town of Fleming-Neon and some outlying areas. The flash flooding damaged homes, closed businesses, and coated City Hall in mud. The flooding also temporarily closed local roads.

Johnson County

Oil Spgs	02	2015EST			0	0	0	0	Thunderstorm Wind
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One tree was down across Kentucky Highway 825.

Floyd County

Ivel	02	2130EST			0	0	0	0	Hail(0.75)
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Aside from 0.75 inch hail, 1 inch of rain fell within 20 minutes.

Rockcastle County

Brodhead	02	2230EST			0	0	0	0	Thunderstorm Wind
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Trees and power lines were down on Kentucky Highway 150.

Wolfe County

Landsaw to Malaga	05	1400EST 1405EST			0	0	0	0	Thunderstorm Wind
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Trees were down along Kentucky Highway 1812 between Landsaw and Malaga. Large branches were also down and blocking Kentucky Highway 1261.

Breathitt County

Juan	05	1415EST			0	0	0	0	Thunderstorm Wind
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Several trees were down on Kentucky Highway 30.

Knott County

Mousie	05	1545EST			0	0	0	0	Hail(1.00)
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Elliott County

Lyttlen	09	1635EST			0	0	0	0	Thunderstorm Wind
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Trees and tree limbs were down. Also small hail reported and 2.5 inches of rain in one hour.

Pike County

Freeburn to 3 NE Ransom	20	0510EST 0800EST			0	0	50K	0	Flash Flood
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Flash flooding caused water to flood into homes in the McCarr area. People were stranded in cars from quickly rising water in Freeburn, and roads were washed out at Kentucky Highway 1056 and Kentucky Highway 319.

Magoffin County

Hendricks to 2 W Salyersville	20	0930EST 1100EST			0	0	0	0	Flash Flood
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A couple of driveway bridges were washed out along Bear Branch Creek near Kentucky Highway 30 and Kentucky Highway 1090. Also, two feet of water was flowing over Kentucky Highway 30, one mile south of Kentucky Highway 460.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

KENTUCKY, Eastern

Laurel County London	20	1614EST			0	0	0	0	Hail(0.88)
Laurel County London	20	1621EST			0	0	0	0	Thunderstorm Wind One large tree was down on Pearl Street.
Laurel County London	20	1625EST			0	0	0	0	Hail(0.75)
Laurel County London	20	1628EST			0	0	10K	0	Thunderstorm Wind Several trees were down. One large Pine tree was uprooted and a couple of trees fell onto cars.
Laurel County 4 SW London	22	1530EST			0	0	0	0	Thunderstorm Wind Several trees were down.
Laurel County 6 SE London	22	1532EST			0	0	0	0	Thunderstorm Wind One large tree was down and blocking Kentucky Highway 229.
Laurel County 5 S London	22	1539EST			0	1	0	0	Lightning One woman was struck by lightning.
Martin County 1 N Laura	23	1810EST 2100EST			0	0	0	0	Flash Flood Water was flowing about 7 to 8 inches deep along Kentucky Highway 1714, which runs along Pigeon Roost Creek.
Mccreary County Countywide	23	1825EST			0	0	0	0	Thunderstorm Wind Multiple trees were reported down countywide along with several power outages.

KENTUCKY, Northeast

NONE REPORTED.

KENTUCKY, Northern

Mason County Mays Lick	22	1650EST 1653EST			0	0	3K		Thunderstorm Wind (G50) Several trees and limbs were downed.
Boone County Big Bone	29	1730EST			0	0	1K		Thunderstorm Wind (G50) Large limbs were blown down in Big Bone Lick State Park.
Kenton County Countywide	29	1815EST 1830EST			0	0	2K		Thunderstorm Wind (G50) Trees were blown down in Covington, and large limbs were downed in Fort Mitchell. A retaining wall holding up a structure in downtown Covington was blown down.
Campbell County Dayton	29	1825EST 1830EST			0	0	8K		Thunderstorm Wind (G50) A few trees were blown down.
Grant County Crittenden	29	1830EST 1840EST			0	0	5K		Thunderstorm Wind (G50) Several trees were blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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KENTUCKY, Northern

Owen County

Monterey	29	1835EST 1845EST			0	0	4K		Thunderstorm Wind (G50)
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Trees were blown down.

Owen County

Perry Park	29	2030EST 2035EST			0	0	4K		Thunderstorm Wind (G50)
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A few trees were blown down on State Route 355.

KENTUCKY, Southwest

Todd County

Guthrie to 4 NW Guthrie	02	1305CST 1315CST			0	0	10K		Hail(2.75)
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Baseball size hail was reported along Highway 181 about 4 miles northwest of Guthrie. Vehicles were dented. In Guthrie, quarter size hail was reported. The large hail was caused by a severe thunderstorm that drifted slowly north across the Guthrie area from Tennessee.

Mccracken County

.5 W (Pah)Barkley Arpt 1 SE (Pah)Barkley Arpt	10	1116CST			0	0	25K		Thunderstorm Wind (G61) ^M
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A gust to 70 MPH was recorded by ASOS wind equipment at Barkley Regional Airport. Numerous trees and limbs were blown down just west, south, and southeast of the airport. Some of the trees landed on houses, roads, and power lines. An old hangar building at the airport was blown down. A church received minor damage to the roof and steeple.

Mccracken County

Paducah	10	1125CST			0	0	5K		Lightning
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A shed burned down after a lightning strike.

Todd County

Daysville	10	1140CST			0	0	10K		Thunderstorm Wind (G50)
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Trees and large limbs were blown down. At least two trees fell on houses near Daysville. A tree fell through a house about a mile south of Daysville.

Graves County

Symsonia	10	1145CST			0	0	2K		Thunderstorm Wind (G50)
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Several trees were blown down.

Marshall County

6.6 SE Gilbertsville to 7.2 SE Gilbertsville	10	1150CST 1154CST			0	2	1M		Thunderstorm Wind (G87)
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Marshall County

6.6 SE Gilbertsville to 6.8 SE Gilbertsville	10	1150CST 1151CST	0.5	10	0	0	25K		Tornado (F0)
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The Cambridge Shores community, located on the shore of Kentucky Lake about 7 miles southeast of Gilbertsville, received severe damage from a downburst with estimated winds to 100 MPH. The core of the damage path was about 1.5 miles long and 1/4 mile wide. Numerous witnesses reported seeing a weak tornado embedded in the downburst. Estimated peak winds in this small tornado were 70 MPH. The bulk of the damage and both injuries were incurred by the downburst. At least a dozen boat docks were destroyed, and six boats were destroyed or capsized, including a houseboat. At least a dozen homes received significant damage, such as roofs blown off and trees landing on houses. Numerous trees were blown down. Two persons received minor injuries when their 48-foot houseboat capsized.

Marshall County

3 NW Palma to Tatumsville	10	1152CST 1156CST			0	0	20K		Thunderstorm Wind (G55)
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Trees were blown down at Possum Trot. Near Tatumsville, roofs were blown off homes, and numerous trees and power lines were down.

Carlisle County

5 SSW Bardwell to 3 NE Bardwell	10	1235CST 1245CST			0	0	15K		Thunderstorm Wind (G58)
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Winds gusted to 67 MPH in Bardwell. About 100 trees were blown down in southwest Carlisle County, especially near Highway 1591. At least one of the trees fell through a house. Power lines were blown down on Highway 1371 about 3 miles northeast of Bardwell.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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KENTUCKY, Southwest

Trigg County

Cadiz	10	1252CST			0	0	3K		Thunderstorm Wind (G50)
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Trees were down on the west side of Cadiz.

Christian County

1 W Hopkinsville	10	1258CST			0	0			Thunderstorm Wind (G50)
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At least a half dozen large trees were blown down along Highway 272.

Hickman County

3 S Beulah	10	1305CST			0	0	2K		Thunderstorm Wind (G50)
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Several trees were blown down on Highway 307.

Hickman County

Clinton	10	1345CST			0	0	1K		Lightning
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A tree at the county courthouse was struck by lightning and caught fire.

Henderson County

Henderson	29	1645CST			0	0			Thunderstorm Wind (G50)
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Several trees were blown down.

Todd County

6 SSW Elkton	30	1020CST			0	0			Thunderstorm Wind (G50)
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Large tree limbs were down on Highway 181.

LAKE ERIE

LEZ444

Mi Waters Of Lake Erie

11 N Detroit River Light	21	1301EST			0	0			Marine Tstm Wind (G44)
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LEZ162

Le Detroit R Lt To Reno Beach Oh Byd 5Nm Offshore To Intl Border

Maumee Bay to Reno Beach	21	1330EST 1500EST			0	0			Marine Tstm Wind (G35)
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LEZ163

Le Reno Beach To The Islands Oh Byd 5Nm Offshore To Intl Border

Reno Beach to The Islands	21	1330EST 1500EST			0	0			Marine Tstm Wind (G35)
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LEZ164

Le The Islands To Vermilion Oh Byd 5Nm Offshore To Intl Border

The Islands to Vermilion	21	1330EST 1500EST			0	0			Marine Tstm Wind (G35)
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LEZ142

Maumee Bay To Reno Beach Oh

Maumee Bay to Reno Beach	21	1330EST 1500EST			0	0			Marine Tstm Wind (G35)
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LEZ143

Reno Beach To The Islands Oh

Reno Beach to The Islands	21	1330EST 1500EST			0	0			Marine Tstm Wind (G35)
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LEZ144

The Islands To Vermilion Oh

The Islands to Vermilion	21	1330EST 1500EST			0	0			Marine Tstm Wind (G35)
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Thunderstorms producing wind gusts to 35 knots moved across the west end of Lake Erie. A 35 knot gust was measured on South Bass Island.

LEZ444

Mi Waters Of Lake Erie

10 N Detroit River Light	22	1139EST			0	0			Marine Tstm Wind (G43)
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LEZ162

Le Detroit R Lt To Reno Beach Oh Byd 5Nm Offshore To Intl Border

Maumee Bay to Reno Beach	22	1900EST 2100EST			0	0			Marine Tstm Wind (G35)
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LEZ163

Le Reno Beach To The Islands Oh Byd 5Nm Offshore To Intl Border

Reno Beach to The Islands	22	1900EST 2100EST			0	0			Marine Tstm Wind (G35)
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LEZ142

Maumee Bay To Reno Beach Oh

Maumee Bay to Reno Beach	22	1900EST 2100EST			0	0			Marine Tstm Wind (G35)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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LAKE ERIE

LEZ143	Reno Beach To The Islands Oh								
Reno Beach to The Islands	22	1900EST 2100EST			0	0			Marine Tstm Wind (G35)
									Thunderstorms moved across the western basin of Lake Erie and produced wind gusts in excess of 35 knots.
LEZ146	Avon Point To Willowick Oh								
Avon Point to Willowick	22	2030EST 2300EST			0	0			Marine Tstm Wind (G48)
LEZ166	Le Avon Pt To Willowick Oh Byd 5Nm Offshore To Intl Border								
Avon Point to Willowick	22	2030EST 2300EST			0	0			Marine Tstm Wind (G35)
LEZ164	Le The Islands To Vermilion Oh Byd 5Nm Offshore To Intl Border								
The Islands to Vermilion	22	2030EST 2300EST			0	0			Marine Tstm Wind (G35)
LEZ165	Le Vermilion To Avon Pt Oh Byd 5Nm Offshore To Intl Border								
Vermilion to Avon Point	22	2030EST 2300EST			0	0			Marine Tstm Wind (G35)
LEZ167	Le Willowick To Geneva On The Lake Oh Byd 5Nm Offshore To Intl Border								
Willowick to Geneva-On-The-Lake	22	2030EST 2300EST			0	0			Marine Tstm Wind (G35)
LEZ144	The Islands To Vermilion Oh								
The Islands to Vermilion	22	2030EST 2300EST			0	0			Marine Tstm Wind (G35)
LEZ145	Vermilion To Avon Point Oh								
Vermilion to Avon Point	22	2030EST 2300EST			0	0			Marine Tstm Wind (G35)
LEZ147	Willowick To Geneva On The Lake Oh								
Willowick to Geneva-On-The-Lake	22	2030EST 2300EST			0	0			Marine Tstm Wind (G35)
									A line of strong thunderstorms moved across Lake Erie and produced wind gusts in excess of 35 knots. A 48 knot gust was measured at the Cleveland lighthouse.
LEZ149	Conneaut Oh To Ripley Ny								
Ripley Ny	22 23	2140EST 0000EST			0	0			Marine Tstm Wind (G35)
LEZ148	Geneva On The Lake Oh To Conneaut Oh								
Geneva-On-The-Lake to Conneaut	22 23	2140EST 0000EST			0	0			Marine Tstm Wind (G35)
LEZ169	Le Conneaut Oh To Ripley Ny Byd 5Nm Offshore To Intl Border								
Conneaut to Ripley Ny	22 23	2140EST 0000EST			0	0			Marine Tstm Wind (G35)
LEZ168	Le Geneva On The Lake To Conneaut Oh Byd 5Nm Offshore To Intl Border								
Geneva-On-The-Lake to Conneaut	22 23	2140EST 0000EST			0	0			Marine Tstm Wind (G35)
									A line of thunderstorms moved east across Lake Erie and produced wind gusts in excess of 35 knots.
LEZ146	Avon Point To Willowick Oh								
Avon Point to Willowick	28	0000EST 0100EST			0	0			Marine Tstm Wind (G35)
LEZ166	Le Avon Pt To Willowick Oh Byd 5Nm Offshore To Intl Border								
Avon Point to Willowick	28	0000EST 0100EST			0	0			Marine Tstm Wind (G35)
LEZ164	Le The Islands To Vermilion Oh Byd 5Nm Offshore To Intl Border								
The Islands to Vermilion	28	0000EST 0100EST			0	0			Marine Tstm Wind (G35)
LEZ165	Le Vermilion To Avon Pt Oh Byd 5Nm Offshore To Intl Border								
Vermilion to Avon Point	28	0000EST 0100EST			0	0			Marine Tstm Wind (G35)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>LAKE ERIE</u>									
LEZ145			Vermilion To Avon Point Oh						
Vermilion to Avon Point	28	0000EST 0100EST			0	0			Marine Tstm Wind (G35)
			A strong thunderstorm moved east across Lake Erie and produced 35 knot wind gusts.						
LEZ162			Le Detroit R Lt To Reno Beach Oh Byd 5Nm Offshore To Intl Border						
Maumee Bay to Reno Beach	28	0115EST 0230EST			0	0			Marine Tstm Wind (G35)
LEZ163			Le Reno Beach To The Islands Oh Byd 5Nm Offshore To Intl Border						
Reno Beach to The Islands	28	0115EST 0230EST			0	0			Marine Tstm Wind (G35)
LEZ164			Le The Islands To Vermilion Oh Byd 5Nm Offshore To Intl Border						
The Islands to Vermilion	28	0115EST 0230EST			0	0			Marine Tstm Wind (G35)
LEZ142			Maumee Bay To Reno Beach Oh						
Maumee Bay to Reno Beach	28	0115EST 0230EST			0	0			Marine Tstm Wind (G35)
LEZ143			Reno Beach To The Islands Oh						
Reno Beach to The Islands	28	0115EST 0230EST			0	0			Marine Tstm Wind (G35)
LEZ144			The Islands To Vermilion Oh						
The Islands to Vermilion	28	0115EST 0230EST			0	0			Marine Tstm Wind (G35)
			Strong thunderstorms moved east across Lake Erie and produced wind gusts to 35 knots.						
LEZ444			Mi Waters Of Lake Erie						
Stony Point	28	0125EST			0	0			Marine Tstm Wind (G43)
LEZ149			Conneaut Oh To Ripley Ny						
Ripley Ny	28	1600EST 1730EST			0	0			Marine Tstm Wind (G35)
LEZ148			Geneva On The Lake Oh To Conneaut Oh						
Geneva-On-The-Lake to Conneaut	28	1600EST 1730EST			0	0			Marine Tstm Wind (G35)
LEZ169			Le Conneaut Oh To Ripley Ny Byd 5Nm Offshore To Intl Border						
Conneaut to Ripley Ny	28	1600EST 1730EST			0	0			Marine Tstm Wind (G35)
LEZ168			Le Geneva On The Lake To Conneaut Oh Byd 5Nm Offshore To Intl Border						
Geneva-On-The-Lake to Conneaut	28	1600EST 1730EST			0	0			Marine Tstm Wind (G35)
LEZ167			Le Willowick To Geneva On The Lake Oh Byd 5Nm Offshore To Intl Border						
Willowick to Geneva-On-The-Lake	28	1600EST 1730EST			0	0			Marine Tstm Wind (G35)
			A line of strong thunderstorms moved east across Lake Erie and produced wind gusts of 35 knots.						
LEZ146			Avon Point To Willowick Oh						
Avon Point to Willowick	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ166			Le Avon Pt To Willowick Oh Byd 5Nm Offshore To Intl Border						
Avon Point to Willowick	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ162			Le Detroit R Lt To Reno Beach Oh Byd 5Nm Offshore To Intl Border						
Maumee Bay to Reno Beach	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ163			Le Reno Beach To The Islands Oh Byd 5Nm Offshore To Intl Border						
Reno Beach to The Islands	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ164			Le The Islands To Vermilion Oh Byd 5Nm Offshore To Intl Border						
The Islands to Vermilion	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>LAKE ERIE</u>									
LEZ165	Le Vermilion To Avon Pt Oh Byd 5Nm Offshore To Intl Border								
Vermilion to Avon Point	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ142	Maumee Bay To Reno Beach Oh								
Maumee Bay to Reno Beach	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ143	Reno Beach To The Islands Oh								
Reno Beach to The Islands	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ144	The Islands To Vermilion Oh								
The Islands to Vermilion	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
LEZ145	Vermilion To Avon Point Oh								
Vermilion to Avon Point	28	1830EST 2000EST			0	0			Marine Tstm Wind (G35)
A line of strong thunderstorms moved east across Lake Erie and produced wind gusts in excess of 35 knots.									
LEZ146	Avon Point To Willowick Oh								
Avon Point to Willowick	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
LEZ166	Le Avon Pt To Willowick Oh Byd 5Nm Offshore To Intl Border								
Avon Point to Willowick	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
LEZ163	Le Reno Beach To The Islands Oh Byd 5Nm Offshore To Intl Border								
Reno Beach to The Islands	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
LEZ164	Le The Islands To Vermilion Oh Byd 5Nm Offshore To Intl Border								
The Islands to Vermilion	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
LEZ165	Le Vermilion To Avon Pt Oh Byd 5Nm Offshore To Intl Border								
Vermilion to Avon Point	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
LEZ143	Reno Beach To The Islands Oh								
Reno Beach to The Islands	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
LEZ144	The Islands To Vermilion Oh								
The Islands to Vermilion	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
LEZ145	Vermilion To Avon Point Oh								
Vermilion to Avon Point	28	2030EST 2200EST			0	0			Marine Tstm Wind (G35)
Scattered strong thunderstorms moved east across Lake Erie and produced winds in excess of 35 knots.									
LEZ162	Le Detroit R Lt To Reno Beach Oh Byd 5Nm Offshore To Intl Border								
Maumee Bay to Reno Beach	29	1600EST 1745EST			0	0			Marine Tstm Wind (G35)
LEZ163	Le Reno Beach To The Islands Oh Byd 5Nm Offshore To Intl Border								
Reno Beach to The Islands	29	1600EST 1745EST			0	0			Marine Tstm Wind (G35)
LEZ164	Le The Islands To Vermilion Oh Byd 5Nm Offshore To Intl Border								
The Islands to Vermilion	29	1600EST 1745EST			0	0			Marine Tstm Wind (G35)
LEZ142	Maumee Bay To Reno Beach Oh								
Maumee Bay to Reno Beach	29	1600EST 1745EST			0	0			Marine Tstm Wind (G35)
LEZ143	Reno Beach To The Islands Oh								
Reno Beach to The Islands	29	1600EST 1745EST			0	0			Marine Tstm Wind (G35)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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LAKE ERIE

LEZ144 The Islands to Vermilion	29	1600EST 1745EST	The Islands To Vermilion Oh		0	0			Marine Tstm Wind (G35)
A line of thunderstorms moved east across Lake Erie and produced wind gusts in excess of 35 knots.									
LEZ146 Avon Point to Willowick	29	1730EST 1915EST	Avon Point To Willowick Oh		0	0			Marine Tstm Wind (G54)
LEZ166 Avon Point to Willowick	29	1730EST 1915EST	Le Avon Pt To Willowick Oh Byd 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G45)
LEZ165 Vermilion to Avon Point	29	1730EST 1915EST	Le Vermilion To Avon Pt Oh Byd 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G37)
LEZ167 Willowick to Geneva-On-The-Lake	29	1730EST 1915EST	Le Willowick To Geneva On The Lake Oh Byd 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G45)
LEZ145 Vermilion to Avon Point	29	1730EST 1915EST	Vermilion To Avon Point Oh		0	0			Marine Tstm Wind (G45)
LEZ147 Willowick to Geneva-On-The-Lake	29	1730EST 1915EST	Willowick To Geneva On The Lake Oh		0	0			Marine Tstm Wind (G45)
A line of severe thunderstorms moved east across Lake Erie and produced wind gusts well in excess of 35 knots. A 54 knot gust was measured at the Cleveland lighthouse and a bouy north of Vermilion measured a 37 knot gust.									
LEZ149 Ripley Ny	29	1900EST 2015EST	Conneaut Oh To Ripley Ny		0	0			Marine Tstm Wind (G38)
LEZ148 Geneva-On-The-Lake to Conneaut	29	1900EST 2015EST	Geneva On The Lake Oh To Conneaut Oh		0	0			Marine Tstm Wind (G35)
LEZ169 Conneaut to Ripley Ny	29	1900EST 2015EST	Le Conneaut Oh To Ripley Ny Byd 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G35)
LEZ168 Geneva-On-The-Lake to Conneaut	29	1900EST 2015EST	Le Geneva On The Lake To Conneaut Oh Byd 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G35)
A line of strong thunderstorms moved east across Lake Erie and produced wind gusts in excess of 35 knots. A 38 knot gust was measured at the Presque Isle lighthouse.									

LAKE HURON

LHZ345 Mackinac Bridge	21	1945EST	Straits Of Mackinac Within 5Nm Of Mackinac Bridge Including Mackinac Island		0	0			Marine Tstm Wind (G60)
LHZ361 Cheboygan	21	2019EST	Lh 5Nm E Of Mackinac Bridge To Presque Isl Lt Mi Ewd Byd 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G36)
LHZ464 14 W Lexington	22	1652EST	Lh Pt Sanilac To Pt Huron 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G50)
LHZ443 14 W Lexington	22	1652EST	Pt Sanilac To Pt Huron Mi		0	0			Marine Tstm Wind (G50)
LHZ347 Cheboygan	27	2018EST	5Nm E Of Mackinac Bridge To Presque Isle Lt Mi		0	0			Marine Tstm Wind (G36)
LHZ361 Cheboygan	27	2018EST	Lh 5Nm E Of Mackinac Bridge To Presque Isl Lt Mi Ewd Byd 5Nm Offshore To Intl Border		0	0			Marine Tstm Wind (G36)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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LAKE HURON

LHZ362	Lh Presque Isl Lt To Alabaster Mi Ewd Byd 5Nm Offshore To Intl Border								
East Tawas	28	0405EST			0	0			Marine Tstm Wind (G45)
LHZ349	Sturgeon Pt To Alabaster Mi								
East Tawas	28	0405EST			0	0			Marine Tstm Wind (G45)
LHZ422	Inner Saginaw Bay & Sw Of Pt Au Gres To Bay Port Mi								
Sebewaing	28	0440EST			0	0			Marine Tstm Wind (G39)
LHZ421	Outer Saginaw Bay & Sw Of Alabaster To Pt Austin Mi								
6 SW Bay Port	28	0440EST			0	0			Marine Tstm Wind (G39)
LHZ442	Hbr Beach To Pt Sanilac Mi								
16 W Harbor Beach	28	0455EST			0	0			Marine Tstm Wind (G50)
LHZ463	Lh Hbr Beach To Pt Sanilac 5Nm Offshore To Intl Border								
16 W Harbor Beach	28	0455EST			0	0			Marine Tstm Wind (G50)
LHZ462	Lh Pt Austin To Hbr Beach Mi 5Nm Offshore To Intl Border								
16 W Harbor Beach	28	0455EST			0	0			Marine Tstm Wind (G50)
LHZ441	Pt Austin To Hbr Beach Mi								
16 W Harbor Beach	28	0455EST			0	0			Marine Tstm Wind (G50)
LHZ422	Inner Saginaw Bay & Sw Of Pt Au Gres To Bay Port Mi								
8 SW Sebewaing	29	1400EST			0	0			Marine Tstm Wind (G48)
LHZ421	Outer Saginaw Bay & Sw Of Alabaster To Pt Austin Mi								
15 SW Bay Port to 22 SW Bay Port	29	1400EST			0	0			Marine Tstm Wind (G48)
LHZ462	Lh Pt Austin To Hbr Beach Mi 5Nm Offshore To Intl Border								
20 SW Port Austin	29	1408EST			0	0			Marine Tstm Wind (G50)
LHZ441	Pt Austin To Hbr Beach Mi								
20 SW Port Austin	29	1408EST			0	0			Marine Tstm Wind (G50)
LHZ347	5Nm E Of Mackinac Bridge To Presque Isle Lt Mi								
Bois Blanc Island	31	1750EST			0	0			Marine Tstm Wind (G40)
LHZ361	Lh 5Nm E Of Mackinac Bridge To Presque Isl Lt Mi Ewd Byd 5Nm Offshore To Intl Border								
Bois Blanc Island	31	1750EST			0	0			Marine Tstm Wind (G40)
LHZ346	St Ignace To False Detour Channel								
St. Ignace	31	1750EST			0	0			Marine Tstm Wind (G40)
LHZ345	Straits Of Mackinac Within 5Nm Of Mackinac Bridge Including Mackinac Island								
Mackinac Bridge	31	1750EST			0	0			Marine Tstm Wind (G40)
LHZ362	Lh Presque Isl Lt To Alabaster Mi Ewd Byd 5Nm Offshore To Intl Border								
Alpena	31	2003EST			0	0			Marine Tstm Wind (G35)
LHZ348	Presque Isl Lt To Sturgeon Pt Mi								
Ossineke	31	2003EST			0	0			Marine Tstm Wind (G35)

LAKE MICHIGAN

LMZ643	Sheboygan To Pt Washington Wi								
.5 E Sheboygan	08	1700CST			0	0			Marine Tstm Wind (G46)
LMZ643	Sheboygan To Pt Washington Wi								
.5 E Sheboygan	08	1900CST			0	0			Marine Tstm Wind (G36)
LMZ644	Pt Washington To North Pt Lt Wi								
3 E Mequon	08	1950CST			0	0			Marine Tstm Wind (G52)
LMZ644	Pt Washington To North Pt Lt Wi								
5 SE Mequon	08	1952CST			0	0			Marine Tstm Wind (G52)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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LAKE MICHIGAN

A line of strong thunderstorms moved east-southeast out over Lake Michigan, producing powerful wind gusts.

LMZ363			Lm 5Nm W Of Mackinac Bridge To Manistee Mi Nwd Beyond 5Nm Offshore To Mid Line Of Lake						
Beaver Island	21	0542EST			0	0			Marine Tstm Wind (G35)
LMZ342			Norwood Mi To 5Nm W Of Mackinac Bridge						
Good Hart	21	0542EST			0	0			Marine Tstm Wind (G35)
LMZ345			Sleeping Bear Pt To Manistee Mi						
Empire	21	0542EST			0	0			Marine Tstm Wind (G35)
LMZ344			Grand Traverse Lt To Sleeping Bear Pt Mi						
Leland	21	0620EST			0	0			Marine Tstm Wind (G35)
LMZ363			Lm 5Nm W Of Mackinac Bridge To Manistee Mi Nwd Beyond 5Nm Offshore To Mid Line Of Lake						
Beaver Island	21	1945EST			0	0			Marine Tstm Wind (G60)
LMZ342			Norwood Mi To 5Nm W Of Mackinac Bridge						
Cross Village	21	1945EST			0	0			Marine Tstm Wind (G60)
LMZ341			Seul Choix Pt Mi To 5Nm W Of Mackinac Bridge						
Pt Aux Chenes	21	1945EST			0	0			Marine Tstm Wind (G60)
LMZ522			Bay Of Green Bay S Of Ln Marinette To Fish Creek Wi						
Green Bay Light	30	2030CST			0	0			Marine Tstm Wind (G65)
LMZ543			Two Rivers To Sheboygan Wi						
4 N Manitowoc to 23 S Manitowoc	30	2055CST 2100CST			0	0			Marine Tstm Wind (G41)
LMZ521			Bay Of Green Bay Cedar R To Rock Is Psg To Marinette To Fish Cr Wi						
Ellison Bay to 3 N Ellison Bay	30	2100CST			0	0			Marine Tstm Wind (G70)
LMZ541			Rock Is Psg To Sturgeon Bay Wi						
2 E Gills Rock to 4 SSE Gills Rock	30	2100CST			0	0			Marine Tstm Wind (G70)
LMZ564			Lm Rock Is Psg To Sheboygan Wi Ewd Byd 5Nm To Mid Line Of Lake						
24 E Washington Island	30	2208CST			0	0			Marine Tstm Wind (G57)
			Thunderstorms that produced severe weather across parts of northeast and east central Wisconsin produced strong wind gusts as they moved over the Bay of Green Bay and the nearshore and open waters of Lake Michigan.						
LMZ643			Sheboygan To Pt Washington Wi						
Sheboygan	30	2100CST			0	0			Marine Tstm Wind (G42)
			A line of severe thunderstorms along a cold front moved east across Lake Michigan, generating powerful wind gusts.						
LMZ345			Sleeping Bear Pt To Manistee Mi						
Frankfort	30	2230EST			0	0			Marine Tstm Wind (G45)
LMZ344			Grand Traverse Lt To Sleeping Bear Pt Mi						
Leland	30	2238EST			0	0			Marine Tstm Wind (G45)
LMZ363			Lm 5Nm W Of Mackinac Bridge To Manistee Mi Nwd Beyond 5Nm Offshore To Mid Line Of Lake						
Grand Traverse Light	30	2238EST			0	0			Marine Tstm Wind (G45)
LMZ323			Grand Traverse Bay & Norwood To Grand Traverse Lt Mi						
Old Mission	30	2251EST			0	0			Marine Tstm Wind (G40)
LMZ363			Lm 5Nm W Of Mackinac Bridge To Manistee Mi Nwd Beyond 5Nm Offshore To Mid Line Of Lake						
Beaver Island	31	1750EST			0	0			Marine Tstm Wind (G40)
LMZ342			Norwood Mi To 5Nm W Of Mackinac Bridge						
Cross Village	31	1750EST			0	0			Marine Tstm Wind (G40)
LMZ341			Seul Choix Pt Mi To 5Nm W Of Mackinac Bridge						
Brevort	31	1750EST			0	0			Marine Tstm Wind (G40)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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LAKE ONTARIO

LOZ45	Mexico Bay Ny To The St Lawrence River								
Port Ontario	22	1650EST			0	0	10K		Marine Tstm Wind (G45)

LAKE ST CLAIR

LCZ460	Lake St Clair (U.S. Portion)								
1 N Metropolitan Beach	18	1400EST			0	0			Marine Tstm Wind (G37)
LCZ423	Detroit River								
1 SW Ambassador Bridg	18	1441EST			0	0			Marine Tstm Wind (G44)
LCZ460	Lake St Clair (U.S. Portion)								
5 SW Grosse Pointe	18	1441EST			0	0			Marine Tstm Wind (G44)
LCZ423	Detroit River								
11 W Wyandotte	21	1254EST			0	0			Marine Tstm Wind (G41)
LCZ460	Lake St Clair (U.S. Portion)								
4 N Grosse Pointe	21	1259EST			0	0			Marine Tstm Wind (G40)
LCZ423	Detroit River								
Wyandotte	22	1139EST			0	0			Marine Tstm Wind (G43)
LCZ460	Lake St Clair (U.S. Portion)								
Grosse Pointe	22	1200EST			0	0			Marine Tstm Wind (G51)
LCZ422	St Clair River								
Algonac	22	1800EST			0	0			Marine Tstm Wind (G50)
LCZ460	Lake St Clair (U.S. Portion)								
8 SE New Baltimore	27	2045EST			0	0			Marine Tstm Wind (G41)
LCZ422	St Clair River								
Algonac	27	2045EST			0	0			Marine Tstm Wind (G41)
LCZ460	Lake St Clair (U.S. Portion)								
5 NW New Baltimore	28	1242EST			0	0			Marine Tstm Wind (G60)
LCZ422	St Clair River								
2 N Algonac	28	1327EST			0	0			Marine Tstm Wind (G52)
LCZ422	St Clair River								
City Of St. Clair	29	1627EST			0	0			Marine Tstm Wind (G43)

LAKE SUPERIOR

LSZ246	Marquette To Munising Mi								
Au Train	21	1800EST			0	0			Waterspout
Waterspout was sighted over Lake Superior offshore from Au Train.									
LSZ145	Duluth Mn To Pt Wing Wi								
Duluth	31	0735CST			0	0			Marine Tstm Wind (G38)
The automated observing equipment in Duluth and at Superior reported 38 knot wind gusts.									

LOUISIANA, Northeast

MorehouseParish	Oak Ridge								
	07	1430CST			0	0	1K		Thunderstorm Wind
Several trees were blown down at the intersection of South Oak Street and State Road 133.									
MorehouseParish	Collinston								
	11	1135CST			0	0	1K		Thunderstorm Wind
A few trees were blown down in the city.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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LOUISIANA, Northeast

East Carroll Parish									
Lake Providence	11	1245CST			0	0	2K		Thunderstorm Wind
Powerlines and a few trees were blown down.									
Morehouse Parish									
Bastrop	12	2048CST			0	0	1K		Thunderstorm Wind
Several trees were blown down in the area.									
East Carroll Parish									
Transylvania	12	2142CST			0	0	1K		Thunderstorm Wind
A few trees were blown down around the community.									
Catahoula Parish									
Larto	22	1615CST			0	0	1K		Thunderstorm Wind
Several trees were blown down around Lake Larto.									
Catahoula Parish									
Sicily Is	22	1615CST			0	0	1.5K		Thunderstorm Wind
Several trees and powerlines were blown down along State Road 15 between Wisner and Sicily Island.									
Franklin Parish									
Winnsboro	24	1630CST			0	0	1K		Thunderstorm Wind
Several trees were blown down around the city.									
East Carroll Parish									
Lake Providence	31	1515CST			0	0	5K		Thunderstorm Wind
Thunderstorm winds resulted in minor roof damage to a building, as well as trees and powerlines being blown down across the area.									
Madison Parish									
Tallulah	31	1715CST			0	0	1K		Thunderstorm Wind
Several trees were blown down on State Roads 602 and 603, as well as U.S. Highway 80.									
Tensas Parish									
Newellton	31	1800CST			0	0	1K		Thunderstorm Wind
Several trees and large limbs were blown down in the city.									

LOUISIANA, Northwest

Lincoln Parish									
Simsboro	05	1540CST			0	0	120K		Thunderstorm Wind (G68)
Numerous trees down. A tree also fell on an 18-Wheeler on Interstate 20.									
Lincoln Parish									
8 N Simsboro	05	1540CST			0	0			Thunderstorm Wind (G70)
Numerous trees down.									
LAZ002									
Bossier									
	08	1430CST			1	0			Excessive Heat
Construction worker was found beside his vehicle at a construction site in Bossier Parish around 1330 CST and pronounced dead at 1430 CST. Heat stress was assumed as the cause of death.									
M44OU									
Webster Parish									
Minden	11	1610CST			0	0	50K		Thunderstorm Wind
A hollow tree was split in two by strong winds and fell across two trailers doing moderate damage. A large tree limb also fell across a car in the same trailer park.									
Jackson Parish									
Jonesboro	11	1750CST			0	0			Thunderstorm Wind (G58)
Several large trees down along Hwy 4 east and west.									
Jackson Parish									
2 S Jonesboro	11	1805CST			0	0			Thunderstorm Wind (G52)
Numerous trees down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>LOUISIANA, Northwest</u>									
CaddoParish									
1 SE Shreveport	12	1245CST			0	0			Thunderstorm Wind (G52)
			Several trees down and a railroad crossing sign blown down.						
SabineParish									
Many	12	1535CST			0	1	23K		Thunderstorm Wind (G52)
			Several large trees and power lines toppled. A storage shed was blown over and electricity was out across most of the town. One woman suffered injuries when a huge oak tree fell across a car she was driving in town. Her car was crushed but the tree just missed the drivers seat.						
De SotoParish									
3 N Logansport	12	1605CST			0	0			Thunderstorm Wind (G58)
			Numerous trees down.						
De SotoParish									
Gloster	12	1610CST			0	0			Hail(0.75)
CaddoParish									
Shreveport	13	1230CST			0	0			Thunderstorm Wind (G52)
			Several large trees down in the Highland area.						
Red RiverParish									
Hall Summit	13	1345CST			0	0			Thunderstorm Wind (G52)
			Trees down along Hwy 371.						
BienvilleParish									
Ringgold	13	1350CST			0	0			Thunderstorm Wind (G52)
			Trees and power lines down.						
BienvilleParish									
Castor	13	1400CST			0	0			Thunderstorm Wind (G55)
			Trees and power lines toppled.						
UnionParish									
Spearsville	14	1840CST			0	0			Thunderstorm Wind (G52)
			Several large trees down in town.						
LincolnParish									
2 E Choudrant	20	1735CST			0	0			Hail(1.50)
			Reported at rest stop on I-20.						
La SalleParish									
Jena	22	1550CST			0	0			Thunderstorm Wind (G58)
			Numerous trees and power lines blown down.						
La SalleParish									
Trout	22	1610CST			0	0			Thunderstorm Wind (G52)
			Numerous trees and power lines blown down.						
JacksonParish									
5 SW Womack	22	1823CST			0	0			Thunderstorm Wind (G53)
			Numerous trees down across Hwy 810.						
JacksonParish									
Weston	22	1845CST			0	0			Hail(0.88)
BienvilleParish									
Bienville	24	1315CST			0	0			Thunderstorm Wind (G52)
			Several large trees down.						
ClaiborneParish									
Homer	24	1410CST			0	0	50K		Thunderstorm Wind (G55) ^M
			Numerous trees down. A shingle roof removed off of a business in downtown Homer.						
GrantParish									
Verda	24	1425CST			0	0			Thunderstorm Wind (G53)
			Several large trees and power lines blown down.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>LOUISIANA, Northwest</u>									
CaddoParish									
Vivian	24	1500CST			0	0			Thunderstorm Wind (G55)
									Numerous trees and power lines blown down blocking many streets throughout town.
La SalleParish									
Jena	24	1530CST			0	0			Thunderstorm Wind (G52)
									Several trees and power lines blown down.
OuachitaParish									
Monroe	25	1600CST			0	0			Lightning
									The City of Monroe's maintenance department arrived at work to find all the clocks and phones damaged from lightning which traveled into the building from an outside power pole. Damage was light and no injuries occurred.
<u>LOUISIANA, Southeast</u>									
WashingtonParish									
Thomas	07	1625CST			0	0	2K		Lightning
									Lightning struck a house causing a structural fire.
WashingtonParish									
Isabel	07	1630CST			0	0	1.5K		Thunderstorm Wind
									Several trees and power lines were blown down along Highway 60.
WashingtonParish									
Bogalusa	07	1630CST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds blew down a tree, power lines, and a telephone pole.
TangipahoaParish									
Countywide	07	1630CST			0	0	2K		Lightning
									Lightning knocked out power to nearly two thousand customers across the parish and knocked out the phone lines and 911 equipment at the Tangipahoa Parish Courthouse in Amite.
LivingstonParish									
Denham Spgs	07	1640CST			0	0	1.5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
LivingstonParish									
2 W Albany	07	1643CST			0	0	15K		Thunderstorm Wind
									Several trees and power lines were knocked down causing damage to a number of homes.
East Baton RougeParish									
Baton Rouge	07	1645CST			0	0	1K		Lightning
									Lightning set trees on fire and blew out transformers.
WashingtonParish									
Pine	07	1645CST			0	0	4K		Thunderstorm Wind
									Thunderstorm winds partially removed the tin roof of a home.
East Baton RougeParish									
Baton Rouge	07	1645CST			0	0	1.5K		Thunderstorm Wind
									Thunderstorm winds blew down trees and power lines causing nearly 10,000 customers to lose power.
OrleansParish									
.5 N New Orleans	07	1705CST			0	0	4K		Thunderstorm Wind
									Thunderstorm winds capsized two small boats on the southern end of Lake Pontchartrain throwing four people into the lake.
St. TammanyParish									
Goodbee to Folsom	07	1710CST			0	0	2K		Thunderstorm Wind
									Numerous trees were blown down.
TangipahoaParish									
6 E Robert	07	1710CST			0	0	1K		Thunderstorm Wind
									A few trees were blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>LOUISIANA, Southeast</u>									
West Baton Rouge Parish									
Brusly	07	1719CST			0	0			Thunderstorm Wind (G50) ^M
St. Tammany Parish									
Slidell	07	1730CST			0	0	125K		Lightning
A lightning strike caused a fire that severely damaged a home.									
Iberville Parish									
Countywide	07	1731CST			0	0	2K		Thunderstorm Wind
Numerous trees and power lines were blown down across the parish. Most of the damage occurred in the areas around Grosse Tete, Rosedale, and St. Gabriel.									
East Baton Rouge Parish									
Baton Rouge	11	1630CST			0	0	1K		Lightning
A lightning strike sparked a house fire causing minor damage.									
East Baton Rouge Parish									
Baton Rouge	12	1640CST			0	0	1.5K		Thunderstorm Wind
Several trees were blown down in southeast areas of Baton Rouge.									
East Baton Rouge Parish									
Baton Rouge	12	1640CST			0	0	50K		Lightning
A fire started by lightning heavily damaged four apartments.									
Livingston Parish									
2 S Denham Spgs	12	1650CST			0	0			Hail(0.75)
Pointe Coupee Parish									
Glynn	12	1830CST			0	0	1.5K		Thunderstorm Wind
Thunderstorm winds blew down several trees and knocked down a number of power lines.									
Orleans Parish									
New Orleans Lakefront	13	1238CST			0	0			Thunderstorm Wind (G56) ^M
Orleans Parish									
New Orleans	13	1250CST			0	0	0.25K		Thunderstorm Wind
A large tree was knocked down in New Orleans East along Interstate 10.									
Jefferson Parish									
8 N Metairie	13	1330CST			0	0	50K		Thunderstorm Wind
Thunderstorm winds caused a 63 foot tugboat carrying 3,500 gallons of diesel fuel to sink just west of the Causeway bridge. Two men onboard the boat were rescued by the Coast Guard.									
West Feliciana Parish									
2 SE St Francisville	15	1248CST			0	0	3.5K		Thunderstorm Wind
Thunderstorm winds downed several trees and damaged two mobile homes.									
Tangipahoa Parish									
Hammond	15	1300CST			0	0	2K		Lightning
Lightning knocked out power to nearly 4,000 customers around Hammond and southern areas of Tangipahoa Parish and injured a Hammond woman talking on a telephone.									
Jefferson Parish									
Bridge City to Marrero	18	1400CST			0	0			Lightning
Lightning strikes knocked out power to about 2,200 customers.									
Lafourche Parish									
Thibodaux	18	1555CST			0	0			Funnel Cloud
A funnel cloud was briefly observed near Thibodaux.									
St. Tammany Parish									
Mandeville	19	1400CST			0	0	10K		Lightning
A mobile home was destroyed when lightning struck the residence and a nearby tree causing it to split and fall on the mobile home.									
St. Tammany Parish									
Slidell	19	1430CST			0	0	0.75K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Thunderstorm winds uprooted a 40 foot oak tree and snapped a pine tree 30 feet above the ground.									
St. Tammany Parish Slidell	19	1430CST			0	0			Hail(0.75)
St. Tammany Parish Pearl River	19	1540CST			0	0	5K		Thunderstorm Wind
A few trees were blown down damaging three houses and four automobiles.									
Jefferson Parish Harahan	21	1730CST			0	0	1.5K		Thunderstorm Wind
Several trees were blown down.									
St. Charles Parish Destrehan	21	1730CST			0	0	0.25K		Thunderstorm Wind
A large tree was blown down.									
St. Charles Parish Norco	22	1415CST			0	0	2K		Thunderstorm Wind
Several trees and power lines were blown down.									
St. John The Baptist Parish Reserve	22	1420CST			0	0			Thunderstorm Wind (G50)^M
East Baton Rouge Parish Baton Rouge	23	1244CST			0	0	3K		Thunderstorm Wind
Several trees were blown down including some which fell on houses.									
East Baton Rouge Parish Scotlandville	23	1400CST			0	0	10K		Thunderstorm Wind
A roof was blown off of a house.									
Iberville Parish Plaquemine	23	1440CST			0	0	2K		Thunderstorm Wind
A tree was blown down on a car.									
Iberville Parish Pigeon	23	1450CST			0	0	1.5K		Thunderstorm Wind
Thunderstorm winds blew down trees and power lines.									
Ascension Parish Prairieville	24	1415CST			0	0	1K		Thunderstorm Wind
A few trees were blown down.									
Ascension Parish Brittany	24	1420CST			0	0	1K		Thunderstorm Wind
A few trees were blown down.									
St. James Parish 2 N Gramercy	24	1435CST			0	0	0.25K		Thunderstorm Wind
A tree was knocked down along Highway 61.									
Terrebonne Parish Houma	25	1230CST			0	0	20K		Lightning
A lightning strike destroyed a shed and its contents.									
Ascension Parish Gonzales	30	1330CST			0	0	3K		Thunderstorm Wind
A few trees were blown down. One tree fell on the roof of a house causing minor damage.									

LOUISIANA, Southwest

Beauregard Parish 1.5 S Merryville	04	1523CST			1	0			Lightning
Two men fishing in a boat on a creek south of Merryville moved ashore when a thunderstorm passed by. While standing under an oak tree, lightning struck and one of the men fell on his back, struck by lightning. M57UT									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>LOUISIANA, Southwest</u>									
St. Martin Parish Breux Bridge	07	1825CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down in Breux Bridge and St. Martinville.						
Beauregard Parish De Ridder	07	2100CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down along Highway 394 and 171 between Bundick Lake and DeRidder.						
Acadia Parish Rayne	08	1830CST			0	0	15K		Thunderstorm Wind
			A large tree fell on a parked car, destroying it.						
Rapides Parish Alexandria	11	1630CST			0	0	10K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Acadia Parish Crowley	12	1630CST			0	0	15K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
St. Landry Parish Opelousas	15	1200CST			0	0	10K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Rapides Parish Alexandria	22	1729CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Vernon Parish Lacamp	22	1750CST			0	0			Hail(0.75)
Rapides Parish Countywide	22	1758CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
St. Landry Parish 5 S Morrows	22	1832CST			0	0	5K		Thunderstorm Wind
			Several trees were blown down on Highway 71.						
Evangeline Parish Ville Platte	22	1840CST			0	1	50K		Thunderstorm Wind
			Several trees and power lines were blown down. The covering of a service station fell on a couple of cars. One person was trapped inside and taken to the hospital with moderate injuries.						
Vernon Parish Slagle	22	1912CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Allen Parish Oberlin	22	1920CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Jefferson Davis Parish Elton	22	1938CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Acadia Parish Iota	22	1943CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Vermilion Parish Gueydan	22	2050CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
Vermilion Parish Gueydan	22	2050CST			0	0			Hail(1.75)
Allen Parish Oakdale	23	1614CST			0	0	5K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
LOUISIANA, Southwest									
									Several trees and power lines were blown down.
RapidesParish 7 SW Boyce	23	1700CST			0	0			Hail(0.75)
AllenParish Kinder	23	1721CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
AvoyellesParish Mansura	23	1727CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
AvoyellesParish Moreauville	23	1735CST			0	0			Hail(0.75)
Jefferson DavisParish Elton	23	1755CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
AllenParish Reeves	23	1835CST			0	0			Hail(0.75)
BeauregardParish Longville	24	1445CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
BeauregardParish Longville	24	1513CST			0	0			Hail(0.75)
AllenParish Kinder	24	1530CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
AcadiaParish Mire	24	1650CST			0	0			Hail(1.50)
IberiaParish New Iberia	24	1730CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
LafayetteParish Lafayette	24	1730CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
St. MartinParish Breux Bridge	24	1740CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
AcadiaParish Iota	24	1745CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
VermilionParish Gueydan	24	1750CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
CalcasieuParish 5 NE Lake Charles	24	1815CST			0	0			Hail(1.75)
BeauregardParish Ragley	24	1920CST			0	0			Hail(0.75)
CalcasieuParish 3 N Sulphur	24	1935CST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>MAINE, North</u>									
Aroostook County									
Limestone	02	0125EST			0	0			Thunderstorm Wind (G52)
			Trees and power lines blown down.						
Piscataquis County									
Dover Foxcroft	03	1810EST			0	0			Hail(1.00)
Piscataquis County									
Dover Foxcroft	03	1810EST			0	0			Thunderstorm Wind (G52)
			Several 4 inch diameter tree limbs blown down.						
Penobscot County									
Millinocket	03	1815EST			0	0			Hail(1.00)
Piscataquis County									
Sebec	03	1815EST			0	0			Hail(1.00)
Penobscot County									
Orono	03	1947EST			0	0			Hail(1.00)
Penobscot County									
Carmel	03	1955EST			0	0			Thunderstorm Wind (G52)
			Several large trees blown down.						
Hancock County									
Great Pond	03	2000EST			0	0			Thunderstorm Wind (G52)
			Several trees blown down.						
Penobscot County									
Etna	03	2029EST			0	0			Thunderstorm Wind (G52)
			Several trees blown down.						
Penobscot County									
Burlington	03	2029EST			0	0			Thunderstorm Wind (G52)
			Several trees blown down. Power lines also reported down.						
Penobscot County									
Burlington	03	2029EST			0	0			Hail(1.75)
Washington County									
Cherryfield	03	2132EST			0	0			Hail(0.75)
Washington County									
Milbridge	03	2134EST			0	0			Hail(1.00)
Washington County									
Milbridge	03	2134EST			0	0			Thunderstorm Wind (G52)
			Two 12 inch diameter trees blown down.						
Aroostook County									
Houlton	03	2245EST			0	0			Thunderstorm Wind (G61)
			Trees blown down. Several parked planes received damage at the airport.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MAINE, North</u>									
Aroostook County 3 E Knowles Corner	04	0030EST			0	0			Thunderstorm Wind (G52)
									Several trees over one foot in diameter uprooted.
Aroostook County Oakfield	04	0055EST			0	0			Thunderstorm Wind (G52)
									Several trees blown down. Power lines also reported down.
Aroostook County Presque Isle	04	1045EST			0	0			Thunderstorm Wind (G61)
									Several trees blown down. A fence was also blown down and a chimney damaged.
Aroostook County New Sweden	04	1055EST			0	0			Thunderstorm Wind (G52)
									Four trees blown down. Several of the trees resting on power lines.
Aroostook County Mapleton	04	1100EST			0	0			Thunderstorm Wind (G61)
									Trees and power lines blown down. Three framed walls of a building under construction were blown over and a church steeple was damaged.
Aroostook County Easton	04	1108EST			0	0			Thunderstorm Wind (G52)
									Two trees blown down.
Aroostook County 3 NW Mapleton	04	1115EST			0	0			Thunderstorm Wind (G52)
									Trees blown down at Castle Hill.
Aroostook County Presque Isle	04	1130EST			0	0			Thunderstorm Wind (G52)
									Trees blown down all over town.
Aroostook County Monticello	04	1215EST			0	0			Thunderstorm Wind (G52)
									Five trees blown down.
Aroostook County 8 W Littleton to 7 W Littleton	04	1500EST 1505EST	1	300	0	0			Tornado (F1)
									The tornado originated near Number Seven Ridge and tracked southeast around a mile before dissipating. The tornado remained in wooded areas during the entire track causing extensive tree damage.
Piscataquis County Brownville	04	1500EST			0	0			Thunderstorm Wind (G61)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MAINE, North

Around 20 trees were blown down and a picnic table was thrown 100 feet.

Piscataquis County

Brownville

04 1500EST

0 0

Hail(1.00)

Penobscot County

Burlington

04 1630EST

0 0

Thunderstorm Wind (G52)

Trees blown down.

Washington County

8 W Topsfield

04 1653EST

0 0

Thunderstorm Wind (G52)

Trees blown down in Kossuth Township.

Hancock County

15 NE Amherst

04 1715EST

0 0

Hail(1.50)

Washington County

Brookton

04 1724EST

0 0

Thunderstorm Wind (G52)

Numerous trees blown down.

Hancock County

12 E Amherst

04 1745EST

0 0

Thunderstorm Wind (G52)

Numerous trees blown down.

Aroostook County

Hersey

04 2015EST

0 0

Thunderstorm Wind (G52)

Three trees blown down.

Washington County

Danforth

04 2210EST

0 0

Hail(0.75)

Aroostook County

Perham

15 1817EST

0 0

Hail(0.75)

Aroostook County

Oakfield

15 1830EST

0 0

Hail(1.00)

Penobscot County

15 N Patten

23 1100EST

0 0

Thunderstorm Wind (G61)

Numerous large trees blown down in the vicinity of Lane Brook.

Aroostook County

7 NW Knowles Corner

23

**1110EST
1111EST**

0.2

30

0

0

Tornado (F0)

Tornado briefly snapped off trees at tree top level before lifting back into the cloud.

Aroostook County

1 E Littleton

23

1115EST

0

0

Thunderstorm Wind (G52)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MAINE, North</u>									
Washington County Vanceboro	23	1335EST			0	0			Thunderstorm Wind (G52) Large tree limbs blown down.
<u>MAINE, South</u>									
Franklin County New Vineyard	02	0700EST			0	0	2.5K		Lightning Lightning struck a house in the town of New Vineyard and the resulting fire burned it to the ground. The unoccupied house was very old and small and valued at \$2500 by the town.
Somerset County St Albans	03	1900EST			0	0			Thunderstorm Wind (G50) Winds from a severe thunderstorm knocked over several dozen trees in the town of St. Albans. In addition, an above ground pool was demolished and a metal storage shed was tossed into the woods. One person was injured when a tree fell on her car, and a second car left the road to avoid debris.
Kennebec County Winslow	04	1717EST			0	0			Thunderstorm Wind (G50)
Knox County Rockland	04	1730EST			0	1			Lightning
Waldo County Unity	04	1740EST			0	0			Thunderstorm Wind (G50)
Waldo County Searsport	04	1755EST			0	0	2K		Lightning Lightning struck the Knox County Sheriff's Dispatch Center causing it to lose power for a few minutes and injuring a dispatcher who was on the phone at the time. Lightning also struck a home in Searsport and damaged the chimney and a couple computers inside the home. In addition, in Skowhegan, lightning struck the police department and a second building near the fire department destroying television monitors and damaging computer equipment. The thunderstorms also downed branches and power lines in Winslow and Unity.
Oxford County Town House	15	1450EST			0	0			Hail(0.75)
Somerset County The Forks	15	1511EST			0	0			Hail(1.50)
Oxford County Porter	15	1520EST			0	0			Thunderstorm Wind (G50)
Androscoggin County Turner	15	1530EST			0	0			Thunderstorm Wind (G50)
Oxford County Buckfield	15	1530EST			0	0	26K		Lightning
Oxford County Hiram	15	1530EST			0	0			Hail(0.75)
Oxford County Hiram	15	1530EST			0	0			Thunderstorm Wind (G50)
Androscoggin County Greene	15	1600EST			0	0			Thunderstorm Wind (G50)
Cumberland County East Baldwin	15	1600EST			0	0			Hail(0.88)
Kennebec County Monmouth	15	1600EST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MAINE, South</u>									
Sagadahoc County									
Richmond	15	1615EST			0	0			Hail(0.75)
Lincoln County									
Dresden Mills	15	1625EST			0	0			Thunderstorm Wind (G50)
Lincoln County									
Wiscasset	15	1630EST			0	0			Thunderstorm Wind (G50)
York County									
Limington	15	1630EST			0	0			Hail(0.75)
Cumberland County									
Gorham	15	1640EST			0	0			Thunderstorm Wind (G50)
Cumberland County									
Westbrook	15	1645EST			0	0			Thunderstorm Wind (G50)
Cumberland County									
Cape Elizabeth	15	1702EST			0	0			Hail(0.75)
Cumberland County									
Cape Elizabeth	15	1702EST			0	0			Thunderstorm Wind (G68) ^M
Knox County									
Tenants Harbor	15	1730EST			0	0	5K		Lightning
<p>Severe thunderstorms moving through western and mid-coast Maine knocked down trees and caused large hail throughout the area. Trees and/or large limbs were reported down in the towns of Westbrook, Porter, Gorham, Hiram, Turner, Greene, Dresden, Monmouth, and Wiscasset. One and a half inch hail was reported in The Forks, one inch hail was reported in Cornish and Kezar Falls, nickel sized hail was reported in Baldwin, and dime-sized hail was reported in Cape Elizabeth, Hiram, Richmond, Limington, and Albany Township. As the storms moved through the state, lightning ignited a fires in Buckfield and Tenants Harbor. In Buckfield, lightning struck a large tree and followed ground lines into a home and shed. The shed and it's contents, including a car and two motorcycles, were destroyed by the resulting fire, causing an estimated \$26000 in damage. In Tennants Harbor, lightning struck the steeple of a church.</p>									
Waldo County									
North Palermo	18	1445EST			0	0			Thunderstorm Wind (G50)
Waldo County									
3 W Liberty	18	1450EST			0	0			Thunderstorm Wind (G50)
Winds from a severe thunderstorm knocked down trees in the village of North Palermo and in Lake George State Park.									
Franklin County									
Chesterville	23	1225EST			0	0			Thunderstorm Wind (G50)
Franklin County									
Week Mills	23	1225EST			0	0	100K		Lightning
Somerset County									
Skowhegan	23	1235EST			0	0			Thunderstorm Wind (G50)
Kennebec County									
China	23	1300EST			0	0	100K		Lightning
Somerset County									
Fairfield	23	1300EST			0	0			Thunderstorm Wind (G50)
Cumberland County									
Cumberland Center	23	1420EST			0	0			Thunderstorm Wind (G50)
Cumberland County									
Scarborough	23	1430EST			0	0	100K		Lightning
Knox County									
Warren	23	1455EST			0	0	25K		Lightning
Sagadahoc County									
Bath	23	1500EST			0	0	25K		Lightning

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MAINE, South

York County

Limerick

23 1530EST 0 0 100K Lightning

Scattered thunderstorms moving through western and central Maine knocked down trees and power lines and lightning from the storms damaged buildings and caused several fires. Trees were reported down in Skowhegan, Fairfield, Chesterville, Cumberland, and Belmont. Lightning damaged structures in Limerick, Warren, Scarborough, Bath, China, and Industry. In Limerick, lightning ignited a fire in a vacant summer home causing the structure to burn to the ground. Homes in Industry, Scarborough and Bath were heavily damaged by fire, smoke, and water after being struck by lightning. Church steeples were struck and damaged by lightning in Warren and Bath.

MARYLAND, Central

MDZ002>007-009>011-013>014-016>018

Allegany - Washington - Frederick - Carroll - Northern Baltimore - Harford - Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel - Charles - St. Mary'S - Calvert

02 1000EST 21 0 Excessive Heat
04 2000EST

High pressure remained stationary off the Delmarva coastline during the 1st week of July. This resulted in a prolonged period of hot and humid weather across the Mid Atlantic region. Between July 2nd and 4th, high temperatures rose into the lower to middle 90s and dew points reached into the lower 70s. This resulted in heat index values reaching 100 to 110 degrees during the afternoon. In addition, heat index values only dropped into the middle 80s overnight in downtown Baltimore on the 4th and 5th, resulting in little relief for people without air conditioning. These conditions led to several heat related deaths and illnesses, especially in people already suffering from pre-existing medical conditions.

In Baltimore City, 12 people died in their non air-conditioned homes between July 3rd and 9th. On the 3rd, an 85 year-old man died from heat stroke. On the 4th, two men, age 65 and 72, and one woman who was 90 years old succumbed to the heat. On the 5th, three men, age 52, 56, and 86, and two women, age 53 and 67, died. On the 6th, an 80 year-old man and an 82 year-old woman died. On the 7th, a man of unknown age was found dead in his residence. On the 8th, an 88 year-old man was found dead in his home. On the 9th, an 83 year-old woman and a 53 year-old man died from exposure to the heat. Several other people were treated for heat illnesses in city hospitals during the period. In Baltimore County, a 78 year-old man died in his home on the 4th of July and a 48 year-old man was found dead at a construction site on the 10th. Also on the 4th, ten people were treated for heat exhaustion at a parade in Dundalk.

In Montgomery County, a 55 year-old man died on the 4th and a 74 year-old man died on the 8th. In Harford County, a 69 year-old woman was found dead in her non-air-conditioned Aberdeen home on the 5th. In Frederick County, a 23 year-old firefighter who was participating in a jogging exercise on the morning of the 3rd collapsed and went into cardiac arrest. By the time he arrived at the hospital, his body temperature had reached 107 degrees. He died of heat stroke a short time later. Twenty other people were treated at hospitals for heat illnesses countywide between July 2nd and 4th. In Washington County, a woman in her 60s was treated at a Hagerstown hospital for heat exhaustion. Her body temperature reached 105 degrees and she suffered from dementia. A 67 year-old man was overcome for a time by heat while changing a tire near Hancock. A firefighter was also treated for heat exhaustion on the 3rd after fighting a blaze in Hagerstown. M23OU, M55OT, M74PH, M78PH, M48OU, M85PH, M65PH, M72PH, F90PH, F67PH, M86PH, M56PH, F53PH, M52PH, M80PH, F82PH, M?PH, M88PH, F83PH, M53PH, F69PH

Washington County

2 NE Smithsburg

09 1722EST 0 0 Thunderstorm Wind (G53)^M
A wind gust of 61 MPH was recorded.

Frederick County

Frederick

09 1815EST 0 0 2K Thunderstorm Wind
Trees were downed.

Carroll County

Winfield

09 1830EST 0 10 5K Tstm Wind/Hail
Gusty winds and driving rain toppled several tents, resulting in injuries to 10 people.

Anne Arundel County

North Portion

09 1909EST 0 0 50K Thunderstorm Wind
1940EST
Numerous trees and wires were downed.

Baltimore County

Reisterstown to Dundalk

09 1910EST 0 0 100K Thunderstorm Wind
1940EST
Hundreds of trees and some power lines were downed.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MARYLAND, Central

Baltimore County

1 S Dundalk	09	1930EST			0	0			Thunderstorm Wind (G54) ^M
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Wind gusts of up to 62 MPH forced the closure of the Key Bridge (Interstate 695) for 20 minutes.

Baltimore City (C)

Baltimore	09	1930EST			0	0	20K		Thunderstorm Wind
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Fifty calls for downed trees were received by county officials.

Harford County

Joppa	09	1955EST			0	0	2K		Thunderstorm Wind
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Trees were downed.

Harford County

Bel Air	09	2000EST			0	0	2K		Thunderstorm Wind
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Trees were downed.

Thunderstorms with heavy downpours and damaging winds moved through Central Maryland between 6 PM and 9:30 PM EDT on the 9th. In Washington County, a wind gust of 61 MPH was recorded just northeast of Smithsburg. Light tree damage was noted in the vicinity. In Frederick County, trees were downed in Frederick where a wind gust of 48 MPH was recorded. One fallen tree damaged four cars on North Market Street. The communities of Mount Airy, Thurmont, Braddock Heights, and Frederick reported power outages. In Carroll County, gusty winds and driving rain toppled several tents at a community festival in Winfield. Ten people were injured. Wind gusts were estimated between 40 and 50 MPH. In Anne Arundel County, numerous trees and electrical wires were downed in the central and northern portion of the county. Communities affected by the high winds included Maryland City, Glen Burnie, Waugh Chapel, Odenton, Orchard Beach, Annapolis, Linthicum, Marley Park, Harmon's Dorsey, Arnold, Harold Harbor, Riva, Lake Shore, and Crofton. A wind gust of 49 MPH was recorded at the Naval Academy in Annapolis and a gust of 48 MPH was measured at BWI Airport. In Baltimore County, hundreds of trees and some power lines were downed between Reisterstown and Dundalk. Officials in Baltimore City received 50 calls regarding downed trees. A wind gust of 48 MPH was recorded on the University of Maryland's Baltimore Campus. A wind gust of 62 MPH forced a 20 minute closure of the Key Bridge (Interstate 695) as the storms moved through. In the Baltimore metro area, around 70,000 customers lost power as a direct result of the storm. In Harford County, trees were downed in Joppa and Bel Air.

MDZ004>007-009>011-013>014-016>018

Frederick - Carroll - Northern Baltimore - Harford - Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel - Charles - St. Mary'S - Calvert

22	1000EST				3	0			Excessive Heat
23	2000EST								

Another round of hot and humid weather occurred across Central and Southern Maryland on July 22nd and 23rd. Heat indexes rose to between 98 and 105 degrees both days. Three people died from heat related illnesses during this time. In Montgomery County, a 47 year old man died on the 25th. In Baltimore County, a 50 year old man died on the 22nd. In the city of Baltimore, a 60 year old man was found dead in a junkyard on the 20th. Each victim had underlying health conditions which contributed to their death. Allegany Power, serving Central and Western Maryland, recorded record energy usage on the 22nd. M600U, M500T, M470T

Montgomery County

Countywide	23	1700EST 1800EST			0	0			Heavy Rain
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Montgomery County

Countywide	23	1745EST 1800EST			0	0	45K		Lightning
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Several lightning fires were reported.

Thunderstorms with very heavy downpours and frequent lightning moved through Central Maryland during the afternoon of the 23rd. In Montgomery County, the roofs of two homes were damaged by lightning fires in Rockville. An observer in Potomac recorded 2.3 inches of rain in one hour. Several trees in the city were also struck by lightning, including a handful that were downed onto power lines. In Gaithersburg, lightning started a shed on fire and the flames spread to an adjoining fence. Pea sized hail was also reported.

MDZ002>007-009>011-013>014-016>018

Allegany - Washington - Frederick - Carroll - Northern Baltimore - Harford - Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel - Charles - St. Mary'S - Calvert

28	1000EST				3	0			Excessive Heat
29	2000EST								

A large area of high pressure sat off the Mid-Atlantic coast during the last week of July. This caused a warm and moist south wind to blow into the region for several days, resulting in another heat wave. The hottest days were the 28th and 29th of July when temperatures rose into the 90s and heat index values reached 100 to 110 degrees. Power companies reported record electricity use on the 29th. Excessive heat was believed to have played a part in buckling train tracks that caused a passenger train derailment in the Montgomery County community of Kensington on the afternoon of the 29th. The derailment injured 97 people, including 6 who were critically injured.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Property Damage	Crops	Character of Storm
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MARYLAND, Central

At least three people died from heat stroke in Central Maryland during the heat wave. In Prince George's County, a 31 year-old man was found dead in his residence on the 30th. In Baltimore City, a 73 year-old man was found dead in his home on the 30th and an 81 year-old woman was found dead in her home on the 31st. Underlying health conditions contributed to these deaths. A 71 year-old man was also believed to have succumbed to the heat in his Baltimore home where a temperature of 96.5 degrees was measured on the 28th. Several other jurisdictions reported an increase of emergency room visits due to the heat. In Harford County, 12 elderly citizens were treated for heat illness. In Anne Arundel County, 7 people ranging from children to senior citizens were treated for exposure to the heat. In Baltimore County, at least 3 people were treated for heat cramps or heat exhaustion. M73PH, F81PH, M31PH

MARYLAND, Northeast

MDZ008-012-015-019>020 Cecil - Kent - Queen Annes - Talbot - Caroline

01	0000EST	0	0	0					Drought
31	2359EST								

The combination of unseasonably warm weather and below normal precipitation intensified the drought across the Maryland Eastern Shore in July. The drought emergency remained in effect for Cecil County. The rest of the Eastern Shore remained under a drought warning. Level one mandatory restrictions remained in place for Cecil County and included the prohibition of watering lawns, use of water for ornamental purposes, use of water for non-commercial washing or cleaning of automobiles, trucks, trailers and boats, washing paved surfaces, use of sprinklers and other automatic watering devices for irrigation, watering gardens, trees, shrubs or other outdoor plants. Hand held hoses and containers could still be used. Elsewhere along the Eastern Shore, no formal restrictions were in place, but water conservation continued to be emphasized. The only reported exceptions were in Galena (Kent County) where watering restrictions were in place on the odd number days and in Centreville (Queen Anne's County) where vehicle washing was banned and lawn and garden irrigation was restricted to odd and even days. As of July 9th, only 18 percent of Eastern Shore soil had adequate moisture. To exacerbate the problem, rainfall was scarce during the critical time when corn plants were pollinating. Conditions were worse south of Stevensville. It was estimated that 30 percent of the corn crop in Queen Anne's County will be lost. Percentages in Talbot County increased to as high as 80 percent. Some corn fields may not be harvested at all. While soybeans are more drought resistance, the hot and dry weather increased the damage done by spider mites. Irrigation ponds were drying up and the need for irrigation was dropping groundwater levels. Monitoring groundwater wells in central Maryland were reaching record lows for the calendar day. A well in Grasonville (Queen Anne's County) has shown a 15 foot decline in water levels since it was installed in 1980. In Queen Anne's County, homeowners' wells were drying at twice the rate of last summer and permits to replace wells have tripled. There was a two week waiting period for digging or deepening existing wells. Profits at nurseries were down as homeowners were not planting. July monthly precipitation on a county weighted average ranged from 2.2 inches in Cecil County to 2.9 inches in Talbot and Caroline Counties. Normal is around 3.9 inches. At the Baltimore-Washington International Airport, July monthly precipitation was 2.26 inches, 1.59 inches below normal.

MDZ008-012-015-019>020 Cecil - Kent - Queen Annes - Talbot - Caroline

01	0900EST	1	0						Excessive Heat
04	1800EST								

July started with unseasonably hot and humid weather across the Maryland Eastern Shore. The hottest and most humid weather occurred on Independence Day before a cold front quietly moved through the region during the night of the 4th. Highest temperatures were around 100 degrees and heat indices reached around 105 degrees. An 80-year-old man in Talbot County died from the excessive heat. The heat also caused an increase in demand for electricity and contributed to a six hour blackout from 3 p.m. until 9 p.m. EDT on the 3rd in Kent County. About 3,000 Conectiv Power Delivery customers were without power from Chestertown to Rock Hall. The power outage affected operations at the Kent County Office of Emergency Management. The high temperatures combined with more concentrated nutrients and thus more algae caused a fish kill in Kent County. Dozens of dead gizzard shads were found in a pond adjacent to the Chester River Yacht Club just south of Chestertown. The implementation of tunnel ventilation systems in chicken houses prevented any heat related deaths.

Highest temperatures included 100 degrees at the Baltimore-Washington International Airport and Easton (Talbot County) and 99 degrees in Salisbury (Wicomico County). M800T

MDZ008-012-015-019>020 Cecil - Kent - Queen Annes - Talbot - Caroline

06	1200EST	0	0	0	0				Smoke
07	1800EST								

A northerly flow of air through the lower half of the atmosphere pushed smoke from forest fires in northern Quebec across the Maryland Eastern Shore. The smoke reduced visibilities and could be smelled from the afternoon of the 6th into the afternoon of the 7th. Winds started to shift from north on the 7th to the west on the 8th and pushed the smoke farther to the east. In all about 50 fires were burning near James Bay about 500 miles north of Montreal in Quebec Province. The fires consumed about 150,000 acres and caused the evacuation of the Native American village of Nemaska.

Kent County Crosby to Chestertown

09	2000EST	0	0						Thunderstorm Wind (G52)
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A severe thunderstorm knocked down a couple of trees in Chestertown and in the southwestern part of Kent County. One downed

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MARYLAND, Northeast

tree damaged a vehicle in Chestertown. The downed trees caused power outages in Chestertown.

Queen Anne'S County

Queenstown to Church Hill	09	2000EST 2010EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down a couple of trees near the Queen Anne's/Kent County border.

Cecil County

Cecilton to North East	09	2020EST 2025EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked down several trees in both North East and Cecilton. A couple of them fell on roadways.

Kent County

2 S Chestertown	09	2025EST			0	0			Thunderstorm Wind (G52)
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A second severe thunderstorm knocked down two large trees unto one roadway south of Chestertown. A couple of trees also pulled down some wires.

Queen Anne'S County

Sudlersville	09	2035EST			0	0			Thunderstorm Wind (G52)
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The second severe thunderstorm of the evening in Queen Anne's County knocked down a couple of trees onto wires in Sudlersville.

MDZ008-012-015-019>020 Cecil - Kent - Queen Annes - Talbot - Caroline

15 19		0900EST 1800EST			0	0			Excessive Heat
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Another work week of hot weather affected the Maryland Eastern Shore from the 15th through the 19th. High temperatures reached into the 90s each day. The highest temperatures mainly occurred on the 17th. Humidity levels were high for most of the week, except for the 16th when a weak back door cold front moved through the region. A second stronger front moved through the Eastern Shore during the first half of the 20th and ended the string of 90 degree high temperatures. Highest temperatures included 96 degrees in Salisbury (Wicomico County), 94 degrees in Stevensville (Queen Anne's County) and 93 degrees at the Baltimore-Washington International Airport.

MDZ008-012-015-019>020 Cecil - Kent - Queen Annes - Talbot - Caroline

28 30		0900EST 1800EST			1	0			Excessive Heat
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Another hot and very humid air mass moved into the Maryland Eastern Shore on the 28th. In most areas this hot spell produced some of the highest heat indices of the summer as they reached between 105F and 110F during the afternoon of the 29th. A cold front moved through the region during the night of the 30th. While temperatures on the 31st still reached into the 90s, dew point temperatures and the moisture content of the air mass was considerably lower. The apparent temperature (or heat index) matched afternoon high temperatures. More humid air again moved in during the start of August. The string of days with high temperatures of 90 degrees or higher did not end until August 6th. There was one heat related death on the Eastern Shore in Talbot County. A 48-year-old man succumbed from the heat. There were also three instances of dogs dying in vehicles. The hot weather and high humidity levels taxed electric utilities and the PJM Interconnection issued a usage advisory.

For most places the highest temperatures with the July part of this hot spell occurred on the 29th and included 99 degrees in Chestertown (Kent County), 97 degrees in Salisbury (Wicomico County), 96 degrees in Easton (Talbot County) and 95 degrees at the Baltimore-Washington International Airport and Stevensville (Queen Anne's County). The hot spell at the end of July cemented the month as being well above normal. Monthly mean temperatures averaged about 2 degrees warmer than normal. The July monthly mean temperature at the Baltimore-Washington International Airport was 78.6 degrees, 2.1 degrees warmer than normal. At Royal Oak in Talbot County, 22 of the 31 days in July had high temperatures of 90 degrees or higher. M480 T

MARYLAND, South

MDZ021

Dorchester									
20		1500EST			1	0			Excessive Heat

High temperatures reached the lower 90s. Heat related death of a man, found inside residence where the temperature was 100 degrees.

M47PH

MARYLAND, West

NONE REPORTED.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MASSACHUSETTS, Central and East

Hampden County Granville	04	1630EST			0	0			Hail(0.75)
Hampden County Chicopee to Springfield	04	1645EST 1655EST			0	0			Hail(0.88)
Hampden County Springfield	04	1655EST			0	0	2K		Thunderstorm Wind (G50)
Hampshire County Southampton	04	1835EST			0	0	10K		Lightning
Severe thunderstorms produced dime to nickel sized hail in Granville, Chicopee, and Springfield. The storms also downed trees and large branches in Springfield and Wilbraham. Lightning from other thunderstorms later in the day struck two large hemlock trees in Southampton, igniting a fire at an auto salvage yard.									
Worcester County Sterling	15	1725EST			0	0			Hail(0.75)
Middlesex County Wayland	15	1803EST			0	0	2K		Thunderstorm Wind (G50)
Norfolk County Milton to Quincy	15	1827EST 1845EST			0	0	25K		Thunderstorm Wind (G62) ^M
Norfolk County Dedham to Weymouth	15	1831EST 1845EST			0	0	95K		Lightning
Norfolk County Randolph	15	1854EST			0	0			Hail(1.00)
Plymouth County Abington to Pembroke	15	1904EST 1915EST			0	0	5K		Thunderstorm Wind (G50)
Plymouth County Rockland	15	1908EST			0	0			Hail(0.75)
Hampshire County Florence	15	2155EST			0	0			Hail(1.00)
A fast-moving line of severe thunderstorms brought large hail and damaging winds to parts of central and eastern Massachusetts. The damage began in Worcester County, where thunderstorms dropped dime sized hail on the border of Sterling and Princeton, before moving into southern Middlesex County where large branches were downed in Wayland.									
Additional storms developed to the south, and caused additional damage in Norfolk and Plymouth Counties. A wind gust to 71 mph was measured at the Blue Hill Observatory in Milton, and there were numerous reports of downed trees and wires in Milton and Quincy. Quarter sized hail fell in Randolph, as observed by a Skywarn spotter, which lasted for about three minutes. In Dedham, lightning struck a house and ignited a fire which damaged the roof. Lightning also struck a two-story building in Weymouth causing minor damage. As these storms progressed into Plymouth County, they downed trees and wires in Abington, Whitman, Hanson, Hanover, and Pembroke. Dime sized hail was reported by a Skywarn spotter in Rockland. In all, about 7,500 customers were left without power in Norfolk and Plymouth Counties after the storms moved through.									
Essex County Methuen to Salisbury	19	0115EST 0215EST			0	0	10K		Lightning
Norfolk County Milton to Quincy	19	0500EST 0700EST			0	0	90K		Lightning
Worcester County Southbridge	19	0645EST			0	0			Hail(0.75)
Worcester County Southbridge	19	0645EST			0	0	2K		Thunderstorm Wind (G50)
Lightning from early morning thunderstorms caused brief power outages and minor damage in Essex County. A shed was damaged by a lightning-induced fire in Methuen and about 2,500 customers lost power in Methuen, Andover, Lawrence, Boxford,									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MASSACHUSETTS, Central and East

and Salisbury.

Just after dawn, other thunderstorms moved across central and eastern Massachusetts. One thunderstorm briefly became severe in Worcester County, producing dime sized hail in Southbridge and downing large branches. The storm weakened as it reached greater Boston, but lightning struck two homes in Quincy and damaged two vehicles on the Southeast Expressway in Milton. No injuries were reported.

Franklin County									
Shelburne	23	1310EST			0	0	5K		Thunderstorm Wind (G50)
Hampshire County									
Northampton to Easthampton	23	1343EST 1353EST			0	0	8K		Thunderstorm Wind (G62) ^M
Franklin County									
Northfield to New Salem	23	1345EST 1355EST			0	0	8K		Thunderstorm Wind (G50)
Hampden County									
West Springfield to Westfield	23	1352EST 1355EST			0	0	10K		Thunderstorm Wind (G51) ^M
Middlesex County									
Pepperell to Ashby	23	1404EST 1420EST			0	0	5K		Thunderstorm Wind (G50)
Worcester County									
West Brookfield	23	1415EST Brief F1 touchdown	0.4	75	0	0	50K		Tornado (F1)
Worcester County									
East Brookfield to Shrewsbury	23	1430EST 1500EST			0	0	25K		Thunderstorm Wind (G85)
Hampden County									
Westfield to Monson	23	1436EST 1441EST			0	0	5K		Thunderstorm Wind (G50)
Middlesex County									
Concord	23	1445EST 1500EST			0	0	35K		Thunderstorm Wind (G65)
Middlesex County									
Concord	23	1500EST			0	0	250K		Lightning
Essex County									
Peabody to Marblehead	23	1507EST 1522EST			0	0	15K		Thunderstorm Wind (G50)
Suffolk County									
Boston	23	1520EST			0	0	8K		Thunderstorm Wind (G50)
Worcester County									
Worcester	23	1525EST			0	0	2K		Thunderstorm Wind (G50)
Norfolk County									
Sharon	23	1545EST			0	0	2K		Thunderstorm Wind (G50)
Plymouth County									
Hingham	23	1600EST			0	0	1K		Thunderstorm Wind (G50)
Norfolk County									
Weymouth	23	1605EST			0	0	5K		Thunderstorm Wind (G50)
Plymouth County									
Brockton	23	1630EST			0	0	250K		Lightning

A line of severe thunderstorms moved across much of the Bay State during the afternoon and early evening, producing widespread wind damage. There were numerous reports of downed trees, power lines, and large branches from the Connecticut River Valley to the Worcester Hills, Merrimack Valley, and the eastern Massachusetts coastline from Marblehead to Hingham. Amateur radio operators measured wind gusts to 71 mph in Easthampton and to 59 mph in West Springfield as the storms moved through. In the city of Boston, winds estimated near 60 mph blew down scaffolding on a school building, while in Salem winds of similar

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MASSACHUSETTS, Central and East

magnitude ripped siding off a house.

A tornado briefly touched down in West Brookfield at 315 pm, and there were no injuries reported. The tornado had an approximate path width of 75 yards, a path length of about one-half mile, and was only on the ground for about 30 seconds, as determined by a National Weather Service survey of the area. The intensity of the tornado was determined to be an F1 on the Fujita damage scale, which corresponds to wind speeds between 73 and 112 mph. It is likely that winds were closer to the upper region of that range. The tornado formed over the northeast portion of Lake Wickaboag and traveled to the east, dissipating just to the east of the portion of Wickaboag Valley Road that is adjacent to the lake. Microburst damage was evident for about another two miles east of where the tornado circulation ended.

Eyewitnesses reported that a curtain of water was drawn from the lake as high as 50 feet into the air, and traveled east. A portion of it hit a house by the lake, causing its roof to fly off and become embedded to a tree across the street. There was also a brief flash as power lines were downed on Wickaboag Valley Road. Although most downed trees were facing southwest to northeast, there was some evidence of trees blown down to the north and northwest near the lake.

The same thunderstorm was responsible for another microburst in Spencer. Large trees were uprooted, some of which landed on cars and houses. Wind speeds were estimated to be near 100 mph based upon the damage observed.

Another severe thunderstorm produced a microburst in Concord, as determined by a National Weather Service survey, which occurred between 345 and 400 pm. Straight line winds on Monument Street were estimated near 75 mph. Numerous large trees were snapped off and uprooted, which in turn knocked down many electric poles and wires. A couple of large trees were snapped off, and fell on a house on Monument Street. The microburst was approximately one-half mile wide and about one and a half miles long.

MASSACHUSETTS, West

MAZ001

Berkshire

05 2000EST
07 2359EST

0 0

Smoke

Smoke, from many forest fires across the Nemiscau region of northern Quebec, became trapped under a subsidence inversion, and was transported south across western Massachusetts on the evening hours of July 5, to the late evening of July 7. The forest fires were sparked by exceptionally hot and dry weather over that part of Canada followed by an unusual amount of thunderstorm activity, resulting in many lightning strikes. The circulation between high pressure over Hudsons Bay and a low pressure off the Canadian Maritimes transported the smoke southward. The smoke obscured the sky, and even reduced surface visibilities to as low as one mile, especially on the early morning of July 7. Advisories were issued warning people with respiratory problems to remain indoors and all individuals to curb outside activity. No major problems were reported to the National Weather Service as a result of this smoke. By late Sunday, July 7, the low pressure weakened and moved further east, allowing the wind to back into more of a westerly direction, finally dissipating the smoke.

Berkshire County

Monterey

18 1720EST

0 0

5K

Thunderstorm Wind

An upper level disturbance produced scattered thunderstorms across Berkshire County on the evening of July 18. One storm became briefly severe as thunderstorm winds blew a tree and large branches down in the town of Monterey.

Berkshire County

Great Barrington

23 1310EST

0 0

10K

Hail(0.75)

Berkshire County

New Marlborough

23 1315EST

0 0

10K

Thunderstorm Wind

Berkshire County

Washington

23 1315EST

0 0

10K

Thunderstorm Wind

Berkshire County

Egremont Plain

23 1316EST

0 0

5K

Thunderstorm Wind

A cold front, working southeast across the Empire State, triggered a broken line of thunderstorms across Berkshire County during the early afternoon hours of July 23. Since the air mass ahead of the front was hot and humid, and winds aloft rather strong, a couple of the storms became severe. A thunderstorm deposited dime size hail at Great Barrington. Thunderstorm winds produced tree and wire damage in the towns of New Marlborough, Washington and Egremont Plain.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MICHIGAN, East</u>									
MIZ069>070-076			Oakland - Macomb - Wayne						
		01 1200EST			0	25			Excessive Heat
		04 1600EST							
									Local television media reported that an estimated 25 people across metro Detroit were treated for heat stroke during the beginning of the month as afternoon high temperatures soared into the 90s, while heat indices broke 100 degrees.
Macomb County									
Warren									
	18	1330EST			0	0			Thunderstorm Wind (G50)
									The public reported a couple large trees blown down by thunderstorm winds.
Macomb County									
5 N Sterling Hgts									
	18	1345EST			0	0	25K		Lightning
									A newspaper reported that lightning struck a home in Shelby Township and started a small fire.
Macomb County									
3 E Mt Clemens									
	18	1400EST			0	1			Lightning
									A newspaper reported that a 21-year old male was struck by lightning while working on runway lights at Selfridge Air National Guard Base.
Macomb County									
2 NW New Baltimore									
	18	1400EST			0	1			Lightning
									A newspaper reported that an 11-year old girl was struck by lightning while riding her bicycle.
Wayne County									
Livonia									
	18	1440EST			0	0	5K		Thunderstorm Wind (G56)
									Law enforcement reported that several large trees and power lines were blown down. Two large trees were also uprooted and damaged some of the fence around the Beth El Memorial Park Cemetery.
									A weak cold front moved through eastern Michigan during the afternoon of the 18th. This front triggered some scattered thunderstorms across the northern suburbs of Detroit. A couple of these storms produced some severe wind gusts. There was an estimated 11000 homes and businesses who lost power in Wayne and Macomb Counties due to the thunderstorms.
Wayne County									
Plymouth									
	21	1230EST			0	0			Thunderstorm Wind (G50)
									Spotters reported that several large tree branches were blown down in thunderstorm winds.
Monroe County									
Monroe									
	21	1330EST			0	1			Thunderstorm Wind (G50)
									A newspaper reported that a large tree blew over in thunderstorm winds and fell onto a man, trapping him in his back yard.
									A large cluster of thunderstorms formed over Upper Michigan during the overnight hours of July 20th, and then made a right turn over northern Lower Michigan during the morning hours of July 21st. This complex slowly weakened as it moved through southeast Michigan. This storm produced a great deal of lightning and heavy rainfall throughout eastern Michigan. Most of the wind gusts with the strongest storms were in the 40 to 50 MPH range, however, a few isolated severe wind reports were received. An estimated 20,000 homes and businesses were left without power in the metro Detroit Area following the storms.
Lenawee County									
Adrian									
	22	0952EST			0	0			Hail(0.75)
Lenawee County									
Adrian									
	22	1000EST			0	0			Thunderstorm Wind (G50)
									The city of Adrian parks and recreation reported 6 to 12 inch diameter tree limbs blown down in thunderstorm winds.
Lenawee County									
2.5 N Britton									
	22	1030EST			0	0	100K		Lightning
									A newspaper reported that lightning struck a home in Macon Township and set it on fire, causing considerable damage.
Monroe County									
4 NW Dundee									
	22	1030EST			0	0			Thunderstorm Wind (G50)
									A spotter reported several 8 to 12 inch diameter tree limbs blown down.
Lenawee County									
1 N Adrian									
	22	1100EST			0	0	50K		Lightning
									A newspaper reported that lightning struck a home and set it on fire.
Macomb County									
2 SW Mt Clemens									
	22	1200EST			0	0			Thunderstorm Wind (G56)^M
Macomb County									
St Clair Shrs									
	22	1200EST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MICHIGAN, East</u>									
Law enforcement reported 10 inch diameter tree limbs blown down.									
Wayne County Grosse Pt Woods	22	1200EST			0	0			Thunderstorm Wind (G50)
Trained spotters reported 16 inch diameter tree limbs blown down.									
Wayne County Grosse Pt Woods	22	1200EST			0	0			Thunderstorm Wind (G54) ^M
Lenawee County 2 E Fairfield	22	1215EST			0	0			Thunderstorm Wind (G52)
Law enforcement reported numerous large trees down.									
Lapeer County Lapeer	22	1535EST			0	3			Lightning
A newspaper reported that three people were struck by lightning while walking toward a dumpster in the parking lot of an apartment complex. Witnesses claim that lightning ricocheted off the dumpster and hit the three people (2 men and one woman). They were all taken to the hospital with minor injuries.									
Washtenaw County Manchester	22	1550EST			0	0			Thunderstorm Wind (G50)
Emergency management reported 9 inch diameter tree limbs blown down.									
Washtenaw County Manchester	22	1600EST			0	0			Thunderstorm Wind (G50)
Emergency management reported 7 inch diameter tree limbs blown down.									
Saginaw County Chesaning	22	1615EST			0	0			Thunderstorm Wind (G50)
Saginaw County Central Dispatch reported several large trees blown down.									
Tuscola County Reese	22	1615EST			0	0			Hail(0.75)
Washtenaw County Saline	22	1630EST			0	0	127K		Lightning
A newspaper reported that a lightning strike traveled through the ductwork of four furnaces in the same neighborhood. This started a fire in the basement of each home. Three of the homes suffered only minor damage, but the fire got into the drywall of the fourth home and caused more substantial damage.									
Washtenaw County Saline	22	1630EST			0	0	30K		Thunderstorm Wind (G55)
A newspaper reported that 5 utility poles were blown down in thunderstorm winds along US-12 in Saline. Three of the poles came down onto moving cars. No injuries were reported.									
Livingston County Howell	22	1645EST			0	0			Thunderstorm Wind (G52)
Livingston County Central Dispatch reported several trees blown down onto power lines.									
Washtenaw County Ann Arbor	22	1649EST			0	0			Hail(1.00)
Wayne County 5 W Westland	22	1650EST			0	0	50K		Thunderstorm Wind (G52)
The media reported damage to a garage and car from thunderstorm winds.									
Wayne County Garden City	22	1651EST			0	0	10K		Thunderstorm Wind (G52)
A newspaper reported that a large tree blew over onto a car in thunderstorm winds. The paper also reported numerous tree limbs and power lines down.									
Sanilac County Peck	22	1652EST			0	0			Thunderstorm Wind (G50)
Sanilac County Central Dispatch reported several large trees down and blocking a road.									
Tuscola County 1 N Kingston	22	1652EST			0	0			Thunderstorm Wind (G50)
Tuscola County Central Dispatch reported several large trees blown down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>MICHIGAN, East</u>									
Tuscola County Kingston	22	1652EST			0	0			Thunderstorm Wind (G52) Trained spotters reported several trees blown down.
Livingston County Howell	22	1700EST			0	0			Thunderstorm Wind (G52) The newspaper reported that thunderstorm winds uprooted an 80 foot willow tree.
Oakland County 3 NE Farmington	22	1700EST			0	0			Thunderstorm Wind (G50) Trained spotters reported 10 inch diameter tree limbs blown down at Thirteen Mile and Middlebelt Roads in Farmington Hills.
Oakland County 4 E Holly	22	1727EST			0	0			Thunderstorm Wind (G50) Trained spotters reported numerous large tree limbs blown down at Dixie Highway and Grange Hall Road.
Oakland County Rose Center	22	1727EST			0	0			Thunderstorm Wind (G50) Trained spotters reported several large tree limbs blown down.
Lapeer County 2 SW Imlay City	22	1730EST			0	0	25K		Lightning A newspaper reported that a house was struck by lightning and caught fire. The damage was reportedly confined to one bedroom and its contents.
Wayne County Livonia	22	1730EST			0	0			Thunderstorm Wind (G52) Law enforcement reported several large trees blown down.
Wayne County 1 S Northville	22	1730EST			0	0			Thunderstorm Wind (G50) The Northville Township fire department reported an 18 inch diameter tree blown down.
Lapeer County Almont	22	1735EST			0	0			Thunderstorm Wind (G52) Law enforcement reported several large tree branches blown down.
St. Clair County Algonac	22	1800EST			0	0			Thunderstorm Wind (G50) A newspaper reported that several trees and power lines were blown down in thunderstorm winds.
St. Clair County Marine City	22	1800EST			0	0			Thunderstorm Wind (G50) A newspaper reported that several trees and power lines were blown down in thunderstorm winds.
Washtenaw County Ypsilanti	22	1815EST			0	0			Thunderstorm Wind (G50) The general public reported several large trees blown down.
Wayne County Westland	22	1850EST			0	0	5K		Thunderstorm Wind (G50) Trained spotters reported power lines and utility poles blown down at Wayne and Cherry Hill roads. A newspaper also reported that a large tree had fallen onto a house near Cherry Hill and Carlson roads. Only minor damage was reported. Thunderstorms developed in a very warm and humid airmass ahead of an approaching cold front. Thunderstorms developed during the late morning hours around Adrian and then quickly moved northeast and affected the metro Detroit region. These storms dissipated early in the afternoon. However storms redeveloped across western and central Lower Michigan by mid afternoon. These storms then moved into eastern Michigan. The storms continued through the afternoon and much of the evening hours. Severe wind gusts were associated with many of these storms. The most widespread thunderstorm activity occurred across Washtenaw and Wayne counties where thunderstorms repeatedly move through during much of the day. Thousands of power outages were reported throughout eastern Michigan.
Huron County 3 W Bad Axe	28	0455EST			0	0			Thunderstorm Wind (G50) A spotter reported several large tree limbs blown down.
Huron County Bad Axe	28	0615EST			0	0	300K		Lightning

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MICHIGAN, East

A newspaper reported that lightning struck a meat packing plant and started a fire, causing serious damage.

Midland County

Midland	28	1030EST			0	0			Lightning
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A newspaper reported that lightning struck a telephone line, knocking power out to thousands of Midland County residents.

Lapeer County

Dryden	28	1220EST			0	0			Thunderstorm Wind (G52)
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Law enforcement reported several large trees blown down.

Macomb County

3 N Romeo	28	1242EST			0	0			Hail(1.75)
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Macomb County

6 SW Romeo	28	1242EST			0	0			Thunderstorm Wind (G60)
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Spotters reported several large trees and tree limbs down.

Macomb County

Armada	28	1255EST			0	0	50K		Lightning
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A newspaper reported that a home in Armada Township was struck by lightning and caught on fire.

Macomb County

2 W New Haven Macomb	28	1302EST 1305EST	0.1	10	0	0			Tornado (F0)
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Trained spotters reported a brief tornado touchdown 2 miles west of New Haven. A National Weather Service storm survey confirmed tree damage consistent with an F0 tornado.

St. Clair County

2 N Algonac	28	1327EST			0	0			Thunderstorm Wind (G52)
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Law enforcement reported several large trees down near Algonac State Park.

St. Clair County

Algonac	28	1327EST			0	0			Thunderstorm Wind (G50)
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Algonac city police reported several large tree limbs blown down.

St. Clair County

Port Huron	28	1329EST			0	0			Thunderstorm Wind (G50)
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A newspaper reported that a large tree was blown over in thunderstorms winds and landed next to an apartment building, tearing the electrical service box from the building.

Scattered thunderstorms occurred very early in the morning on the 28th around Saginaw Bay. These storms laid out an outflow boundary. This boundary focused the development of additional thunderstorms later in the morning. High temperatures and humidity provided enough instability for some of these storms to become severe. The strongest storms developed near the border of Oakland and Lapeer counties. These storms evolved into a supercell as they moved into Macomb county. This supercell caused considerable wind damage and even spawned a short-lived tornado.

Huron County

Sebewaing	29	1408EST			0	0			Thunderstorm Wind (G50)
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A spotter reported several 4 inch diameter tree limbs blown down.

Huron County

Pigeon	29	1436EST			0	0			Thunderstorm Wind (G50)
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A spotter reported several 4 inch diameter tree limbs blown down.

A cold front moved through eastern Lower Michigan during the late afternoon and early evening hours. Showers and thunderstorms developed ahead of this front. An isolated storm in Huron county caused some wind damage. The other thunderstorms across the region remained below severe levels.

MICHIGAN, Extreme Southwest

Hillsdale County

6 W Hillsdale	22	1530EST			0	0	0		Thunderstorm Wind
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Law Enforcement reported large tree limbs down west of Hillsdale.

Hillsdale County

1 NW Moscow	22	1746EST			0	0	0		Thunderstorm Wind
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Emergency management reported large trees down near Moscow.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MICHIGAN, Extreme Southwest

Hillsdale County

4 W Reading	22	1746EST			0	0	1K		Thunderstorm Wind
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Emergency management reported a barn was blown down west of Reading.

Branch County

Bronson	27	1940EST			0	0	0		Thunderstorm Wind
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Law enforcement reported trees down in Bronson.

Branch County

Coldwater	27	1955EST			0	0	0		Thunderstorm Wind
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Law enforcement reported trees down in Coldwater.

Hillsdale County

Jonesville	27	2105EST			0	0	0		Thunderstorm Wind
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Emergency management reported power lines down in Jonesville.

MICHIGAN, North

Antrim County

Elk Rapids	21	0545EST			0	0			Thunderstorm Wind (G50)
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Scattered trees and power lines down.

Charlevoix County

Charlevoix	21	0555EST			0	0			Thunderstorm Wind (G50)
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Numerous 12-15 inch trees down.

Otsego County

Countywide	21	0630EST			0	0			Thunderstorm Wind (G50)
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Scattered trees down.

An area of thunderstorms moved into northwest Lower Michigan during the morning hours on the 21st. The winds associated with these storms downed numerous trees and power lines.

Mackinac County

Curtis	21	1855EST			0	0			Thunderstorm Wind (G50)
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Numerous trees down.

Mackinac County

2 S St Ignace	21	1945EST			0	0			Thunderstorm Wind (G60) ^M
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Presque Isle County

2 S Rogers City	21	2045EST			0	0			Thunderstorm Wind (G50)
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Numerous trees down.

A line of thunderstorms moved across eastern Upper and far northern Lower Michigan during the evening hours on the 21st. The wind gusts associated these storms downed trees across a few locales.

Ogemaw County

4 W West Branch	28	0320EST			0	0			Hail(0.88)
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Ogemaw County

8 E West Branch	28	0325EST			0	1			Thunderstorm Wind (G50)
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Tree down at Ogemaw County Fairgrounds

Ogemaw County

Prescott	28	0335EST			0	0			Thunderstorm Wind (G50)
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Trees down.

Iosco County

Tawas City	28	0405EST			0	0			Thunderstorm Wind (G50)
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Trees and power lines down.

Arenac County

5 NE Au Gres	28	0410EST			0	0			Thunderstorm Wind (G50)
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Trees down.

A cluster of thunderstorms moved across a portion of northeast Lower Michigan during the overnight hours on the 28th. The wind gusts associated with these thunderstorms downed numerous trees and power lines.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MICHIGAN, North</u>									
Kalkaska County									
2 SE Kalkaska	29	0758EST			0	0			Thunderstorm Wind (G50)
			Several 10 to 15 inch diameter trees downed.						
Benzie County									
Frankfort	30	2230EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down.						
Manistee County									
Manistee	30	2235EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down.						
Grand Traverse County									
Traverse City	30	2244EST			0	0			Thunderstorm Wind (G65) ^M
Benzie County									
Lake Ann	30	2247EST			0	0			Thunderstorm Wind (G50)
			Several trees down.						
Manistee County									
Manistee	30	2253EST			0	0			Thunderstorm Wind (G50)
			Several trees down.						
Antrim County									
4 E Eastport	30	2258EST			0	0			Thunderstorm Wind (G50)
Antrim County									
Kewadin	30	2303EST			0	0			Thunderstorm Wind (G50)
Grand Traverse County									
Traverse City	30	2305EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down.						
Leelanau County									
Suttons Bay	30	2310EST			0	0			Thunderstorm Wind (G50)
			Trees down on roadways.						
Wexford County									
8 E Buckley	30	2319EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down.						
Kalkaska County									
Kalkaska	30	2325EST			0	0			Thunderstorm Wind (G50)
			Several trees down.						
Antrim County									
Alba	30	2331EST			0	0			Thunderstorm Wind (G50)
			A few trees down.						
Grand Traverse County									
Fife Lake	30	2335EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down.						
Crawford County									
Grayling	30	2341EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down.						
Kalkaska County									
2 NE South Boardman	30	2345EST			0	0			Thunderstorm Wind (G50)
			A few trees down.						
Antrim County									
Mancelona	30	2350EST			0	0			Thunderstorm Wind (G50)
			Numerous trees down.						
Roscommon County									
Higgins Lake	30	2357EST			0	0			Thunderstorm Wind (G50)
			Several trees down.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MICHIGAN, North

Oscoda County

Red Oak	31	0031EST			0	0			Thunderstorm Wind (G50)
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Trees down across roadways.

Ogemaw County

West Branch	31	0038EST			0	0			Thunderstorm Wind (G50)
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Numerous trees down.

A line of severe thunderstorms moved across much of northern Lower Michigan during the late evening hours on the 30th and the overnight hours on the 31st. The wind gusts associated with these storms downed many trees and power lines, especially across northwest Lower Michigan.

Iosco County

Hale	31	1429EST			0	0			Hail(0.88)
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Iosco County

Whittemore	31	1432EST			0	0			Hail(1.00)
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Alcona County

7 W Spruce	31	1815EST			0	0			Thunderstorm Wind (G50)
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Several trees down.

Alcona County

2 W Black River	31	1817EST			0	0			Hail(0.75)
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Alpena County

Ossineke	31	2002EST			0	0			Hail(0.75)
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Scattered thunderstorms produced isolated reports of severe hail and wind damage across northeast Lower Michigan during the late afternoon and evening hours of the 31st.

MICHIGAN, Upper

Schoolcraft County

Seney	02	2150EST			0	0			Hail(0.75)
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Penny sized hail was reported.

A cold front pushed across Upper Michigan during the evening of July 2, triggering thunderstorms over the Upper Peninsula. One of the storms over Schoolcraft County produced penny sized hail.

Iron County

2 E Crystal Falls	21	1600CST			0	0			Hail(0.75)
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Penny sized hail was reported.

Iron County

Alpha	21	1615CST			0	0			Thunderstorm Wind (G65)
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Numerous trees were blown down.

Dickinson County

7 E Iron Mtn	21	1630CST			0	0			Thunderstorm Wind (G65)
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Two foot diameter tree blown down.

Marquette County

Republic	21	1645EST			0	0			Hail(2.00)
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Two inch hail was reported.

Marquette County

9 SW Ishpeming	21	1700EST			0	0			Thunderstorm Wind (G60)
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One to two foot diameter trees were blown down.

Menominee County

8 E Carney	21	1709CST			0	0			Thunderstorm Wind (G55)
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One to two inch diameter tree branches were broken off.

Menominee County

Ingalls	21	1709CST			0	0			Thunderstorm Wind (G65)
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Several large trees and power lines were blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MICHIGAN, Upper</u>									
Menominee County									
2 W Stephenson	21	1709CST			0	0			Thunderstorm Wind (G65)
			Several large trees were blown down.						
Marquette County									
10 S Marquette	21	1720EST			0	0			Thunderstorm Wind (G70)
			Sixty foot tall trees blown down. Power lines were knocked down.						
Marquette County									
5 E Sawyer Afb	21	1720EST			0	0			Thunderstorm Wind (G70)
			Numerous 1 to 2 foot diameter trees blown down or broken off.						
Marquette County									
7 S Marquette	21	1740EST			0	0			Thunderstorm Wind (G70)
			Numerous 1 to 2 foot diameter trees blown down or broken off.						
Alger County									
2 E Munising	21	1804EST			0	0			Thunderstorm Wind (G55)
			One to two inch diameter tree branches were broken off.						
Alger County									
5 N Shingleton	21	1809EST			0	0			Funnel Cloud
Delta County									
Rapid River	21	1814EST			0	0			Thunderstorm Wind (G55)
			One to two inch diameter tree branches were broken off.						
Marquette County									
1 N Marquette	21	1815EST 1930EST			0	0			Flood
			Tourist park flooded with 3 to 5 inches of water over the roads.						
Schoolcraft County									
Gulliver	21	1842EST			0	0			Thunderstorm Wind (G55)
			One to two inch diameter tree branches were broken off.						
Delta County									
3 W Rock	21	1850EST			0	0			Thunderstorm Wind (G55)
			Tree branches up to three inches in diameter were broken off.						
Luce County									
Newberry	21	1914EST			0	0			Thunderstorm Wind (G55)
			One to two inch diameter tree branches were broken off.						
			A cold front moving across Michigan's Upper Peninsula on July 21 interacted with a moist and unstable airmass to set off thunderstorms during the late afternoon and evening. Some of the storms produced large hail, high winds and heavy rain.						
Gogebic County									
Ironwood	27	1645CST			0	0			Thunderstorm Wind (G55)
			Power lines were knocked down.						
Iron County									
16 NE Crystal Falls	27	1800CST			0	0			Thunderstorm Wind (G55)
			Three to four inch diameter tree branches were broken off.						
Dickinson County									
Norway	27	1825CST			0	0			Thunderstorm Wind (G55)
			One to two inch diameter tree branches were broken off.						
Menominee County									
Faithorn	27	1840CST			0	0			Thunderstorm Wind (G55)
			One to two inch diameter tree branches were broken off.						
			A cold front moving across the Upper Peninsula of Michigan on July 27 triggered thunderstorms during the late afternoon and evening. Some of the storms produced high winds that knocked down trees and power lines.						
Menominee County									
Daggett	30	2015CST			0	0			Thunderstorm Wind (G65)
			Several trees were blown down across the road.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MICHIGAN, Upper</u>									
Menominee County 3 E Stephenson	30	2020CST			0	0			Hail(0.75) Penny sized hail was reported.
Menominee County 6 N Menominee	30	2025CST			0	0			Thunderstorm Wind (G65) Several trees were blow down across Range Lind Road and Birch Creek Road.
Iron County 4 NW Iron River	30	2047CST			0	0			Hail(1.00) One inch hail was reported.
Iron County Iron River	30	2048CST			0	0			Hail(0.88) Nickel sized hail was reported.
Iron County Iron River	30	2048CST			0	0			Thunderstorm Wind (G65) Several trees were blown down on Irish Street.
Delta County Cornell	30	2158EST			0	0			Hail(0.75) Penny sized hail was reported.
Delta County Garden	30	2301EST			0	0			Hail(1.75) One and three quarter inch diameter hail was reported. A moist and unstable airmass over Upper Michigan interacted with a swiftly moving cold front to produce severe thunderstorms during the night of July 30th. Large hail and damaging winds were reported over the south and west portions of the Upper Peninsula.
Iron County Gaastra	31	0727CST			0	0			Hail(1.50) Hail the size of a fifty-cent piece was reported.
Ontonagon County 8 SW Paulding	31	0740EST			0	0			Hail(1.00) Quarter sized hail was reported.
Dickinson County Iron Mtn	31	0800CST			0	0			Hail(0.75) Penny sized hail was reported.
Menominee County 8 SE La Branch	31	0815CST			0	0			Thunderstorm Wind (G60) A tree 10 inches in diameter was blown down.
Houghton County Sidnaw	31	0833EST			0	0			Hail(0.75) Penny sized hail was reported.
Baraga County Covington	31	0840EST			0	0			Hail(1.00) One inch diameter hail was reported.
Marquette County Republic	31	0913EST			0	0			Hail(0.75) Penny sized hail was reported.
Delta County Rock	31	0940EST			0	0			Thunderstorm Wind (G60) Tree branches 3 to 5 inches in diameter were broken off.
Ontonagon County Mass	31	0940EST			0	0			Thunderstorm Wind (G65) An apple tree 1 foot in diameter was blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MICHIGAN, Upper

Dickinson County Iron Mtn	31	1410CST			0	0			Thunderstorm Wind (G65) Numerous trees and power lines were blown down across the Iron Mountain area.
Dickinson County 2 SE Foster City	31	1415CST			0	0			Thunderstorm Wind (G60) Trees and branches were blown down.
Dickinson County Hardwood	31	1420CST			0	0			Thunderstorm Wind (G65) Numerous trees 1 to 2 feet in diameter were blown down.
Menominee County La Branch	31	1425CST			0	0			Thunderstorm Wind (G60) A tree was blown down across the road.
Marquette County Arnold	31	1520EST			0	0			Thunderstorm Wind (G55) One to two inch diameter branches were broken off.
Delta County Cornell	31	1540EST			0	0			Thunderstorm Wind (G60) Numerous small trees were blown down.
Delta County Gladstone	31	1555EST			0	0			Thunderstorm Wind (G60) Three to four inch diameter trees were blown down across River Road.
Alger County 14 S Munising	31	1615EST			0	0			Thunderstorm Wind (G55) A spotter estimated 65 mph wind gusts.
Schoolcraft County 10 N Manistique	31	1625EST			0	0			Thunderstorm Wind (G65) Numerous trees and power lines were blown down.
Schoolcraft County Steuben	31	1625EST			0	0			Thunderstorm Wind (G60) A 10 inch diameter tree branch was broken off.
Alger County 5 N Shingleton	31	1638EST			0	0			Thunderstorm Wind (G65) Power lines and 10 to 12 inch diameter trees were blown down. Severe thunderstorms were set off over Michigan's Upper Peninsula on July 31st as warm, moist air over the area interacted with a warm front that moved north from Wisconsin. Large hail and damaging winds were reported.

MICHIGAN, West

Oceana County Hart	08	1911EST			0	0	10K		Thunderstorm Wind (G53) A few trees were blown down in Hart and several more trees were blown down across Oceana county, which also knocked down several power lines.
Kent County Lowell	08	2228EST			0	0	7K		Thunderstorm Wind (G53) Several trees were blown down by thunderstorm wind gusts near Three Mile and Lincoln Lake roads.
Allegan County Plainwell	08	2230EST			0	0	5K		Thunderstorm Wind (G53) Several large maple trees had limbs of up to one foot in diameter blown down by thunderstorm wind gusts.
Eaton County Olivet Station	22	1625EST			0	0	5K	5K	Hail(0.88) Hail of up to seven eighths of an inch was reported by spotters with a thunderstorm in Olivet.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MICHIGAN, West

Calhoun County

Pennfield	22	1628EST			0	0	3K		Thunderstorm Wind (G53)
Several large tree limbs were blown down by thunderstorm wind gusts, one of which fell down on and blocked a road in Pennfield.									

Jackson County

Clarklake	22	1740EST			0	0	5K		Thunderstorm Wind (G53)
Numerous eight to ten inch diameter tree limbs were blown down and several fell down on and blocked roads in the Clark Lake area.									

Jackson County

Jackson	26	0824EST 0830EST			0	0	20K		Thunderstorm Wind (G53)
An isolated severe thunderstorm during the morning in Jackson produced several high wind gusts, causing several large trees and limbs to be blown down. One large tree was blown down on a home on the west side of Jackson, and another report of a tree blown down onto a home in Jackson was received as well. Another large tree limb was blown down and blocked a road.									

Allegan County

Cheshire Center	27	1945EST			0	2	200K	20K	Thunderstorm Wind (G62)
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Barry County

Delton	27	2050EST			0	0	10K		Thunderstorm Wind
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Kalamazoo County

Augusta to Climax	27	2125EST 2131EST	400	800	0	0	100K	40K	Tornado (F1)
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Calhoun County

Ft Custer to Battle Creek	27	2130EST 2141EST	400	800	0	0	150K	75K	Tornado (F1)
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Ionia County

Lake Odessa	28	0000EST			0	0	20K	5K	Thunderstorm Wind (G62)
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A F1 tornado touched down about one mile east of Augusta (Kalamazoo county). The tornado passed through Ft. Custer (Calhoun county) and continued to move through western Calhoun county, ending near Hill Brady road, about one mile northwest of the Battle Creek airport. The damage path was approximately 800 yards wide and path length was 3 miles long. Extensive tree damage occurred in the Fort Custer area and the roof was blown off a firing range shelter. Maximum winds were estimated at 80 m.p.h.

After the tornado ended, downburst damage continued for several more miles in Calhoun county. A parked tractor trailer was blown over and some minor roof damage occurred northwest of Battle Creek. The Battle Creek Airport recorded a wind gust to 66 m.p.h. More damage occurred southeast of Battle Creek near the Marshall area, where a garage door was blown in and large tree limbs were blown down along 15 mile road west of Marshall. Top winds across that area were estimated at 70 m.p.h.

A severe thunderstorm struck a campground and mobile home park along Swan Lake in Cheshire Township (southern Allegan county). Wind damage occurred over an area 300 yards wide and one eighth of a mile long. Trees were blown down onto mobile homes and small boats were blown out of the lake. Two minor injuries occurred. Top winds with the downburst were estimated at 70 m.p.h.

A severe thunderstorm blew down several trees in Delton (Barry county). Severe thunderstorm wind gusts also destroyed a 14 by 30 foot outbuilding, blew down numerous tree limbs, and damaged the siding and broke windows of a home near Lake Odessa (Ionia county).

Osceola County

Reed City	29	0705EST			0	0	5K	5K	Hail(1.00)
One inch hail was reported with an isolated early morning thunderstorm in Reed City (Osceola county).									

Mason County

Scottville to Ludington	30	2250EST			0	0	10K		Thunderstorm Wind (G53)
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An isolated severe thunderstorm during the late evening hours blew down several trees and power lines in Scottville and Ludington (Mason county).

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MINNESOTA, Central and South Central</u>									
Todd County									
1 W Hewitt	07	1430CST			0	0			Thunderstorm Wind (G55)
			Trees down.						
Todd County									
5 ENE Hewitt	07	1445CST 1450CST			0	0			Hail(0.75)
Stearns County									
Paynesville	07	1645CST 1650CST			0	0			Hail(1.00)
Kandiyohi County									
10 W New London	07	1655CST			0	0			Hail(0.75)
Stearns County									
6 S Richmond to 5 S Cold Spg	07	1815CST 1825CST			0	0			Thunderstorm Wind (G55)
			Scattered trees down in a six mile long path.						
Stearns County									
5 NW Sauk Centre	07	1950CST			0	0			Hail(0.75)
Todd County									
3 SW Little Sauk	07	2010CST			0	0			Hail(0.75)
Todd County									
Gutches Grove	07	2015CST			0	0			Hail(1.75)
Douglas County									
7 NE Alexandria	07	2141CST			0	0			Thunderstorm Wind (G52)
			Few trees down across power lines.						
Todd County									
North Portion	07 08	2205CST 0100CST			0	0			Flash Flood
			Rainfall of 4.5 to 6.5 inches fell across the northern tier of townships in Todd County, from 2 miles north of Hewitt to 4 miles southeast of Staples. Six roads were washed out in Villard township, southeast of Staples.						
Douglas County									
Alexandria	07	2215CST 2330CST			0	0			Flash Flood
			Numerous streets flooded.						
Mille Lacs County									
8 N Milaca to 8 NNE Milaca	08	0030CST			0	0			Thunderstorm Wind (G65)
			Hundreds of trees down. Two barns and one shed down.						
Mille Lacs County									
Northeast Portion	08	0200CST 0400CST			0	0			Flash Flood
			Four to seven inches rain fell on the southeast side of Mille Lacs Lake, generally from Isle to 8 N Isle. Water came over Highway 27 as well as the intersection of Highways 47 and 18. Two township roads were washed out. Water surrounded cabins along Cedar Creek, and along Peterson's Creek near Hunter Point.						
Kanabec County									
North Portion	08	0400CST 0500CST			0	0			Flash Flood
			Five to six inches of rain in the pre-dawn hours washed out several township roads.						
MN2045									
Kanabec	08 09	1900CST 0900CST			0	0	15K		Flood
			The Snake River and tributaries overflowed their banks in the wake of heavy rain early on July 8 (see corresponding entry for Kanabec County Flash Flood). Several county and township roads were flooded, sandbagging was necessary along Riverside Avenue in Mora, and Peninsula drive collapsed near the east side of Knife Lake.						
Stevens County									
Morris	10	0155CST			0	0			Hail(0.88)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MINNESOTA, Central and South Central

Pope County

Glenwood	10	0250CST			0	0			Thunderstorm Wind (G52)
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Few trees and power poles down.

Pope County

5 NE Glenwood	10	0315CST			0	0			Thunderstorm Wind (G55)
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Shed down, irrigator blown over.

Stearns County

St Joseph to St Cloud	10	0600CST 0610CST			0	0			Thunderstorm Wind (G55)
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Several dozen trees down along a 7 mile long path.

Pope County

Countywide	10	0500CST 1200CST			0	0	25K		Flash Flood
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Street flooding was widespread in Glenwood, due to four to six quick inches of rain. The most significant flooding occurred in the northeast portion of Glenwood, washing out some alleys and ripping the blacktop off some city streets. The Glenwood Public Works Director measured five inches of rain in one half hour, beginning around 5 am LST.

Stearns County

Countywide	10	0530CST 1330CST			0	0	300K		Flash Flood
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Four to eight inches rain fell in less than four hours, producing widespread flooding across all but the southwest portion of Stearns County. Several feet of water covered some roads from Sauk Centre to St. Cloud, with many roads closed. Several dozen cars stalled in St. Cloud when people attempted to drive into deep water, and about nine people had to be rescued from vehicles driven into deep water in viaducts. Numerous creeks overflowed their banks. Water was at least two feet deep in several dozen homes and businesses. A house was flooded in Sartell.

Douglas County

Southeast Portion	10	0600CST 1200CST			0	0	25K		Flash Flood
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Rainfall totaled 3.5 to 7 inches across southeastern Douglas County, producing water over numerous roads from Alexandria to Osakis. County Road 31 between Osakis and Nelson was closed, but no roads were washed out. Numerous basements were flooded.

Morrison County

Countywide	10	0630CST 1330CST			0	0			Flash Flood
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Rainfall totaling 3.5 to 7 inches was common across all but the far northwest corner of Morrison County. Two to three feet of water covered roads in Bowlus, and several township roads were flooded across the southern and eastern half of the county.

Todd County

South Portion	10	0630CST 1200CST			0	0			Flash Flood
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Four to six inches rain produced water over a number of roads, prompting their closure. State Highways 27 and 28 southwest of Long Prairie were flooded, as were several county and township roads. Some streets were flooded in Long Prairie.

Benton County

Countywide	10	0830CST 1330CST			0	0	100K	2.5M	Flash Flood
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Seven to ten inches of rain was common across a large swath of Benton County, from the northwest corner to the southeast. About 30 roads were closed, including State Highway 23 in Foley. A few township roads were washed out. About 3500 sandbags were used in the Foley area. Some basements were flooded. Local agriculture officials estimate that about 10% of the sellable crops in Benton County were destroyed. Numerous creeks in Alberta township (Gilman to Rum River area) rose out of their banks.

Sherburne County

Countywide	10	0830CST 1330CST			0	0	25K		Flash Flood
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Four to seven inches of rain fell, producing water over numerous roads. State highway 169 was closed between Princeton and Zimmerman, and County Road 31 was closed west of Santiago. Several dozen basements were flooded.

Kanabec County

Countywide	10	0900CST 1330CST			0	0	25K		Flash Flood
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Five to ten inches fell across central Kanabec County, prompting the closure of County Road 17 east of Mora. Several township roads were closed, and a number of basements flooded.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MINNESOTA, Central and South Central

Mille Lacs County

Countywide	10	0900CST 1330CST			0	0	25K		Flash Flood
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Four to nine inches rain resulted in several creeks out of their banks, and approximately two dozen county and township roads were closed across the entire county. State Highway 95 was closed west of Princeton. Several dozen basements were reported flooded with several feet of water.

Wright County

Northeast Portion	10	1000CST 1330CST			0	0			Flash Flood
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Four to six inches rain fell across the northeast half of the county. Two to three feet of water flowed across roads near Rockford, prompting the closure of county and township roads. Water pushed debris across County Road 20 near Rockford.

Anoka County

Southwest Portion	10	1100CST 1330CST			0	0			Flash Flood
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One to two feet water over a number of roads from Fridley to Ramsey. Several businesses along University Avenue in Fridley had their basements flooded. A mudslide occurred near Highway 10 and Round Lake Blvd in Coon Rapids.

Hennepin County

North Portion	10	1100CST 1330CST			0	0			Flash Flood
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Three to four inches rain fell in less than four hours, producing water over several roads, including five feet deep at the intersection of State Highway 100 and County Road 81 in Robbinsdale.

Martin County

7.1 WSW Trimont to 7 WSW Trimont	10	1910CST 1911CST	0.1	50	0	0			Tornado (F0)
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Tornado briefly crossed into Martin County from Jackson County (see corresponding entry for southwest Minnesota). Tornado remained over open country before dissipating.

Steele County

1 W Medford to Medford	18	1201CST 1207CST	1	50	0	0			Tornado (F1)
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Damage to a farm north of Owatonna near I-35. Minor damage to farmstead. Corn flattened.

Mille Lacs County

3 NW Vineland	20	2215CST			0	0			Thunderstorm Wind (G50)
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Tree down.

Mille Lacs County

5 NNW Isle	20	2235CST			0	0	5K		Thunderstorm Wind (G55)
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Trees down, including one on a trailer.

Stevens County

Chokio to Morris	21	0510CST 0525CST			0	0	50K		Thunderstorm Wind (G78) ^M
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Ten mile long path of wind damage. Numerous trees down, one on a van. Silos, several sheds, and grain bins down. Maximum wind gust of 78 knots measured at Morris Airport.

Pope County

Cyrus	21	0530CST			0	0			Thunderstorm Wind (G55)
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Trees down.

Douglas County

2 E Alexandria	21	0609CST			0	0			Thunderstorm Wind (G52)
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Trees down.

Todd County

Long Prairie	21	0635CST			0	0			Thunderstorm Wind (G52)
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Few trees toppled.

Anoka County

South Central Portion	21	1530CST 1630CST			0	0			Flash Flood
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Heavy rain. Street flooding in Columbia Heights.

Martin County

Welcome	21	1650CST			0	0			Thunderstorm Wind (G61) ^M
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>MINNESOTA, Central and South Central</u>									
			Corn fields flattened, few trees down.						
Freeborn County									
Albert Lea	21	1700CST 1900CST			0	0			Flash Flood
			Heavy rain produced street flooding with water two to three feet deep. Several streets barricaded.						
Martin County									
Fairmont	21	1715CST			0	0			Hail(1.00)
Martin County									
1 E Fairmont	21	1720CST			0	0			Hail(1.00)
Faribault County									
Blue Earth	21	1730CST			0	0			Hail(1.00)
Faribault County									
Blue Earth	21	1730CST			0	0			Thunderstorm Wind (G52)
			Several trees down.						
Faribault County									
East Portion	21	1821CST 2000CST			0	0			Flash Flood
			Four to seven inch swath of rain from Wells to Kiester. Two to three feet of water in the city of Wells. County Road #2 closed southeast of Kiester.						
Steele County									
Blooming Prairie	21	1900CST 2000CST			0	0			Flash Flood
			Several streets blocked by high water.						
Stearns County									
Sauk Centre	24	1900CST 2000CST			0	0			Flash Flood
			Street flooding.						
Stearns County									
Sauk Centre	24	1925CST			0	0			Hail(0.75)
Martin County									
1 SW Ceylon	24	2055CST 2115CST			0	0			Hail(0.75)
			Hail covered ground. Some crop damage.						
Faribault County									
Bricelyn	24	2115CST			0	0			Thunderstorm Wind (G50)
			Large branches down.						
Stevens County									
Chokio	25	0140CST			0	0			Thunderstorm Wind (G60)
			Damage to trees, sheds, grain bins, and crops.						
Lac Qui Parle County									
Madison	25	0145CST			0	0			Thunderstorm Wind (G50)
			Large tree branch fell on roof of house.						
Stevens County									
Donnelly	27	0922CST 0925CST			0	0			Hail(0.75)
Pope County									
Starbuck	27	1025CST			0	0			Thunderstorm Wind (G50)
			Trees down.						
Pope County									
3 S Starbuck	27	1035CST			0	0			Hail(1.00)
Pope County									
5 SW Sedan	27	1105CST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>MINNESOTA, Central and South Central</u>									
Stearns County									
Sauk Centre	27	1110CST			0	0			Thunderstorm Wind (G50)
			Tree down on Main Street.						
Pope County									
3 SE Gilchrist	27	1115CST			0	0			Hail(0.75)
Pope County									
7 SE Sedan	27	1121CST			0	0			Thunderstorm Wind (G60)
			Empty grain bin blown 1/4 mile. Trees down.						
Morrison County									
1 W Upsala	27	1130CST			0	0			Thunderstorm Wind (G55)
			Numerous trees down in campground. Tree on vehicle.						
Stearns County									
2 S St Francis	27	1135CST			0	0			Hail(0.75)
Stearns County									
3 NW Belgrade	27	1138CST			0	0			Hail(1.00)
			Ground turned white.						
Stearns County									
Holdingford	27	1140CST			0	0			Thunderstorm Wind (G52)
			Power lines and trees down.						
Stearns County									
4 W Sartell to St Stephen	27	1150CST			0	0			Thunderstorm Wind (G60)
			Numerous trees down, including some that were 15 inches in diameter. Several trees were toppled across County Road 2 and at the intersection of County roads 2 and 4. Some trees fell onto sheds.						
Benton County									
Rice	27	1153CST 1158CST			0	0			Hail(0.75)
Benton County									
Rice to 5 SE Rice	27	1153CST 1156CST			0	0			Thunderstorm Wind (G55)
			Scattered trees down.						
Morrison County									
Royalton	27	1155CST			0	0			Thunderstorm Wind (G52)
			Trees and power lines down.						
Kandiyohi County									
Sunburg	27	1205CST			0	0			Hail(0.75)
Benton County									
2 W Gilman to 5 NE Gilman	27	1207CST			0	0			Thunderstorm Wind (G63) ^M
			Numerous trees down. Outbuildings down.						
Kandiyohi County									
7 W Regal	27	1208CST			0	0			Hail(0.75)
Benton County									
3 WNW Foley	27	1210CST			0	0	250K		Thunderstorm Wind (G75)
			Roof off house. House was also moved 5 feet off its foundation. Trees down. Sheds and pole barns down.						
Benton County									
3 NW Gilman	27	1210CST			0	0			Hail(1.00)
Mille Lacs County									
Milaca	27	1238CST			0	0			Hail(0.75)
Kanabec County									
6 N Mora	27	1300CST			0	0			Thunderstorm Wind (G52)
			Power lines and trees down.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MINNESOTA, Central and South Central</u>									
Kandiyohi County									
4 NE Willmar	27	1300CST			0	0			Hail(0.75)
Chisago County									
3 W Rush City to 3 NE Rush City	27	1335CST 1340CST			0	0			Thunderstorm Wind (G55)
			Trees down. Boats blown into each other on Rush Lake.						
Carver County									
Watertown	27	1442CST			0	0			Hail(0.75)
Hennepin County									
Spring Park	27	1457CST			0	0			Hail(0.75)
Hennepin County									
New Hope	27	1515CST			0	0			Hail(0.88)
Hennepin County									
Minneapolis	27	1518CST			0	0			Hail(0.75)
			At intersection of Dowling and I-94.						
Hennepin County									
Crystal	27	1520CST			0	0			Hail(0.75)
			Along Highway 100.						
Anoka County									
Hilltop	27	1523CST			0	0			Hail(0.75)
Freeborn County									
5 SE Albert Lea	27	1800CST			0	0			Thunderstorm Wind (G52) ^M
Redwood County									
2 W Walnut Grove	28	1514CST			0	0			Hail(1.00)
Le Sueur County									
2 SW Le Center	28	1520CST			0	0			Hail(1.00)
Redwood County									
Walnut Grove	28	1525CST			0	0			Thunderstorm Wind (G52)
			Scattered trees down.						
Redwood County									
Revere to Sanborn	28	1530CST 1540CST			0	0			Thunderstorm Wind (G55)
			Scattered trees and power lines down. Corn flattened.						
Le Sueur County									
3 NW Montgomery	28	1537CST			0	0			Hail(0.88)
Brown County									
Comfrey	28	1540CST			0	0			Hail(0.88)
Brown County									
2 E Springfield	28	1545CST			0	0			Hail(1.00)
Renville County									
4 W Fairfax	28	1545CST			0	0			Thunderstorm Wind (G52)
			Several trees down. Corn flattened.						
Brown County									
2 S New Ulm to New Ulm	28	1550CST			0	0	40K		Thunderstorm Wind (G55)
			Numerous trees down, including one on a car. Barn and shed also downed.						
Nicollet County									
5 NW Courtland to 5 N Courtland	28	1555CST			0	0			Thunderstorm Wind (G50)
			Few trees down.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MINNESOTA, Central and South Central</u>									
Scott County									
4 W New Prague	28	1608CST			0	0			Hail(0.75)
Sibley County									
New Auburn to Green Isle	28	1610CST			0	0			Thunderstorm Wind (G52)
									Few trees down.
Goodhue County									
Stanton	28	1617CST			0	0			Hail(1.00)
Mcleod County									
Brownton	28	1620CST			0	0			Hail(1.00)
Scott County									
2 SW Belle Plaine	28	1625CST			0	0			Hail(0.88)
Mcleod County									
Stewart	28	1633CST 1643CST			0	0			Hail(1.25)
Brown County									
5 W Springfield to Springfield	28	1639CST			0	0	20K		Thunderstorm Wind (G55)
									Numerous trees down, including some on vehicles and garages. Corn flattened.
Nicollet County									
3 E Klossner to 3.5 ENE Klossner	28	1640CST 1643CST	0.5	50	0	0			Tornado (F0)
									Touched down in field. Corn flattened.
Mcleod County									
2 N Stewart	28	1647CST			0	0			Hail(1.25)
Goodhue County									
3 E Cannon Falls to Welch	28	1650CST 1700CST			0	0			Hail(1.00)
									One mile wide swath of hail. Crops damaged.
Nicollet County									
5 S Bernadotte to New Sweden	28	1650CST			0	0			Thunderstorm Wind (G52)
									Few trees toppled. Corn and beans flattened.
Scott County									
3 W New Market	28	1700CST			0	0			Hail(1.00)
Sibley County									
New Auburn to Green Isle	28	1730CST 1830CST			0	0			Flash Flood
									Four to five inches rain produced street flooding.
Dakota County									
5 S Farmington	28	1731CST			0	0			Hail(0.75)
Anoka County									
South Central Portion	28	1737CST 1945CST			0	0			Flash Flood
									Street flooding in Coon Rapids, Spring Lake Park and Blaine. Numerous vehicles stranded in water.
Goodhue County									
Red Wing	28	1745CST			0	0			Hail(1.00)
Steele County									
Owatonna	28	1755CST			0	0			Thunderstorm Wind (G52)
									Several trees and power lines down along Interstate 35.
Goodhue County									
Kenyon to 5 W Wanamingo	28	1800CST			0	0			Thunderstorm Wind (G55)
									Numerous trees down, chimney toppled.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MINNESOTA, Central and South Central

Ramsey County

Vadnais Hgts to
White Bear Lake

28

1800CST
1900CST

0

0

Flash Flood

Nearly three inches rain in two hours led to street flooding. Water rose to more than four feet deep under a railroad bridge, trapping four people in two vehicles. They were rescued by Fire and Rescue personnel. A clogged drain backed up and flooded the south campus of White Bear Lake High School.

Goodhue County

Zumbrota

28

1815CST

0

0

Thunderstorm Wind (G52)

Few trees down.

Goodhue County

Pine Is

28

1816CST

0

0

Thunderstorm Wind (G52)

Few trees down.

Hennepin County

Rockford

28

1840CST
1945CST

0

0

Flash Flood

Trailer park flooded.

Rice County

2 N Morristown

30

1530CST

0

0

Hail(0.88)

Rice County

Northfield

30

1539CST

0

0

Hail(0.88)

Rice County

5 N Faribault

30

1540CST

0

0

Hail(1.00)

Waseca County

7 NE Waseca

30

1555CST

0

0

Hail(1.75)

Goodhue County

Pine Is

30

1610CST

0

0

Thunderstorm Wind (G52)^M

Measured at the fire station.

Waseca County

St Mary

30

1650CST

0

0

Hail(1.00)

Steele County

2 S Lemond

30

1720CST

0

0

Hail(0.75)

Steele County

Blooming Prairie

30

1730CST

0

0

Hail(0.75)

Brown County

Comfrey

30

1847CST

0

0

Hail(0.88)

Pope County

1 N Grovelake

31

0815CST

0

0

Hail(1.00)

Stearns County

3 S Padua

31

0825CST

0

0

Hail(0.75)

Stearns County

Padua

31

0830CST

0

0

Hail(0.75)

Stearns County

6 SW Albany

31

0850CST

0

0

Hail(0.75)

MINNESOTA, Northeast

Koochiching County

5 E International Falls

01

1853CST

0

0

Hail(0.88)

Crow Wing County

15 E Brainerd

07
08

2000CST
0200CST

0

0

250K

Flash Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MINNESOTA, Northeast

High water caused \$254,750 in road damage.									
Aitkin County									
Redtop	07	2100CST			0	0			Flash Flood
	08	0400CST							
Roads were damaged by high water.									
Aitkin County									
10 S Aitkin	08	0000CST			0	0			Thunderstorm Wind (G50)
Trees were blown down.									
Crow Wing County									
4 S Breezy Pt	08	1910CST			0	0			Thunderstorm Wind (G50)
Boats were thrown from lifts onto docks; docks were mangled.									
Crow Wing County									
Deerwood	21	0735CST			0	0			Thunderstorm Wind (G50)
Trees were blown down.									
Aitkin County									
4 W Mc Grath	21	2245CST			0	0			Thunderstorm Wind (G50)
Fifty trees were blown down at a cabin.									
Pine County									
1.5 E Sandstone	21	2305CST			0	0			Thunderstorm Wind (G50)
A large tree was uprooted.									
Itasca County									
Marcell	25	2125CST			0	0			Hail(1.00)
Pine County									
Pine City	27	1313CST			0	0			Thunderstorm Wind (G60)
Trees were blown down.									
Pine County									
14 E Hinckley to 5 E Hinckley	27	1528CST			0	0			Thunderstorm Wind (G60)
Trees were blown down. Trees were also blown down 5 miles east of Hinckley.									
Pine County									
3 NW Sandstone	31	1010CST			0	0			Thunderstorm Wind (G55)
Trees were blown down.									
Itasca County									
Deer River	31	2310CST			0	0			Hail(0.75)

MINNESOTA, Northwest

Kittson County									
3 N Lancaster	01	1005CST			0	0			Hail(0.88)
Beltrami County									
6 N Waskish	01	1015CST			0	0			Hail(0.88)
Kittson County									
2 N Hallock	01	1035CST			0	0			Hail(0.88)
Kittson County									
6 E Lancaster	01	1055CST			0	0			Hail(0.75)
Roseau County									
7 SW Warroad	01	1128CST			0	0			Hail(2.75)
Roseau County									
Warroad	01	1133CST			0	0			Hail(1.75)
Roseau County									
2 E Warroad	01	1138CST			0	0			Hail(0.88)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>MINNESOTA, Northwest</u>									
Roseau County									
1 W Roseau	01	1145CST			0	0			Hail(1.75)
Roseau County									
Swift	01	1145CST	0.2	25	0	0			Tornado (F0) A tornado touchdown was reported by the Roseau sheriff's office.
Lake Of The Woods County									
10 N Williams to 11 NNE Williams	01	1205CST 1210CST			0	0			Hail(1.00)
Roseau County									
2 N Warroad	01	1205CST			0	0			Hail(0.88)
Lake Of The Woods County									
Lude	01	1215CST			0	0			Hail(1.00)
Wadena County									
1 SW Menahga	07	0804CST			0	0	5K		Thunderstorm Wind Strong winds blew down numerous trees around Spirit Lake. One property owner reported that his dock, boat lift, and pontoon were flipped completely over.
Beltrami County									
12 N Waskish	07	1300CST			0	0	0.10K		Thunderstorm Wind Tree limbs were blown down.
Lake Of The Woods County									
20 S Baudette	07	1300CST			0	0	0.20K		Thunderstorm Wind Trees were blown down.
Otter Tail County									
3 N Wrightstown	07	1345CST			0	0			Hail(0.75)
Becker County									
Detroit Lakes	07	1500CST			0	0	10K		Lightning Lightning struck a house and ignited a fire in the attic.
Otter Tail County									
7 NW Perham	07	1630CST			0	1			Lightning A 33 year-old man was struck by lightning while riding his motorcycle westbound on U.S. Highway 10. His wife, who was also on the motorcycle, was uninjured.
Wadena County									
Aldrich	07	1810CST			0	0	0.10K		Thunderstorm Wind Tree branches were blown down.
Wadena County									
Verndale	07	1810CST			0	0	1K		Thunderstorm Wind Large tree branches were blown down in the wind.
Wilkin County									
Breckenridge	07	1910CST			0	0			Lightning Lightning struck a power pole snapping two electrical lines. Residents lost power for an hour.
Wilkin County									
5 N Foxhome	07	1910CST	0.2	25	0	0			Tornado (F0) A brief touchdown was reported.
Clay County									
Hawley	07	1915CST			0	0	5K		Lightning A bolt of lightning hit Hawley's main power hub on the southeast edge of town.
Grant County									
1 S Herman	07	2130CST			0	0	10K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MINNESOTA, Northwest</u>									
Strong winds hit a farmstead just south of Herman. A man who was in the house at the time said his ears popped. Ten to twelve trees were destroyed and some shingles on the house were lifted. A trampoline in the yard was twisted and the garage door was buckled.									
Polk County									
East Grand Forks	09 10	2305CST 0105CST			0	0			Flash Flood
									Street flooding was reported.
Polk County									
Fisher	09 10	2305CST 0105CST			0	0			Flash Flood
									11.6 inches of rain were measured at a MN DOT RWIS station near Fisher. Numerous farm fields were flooded with water. Some county roads were also closed due to high water.
Norman County									
Ada	10	0040CST 0240CST			0	0			Flash Flood
									Street flooding was reported in Ada.
Norman County									
Hendrum	10	0100CST 0300CST			0	0			Flash Flood
									Water was reported to be over highway 75.
MN2001									
		West Polk							
	10 20	0108CST 2359CST			0	0			Flood
									Sections of cropland in the southwest portion of Polk county remained under lakes of water for days. Many acres of cropland were a total loss.
Otter Tail County									
Fergus Falls	10	1000CST 1200CST			0	0			Flash Flood
									Several county roads were covered with water and the westbound lane of Interstate 94 was also covered.
Clay County									
Barnesville	10	1030CST 1230CST			0	0			Flash Flood
									A highway underpass was flooded.
Wilkin County									
4 N Foxhome	10	1200CST 1400CST			0	0			Flash Flood
									Four township roads were under water and one was washed out.
Otter Tail County									
3 N Pelican Rapids	17	1325CST			0	0			Hail(1.00)
Mahnomen County									
1 W Mahnomen	20	0715CST			0	0			Hail(0.75)
Wilkin County									
6 W Campbell	21	0510CST			0	0	15K		Thunderstorm Wind (G78)
									A garage was blown down.
Wilkin County									
4 W Campbell	21	0515CST			0	0	25K		Thunderstorm Wind (G87)
									A small aircraft hangar was blown down with the debris scattered over one-half mile away.
Wilkin County									
Campbell	21	0520CST			0	0	20K		Thunderstorm Wind (G78)
									Widespread tree and roof damage was observed. Trees were uprooted and power lines were blown down.
Wilkin County									
Tenney	21	0526CST			0	0			Thunderstorm Wind (G66) ^M
									A MNDOT RWIS site measured a 76 mph wind gust.
Wilkin County									
5 E Tenney	21	0530CST			0	0	10K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
MINNESOTA, Northwest									
A power pole was snapped and trees damaged.									
Grant County									
Wendell	21	0535CST 0600CST			0	0			Thunderstorm Wind (G70)
Large tree limbs were blown down.									
Otter Tail County									
6 SW Fergus Falls	21	0540CST			0	0	5K		Thunderstorm Wind
Small outbuildings were destroyed.									
Otter Tail County									
Battle Lake	21	0600CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down, several falling on garages.									
Otter Tail County									
Henning	21	0610CST			0	0	10K		Thunderstorm Wind
Power poles were blown down by the strong wind. A tree also fell on the city playground equipment, causing a total loss. A new church being constructed was also flattened.									
Wadena County									
2 NNW Verndale	21	0628CST			0	0			Thunderstorm Wind (G52) ^M
A MNDOT RWIS site measured a 60 mph wind gust.									
Wadena County									
Wadena	21	0715CST			0	0	5K		Thunderstorm Wind
Power lines were blown down.									
Clay County									
1 NE Hawley	25	0010CST			0	0			Hail(0.88)
Becker County									
7 N Lake Park	25	0100CST			0	0			Hail(1.00)
Becker County									
3 N Audubon	25	0145CST			0	0			Hail(0.88)
Roseau County									
12 NW Greenbush	25	1604CST			0	0			Hail(1.00)
Polk County									
2 S Erskine	25	1700CST			0	0			Hail(0.75)
Polk County									
1 E Winger	25	1745CST 1750CST			0	0			Hail(1.75)
Polk County									
2 N Winger to 2 SE Winger	25	1745CST 1752CST	3	50	0	0	20K		Tornado (F1)
A metal shed roof was damaged and a steel bin roof was torn off 2 miles north of Winger. The path was intermittent.									
Clay County									
2 SE Averill	25	1750CST			0	0			Hail(0.88)
Mahnomen County									
7 E Bejou	25	1755CST			0	0			Hail(0.88)
Mahnomen County									
3 NE Bejou to 3 E Bejou	25	1758CST 1808CST	3	50	0	0			Tornado (F1)
Numerous trees were uprooted.									
Clay County									
2 SW Hawley	25	1820CST			0	0			Hail(0.88)
Mahnomen County									
11 E Waubun	25	1830CST			0	0			Hail(0.75)
Becker County									
20 E White Earth	25	1855CST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MINNESOTA, Northwest</u>									
Beltrami County 3 NE Waskish	30	0430CST			0	0			Hail(1.75)
Wilkin County 5 W Tenney	31	0445CST			0	0	0.20K		Thunderstorm Wind Branches were blown down.
Otter Tail County Dalton	31	0455CST			0	0			Thunderstorm Wind (G51) ^M
Otter Tail County 2 SE Ottertail	31	0520CST			0	0	0.20K		Thunderstorm Wind Branches were blown down.
Marshall County Warren	31	2030CST			0	0	5K		Thunderstorm Wind Strong winds blew a tree onto a house.
Beltrami County Nebish	31	2100CST			0	0			Hail(0.88)
Polk County 9 N Mc Intosh	31	2152CST			0	0			Hail(0.88)
Polk County Mc Intosh	31	2205CST			0	0	0.50K		Thunderstorm Wind Tree damage was reported in the town of McIntosh.
Polk County 6 N Mc Intosh	31	2210CST			0	0			Hail(1.75)
Wadena County 4 E Menahga	31	2345CST			0	0			Hail(0.75)
<u>MINNESOTA, Southeast</u>									
Olmsted County 1 W Byron	18	1243CST			0	0			Hail(0.75)
Dodge County 7 S Dodge Center	18	1245CST 1250CST			0	0			Funnel Cloud
Fillmore County Preston	18	1405CST			0	0	1K	2K	Thunderstorm Wind (G52) Storm spotters reported dime size hail and also sighted a funnel cloud, which did not touch down. In the Preston area (Fillmore County), winds estimated at 60 mph damaged corn fields and toppled some large trees.
Olmsted County 1 W Rochester	21	1645CST			0	0			Hail(0.75)
Olmsted County Rochester	21	1648CST			0	0			Hail(0.75)
Olmsted County Rochester	21	1648CST			0	0			Thunderstorm Wind (G52)
Olmsted County Rochester	21	1739CST			0	0			Thunderstorm Wind (G50) ^M Storm spotters and the public reported dime size hail, while a wind gust of 58 mph was recorded at the Rochester International airport.
Mower County 8 S Austin	27	1809CST			0	0			Thunderstorm Wind (G50)
Mower County Lyle	27	1825CST 1831CST			0	0			Funnel Cloud

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MINNESOTA, Southeast

Storm spotters estimated wind gusts of 58 mph and also reported a funnel cloud near the Minnesota/Iowa border .

Wabasha County

Lake City	28	1930CST 2015CST			0	0	1.5K		Flash Flood
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Two inches of rain in less than an hour caused several streets to become flooded.

Olmsted County

Byron	30	1620CST			0	0	2.5K		Thunderstorm Wind (G57)
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Olmsted County

3 W Rochester	30	1623CST			0	0	3.5K		Thunderstorm Wind (G61) ^M
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Olmsted County

5 N Rochester	30	1630CST			0	0			Thunderstorm Wind (G52)
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Olmsted County

Eyota	30	1636CST			0	0			Thunderstorm Wind (G52)
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Dodge County

Kasson	30	1640CST			0	0	1.3K		Thunderstorm Wind (G57)
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Dodge County

Mantorville	30	1642CST			0	0			Hail(0.75)
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Olmsted County

1 N Chatfield	30	1650CST			0	0	7.5K		Thunderstorm Wind (G55)
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Winona County

4 W Lewiston	30	1653CST			0	0	2.5K		Thunderstorm Wind (G54) ^M
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Fillmore County

Whalan	30	1703CST			0	0	2K		Thunderstorm Wind (G57)
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Wind gusts of 60 to 70 mph knocked down numerous trees and power lines. A tree, which was three feet in diameter, fell on a car near Chatfield (Olmsted County).

MINNESOTA, Southwest

Jackson County

10 NE Jackson	10	1907CST 1910CST	0.5	50	0	0			Tornado (F0)
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A tornado caused no reported damage before crossing the county line.

Jackson County

3 W Lakefield	21	1558CST			0	0			Hail(0.88)
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Jackson County

3 N Jackson	21	1621CST			0	0			Hail(1.75)
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Large hail covered the ground and knocked small branches off of trees. The hail caused crop damage, but the amount of crop damage was not known.

Nobles County

Worthington	21	1638CST			0	0			Hail(0.75)
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Nobles County

3 E Worthington	21	1647CST			0	0			Hail(1.00)
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Jackson County

10 W Jackson	21	1655CST			0	0			Hail(1.75)
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Jackson County

4 SE Lakefield	21	1713CST			0	0			Hail(1.75)
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Nobles County

(Otg)Worthington Arp	24	2015CST			0	0			Thunderstorm Wind (G50) ^M
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Jackson County

Jackson	24	2035CST			0	0			Hail(1.00)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MINNESOTA, Southwest</u>									
Pipestone County									
Pipestone	28	1407CST			0	0			Thunderstorm Wind (G52)
Lincoln County									
8 W Lake Benton	28	1410CST			0	0			Thunderstorm Wind (G61) Thunderstorm winds caused an unknown amount of tree damage.
Lincoln County									
Lake Benton	28	1413CST			0	0	100K		Hail(1.75) Large hail caused damage to windows, vehicles, and crops. The amount of crop damage was not known.
Lyon County									
Florence	28	1419CST			0	0			Hail(2.75) Large hail caused damage to vehicles, windows, and crops. The amount of damage was not known.
Lincoln County									
7 SW Tyler	28	1423CST			0	0			Hail(2.75) Large hail caused damage to vehicles, windows, and crops. The amount of damage was not known.
Pipestone County									
5 W Holland	28	1426CST			0	0			Hail(0.75)
Lyon County									
5 SW Balaton	28	1428CST			0	0			Hail(1.75)
Murray County									
7 NE Curreant Lake	28	1445CST			0	0			Hail(0.75)
Murray County									
7 NE Curreant Lake	28	1445CST			0	0			Thunderstorm Wind (G52)
Lyon County									
Tracy	28	1445CST			0	0			Hail(0.75)
Lyon County									
1 S Tracy	28	1455CST			0	0			Hail(1.75) Large hail caused an unknown amount of crop damage.
Murray County									
8 N Slayton	28	1458CST			0	0			Hail(1.75)
Rock County									
1 S Jasper	28	1500CST			0	0			Thunderstorm Wind (G61)
Lyon County									
Amiret	28	1504CST			0	0			Hail(0.88)
Lyon County									
Tracy	28	1509CST			0	0			Thunderstorm Wind (G61) Thunderstorm winds caused tree damage, including branches blown down.
Cottonwood County									
12 NE Delft	28	1518CST			0	0			Hail(0.88)
Cottonwood County									
3 N Westbrook	28	1518CST			0	0			Thunderstorm Wind (G52) Thunderstorm winds blew down tree branches.
Cottonwood County									
Storden	28	1535CST			0	0			Hail(0.75)
Lyon County									
Tracy	30	1428CST			0	0			Hail(1.00)
Cottonwood County									
6 NE Jeffers	30	1847CST			0	0			Hail(0.88)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MINNESOTA, West

NONE REPORTED.

MINNESOTA, West Central

Traverse County 2 S Collis	07	1808CST			0	0			Hail(0.75)
Traverse County 7 E Browns Vly	10	0018CST			0	0			Thunderstorm Wind (G52)
Big Stone County Ortonville	21	0430CST			0	0			Thunderstorm Wind (G61)
Several large tree limbs were downed in Ortonville.									
Traverse County 8 NW Collis	21	0445CST			0	0			Thunderstorm Wind (G52)
Traverse County 7 NE Wheaton	31	0420CST			0	0			Thunderstorm Wind (G52)
Traverse County 3 S Tintah	31	0440CST			0	0			Thunderstorm Wind (G52)

MISSISSIPPI, Central

Lamar County 3 NW Lumberton	01	1435CST			0	0	1K		Thunderstorm Wind
Several trees were blown down along State Road 13.									
Jones County Countywide	01	1930CST			0	0	1K		Thunderstorm Wind
Several trees were blown down across the county between 19:10 and 19:45.									
Rankin County Countywide	01	1953CST			0	0	1K		Thunderstorm Wind
Several trees were blown down at the intersection of St. John's Road and Florence-Byrum Road.									
Madison County Madison	01	2230CST			0	0	1K		Thunderstorm Wind
Several large limbs were blown down in the Northbay Subdivision.									
Jones County 2 SE Hebron	02	1815CST			0	0	2K		Thunderstorm Wind
Several powerlines were blown down around the Big Creek Wildlife Preserve.									
Madison County Canton	05	1550CST			0	0			Hail(1.00)
Madison County 3 SW Canton	05	1550CST			0	0	1K		Thunderstorm Wind
A few trees were blown down on State Road 22.									
Hinds County 8 NW Jackson	05	1615CST			0	0	2K		Thunderstorm Wind
Several trees were blown down at the intersection of US Highway 49 and West County Line Road, as well as at the intersection of Cynthia Road and US Highway 49.									
Hinds County Clinton	05	1635CST			0	0	1K		Thunderstorm Wind
Numerous small limbs and several powerlines were blown down, resulting in numerous power outages across the area.									
Lawrence County 14 SW Monticello	07	1405CST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSISSIPPI, Central</u>									
Lincoln County									
15 SE Brookhaven	07	1405CST			0	0			Hail(0.75)
Lincoln County									
12 SE Brookhaven	07	1407CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down at the intersection of State Road 569 and US 98.									
Newton County									
3 S Newton	07	1427CST			0	0	1K		Thunderstorm Wind
Trees were blown down east of State Road 15 and south of US 80.									
Jasper County									
Bay Spgs	07	1428CST			0	0	2K		Thunderstorm Wind
Numerous trees and powerlines were blown down between Bay Springs and Montrose between 14:28 and 14:40. Some trees blocked area roads.									
Jasper County									
Stringer	07	1428CST			0	0			Hail(1.00)
Dime- to quarter-sized hail covered the ground between Stringer and Montrose.									
Jones County									
5 N Laurel	07	1438CST			0	0			Hail(0.75)
Jones County									
4 NW Soso	07	1510CST			0	0	1K		Thunderstorm Wind
Several large limbs were blown down.									
Jones County									
3 NW Soso	07	1510CST			0	0	1K		Thunderstorm Wind
Several large limbs were blown down.									
Forrest County									
Carnes	07	1530CST			0	0			Hail(0.75)
Covington County									
2 N Collins	07	1545CST			0	0	1K		Thunderstorm Wind
Several large limbs were blown down.									
Forrest County									
Carnes	07	1545CST			0	0	5K		Thunderstorm Wind
Several trees were blown down in the area. One tree fell on a house, resulting in minor damage.									
Franklin County									
Meadville	07	1605CST			0	0	1K		Thunderstorm Wind
Several trees were blown down across the road.									
Marion County									
3 N Columbia	07	1634CST			0	0	1K		Hail(1.75)
Golfball-sized hail occurred for at least 10 minutes and covered the ground on State Road 13 north and Columbia.									
Lawrence County									
4 E Monticello	07	1640CST			0	0	1K		Thunderstorm Wind
Several large limbs were blown down on US 84 between Monticello and Silver Creek.									
Franklin County									
Roxie	07	1647CST			0	0			Hail(0.75)
Franklin County									
Roxie	07	1647CST			0	0	25K		Thunderstorm Wind
Seven trees and three cars were overturned in the area.									
Marion County									
10 N Columbia	07	1647CST			0	0	6K		Thunderstorm Wind
Numerous trees were blown down in the area. The damage path was 3 miles wide at times north of the community.									
Marion County									
10 N Columbia	07	1650CST			0	0			Hail(1.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSISSIPPI, Central</u>									
Marion County									
Morgantown	07	1652CST			0	0	1K		Thunderstorm Wind
			Numerous trees were blown down in the area.						
Jefferson Davis County									
Countywide	07	1700CST			0	0	3K		Thunderstorm Wind
			Numerous trees were blown down across the county.						
Jefferson Davis County									
Prentiss	07	1700CST			0	0			Hail(1.75)
Lincoln County									
Brookhaven	07	1732CST			0	0	3K		Thunderstorm Wind
			Several streets in the city were blocked by numerous trees, limbs, and powerlines.						
Hinds County									
Raymond	07	1841CST			0	0	1.5K		Thunderstorm Wind
			Numerous trees were blown down along Dry Grove Road, near State Road 18 and Midway-Myers Rd.						
Lincoln County									
Brookhaven	07	1734CST			0	0	5K		Thunderstorm Wind
			A top of tree fell on a house, resulting in minor damage.						
Carroll County									
10 NW Carrollton	08	1455CST			0	0			Hail(0.75)
Carroll County									
10 NW Carrollton	08	1455CST			0	0	1K		Thunderstorm Wind
			Several large limbs were blown down in the northwestern part of the county.						
Jones County									
Ellisville	08	1530CST			0	0			Funnel Cloud
			A funnel cloud was sighted near Interstate 59.						
Covington County									
Collins	08	1730CST			0	0	1K		Thunderstorm Wind
			A few trees were reported down in the area.						
Jones County									
5 N Laurel	08	1730CST			0	0	0.50K		Thunderstorm Wind
			One tree was blown down.						
Jefferson Davis County									
5 NE Prentiss	08	1815CST			0	0	2.5K		Thunderstorm Wind
			Numerous powerlines were blown over.						
Sharkey County									
Onward	11	1310CST			0	0			Thunderstorm Wind (G60) ^M
Yazoo County									
Yazoo City	11	1320CST			0	0			Thunderstorm Wind (G60) ^M
Leake County									
Sunrise	11	1330CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down around the community.						
Leake County									
Sunrise	11	1345CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down.						
Madison County									
Canton	11	1345CST			0	0			Thunderstorm Wind (G60) ^M
Rankin County									
Pelahatchie	11	1430CST			0	0	2K		Thunderstorm Wind
			A few trees and powerlines were blown down.						
Scott County									
2 E Morton	11	1430CST			0	0	1K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MISSISSIPPI, Central</u>									
			A few trees were blown down.						
Rankin County									
Pelahatchie	11	1500CST			0	0			Thunderstorm Wind (G60)^M
Scott County									
3 W Forest	11	1500CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down in the area.						
Scott County									
Pulaski	11	1500CST			0	0	1.5K		Thunderstorm Wind
			Numerous trees were blown down around the city.						
Attala County									
2 E Possumneck	11	1630CST 1650CST			0	0	1K		Flash Flood
			Heavy rainfall resulted in the flooding of County Road 2210.						
Leflore County									
1 S Greenwood	12	1253CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down across the area.						
Sunflower County									
Drew	12	1300CST 1400CST			0	0	1K		Flash Flood
			Numerous streets were flooded in the city.						
Leake County									
Sunrise	12	1330CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down in the community.						
Leflore County									
Greenwood	12	1330CST			0	0			Thunderstorm Wind (G60)^M
Oktibbeha County									
Maben	12	1420CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down in the community.						
Scott County									
Pulaski	12	1500CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down in the community.						
Rankin County									
Brandon	12	1540CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down in the city.						
Rankin County									
Brandon	12	1620CST			0	0	7K		Thunderstorm Wind
			Several trees were blown down in the city. One tree fell on a house, resulting in minor damage.						
Rankin County									
Brandon	12	1630CST			0	0	17.5K		Thunderstorm Wind
			Thunderstorm winds in the area resulted in roof and some structural damage to a building.						
Marion County									
Morgantown	12	1700CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down near the intersection of State Road 587 and State Road 44.						
Marion County									
10 NE Columbia	12	1705CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down on State Road 44, especially near the Marion/Lamar County line.						
Jasper County									
Stringer	12	1820CST			0	0	1K		Thunderstorm Wind
			Numerous trees were blown down in the southwestern Jasper County.						
Jones County									
Soso to Laurel	12	1845CST			0	0	1K		Thunderstorm Wind
			Numerous trees were blown down between Laurel and Soso, along State Road 28.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>MISSISSIPPI, Central</u>									
Jefferson County 10 SE Lorman	12	1850CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down in the area.						
Jones County 3 NW Soso	12	1915CST			0	0	0.50K		Thunderstorm Wind
			Several large limbs were blown down in the area.						
Madison County 6 SW Madison	12	2321CST			0	0	0.50K		Thunderstorm Wind
			Several large limbs were blown down near the intersection of Catlett Road and State Road 22.						
Jefferson County Fayette	15	1212CST			0	0	2K		Thunderstorm Wind
			Several trees and powerlines were blown down in the city.						
Copiah County Jack	15	1310CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down on Morningstar Road.						
Hinds County 5 W Terry	15	1330CST			0	0	2K		Thunderstorm Wind
			Several powerlines were blown down in the area.						
Rankin County 3 N Brandon	15	1330CST			0	0	1K		Thunderstorm Wind
			Numerous trees were blown down around Bluebird Lane, near Grant's Ferry Road.						
Jones County 26 W Laurel	15	1420CST			0	0	0.50K		Hail(1.00)
			Quarter-sized hail resulted in broken windows in several buildings.						
Jefferson County Rodney	16	1518CST			0	0	2K		Thunderstorm Wind
			Several powerlines were blown down in the Rodney Lake and Church Hill areas.						
Claiborne County Russum	16	1522CST			0	0	2K		Thunderstorm Wind
			Several powerlines were blown down just inside the Claiborne County line.						
Oktibbeha County 1 SW Starkville	19	1443CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down on U.S. Highway 82.						
Lowndes County Columbus	19	1452CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down in the city.						
Sunflower County 2 W Drew	19	1515CST			0	0			Hail(1.00)
Clarke County Quitman	19	1600CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down in the city.						
Leflore County Greenwood	19	1620CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down on Norman Road, resulting in blocked traffic.						
Oktibbeha County 3 NW Adaton	20	1041CST			0	0	2K		Thunderstorm Wind
			Powerlines were blown down in the area.						
Oktibbeha County 3 W Starkville	20	1100CST			0	0	2K		Thunderstorm Wind
			Numerous trees and powerlines were blown down in the area.						
Clarke County Countywide	20	1705CST			0	0	1K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSISSIPPI, Central</u>									
Several trees were blown down in Quitman, as well as on County Road 3541 near Stonewall.									
Copiah County 5 SW Hazlehurst	21	1305CST			0	0	1K		Thunderstorm Wind
Several trees and large limbs were blown down across an area road.									
Lawrence County Countywide	21	1315CST			0	0	1.5K		Thunderstorm Wind
Numerous trees were blown down across the county.									
Carroll County 5 W Black Hawk	21	1328CST			0	0	1K		Thunderstorm Wind
Several trees were blown down in the area.									
Carroll County 5 SE Carrollton	21	1328CST			0	0	1K		Thunderstorm Wind
A large tree was blown across State Road 35.									
Lauderdale County Meridian	21	1330CST			0	0	1.8K		Thunderstorm Wind
Large limbs were blown down on powerlines in the city.									
Lamar County Sumrall	21	1400CST			0	0	2K		Thunderstorm Wind
Numerous trees and powerlines were blown down in the city.									
Winston County 10 SW Louisville	21	1400CST			0	0			Thunderstorm Wind (G60) ^M
Winston County 6 SE Louisville	21	1400CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down in the area.									
Lawrence County Countywide	21	1405CST			0	0	1.5K		Thunderstorm Wind
Numerous trees were blown down throughout the county.									
Lincoln County Countywide	21	1410CST			0	0	1.5K		Thunderstorm Wind
Numerous trees were blown down across the county.									
Jasper County Stringer	21	1418CST			0	0			Hail(1.00)
Marion County 5 W Columbia	21	1420CST			0	0			Hail(1.75)
Neshoba County 9 N Philadelphia	21	1420CST			0	0	1K		Thunderstorm Wind
A couple of trees were blown down in the area.									
Lincoln County Countywide	21	1430CST			0	0	30K		Thunderstorm Wind
Thunderstorm winds produced a 4 to 5 mile wide path of destruction across the county. Trees were blown down, a mobile home was destroyed, and minor damage occurred to several homes.									
Lincoln County 5 W Bogue Chitto	21	1440CST			0	0	7K		Thunderstorm Wind
Numerous trees were blown down in the area. One tree fell on a house and resulted in minor damage.									
Leake County Countywide	21	1500CST			0	0	1.3K		Thunderstorm Wind
Numerous trees were blown down across the county. In addition, a roof was also blown off a chicken house.									
Lowndes County Columbus	21	1530CST			0	0	1.3K		Thunderstorm Wind
A few trees were blown down on powerlines in the city.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSISSIPPI, Central</u>									
Madison County									
1 W Cameron	21	1545CST			0	0	1K		Thunderstorm Wind
			Numerous trees were blown down in the area.						
Madison County									
Ridgeland	21	1625CST			0	0			Hail(0.75)
Hinds County									
(Jan)Thompson Fld Ja	21	1645CST			0	0			Thunderstorm Wind (G50)^M
Rankin County									
Brandon	21	1654CST			0	0			Hail(1.00)
Rankin County									
Brandon	21	1654CST			0	0			Thunderstorm Wind (G60)^M
Rankin County									
Brandon	21	1700CST			0	0	1K		Thunderstorm Wind
			Numerous trees were blown down in the city.						
Webster County									
Mantee	21	1710CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down in the community.						
Lincoln County									
Brookhaven	22	1255CST			0	0			Hail(0.75)
			A severe thunderstorm produced dime-sized hail on State Road 583, just southeast of the city.						
Holmes County									
Durant	22	1300CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down in the city.						
Rankin County									
Countywide	22	1300CST			0	0	0.75K		Thunderstorm Wind
			Several large large limbs were blown down across the county.						
Lincoln County									
Brookhaven	22	1301CST			0	0			Hail(0.75)
			Hail in a severe thunderstorm fell at such a rate that it reduced visibility and forced area motorists to pull off the road at the intersection of U.S. Highway 84 and Hog Chain Road.						
Neshoba County									
3 NE Burnside	22	1325CST			0	0			Hail(1.00)
			A severe thunderstorm produced nickel- to quarter-sized hail.						
Leflore County									
(Gwo)Greenwood Arpt	22	1328CST			0	0	175K		Thunderstorm Wind (G85)^M
			Thunderstorm winds flipped and destroyed two planes, as well as a storage shed. Three other planes and a jeep also suffered damage when the hangar door was blown inside the building. A private company's radar and an employee's recreational vehicle also received damage.						
Hinds County									
Byram	22	1350CST			0	0	13.3K		Thunderstorm Wind
			Severe thunderstorm winds blew out windows in buildings and blew down numerous trees on powerlines, houses, and automobiles.						
Copiah County									
Hazlehurst	22	1415CST			0	0	7.5K		Thunderstorm Wind
			Thunderstorm winds blew trees down on 2 houses. Several powerlines were also blown down in the storm.						
Simpson County									
Braxton	22	1440CST			0	0	3K		Thunderstorm Wind
			A tree was blown onto a house. Several large limbs were blown down near the city.						
Montgomery County									
Winona	22	1450CST			0	0	1K		Thunderstorm Wind
			A few trees were blown down in the city.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSISSIPPI, Central</u>									
Smith County									
3 E Taylorsville	22	1520CST			0	0	1K		Thunderstorm Wind
A large tree and several large limbs were blown down near the intersection of State Roads 28 and 531.									
Holmes County									
West	22	1545CST			0	0	1K		Thunderstorm Wind
Several large limbs, 3 to 4 inches in diameter, were blown down across the area.									
Yazoo County									
3 W Bentonia	22	1600CST			0	0	1K		Thunderstorm Wind
Several trees were blown down across State Road 433.									
Jasper County									
Stringer	23	1530CST			0	0	0.75K		Thunderstorm Wind
Several large limbs were blown down in the city.									
Grenada County									
Grenada	23	2100CST			0	0	2K		Thunderstorm Wind
Several limbs, powerlines, and phone lines were blown down.									
Leflore County									
Greenwood	23	2120CST			0	0	1K		Thunderstorm Wind
Two trees were blown down by thunderstorm winds.									
Carroll County									
Carrollton	23	2130CST			0	0	2K		Thunderstorm Wind
Several trees and powerlines were blown down into a northbound lane of State Road 17.									
Leflore County									
Greenwood	23	2150CST 2155CST			0	0	1K		Flash Flood
Heavy rainfall from a thunderstorm resulted in 2 to 3 feet of water on area roads.									
Hinds County									
Jackson	23	1800CST 1815CST			0	0	15K		Urban/Sml Stream Fld
Thunderstorms produced heavy rainfall, which resulted in the flooding of several area businesses and homes.									
Montgomery County									
Winona	23	2145CST			0	0	20K		Thunderstorm Wind
Thunderstorm winds produced extensive roof damage to a motel at the intersection of U.S. Highway 82 and Interstate 55.									
Jones County									
6 E Laurel	25	1815CST			0	0	1K		Thunderstorm Wind
A few trees were blown down in the area.									
Jones County									
8 S Laurel	25	1815CST			0	0	1K		Thunderstorm Wind
A few trees were blown down in the area.									
Lamar County									
2 N Oak Grove	26	1555CST			0	0			Hail(0.75)
Jefferson County									
4 S Fayette	27	1530CST			0	0	2K		Thunderstorm Wind
A large tree and several powerlines were blown down on U.S. Highway 61.									
Forrest County									
1 W Hattiesburg	28	1530CST			0	0	1K		Thunderstorm Wind
A few 6 inch to 1 foot diameter trees were blown down near U.S. Highways 98 and 49.									
Copiah County									
Crystal Spgs	29	1545CST			0	0	1K		Thunderstorm Wind
A few trees were blown down on Dampeer Street.									
Rankin County									
5 S Pelahatchie	29	1630CST			0	0	1K		Thunderstorm Wind
A few trees were blown into a southbound lane of State Road 43.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSISSIPPI, Central</u>									
Winston County Noxapater	30	1530CST			0	0	1K		Thunderstorm Wind
									Several powerlines were blown down in the city.
Rankin County Flowood	30	1619CST			0	0			Hail(0.88)
									Nickel-sized hail fell near St. Mark's Church on Grant's Ferry Road.
Rankin County Countywide	30	1630CST			0	0	2K		Thunderstorm Wind
									Several trees and powerlines were blown down in the county.
Warren County Vicksburg	31	1645CST			0	0	2K		Thunderstorm Wind
									Several trees and powerlines were blown down near U.S. Highway 27 and Grange Hall Road.
Rankin County Brandon	31	1800CST			0	0	1K		Thunderstorm Wind
									Two trees were blown down at State Road 471 and Stull Road.
<u>MISSISSIPPI, North</u>									
Alcorn County Corinth	01	1542CST 1550CST			0	0	10K		Thunderstorm Wind
									A large tree was blown down on top of a house. A second home lost a large number of shingles.
Itawamba County Fulton	02	1600CST 1605CST			0	0	5K		Thunderstorm Wind
									Some trees were knocked down.
Tippah County 3 E Pine Grove	02	1630CST			0	0	0.75K		Hail(1.75)
Tippah County 3 E Pine Grove	02	1630CST 1635CST			0	0	15K		Thunderstorm Wind
									Two homes and a barn were damaged. Several trees were blown down.
Marshall County Holly Spgs	02	1900CST 1905CST			0	0	5K		Thunderstorm Wind
									Several trees were blown down.
Tate County Senatobia	02	1915CST 1920CST			0	0	5K		Thunderstorm Wind
									A few trees were knocked down.
Marshall County Holly Spgs	10	1715CST 1720CST			0	0	10K		Thunderstorm Wind
									A small grocery store lost part of its roof. Some tree were blown down.
Tippah County Dumas	10	1935CST 1940CST			0	0	1K		Lightning
									One structure was damaged by a fire started by lightning.
Tippah County Dumas	10	1935CST 1940CST			0	0	10K		Thunderstorm Wind
									Several trees and power lines were blown down.
MSZ016 Lee	10	1958CST 2005CST			0	0	5K		High Wind (G35) ^M

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MISSISSIPPI, North

Gusty winds along an outflow boundary knocked down a few trees on the west side of Tupelo. One of the trees fell on a house.

De Soto County

South Haven	12	1100CST 1200CST			0	0	1K		Flash Flood
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Several streets were flooded as over 2 inches of rain fell in about 40 minutes.

Benton County

Hickory Flat	12	1125CST 1130CST			0	0	5K		Thunderstorm Wind
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Some trees were blown down.

Union County

Ingomar	12	1300CST 1400CST			0	0	1K		Flash Flood
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One road was under water.

Coahoma County

Friars Pt	14	1520CST 1620CST			0	0	1K		Flash Flood
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A few streets were flooded.

Coahoma County

Clarksdale	17	1805CST 1810CST			0	0	0.01K		Hail(0.75)
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Tishomingo County

Mingo	21	1625CST 1630CST			0	0	5K		Thunderstorm Wind
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A few trees were uprooted.

Lafayette County

Oxford	22	1210CST 1215CST			0	0	0.01K		Hail(0.75)
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Lafayette County

1 NE Oxford	22	1225CST 1230CST			0	0	10K		Thunderstorm Wind
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A radio tower and several trees were blown down.

Alcorn County

Corinth	23	1400CST 1405CST			0	0	0.01K		Hail(0.75)
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Marshall County

Potts Camp	23	1425CST 1430CST			0	0	5K		Thunderstorm Wind
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A few trees were knocked down.

Pontotoc County

5 N Thaxton	23	1430CST 1435CST			0	0	5K		Thunderstorm Wind
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A few trees were blown down.

Union County

4 W New Albany	23	1440CST 1445CST			0	0	5K		Thunderstorm Wind
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Some trees were blown down.

Lafayette County

Cambridge	23	1445CST 1450CST			0	0	10K		Thunderstorm Wind
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Some trees and power lines were knocked down.

Lee County

Baldwyn	23	1530CST 1535CST			0	0	1K		Thunderstorm Wind
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Several large tree limbs were blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MISSISSIPPI, North

Lafayette County

Lafayette Spgs	23	1555CST 1600CST			0	0	5K		Thunderstorm Wind
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Several power lines were blown down.

MISSISSIPPI, South

Pike County

3 NE Mc Comb	07	1413CST			0	0			Hail(0.75)
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Pike County

Mc Comb	07	1420CST			0	0	2.5K		Thunderstorm Wind
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Thunderstorm winds blew down power lines and about a dozen trees. One tree fell on a mobile home causing minor damage.

Pike County

Summit	07	1500CST			0	0	1.5K		Thunderstorm Wind
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Several trees were knocked down along Highway 98 near Interstate 55.

Wilkinson County

Centreville	07	1546CST			0	0	1K		Thunderstorm Wind
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A few trees were blown down.

Pearl River County

5 N Poplarville	07	1602CST			0	0	1K		Thunderstorm Wind
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A few trees were blown along Interstate 59.

Pike County

Summit	07	1800CST			0	0	5K		Lightning
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A lightning strike started a fire in a shed that spread to an adjacent house.

Hancock County

1 N Bay St Louis	21	1450CST			0	0	0.25K		Thunderstorm Wind
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Thunderstorm winds knocked a tree down on a power line.

Walthall County

1 W Tylertown	22	1155CST			0	0			Hail(0.75)
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Walthall County

Tylertown	22	1205CST			0	0	2.5K		Thunderstorm Wind
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Thunderstorm winds blew down several trees and damaged a mobile home.

Harrison County

Gulfport	24	1600CST			0	0	0.75K		Thunderstorm Wind
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Thunderstorm winds blew down a tree and knocked out power to about 2,500 homes.

MISSISSIPPI, Southeast

Wayne County

Clara	06	1800CST 1801CST			0	0			Hail(0.75)
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Greene County

Sand Hill to Neely	07	1440CST 1445CST			0	0	8K		Thunderstorm Wind (G50)
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Several trees were blown down between Sand Hill and Neely as thunderstorms moved across the area.

Greene County

Neely	07	1445CST			0	0	20K		Lightning
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Lightning struck a barn and killed four cows that were in it. Several electrical appliances were also damaged in a home near the barn.

George County

Agricola	07	1800CST 1801CST			0	0			Hail(1.00)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSISSIPPI, Southeast</u>									
Stone County									
Wiggins	12	1815CST 1817CST			0	0	10K		Thunderstorm Wind (G50)
Trees and power lines were blown down in Wiggins as thunderstorms moved through the area.									
Perry County									
Belleville	19	1845CST 1847CST			0	0	10K		Thunderstorm Wind (G50)
Trees and power lines were blown down by high winds from a thunderstorm near Belleville.									
Greene County									
Sand Hill	21	1215CST 1217CST			0	0	10K		Thunderstorm Wind (G50)
Trees were blown down by high winds from a thunderstorm just south of Sand Hill.									
Perry County									
Beaumont	21	1240CST 1242CST			0	0	10K		Thunderstorm Wind (G50)
Trees and power lines were blown down by high winds from a thunderstorm south of Beaumont near Lake Perry.									
<u>MISSOURI, East</u>									
MOZ063									
St. Louis									
	01	1700CST			1	0			Excessive Heat
A 73 year old woman died in her home in Velda Village of hyperthermia. The home had an air conditioner but it did not work. The high temperature that day and the previous day was 94.									
F73PH									
MOZ063									
St. Louis									
	02	1800CST			1	0			Excessive Heat
An 85 year old man died in his home in Maryland Heights of hyperthermia. The home had no air conditioner, no fans and the windows were all shut.									
M85PH									
Iron County									
Ironton	03	1300CST			0	0			Thunderstorm Wind (G50)
Thunderstorm wind gusts downed some trees and power lines around Ironton. About 1800 people lost electricity from Pilot Knob to Arcadia.									
Lincoln County									
2 S Moscow Mills	03	1400CST			0	0			Thunderstorm Wind (G60)
Storm spotters reported isolated damage from thunderstorm winds south of Moscow Mills. Two utility poles were damaged, roof shingles blown off, a garage door damaged, and a flag pole was bent over.									
Jefferson County									
De Soto	03	1435CST			0	0			Lightning
Jefferson County									
De Soto	03	1435CST			0	0	10K		Thunderstorm Wind (G55)
An isolated pulse thunderstorm caused wind damage in the De Soto area. Some trees and power lines were blown down resulting in about 3200 people losing electric power. A tree fell through the roof of a 2 story house causing about \$10,000 in damage. A man was hit by lightning near De Soto and luckily received only minor injuries.									
Boone County									
Columbia	06	1700CST			0	0			Thunderstorm Wind (G55)
Boone County									
Columbia	06	1705CST			0	0	50K		Thunderstorm Wind (G55)
Thunderstorm wind gusts caused scattered damage in the Columbia area. Trees and power lines were reported down on the southwest side of town and on the north side of the University of Missouri campus. Downed trees destroyed a vehicle and damaged one home.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MISSOURI, East

MOZ018>019-026>027-034>036-041>042-047>052-059>065-072>075-084>085-099 **Knox - Lewis - Shelby - Marion - Monroe - Ralls - Pike - Boone - Audrain - Moniteau - Cole - Osage - Callaway - Montgomery - Lincoln - Gasconade - Warren - St. Charles - Franklin - St. Louis - St. Louis (C) - Jefferson - Crawford - Washington - St. Francois - Ste. Genevieve - Iron - Madison - Reynolds**

08	1100CST				1	26			Excessive Heat
09	2300CST								

High temperatures climbed into the middle to upper 90's with Heat Indices from 105 to 110 degrees. There was one death in St. Louis County in which heat was listed as a contributing cause. F69PH

Gasconade County

1 W Gasconade

09	1530CST				0	0	10K		Thunderstorm Wind (G52)
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A large cottonwood tree was blown down onto a home just west of Gasconade. The home suffered moderate roof damage.

Pike County

Louisiana

09	1605CST				0	0			Thunderstorm Wind (G52)
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The County Sheriff reported trees and power lines down in Louisiana.

Pike County

3 NW Bowling Green

09	1645CST				0	0			Thunderstorm Wind (G52)
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The County Sheriff reported trees and power lines down blocking County Road UU.

Moniteau County

California

10	1205CST				0	0			Thunderstorm Wind (G60)
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Thunderstorm winds downed trees and power lines and caused some structural damage. A grocery store, the newspaper office, a fire station and California City Hall all suffered roof damage from the wind gusts. A 20 foot section of the City Hall roof was blown off resulting in considerable water damage inside.

Moniteau County

Tipton

10	1205CST				0	0			Thunderstorm Wind (G55)
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Amateur radio spotters reported trees down in Tipton. The roof of a historic building in town was also blown off. The stone cornice of the building fell off at a later date because of the damage.

Lincoln County

2 W Troy

10	1225CST				0	0			Thunderstorm Wind (G55)
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The County Sheriff reported trees down blocking Highway H.

Cole County

Jefferson City

10	1235CST				0	0			Thunderstorm Wind (G60)
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Thunderstorm wind gusts caused scattered damage across Jefferson City. Trees and power lines were down, especially in the northwest and southwest parts of town. At least 2500 customers lost electric power. The Jefferson City Fire Department responded to 22 storm related calls, primarily downed trees and power lines. Some homes and vehicles were damaged by the downed trees and limbs.

Cole County

Brazito

10	1240CST				0	0	40K		Thunderstorm Wind (G60)
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Thunderstorm wind gusts destroyed a double wide mobile home that was being transported on Highway 54 near Brazito.

Cole County

Wardsville

10	1245CST				0	0			Thunderstorm Wind (G55)
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The County Sheriff reported trees and power lines down in Wardsville.

Cole County

Russellville

10	1255CST				0	0			Thunderstorm Wind (G65)
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Thunderstorm winds caused scattered damage in Russellville. A boat and trailer were blown about 150 yards before the boats trailer finally plunged into the wall of a home. A garage was damaged and numerous trees and power lines were down.

Franklin County

New Haven

10	1255CST				0	0			Thunderstorm Wind (G55)
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The County Sheriff reported trees and power lines down. The wind also caused havoc at the County Youth Fair which had just started. A couple of large tents were blown down and electricity was knocked out in the area.

St. Charles County

Wentzville

10	1300CST				0	0			Thunderstorm Wind (G55)
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St. Charles County

Wentzville

10	1305CST				0	0			Thunderstorm Wind (G55)
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Thunderstorm wind gusts caused scattered damage in Wentzville. Power lines were blown down on the eastbound lanes of

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>MISSOURI, East</u>									
Interstate 70 near Pearce Boulevard. The roof of a car wash was blown off and numerous trees and power lines were reported down.									
Franklin County Washington	10	1305CST			0	0			Thunderstorm Wind (G55)
Franklin County Gray Summit	10	1310CST			0	0			Thunderstorm Wind (G55)
The County Sheriff reported wind damage across the northern parts of Franklin County. Trees, power lines, and a traffic signal were downed in Washington. Power lines were reported down in Gray Summit.									
Gasconade County Owensville	10	1320CST			0	0			Thunderstorm Wind (G55)
Gasconade County 2 S Owensville	10	1325CST			0	0			Thunderstorm Wind (G55)
The County Sheriff reported trees down in Owensville. Trees were also blown down blocking Highway 19 just south of Owensville.									
Franklin County Sullivan	10	1330CST			0	0			Thunderstorm Wind (G52)
The County sheriff reported power lines down in Sullivan.									
Crawford County Cuba	10	1340CST			0	0			Thunderstorm Wind (G55)
Crawford County Leasburg	10	1340CST			0	0			Thunderstorm Wind (G55)
Crawford County Steelville	10	1345CST			0	0	100K		Thunderstorm Wind (G55)
The County Sheriff reported scattered damage across Crawford County. Trees were down in Cuba blocking some city streets. Near Leasburg, trees were down blocking the intersection of Routes HH and MM. Trees were downed in Steelville damaging a couple of homes and vehicles.									
St. Louis County 3 SW Ballwin	10	1345CST			0	0			Thunderstorm Wind (G55)
St. Louis County Eureka	10	1350CST			0	0	15K		Thunderstorm Wind (G55)
The St. Louis County Police reported trees blown down onto Highway 109 in Wildwood and Eureka. A vehicle at a hotel parking lot in Eureka was also damaged by a downed tree.									
Jefferson County High Ridge	10	1347CST			0	0			Thunderstorm Wind (G55)
Jefferson County Cedar Hill	10	1350CST			0	0			Thunderstorm Wind (G55)
Jefferson County Hillsboro	10	1400CST			0	0			Lightning
Jefferson County Hillsboro	10	1400CST			0	0			Thunderstorm Wind (G55)
Jefferson County Festus	10	1410CST			0	0			Thunderstorm Wind (G55)
Thunderstorm wind gusts caused scattered damage across the north half of Jefferson County. One home suffered roof damage in High Ridge. Numerous trees were down in the Cedar Hill area and trees were also down on Highway 21 in Hillsboro. Numerous trees were also reported down in the Festus area. A lightning strike knocked out power to the Jefferson County Emergency Dispatch Center in Hillsboro. The power was out for about 10 minutes until authorities activated a backup system.									
St. Francois County Desloge	10	1415CST			0	0			Thunderstorm Wind (G60)
St. Francois County Bonne Terre	10	1425CST			0	0			Thunderstorm Wind (G60)
The County Sheriff reported numerous trees and power lines down in the Desloge and Bonne Terre areas. Some homes and vehicles were damaged by the downed trees.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSOURI, East</u>									
Reynolds County									
7 NW Reynolds	10	1430CST			0	0			Thunderstorm Wind (G55)
The County Sheriff reported trees down blocking Highway 72 northwest of Reynolds and just east of Bunker.									
Ste. Genevieve County									
Bloomsdale	10	1430CST			0	0			Thunderstorm Wind (G55)
Ste. Genevieve County									
Weingarten	10	1435CST			0	0			Thunderstorm Wind (G55)
Ste. Genevieve County									
Ste Genevieve	10	1440CST			0	0			Thunderstorm Wind (G55)
Ste. Genevieve County									
Coffman	10	1445CST			0	0			Thunderstorm Wind (G55)
The County Sheriff reported trees down across much of Ste. Genevieve County. Roads and streets were blocked by downed trees in and around Bloomsdale, Weingarten, Ste. Genevieve, and Coffman.									
Franklin County									
Berger	11	1750CST			0	0			Thunderstorm Wind (G55)
Thunderstorm wind gusts knocked down trees and power lines in the Berger area. Most of the damage was concentrated along Highway 100 from Berger to New Haven. About 3000 people lost electricity in the area.									
Franklin County									
New Haven	11	1755CST			0	0			Thunderstorm Wind (G60)
The County Sheriff reported wind damage in New Haven. Trees, power lines, and some street signs were blown down.									
Franklin County									
Krakow	11	1815CST			0	0			Thunderstorm Wind (G55)
Storm spotters reported several small trees blown down by thunderstorm wind gusts.									
MOZ064									
St. Louis (C)									
	17	1600CST			1	0			Excessive Heat
The St. Louis City Coroner reported the death of a 45 year old man from heat related causes. M45PH									
St. Louis County									
Hazelwood	18	1130CST			0	0			Thunderstorm Wind (G52)
A pulse thunderstorm caused isolated wind damage in Hazelwood. Large tree limbs broke downing some power lines and damaging vehicles. About 1800 people lost electric power in the area.									
Crawford County									
Cuba	18	1515CST 1745CST			0	1			Flash Flood
A reported 4 inches of rain in about an hour caused flash flooding in Cuba. The Sheriff Department reported the Highway 19 railroad underpass had at least 2 feet of water in it and had to be closed. Another area that flooded had 2 propane tanks break loose and float away. The heavy rain caused problems at the County Fair that had started the day before. The entire evenings planned events had to be cancelled. The roof of the main stage collapsed due to the rain. One man was injured with a broken arm when the roof collapsed.									
MOZ018>019-026>027-034>036-041>042-047>052-059>065-072>075-084>085-099									
Knox - Lewis - Shelby - Marion - Monroe - Ralls - Pike - Boone - Audrain - Moniteau - Cole - Osage - Callaway - Montgomery - Lincoln - Gasconade - Warren - St. Charles - Franklin - St. Louis - St. Louis (C) - Jefferson - Crawford - Washington - St. Francois - Ste. Genevieve - Iron - Madison - Reynolds									
	20 22	1100CST 2300CST			0	47			Excessive Heat
High temperatures climbed into the middle to upper 90's with the Heat Indices from 105 to near 115 degrees. St. Louis hit 100 degrees on July 22.									
Monroe County									
Florida	22	1452CST			0	0			Thunderstorm Wind (G55)
Amateur Radio spotters reported trees down on Route U.									
Marion County									
Palmyra	22	1555CST			0	0			Thunderstorm Wind (G55)
Thunderstorm wind gusts downed numerous trees and power lines.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSOURI, East</u>									
Boone County									
Columbia	22	1625CST			0	0			Thunderstorm Wind (G55)
									The Emergency Management Agency reported several trees and power lines down.
Moniteau County									
California	22	1646CST			0	0			Thunderstorm Wind (G52)
									The County Sheriff reported several trees and power lines down in the south part of town.
Cole County									
Jefferson City	22	1716CST			0	0			Thunderstorm Wind (G52)
									Amateur radio spotters reported several trees and power lines down on the west side of town.
Callaway County									
3 N Holts Summit	22	1730CST			0	0			Thunderstorm Wind (G52)
									The County Sheriff reported some large trees and large tree limbs down just north of Holts Summit.
St. Louis County									
3 SW Ballwin	22	1815CST			0	0			Thunderstorm Wind (G55)
									Amateur radio spotters reported several trees and power lines down in Wildwood.
Franklin County									
Gray Summit	22	1820CST			0	0			Thunderstorm Wind (G55)
									The County Sheriff reported a couple of billboards blown down at Interstate 44 and Highway 100.
St. Louis County									
1 W Ballwin	22	1820CST			0	0	200K		Lightning
									A lightning strike caused a fire which destroyed a 2 story home in an unincorporated area of St. Louis County just west of Ballwin. No one was home at the time of the fire.
Franklin County									
New Haven	22	1820CST			0	0			Thunderstorm Wind (G53)
									Thunderstorm wind gusts caused some damage just south of New Haven. Trees and power lines were down, a barn and some outbuildings were also damaged. A mobile home was damaged when 3 trees were pushed over by the wind and ended up leaning on the side of the home.
Franklin County									
St Clair	22	1825CST			0	0			Thunderstorm Wind (G55)
									Amateur radio spotters reported several trees and power lines down in St. Clair.
Jefferson County									
Cedar Hill	22	1845CST			0	0			Thunderstorm Wind (G55)
Jefferson County									
High Ridge	22	1849CST			0	0			Thunderstorm Wind (G55)
									The County Sheriff reported numerous trees and power lines down in Cedar Hill and High Ridge.
St. Louis County									
Overland	22	1845CST			0	0			Thunderstorm Wind (G52)
St. Louis County									
Jennings	22	1850CST			0	0			Thunderstorm Wind (G52)
									Amateur radio spotters reported trees and power lines down in Overland and Jennings.
St. Louis (C)									
Carondelet	22	1850CST			0	0			Thunderstorm Wind (G52)
									Amateur radio spotters reported a house damaged by a downed tree in south St. Louis.
Jefferson County									
Otto	22	1855CST			0	0			Thunderstorm Wind (G55)
									The County Sheriff reported trees and power lines down around Otto.
St. Louis County									
Bellefontaine Neighb	22	1855CST			0	0			Thunderstorm Wind (G55)
									Amateur radio spotters reported trees and power lines down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MISSOURI, East

MOZ041>042-047>052-059>065-072>075-084>085-099 **Boone - Audrain - Moniteau - Cole - Osage - Callaway - Montgomery - Lincoln - Gasconade - Warren - St. Charles - Franklin - St. Louis - St. Louis (C) - Jefferson - Crawford - Washington - St. Francois - Ste. Genevieve - Iron - Madison - Reynolds**

26	1100CST				0	185			Excessive Heat
31	2300CST								

High temperatures across Central, Eastern and Southeast Missouri rose to the middle to upper 90's with Heat Indices from 105 to near 115 degrees. There was a one day break in the heat as a weak cold front dropped high temperatures into the upper 80's on July 29. However temperatures quickly rebounded and remained high into August. About 100 people had to be treated for heat related illnesses at the St. Louis Cardinals baseball game on July 27.

Knox County

5 S Hurdland

28	1730CST				0	0			Hail(0.75)
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Storm spotters reported 3/4 inch hail south of Hurdland.

MISSOURI, Lower

NONE REPORTED.

MISSOURI, Northeast

Scotland County

Memphis

28	0825CST				0	0			Hail(1.00)
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MISSOURI, Northwest

Andrew County

2 W Avenue City

04	1355CST				0	0			Thunderstorm Wind (G51)
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MOZ037

Jackson

06	1647CST				5	0			Excessive Heat
09	1858CST								

F52PH, M52OU, M51OU, M55PH, F85PH

Linn County

Laclede

09	1540CST				0	0	5K		Thunderstorm Wind (G52)
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Power lines down and roof damage reported in Laclede.

Howard County

Fayette

09	1730CST				0	0	200K		Thunderstorm Wind (G61)
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Downtown portions of Fayette, reported moderate to severe damage to several buildings, including a church and city hall. Large trees and power lines were also knocked down.

Harrison County

5 WNW Eagleville

10	0800CST				0	0			Thunderstorm Wind (G57)
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Harrison County

Martinsville

10	0828CST				0	0			Thunderstorm Wind (G57)
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Harrison County

Ridgeway

10	0835CST				0	0	1K		Thunderstorm Wind (G57)
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Power lines down.

Harrison County

1 N Bethany

10	0841CST				0	0			Thunderstorm Wind (G57)
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Cooper County

Boonville

10	1139CST				0	0	2K		Thunderstorm Wind (G57) ^M
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Minor roof damage reported.

Grundy County

4 N Edinburg

11	1650CST				0	0			Thunderstorm Wind (G52)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MISSOURI, Northwest</u>									
Henry County 15 NW Clinton	19	1625CST			0	0			Hail(1.75)
Henry County Montrose	19	1632CST			0	0			Hail(0.88)
Saline County Marshall	19	1708CST			0	0			Hail(1.75)
Saline County 2 WNW Marshall	19	1717CST			0	0			Hail(0.88)
Saline County 1 S Marshall	19	1718CST			0	0			Hail(1.00)
Saline County 10 NE Sweet Spgs	19	1740CST			0	0			Hail(0.75)
Pettis County 9 SW Sedalia	19	1820CST			0	0			Hail(0.88)
Pettis County 10 SW Sedalia	19	1822CST			0	0			Hail(1.00)
Henry County 5 E Clinton	22	1520CST			0	0			Hail(0.75)
Henry County 2 N Urich	22	1645CST			0	0			Thunderstorm Wind (G52)
Daviess County 3 E Jameson	26	1907CST 1908CST	0.1	25	0	0			Tornado (F0)
									Brief tornado touchdown with no damage or injuries reported.
Holt County 2 N Maitland	26	1920CST			0	0			Hail(2.75)
Nodaway County Graham	26	1926CST			0	0			Thunderstorm Wind (G52)
Holt County 3 N Maitland	26	1928CST			0	0			Hail(1.00)
Nodaway County 6 S Maryville	26	1955CST			0	0			Hail(0.75)
Grundy County 3 W Trenton	26	1956CST			0	0			Thunderstorm Wind (G52)
Daviess County 8 N Jamesport	26	1957CST 1958CST	0.1	25	0	0	5K		Tornado (F0)
									Brief tornado touchdown. Minor damage to a barn and farmstead.
Grundy County Trenton	26	2005CST			0	0			Hail(1.00)
Grundy County 1 W Trenton	26	2006CST			0	0			Hail(0.88)
Grundy County Trenton	26	2030CST			0	0			Hail(0.75)
Jackson County Kansas City	28	1505CST			0	0			Thunderstorm Wind (G52)
Clay County Liberty	28	1525CST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MISSOURI, Northwest</u>									
Clay County Kearney	28	1537CST			0	0			Thunderstorm Wind (G52)
Clay County Holt	28	1540CST			0	0			Hail(0.75)
Clay County Holt	28	1540CST			0	0			Thunderstorm Wind (G52)
Clinton County 4 E Plattsburg	28	1540CST			0	0			Hail(0.75)
Adair County Irk Cannon Mem Arpt	28	1703CST			0	0			Thunderstorm Wind (G51) ^M
Mercer County 2 NW Princeton	28	1705CST			0	0			Thunderstorm Wind (G52)
Adair County Kirksville	28	1725CST			0	0			Hail(0.88)
Grundy County 2 W Spickard	28	1725CST			0	0			Thunderstorm Wind (G52)
Sullivan County Milan	28	1745CST			0	0			Thunderstorm Wind (G52) Ten inch tree limb knocked down.
Adair County 2 S Millard	28	1759CST			0	0			Thunderstorm Wind (G51) Five inch tree limb down.
<u>MISSOURI, Southeast</u>									
Stoddard County Bloomfield	10	1322CST			0	0	25K		Thunderstorm Wind (G55) Numerous trees were uprooted. Roofing was peeled off a number of buildings, including part of the county courthouse.
Ripley County 2 W Naylor	10	1405CST			0	0	3K		Thunderstorm Wind (G50) Power lines were blown down.
Perry County Brewer to Lithium	10	1540CST			0	0			Thunderstorm Wind (G50) Trees were blown down.
Perry County 7 NW Perryville	10	1600CST 1615CST			0	0			Urban/Sml Stream Fld Some road and highway flooding was reported. Law enforcement personnel reported up to one foot of water was over Interstate 55 near mile marker 138. Rainfall estimates were up to 3 inches in 90 minutes over northwest Perry County.
Bollinger County 3 N Marble Hill	12	1400CST 1430CST			0	0			Urban/Sml Stream Fld Thunderstorms produced torrential rainfall. Up to 3 inches per hour was reported by a spotter north of Marble Hill. One and a half inches per hour was reported in Marble Hill. Some low water crossings were flooded north of Marble Hill.
Ripley County 10 W Doniphan	15	0651CST 0930CST			0	0	4K		Flash Flood Flooding occurred in and near the Gatewood and Briar areas. One foot of water was over Highway 160 just west of State Highway C. On Highway 142 west, a motorist was trapped between two flooded creeks. The flash flooding was caused by a nearly stationary complex of thunderstorms that produced an estimated 3 to 5 inches of rain in a few hours.
New Madrid County Portageville	30	1405CST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MISSOURI, Southeast

Large tree limbs were blown down.

Ripley County

Briar to
Gatewood

31	0315CST 0915CST				0	1	25K		Flash Flood
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Major flash flooding of creeks occurred in southwest Ripley County. In Gatewood, water from the West Fork Creek forced the evacuation of a residence and flooded Highway 142. A vehicle was swept into the creek, and both occupants were rescued. One of the occupants was moderately injured. Another water rescue was conducted when a vehicle was swept into a creek on Highway P. The motorist was uninjured. Water and debris was over Highway 160 near Briar and just west of Highway C. A few roads were damaged by erosion.

MISSOURI, Southwest

Taney County

Branson

02	1330CST				0	0	0		Thunderstorm Wind (G50)
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A billboard sign and a few trees were blown down near Branson.

Taney County

3 W Branson

02	1345CST				0	0	0		Thunderstorm Wind (G50)
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Trees were blown down in the Fall Creek area.

Christian County

Nixa

02	1345CST				0	0	0		Thunderstorm Wind (G50)
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Several trees were blown down around Nixa.

Stone County

Silver Dollar City

02	1350CST				0	0	0		Thunderstorm Wind (G50)
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A large tree was blown down at the Silver Dollar City amusement park.

Greene County

Springfield

02	1440CST				0	0	0		Thunderstorm Wind (G50)
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Several trees and power lines were blown down around Springfield.

Greene County

Springfield

03	1620CST 1630CST				0	0	0		Thunderstorm Wind (G50)
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A microburst moved across northern parts of Springfield. It downed numerous large trees and power lines.

Benton County

Zora

04	1245CST 1250CST				0	0	50K		Thunderstorm Wind (G62)
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70 mph winds caused damage to a resort and marina near the Lake of the Ozarks. Two docks were capsized and several boats were thrown ashore. There was also extensive tree and property damage in the resort area.

Webster County

Niangua

06	1625CST				0	0	1.5K		Thunderstorm Wind (G50)
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Sixty mph winds caused siding to be striped off a home. There were other reports of large tree limbs blown down around the city.

Greene County

5 W Fair Grove

06	1645CST				0	0	0		Hail(0.75)
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Miller County

Eldon

10	1241CST				0	0	10K		Thunderstorm Wind (G52)
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Morgan County

Gravois Mills

10	1245CST				0	0	0		Thunderstorm Wind (G52)
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Camden County

Macks Creek to
Sunrise Beach

10	1247CST 1255CST				0	0	0		Thunderstorm Wind (G52)
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Maries County

Belle

10	1300CST				0	0	10K		Thunderstorm Wind (G52)
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Pulaski County

Dixon to
Waynesville

10	1327CST 1335CST				0	0	10K		Thunderstorm Wind (G62)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>MISSOURI, Southwest</u>									
Phelps County									
Rolla	10	1330CST 1335CST			0	0	15K		Thunderstorm Wind (G52)
Dent County									
Salem	10	1408CST 1415CST			0	0	0		Thunderstorm Wind (G52)
A squall line with estimated winds of 60 to 70 mph moved through portions of the Lake of the Ozarks producing damage from Gravois Mills, eastward to Eldon, then south across Sunrise Beach, Dixon and Salem. Numerous trees were uprooted along with power lines blown down. Near Rolla, a large tree fell on a car and destroyed it. No injuries were reported.									
Polk County									
1 E Fair Play	10	1525CST			0	0	0		Thunderstorm Wind (G52)
Christian County									
Billings	10	1605CST			0	0	0		Thunderstorm Wind (G52)
Barry County									
Cassville	10	1705CST			0	0	0		Thunderstorm Wind (G52)
Newton County									
Neosho	10	1745CST			0	0	0		Thunderstorm Wind (G52)
Mcdonald County									
Pineville to Anderson	10	1805CST 1813CST			0	0	0		Thunderstorm Wind (G52)
A line of severe thunderstorms produced localized wind gusts of 60 mph across portions of southwest Missouri. There were several reports of downed trees and power lines across this area, however no structural damage or injuries were reported.									
Maries County									
North Central Portion	10	2000CST 2200CST			0	0	20K		Flash Flood
Nearly three inches of rain in a short period of time caused damage to area homes.									
Camden County									
North Portion	12	0345CST 0545CST			0	0	0		Flash Flood
Excessive rainfall of three inches in less than one hour caused Highway Z east of Climax Springs to flooded and remain impassable for a few hours.									
Howell County									
Central Portion	18	1000CST 1400CST			0	0	0		Flash Flood
Rainfall amounts in excess of three inches fell over portions of Howell County producing flash flooding around West Plains, and along Highway 142 between Moody and Lanton. Numerous roads in West Plains were flooded for over three hours.									
St. Clair County									
5 SW Collins	18	1230CST			0	0	0		Hail(1.75)
Polk County									
Humansville	18	1245CST			0	0	0		Hail(1.00)
Taney County									
3 N Forsyth	18	1335CST			0	0	0		Thunderstorm Wind (G52)
Barry County									
Butterfield	18	1345CST			0	0	0		Hail(0.88)
Ozark County									
5 N Thornfield	18	1400CST			0	0	0		Thunderstorm Wind (G52)
Large trees were blown down north of Thornfield.									
Taney County									
Forsyth	18	1405CST			0	0	0		Thunderstorm Wind (G52)
Mcdonald County									
Jane	18	1457CST			0	0	0		Hail(1.00)
Maries County									
2 N Vichy	18	1515CST			0	0	0		Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MISSOURI, Southwest</u>									
McDonald County									
Southwest Portion	18	1600CST 1900CST			0	0	0		Flash Flood
Rainfall amounts of two to three inches fell in southwest McDonald County near Noel in less than two hours. Major street flooding was reported around Noel.									
Maries County									
North Portion	18	1600CST 1900CST			0	0	0		Flash Flood
Three to four inches of rain fell over northern and eastern portions of Maries County in less than two hours. It caused Highway Z near Belle to closed.									
Morgan County									
Stover	18	1805CST			0	0	0		Hail(0.75)
Shannon County									
South Portion	19	0730CST 1100CST			0	0	0		Flash Flood
Howell County									
North Portion	19	1010CST 1330CST			0	0	0		Flash Flood
Texas County									
South Portion	19	1130CST 1330CST			0	0	0		Flash Flood
Two to four inches of rain fell over southern Shannon, southern Texas, and northern Howell County during the morning of July 19th. Numerous low water crossings were flooded across southern Shannon County, plus Highway 17 near Mountain View was closed due to the flooding. Major street flooding was also reported in Cabool.									
Webster County									
Seymour	19	1340CST			0	0	0		Hail(0.75)
Nickel size hail was also reported near Fordland.									
Laclede County									
1 N Phillipsburg	19	1345CST			0	0	0		Hail(0.75)
Polk County									
Half Way	19	1430CST			0	0	0		Hail(0.75)
Christian County									
Nixa	19	1520CST			0	0	0		Hail(0.88)
A large tree was also blown down in Nixa.									
Greene County									
Springfield Arpt to Willard	19	1521CST 1530CST			0	0	15K		Thunderstorm Wind (G57) ^M
65 mph winds were measured by the National Weather Service Office in Springfield, Missouri. An off-duty National Weather Service employee reported large trees uprooted and roof damage to many homes two miles northwest of the National Weather Service Office. A local storm spotter also reported numerous trees downed around Willard.									
Polk County									
Eudora	19	1535CST			0	0	0		Hail(0.75)
Large trees were also blown down near Aldrich.									
Greene County									
Bois D Arc to 5 W Bois D Arc	19	1535CST 1550CST			0	0	10K		Thunderstorm Wind (G55)
60 to 65 mph winds caused damage around Bois D Arc. In addition to numerous trees and power poles blown down, roof damage was reported along with dime size hail.									
St. Clair County									
Lowry City to 3 SW Roscoe	19	1700CST 1710CST			0	0	10K		Hail(1.75)
A barn was also blown down southwest of Lowry City with additional reports of dime to nickel size hail.									
Vernon County									
Nevada	22	1700CST			0	0	5K		Thunderstorm Wind
Power lines and poles were blown down around Nevada. Dime size hail was also reported.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MISSOURI, Southwest

Barton County

Lamar	22	1745CST 1755CST			0	0	0		Hail(0.75)
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60 mph winds caused numerous large tree limbs to be blown down around Lamar.

Jasper County

Joplin	22	1800CST			0	1			Lightning
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A man suffered serious injuries to his face and upper body when he was struck by lightning near Joplin.

Polk County

Humansville	22	1810CST			0	0	0		Thunderstorm Wind (G50)
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Trees were uprooted around Humansville.

Camden County

4 S Osage Beach	22	1841CST			0	0	0		Hail(0.75)
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Dallas County

3 E Plad	22	1850CST			0	0	0		Thunderstorm Wind (G50)
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Numerous trees were uprooted east of Plad.

MOZ066

Vernon

	25	1500CST			1	0			Excessive Heat
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A 15 year old male was riding his bike during the afternoon. He collapsed and die of heat stroke in Nevada. M15OU

MONTANA, Central

Hill County

Havre	03	1831MST			0	0			Thunderstorm Wind (G59)^M
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A severe thunderstorm produced a wind gust of 59 mph at the Havre Airport.

Fergus County

Winifred	04	1745MST			0	0			Hail(0.75)
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A severe thunderstorm produced 0.75 inch hail at Winifred 10NE.

Fergus County

Suffolk	04	1800MST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm produced hail and wind gusts to 60 mph at Suffolk 5E.

Judith Basin County

Benchland	04	1800MST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm produced a wind gust to 60 mph at Benchland.

Fergus County

Forestgrove	04	1840MST			0	0			Hail(0.75)
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A severe thunderstorm produced 0.75 inch hail at Forestgrove 10S.

Meagher County

White Sulphur Spgs	06	1945MST			0	0			Hail(1.00)
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A severe thunderstorm produced 1.00 inch hail at White Sulphur Springs 22 NE.

Cascade County

Centerville	06	2030MST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm produced a wind gust of 60 mph at Centerville 7S.

Cascade County

Eden	06	2030MST			0	0			Thunderstorm Wind (G61)
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A severe thunderstorm produced a wind gust of 70 mph near Eden.

Cascade County

Belt	06	2100MST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm produced a wind gust near 60 mph and caused tree damage near Belt.

Meagher County

White Slphr Spgs Arp	08	1350MST			0	0			Hail(1.75)
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A severe thunderstorm produced 1.75 inch hail at White Sulphur Springs 27NW.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MONTANA, Central

Meagher County

White Sphr Spgs Arp	08	1410MST			0	0			Hail(1.75)
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A severe thunderstorm produced 1.75 inch hail at White Sulphur Springs 33NW.

Broadwater County

Townsend	08	1420MST			0	0			Hail(0.75)
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A severe thunderstorm produced 0.75 inch hail at Townsend 8E.

Cascade County

Neihart	08	1430MST 1500MST			0	0			Thunderstorm Wind (G87)
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A severe thunderstorm moved through the Neihart area during the mid afternoon hours on the 8th. This storm produced golf ball size hail, along with wind gusts up to 100 mph. The strong wind gusts were determined to be from a wet microburst. This microburst caused 6 homes to be severely damaged, numerous trees were uprooted in a half-mile stretch, along with downed power lines.

Judith Basin County

Stanford	08	1435MST			0	0			Hail(1.00)
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A severe thunderstorm produced 1.00 inch hail at Stanford 6SW.

Judith Basin County

Stanford	08	1450MST			0	0			Hail(2.50)
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A severe thunderstorm produced 2.50 inch hail near Stanford.

Judith Basin County

Utica	08	1500MST			0	0			Hail(0.75)
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A severe thunderstorm produced 0.75 inch hail at Utica 3E.

Judith Basin County

Utica	08	1505MST			0	0			Hail(1.00)
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A severe thunderstorm produced 1.00 inch hail near Utica.

Fergus County

Moore	08	1515MST 1530MST			0	0			Hail(2.00)
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A severe thunderstorm produced 2.00 inch hail and 2 funnel clouds near Moore.

Judith Basin County

Hobson	08	1515MST 1530MST			0	0			Hail(1.75)
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A severe thunderstorm produced 1.75 inch hail and a funnel cloud near Hobson.

Fergus County

Hilger	08	1530MST 1630MST	10	200	0	0	100K		Tornado (F2)
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A severe thunderstorm moved across the northern half of Fergus County during the late afternoon hours on the 8th. This storm produced a widespread area of one to two inch hail from Brooks to Roy, with wind gusts over 70 mph. When the storm was just north of Brooks, a tornado developed. This tornado was on the ground for several miles, but remained over rural areas of Fergus County. However, this tornado did hit three residences, causing damage to houses and several barns. A few mobile homes were also damaged and one grain elevator near Moulton was toppled.

Fergus County

Roy	08	1640MST			0	0			Hail(0.75)
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A severe thunderstorm produced 0.75 inch hail at Roy 30E.

Blaine County

Chinook	08	1700MST 1730MST	2	50	0	0	50K		Tornado (F1)
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A severe thunderstorm moved across southern Blaine County during the late afternoon hours on the 8th. This storm produced golf ball sized hail, and wind gusts in excess of 100 mph. A tornado developed shortly after 1600 MST. This tornado was short lived, but it did do some crop damage, along with damage to 3 residences. Several barns were destroyed and a few other structures lost roofs. One vehicle suffered major damage.

Glacier County

Browning	14	0000MST			0	0			Thunderstorm Wind (G69)
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A severe thunderstorm produced a wind gust between 70 and 80 mph near Browning. Numerous tepees and trailers were overturned at the camp ground.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MONTANA, Central

Glacier County

Cutbank	14	0045MST			0	0			Thunderstorm Wind (G56) ^M
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A severe thunderstorm produced a wind gust of 65 mph near Black Feet.

Lewis And Clark County

Helena	14	1640MST 1700MST			0	0			Hail(1.75)
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A severe thunderstorm moved through the Helena area on the 14th. Hail generally ranged from 1 inch to 1.75 inches in diameter. Wind gusts between 60 and 70 mph were common throughout the Helena area. Numerous trees and power lines were knocked down.

Lewis And Clark County

Silver City	14	1655MST			0	0			Hail(0.75)
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A severe thunderstorm produced 0.75 inch hail and wind gusts to 60 mph at Silver City 2W.

Broadwater County

Townsend	14	1706MST			0	0			Thunderstorm Wind (G71) ^M
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A severe thunderstorm produced an 82 mph wind gust at Canyon Ferry Lake near Townsend, and a 61 mph wind gust in the city of Townsend. Numerous trees and power lines were knocked down. Hail up to one quarter inch was reported.

Cascade County

Great Falls	14	1720MST			0	0			Thunderstorm Wind (G57) ^M
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A severe thunderstorm produced a 66 mph wind gust at the NWS office in Great Falls. Hail up to 0.75 inches was reported just south of town. Numerous power lines were knocked down, and several trees were uprooted.

Broadwater County

Townsend	14	1730MST 1745MST			0	0			Thunderstorm Wind (G61) ^M
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A severe thunderstorm produced a 70 mph wind gust at Ginger. Winds were gusting to over 60 mph in the city of Townsend, with a few trees knocked down.

Lewis And Clark County

Helena	14	1735MST			0	0			Thunderstorm Wind (G51) ^M
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A severe thunderstorm produced a 59 mph wind gust at Helena.

Meagher County

White Sulphr Spgs Arp	14	1735MST			0	0			Thunderstorm Wind (G65)
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A severe thunderstorm produced a 75 mph wind gust at White Sulphur Springs.

Chouteau County

Highwood	14	1800MST			0	0			Hail(0.75)
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A severe thunderstorm produced 0.75 inch hail and 45 mph winds at Highwood 7NE.

Cascade County

Great Falls	14	1810MST			0	0			Dry Microburst
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A dry microburst produced a wind gust of 59 mph at the NWS office in Great Falls.

Teton County

Power	14	1825MST			0	0			Hail(1.00)
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A severe thunderstorm produced 1.00 inch hail and wind gusts to 40 mph near Power.

Judith Basin County

Stanford to Hobson	14	1856MST 1900MST			0	0			Thunderstorm Wind (G62) ^M
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A severe thunderstorm produced wind gusts to 70 mph between Stanford and Hobson.

Fergus County

Moore	14	1901MST			0	0			Thunderstorm Wind (G61)
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A severe thunderstorm produced a 70 mph wind gust and broke some tree limbs near Moore.

Beaverhead County

Wisdom	14	1915MST			0	0			Hail(1.00)
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A severe thunderstorm produce 1.00 inch near Wisdom.

Fergus County

Denton	14	1917MST			0	0			Thunderstorm Wind (G63) ^M
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A severe thunderstorm produced a 72 mph wind gust at Denton 3E.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MONTANA, Central

Fergus County

Lewistown	14	1920MST			0	0			Dry Microburst
A dry microburst moved through the Lewistown area during the evening hours on the 14th. Wide spread tree damage occurred, causing power to be knocked out and damaging vehicles.									

Chouteau County

Ft Benton	14	1930MST			0	0			Thunderstorm Wind (G87)
A severe thunderstorm produced 0.25 inch hail and wind gusts to 100 mph as it moved through the city of Fort Benton. Wide spread tree damage occurred. The main power line to all of north-central Montana was blown down.									

Fergus County

Hilger	14	1935MST			0	0			Thunderstorm Wind (G61)
A severe thunderstorm produced a 70 mph wind gust at Hilger 3W. Tree limbs were knocked down and a water tank was blown over.									

Fergus County

Roy	14	2000MST			0	0			Thunderstorm Wind (G56)
A severe thunderstorm produced a 60 mph wind gust near Roy.									

Hill County

Havre	14	2003MST			0	0			Thunderstorm Wind (G52) ^M
A severe thunderstorm produced a 60 mph wind gust at Havre.									

Beaverhead County

Wisdom	14	2004MST			0	0			Hail(0.75)
A severe thunderstorm produced 0.75 inch hail near Wisdom.									

Fergus County

Valentine	14	2010MST			0	0			Thunderstorm Wind (G56)
A severe thunderstorm produced a 64 mph wind gust near Valentine.									

Blaine County

Ft Belknap	14	2126MST			0	0			Thunderstorm Wind (G71) ^M
A severe thunderstorm produced an 82 mph wind gust at Fort Belknap.									

Broadwater County

Townsend	15	1435MST			0	0			Thunderstorm Wind (G52)
A severe thunderstorm produced a wind gust of 60 mph at Townsend 6 NE.									

Fergus County

Lewistown	15	1930MST			0	0			Thunderstorm Wind (G61)
A severe thunderstorm produced 0.75 inch hail and wind gusts to 70 mph at Lewistown 10S.									

Fergus County

Lewistown	15	1945MST			0	0			Thunderstorm Wind (G52)
A severe thunderstorm produced a wind gust of 60 mph at Lewistown 8E.									

Fergus County

Roy	16	1720MST			0	0			Thunderstorm Wind (G59) ^M
A severe thunderstorm produced a wind gust of 68 mph at Roy 18E.									

Fergus County

Valentine	16	1722MST			0	0			Hail(0.75)
A severe thunderstorm produced 0.75 inch hail at Valentine.									

Chouteau County

Carter	17	1800MST			0	0			Hail(0.75)
A severe thunderstorm produced 0.75 inch hail at Carter 8NW.									

Cascade County

Ulm	17	1855MST			0	0			Thunderstorm Wind (G52)
A severe thunderstorm produced a wind gust of 60 mph at Ulm 1S.									

Beaverhead County

Dillon	23	1553MST			0	0			Hail(0.75)
A severe thunderstorm produced 0.75 inch hail at Dillon 3N.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MONTANA, Central

Teton County

Choteau	23	1615MST			0	0			Hail(0.88)
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A severe thunderstorm produced 0.88 inch hail at Choteau 6N.

Cascade County

Ft Shaw	23	1705MST			0	0			Thunderstorm Wind (G61)
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A severe thunderstorm produced a 70 mph wind gust and 0.50 inch hail near Fort Shaw.

Cascade County

Vaughn	23	1720MST			0	0			Thunderstorm Wind (G56)
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A severe thunderstorm produced a 65 mph wind gust at Vaughn 3S.

Cascade County

Great Falls	23	1730MST 1735MST			0	0			Thunderstorm Wind (G56)
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A severe thunderstorm produced wind gusts between 60 and 65 mph throughout the city of Great Falls.

Cascade County

Belt	23	1800MST			0	0			Thunderstorm Wind (G56)
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A severe thunderstorm produced a 65 mph wind gust at Belt.

Lewis And Clark County

Canyon Creek	23	1815MST			0	0			Thunderstorm Wind (G56)
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A severe thunderstorm produced a 65 mph wind gust and 0.50 inch hail near Canyon Creek.

Chouteau County

Highwood	23	1820MST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm produced a 60 mph wind gust near Highwood.

Judith Basin County

Geyser	23	1840MST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm produced a 60 mph wind gust at Geysers 1E.

Fergus County

Winifred	23	1955MST			0	0			Thunderstorm Wind (G58)
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A severe thunderstorm produced a 67 mph wind gust at Winifred.

MONTANA, East

Prairie County

23 NNW Terry to 23 NNE Terry	03	1545MST			0	0			Hail(0.75)
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Dawson County

25 W Glendive	03	1600MST			0	0			Hail(0.75)
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Dawson County

9 S Glendive	03	1630MST			0	0			Thunderstorm Wind (G52)^M
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Wibaux County

15 S Wibaux	03	1800MST			0	0			Thunderstorm Wind (G67)^M
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Petroleum County

Flatwillow	04	1920MST			0	0			Hail(1.00)
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Petroleum County

Flatwillow	04	1920MST			0	0			Thunderstorm Wind (G57)^M
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Phillips County

35 S Malta	04	1920MST			0	0			Thunderstorm Wind (G60)^M
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Petroleum County

8 ESE Winnett	04	1930MST			0	0			Hail(0.75)
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Phillips County

41 S Malta	04	1937MST			0	0			Thunderstorm Wind (G60)^M
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MONTANA, East</u>									
Garfield County 2 E Mosby	04	2010MST			0	0			Hail(1.00)
Garfield County Jordan Arpt	04	2049MST 2100MST			0	0	25K		Thunderstorm Wind (G66) ^M
A thunderstorm gust uprooted several trees in Jordan. The wind damaged a roof in Jordan and overturned a semi-trailer.									
McCone County 45 NW Circle	04	2110MST			0	0			Thunderstorm Wind (G56) ^M
Garfield County 5 SE Van Norman	04	2120MST			0	0			Thunderstorm Wind (G52) ^M
Valley County 16 N Oswego	04	2151MST			0	0			Thunderstorm Wind (G52) ^M
Roosevelt County 16 SW Bredette	04	2217MST			0	0			Thunderstorm Wind (G52) ^M
McCone County 6 E Vida	04	2232MST			0	0			Thunderstorm Wind (G52) ^M
Roosevelt County 15 NE Wolf Pt	04	2238MST 2240MST			0	0			Thunderstorm Wind (G54) ^M
Wind gust reported by Montana Department of Transportation wind sensor on Montana Highway 13.									
Richland County 15 W Andes	04	2250MST			0	0			Thunderstorm Wind (G74) ^M
Roosevelt County 8 E Poplar	04	2255MST			0	0			Thunderstorm Wind (G54) ^M
Wind gust reported at the Poplar RAWS site.									
Sheridan County 3 N Medicine Lake	04	2330MST			0	0			Thunderstorm Wind (G52) ^M
Roosevelt County Bainville	04	2339MST			0	0	200K		Thunderstorm Wind (G60)
Thunderstorm wind gust blew the roof off of the Bainville School.									
McCone County 15 SW Brockway	06	2105MST			0	0			Hail(0.75)
McCone County 3 WSW Brockway	06	2144MST			0	0			Hail(0.75)
Petroleum County 15 N Winnett	08	1610MST 1615MST	2	50	0	0			Tornado (F0)
Two spotters saw a tornado 15 miles north of Winnett. It travelled through a rural area and caused no damage.									
Petroleum County Winnett	08	1621MST			0	0			Hail(1.00)
Petroleum County 6 N Winnett	08	1630MST			0	0			Hail(1.25)
Petroleum County 17 N Winnett	08	1630MST			0	0			Thunderstorm Wind (G63) ^M
Wind gust reported at the Dry Blood Creek RAWS site.									
Petroleum County 8 ESE Winnett	08	1647MST			0	0			Hail(0.75)
Garfield County 26 WSW Sand Spgs	08	1716MST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MONTANA, East</u>									
Phillips County 6 N Saco	08	1730MST			0	0			Thunderstorm Wind (G55) ^M
Garfield County 33 NW Jordan	08	1740MST			0	0			Thunderstorm Wind (G78) ^M Wind gust reported from the South Sawmill Creek RAWS site.
Valley County 2 W Hinsdale to Hinsdale	08	1745MST 1750MST			0	0	50K		Thunderstorm Wind (G60) Thunderstorm wind gust damaged several sheds and outbuildings 2 miles west of Hinsdale, lifted pickup truck 2 feet off the ground 1 miles west of Hinsdale and blew off the roof on the Nemotel building and downed power lines in Hinsdale.
Garfield County 15 N Jordan	08	1748MST			0	0			Hail(0.75)
Garfield County Jordan Arpt	08	1748MST			0	0			Thunderstorm Wind (G62) ^M
Valley County 14 NW Glasgow	08	1751MST			0	0			Thunderstorm Wind (G55) ^M
Valley County 34 SW Glasgow	08	1751MST			0	0			Thunderstorm Wind (G83) ^M Wind gust reported at the King Coulee RAWS site.
Valley County 45 SW Glasgow	08	1815MST	0.1	50	0	0			Tornado (F0) A spotter reported a tornado on their ranch. It did not stay on the ground for long, and caused no damage.
Valley County 16 NW Hinsdale	08	1817MST			0	0			Thunderstorm Wind (G52) ^M
Valley County 5 W Hinsdale	08	1825MST 1830MST	0.1	50	0	0	10K		Tornado (F0) A small tornado damaged a shed and metal livestock stall on a ranch 5 miles west of Hinsdale.
Valley County Hinsdale	08	1828MST			0	0			Thunderstorm Wind (G52) ^M
Garfield County 43 ENE Jordan	08	1834MST			0	0			Thunderstorm Wind (G60) ^M
Valley County Hinsdale	08	1840MST			0	0	75K		Thunderstorm Wind (G55) Several roofs were blown off houses and several trees downed by thunderstorm winds in Hinsdale.
Valley County Park Grove	08	1840MST 1845MST	0.5	50	0	0	100K		Tornado (F0) A small tornado along the edge of a gust front damaged two modular homes and downed several trees in Park Grove. Many homes had some damage to awnings, and gutters and roofs.
Valley County 24 W Opheim	08	1845MST			0	0			Thunderstorm Wind (G53) ^M Wind gust reported at the Bluff Creek RAWS site.
Garfield County 35 E Jordan	08	1900MST			0	0			Hail(1.00)
Valley County Park Grove	08	1900MST 1910MST			0	0	10K		Thunderstorm Wind (G60) ^M A strong thunderstorm gust front uprooted cottonwood trees, and damaged roofs and siding on several modular homes in the Park Grove area. One car was destroyed when a portion of a trailer roof was blown on top of it.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MONTANA, East</u>									
Valley County 3 N Oswego	08	1905MST			0	0			Thunderstorm Wind (G53) ^M
Roosevelt County 5 N (Old)Wolf Pt Int Arp	08	1915MST			0	0			Thunderstorm Wind (G65) ^M
Prairie County Terry	08	1923MST			0	0			Hail(0.75)
Garfield County Brusett	08	1930MST			0	0			Thunderstorm Wind (G60) ^M
Prairie County 10 NW Mc Cloud	08	1930MST			0	0			Thunderstorm Wind (G56) ^M
Prairie County 30 N Terry	08	1930MST			0	0			Thunderstorm Wind (G52) ^M
Prairie County Terry	08	1930MST			0	0			Thunderstorm Wind (G60) ^M
Garfield County 35 E Jordan	08	1935MST			0	0			Thunderstorm Wind (G70) ^M
Dawson County 10 S Lindsay	08	2003MST			0	0			Thunderstorm Wind (G52) ^M 60 mph wind tore awning off roof 10 miles south of Lindsay.
MTZ017-022>023-025>027			Central And Southern Valley - Garfield - Mccone - Dawson - Prairie - Wibaux						
	14	1200MST 1900MST			0	0			Excessive Heat An upper level ridge brought extreme heat to northeast Montana in mid July. The hottest day in the heatwave was July 14. High temperatures that day included Glendive 111; Cohagen, Jordan, Mildred, and Mosby 110; Circle 109; Brockway, Fort Peck, Nashua, and Vida 108; Savage 107; and Bloomfield 105.
Petroleum County 13 ESE Winnett	14	2033MST			0	0			Thunderstorm Wind (G52) ^M
Petroleum County 16 N Winnett to 25 N Winnett	14	2045MST			0	0			Thunderstorm Wind (G57) ^M Wind gust reported at Dry Blood Creek RAWS site.
Phillips County 16 SE Zortman	14	2045MST			0	0			Thunderstorm Wind (G59) ^M Wind gust reported at Manning Corral Prairie Dog RAWS site.
Phillips County 14 S Zortman	14	2045MST			0	0	20K		Thunderstorm Wind (G70) ^M A thunderstorm wind gust 4 miles north of the Manning Corral RAWS site blew a roof off of a barn and blew down 2 power poles.
Phillips County Landusky	14	2100MST			0	0	50K		Thunderstorm Wind (G55) Thunderstorm wind gusts in Landusky blew away 2 grain bins and blew down a wooden building and 20 acres of hay. There was also a roof blown off a building in Landusky.
Garfield County 4 ENE Mosby	14	2107MST			0	0			Thunderstorm Wind (G52) ^M
Phillips County Dodson	14	2115MST			0	0			Thunderstorm Wind (G52) ^M
Phillips County Zortman	14	2120MST			0	0	50K		Thunderstorm Wind (G55) ^M A thunderstorm wind gust blew a Ford Bronco SUV into a house and downed 5 power poles in Zortman. Several trees and a sign were also blown down by the wind.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MONTANA, East</u>									
Valley County 35 SW Glasgow	14	2151MST			0	0			Thunderstorm Wind (G50) ^M Wind gust report at the King Coulee RAWS site.
Garfield County 20 NW Sand Spgs	14	2153MST			0	0			Thunderstorm Wind (G50) ^M Wind gust reported at the North Breaks RAWS site.
Phillips County Malta	14	2200MST 2205MST			0	0			Thunderstorm Wind (G55) Thunderstorm wind gust downed 2 to 3 feet diameter trees in Malta.
Valley County Glasgow	14	2230MST			0	0			Thunderstorm Wind (G56) ^M Wind gust measured by NWS employee.
Valley County 5 SW Ft Peck	14	2315MST			0	0			Thunderstorm Wind (G60) ^M
McCone County 2 W Circle	14	2335MST			0	0			Thunderstorm Wind (G52) ^M
Roosevelt County 8 E Poplar	14	2344MST			0	0			Thunderstorm Wind (G50) ^M Wind gust reported at the Poplar RAWS site.
Petroleum County 16 N Winnett	16	1750MST			0	0			Thunderstorm Wind (G52) ^M 60 mph wind gust reported by spotter 18 miles north of Winnett.
Petroleum County 16 N Winnett	16	1845MST			0	0			Thunderstorm Wind (G51) ^M 59 mph wind gust reported by the Dry Blood Creek RAWS.
Garfield County 15 N Mosby	16	1852MST			0	0			Hail(0.75)
Garfield County 6 N Sand Spgs	16	1910MST			0	0			Thunderstorm Wind (G60) ^M 70 mph wind gust reported by spotter 6 miles north of Sand Springs.
Garfield County 10 SE Sand Spgs	16	1915MST			0	0			Thunderstorm Wind (G55) Thunderstorm wind downed 6 inch diameter tree.
Garfield County 12 NW Sand Spgs	16	1920MST			0	0			Thunderstorm Wind (G52) ^M 60 mph wind gust reported by spotter 12 miles NW of Sand Springs.
Garfield County 5 E Jordan	16	2015MST			0	0			Thunderstorm Wind (G52) 60 mph wind reported by spotter 5 miles east of Jordan.
Garfield County 30 NW Jordan	16	2015MST			0	0			Thunderstorm Wind (G67) ^M 78 mph wind gust reported by the South Sawmill Creek RAWS.
Valley County 40 SW Glasgow	16	2050MST			0	0			Thunderstorm Wind (G50) ^M 58 mph wind gust reported by the King Coulee RAWS.
Prairie County 20 NW Terry	16	2100MST			0	0			Thunderstorm Wind (G52) ^M 60 mph wind gust reported by spotter 20 miles northwest of Terry.
Roosevelt County 8 E Poplar	16	2218MST			0	0			Thunderstorm Wind (G52) ^M

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MONTANA, East

60 mph wind gust reported at the Poplar RAWS.

Prairie County

11 SW Mildred	16	2259MST			0	0			Thunderstorm Wind (G56) ^M
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65 mph wind gust reported by spotter 11 miles southwest of Mildred.

Phillips County

35 SE Malta	24	1315MST			0	0			Hail(0.75)
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Daniels County

8 SSW Scobey	24	1355MST			0	0			Thunderstorm Wind (G52) ^M
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Garfield County

23 N Jordan	24	1414MST			0	0			Thunderstorm Wind (G52) ^M
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Sheridan County

2 SE Redstone	24	1420MST			0	0			Hail(0.75)
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Roosevelt County

1 S Bredette	24	1430MST			0	0			Thunderstorm Wind (G52) ^M
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Roosevelt County

17 N Brockton	24	1445MST			0	0			Hail(0.88)
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Roosevelt County

17 N Brockton	24	1445MST			0	0			Thunderstorm Wind (G52) ^M
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60 mph wind gust with hail reported by spotter 17 miles north of Brockton.

Valley County

35 SW Glasgow	24	1451MST			0	0			Thunderstorm Wind (G53) ^M
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Wind gust reported by the King Coulee RAWS site.

Garfield County

8 N Haxby	24	1515MST			0	0			Thunderstorm Wind (G52) ^M
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Roosevelt County

Culbertson	24	1515MST			0	0			Thunderstorm Wind (G52) ^M
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Richland County

25 NW Lambert	24	1525MST			0	0			Thunderstorm Wind (G52) ^M
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Roosevelt County

1 W Bainville	24	1530MST			0	0			Thunderstorm Wind (G52) ^M
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Richland County

4 W Sidney	24	1608MST			0	0			Hail(0.75)
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Richland County

5 SE Sidney	24	1608MST			0	0			Thunderstorm Wind (G52) ^M
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Richland County

5 SE Sidney	24	1625MST			0	0			Thunderstorm Wind (G52) ^M
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MONTANA, South

Custer County

32 SSE Miles City	06	2000MST			0	0			Flash Flood
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Powderville Road closed due to flash flooding. 2-3 inches of rain in less than one hour.

Big Horn County

St Xavier	06	2135MST			0	0			Hail(0.88)
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Yellowstone County

17 N Pompeys Pillar	08	1830MST			0	0			Thunderstorm Wind (G61) ^M
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Yellowstone County

17 N Pompeys Pillar	08	1915MST			0	0			Thunderstorm Wind (G62) ^M
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MONTANA, South</u>									
Rosebud County									
Hathaway	08	1930MST			0	0			Thunderstorm Wind (G90)
			Mile marker signs and satellite dish blown over						
Custer County									
Miles City	08	1956MST			0	0			Thunderstorm Wind (G60)
Sweet Grass County									
Mc Leod	15	1645MST			0	0			Thunderstorm Wind (G60)
Rosebud County									
10 W Sumatra	15	2015MST			0	0			Hail(1.75)
Yellowstone County									
Billings	16	1646MST			0	0			Thunderstorm Wind (G68) ^M
Yellowstone County									
5 SW Billings	16	1650MST			0	0			Hail(1.75)
Yellowstone County									
Billings	16	1650MST			0	0			Thunderstorm Wind (G86) ^M
			86 mph wind gust recorded at Q2 News Station						
Yellowstone County									
Laurel	16	1650MST			0	0			Hail(1.00)
Yellowstone County									
5 E Billings	16	1653MST			0	0			Thunderstorm Wind (G75) ^M
			75 mph wind gust recorded by Billings ASOS						
Yellowstone County									
Billings	16	1700MST			0	0			Thunderstorm Wind (G70)
			Wind damage. Numerous reports of trees and fences blown over. Large billboard on 6th Ave. North blown over.						
Yellowstone County									
1 S Worden	16	1720MST			0	0			Thunderstorm Wind (G60)
Yellowstone County									
5 E Worden	16	1723MST			0	0			Thunderstorm Wind (G70)
Big Horn County									
Crow Agency	16	1802MST			0	0			Hail(0.75)
Big Horn County									
Crow Agency	16	1802MST			0	0			Thunderstorm Wind (G70)
Treasure County									
5 W Hysham	16	1830MST			0	0			Thunderstorm Wind (G60)
Custer County									
Kinsey	16	2130MST			0	0			Thunderstorm Wind (G60)
Powder River County									
35 NW Broadus	16	2130MST			0	0			Hail(0.75)
Custer County									
21 SSW Miles City	16	2215MST			0	0			Hail(1.00)
Big Horn County									
St Xavier	17	1910MST			0	0			Thunderstorm Wind (G65)
Big Horn County									
Crow Agency	17	1930MST			0	0			Thunderstorm Wind (G65)
Big Horn County									
2 SW Hardin	17	1942MST			0	0			Funnel Cloud
			Public reported a possible funnel cloud						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>MONTANA, South</u>									
Rosebud County 9 S Ashland	19	1610MST			0	0			Hail(1.00)
Rosebud County Colstrip	22	2150MST			0	0			Hail(0.75)
Rosebud County Colstrip	22	2152MST			0	0			Hail(1.00)
Stillwater County 12 SW Reed Pt	27	1248MST			0	0			Hail(0.75)
Stillwater County 6 NW Fishtail	27	1310MST			0	0			Hail(0.75)
Stillwater County 3 E Columbus	27	1322MST			0	0			Hail(0.75)
Musselshell County 6 NE Musselshell	27	1445MST			0	0			Hail(0.75)
Musselshell County 4 S Melstone	27	1450MST			0	0			Hail(0.75)
Big Horn County Lodge Grass	27	1535MST			0	0			Thunderstorm Wind (G70) Wind damage. Gustnado ahead of storm downed a few trees.
Big Horn County St Xavier	27	1535MST			0	0			Hail(0.75)
Powder River County Broadus	27	1805MST			0	0			Hail(0.75)
Powder River County Broadus	27	1805MST			0	0			Thunderstorm Wind (G71)
Powder River County 3 NE Broadus	27	1813MST			0	0			Thunderstorm Wind (G60)
Carter County 9 NNE Alzada	27	1915MST			0	0			Thunderstorm Wind (G60)
Fallon County 22 S Baker	27	1925MST			0	0			Thunderstorm Wind (G60)
Carter County 10 N Alzada	27	1927MST			0	0			Hail(1.75)
Carter County Alzada	27	1927MST			0	0			Thunderstorm Wind (G70)
<u>MONTANA, West</u>									
Missoula County Clinton	07	1650MST 1730MST			0	0			Thunderstorm Wind (G50) Wind damage occurred at the north end of Rock Creek near Clinton. Thunderstorm winds snapped trees in half with numerous branches broken and blown around. One tree fell onto a power line and started a fire with power outages reported.
Powell County Deer Lodge	08	0915MST 0920MST			0	0			Hail(1.00) 0.75 to 1.00 inch hail reported by spotters in Deer Lodge.
Missoula County Missoula	08	1235MST			0	1			Thunderstorm Wind (G52)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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MONTANA, West

Missoula County 12 N Missoula Arprt	08	1237MST			0	0			Thunderstorm Wind (G62) ^M
Missoula County 5 S Condon	08	1245MST			0	0			Hail(0.75)
Missoula County Condon	08	1245MST			0	0			Thunderstorm Wind (G52)
Missoula County 18 NW Clearwater	08	1330MST			0	0			Thunderstorm Wind (G52)

Strong thunderstorm winds blew through Missoula County during the afternoon. As the storm moved through Missoula, a tree fell onto a bicyclist who was knocked unconscious and injured. Power lines were also blown down in Missoula from the storm. As the thunderstorm moved to the northeast, wind gusts up to 71 mph were recorded with wind damage reported through the Swan Valley and 0.75 hail reported in Condon.

Mineral County St Regis	13	2010MST 2030MST			0	1	360K		Thunderstorm Wind (G57)
Missoula County Missoula Southwest to Seeley Lake	13	2040MST 2120MST			0	0			Thunderstorm Wind (G53) ^M
Lake County Arlee to St Ignatius	13	2055MST 2130MST			0	0			Thunderstorm Wind (G54) ^M
Sanders County Plains to Hot Spgs	13	2100MST 2222MST			0	0			Thunderstorm Wind (G51) ^M
Flathead County Lakeside to Kalispell	13	2140MST 2150MST			0	0			Thunderstorm Wind (G57) ^M

Strong thunderstorm winds gusting between 58 to 65 mph caused wind damage in northwest Montana during the evening hours. Most significant damage was on the west end of St. Regis in Mineral County, where numerous large pine trees fell down causing damage of \$360,000. Fallen trees damaged a camper and 12 homes on Camels Hump Road. Twelve separate fires were started in Mineral County as trees fell onto power lines and roadways. Highway I-90 was temporarily closed due to fallen trees. A search and rescue worker was injured on I-90, when she was struck in the head by a four-inch diameter falling cottonwood branch. Wind damage was reported near Plains in Sanders County, where strong winds blew a barn off it's foundation 15 feet, and a garage was damaged by a fallen tree. Power outages and small fires were also reported by fallen trees onto power lines in Sanders, Missoula, Lake and Flathead Counties. In Kalispell, a section of awning along the roof line of Wendy's restaurant blew off onto two cars.

Powell County Deer Lodge	14	1550MST			0	0			Hail(0.75)
Powell County Deer Lodge	14	1553MST			0	0			Hail(0.75)
Powell County 1.5 S Deer Lodge	14	1558MST			0	0			Hail(0.75)
Powell County Deer Lodge	14	1600MST			0	0			Hail(1.00)
Powell County Deer Lodge	14	1600MST			0	0			Hail(0.75)

Severe weather spotters reported 0.75 inch to 1.00 inch diameter hail from a severe thunderstorm passing through the Deer Lodge area.

Missoula County Missoula	15	1900MST			0	1			Lightning
Missoula County Clinton	15	1915MST			0	0			Thunderstorm Wind (G52)

A strong thunderstorm developed near Missoula and moved east over Clinton. The storm caused lightning to strike a 42 year old man driving an open top Jeep. The lightning knocked him temporarily unconscious, and burned out the electrical system of the Jeep. As the storm moved east, it intensified with strong winds blowing down cottonwood trees, which damaged a roof in Clinton.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MONTANA, West

Deer Lodge County

1 W Anaconda to .7 W Anaconda	19	1700MST 1735MST			0	0			Flash Flood
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A strong thunderstorm dumped heavy rain which flooded an area just west of Anaconda. Reports from media and law enforcement of flash flooding, which caused water two feet deep to flood several buildings around the 1880s Ranch on North Cable Road. Mud and tree branches and stumps were reported flowing through the ranch, with water flooding North Cable Road. Five buildings were flooded with six to eight inches of mud. Part of a garage foundation was washed away, as water came down a hill nine inches deep and about twice as wide as the driveway.

Lake County

Arlee	23	1440MST 1441MST			0	0			Hail(1.50)
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Ravalli County

5 SW Victor	23	1835MST			0	0			Heavy Rain
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Ravalli County

7 S Stevensville	23	1910MST			0	0			Hail(1.00)
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Ravalli County

8 SE Stevensville	23	1920MST			0	0			Hail(1.00)
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Golfball size hail fell from a thunderstorm over Arlee. Later in the evening, thunderstorms developed over the Bitterroot Valley, producing heavy rain with 0.70 inches reported in 30 minutes near Victor, and 1 inch diameter hail reported near Stevensville.

Ravalli County

5 ESE Hamilton	25	1910MST			0	0			Hail(1.00)
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A strong thunderstorm moved north along the eastern edge of the Bitterroot Valley near Hamilton, producing one inch diameter hail and gusty winds which downed power lines.

NEBRASKA, Central

Keya Paha County

11 SE Springview	02	1800CST			0	0			Hail(0.75)
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Rock County

4 N Bassett	02	1800CST			0	0			Hail(1.00)
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Rock County

9 W Bassett	02	1835CST	0.1	5	0	0			Tornado (F0)
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The tornado touched down briefly in a rural area approximately 8 miles west of Bassett in Rock County...near the Rock and Brown County line...and then entered Brown County. There was no damage.

Brown County

2 NE Long Pine	02	1836CST	0.1	5	0	0			Tornado (F0)
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The tornado...originally touching down in Rock County...moved into rural Brown County and lifted quickly causing no damage.

Rock County

7 SSW Bassett	02	1855CST			0	0			Hail(0.75)
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Brown County

10 S Johnstown	02	1915CST			0	0			Hail(0.75)
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Brown County

14 S Ainsworth	02	1925CST	0.1	10	0	0	5K		Tornado (F0)
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Irrigation system was damaged as the tornado made a brief touchdown.

Blaine County

3 SW Dunning	02	2000CST			0	0			Hail(1.00)
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Custer County

13 NW Anselmo	02	2020CST			0	0			Hail(0.88)
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Logan County

8 N Stapleton	02	2045CST			0	0			Hail(0.75)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEBRASKA, Central

Keith County

South Portion

06	0700MST 1000MST				1	0	800K	20K	Flash Flood
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A tropical-like system moved into Southwest Nebraska Friday night and Saturday. Thunderstorms formed along a stationary front and persisted over the same area. Total rainfall was from 8 to 11 inches. Flood waters began to inundate hotels and businesses along Interstate 80 in Ogallala at 7 AM MST. One bridge and numerous roads were damaged or washed out. One person was killed 4 miles west of Ogallala at 759 AM MST as a bridge approach collapsed on Interstate 80. There were 64 homes with water damage. Forty of the homes sustained minor damage while the remaining 24 were total losses or sustained major damage. M46VE

Perkins County

North Portion

06	0700MST 1000MST				0	0	20K	30K	Flash Flood
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A tropical-like system moved into Southwest Nebraska late Friday night and then became stationary through Saturday morning. Heavy rainfall continued over many hours with storm total rainfall from 5 to 8 inches. Large areas of corn fields and pastures were under water from the Keith/Perkins County line to near Grant. Flood water was over roads in many locations.

Perkins County

8 N Grant

06	1856MST 1956MST				0	0			Flash Flood
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Highway 61 was closed due to water over the road. Water runoff occurred quickly as heavy rain from thunderstorms fell on already saturated ground from flash flooding early that morning.

Keith County

4 S Ogallala

06	1925MST 2025MST				0	0			Flash Flood
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Highway 61 was closed due to water over the road. Water runoff occurred quickly as heavy rain from thunderstorms fell on already saturated ground from flash flooding early that morning.

Rock County

6 SSE Bassett

09	1650CST 1655CST				0	0		5K	Hail(1.75)
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Hail lasted for five minutes and ranged from nickel to golfball size.

Brown County

8 SE Ainsworth

09	1655CST				0	0			Hail(0.75)
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Rock County

1 ESE Newport

09	1715CST				0	0			Hail(0.88)
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Holt County

2 WNW Stuart

09	1730CST				0	0			Hail(0.75)
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Rock County

4 S Newport

09	1743CST				0	0		2K	Hail(1.75)
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Rock County

3 E Bassett

09	1808CST				0	0			Hail(0.88)
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Holt County

15 NNW Atkinson

09	1840CST				0	0			Hail(0.75)
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Boyd County

4 S Butte

09	1852CST				0	0			Hail(0.75)
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Boyd County

4 NNE Spencer to Gross

09	1915CST 1920CST				0	0	15K	5K	Hail(1.75)
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Hail ranged from nickel to golfball size.

Custer County

2 WNW Merna

09	1920CST				0	0			Hail(0.75)
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Holt County

22 NE O'Neill

09	1925CST				0	0			Hail(0.75)
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Boyd County

7 NNW Lynch

09	1940CST				0	0		2K	Hail(1.75)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>NEBRASKA, Central</u>									
Holt County 2 W O Neill	24	1605CST			0	0			Hail(0.75)
Holt County 6 NW Inman to O Neill	24	1617CST 1627CST			0	0	2K		Hail(1.00)
									Hail ranged from nickel to quarter size.
Rock County 9 ESE Rose	24	1630CST			0	0			Hail(0.75)
Holt County 1 S O Neill	24	1631CST			0	0	2K		Hail(1.75)
Loup County 5 NNE Taylor	24	1647CST			0	0			Hail(0.75)
Garfield County 1 S Burwell	24	1700CST			0	0			Hail(0.75)
Garfield County 6 W Burwell	24	1700CST			0	0	5K	10K	Hail(4.50)
Holt County 6 NE Chambers	24	1720CST			0	0			Hail(1.00)
Garfield County 1 S Burwell	24	1725CST 1730CST			0	0	2K		Hail(1.00)
									Hail ranged from nickel to quarter size.
Holt County 6 SE Chambers	24	1737CST	0.1	10	0	0	10K		Tornado (F0)
									Tornado touched down briefly and downed power lines.
Wheeler County 7 N Bartlett	24	1810CST			0	0	2K		Hail(1.75)
Wheeler County 6 SE Bartlett	24	1905CST	0.1	5	0	0			Tornado (F0)
									Tornado touched down briefly with no damage.
Keith County Ogallala Arpt	26	1910MST			0	0			Thunderstorm Wind (G56) ^M
Holt County 3 SE Atkinson	30	1505CST			0	0			Hail(1.00)
Holt County 5 ESE Atkinson	30	1525CST			0	0			Hail(1.00)
Holt County 9 NNE O Neill	30	1535CST			0	0	2K		Hail(1.75)
Holt County 7 W Inman	30	1550CST			0	0	2K		Hail(1.75)
Holt County 4 S O Neill	30	1615CST			0	0	2K		Hail(1.25)
Holt County 4 S O Neill	30	1615CST			0	0			Thunderstorm Wind (G52) ^M
Holt County 3 W Ewing	30	1635CST 1641CST			0	0	2K		Hail(1.00)
									Hail ranged from nickel to quarter size.
Holt County Ewing to 1 S Ewing	30	1717CST 1719CST			0	0	5K	5K	Hail(1.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEBRASKA, Central

Hail ranged from nickel to golfball size.

NEBRASKA, East

Antelope County

Orchard	02	2040CST			0	0			Hail(0.88)
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A thunderstorm dropped nickel size hail in addition to wind gusts around 50 mph which downed a few tree limbs.

Knox County

2 N Crofton	10	0110CST			0	0			Hail(0.75)
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Cedar County

2 NNW Fordyce	10	0120CST			0	0			Hail(0.75)
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Cedar County

5 N Hartington	10	0214CST			0	0			Hail(1.25)
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Pierce County

2 E Mc Lean to 6 ENE Mc Lean	21	1510CST 1520CST			0	0			Hail(1.00)
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Cedar County

3 WNW Randolph	21	1517CST			0	0			Hail(1.00)
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Madison County

3 W Battle Creek to Battle Creek	21	1525CST 1540CST			0	0			Hail(0.88)
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Cedar County

Belden	21	1540CST			0	0			Hail(1.00)
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Cedar County

Laurel	21	1550CST			0	0			Hail(0.75)
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Madison County

Norfolk	21	1551CST			0	0			Thunderstorm Wind (G50)
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A law enforcement official reported a thunderstorm wind gust estimated at around 60 mph.

Stanton County

11 NW Stanton	21	1620CST			0	0			Hail(0.75)
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Wayne County

5 S Winside	21	1625CST			0	0			Hail(1.00)
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Thurston County

1 E Macy	21	1636CST			0	0			Hail(0.75)
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Knox County

7 N Crofton	24	2300CST			0	0			Thunderstorm Wind (G55)
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Thunderstorm wind gusts did extensive damage to some rental storage units north of town on highway 121.

Douglas County

Omaha	25	0111CST			0	0			Hail(1.00)
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Sarpy County

La Vista	25	0115CST			0	0			Thunderstorm Wind (G50)
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Thunderstorm wind gusts downed at least 7 large tree limbs in town.

Cass County

4 W Plattsmouth	25	0120CST			0	0			Hail(0.75)
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Cass County

4 W Plattsmouth	25	0120CST			0	0			Thunderstorm Wind (G70)
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A storm spotter estimated thunderstorm winds of at least 80 mph. The winds snapped 7 large multi-tiered and multi-line power poles. An 18 inch diameter tree was snapped 2 feet above the ground. Numerous power lines and smaller trees were downed within a half mile of the destroyed power poles. A metal roof was also torn off the north side of a barn.

Douglas County

Omaha	25	0123CST			0	0			Thunderstorm Wind (G50)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEBRASKA, East

Twelve to 14 inch tree limbs were downed and a fence damaged in west Omaha due to thunderstorm wind gusts.

Cass County

3 E Louisville	25	0145CST			0	0			Thunderstorm Wind (G50)
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A thunderstorm wind gust was estimated at around 60 mph by a law enforcement official.

Burt County

Decatur	25	0322CST			0	0			Hail(1.75)
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Thurston County

1 S Macy	25	0325CST	0.1	20	0	0			Tornado (F0)
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Law enforcement reported a brief touchdown of a small tornado in open country south of Macy.

Burt County

Decatur	25	0340CST			0	0			Hail(1.75)
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A storm spotter reported hail up to golfball size caused "extreme damage" in town.

Lancaster County

Cheneys	26	1620CST			0	0	479K		Lightning
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Lightning struck a painting company's building causing a fire which destroyed the building and around \$200,000 in contents.

Douglas County

Elkhorn	26	1800CST			0	0			Hail(0.75)
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Douglas County

Omaha	26	1810CST 1820CST			0	0			Hail(1.75)
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Hail of 1 inch diameter was reported across parts of Omaha including 149th and Fort and 156th and F streets with one report in west Omaha of up to golf ball size hail.

Platte County

6 SW Monroe	30	1010CST			0	0			Hail(0.88)
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Platte County

Platte Center	30	1135CST			0	0			Hail(1.00)
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Butler County

4 SW Surprise	30	1238CST			0	0			Hail(0.88)
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Platte County

Columbus	30	1238CST 1250CST			0	0			Hail(1.25)
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Hail up to 1.25 inches in diameter was reported in Columbus by emergency management.

Platte County

Columbus Arpt	30	1315CST			0	0			Thunderstorm Wind (G53)^M
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A thunderstorm wind gust of 61 mph was recorded by the AWOS at the Columbus airport. This is from the same storm that produced hail up to 1.25 inches in diameter. The winds downed large tree limbs in town, several of which fell on vehicles or downed a few power lines.

Butler County

Bellwood	30	1315CST			0	0			Hail(0.75)
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Butler County

4 W Bellwood	30	1330CST			0	0			Hail(1.75)
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Knox County

6 W Verdigre	30	1607CST			0	0			Hail(1.75)
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Antelope County

5 W Clearwater	30	1722CST			0	0			Hail(1.00)
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Antelope County

2 W Clearwater	30	1739CST			0	0			Thunderstorm Wind (G50)
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A storm spotter estimated thunderstorm wind gusts of around 60 mph.

Cuming County

Beemer	30	1835CST			0	0			Thunderstorm Wind (G55)
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A thunderstorm downburst downed several large trees on the north side of Beemer.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>NEBRASKA, Extreme Northeast</u>									
Dixon County 4 NE Maskell	10	0242CST			0	0			Hail(0.88)
Dakota County 4 E Hubbard	10	0430CST			0	0			Hail(0.75)
Dixon County 5 NE Dixon	21	1606CST			0	0			Hail(1.00)
Dixon County Waterbury	21	1631CST			0	0			Hail(1.25)
Dakota County South Sioux City	21	1654CST			0	0			Hail(1.00)
Dixon County Ponca	24	1333CST			0	0	1K		Thunderstorm Wind (G61)
									Thunderstorm winds caused tree damage, including several large branches down.
Dakota County 2 NW Jackson	24	1345CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds caused tree damage, including several branches down.
Dixon County 2 NE Martinsburg	24	2105CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds caused tree damage. The amount of damage was not known.
Dixon County Ponca	25	0040CST 0042CST			0	0			Hail(0.88)
									Large hail accumulated to a depth of three inches.
Dixon County Ponca	25	0040CST 0042CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds caused tree damage, including trees and large limbs blown down. The winds also broke a window in a police building.
Dakota County 1 W Jackson	25	0057CST			0	0			Hail(0.75)
Dixon County Ponca	25	0210CST 0215CST			0	1			Thunderstorm Wind (G69)
									Thunderstorm winds caused widespread tree damage, including some large trees blown down. Some of the tree debris caused damage to homes. The winds also caused other damage to buildings, including a garage which was destroyed, a shed overturned, windows broken, and roof and siding damage. Power lines and poles were blown down, resulting in power outages. A woman suffered a back injury and a broken arm when hit by debris.
Dixon County 2 W Ponca to 1 W Waterbury	25	0212CST 0220CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds caused damage to 10,000 acres of crops. A few fields sustained extensive damage, but most was leaf damage with hope of some recovery. Most of the damage was to corn crops, while soybean crops withstood the strong winds with minor damage. No damage estimate could be given because it was not known how much the crops would recover.
Dixon County Waterbury	25	0215CST			0	0			Thunderstorm Wind (G65)
									Thunderstorm winds caused tree damage, including some trees blown down. The winds also caused minor damage to structures.
Dakota County Jackson	25	0220CST			0	0			Thunderstorm Wind (G69)
									Thunderstorm winds caused widespread tree damage, including many trees blown down.
Dakota County South Sioux City	25	0238CST			0	0			Hail(1.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEBRASKA, Extreme Northeast

Dakota County

Jackson to 2 S Jackson	25	0245CST 0250CST			0	0	500K		Thunderstorm Wind (G69)
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Thunderstorm winds caused widespread damage to trees and structures. The worst structural damage was on a farm just south of Jackson where two barns and a windmill were totally destroyed, shingles on the roof of the house were blown off, an air conditioner was destroyed, five horses were injured, and electricity was cut off. In Jackson, shingles were blown off the roofs of buildings, siding was damaged from wind blown debris, and a few homes suffered damage when large branches fell. Major tree damage in Jackson included a few large trees blown over. Power lines and poles were blown down or damaged by falling trees, resulting in power outages.

Dakota County

Jackson to 2 S Jackson	25	0245CST 0250CST			0	0	100K		Hail(1.75)
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Large hail, driven by severe winds, damaged siding on homes, and also dented vehicles.

Dakota County

Homer	25	0245CST			0	0	20K		Thunderstorm Wind (G61)
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Thunderstorm winds severely damaged grain elevators on a farm, and caused tree damage.

NEBRASKA, Extreme Southwest

NEZ079>081

Dundy - Hitchcock - Red Willow

01	0000MST				0	0			Drought
31	2359MST								

Drought conditions worsened from extreme to exceptional during the month of July across extreme southwest Nebraska. Hot temperatures and much below normal rainfall during the month continued to stress crops and livestock in the area.

Red Willow County

Indianola	02	2200MST			0	0	0.10K		Thunderstorm Wind (G52)
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Large tree uprooted by thunderstorm winds.

Red Willow County

12 S Mc Cook	21	1750MST			0	0			Hail(0.75)
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Red Willow County

Mc Cook	21	1850MST			0	2	100K		Thunderstorm Wind (G70)
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Refer to event narrative for July 21st.

Red Willow County

2 N Mc Cook	21	1852MST			0	0			Thunderstorm Wind (G52)
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Red Willow County

2 N Mc Cook	21	1854MST			0	0			Hail(0.75)
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Red Willow County

3 E Mc Cook	21	1900MST 2100MST			0	0			Flash Flood
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Three to four feet of water across portions of highway 6/34 between McCook and Bartley due to rapid runoff from thunderstorm rains. Law enforcement closed the highway in several locations while cleanup crews removed mud and debris after the water subsided.

Several slow-moving, strong thunderstorms moved from northern Kansas into extreme southern Nebraska during the evening, affecting eastern Hitchcock and Red Willow counties in Nebraska. Locally heavy rainfall of 3 to 4 inches produced rapid runoff, closing highway 6/34 for several hours. Small hail and strong, damaging winds also accompanied the storms. Two people suffered minor injuries when a tarp blew down at a local rodeo, still in progress during the storm. A ferris wheel was also damaged at a local carnival. At least six utility poles were blown down, and a roof was removed from a hangar at the McCook airport. A roof was blown off a house in the city of McCook. Numerous trees and tree limbs were reported down throughout the city.

NEBRASKA, South Central

Greeley County

Greeley	21	1520CST			0	0	0	0	Hail(0.75)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>NEBRASKA, South Central</u>									
Howard County									
2 SW Cotesfield	21	1530CST			0	0	0	0	Hail(0.75)
Sherman County									
Ashton	21	1530CST			0	0	0	0	Hail(0.75)
Buffalo County									
12 N Kearney	21	1535CST			0	0	6K	0	Thunderstorm Wind (G52)
Adams County									
Hastings	21	1636CST			0	0	250K	0	Thunderstorm Wind (G70)
Furnas County									
Hendley	21	1756CST 1810CST			0	0	150K	250K	Thunderstorm Wind (G70)
<p>Isolated thunderstorms produced strong downburst winds in parts of the area. On the east side of Hastings, an estimated 80 mph wind destroyed three buildings, ripped the roof from a horse barn, tore another roof from a local radio station and fell numerous trees in the area. An empty grain bin at one of the ethanol plants was destroyed. In Furnas county at Hendley, another 70+ mph wind damaged six houses with lost shingles and blown out windows, and significantly damaged a steel structure at the local elevator. Yet one more storm passed north of Kearney and snapped 4 power poles.</p>									
Valley County									
12 NW Ord	24	1805CST			0	0	10K	250K	Hail(1.75)
Valley County									
9 N Arcadia	24	1825CST	0.1	25	0	0	0	0	Tornado (F0)
Brief touchdown in open country reported by volunteer fireman.									
Greeley County									
Spalding	24	1919CST			0	0	0	0	Hail(1.00)
Sherman County									
Rockville	24	1955CST			0	0	10K	250K	Hail(1.75)
Howard County									
Dannebrog	24	2015CST			0	0	25K	0	Thunderstorm Wind (G60)
Hall County									
5 SW Wood River	24	2030CST			0	0	0	0	Hail(0.88)
Buffalo County									
6 NE Shelton to 4 NE Shelton	24	2043CST 2047CST	2	35	0	0	0	100K	Tornado (F0)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEBRASKA, South Central



This is a picture of the storm as it moved into northern Buffalo county. Photo provided by Jeff Zinnel.

An off-duty NWS employee and many other storm spotters witnessed the tornado north of Shelton. No significant damage was reported from the tornado itself as it bounced along the ground.

Buffalo County									
1 W Shelton	24	2100CST			0	0	150K	2M	Hail(1.75)
Adams County									
7 NW Kenesaw	24	2122CST			0	0	100K	2M	Hail(1.75)
Buffalo County									
Shelton	24	2127CST			0	0	250K	2M	Hail(2.75)
Adams County									
3 NW Roseland	24	2135CST			0	0	100K	1M	Hail(1.75)
Adams County									
2 S Kenesaw	24	2140CST			0	0	200K	2M	Hail(2.75)
Kearney County									
2 E Heartwell	24	2149CST			0	0	50K	1M	Hail(1.75)
Adams County									
3 NW Holstein	24	2210CST			0	0	25K	500K	Hail(1.00)

An ominous looking supercell dived southeast from around Ord to southwest of Hastings spawning tornadoes and damaging hail along its path. The structure of the severe thunderstorm was easily visible from many miles away. After producing large hail in northwest Valley county, a tornado was spotted by a volunteer fireman north of Arcadia. No damaged occurred. As the storm drove southeast, hail to the size of baseballs was reported from near Ravenna to south of Shelton. To the northeast of Shelton, another tornado was reported to have lasted about four minutes. No property damage was noted. Wind driven large hail did hammer much of Shelton and the surrounding areas. Windows were blown out, cars severely damaged and many roofs were deemed lost. Some crops in the area were leveled as damage totaled well into the millions. The storm continued to pound western Adams and eastern Kearney county with damaging hail and wind before falling apart in Franklin county around midnight.

Clay County									
Countywide	28	1430CST 1600CST			0	0	10K	100K	Heavy Rain
Nuckolls County									
Countywide	28	1430CST 1600CST			0	0	10K	100K	Heavy Rain
Clay County									
5 E Deweese	28	1515CST			0	0	0	0	Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEBRASKA, South Central

Heavy rains fell in the Little Blue River Basin southeast of Hastings. The river was dry, but up to 4 inches of rain across southern Clay and northern Nuckolls county replenished the flow. The 279 farmers who rely on the river for irrigation could once again draw on the river to water their drought stricken crops.

Nance County

Genoa	30	0955CST			0	0	50K	250K	Hail(1.00)
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Polk County

Shelby	30	1126CST			0	0	50K	400K	Hail(1.75)
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Hail to the size of golf balls was reported in Shelby from some early afternoon severe storms passing through the region. Up to 2 inches of rain fell in southeast Polk county.

NEBRASKA, West

NONE REPORTED.

NEVADA, North

Elko County

(Eko)Harris Fld Elko	05	1739PST			0	0			Thunderstorm Wind (G52) ^M
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Elko County

Spring Creek	13	1720PST 1723PST			0	0			Thunderstorm Wind (G55)
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Thunderstorm winds blew over a windmill and blew a heavy grill off a deck.

Elko County

12 SE Charleston to 27 S Jackpot	14	1410PST 1430PST			0	0			Thunderstorm Wind (G58) ^M
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The Rock Springs RAWS site 27 miles south of Jackpot reported thunderstorm wind gust to 67 mph while the Stag Mountain RAWS site 12 miles southeast of Charleston reported thunderstorm wind gust to 58 mph.

Elko County

Spring Creek	14	1415PST 1420PST			0	0			Thunderstorm Wind (G50)
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Thunderstorm winds blew some shingles off a roof.

Elko County

Spring Creek	16	1450PST 1455PST			0	0			Thunderstorm Wind (G52) ^M
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Lander County

Battle Mtn	21	2000PST 2100PST			0	0	1K		Thunderstorm Wind (G65)
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Thunderstorm winds at Battle Mountain High School blew several porta-potties about 175 feet, torn the roof off the baseball dugout, blew over large metal trailer, and partially uprooted a large tree.

Elko County

12 SW Jiggs to Spring Creek	24	1420PST 1500PST			0	0			Thunderstorm Wind (G59) ^M
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Thunderstorm winds gusted to 65 mph at the Crane Springs RAWS site and 68 mph at Spring Creek.

NEVADA, South

Clark County

Henderson	12	1715PST			0	0			Thunderstorm Wind (G60) ^M
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Winds of 69 mph were measured at the Henderson Executive Airport.

Clark County

Cal-Nev-Ari	12	1738PST			0	0			Thunderstorm Wind (G61)
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Thunderstorm winds estimated at 70 mph were reported in Cal-Nev-Ari.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
NEVADA, West									
Lyon County									
Dayton	12	1430PST 1500PST			0	0	50K	0	Thunderstorm Wind
Several downed power poles and four small trailers destroyed.									
Washoe County									
5 NW Reno Stead Arpt	12	1430PST 1445PST			0	0	0	0	Tstm Wind/Hail
3/4 inch hail									
Washoe County									
Sun Vly	12	1500PST 1515PST			0	0	0	0	Tstm Wind/Hail
3/4 inch hail									
A line of severe thunderstorms moved through southern Washoe and northern Lyon County, NV between 3:30 and 4:30 pm PDT. Numerous spotter reports of 3/4 inch hail in Cold Springs and Sun Valley. Several power poles and four small trailers were destroyed by high winds near Dayton.									
Washoe County									
20 W Gerlach	12	1730PST 1830PST			0	0	0	0	Thunderstorm Wind (G68) ^M
78 mph wind gust									
Between 6:30 pm and 7:30 pm PDT, a line of severe thunderstorms moved through northern Washoe Co., NV. During this time, an automated weather station measured a 78 mph wind gust in association with the storms.									
Washoe County									
15 W Nixon	13	1415PST 1430PST			0	0			Hail(1.75)
Reported by resident of Warm Springs Valley.									
Washoe County									
5 SW Nixon	13	1438PST			0	0			Thunderstorm Wind (G73) ^M
Thunderstorm wind gust of 84 mph recorded by automated weather station on Virginia Peak.									
Douglas County									
5 E Gardnerville	13	1532PST			0	0			Thunderstorm Wind (G51) ^M
Thunderstorm wind gust of 59 mph recorded by RAWS site.									
Washoe County									
Gerlach	13	1552PST			0	0			Thunderstorm Wind (G56)
Spotter reported estimated wind gust of 65 mph.									
Washoe County									
5 E Sutcliffe	13	1600PST			0	1	5K		Thunderstorm Wind (G51)
Thunderstorm winds capsized a fishing boat on Pyramid Lake. The occupant was rescued.									
Washoe County									
5 NW Reno	13	1600PST 1620PST			0	0	0.50K		Thunderstorm Wind (G65)
Spotter report of estimated wind gusts of 75 mph. Two trees blown down.									
Washoe County									
3 N Reno Cannon Intl A	13	1615PST			0	0			Thunderstorm Wind (G51) ^M
58 mph thunderstorm wind gust recorded at National Weather Service office.									
Washoe County									
5 SW Reno	13	1615PST 1620PST			0	0	1K		Thunderstorm Wind (G56)
Public report of several trees blown down due to estimated thunderstorm winds of 65 mph.									
Washoe County									
8 N Reno	13	1622PST			0	0			Thunderstorm Wind (G50) ^M
Wind gust of 58 mph recorded by RAWS site at Desert Springs.									
Lyon County									
Fernley	13	1638PST			0	0	5K		Thunderstorm Wind
The Lyon County Sheriff Office reported several power lines blown down due to strong thunderstorm winds.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEVADA, West

Lyon County

6 SW Dayton	13	1850PST			0	0	1K		Thunderstorm Wind
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The Lyon County Sheriff Office reported several trees blown down due to thunderstorm winds in the Moundhouse Area.

Douglas County

Glenbrook	17	1230PST 1245PST			0	0	0	0	Hail(1.00)
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One inch hail

Washoe County

Incline Vlg	17	1300PST 1315PST			0	0	0	0	Hail(1.00)
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A severe thunderstorm moved over Douglas and Washoe Co. near the Nevada shore of Lake Tahoe. Glenbrook Fire Dept. reported 1 inch hail at 1:43 pm PDT and about 20 minutes later, spotters in Incline Village, NV reported 1 inch hail.

Mineral County

Hawthorne	18	1045PST 1100PST			0	0	0	0	Hail(0.75)
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1 inch hail
Spotter reports 1 inch hail occurring at 11:47 am PDT with severe thunderstorm moving over Hawthorne, NV.

NVZ004

Western Nevada Basin And Range

18		1400PST 1500PST			0	0			Dust Storm
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Strong downburst winds from thunderstorms caused dust storm across Pershing Co., NV. The Pershing County Sheriff's Office reported visibilities as low as 50 ft. approximately 20 miles west of Lovelock at 3:15 pm PDT.

Pershing County

40 E Unionville	21	1830PST			0	0			Thunderstorm Wind (G59) ^M
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Siard RAWS reports a 68 mph wind gust at 7:30 pm PDT in association with downburst winds from a severe thunderstorm moving through eastern Pershing Co., NV.

Washoe County

3 NW Nixon	21	1905PST			0	0			Thunderstorm Wind (G52) ^M
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Strong winds in association with severe thunderstorms. Gusts to 60 mph at 8:05 pm PDT at automated wind sensor near Pyramid Lake, NV.

NEW HAMPSHIRE, North and Central

Carroll County

Ossipee	08	2310EST			0	0			Lightning
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Lightning caused a fire that flared up on the 13th and burned 3 to 4 acres on Pocket Mountain in Granite. Approximately 70 firefighters from 16 departments responded to the blaze. A tall pine tree was apparently struck late on the 8th and the resultant fire smoldered in the tree or in the ground until it flared up on the 13th.

Carroll County

Conway	15	1500EST			0	0			Thunderstorm Wind (G50)
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Sullivan County

Claremont	15	1525EST			0	0			Hail(0.88)
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Severe thunderstorms moving through New Hampshire knocked down trees and caused large hail in a few areas in the central part of the state. Trees were reported down in the town of Conway, while falling branches caused minor damage and a few power outages near Meredith. Nickel-sized hail was reported in Claremont. As the storms moved through the southeast part of the state, lightning ignited a small fire at a lumber yard in Rye.

Grafton County

Alexandria	23	1300EST			0	0			Thunderstorm Wind (G50)
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Belknap County

Gilford	23	1315EST			0	0			Thunderstorm Wind (G50)
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Merrimack County

Hooksett	23	1415EST			0	2			Lightning
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Strafford County

Strafford	23	1415EST			0	0			Thunderstorm Wind (G50)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW HAMPSHIRE, North and Central

Rockingham County Auburn	23	1430EST			0	0	5K		Lightning
Rockingham County Brentwood	23	1430EST			0	0			Thunderstorm Wind (G50)
Rockingham County Epping	23	1440EST			0	0			Thunderstorm Wind (G50)
Rockingham County Salem	23	1440EST			0	0			Thunderstorm Wind (G50)
Rockingham County Exeter	23	1445EST			0	0			Thunderstorm Wind (G50)
Rockingham County Newfields	23	1445EST			0	0			Thunderstorm Wind (G50)
Rockingham County Stratham	23	1445EST			0	0	10K		Lightning
Rockingham County Stratham	23	1445EST			0	0			Thunderstorm Wind (G50)
Rockingham County North Hampton	23	1450EST			0	0			Thunderstorm Wind (G50)
Rockingham County Greenland	23	1455EST			0	0			Thunderstorm Wind (G50)
Rockingham County Hampton to Hampton Beach	23	1455EST			0	0			Thunderstorm Wind (G50)
Rockingham County Hampton Falls	23	1455EST			0	0			Thunderstorm Wind (G50)
Rockingham County 6.5 E Rye Beach	23	1510EST			0	0			Thunderstorm Wind (G52) ^M

Severe thunderstorms moving through central and southern New Hampshire knocked down trees and power lines and lightning from the storms caused several fires. Southeastern Rockingham County had the worst damage as numerous trees were downed by the thunderstorms. Trees were reported down in Alexandria, Gilford, Strafford, Newfields, Salem, Hampton, Hampton Falls, North Hampton, Stratham, Exeter, Brentwood, Epping, and Greenland. Lightning damaged structures in Stratham and Auburn and two people were injured by lightning as they stood outside their home in Hooksett. In Hampton, the porch of a building was lifted up and over the building on Ocean Blvd and landed in the street. In Stratham, lightning struck a 14 by 28 ft barn, causing a fire that burned the structure and equipment inside to the ground. Lightning also struck the fire station in Auburn causing about \$5000 in damage.

NEW HAMPSHIRE, Southern

Hillsborough County Hillsboro Center	15	1525EST			0	0	2K		Thunderstorm Wind (G50)
Severe thunderstorms downed several large trees on Route 9 in Hillsborough.									
Cheshire County Keene to Harrisville	23	1320EST 1331EST			0	0	8K		Thunderstorm Wind (G50)
Hillsborough County Peterborough	23	1341EST			0	0	2K		Thunderstorm Wind (G50)
Hillsborough County Manchester to Nashua	23	1400EST 1420EST			0	0	15K		Thunderstorm Wind (G50)
Cheshire County Jaffrey	23	1425EST			0	0	5K		Thunderstorm Wind (G50)

A line of severe thunderstorms moved across southern New Hampshire. Trees and wires were downed in Keene and Harrisville, in

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEW HAMPSHIRE, Southern

Cheshire County. The same storms downed large branches as they reached Peterborough, in Hillsborough County, but the damage was more significant as the storms moved farther east. A roof was blown off a building in Manchester, and there were many reports of downed trees and wires in New Boston and Nashua. A plywood board was sent airborne by a wind gust and apparently sheared a gas line at a business, which shut down a portion of Daniel Webster Highway for more than an hour. In all, about 7,500 customers were left without power because of the storms.

NEW JERSEY, Northeast

NJZ002>006-011

Western Passaic - Bergen - Eastern Passaic - Essex - Hudson - Union

01	0000EST								
31	2359EST				0	0			Drought

After an encouraging 4 month period of increasing rainfall and improving drought conditions, the region experienced a disappointing setback during July. Rainfall during the month was well below normal. The Brookhaven Hydrologic Service Area (HSA) received 1.62 inches of rain during July, which was 41 percent of normal or 2.33 inches below normal.

At the end of July, a majority of the streams monitored in real time by the U. S. Geological Survey in New Jersey, were classified as having streamflows in the 10 to 24 percentile, which was well below normal.

The combined storage in the 13 major reservoirs serving Northeast New Jersey on July 31st was 83.6 percent capacity, which was within 10 percent of normal. Capacities in the individual reservoirs on July 31st were:

Newark Reservoirs	71.9% (Percent capacity)
Jersey City Reservoirs	88.1%
North Jersey District	88.3%
United Water of New Jersey	75.2%

The State of New Jersey extended the state-wide Drought Emergency that it issued on March 4th, through July 31st. Passaic, Bergen, Essex, Hudson, and Union Counties were included in this emergency.

NJZ002>006-011

Western Passaic - Bergen - Eastern Passaic - Essex - Hudson - Union

02	1200EST								
04	1700EST				0	0			Excessive Heat

Temperatures rose into the upper 90s in the highly urbanized areas of Northeast Union, Southeast Essex, and Eastern Hudson Counties that included the corridor from Elizabeth City north to Newark and Jersey City. They rose mainly into the mid 90s elsewhere. Temperatures averaged 10 to 15 degrees above normal. On July 4th, the high temperature reached 100 degrees at Newark Airport. Overnight low temperatures during July third and fourth remained in the lower 80s in highly urbanized areas. High temperatures and humidities combined to produce heat indices from 100 to 105 degrees throughout the region.

Bergen County

Bergenfield

09	1616EST								
					0	0			Thunderstorm Wind (G50)

A severe thunderstorm wind gust knocked over a tree, which fell onto a house.

Bergen County

Montvale

19	1615EST								
					0	0			Thunderstorm Wind (G50)

A severe thunderstorm produced high winds that downed tree limbs in Montvale. This was reported by local law enforcement.

Passaic County

Clifton

19	1620EST								
					0	0			Hail(0.75)

A spotter reported dime size hail.

Bergen County

Countywide

19	1631EST								
	1645EST				0	0			Urban/Sml Stream Fld

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEW JERSEY, Northeast

Brief periods of heavy rain produced by strong thunderstorms caused widespread urban flooding of low lying and poor drainage areas in Bergen County. Radar estimated rainfall rates between 1 and 2 inches per hour. Spotters reported up to 2 feet of water at the Hillsdale Toll Plaza on the Garden State Parkway. Widespread street flooding was reported in Dumont, and four cars were left underwater in a parking lot in East Rutherford after nearby swamp land flooded and another two were stuck in a rising tide on Route 17.

NJZ002>006-011

Western Passaic - Bergen - Eastern Passaic - Essex - Hudson - Union

29	1200EST								
31	2359EST				0	0			Excessive Heat

An eight day "heat wave" began on July 29th and extended through August 5th across the region. High temperatures rose into the mid and upper 90s from July 29th through the 31st. These temperatures combined with humidity produced heat indices from 100 to 105 degrees on the 29th and from around 95 to 100 degrees on the 30th and 31st.

NEW JERSEY, South and Northwest

NJZ001-007>010-012>026 **Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Northwestern Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean**

01	0000EST								
31	2359EST				0	0	0		Drought

The unseasonably warm and dry month of July intensified drought conditions across the state. In spite of mandatory restrictions, water usage increased as the month wore on. Water usage statewide was down by as much as 20 percent in May and June. The preliminary statewide average precipitation total for the month of July was 1.52 inches, the 6th driest July on record since 1895. Normal is 4.49 inches.

As July wore on streamflow and groundwater levels dropped again. In the southern part of the state as of July 22nd groundwater levels in the Kirkwood-Cohansey Aquifer reached record low levels for July. Streamflow on the Maurice, Great Egg and Oswego Rivers were also approaching record lows. The number of municipalities declaring tighter restrictions increased. In Woolwich Township (Gloucester County) and Roxbury Township (Morris County) moratoriums on water allocation permits stopped ongoing developments. Brick Township in Ocean County banned all unnecessary watering in the township and also in Point Pleasant and Point Pleasant Beach as sand intruded in one well. The municipal authority could not draw water from the Metedeconk River because of salt water intrusion. In Cumberland County, residents in one Vineland community were invaded by crayfish after the Burnt Mill Pond went dry and the creatures went looking for water.

Due to the normal to above normal precipitation from March through June, early crops were not affected by the drought. But, as the month wore on, they were showing signs of stress. The second cutting of hay in Sussex County was stopped because of inadequate moisture. Subsoil conditions were becoming dry. It was estimated that up to 50 percent of the corn crop in Hunterdon County could be lost. Flow along the Assunpink Creek was at a 19 year low. Any plans of opening the Mercer Oaks East Golf Course this year were cancelled.

The Delaware River Basin Commission, which oversees water supply throughout the Delaware River Basin declared a "drought" on December 3, 2001 when the supply of water in the New York City reservoir system dropped below a designated level for early December. The commission declared a drought emergency on December 18, 2001. Both triggered additional reductions in the amount of water released from the reservoirs into the Delaware River and the amount diverted out of the Delaware River Basin to New York City and New Jersey. Diversions to New York City dropped from 800 million gallons a day to 520 million gallons a day. The emergency declaration gave the commission the power to restrict the amount of water suppliers could draw from the basin. It gave the commission the authority to take water from municipal reservoirs to maintain river levels. It could also call for water releases from federal, state and privately owned reservoirs. Water from Lake Nockamixon, the F.E. Walter Reservoir and Lake Wallenpaupack could be used to maintain river levels. They were last used for this purpose in the 1960s. The releases help protect the riverbank and aquatic life and also prevents salt water from flowing up the Delaware River. Salt water intrusion causes corrosion problems for industries and increases water treatment costs for municipalities that depend on the river for their water supply. Maintaining river levels are also important for groundwater reserves that are recharged by the river itself. As of July 31st, the salt front along the Delaware River was one mile farther upstream than its normal July position. The emergency declaration also gives the commission the power to request that utilities and other companies that use more than one million gallons of water a day to prepare contingency plans to use less water and submit the plans to the commission. The New York City Reservoirs which feed the Delaware River decreased from 89.0 percent of capacity on July 1st to 77.1 percent of capacity on July 31st. The northern New Jersey reservoirs were at about 80 percent of capacity as of July 31st, slightly below normal. For the month streamflow on the Delaware River was about 75 percent of normal.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Property Damage	Estimated Damage Crops	Character of Storm
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NEW JERSEY, South and Northwest

On a county weighted average, July monthly precipitation totals ranged from 1.1 inches in Hunterdon County to 2.5 inches in Camden County. The least precipitation fell across the Raritan River Basin. Monthly precipitation totals were 1.07 inches (second driest on record) at the Atlantic City International Airport and 0.60 inches in Trenton. The monthly precipitation total of 0.86 inches at the Atlantic City Marina was the 6th driest July on record.

NJZ001-007>010-012>026 Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Northwestern Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean

01	0900EST								
04	1800EST			0	0				Excessive Heat

July started with unseasonably hot and humid weather across New Jersey. The hottest and most humid weather occurred on Independence Day before a cold front quietly moved through the region during the night of the 4th. Highest temperatures for most locations were well into the 90s and heat indices reached as high as 105 degrees. Offshore winds even baked shore areas on the 3rd and 4th as high temperatures reached into the 90s. The excessive heat caused a small number of heat related illnesses across the state, mainly the elderly. Festivals scheduled for Independence Day showed drops in attendance figures because of the hot weather. Jersey Central Power and Light set a new usage record of 5,617 megawatts on the 3rd.

Highest temperatures included 100 degrees in Pennsauken (Camden County) and Belvidere (Warren County), 99 degrees in Margate (Atlantic County), White House Station (Hunterdon County) and Morristown (Morris County), 98 degrees in Millville (Cumberland County), West Deptford (Gloucester County), Hightstown (Mercer County), New Brunswick (Middlesex County), Freehold (Monmouth County), Vernon (Sussex County) and Mount Holly (Burlington County), 97 degrees in Beach Haven (Ocean County), Wildwood (Cape May County), Trenton (Mercer County) and the Atlantic City International, 96 degrees in Somerville (Somerset County) and the Marina within Atlantic City and 94 degrees in Flemington (Hunterdon County).

NJZ001-007>010-012>026 Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Northwestern Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean

06	1200EST								
07	1800EST			0	0	0	0		Smoke

A northerly flow of air through the lower half of the atmosphere pushed smoke from forest fires in northern Quebec across New Jersey. The smoke reduced visibilities and could be smelled from the afternoon of the 6th into the afternoon of the 7th. Winds started to shift from north on the 7th to the west on the 8th and pushed the smoke farther to the east. In all about 50 fires were burning near James Bay about 500 miles north of Montreal in Quebec Province. The fires consumed about 150,000 acres and caused the evacuation of the Native American village of Nemaska.

**Cumberland County
Stow Creek Lndg to
Bridgeton**

09	2100EST								
	2110EST			0	0				Thunderstorm Wind (G50)

A severe thunderstorm tore down several large limbs across the western third of Cumberland County. Downed limbs on roadways were reported in Stow Creek Township and Bridgeton City.

**Cape May County
Cape May**

09	2130EST								
				0	0	0	0		Tstm Wind/Hail

A thunderstorm damaged beach tents and a lifeguard boat in Cape May. Cape May Harbor recorded a wind gust to 48 mph.

**Ocean County
Holiday City**

09	2200EST								
				0	0	0	0		Lightning

Lightning strikes knocked out power to 4,900 Conectiv Power Delivery customers in Berkeley Township including the Silver Ridge Park and Holiday City adult communities.

**Monmouth County
Bradley Beach**

11	1824EST								
				1	0	0	0		Lightning

A 28-year-old woman was fatally struck by lightning on the LaReine Avenue Beach in Bradley Beach during the early evening of the 11th. She was found in distress on the beach with burn marks in the mid section of her body before she passed away. F280 U

NJZ001-007>010-012>013-015>023

Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Mercer - Salem - Gloucester - Camden - Northwestern Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May

15	0900EST								
19	1800EST			0	0				Excessive Heat

Another work week of hot weather affected the southern half of New Jersey from the 15th through the 19th. High temperatures reached into the 90s in most areas each day. The highest temperatures mainly occurred on the 17th. Humidity levels were high for most of the week, except for the 16th when a weak back door cold front moved through the region. The heat and humidity extended into the northern half of the state from the 17th through the 19th. A second stronger front moved through the state during the evening of the 19th and the early morning of the 20th and ended the string of 90 degree high temperatures. Highest temperatures included 98 degrees in Newton (Sussex County), Belvidere (Warren County) and New Lisbon (Burlington County), 96 degrees in Phillipsburg (Warren County), Flemington (Hunterdon County), New Brunswick (Middlesex County), Somerville

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW JERSEY, South and Northwest

(Somerset County), Trenton and Hightstown (Mercer County) and Chatham (Morris County), 95 degrees in Mount Holly (Burlington County), 94 degrees at the Atlantic City International Airport, in Seabrook (Cumberland County) and West Deptford (Gloucester County) and 93 degrees in Freehold (Monmouth County).

Morris County

**Middle Vly to
Chester**

**18 1715EST
1725EST 0 0 Thunderstorm Wind (G52)**

A severe thunderstorm tore down several trees, tree limbs and wires across Washington and Chester Townships and Chester Borough.

Somerset County

**Gladstone to
Peapack**

18 1745EST 0 0 Thunderstorm Wind (G52)

A severe thunderstorm knocked over several trees and tree limbs and numerous wires in Peapack-Gladstone Borough.

Monmouth County

Howell

19 1350EST 0 0 Thunderstorm Wind (G57)

A severe thunderstorm knocked down numerous trees and wires in Howell Township, especially the southern half of the township. Several trees were knocked down across County Route 547 taking power lines with them. The combination of high winds and lightning left 5,000 Jersey Central Power and Light customers without power in Monmouth and Ocean Counties on the 19th.

Monmouth County

Howell

19 1400EST 0 0 0 Lightning

Lightning struck a boat in storage in Howell Township. The ensuing fire took about 10 minutes to get under control. A transformer near the township police station was also struck by lightning.

Ocean County

Bayville

19 1449EST 0 0 Thunderstorm Wind (G52)

A severe thunderstorm knocked down a couple of trees in Bayville.

Ocean County

Bayville

**19 1500EST
1530EST 0 1 0 Lightning**

Lightning struck the roof of a vacant two story building in Bayville during the afternoon of the 19th. The ensuing fire was extinguished in about 20 minutes, but still damaged the second story of the building. As firefighters were cleaning the scene, another bolt of lightning struck the ground about 30 feet from a fire truck. It traveled to the truck and injured a firefighter who had his hand on a metal casing at the time of lightning strike. His arm went numb. Jersey Central Power and Light reported that 5,000 of its customers lost power due to the winds and lightning on the 19th in Ocean and Monmouth Counties.

Sussex County

Newton

19 1510EST 0 0 0 Lightning

A lightning bolt struck an apartment building, left two holes in the roof and ignited a small fire. Residents in the sixteen units of the apartment building were safely evacuated. The fire was quickly extinguished. One apartment had to be inspected before the residents were allowed to return. No serious injuries were reported.

Burlington County

Cinnaminson

19 1610EST 0 0 Thunderstorm Wind (G52)

A severe thunderstorm knocked down numerous trees and wires in Cinnaminson Township. Five evergreens trees were knocked down on one property. A trampoline on one property sailed over a pool and knocked out a fence. More than thirty trees were knocked down on the property of Saint Borromeo Church and School. A downed tree landed on and damaged an empty house on the church property.

Burlington County

**Moorestown to
Mt Laurel**

**19 1632EST
1637EST 0 0 Thunderstorm Wind (G50)**

A severe thunderstorm knocked down numerous large tree limbs and wires in Moorestown and Mount Laurel Townships. A large tree was also knocked down on Chester Avenue in Moorestown. Just south of Mount Laurel, South Jersey Regional Airport reported a peak wind gust of 49 mph at 533 p.m. EDT. A rotten tree was knocked down near the airport on Ark Road. Public Service Electric and Gas (PSE & G) reported about 25,000 of its customers lost power from the series of thunderstorms on the 19th in Mercer, Burlington and Camden Counties. All power was restored in Burlington County on the 21st.

Somerset County

Countywide

**19 1645EST
1845EST 0 0 Urban/Sml Stream Fld**

Thunderstorms with heavy rain dropped an adjusted Doppler Radar storm total of 1 to 2 inches across most of Somerset County. This caused low lying and poor drainage area flooding. A motorist was stuck in an underpass in South Bound Brook and was rescued about 6 p.m. EDT by breaking the vehicle's driver side window.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW JERSEY, South and Northwest

Middlesex County

Piscataway	19	1715EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm tore off part of a roof of a house in Piscataway Township.

Ocean County

North Portion	19	1730EST 1930EST			0	0			Flash Flood
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Thunderstorms with torrential downpours dropped an adjusted Doppler Radar Storm Total estimate of 5 to 6 inches of rain in Lakewood and Jackson Townships. This caused considerable urban and poor drainage flooding as well as flooding of streams in northern Ocean County. The heavy rain forced the closure of a couple of major roads in Lakewood Township: U.S. Route 9 and New Jersey State Route 70. It also flooded the entrance to the Kimball Medical Center. Farther south, the heavy rain caused street flooding in Dover Township in Toms River.

Camden County

Pennsauken to Cherry Hill	19	1730EST 1930EST			0	0			Urban/Sml Stream Fld
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Thunderstorms with very heavy rain caused urban and poor drainage flooding along the northeastern Camden County border with Burlington County. A SKYWARN Spotter reported two inches of rain fell in one hour between 6 p.m. and 7 p.m. EDT in Cherry Hill Township. Event totals were mainly between two and three inches. Flooding was reported along Admiral Wilson Boulevard in Camden and Pennsauken. Storm totals included 2.55 inches in Cherry Hill and 2.41 inches in Pennsauken.

Middlesex County

Metuchen to Sayreville	19	1730EST 1930EST			0	0			Urban/Sml Stream Fld
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Thunderstorms with heavy rain dropped an adjusted Doppler Radar Storm Total estimate of two to three inches across central Middlesex County. This caused urban and poor drainage flooding in East Brunswick Township, Edison Township, Metuchen Borough and Sayreville Borough. Flooding was reported at the Victory Circle in Sayreville, U.S. Route 1 in Edison and New Jersey State Route 18 in East Brunswick. A motorist was rescued from a vehicle on U.S. Route 1 in Edison.

Middlesex County

Cranbury	19	1745EST			0	0	50K	0	Lightning
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Lightning struck the chimney of a house in Cranbury. Bricks from the chimney were strewn across the front lawn. The lightning ignited a fire in the attic of the house. Before it was extinguished, the house was severely damaged. The damage estimate was conservatively estimated at \$50,000. No serious injuries were reported.

Burlington County

Mt Laurel	19	1745EST			0	0	0	Lightning
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Lightning struck two buildings in Mount Laurel Township and started fires in each of them. One was a vacant building on New Jersey State Route 73, the second was a building on Union Mill Road. No serious injuries were reported.

Camden County

Haddonfield to Cherry Hill	19	1750EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down numerous large limbs as well as wires in Cherry Hill and Haddonfield Townships. Public Service Electric and Gas (PSE & G) reported about 25,000 of its customers lost power from the series of thunderstorms on the 19th in Mercer, Burlington and Camden Counties. All power was restored by the 21st.

Monmouth County

Cliffwood Beach to Holmdel	19	1750EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked over a couple of trees and numerous limbs and wires in northwestern Monmouth County in Clifford Beach (Aberdeen Township), Hazlet Township, Holmdel Township, Keansburg Borough and Keyport Borough. Jersey Central Power and Light reported that 5,000 of its customers lost power due to the winds and lightning on the 19th in Ocean and Monmouth Counties.

Burlington County

Palmyra to Marlton	19	1815EST 2015EST			0	0			Flash Flood
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Thunderstorms with very heavy rain caused considerable urban and poor drainage flooding as well as creek flooding from Palmyra Township south to Evesham Township in Burlington County. Adjusted Doppler Radar storm total estimates indicated that 4 to 5 inches of rain fell within a three hour period in this area. In Mount Laurel Township, State Route 38 near Interstate 295 was flooded. South Jersey Regional Airport in Lumberton Township reported a storm total of 3.04 inches. Elsewhere in the county, the heavy rain apparently contributed to a fatal accident in which three teenage boys were killed on State Route 38 in Southampton Township. The driver was heading westbound and lost control of the vehicle and veered into the eastbound lanes where it struck another vehicle.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEW JERSEY, South and Northwest

Ocean County

Jackson	19	1830EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down a few trees, limbs and wires in Jackson Township. Jersey Central Power and Light reported that 5,000 of its customers lost power due to the winds and lightning on the 19th in Ocean and Monmouth Counties.

Mercer County

Princeton	20	0900EST			0	0			Tstm Wind/Hail
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In a delayed reaction, a nearly two century old silver maple tree came down in pieces over the weekend of July 20th and 21st in a driveway of a Princeton Borough home. Officials believed the winds and rain on the 19th weakened the tree.

Sussex County

Montague	23	1450EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked down a few trees along Clove Road (County Route 653) in Montague Township.

Sussex County

Central Portion	23	1515EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked down trees and power lines in the central part of Sussex County. Traffic lights were out along U.S. Route 206.

Warren County

Blairstown to Lower Harmony	23	1540EST 1555EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked down a few trees and several large limbs and wires across western parts of Warren County. Wind damage was reported in Blairstown, Harmony and White Townships.

Sussex County

Stanhope	23	1600EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down a couple of trees in Stanhope Borough. One fallen large tree demolished a bank sign and blocked a roadway.

Morris County

Montville	23	1630EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down a couple of trees in Boonton and Montville Townships.

NJZ007>010-012>026 Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Northwestern Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean

28	0900EST			0	0				Excessive Heat
30	1800EST								

Another hot and very humid air mass moved into New Jersey on the 28th. In most areas this hot spell produced some of the highest heat indices of the summer as they reached around 105F during the afternoon of the 29th. Even shore areas baked on the 29th and 30th as westerly winds kept the sea breeze from forming. July 30th was the hottest day (99 degrees) of the summer at the Atlantic City Marina. A cold front moved through the region during the night of the 30th. While temperatures on the 31st still reached into the 90s, dew point temperatures and the moisture content of the air mass was considerably lower. The apparent temperature (or heat index) matched and did not exceed the afternoon high temperatures. More humid air again moved in during the start of August. The string of days with high temperatures of 90 degrees or higher for inland locations did not end until August 5th or 6th. There were several reports of heat related illnesses, most were along the shore. Cooling centers for senior citizens were opened in Middlesex County. The hot weather and high humidity levels taxed electric utilities and the PJM Interconnection issued a usage advisory. Both Jersey Central Power and Light and Conectiv Power Delivery asked customers to use electricity prudently.

For most places the highest temperatures with the July part of this hot spell occurred on the 29th and included 101 degrees in New Lisbon (Burlington County), 99 degrees at the Marina within Atlantic City and Belvidere (Warren County), 98 degrees at the Atlantic City International Airport, New Brunswick (Middlesex County), Mount Holly (Burlington County), Pennsauken (Camden County), Beach Haven (Ocean County) and Trenton (Mercer County), 97 degrees in Belmar (Monmouth County), Morristown (Morris County), Somerville (Somerset County), West Deptford (Gloucester County) and Millville (Cumberland County), 96 degrees in Flemington (Hunterdon County) 94 degrees in Avalon (Cape May County) and Sandy Hook (Monmouth County) and 93 degrees in Wildwood (Cape May County)

The hot spell at the end of July cemented the month as being well above normal. The preliminary statewide monthly mean temperature of 76.5 degrees was 2.0 degrees above normal and was tied for the 10th warmest July in New Jersey since 1895. The July monthly mean temperature at the Atlantic City International Airport was 77.1 degrees, 1.8 degrees above normal and the 6th warmest July on record. There were 16 days that the high temperatures was 90 degrees or higher. The July monthly mean temperature at the Marina within Atlantic City was 77.2 degrees, 2.0 degrees above normal and the 5th warmest July on record. The July monthly mean temperature in Trenton was 77.3 degrees, 1.4 degrees above normal. There were 15 days that the high temperatures was 90 degrees or higher.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW MEXICO, Central and North

NMZ001>021-026	<p>Northwest Plateau - Northwest Mountains Including Jemez - Upper Rio Grande Valley - Sangre De Cristo Mountains - Northeast Highlands - Harding - Far Northeast Plains - Westcentral Mountains - Middle Rio Grande Valley - Sandia/Manzano Mountains - Central High Plains/Estancia Valley County - Conchas Lake/Guadalupe - Quay - Southwest Mountains/Upper Gila Region - Lower Rio Grande Valley - Lincoln County High Plains/Hondo Valley - Capitan/Northern Sacramento Mountains - De Baca - Chaves County Plains - Roosevelt - Curry - Guadalupe Mountains Of Chaves County</p>								
	01	0000MST			0	0			Drought
	31	2359MST							

Dry weather dominated for many areas throughout the month. The long awaited summer thunderstorm season began about a week late and with early rainfall amounts that were light and spotty. Hopes for drought relief were dashed during the mid-month as a high pressure center rebuilt over the state and suppressed the showers. Following several weeks of abnormally dry weather at mid-month, showers returned but were brought by unusual northeast to southwest upper level winds. By the end of the month higher elevation forest areas had had enough rain and higher humidity to allow the re-opening of federal and state recreational lands that had been closed due to extreme fire danger since early June or for one the longest closure periods on record. Runoff from rains, however, was still light and new worries began that the Rio Grande River would run dry near Albuquerque before the end of summer.

Quay County Montoya	01	1813MST			0	0			Hail(1.00)
Quay County 1 E San Jon	01	1830MST			0	0			Hail(0.75)
Quay County San Jon	01	1845MST			0	0			Hail(1.75)
Quay County San Jon	01	1845MST			0	0			Thunderstorm Wind (G50)
Guadalupe County Vaughn	03	1700MST 1720MST			0	0			Flash Flood
Torrance County Encino	03	1700MST 1720MST			0	0			Flash Flood
Guadalupe County 7 E Santa Rosa	03	1740MST			0	0			Hail(1.75)
A storm produced heavy rain and road flooding from Encino east to Vaughn, while another dumped large hail east of Santa Rosa.									
Chaves County 9 SE Roswell	03	1859MST			0	0			Hail(1.75)
Curry County Clovis	04	2010MST 2040MST			0	0			Flash Flood
Heavy rain of 2 inches in less than an hour caused wide spread street flooding and stranded motorist in low water crossings across Clovis.									
Chaves County Lake Arthur	08	1145MST			0	0			Heavy Rain
Heavy rain filled low water crossings along Walnut Creek in far southern Chaves County. State Road 2 had water topping the ditches and into travel lanes near the Chaves-Eddy County line.									
Santa Fe County Edgewood	09	1445MST			0	0			Hail(0.75)
Bernalillo County Tijeras	10	1610MST			0	0			Hail(1.00)
San Miguel County 6 N Las Vegas	11	1537MST			0	0			Tstm Wind/Hail
Marble sized hail covered Interstate 25 up to eight inches deep at mile marker 350-352 north of Las Vegas.									
Guadalupe County 5 N Santa Rosa	15	1850MST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEW MEXICO, Central and North

Bernalillo County

Albuquerque	19	1350MST 1420MST			0	0			Heavy Rain
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Heavy rain of near 1 inch an hour moved over Albuquerque causing a quick surge into city drainage and arroyo channels. Two men were caught in an arroyo by the fast moving flow but were rescued before injury by city fire fighters who had been put on Swift Water Rescue Alert.

Valencia County

El Cerro	19	1435MST 1440MST			0	0	3K		Thunderstorm Wind
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Valencia County

12 E Los Lunas	19	1530MST			0	0			Heavy Rain
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Thundertorm winds damaged porch coverings attached to several mobile homes in the El Cerro community, while heavy rain caused swift run off into small arroyos and enough erosion to block several dirt roads leading into the Meadow Lake area.

Socorro County

15 S Socorro	19	1649MST			0	0			Hail(0.75)
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Socorro County

Lemitar	19	1800MST 1830MST			0	0			Flash Flood
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A storm with hail and heavy rain moved over central Socorro County. Wide spread ditch and road flooding was reported by a spotter from Lemitar.

Bernalillo County

Albuquerque	20	1830MST 1900MST			0	0			Flash Flood
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Heavy rain with swift water into arroyos and through low water crossings was reported in the foothills neighborhoods of northeast Albuquerque.

Mckinley County

Gallup	22	1315MST 1500MST			0	0	100K		Flash Flood
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One to two inches of rain from a slow moving thunderstorm caused wide spread street flooding in Gallup. Debris clogged city drainage which aggravated flooding in the older down town section. Water reached 18 to 24 inches deep in several business and two homes.

Santa Fe County

2 W Edgewood	29	1200MST			0	0			Hail(0.75)
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Guadalupe County

Dilia	29	1538MST			0	0			Hail(0.75)
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Colfax County

12 NW Cimarron	29	1640MST 1720MST			0	0			Flash Flood
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Heavy debris runoff and flash flooding from recent burnt areas were reported from both Ponil and North Ponil Canyons on the Philmont Scout Ranch. An archaeological team had advanced warning and moved to safe terrain ahead of the dangerous flows.

NEW MEXICO, South Central and Southwest

Grant County

(Sve)Silver City Arpt	01	1531MST			0	0	10K		Thunderstorm Wind (G66) ^M
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A microburst measured at 66 kts (75 mph) collapsed a hangar roof and blew down a chain link fence at a USFS air tanker base (east edge of the airport).

Otero County

5 E Cloudcroft	02	1520MST 1540MST			0	0			Hail(1.00)
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Hail up to the size of quarters covered the ground to a depth of 2 inches.

Otero County

12 S Alamogordo	02	1745MST 1800MST			0	0	25K		Thunderstorm Wind
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Thunderstorm outflow blew down billboards, power lines and trees, and left at least one house without a roof.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEW MEXICO, South Central and Southwest

Dona Ana County Las Cruces	02	1945MST			0	0			Thunderstorm Wind (G52)
Dona Ana County 10 E Las Cruces	02	2010MST			0	0	1K		Thunderstorm Wind (G55)^M Thunderstorm outflow winds measured at 63 mph blew down a 63 year old oak tree that narrowly missed a house but crashed down upon a parked car.
Dona Ana County 11 E Anthony	04	1540MST			0	0			Thunderstorm Wind (G57) Winds estimated at 65 mph reduced visibilities to 500 feet in blowing sand in Chaparral.
Dona Ana County 10 NW Radium Spgs	16	1740MST 1830MST			0	0	20K		Flash Flood A cluster of thunderstorms dropped nearly 4 inches of rain within an hour according to a RAWS rain gauge located in the Sierra de Las Uvas Mountains. The resulting runoff washed out Highway 185 between Radium Springs and Rincon.
Sierra County Monticello	17	1800MST 1900MST			0	0	25K		Flash Flood Very heavy rainfall from thunderstorms was measured at almost 6 inches in less than an hour in Monticello, with 4 inches at nearby Placita. A flash flood in Monticello Canyon washed out Highway 142 at the mouth of the canyon.
Dona Ana County Mesquite	30	1720MST 1740MST			0	0			Urban/Sml Stream Fld Runoff from a thunderstorm over the Franklin Mountains caused an arroyo to fill to a depth of 10 feet. The frontage roads near the arroyo were covered with water, and extensive ponding resulted downstream.

NEW MEXICO, Southeast

Eddy County Carlsbad	03 04	2130MST 0000MST			0	0	0	0	Flash Flood Rainfall rates up to two inches per hour resulted in flooding in and around the city of Carlsbad. Flooding of underpasses and surrounding county roads was reported by the cooperative observer. Additionally, there were several reports in Carlsbad of flooding up to doorways and in garages.
Eddy County 3 E Artesia	04	1900MST 2000MST			0	0	0	0	Flash Flood The Artesia Police Department reported water 3 feet deep along County Road 229 east of Artesia.
Eddy County 5 S Carlsbad	04	1937MST			0	0	0	0	Thunderstorm Wind (G50)^M
Eddy County 5 S Carlsbad	04	2000MST			0	0	0	0	Hail(0.75)
Eddy County Carlsbad	04	2100MST 2300MST			0	0	0	0	Flash Flood Numerous reports of water over roads in the city of Carlsbad resulted in some roads being baracaded.
Eddy County 4 S Hope	05	1625MST 1630MST			0	0	8K	0	Thunderstorm Wind (G61) Very strong thunderstorm outflow winds destroyed a barn south of the community of Hope in northwest portions of Eddy County.
Eddy County 4 S Hope	05	1630MST			0	0	0	0	Hail(0.75)
Eddy County 8 S Hope	05	1700MST 1930MST			0	0	0	0	Flash Flood Three feet of water was reported on Highway 12 south of the community of Hope as Walnut Creek flooded and overflowed its banks.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW MEXICO, Southeast

Eddy County

12 NW Carlsbad	05	1716MST			0	0	0	0	Hail(1.00)
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One inch diameter hail stopped traffic along Highway 285 west of Brantley Lake State Park.

Eddy County

7 NW Carlsbad	05	1815MST			0	0	0	0	Hail(1.00)
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One inch diameter hail was reported along Highway 285.

Eddy County

Carlsbad	05	1830MST			0	0	0	0	Hail(0.88)
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Eddy County

3 N Carlsbad	05	1840MST 2130MST			0	0	0	0	Flash Flood
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Flooding was reported along the truck bypass through Happy Valley, north of Carlsbad.

Eddy County

Carlsbad	05	1844MST			0	0	0	0	Hail(0.88)
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Nickel size hail was reported in the western portions of the city of Carlsbad.

Lea County

9 NE Knowles	06	1140MST			0	0	0	0	Hail(0.75)
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Eddy County

Carlsbad	06	1730MST 1900MST			0	0	0	0	Flash Flood
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Flooding was reported on the New Mexico Highway 524 Truck Bypass. Flood waters were as high as one and a half feet deep. Two to three inches of standing water was also reported on roadways across the city of Carlsbad.

NEW YORK, Central

Otsego County

Cooperstown	04	1500EST 1505EST			0	0	10K		Thunderstorm Wind (G60)
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Trees and power lines were downed due to thunderstorm winds. One tree fell on a car.

Broome County

Endicott	19	1330EST			0	0	5K		Lightning
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Lightning struck a two family house on Oak Hill Avenue in Endicott. It started a small fire in the attic. No one was home at the time of the lightning strike.

Sullivan County

Tusten	19	1400EST			0	0	200K		Lightning
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Lightning struck Cortese Auto Body Shop on Route 97. The lightning started an electrical fire which spread quickly to several cans of paint thinner and paint. The building was completely engulfed by the time the fire department arrived. Two people inside the building at the time of the strike got out uninjured. The shop was a total loss. A school bus, several other vehicles, tools and equipment in the shop were all destroyed.

Oneida County

Forestport	22	1915EST			0	0	2K		Thunderstorm Wind (G50)
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Thunderstorm winds knocked down a tree which took with it several power lines. The tree and wires came down on Route 28 in the town of Forestport north of the hamlet of Alder Creek. Route 28 was closed for several hours. The time of the tree and wires coming down is approximate.

Sullivan County

Countywide	23	1330EST 1400EST			0	0			Thunderstorm Wind (G55)
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Trees down.

Steuben County

Hornell to Bath	28	1630EST 1645EST			0	2	2K		Thunderstorm Wind (G50)
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Trees and wires were downed in Hornell and North Hornell. 600 customers lost electric power. Two people were injured from a falling tree branch in Hornell at the corner of Main and Collier Streets. The male victim suffered a shoulder injury while the female victim suffered head and neck injuries. The woman was treated and released at the hospital. In Bath a tree fell on a barn and another tree fell on County Route 24. A tree also fell in Almond.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEW YORK, Central

Cayuga County

Weedsport to Sennett 28 1720EST
1725EST 0 0 3K **Thunderstorm Wind (G55)**

Several trees and wires downed.

Onondaga County

Mottville 28 1740EST 0.1 50 0 0 2M **Tornado (F1)**

The tornado touched down briefly in the hamlet of Mottville which is in the town of Skaneateles. The tornado's path length was approximately 100 yards and its width was approximately 50 yards. A trailer home was destroyed in the center of Mottville. The 67 year old man who lived in it got out of the debris afterward with only a few scratches. In addition, several large trees were sheared off 10 to 20 feet above the ground. Falling trees damaged several homes and businesses in the area. The Mottville post office opened the next morning despite two large pine trees lying on the roof. The storm continued south into the center of the village of Skaneateles. Damage in this area was due to straight line winds. There were no deaths or serious injuries caused by the tornado. A state of emergency was declared in the town of Skaneateles.

Onondaga County

Skaneateles to Otisco 28 1740EST
1800EST 0 0 1M **Thunderstorm Wind (G60)**

Thunderstorms winds downed numerous trees and wires from Skaneateles through Marcellus, Marietta, and Amber to Otisco. The worst damage was in the village of Skaneateles. In the village an antique boat show was wrapping up. The wind overturned many sailboats on the lake. West Lake Road was hard hit. The wind sheared off the roof of an apartment building on Jordan Road in Skaneateles. A state of emergency was declared in the village and town of Skaneateles. Trees fell on a few houses. More than 3,000 customers lost electricity.

Cayuga County

Scipio Center 28 1749EST 0 0 **Thunderstorm Wind (G50)**

Trees and wires down.

Oneida County

Utica Arpt 28 1810EST 0 0 **Hail(1.00)**

One inch hail reported by the ASOS observer at the Oneida County airport in Oriskany outside of Utica.

Cortland County

Homer to Cuyler 28 1810EST
1820EST 0 0 **Thunderstorm Wind (G55)**

Scattered trees down in Homer, Preble, Truxton, and Cuyler.

NEW YORK, Coastal

NYZ067>081

Orange - Putnam - Rockland - Northern Westchester - Southern Westchester - New York (Manhattan) - Bronx - Richmond (Staten Is.) - Kings (Brooklyn) - Queens - Nassau - Northwest Suffolk - Northeast Suffolk - Southwest Suffolk - Southeast Suffolk

01 0000EST 0 0 **Drought**
31 2359EST

After an encouraging 4 month period of increased rainfall and improved drought conditions, the region experienced a disappointing setback during July. Rainfall during July was well below normal. The Brookhaven Hydrologic Service Area (HSA) received 1.62 inches of rain, which was 41 percent of normal or 2.33 inches below normal. If there was a "bright" spot, rainfall was slightly higher across New York City's Croton and Catskill Watersheds, which averaged 60 to 70 percent of normal.

At the end of July, a majority of the streams monitored in real time by the U. S. Geological Survey in New York, were classified as having streamflows below normal.

The combined storage in the New York City reservoir system on July 31st was 80.2 percent capacity, which was 10.3 percent below normal. Capacities in the individual reservoirs on July 31st were:

Croton System	89.1% (Percent capacity)
Roundout Reservoir	97.3%
Ashokan Reservoir	76.9%
Schoharie Reservoir	53.9%
Cannonsville Reservoir	75.0%
Pepcaton Reservoir	79.5%
Neversink Reservoir	76.4%

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEW YORK, Coastal

The New York State Department of Environmental Conservation extended the Drought Warning for Long Island, New York City, Rockland and Westchester Counties through July 31st. The Drought Watch for Orange and Putnam Counties was also extended through July 31st.

NYZ067>081

Orange - Putnam - Rockland - Northern Westchester - Southern Westchester - New York (Manhattan) - Bronx - Richmond (Staten Is.) - Kings (Brooklyn) - Queens - Nassau - Northwest Suffolk - Northeast Suffolk - Southwest Suffolk - Southeast Suffolk

02	1200EST				0	0			Excessive Heat
04	1700EST								

Temperatures rose into the mid and upper 90s across the region. Overnight low temperatures remained in the lower 80s on the third and fourth in highly urbanized areas throughout the New York City Metropolitan Area. Overall, temperatures averaged 10 to 15 degrees above normal. On July 4th, the temperature reached 98 degrees at LaGuardia Airport, which set a new record high temperature. High temperatures and humidities combined to produce heat indices from 100 to 105 degrees throughout the region. Many cooling centers were opened across the city. On July 4th, the New York Times reported, "Hospital emergency rooms reported some heat exhaustion cases and other heat-related ailments. Small power failures throughout the day left as many as 20,000 homes without electricity." Brownouts occurred throughout the New York City Metropolitan Area, which included New Rochelle, where over 3,300 city residents lost power. Other areas affected included Eastchester, Tuckahoe, and Bronxville, where power outages developed around 1:30 pm on July 2nd. The Long Island Power Authority (LIPA) also reported scattered power outages that affected about 2700 customers throughout Long Island on July fourth.

Westchester County

Ardley

09	1620EST				0	0			Hail(0.88)
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A spotter reported nickel size hail.

Putnam County

Mahopac Falls

09	1625EST				0	0	500K		Lightning
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Lightning strikes caused several fires in the area, including a circa 1910 colonial home on Rock Ledge Place. About 1400 customers lost power due to these storms.

Westchester County

White Plains to
East White Plains

09	1630EST				0	0			Thunderstorm Wind (G50)
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Severe thunderstorm wind gusts knocked down several large tree limbs in White Plains and numerous large trees in East White Plains. The winds and falling trees also downed several power lines in the area, causing about 4600 residents to lose power. The Bronx River Parkway was closed for approximately two hours after a large tree had fallen and blocked the road.

Rockland County

Orangeburg

09	1622EST				0	0			Thunderstorm Wind (G50)
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A spotter, and local media reported that strong thunderstorm wind gusts knocked several large tree limbs and power lines down. Local newspapers reported that about 7000 homes and businesses lost power for anywhere from a few hours to about a day.

Rockland County

Spring Vly

19	1530EST				0	0			Thunderstorm Wind (G60)
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Spotters reported that severe thunderstorm winds knocked down several trees.

Rockland County

4 NW Pearl River to
Nyack

19	1600EST 1603EST				0	0			Thunderstorm Wind (G50)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEW YORK, Coastal

A spotter reported that severe thunderstorm winds ripped roofing shingles off several houses in Chestnut Ridge. A TV Meteorologist reported large trees downed in Nyack and boats overturned on the Hudson River from severe thunderstorm winds.

Rockland County
West Nyack

19 1615EST 0 0 Flood

Torrential rain occurred in and around West Nyack. Radar estimated rainfall rates between 2 and 4 inches within 1 hour. This caused a roof drain to overflow at the Palisades Center Mall in West Nyack. Rain water infiltrated the structure resulting in the flooding of many stores, a partial wall collapse at a JC Penny's Department store and the evacuation of the mall.

Orange County
Ridgebury to
Newburgh

23 1500EST 0 0 Thunderstorm Wind (G50)

A spotter reported that severe thunderstorm winds knocked numerous trees down in Ridgebury, Warwick, Goshen, and Newburgh. This resulted in downed power lines and an interruption in service for about 36,000 electricity customers. In Mongaup Valley, a 50 foot pine tree was snapped in two and fell across a yard.

Orange County
Blooming Grove

23 1550EST 0 0 Thunderstorm Wind (G50)

Local police reported several trees and power lines down due to severe thunderstorm winds.

Westchester County
Bedford

23 1615EST 0 0 Thunderstorm Wind (G50)

Local police reported that severe thunderstorm winds knocked several trees down.

NYZ067>081

Orange - Putnam - Rockland - Northern Westchester - Southern Westchester - New York (Manhattan) - Bronx - Richmond (Staten Is.) - Kings (Brooklyn) - Queens - Nassau - Northwest Suffolk - Northeast Suffolk - Southwest Suffolk - Southeast Suffolk

29 1200EST 0 0 Excessive Heat
31 2359EST

An eight day "heat wave" began on July 29th and extended through August 5th across the region. High temperatures rose into the mid and upper 90s from July 29th through the 31st. These temperatures combined with humidity produced heat indices from 100 to 105 degrees on the 29th and from around 95 to 100 on the 30th and 31st.

NEW YORK, East

NYZ032>033-038>043-047>054-058>061-063>066

Northern Herkimer - Hamilton - Southern Herkimer - Fulton - Montgomery - Northern Saratoga - Warren - Washington - Schoharie - Western Schenectady - Eastern Schenectady - Southern Saratoga - Western Albany - Eastern Albany - Western Rensselaer - Eastern Rensselaer - Western Greene - Eastern Greene - Western Columbia - Eastern Columbia - Western Ulster - Eastern Ulster - Western Dutchess - Eastern Dutchess

05 2000EST 0 0 Smoke
07 2359EST

Smoke, from many forest fires across the Nemiscau region of northern Quebec, became trapped under a subsidence inversion, and was transported south across eastern New York from the evening hours of July 5, to the late evening of July 7. The forest fires were sparked by exceptionally hot and dry weather over that part of Canada followed by an unusual amount of thunderstorm activity, resulting in many lightning strikes. The circulation between high pressure over Hudsons Bay and a low pressure off the Canadian Maritimes transported the smoke southward. The smoke obscured the sky, and even reduced surface visibilities to as low as one mile, especially on the early morning of July 7. Advisories were issued warning people with respiratory problems to remain indoors and all individuals to curb outside activity. No major problems were reported to the National Weather Service as a result of this smoke. By late Sunday, July 7, the low pressure weakened and moved further east, allowing the wind to back into more of a westerly direction, finally dissipating the smoke.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW YORK, East

Fulton County

Caroga Lake	09	1215EST 1315EST			0	2			Lightning
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On the early afternoon of July 9, lightning struck a tree at the Caroga Lake Campsite, in the town of Caroga Lake, Fulton County. The lightning took the bark off and traveling up through the roots as well as the surrounding blacktop. The current also ran through a child and his grandfather. The two individuals were thrown into the air and then fell to the ground. They were stunned and briefly paralyzed. Both victims were burned and admitted to the Westchester Medical Center in fair condition.

Saratoga County

Edinburg	18	1350EST			0	0	7K		Thunderstorm Wind
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Saratoga County

Quaker Spgs	18	1420EST			0	0	10K		Thunderstorm Wind
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Saratoga County

Stillwater	18	1420EST			0	0	10K		Thunderstorm Wind
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Washington County

Easton	18	1425EST			0	0			Hail(0.75)
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A weak upper level disturbance triggered scattered thunderstorms across portions of eastern New York during the afternoon of July 18. Two cells became briefly severe. The first severe storm, in Saratoga County, produced significant wind damage as trees fell on wires at Spiers Falls Dam, in the town of Edinburg. The second cell moved across eastern Saratoga County where trees and wires were blown down at the intersection of Rts 32 and 4 in Stillwater as well as Quaker Springs. The storm then moved into Washington County and produced dime sized hail in the town of Easton.

Albany County

Westerlo	19	1600EST 1900EST			0	0	10K		Flash Flood
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Scattered thunderstorms erupted in a very humid air mass, ahead of a cold front, during the afternoon of July 19. A series of thunderstorms trained across western Albany County, producing torrential rainfall in an area of steep terrain. Doppler radar estimated in excess of 3 inches falling in a short interval of time. The net result was flash flooding. Numerous gravel roads and driveways were reported washed out in the towns of Westerlo, Rensselaerville and New Scotland.

Montgomery County

Amsterdam	23	1105EST			0	0	5K		Thunderstorm Wind
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Albany County

Bethlehem Center	23	1140EST			0	0	4K		Thunderstorm Wind
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Saratoga County

Stillwater	23	1145EST			0	0	5K		Thunderstorm Wind
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Rensselaer County

Poestenkill	23	1213EST			0	0	5K		Thunderstorm Wind
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Columbia County

Kinderhook	23	1226EST			0	0	10K		Thunderstorm Wind
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Greene County

Coxsackie	23	1250EST			0	0	25K		Thunderstorm Wind
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Columbia County

Hillsdale	23	1300EST			0	0	15K		Thunderstorm Wind
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Ulster County

Saugerties South	23	1320EST			0	0	15K		Thunderstorm Wind
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Dutchess County

Millerton	23	1325EST			0	0	20K		Thunderstorm Wind
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Dutchess County

Poughkeepsie	23	1325EST			0	0	10K		Thunderstorm Wind
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Ulster County

Ulster Hgts	23	1325EST			0	0	6K		Thunderstorm Wind
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Ulster County

Gardiner	23	1345EST			0	0	10K		Thunderstorm Wind
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A cold front, working southeast across the Empire State, triggered a broken line of thunderstorms across eastern New York during

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW YORK, East

the midday hours of July 23. Since the air mass ahead of the front was hot and humid, and winds aloft rather strong, some of the storms became severe. Thunderstorm winds produced tree damage in at least one place in Montgomery, Albany, Saratoga and Ulster Counties. In Coxsackie, Green County, in addition to small trees being blown down, thunderstorm winds blew a roof off a trailer. In the town of Hillsdale, Columbia County, several trees and some wires were blown down. One tree fell on a car. In Ulster Heights, Ulster County, a large tree fell on a tree house, destroying it. In Dutchess County, a microburst up to 50 yards wide knocked down many trees in the town of Millerton. One large tree fell on a house. Also in Dutchess County, more trees and wires were blown down in the town of Poughkeepsie. One of the trees blown down was a 120-foot high tree, planted by Samuel Morse in 1860. The storms knocked out power to 13,500 customers in eastern New York, with 12,000 of those in Dutchess County alone.

NEW YORK, North

NONE REPORTED.

NEW YORK, West

Ontario County Victor	22	1458EST			0	1	45K		Thunderstorm Wind (G55)
Wayne County Palmyra	22	1510EST			0	0	15K		Thunderstorm Wind (G50)
Ontario County Naples	22	1610EST			0	0	10K		Thunderstorm Wind (G50)
Chautauqua County Kiantone	22	1650EST			0	0	25K		Thunderstorm Wind (G50)
Jefferson County Sackets Harbor	22	1650EST			0	0	15K		Thunderstorm Wind (G50)
Oswego County Pulaski	22	1720EST			0	0	10K		Thunderstorm Wind (G50)
Jefferson County Black River	22	1725EST			0	0	15K		Thunderstorm Wind (G52) ^M
Jefferson County North Wilna	22	1740EST			0	0	10K		Thunderstorm Wind (G50)
Lewis County Castorland	22	1740EST			0	0	10K		Thunderstorm Wind (G50)
Lewis County Croghan	22	1800EST			0	0	15K		Thunderstorm Wind (G50)
Thunderstorms moves across the area during the afternoon and evening hours. The thunderstorm winds downed trees and power lines. Scattered telephone and power outages were reported. In Victor, a tree came down on a car. One person was taken to a local hospital with minor injuries.									
Erie County Collins	28	0320EST			0	0	15K		Thunderstorm Wind (G50)
Chautauqua County Fredonia	28	0330EST			0	0	15K		Thunderstorm Wind (G50)
Chautauqua County Stockton	28	0515EST			0	0	50K		Thunderstorm Wind (G55)
Cattaraugus County Dayton	28	0530EST			0	0	10K		Thunderstorm Wind (G50)
Chautauqua County Lakewood	28	1505EST			0	0	35K		Hail(1.00)
Chautauqua County Kennedy	28	1515EST			0	0	15K		Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW YORK, West

Cattaraugus County									
Randolph	28	1521EST			0	0	10K		Thunderstorm Wind (G58) ^M
Allegany County									
Belfast	28	1606EST			0	0	10K		Thunderstorm Wind (G50)
Cayuga County									
Cato	28	1730EST			0	0	10K		Thunderstorm Wind (G50)
Ontario County									
Canandaigua	28	1800EST			0	0	40K		Thunderstorm Wind (G55)

Downburst winds accompanying thunderstorms across the southern tier and parts of the Finger Lakes produced isolated downed trees and power lines. Thunderstorms re-developed during the afternoon and evening hours. As many as 15,000 were without power in the southern tier for several hours. A falling tree struck a house in Fredonia. Gusts toppled signs along the Thruway. Several roads were totally blocked by fallen trees. Heavy downpours that accompanied the afternoon thunderstorms resulted in some poor drainage flooding in the Southern Tier.

Chautauqua County									
Fredonia	29	2040EST			0	0	35K		Thunderstorm Wind (G61) ^M
Oswego County									
Volney	29	2040EST			0	0	8K		Thunderstorm Wind (G50)
Erie County									
Buffalo	29	2050EST			0	0	15K		Thunderstorm Wind (G50)
Oswego County									
Maple View	29	2056EST			0	0	10K		Thunderstorm Wind (G50)
Erie County									
Elma	29	2108EST			0	0	20K		Thunderstorm Wind (G50)
Niagara County									
Lockport	29	2109EST			0	0	15K		Thunderstorm Wind (G50)
Genesee County									
Batavia	29	2135EST			0	0	10K		Thunderstorm Wind (G50)
Wyoming County									
Eagle	29	2138EST			0	0	8K		Thunderstorm Wind (G50)
Orleans County									
Kendall	29	2140EST			0	0	10K		Thunderstorm Wind (G50)
Wyoming County									
Arcade	29	2154EST			0	0	8K		Thunderstorm Wind (G50)

Thunderstorms developed ahead of an advancing cold front. The thunderstorm winds downed trees and power lines and scattered outages were reported.

NORTH CAROLINA, Central

Stanly County									
Locust	01	1430EST			0	0			Hail(0.75)
Guilford County									
Pleasant Garden	01	1444EST			0	0			Hail(1.50)
Anson County									
Wadesboro	01	1926EST			0	0			Hail(1.00)
Guilford County									
High Pt	01	1945EST			0	0	7K		Lightning
A lightning strike caused minor damage to a public library.									
Orange County									
Chapel Hill	02	1515EST			0	0	880K		Lightning

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Lightning started at least three house fires around Chapel Hill. The worst damage was sustained at a condominium complex on Copperline Drive.									
Guilford County 3 NE High Pt	02	1633EST			0	0			Hail(0.88)
Montgomery County Candor	02	2300EST			0	0			Hail(0.75)
Edgecombe County Rocky Mt	02	1630EST			0	0	25K		Lightning
Lightning started a fire which damaged a home on Winchester Road.									
Randolph County Asheboro	02	1700EST			0	1			Lightning
A woman was injured when lightning struck nearby.									
Richmond County Roberdel	03	1500EST			0	0			Thunderstorm Wind (G50)
Trees were blown down.									
Forsyth County Winston Salem	03	1515EST			0	0			Hail(1.00)
Quarter sized hail was reported in the west side of Winston Salem near County Club Road.									
Anson County Morven	03	1540EST			0	0			Thunderstorm Wind (G50)
Trees were blown down.									
Guilford County Stokesdale	03	1620EST			0	0			Hail(1.75)
Warren County Warrenton	03	2025EST			0	0			Hail(1.00)
Guilford County Greensboro	04	1440EST			0	0			Hail(0.88)
Guilford County Greensboro	04	1505EST			0	0			Hail(0.75)
Orange County Orange Grove	04	1650EST			0	0			Thunderstorm Wind (G50)
Trees were blown down, one fell onto a house.									
Wake County Raleigh	04	1700EST			0	0			Hail(0.88)
Moore County Robbins	04	1755EST			0	0			Thunderstorm Wind (G50)
Trees and powerlines were blown down.									
Alamance County Burlington	04	1815EST			0	3			Lightning
Three people suffered minor injuries when lightning struck nearby at a campground.									
Alamance County Mebane	04	1827EST			0	0	20K		Lightning
A barn on High Rock Road was destroyed by a lightning strike. Three cows in the barn were killed.									
Johnston County Micro	05	1620EST			0	0			Thunderstorm Wind (G50)
A 70-foot Ham radio tower was blown down near Micro.									
Johnston County Smithfield	05	1650EST			0	0			Hail(0.88)
Franklin County Centerville	05	1659EST			0	0			Thunderstorm Wind (G50)
Trees were blown down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>NORTH CAROLINA, Central</u>									
Franklin County									
Ingleside	05	1730EST			0	0			Hail(1.75)
Wilson County									
Wilson	05	1737EST			0	0			Hail(0.75)
Halifax County									
Airlie	05	1740EST			0	0			Thunderstorm Wind (G55)^M A spotter measured a 55 knot wind gust.
Johnston County									
Smithfield	05	1745EST			0	0			Hail(1.75)
Nash County									
Castalia	05	1745EST			0	0			Hail(1.00)
Nash County									
Red Oak	05	1810EST			0	0			Hail(0.75)
Halifax County									
Ringwood	05	1815EST			0	0			Hail(1.75)
Johnston County									
Selma	05	1815EST			0	0			Thunderstorm Wind (G60) A downburst caused several blocks of damage in Selma. Several trees were uprooted, and some homes were slightly damaged. A portion of a roof on a school was blown off. The greatest damage was within 10 city blocks of Green Street.
Edgecombe County									
10 E Rocky Mt	05	1830EST			0	0			Hail(1.75)
Halifax County									
Enfield	05	1830EST			0	0			Thunderstorm Wind (G50) Trees were blown down.
Wayne County									
Seven Spgs	05	1840EST			0	0			Thunderstorm Wind (G50) A roof on a sun room was damaged.
Johnston County									
Drug Store	05	1900EST			0	0			Hail(1.00)
Wake County									
Fuquay Spgs	05	1916EST			0	0			Thunderstorm Wind (G50) Trees and powerlines were blown down in Fuquay-Varina.
Wilson County									
Wilson	05	1930EST 2100EST			0	0			Flash Flood Motorists were stranded on flooded roads in Wilson; Highway 264 in Wilson was flooded.
Edgecombe County									
Central Portion	05	2000EST 2100EST			0	0			Flash Flood Flooding was reported on Nobles-Millpond Road, Powell Road, and Wedgecombe Road.
Wayne County									
Goldsboro	08	1815EST			0	0	190K		Lightning Lightning started at least four house fires across Wayne county, most occurring near Goldsboro.
Sampson County									
Newton Grove	10	1715EST			0	0			Thunderstorm Wind (G50) Trees were blown down.
Johnston County									
Four Oaks	10	1735EST			0	0			Thunderstorm Wind (G60) Trees were blown down, and crops were ripped and torn on Old School Road. A barn and some small shelters were destroyed.
Wayne County									
Grantham	10	1750EST			0	0			Thunderstorm Wind (G60)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NORTH CAROLINA, Central

Two barns and several trees were blown down.

Person County

Roxboro	10	1815EST			0	0			Thunderstorm Wind (G50)
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Trees were blown down along Highway 501 just south of Roxboro.

Halifax County

Scotland Neck	10	1850EST			0	0			Thunderstorm Wind (G60)
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Near Winslow Road and Stampersiding Road, trees were blown down, one falling on a car and a trailer. Grain barns and sheds were damaged, and irrigation systems were flipped over.

Nash County

Sharpsburg	22	1510EST			0	0			Thunderstorm Wind (G50)
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Trees and power lines were blown down.

Chatham County

Goldston	22	1600EST			0	0			Thunderstorm Wind (G50)
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Several trees were blown down near Goldston and Bear Creek.

Davidson County

Wallburg	22	1600EST			0	0	100K		Lightning
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Lightning started a fire in a home.

Randolph County

Randleman	22	1630EST			0	0			Thunderstorm Wind (G50)
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A garage and two attached outbuildings were blown 50 yards and destroyed.

Cumberland County

Fayetteville	22	1640EST			0	0	180K		Lightning
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Lightning set fire to a home.

Harnett County

5 E Seminole	31	1900EST			0	0			Thunderstorm Wind (G50)
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Trees were blown down on Highway 27.

NORTH CAROLINA, Central Coastal

Pitt County

5 E Greenville	04	1540EST			0	0			Hail(0.75)
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Pitt County

2 S Greenville	04	1611EST			0	0			Hail(0.88)
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Pitt County

Grifton	04	1645EST			0	0			Hail(0.75)
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Craven County

Ft Barnwell	05	1730EST			0	0			Hail(0.75)
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Pitt County

1 E Greenville	05	1910EST			0	0			Hail(1.00)
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Duplin County

Chinquapin	05	1920EST			0	0			Hail(1.75)
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Jones County

Trenton	05	1945EST			0	0			Thunderstorm Wind (G62) ^M
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Onslow County

Sneads Ferry	05	2020EST			0	0			Thunderstorm Wind (G52) ^M
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Duplin County

Albertson	10	1320EST			0	3	5K		Thunderstorm Wind (G62)
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Severe thunderstorm winds in excess of 70 mph flipped a mobile homes near Scott's Store. Three women who were inside of the mobile home suffered minor injuries.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>NORTH CAROLINA, Central Coastal</u>									
Pitt County									
Greenville	10	1330EST 1345EST			0	0			Hail(0.75)
Beaufort County									
Pinetown	10	1405EST			0	0			Thunderstorm Wind (G62)
Numerous trees were blown down by severe thunderstorm winds making Highway 32 impassable.									
Hyde County									
Engelhard	10	1410EST			0	0			Thunderstorm Wind (G62) ^M
Beaufort County									
Belhaven	10	1421EST			0	0	4K		Thunderstorm Wind (G62)
Sever thunderstorm winds of about 70 mph damaged the roof and siding of the post office in Belhaven.									
Craven County									
New Bern	10	1430EST			0	0			Thunderstorm Wind (G52)
Numerous trees and power lines down in New Bern.									
Duplin County									
Rose Hill	10	1440EST			0	0	4K		Thunderstorm Wind (G61)
A thunderstorm downburst of 70 mph flipped over a single wide trailer near Rose Hill.									
Jones County									
5 E Trenton	10	1447EST			0	0			Thunderstorm Wind (G52)
Pamlico County									
Vandemere	10	1507EST			0	0			Thunderstorm Wind (G62)
Onslow County									
Haw Branch	10	1525EST			0	0			Hail(0.75)
Onslow County									
Camp Lejeune	10	1542EST			0	0	20K		Thunderstorm Wind (G62)
Thunderstorm winds around 70 mph blew down numerous trees on Camp Lejeune, one of which totaled a truck. Flying debris damaged several other vehicles.									
Onslow County									
Piney Green	10	1600EST			0	0	1K		Thunderstorm Wind (G62)
Severe thunderstorm winds ripped the siding off of several homes in Piney Green.									
Washington County									
Roper	19	2205EST			0	0			Thunderstorm Wind (G52)
Numerous trees and power lines blown from Roper to Pleasant Grove.									
Onslow County									
Richlands	20	1700EST			0	0	3K		Thunderstorm Wind
Falling trees and limbs caused damage to a mobile home in Richlands.									
Washington County									
Roper	20	1730EST			0	0			Thunderstorm Wind (G52)
Onslow County									
Belgrade	20	1730EST			0	0			Thunderstorm Wind (G52)
Numerous trees and power lines down in and around Belgrade.									
Carteret County									
Stella	20	1746EST			0	0			Thunderstorm Wind (G52) ^M
Carteret County									
Morehead City	20	1810EST			0	0			Thunderstorm Wind (G65) ^M
Carteret County									
Morehead City	20	1840EST			0	0			Thunderstorm Wind (G61)
Carteret County									
Harkers Is	20	1905EST			0	0			Thunderstorm Wind (G52) ^M
Carteret County									
15 W Atlantic Beach	23	1300EST			1	0			Rip Currents

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NORTH CAROLINA, Central Coastal

A 38 year old Virginia man drown while caught in a rip current in Emerald Isle.
M38IW

Pamlico County Whortonville	27	1613EST			0	0			Hail(0.75)
Pitt County Greenville	27	1730EST			0	0	1K		Lightning
Carteret County Morehead City	27	1905EST 2000EST			0	0			Flash Flood
Up to 4-5 inches of rain fall over Morehead City in a 3 hour time period. This caused flooding of many major roads in Morehead City and Atlantic Beach. Numerous vehicles were flooded and abandoned.									
Craven County New Bern	31	1410EST			0	0			Hail(0.75)
Craven County Ernul	31	1445EST			0	0			Thunderstorm Wind (G61)
Craven County New Bern	31	1500EST			0	0			Hail(0.88)
Onslow County Camp Lejeune	31	1514EST			0	0			Thunderstorm Wind (G56) ^M
Onslow County Jacksonville	31	1615EST 1700EST			0	0			Flash Flood
Heavy rain caused the closure of numerous roads in and around Jacksonville. Several cars were flooded.									

NORTH CAROLINA, Extreme Southwest

Cherokee County Andrews	22	1750EST			0	0			Hail(0.75)
Dime size hail was reported in and around Andrews.									
Cherokee County 5 W Murphy	30	1851EST			0	0	5K		Thunderstorm Wind
Numerous trees down in western half of county.									

NORTH CAROLINA, North Coastal

Camden County Camden	04	1315EST			0	0			Hail(0.75)
Currituck County Moyock	04	1315EST			0	0			Hail(1.00)
Chowan County Edenton	05	1545EST			0	0			Hail(1.50)
Chowan County Rockyhock	05	1555EST			0	0	2K		Thunderstorm Wind
Trees down.									
Bertie County Lewiston	10	1850EST			0	0	2K		Thunderstorm Wind
Numerous large tree limbs and powerlines down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops

NORTH CAROLINA, Northwest and North Central

Alleghany County							
6.5 ENE Sparta	02	1529EST			0	0	Hail(0.75)
Wilkes County							
Mcgrady	02	1615EST			0	0	Hail(0.75)
Alleghany County							
Piney Creek	02	1629EST			0	0	Hail(0.75)
Ashe County							
Countywide	02	1640EST 1650EST			0	0	10K Thunderstorm Wind
Stokes County							
Sandy Ridge	02	1740EST			0	0	0 Thunderstorm Wind

Thunderstorms during the afternoon of the 2nd produced damaging winds and hail up to dime size.

Thunderstorm winds downed numerous trees across Ashe county. One tree was downed onto a house, causing damage to the roof.

Thunderstorm winds also downed a large tree in Sandy Ridge.

Watauga County							
Deep Gap	03	1532EST			0	0	Hail(0.88)
Thunderstorm during the afternoon of the 3rd produced hail up to nickel size.							
Ashe County							
Countywide	04	1420EST 1435EST			0	0	0 Thunderstorm Wind
Stokes County							
Danbury	04	1615EST			0	0	Hail(1.00)
Surry County							
Elkin	04	1615EST			0	0	0 Thunderstorm Wind
Yadkin County							
Southwest Portion	04	1705EST			0	0	0 Thunderstorm Wind
Surry County							
4 W Dobson	04	1720EST			0	0	20K Thunderstorm Wind

Thunderstorms during the afternoon of the 4th produced damaging winds and hail up to one inch in diameter.

Thunderstorm winds downed trees in Elkin, southwestern Yadkin county, and across Ashe County. Thunderstorm winds also downed trees 4 miles west of Dobson, including onto two residences, causing damage to the roofs.

Surry County							
East Portion	25 26	2350EST 0130EST			0	0	0 Flash Flood

Heavy thunderstorm rains caused flash flooding across the eastern half of Surry County during the late evening of the 25th and early morning of the 26th. Numerous roads were reported flooded and closed.

Rockingham County							
Intelligence	26	1740EST			0	0	0 Thunderstorm Wind

Thunderstorms winds downed trees and power lines in Intelligence during the late afternoon of the 26th.

NORTH CAROLINA, South Coastal

Pender County							
Surf City	05	2038EST			0	0	Thunderstorm Wind (G52) ^M
Surf City Bridge measured a 60 mph wind gust.							

New Hanover County							
Carolina Beach	06	1500EST			0	3	Lightning
Lightning struck the beach near the Sandpiper Lane public beach access, injuring a lifeguard and two other people near the area, none seriously.							

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NORTH CAROLINA, South Coastal

Pender County

Maple Hill	10	1530EST			0	0			Thunderstorm Wind (G60)
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Public reported trees down.

Columbus County

Bolton	10	1600EST			0	0			Thunderstorm Wind (G60)
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Trees down.

Columbus County

Delco	10	1615EST			0	0			Thunderstorm Wind (G60)
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Trees down.

Columbus County

Lake Waccamaw	10	2115EST			0	0			Thunderstorm Wind (G60)
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Law enforcement reported trees down.

New Hanover County

Wilmington	15	2130EST 2300EST			0	0			Flood
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911 center reported standing water on many streets. New Center Drive was closed due to flooding. The overpass at Market Street had 1-2 feet of standing water. Radar estimated between three and four inches of rain fell in this area.

New Hanover County

Wilmington	20	1345EST			0	1			Lightning
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A women was injured when struck by lightning and was sent to the hospital.

Brunswick County

1 SW Leland	20	1655EST 1700EST			0	0	10K		Thunderstorm Wind (G56)
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Spotter estimated thunderstorm wind gusts to 65 mph. The winds damaged a steel frame house under construction. Dime size hail was also reported with this storm.

New Hanover County

Wilmington	20	1715EST			0	0	5K		Thunderstorm Wind (G55)
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911 dispatch reported a large tree fell on a vehicle.

Brunswick County

4 SE Shallotte to 2 SE Shallotte	24	1655EST 1710EST	2	50	0	0			Tornado (F0)
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A waterspout formed in the Shallotte River and briefly moved over land before dissipating. The F0 tornado crossed Gray Bridge Road. There was no damage reported.

New Hanover County

Wilmington	31	1330EST			0	0			Hail(0.75)
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Dime size hail reported near Oleander and Hydrangea Drives.

Columbus County

5 N Lake Waccamaw	31	1415EST			0	0			Thunderstorm Wind (G60)
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Large trees down on power lines.

Bladen County

Council	31	1415EST			0	0			Hail(0.75)
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Public reported dime size hail.

Robeson County

5 W Rennert	31	1808EST			0	0			Hail(1.25)
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Public reported large hail.

NORTH CAROLINA, Southwest

Jackson County

Glenville	01	1400EST			0	0			Hail(0.75)
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Transylvania County

Rosman to Lake Toxaway	01	1410EST 1425EST			0	0	20K		Hail(1.25)
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Several vehicles received damage.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>NORTH CAROLINA, Southwest</u>									
Macon County									
11 N Franklin	01	1510EST			0	0			Thunderstorm Wind (G50)
			A few trees were blown down.						
Macon County									
1 NW Franklin	01	1535EST			0	0			Hail(0.75)
Macon County									
1 NW Franklin	01	1535EST			0	0			Thunderstorm Wind (G50)
			Several trees were blown down on the north side of Franklin.						
Buncombe County									
3 N Swannanoa	01	1555EST			0	0			Hail(0.88)
Rutherford County									
2 SW Forest City	01	1604EST			0	0			Thunderstorm Wind (G50)
			Trees were blown down along Newton Cole Rd.						
Mecklenburg County									
Charlotte	01	1604EST			0	0			Hail(1.00)
Mecklenburg County									
Pineville	01	1749EST			0	0	1K		Thunderstorm Wind (G50)
			Powerlines were blown down in town. Trees were blown down along Highway 51 near Pineville.						
Mecklenburg County									
Pineville	01	1900EST 2100EST			0	0			Flash Flood
			Cars were stalled in a shopping center parking lot by high water from severe urban flooding. Two people required rescuing from their cars.						
Macon County									
Scaly	02	1300EST			0	0	5K		Hail(1.00)
			Hail damaged at least one vehicle.						
Jackson County									
Cashiers	02	1328EST			0	1			Lightning
			A man in a hottub was struck by lightning.						
Buncombe County									
Asheville	02	1420EST			0	0			Thunderstorm Wind (G50)
			Trees were blown down near the intersection of Interstates 26 and 40.						
Buncombe County									
Enka	02	1420EST 1440EST			0	0			Hail(0.75)
Madison County									
Mars Hill	02	1540EST			0	0			Thunderstorm Wind (G50)
			Several trees were blown down.						
Madison County									
Marshall	02	1545EST			0	0	10K		Lightning
			Lightning ignited a housefire.						
Madison County									
Marshall	02	1545EST			0	0			Thunderstorm Wind (G50)
			Several trees were blown down.						
Avery County									
3 NE Linville	02	1615EST			0	0			Hail(0.75)
			Hail was reported at Ned's Mountain.						
Madison County									
Spring Creek	02	1630EST			0	0			Hail(0.75)
Avery County									
South Portion	02	1630EST 1900EST			0	0			Flash Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>NORTH CAROLINA, Southwest</u>									
Several roads were washed out after 4 to 5 inches of rain fell in a short period of time.									
Avery County Minneapolis	02	1700EST 1715EST			0	0			Hail(0.75)
Hail accumulated to depths of 3 inches.									
Avery County Minneapolis	02	1700EST 1715EST			0	0			Thunderstorm Wind (G50)
Mecklenburg County 4 N Paw Creek	02	1710EST 1730EST			0	0			Hail(0.75)
Mecklenburg County 4 N Paw Creek	02	1710EST 1730EST			0	0	3K		Thunderstorm Wind (G60)
Numerous trees and powerlines were blown down.									
Gaston County Belmont	02	1715EST 1730EST			0	0	20K		Thunderstorm Wind (G60)
Numerous powerlines and trees were blown down, including a 60" diameter tree. Some trees were blown on houses. Siding was torn off of a house. 5700 homes were without power.									
Mitchell County 5 N Bakersville	02	1720EST			0	0			Hail(0.75)
Swain County Bryson City	02	1730EST			0	0			Hail(0.75)
Swain County Bryson City	02	1730EST			0	0	10K		Thunderstorm Wind (G60)
Numerous trees were blown down. The roof of a commercial building received damage.									
Rutherford County Caroleen to Cliffside	02	1810EST			0	2			Thunderstorm Wind (G55)
Numerous trees were blown down. Two people were injured on the morning of the 3rd, when a large tree damaged by the storm fell.									
Davie County 5 NE Mocksville	02	1942EST			0	0			Hail(1.00)
Hail was reported at the intersection of Highway 158 and Baltimore Rd.									
Madison County 5 N Mars Hill	03	1415EST			0	0			Hail(1.75)
Rutherford County Forest City	03	1639EST			0	0			Hail(0.75)
Mecklenburg County Charlotte	03	1656EST			0	0	7.5K		Thunderstorm Wind (G50)
A tree was blown on a car. Several traffic lights and signs were damaged.									
Mecklenburg County 11 NE Charlotte	03	1707EST			0	0			Hail(0.75)
Mecklenburg County 11 NE Charlotte	03	1707EST			0	0	20K		Lightning
Lightning struck a house and a condominium, resulting in damage to both.									
Mecklenburg County 11 NE Charlotte	03	1707EST			0	0	20K		Thunderstorm Wind (G50)
Trees were blown down onto an apartment complex, resulting in evacuation of some units.									
Cabarrus County Harrisburg	03	1715EST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>NORTH CAROLINA, Southwest</u>									
Cleveland County 8 N Shelby	03	1720EST			0	0			Thunderstorm Wind (G55) Numerous trees were blown down.
Mecklenburg County Charlotte	03	1725EST			0	0			Hail(0.75)
Mecklenburg County Charlotte	03	1725EST			0	0	10K		Lightning Two house fires were ignited by lightning.
Cleveland County 3 S Shelby	03	1815EST			0	0			Lightning Lightning ignited several grass fires.
Cleveland County 3 S Shelby	03	1815EST			0	0			Thunderstorm Wind (G55) Numerous trees were blown down.
Mecklenburg County Charlotte	03	1815EST			0	0	3K		Thunderstorm Wind (G55) Numerous trees and powerlines were blown down.
Lincoln County 11 WSW Lincolnton	03	1820EST			0	0			Hail(0.75)
Rutherford County 5 S Forest City	03	1840EST			0	0	25K		Thunderstorm Wind (G50) Numerous trees and powerlines were blown down. One tree fell on a house. A vehicle collided with a tree that had fallen on Highway 120.
Cleveland County Waco	03	1843EST			0	0			Thunderstorm Wind (G50) Several trees were blown down along Old Post Rd and Tobe Ridge Rd.
Cleveland County Shelby to 8 N Shelby	03	1915EST			0	0			Thunderstorm Wind (G52) Numerous trees were blown down across the area.
Cabarrus County 3 N Harrisburg	04	1320EST			0	0			Hail(0.88) Reported on Highway 49.
Mecklenburg County Charlotte	04	1400EST 1500EST			0	0	260K		Lightning At least 3 major fires were ignited by lightning, some at apartments and houses.
Mecklenburg County Matthews	04	1415EST 1420EST			0	0			Hail(0.75)
Mecklenburg County Charlotte	04	1430EST			0	0			Hail(1.00)
Mecklenburg County Charlotte	04	1430EST			0	0			Thunderstorm Wind (G52)
Union County Weddington	04	1435EST			0	0			Hail(0.88)
Union County Weddington	04	1435EST			0	0			Thunderstorm Wind (G55) Numerous trees were blown down.
Madison County Marshall	04	1515EST			0	0			Thunderstorm Wind (G50) Several trees were blown down at the intersection of Highway 19 and Main St.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>NORTH CAROLINA, Southwest</u>									
Buncombe County 4 W Weaverville	04	1600EST			0	1			Thunderstorm Wind (G50) Several trees were blown down, and one injury resulted from a falling tree.
Davie County 5 N Mocksville	04	1652EST			0	0			Hail(0.88)
Gaston County Cherryville	04	1700EST			0	1	30K		Lightning Lightning caused a minor injury at a baseball field. Lightning was also blamed for the loss of equipment at a radio station.
Gaston County Cherryville	04	1705EST			0	0	5K		Thunderstorm Wind (G50) Several trees were blown down. One tree fell on a house.
Caldwell County 2 NE Kings Creek	04	1715EST			0	0			Hail(1.00)
Cleveland County Lattimore	04	1735EST			0	0	10K		Lightning Lightning struck and killed 6 cows and a bull.
Cleveland County Shelby to Kings Mtn	04	1735EST			0	0	3K		Thunderstorm Wind (G55) Numerous trees and powerlines were blown down.
Iredell County 2 E Statesville	04	1745EST			0	0			Hail(0.75)
Iredell County Statesville to 2 E Statesville	04	1745EST			0	0			Thunderstorm Wind (G50) Large limbs were blown onto powerlines, resulting in power outages to 800 homes.
Cleveland County 1 E Mooresboro	04	1800EST 1815EST			0	0	3K		Thunderstorm Wind (G55) Numerous trees were blown down. One tree smashed a car windshield.
Catawba County Maiden	04	1810EST 1820EST			0	0			Thunderstorm Wind (G50) Several trees were blown down.
Rutherford County Rutherfordton to 5 E Rutherfordton	04	1816EST			0	0			Hail(0.75)
Rutherford County Rutherfordton to 5 E Rutherfordton	04	1816EST 1825EST			0	0	100K		Thunderstorm Wind (G55) Hundreds of trees and powerlines were blown down across the county. Some trees fell on homes. Some homes received minor roof damage from the wind.
Rutherford County Sunshine	04	1820EST 1830EST			0	0			Hail(0.75)
Rutherford County Sunshine	04	1820EST 1830EST			0	0			Heavy Rain A portion of Missionary Plantation Rd was washed out.
Lincoln County 2 N Lincolnton	04	1820EST			0	0			Hail(0.75)
Rowan County Salisbury	04	1830EST 1845EST			0	0	25K		Thunderstorm Wind (G60)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NORTH CAROLINA, Southwest

Numerous trees and powerlines were blown down. One tree fell on and crushed a garage. Scaffolding at a downtown construction site collapsed.

Rutherford County

Lake Lure

04	1830EST			0	0	50K		Lightning
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Lightning caused fires at 6 buildings.

Polk County

Columbus to 5 SW Columbus

04	1900EST			0	0	1K		Thunderstorm Wind (G50)
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A few trees and powerlines were blown down.

Mecklenburg County

Charlotte

14	0830EST			0	0			Urban/Sml Stream Fld
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Two to three inches of rain fell in a short time, causing local creeks to rise quickly to near bankfull. No creeks reportedly flooded, but usual flood-prone areas in the southern part of the metro area had minor flooding and standing water.

Burke County

Morganton

21	1730EST			0	0	30K		Thunderstorm Wind (G60)
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A microburst resulted in the roof being blown off of a business. Large tree limbs were also blown down.

Rowan County

China Grove

22	1430EST			0	0			Lightning
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A large tree was struck by lightning.

Swain County

2 W Cherokee

22	1435EST			0	0			Hail(0.75)
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Cabarrus County

Concord

22	1545EST 1550EST			0	0	50K		Thunderstorm Wind (G65)
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Numerous trees, some up to 2 feet in diameter were blown down. Some trees fell on homes and businesses. Some traffic lights were also blown out.

Cabarrus County

Concord

22	1545EST 1550EST			0	0			Urban/Sml Stream Fld
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A few streets were flooded.

Cabarrus County

3 NW Concord

22	1610EST			0	0			Hail(0.75)
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Union County

Monroe to 5 N Monroe

22	1620EST			0	0			Thunderstorm Wind (G55)
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Numerous trees were blown down.

Gaston County

Gastonia

22	1745EST 1800EST			0	0			Thunderstorm Wind (G50)
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A few trees were blown down.

Madison County

8 N Mars Hill

22	1800EST			0	0			Hail(1.25)
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Catawba County

3 E Hickory

22	1830EST			0	0	1K		Thunderstorm Wind (G52)
----	---------	--	--	---	---	----	--	-------------------------

A few trees and powerlines were blown down.

Cleveland County

2 N Polkville

22	1900EST			0	0			Thunderstorm Wind (G50)
----	---------	--	--	---	---	--	--	-------------------------

A couple of trees were blown down across roads.

Lincoln County

Triangle

24	1800EST 1900EST			0	0	50K		Flash Flood
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A severe urban flood developed quickly after about 4 inches of rain fell in 2 hours in eastern Lincoln County. Mud and water flowed across the road from a construction site, flooding the parking lot of a shopping center. People were trapped in cars and had to escape through windows. At least one car floated across the parking lot, and water accumulated to depths of 3 feet against store windows and then entered the stores. The water peaked in about 30 minutes and then receded.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>NORTH DAKOTA, Central and West</u>									
Bowman County									
12 SE Bowman	03	2315CST			0	0			Thunderstorm Wind (G52) ^M
Adams County									
14 N Hettinger	04	0050CST			0	0			Hail(0.75)
									Rainfall from the storm totaled 2.25 inches.
Hettinger County									
Regent	04	1643CST			0	0			Hail(1.00)
Williams County									
(Isn)Sloulin Fld Wil	05	0058CST			0	0			Thunderstorm Wind (G50) ^M
Williams County									
Tioga	05	0125CST			0	0			Thunderstorm Wind (G50)
									Reported by a NWS cooperative observer.
Mountrail County									
10 NW White Earth	05	0150CST			0	0			Thunderstorm Wind (G52)
									Several large trees bent over and numerous tree branches broken off.
Burke County									
Powers Lake	05	0155CST 0205CST			0	0			Thunderstorm Wind (G52) ^M
									Numerous large branches down.
Sioux County									
10 W Selfridge to 5 N Selfridge	05	1100CST 2100CST			0	0			Wild/Forest Fire
									A large grassland fire burned approximately 36,000 acres, claiming 17 residences and 21 outbuildings. The fire was fueled by temperatures above 100 degrees and gusty winds. The rangeland fire danger index was in the extreme category .
Billings County									
Medora	08	2310CST			0	0			Thunderstorm Wind (G52)
Stark County									
(Dik)Dickinson Muni	08	2331CST			0	0			Thunderstorm Wind (G51) ^M
Mcintosh County									
6 NE Ashley	09	1640CST			0	0			Hail(1.75)
Mcintosh County									
7 NE Ashley	09	1640CST	1	50	0	0			Tornado (F0)
									Tornado briefly touched down in open country. Rainfall from the storm measured at 2.50 inches. Crops on 3 seperate farms reported wiped out.
Mcintosh County									
6 NE Ashley	09	1640CST			0	0			Thunderstorm Wind (G52)
La Moure County									
1 N Edgeley	09	1722CST			0	0			Thunderstorm Wind (G52)
Dickey County									
1 W Forbes	09	1730CST			0	0			Hail(1.75)
Dickey County									
2 N Forbes	09	1735CST			0	0			Hail(1.00)
La Moure County									
Berlin	09	1735CST			0	0			Thunderstorm Wind (G70)
									The city of Berlin had major wind and hail damage to several buildings with broken windows and siding stripped off. Most homes in Berlin received damage. Numerous trees uprooted in and around the city. Several crop fields were wiped out by wind and hail. A wall cloud was sighted but no tornado.
La Moure County									
Berlin	09	1735CST			0	0			Hail(1.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>NORTH DAKOTA, Central and West</u>									
Dickey County									
7 NE Fullerton	09	1755CST			0	0			Thunderstorm Wind (G52)
			Several trees blown over.						
La Moure County									
5 NE Berlin	09	1810CST			0	0			Hail(1.00)
			Rainfall from the storm totaled 3.50 inches. Numerous branches down.						
Ward County									
8 SW Des Lacs	09	1905CST	0	0	0	0			Tornado (F0)
			Tornado briefly touched down then dissipated.						
Billings County									
8 NE Fairfield	17	0215CST			0	0			Thunderstorm Wind (G61) ^M
			Rainfall amounts from storm measured at 2.50 inches.						
Billings County									
8 NE Fairfield	17	0215CST			0	0			Hail(1.50)
Mckenzie County									
Grassy Butte	24	1820CST			0	0			Hail(1.00)
			Reported by a NWS cooperative observer.						
Mckenzie County									
Grassy Butte	24	1820CST			0	0			Thunderstorm Wind (G52)
			Reported by a NWS cooperative observer.						
Dunn County									
Halliday	24	1848CST			0	0			Thunderstorm Wind (G52)
			Reported by a NWS cooperative observer.						
Stark County									
1 NW Dickinson	24	1851CST	0	40	0	0			Tornado (F0)
			Tornado briefly touched ground over open country.						
Stark County									
Richardton	24	1935CST			0	0			Thunderstorm Wind (G65) ^M
			Reported by a NWS cooperative observer.						
Mercer County									
Hazen	24	1940CST			0	0			Thunderstorm Wind (G52)
Morton County									
Hebron	24	1942CST			0	0			Thunderstorm Wind (G52)
			Reported by a NWS cooperative observer.						
Hettinger County									
7 NE Mott	24	1945CST			0	0			Hail(1.00)
Mclean County									
Coleharbor	24	2010CST			0	0			Thunderstorm Wind (G52)
Oliver County									
Hensler	24	2015CST			0	0			Thunderstorm Wind (G52)
Grant County									
2 N Carson	24	2017CST			0	0			Thunderstorm Wind (G52)
Grant County									
Elgin	24	2025CST			0	0			Hail(0.75)
Sioux County									
Ft Yates	24	2115CST			0	0			Thunderstorm Wind (G52) ^M
Emmons County									
Linton	24	2120CST			0	0			Thunderstorm Wind (G52)
Logan County									
Napoleon	24	2150CST			0	0			Thunderstorm Wind (G52)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>NORTH DAKOTA, Central and West</u>									
Mcintosh County									
Wishek	24	2200CST			0	0			Thunderstorm Wind (G52)
Sioux County									
35 SW Porcupine	26	2125CST			0	0			Thunderstorm Wind (G52)
Bowman County									
25 SW Bowman	27	2104CST			0	0			Thunderstorm Wind (G52)
									Pea size hail reported with the storm.
Adams County									
5 E Hettinger	30	2155CST			0	0			Hail(1.00)
Stark County									
7 NNW Taylor to 7 NNE Taylor	31	0127CST			0	0			Thunderstorm Wind (G56) ^M
									Reported by a NWS cooperative observer.
Morton County									
2 W New Salem	31	0230CST			0	0			Thunderstorm Wind (G64) ^M
Mchenry County									
4 W Bantry	31	1530CST			0	0			Hail(1.00)
Ward County									
18 S Minot	31	1610CST			0	0			Thunderstorm Wind (G52) ^M
Ward County									
15 S Minot	31	1615CST			0	0			Thunderstorm Wind (G52)
Pierce County									
Rugby	31	1624CST			0	0			Hail(0.75)
Pierce County									
Rugby	31	1635CST			0	0			Hail(1.00)
Pierce County									
4 NE Rugby	31	1636CST			0	0			Hail(1.75)
Mclean County									
15 W Garrison	31	1705CST			0	0			Hail(0.75)
Ward County									
3 E (Mib)Minot Afb	31	1715CST			0	0			Thunderstorm Wind (G56)
									Large tree limbs down. Wind shook home.
Mchenry County									
Drake	31	1725CST			0	0			Hail(0.88)
Oliver County									
10 E Center to 6 E Center	31	1815CST 1820CST			0	0			Thunderstorm Wind (G52)
									Numerous reports by a NWS cooperative observer and newspaper of damage to buildings and downed power lines. Several crop fields wiped out by wind and hail.
Bottineau County									
Willow City	31	1831CST			0	0			Hail(1.75)
Rolette County									
Rolette	31	1854CST			0	0			Hail(0.75)
									Reported by a NWS cooperative observer.
Morton County									
St Anthony	31	1855CST			0	0			Hail(0.75)
Rolette County									
2 W Belcourt	31	1902CST			0	0			Hail(1.75)

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July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>NORTH DAKOTA, Central and West</u>									
Wells County									
Fessenden to 2 SE Sykeston	31	2245CST			0	0			Thunderstorm Wind (G61)
Storm traveled southeast along Highway 52. Numerous large trees down along its path.									
Foster County									
Carrington	31	2253CST			0	0			Hail(0.75)
<u>NORTH DAKOTA, East</u>									
Pembina County									
Joliette	01	0945CST			0	0			Hail(0.88)
Richland County									
3 SW Walcott	07	1815CST			0	0			Hail(0.88)
Richland County									
4 NE Colfax	07	1820CST			0	0	0.20K		Thunderstorm Wind
Tree limbs were blown down.									
Richland County									
Wahpeton	07	2008CST			0	0	10K		Lightning
35 to 40 homes were evacuated after lightning ruptured a gas line. The residents were allowed to return two hours later.									
Richland County									
Wahpeton	07	2100CST			0	0	5K		Lightning
Lightning struck a duplex and damaged a stove and other electrical appliances. No fire was reported.									
Sargent County									
3 NE Crete	09	1843CST			0	0			Hail(0.88)
Sargent County									
3 W Forman	09	1910CST 1917CST			0	0			Hail(1.50)
Sargent County									
1 NW Forman	09	1925CST			0	0	15K		Thunderstorm Wind
Strong winds blew down a pole barn.									
Sargent County									
Forman	09	1930CST			0	0			Thunderstorm Wind (G70)
Large trees and power lines were blown down. One tree blocked a road and another fell on and damaged a garage. A radio tower was also knocked over.									
Sargent County									
Rutland	09	1935CST			0	0	10K		Thunderstorm Wind
A tree was blown over onto a house. Several other trees fell across the city streets.									
Sargent County									
8 S Cayuga	09	1940CST			0	0			Hail(0.88)
Sargent County									
Forman	09	1940CST 2140CST			0	0			Flash Flood
Street flooding was reported in Forman along with water backing up around the school.									
Richland County									
8 SSW Lidgerwood	09	1945CST			0	0			Hail(0.88)
Grand Forks County									
Grand Forks	09 10	2255CST 0055CST			0	0			Flash Flood
Extensive street flooded occurred in Grand Forks, with numerous streets impassable.									
Grand Forks County									
4 SE Thompson	09 10	2255CST 0055CST			0	0	500K		Flash Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NORTH DAKOTA, East

6 to 8 inches of rain caused flooding problems over southeast Grand Forks county. Cole creek threatened a home southeast of Thompson. County roads 7 and 81 were closed due to high water levels. Many fields were flooded and roads were damaged. The county estimated \$500,000 in damages.

Grand Forks County

Reynolds

09	2307CST								
10	0107CST			0	0	250K			Flash Flood

8 to 10 inches of rain fell over the Reynolds area, causing basement flooding and some basement walls to collapse. The coulee on the south side of town rapidly expanded, and threatened homes along it. The southwest ramp to Interstate 29 was closed due to high water.

Trail County

Buxton

09	2307CST								
10	0107CST			0	0				Flash Flood

12 to 15 inches of rain fell around the town of Buxton. The 15 inch amounts were reported to the east of town. Entire sections of cropland were quickly submerged in lakes of water. Flood fighters sandbagged lower lying homes around town. The railroad tracks in town started to prevent water in town from draining to the east. A large pump was brought in and the town received permission from the railroad to lay it across the railroad tracks. Many streets in town were flooded along with quite a few basements. One home just east of Buxton had water on its main floor. Interstate 29 southbound had water over both lanes, with only the passing lane remaining open. Farmers used jet ski's to move around their land.

Trail County

Hillsboro

09	2307CST								
10	0107CST			0	0				Flash Flood

Street and basement flooding was reported along with some sewer backup. Some cars were stranded on city streets. Portions of 20 county roads were closed due to flooding.

Trail County

Mayville

09	2307CST								
10	0107CST			0	0				Flash Flood

Over six inches of rain fell at Mayville, flooding several city streets.

Trail County

7 N Hillsboro

09	2330CST								
10	0130CST			0	0				Flash Flood

Rushing water washed out a culvert and a portion of railroad tracks north of Hillsboro. An alert farmer called 911 and stopped the next Amtrak train leaving Grand Forks and going southbound. The rail line was closed for 24 hours while the spot was repaired.

Richland County

Wyndmere

09	2355CST								
10	0155CST			0	0				Flash Flood

Street flooding was reported.

NDZ030

Trail

10	0108CST								
20	2359CST			0	0				Flood

Sections of cropland around the Buxton area remained under lakes of water for days. Most of the cropland was a total loss.

Cass County

Fargo

10	1030CST								
	1230CST			0	0				Flash Flood

Many city streets were flooded as well as several county roads. Some streets were closed and several vehicles were stranded.

Barnes County

6 SW Sibley

17	1000CST								
				0	0				Hail(1.00)

Barnes County

3 N Oriska

17	1025CST								
				0	0				Hail(2.00)

Barnes County

4 E Oriska

17	1030CST					30K			
				0	0				Thunderstorm Wind

A semi truck was blown off Interstate 94. The truck was not carrying any cargo.

Cass County

Tower City

17	1035CST								
	1055CST			0	0				Hail(1.75)

Cass County

Tower City

17	1040CST					10K			
				0	0				Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

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NORTH DAKOTA, East

Grain bins were damaged and trees were blown down in Tower City. Three of the city's 8 streets were blocked by trees and power was out for 4 hours. One tree fell on a church, causing substantial damage.

Cass County 3 N Alice	17	1110CST			0	0			Hail(0.75)
Cass County 3 N Alice	17	1110CST			0	0	0.20K		Thunderstorm Wind
Trees were blown down.									
Cass County 7 NW Leonard	17	1130CST			0	0			Hail(0.75)
Cavalier County Loma	20	0652CST			0	0			Hail(1.00)
Richland County 4 E Fairmount	21	0500CST			0	0	0.50K		Thunderstorm Wind
Several small trees were blown down.									
Richland County Fairmount	21	0506CST 0530CST			0	0	2K		Thunderstorm Wind (G70)
Numerous large trees were blown down and uprooted.									
Richland County Dwight	21	0530CST			0	0			Lightning
A lightning strike caused a house fire.									
Cass County Amenia	25	0000CST			0	0			Hail(1.00)
Cass County Fargo	25	0030CST			0	0			Hail(0.88)
The hail fell on the south side of town.									
Richland County 9 S Lidgerwood	25	0030CST			0	0	5K		Thunderstorm Wind (G52)
Shingles were torn from a roof.									
Pembina County 7 NW Cavalier	29	2235CST			0	0			Hail(0.75)
Cavalier County 8 NE Vang	29	2300CST			0	0			Hail(1.00)
Pembina County 2 NW Hamilton	29	2300CST			0	0	0.20K		Thunderstorm Wind
Two trees were blown down.									
Sargent County Havana	31	0315CST			0	0			Hail(1.00)
Sargent County 5 S Rutland	31	0330CST			0	0			Hail(1.75)
Sargent County Milnor	31	0335CST			0	0	2K		Thunderstorm Wind
Tree limbs were blown down.									
Richland County 4 W Lidgerwood	31	0400CST			0	0	0.50K		Thunderstorm Wind
Trees were blown down.									
Richland County 4 S Hankinson	31	0420CST			0	0	0.50K		Thunderstorm Wind
Trees were blown down.									
Benson County York	31	1645CST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>NORTH DAKOTA, East</u>									
Benson County									
3 S Leeds	31	1700CST	0.2	25	0	0			Tornado (F0)
A tornado touched down in open country.									
Benson County									
5 N Leeds	31	1710CST			0	0			Hail(1.75)
Benson County									
Leeds	31	1711CST			0	0			Hail(2.00)
Benson County									
Leeds	31	1718CST			0	0			Hail(1.00)
Benson County									
4 E Leeds	31	1718CST			0	0			Hail(2.00)
Ramsey County									
5 N Churchs Ferry	31	1727CST			0	0			Hail(0.75)
Benson County									
10 SE Leeds	31	1730CST	0.2	25	0	0			Tornado (F0)
A brief tornado touchdown snapped off several large tree branches. A farmer saw a brief swirling of dust near a tree row with a funnel above.									
Ramsey County									
Churchs Ferry	31	1739CST			0	0			Hail(0.75)
Ramsey County									
4 E Penn	31	1750CST	0.2	10	0	0			Tornado (F0)
A tornado touched down in a field, causing minimal crop damage.									
Benson County									
Maddock	31	1820CST			0	0			Hail(1.00)
The ground was white with hail.									
Ramsey County									
2 N Devils Lake	31	1820CST			0	0			Hail(0.75)
A wall cloud was observed.									
Cavalier County									
6 SW Wales	31	1830CST			0	0			Hail(0.75)
Ramsey County									
2 NW Devils Lake	31	1830CST			0	0			Hail(1.00)
Benson County									
5 E Maddock	31	1835CST			0	0			Hail(1.00)
Walsh County									
Lankin	31	1835CST 2035CST			0	0			Flash Flood
Street flooding was reported.									
Ramsey County									
Devils Lake	31	1840CST			0	0			Hail(0.75)
A funnel cloud was also reported.									
Ramsey County									
4 NW Devils Lake	31	1840CST			0	0			Hail(1.00)
Walsh County									
Lankin	31	1857CST			0	0			Thunderstorm Wind (G61)
Walsh County									
Lankin	31	1905CST			0	0			Hail(1.00)
Grand Forks County									
2 N Inkster	31	1925CST			0	0			Thunderstorm Wind (G52)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>NORTH DAKOTA, East</u>									
Nelson County									
Lakota	31	1930CST			0	0	0.20K		Thunderstorm Wind
									Tree branches were blown down.
Walsh County									
8 E Grafton	31	1945CST			0	0			Hail(1.00)
Walsh County									
Grafton	31	2002CST 2202CST			0	0			Flash Flood
									Street flooding was reported.
Eddy County									
New Rockford	31	2245CST			0	0	1K		Thunderstorm Wind
									Trees were blown down in New Rockford.
Griggs County									
Cooperstown	31	2330CST			0	0	2K		Thunderstorm Wind
									Trees were blown down in Cooperstown.
Barnes County									
1 N Pillsbury	31	2345CST			0	0			Thunderstorm Wind (G50) ^M
									A 58 mph wind gust was measured at an NDAWN mesonet site.
Steele County									
Luverne	31	2353CST			0	0			Hail(0.75)
Barnes County									
Pillsbury	31	2355CST			0	0			Hail(1.50)
<u>OHIO, East</u>									
Guernsey County									
5 S Cambridge	01	1525EST 1800EST			0	0			Flood
									Heavy thunderstorm rains of over three inches produced minor flooding along portions of County Road 35.
Jefferson County									
Stratton	04	1425EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
Coshocton County									
4 NW Mound	19	1245EST			0	0	15K		Thunderstorm Wind
									A thunderstorm microburst downed numerous trees, flattened a field of corn, and blew out several windows in a farmhouse.
Belmont County									
Powhatan Pt	19	1600EST 1800EST			0	0	20K		Flood
									Heavy thunderstorm rains produced roadway and basement flooding.
Muskingum County									
Zanesville	19	1615EST 1815EST			0	0	50K		Flood
									Thunderstorm rains of over two inches in one hour produced roadway flooding, trapping several motorists in their vehicles.
Belmont County									
Neffs	23	1452EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
Belmont County									
Warnock	23	1455EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed numerous trees and power lines.
Belmont County									
Warnock	23	1459EST 1800EST			0	0			Flood
									Thunderstorm rains of over two inches in an hour forced Neffs Run out of its banks, which produced roadway flooding in the Warnock area.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>OHIO, East</u>									
Belmont County									
Powhatan Pt	23	1500EST 1800EST			0	0	5K		Flood
									Heavy thunderstorm rains produced minor roadway flooding and mud slides.
Coshocton County									
Coshocton	29	1930EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<u>OHIO, North</u>									
Wood County									
Rising Sun	04	1525EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed a few power poles two miles south of Rising Sun.
Seneca County									
Bascom	04	1604EST			0	0	10K		Hail(1.00)
									Quarter size hail was observed.
Medina County									
Wadsworth	04	1710EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed two large tree limbs near Wadsworth.
Summit County									
Norton	04	1710EST			0	0	25K		Hail(1.75)
									Golf ball size hail was observed.
Stark County									
Hartville	04	1805EST			0	0	5K		Hail(0.75)
									Dime size hail was observed just northeast of Hartville.
Seneca County									
Fostoria	19	1140EST			0	0	2K		Hail(0.75)
									Dime size hail was reported three miles northeast of Fostoria.
Seneca County									
Fostoria	19	1157EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed several large tree limbs four miles northeast of Fostoria.
Mahoning County									
Damascus	19	1235EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed two large tree limbs.
Richland County									
Ontario	19	1244EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed several trees and large limbs.
Richland County									
Spring Mill	19	1300EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
Holmes County									
Lakeville	19	1310EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed one tree and several large limbs two miles west of Lakeville.
Holmes County									
Nashville	19	1313EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed one tree near Nashville.
Crawford County									
Bucyrus	19	1330EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed one tree in Bucyrus.
Marion County									
Countywide	19	1624EST 1632EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed several trees across the county.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OHIO, North</u>									
Marion County Marion	19	1700EST			0	0	2K		Hail(0.75) Dime size hail was observed just east of Marion.
Morrow County Iberia	19	1720EST			0	0	2K		Thunderstorm Wind Thunderstorm winds downed two large tree limbs north of Iberia.
Marion County Caledonia	19	1745EST			0	0	2K		Hail(0.75) Dime size hail was observed.
Lake County Painesville	22	1230EST			0	0	5K		Thunderstorm Wind Thunderstorm winds downed several large limbs southeast of Painesville in Leroy Township.
Summit County Akron	22	1258EST			0	0	2K		Thunderstorm Wind Thunderstorm winds downed a large tree.
Summit County Cuyahoga Falls	22	1300EST			0	0	2K		Thunderstorm Wind Thunderstorm winds downed a large tree and several limbs.
Medina County Medina	22	1315EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed several large trees northeast of Medina in Granger Township.
Cuyahoga County North Royalton	22	1320EST			0	0	5K		Thunderstorm Wind Thunderstorm winds downed several large tree limbs.
Stark County Hartville	22	1533EST			0	0	6K		Thunderstorm Wind (G52) ^M A 60 mph thunderstorm wind gust was measured east of Hartville. At least three trees were downed.
Portage County Atwater	22	1550EST			0	0	2K		Hail(0.75) Dime size hail was observed.
Hancock County Findlay to Vanlue	22	2003EST			0	0	5K		Thunderstorm Wind Thunderstorm winds downed trees in Findlay and Vanlue.
Sandusky County Clyde	22	2055EST			0	0	35K		Thunderstorm Wind Thunderstorm winds downed a few trees. A home was damaged by a fallen tree.
Ottawa County Port Clinton	22	2100EST			0	0	5K		Thunderstorm Wind Thunderstorm winds downed several large tree limbs.
Huron County Monroeville	22	2113EST			0	0	5K		Thunderstorm Wind Thunderstorm winds downed a tree in Monroeville and several large limbs west of Monroeville.
Erie County Milan	22	2125EST 2126EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed two trees and several large limbs.
Cuyahoga County Parma	22	2155EST			0	0	2K		Thunderstorm Wind Thunderstorm winds downed many large tree limbs.
Medina County Brunswick	22	2155EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed several trees and limbs in and around Brunswick.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OHIO, North</u>									
Lorain County Sheffield Lake	22	2200EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed several large tree limbs.						
Richland County Mansfield Lahm Arpt	26	1235EST			0	0			Hail(0.75)
			Dime size hail was observed.						
Ashtabula County Pierpont	27	1640EST			0	0	25K		Thunderstorm Wind
			Thunderstorm winds downed a large tree. The tree landed on a house and caused some damage.						
Seneca County Tiffin	27	1950EST			0	0			Hail(0.75)
			Dime size hail was observed four miles north of Tiffin.						
Sandusky County Lindsey	27	2030EST			0	0			Hail(0.75)
			Dime size hail was observed.						
Erie County Sandusky	27	2135EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed two large tree limbs.						
Cuyahoga County Solon	28	1800EST			0	0	30K		Thunderstorm Wind
			Thunderstorm winds downed several large tree limbs. Two homes were damaged by the limbs.						
Geauga County Newbury	28	1836EST			0	0	10K		Thunderstorm Wind
			Thunderstorm winds downed a few trees.						
Ottawa County Genoa	28	1855EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed several large tree limbs.						
Hancock County Rawson	28	1915EST			0	0	10K		Thunderstorm Wind
			Thunderstorm winds downed several trees and large limbs.						
Erie County Sandusky	28	1945EST			0	0	10K		Thunderstorm Wind
			Thunderstorm winds downed several trees.						
Wood County Bowling Green	28	2013EST			0	0			Thunderstorm Wind (G52)
			Thunderstorm winds were estimated at 60 mph.						
Ottawa County Port Clinton	28	2040EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed several large tree limbs.						
Lorain County Lorain	28	2045EST			0	0	35K		Thunderstorm Wind
			Thunderstorm winds toppled a large tree on top of two cars. One car was destroyed, the second heavily damaged.						
Huron County Norwalk	28	2055EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed one tree and a large limb east of Norwalk.						
Cuyahoga County Countywide	28	2105EST			0	0	35K		Thunderstorm Wind
			Thunderstorm winds downed a few trees and large limbs across the county.						
Cuyahoga County Seven Hills	28	2105EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed a couple large trees.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OHIO, North</u>									
Ashtabula County									
Andover	28	2110EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed a few large tree limbs.						
Lake County									
Willoughby	28	2110EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed two large tree limbs.						
Lorain County									
Amherst	28	2115EST			0	0	15K		Thunderstorm Wind
			Thunderstorm winds downed several large trees.						
Sandusky County									
Clyde	28	2115EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed two large tree limbs.						
Geauga County									
Chesterland	28	2135EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed one tree and a large limb.						
Lorain County									
Elyria	28	2135EST 2140EST			0	0	40K		Thunderstorm Wind (G61)
			Thunderstorm wind gusts were estimated at 70 mph. Many trees and large limbs were downed. A car was heavily damaged by a fallen tree.						
Summit County									
Richfield	28	2135EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed two large tree limbs.						
Ashtabula County									
Jefferson	28	2155EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed two large tree limbs west of Jefferson.						
Portage County									
Mantua	28	2155EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed a few large tree limbs.						
Medina County									
Lodi	28	2200EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed a few large tree limbs.						
Trumbull County									
Farmdale	28	2215EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed two large tree limbs.						
Wood County									
Perrysburg	29	1555EST			0	0	25K		Thunderstorm Wind
			Thunderstorm winds downed several trees and damaged a house.						
Hancock County									
Countywide	29	1640EST			0	0	50K		Thunderstorm Wind (G53) ^M
			A 61 mph thunderstorm wind gust was measured at the Findlay Airport. Many trees were downed across the county.						
Wood County									
Bradner	29	1645EST			0	0	15K		Thunderstorm Wind
			Thunderstorm winds downed several large trees.						
Ottawa County									
Catawba Is	29	1700EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed a few trees.						
Hancock County									
Findlay	29	1705EST 1720EST			0	0	10K		Thunderstorm Wind
			Thunderstorm winds downed several large tree limbs and snapped a power pole.						
Ottawa County									
Port Clinton	29	1710EST			0	0	10K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OHIO, North</u>									
Thunderstorm winds downed a few trees.									
Wyandot County									
Wharton	29	1713EST			0	0	2K		Thunderstorm Wind
Thunderstorm winds downed several large limbs.									
Seneca County									
Countywide	29	1730EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds downed a few trees and limbs across the county.									
Crawford County									
Bucyrus	29	1750EST			0	0	25K		Thunderstorm Wind
Thunderstorm winds downed a few trees. A house was slightly damaged by a tree.									
Marion County									
Marion	29	1750EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds downed one tree and one power pole.									
Richland County									
Shelby	29	1753EST			0	0	40K		Thunderstorm Wind
Thunderstorm winds downed many trees. Fallen trees damaged a parked car and a house.									
Ashland County									
Countywide	29	1800EST 1820EST			0	0	75K		Thunderstorm Wind
Thunderstorm winds downed trees across the county. A small plane tied down at the Ashland County Airport was blown 65 feet, turned over and destroyed by wind gusts estimated at 65 mph.									
Erie County									
Countywide	29	1800EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds downed trees and large limbs in Berlin Heights, Vermilion and Sandusky.									
Huron County									
Countywide	29	1800EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds downed several trees across the county.									
Lorain County									
Countywide	29	1800EST 1840EST			0	0	40K		Thunderstorm Wind
Thunderstorm winds downed trees in Wellington, Lorain and Elyria. Four power poles were also downed near Elyria.									
Morrow County									
Fulton to Mt Gilead	29	1800EST 1814EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds downed trees in Fulton and Mount Gilead.									
Richland County									
Mansfield	29	1810EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds downed a few trees.									
Cuyahoga County									
Rocky River	29	1818EST			0	0			Thunderstorm Wind (G52)
A trained spotter estimated thunderstorm winds at 60 mph.									
Knox County									
Howard	29	1830EST			1	4	50K		Thunderstorm Wind
Thunderstorm winds downed many trees near Apple Valley Lake in northeastern Knox County. A vehicle travelling on U.S. 36 just west of Howard was struck by a falling tree. A two year old female inside the car was killed and four other occupants were seriously injured. F2VE									
Medina County									
Countywide	29	1830EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds downed several trees across the county.									
Medina County									
Medina	29	1836EST 1850EST			0	0	25K		Thunderstorm Wind (G52)^M
A 60 mph thunderstorm wind gust was measured. Numerous trees and large limbs were downed in and around Medina.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OHIO, North</u>									
Cuyahoga County Cleveland	29	1842EST			0	0			Thunderstorm Wind (G50) ^M A 58 mph thunderstorm wind gust was measured in downtown Cleveland.
Cuyahoga County North Olmsted to North Royalton	29	1842EST 1850EST			0	0	5K		Thunderstorm Wind Thunderstorm winds downed large trees in North Olmsted and North Royalton.
Holmes County Millersburg	29	1850EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed several trees west of Millersburg.
Geauga County Middlefield	29	1900EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed a few trees.
Lake County Countywide	29	1900EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed trees across the county.
Medina County Countywide	29	1900EST			0	0	25K		Thunderstorm Wind Thunderstorm winds downed trees across the county.
Wayne County Wooster	29	1900EST			0	0	100K		Thunderstorm Wind Thunderstorm winds downed many trees in Wooster. Several homes were damaged by the fallen trees.
Portage County Countywide	29	1910EST 1925EST			0	0	75K		Thunderstorm Wind Thunderstorm winds downed many trees across the northern and central portions of Portage County. A car was damaged by a fallen tree near Brimfield. A small farm building was heavily damaged in Ravenna Township.
Summit County Twinsburg	29	1910EST			0	0	2K		Thunderstorm Wind Thunderstorm winds downed a large tree.
Summit County Tallmadge	29	1915EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed several large trees.
Ashtabula County Conneaut	29	1920EST			0	0	35K		Thunderstorm Wind Thunderstorm winds downed several large tree limbs in a campground. The limbs damaged at least two motor homes.
Portage County Kent	29	1922EST			0	0	35K		Thunderstorm Wind Thunderstorm winds downed around a dozen trees and damaged the roof of a house.
Medina County Countywide	29	1930EST			0	0	15K		Thunderstorm Wind Thunderstorm winds downed a few trees across the western portion of the county.
Stark County Hartville	29	1935EST 1940EST			0	0	10K		Thunderstorm Wind Thunderstorm winds downed a few trees and large limbs in Hartville and Lake Township.
Trumbull County Countywide	29	1945EST			0	0	15K		Thunderstorm Wind Thunderstorm winds downed many trees in the northwestern and southeastern portions of Trumbull County.
Mahoning County Youngstown	29	2005EST			0	0	15K		Thunderstorm Wind (G52) ^M A 60 mph thunderstorm wind gust was measured. Several trees and large limbs were downed.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OHIO, North</u>									
Stark County									
Alliance	29	2015EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed two large tree limbs.						
<u>OHIO, Northwest</u>									
Van Wert County									
2 W Van Wert	22	1908EST			0	0	0		Thunderstorm Wind
			Sheriff dispatch reported trees down west of Van Wert.						
Henry County									
2 N Napoleon	26	1230EST			0	0	0		Thunderstorm Wind
	27	1230EST							
			Power lines and a pole reported down north of Napoleon.						
Defiance County									
6 W Defiance	29	1415EST			0	0	2K		Thunderstorm Wind
			Emergency management reported 2 barns with roofs partially taken off as well as trees down west of Defiance.						
Defiance County									
Defiance	29	1418EST			0	0	10K		Thunderstorm Wind
			Emergency management reported minor roof damage to 7 homes in Defiance.						
Van Wert County									
Willshire	29	1506EST			0	0	0		Thunderstorm Wind
			Emergency management reported power lines down in Van Wert.						
Van Wert County									
Willshire	29	1548EST			0	0	0		Thunderstorm Wind
			Emergency management reported trees down in Willshire.						
Van Wert County									
Van Wert	29	1556EST			0	0	0		Thunderstorm Wind
			Emergency management reported trees down in Van Wert.						
Allen County									
Countywide	29	1606EST			0	0	0		Thunderstorm Wind
			Trees and power lines down reported by emergency management.						
Van Wert County									
Willshire	29	1606EST			0	0	0		Thunderstorm Wind
			Emergency management reported power lines down in Willshire.						
Allen County									
Delphos	29	1620EST			0	0	0		Thunderstorm Wind
			Emergency Management reported numerous trees and power lines down in Delphos.						
Putnam County									
Columbus Grove	29	1635EST			0	0	0		Thunderstorm Wind
			Emergency management reported tress down in Columbus Grove.						
Putnam County									
Ft Jennings	29	1635EST			0	0	0		Thunderstorm Wind
			Emergency management reported trees down in FT Jennings.						
Putnam County									
Pandora	29	1635EST			0	0	0		Thunderstorm Wind
			Emergency management reported trees down in Pandora.						
Putnam County									
Pandora	29	1635EST			0	0	0		Thunderstorm Wind
			Emergency management reported large tree fell onto driveway striking 3 family members. All 3 were treated and released from hospital.						
Putnam County									
Pandora	29	1635EST			0	0	580K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OHIO, Northwest

Emergency management reported straight line winds destroyed 3 gym walls and portion of an elementary school wall under construction in Pandora. Walls were cinder block.

Allen County
2 SW Cairo

	29	1654EST			0	0	1K		Thunderstorm Wind
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Emergency management reported tree limbs down and slight damage to farm equipment southwest of Cairo.

OHIO, Southeast

Athens County
Nelsonville to
Athens

	09	2045EST 2200EST			0	0	10K		Flash Flood
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Rains of 2 to 3.5 inches fell in less than 3 hours, in a northwest to southeast corridor, along the Hocking River Valley. An automatic gauge south of Nelsonville measured 3.5 inches of rain. In the city of Athens, 3.4 inches of rain was recorded. The Plains measured 3.1 inches. Streams flooded roads in such communities as Athens, The Plains, and Chauncey. The York Fire Department went to the aid of motorists stalled in water along township roads. No flooding of dwellings was known.

Vinton County
West Portion

	09 10	2315EST 0200EST			0	0	5K		Flash Flood
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The Middle Fork and its tributaries overflowed onto roads, including Route 50. The cooperative observer at McArthur reported 4.06 inches of rain in its 24 hour report.

Jackson County
1 NE Jackson

	09	2340EST			0	0	1K		Thunderstorm Wind
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Several large tree branches were blown down.

Athens County
Millfield

	18	2000EST			0	0	10K		Thunderstorm Wind
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Several large tree limbs were snapped off. A porch was damaged by a fallen branch.

Vinton County
Mc Arthur

	19	1324EST			0	0	1K		Thunderstorm Wind
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A few large trees were blown down.

OHIO, Southwest

Fairfield County
Lancaster

	04	1645EST 1648EST			0	0			Hail(0.88)
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Numerous trees and power lines were also downed in Lancaster.

Adams County
Cedar Mills

	04	1810EST 1812EST			0	0	3K		Thunderstorm Wind (G50)
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A few trees were knocked down along State Route 348.

OHZ064-074

Pickaway - Hocking

	09	2100EST 2240EST			0	0			Flood
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Thunderstorms along a frontal boundary produced heavy rainfall across portions of central Ohio during the evening hours. Locally three to five inches fell across eastern Pickaway and western Hocking Counties, with high water causing several road closures near Leistville and Laurelville.

Fayette County
1 N Bloomingburg

	09	2120EST 2122EST			0	0	3K		Thunderstorm Wind (G50)
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Trees were knocked down.

Fairfield County
Stoutsville

	09	2200EST 2300EST			0	0			Flash Flood
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Oakland-Stoutsville Road was closed due to high water.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OHIO, Southwest</u>									
Pickaway County									
4 E Circleville	09	2200EST 2300EST			0	0			Flash Flood
Morris Road was closed for a period of time due to high water.									
Hocking County									
5 W South Bloomingville	09	2230EST 2330EST			0	0			Flash Flood
State Route 56 was closed near Haynes because of high water. Several homes were evacuated in Laurelville, with many vehicles in the area under three to four feet of water.									
Ross County									
Chillicothe	10	0010EST 0100EST			0	0	10K		Flash Flood
Problems with high water occurred across the county. A roof of a gas station on the west side of Chillicothe collapsed under the weight of the heavy rain.									
Licking County									
4 N Granville	10	0200EST 0245EST			0	0			Flash Flood
High water washed out a berm on State Route 661.									
Union County									
Marysville	19	1730EST 1735EST			0	0	5K		Thunderstorm Wind (G50)
Trees and powerlines were blown down across town.									
OHZ045-045									
Union									
	19	1930EST 2230EST			0	0			Flood
Slow moving thunderstorms produced very heavy rainfall across the southern half of the county during the evening. Widespread flooding occurred in Marysville, with several road closures.									
Fairfield County									
1 S Lancaster	19	2200EST 2204EST			0	0	10K		Thunderstorm Wind (G50)
A couple of houses sustained minor roof and siding damage along Sugar Grove Road. Trees were also downed.									
Mercer County									
5 N Celina	22	1950EST 1955EST			0	0	3K		Thunderstorm Wind (G50)
Large limbs and power lines were blown down.									
OHZ054>056-061-061-071									
Madison - Franklin - Licking - Montgomery - Warren									
	23	1030EST 1435EST			0	0	12K		Flood
Franklin County									
Columbus	23	1444EST 1515EST			0	0	22K		Flash Flood
Two to three feet of water on some roads submerged some cars and caused others to float. On Leonard Street and 5th Avenue, a foot of water was entering the main level of some homes.									
Warren County									
Springboro	27	0315EST 0320EST			0	0	2K		Thunderstorm Wind (G50)
Trees were blown down.									
Clinton County									
Countywide	27	0345EST 0400EST			0	0	2K		Thunderstorm Wind (G50)
Large limbs and a tree were blown down in the northwest part of the county.									
OHZ061>063-071>072									
Montgomery - Greene - Fayette - Warren - Clinton									
	27	0615EST 0750EST			0	0	23K		Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OHIO, Southwest

A slow moving warm front tracking across the region during the early morning, produced strong thunderstorms with torrential rainfall. Rainfall amounts of four to six inches fell in a four hour period across the southern Miami Valley and portions of south central Ohio. This led to numerous road closures and creeks out of their banks with damage reported on the south side of Dayton and across Greene County. Damage estimates from the storms in Montgomery County alone are around \$8000.

Warren County

Five Pts

27	0710EST 0725EST				0	0	8K		Flash Flood
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Several roads were closed. A mudslide closed a part of route 73 near interstate 75.

Clinton County

Countywide

27	0720EST 0740EST				0	0	3K		Flash Flood
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High water forced the closures of several area roads.

Mercer County

Countywide

29	1610EST 1625EST				0	0	5K		Thunderstorm Wind (G52)
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Trees were blown down in both the Coldwater and Fort Recovery areas.

Darke County

Union City

29	1615EST				0	0			Thunderstorm Wind (G53) ^M
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Auglaize County

Countywide

29	1626EST 1700EST				0	0	6K		Thunderstorm Wind (G55)
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Trees were down across the county. A tent collapsed at the county fairgrounds in St. Mary's.

Hardin County

5 N Roundhead

29	1650EST 1700EST				0	0	3K		Thunderstorm Wind (G51)
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Several trees were blown down in the western part of the county.

Shelby County

Sidney

29	1650EST 1700EST				0	0	6K		Thunderstorm Wind (G55)
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A few trees were blown down. Minor damage occurred at the EMA building.

Champaign County

St Paris

29	1700EST 1705EST				0	0	3K		Thunderstorm Wind (G50)
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A few trees were blown down.

Logan County

Bellefontaine

29	1715EST 1730EST				0	0	10K		Thunderstorm Wind (G53)
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A few trees fell on homes.

Miami County

Troy to Piqua

29	1715EST 1730EST				0	0	3K		Thunderstorm Wind (G50)
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Several trees were blown down.

Preble County

New Hope

29	1715EST 1720EST				0	0	3K		Thunderstorm Wind (G50)
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Several trees were blown down.

Montgomery County

Dayton

29	1725EST 1735EST				0	0	10K		Thunderstorm Wind (G50)
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Several trees were blown down.

Butler County

Countywide

29	1730EST 1750EST				0	0	8K		Thunderstorm Wind (G51)
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Trees were blown down.

Hamilton County

Countywide

29	1745EST 1800EST				0	0	12K		Thunderstorm Wind (G50)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OHIO, Southwest

Trees were downed across the Cincinnati metropolitan area, especially in the suburbs of Mariemont and Colerain.

Delaware County

Countywide	29	1755EST 1810EST			0	0	5K		Thunderstorm Wind (G50)
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Trees were blown down across the county.

Clinton County

5 S Wilmington	29	1800EST 1820EST			0	0	20K		Thunderstorm Wind (G60)
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A number of trees were downed along State Route 134. Several boats were overturned on Cowan Lake.

Greene County

Bellbrook	29	1800EST 1805EST			0	0	4K		Thunderstorm Wind (G50)
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A few trees were blown down.

Warren County

Lebanon	29	1800EST 1805EST			0	0	4K		Thunderstorm Wind (G50)
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Trees were blown down.

Clark County

Springfield	29	1805EST 1808EST			0	0			Thunderstorm Wind (G74)^M
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Clermont County

Amelia	29	1825EST 1835EST			0	0	3K		Thunderstorm Wind (G51)
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Trees were blown down.

Madison County

London	29	1835EST 1845EST			0	0	1K		Thunderstorm Wind (G50)
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Large limbs were blown down.

Brown County

Fayetteville	29	1845EST 1850EST			0	0	3K		Thunderstorm Wind (G50)
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Large limbs were downed. A tree fell on Harner Road.

Fayette County

Countywide	29	1845EST 1855EST			0	0	3K		Thunderstorm Wind (G51)
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A few trees were downed in the northern part of the county.

Highland County

10 E Hillsboro	29	1845EST			0	0	1K		Thunderstorm Wind (G50)
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Two foot diameter trees were blown down, blocking the access to hiking trails in Paint Creek State Park.

Licking County

3 W Utica	29	1900EST 1910EST			0	0	4K		Thunderstorm Wind (G52)
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Trees were blown down in the northern part of the county.

Fairfield County

Thurston	29	1918EST 1920EST			0	0			Hail(0.75)
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OKLAHOMA, Eastern

Cherokee County

3 WSW Hulbert	06	1845CST			1	1			Lightning Lightning struck a 32 year old woman and her 14 year old daughter while they were standing under a tree. They were in Wildwood Park on the shores of Ft. Gibson Lake near Hulbert. Both were taken by Lifeflight helicopter to Hillcrest Medical Center in Tulsa. The daughter fully recovered. The woman died at 530 am CDT the next morning. F32UT
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Latimer County

Wilburton	06	1845CST			0	0	20K		Lightning
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OKLAHOMA, Eastern

Lightning struck a home and started a fire in the attic. Heavy smoke and water damage were common throughout the home. Six firefighters suffered heat exhaustion and smoke inhalation and two were admitted to the hospital.

Pittsburg County 4 S Mc Alester	06	1930CST			0	0			Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew down a large tree. The tree blocked Highway 69.
Nowata County South Coffeyville	10	1650CST			0	0	1K		Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew trees and power lines down.
Craig County Centralia	10	1725CST			0	0			Thunderstorm Wind (G52)
Nowata County Nowata	10	1725CST			0	0			Thunderstorm Wind (G57)
Craig County 10 SE Vinita	10	1749CST			0	0			Thunderstorm Wind (G57) 65 mile an hour thunderstorm winds were reported in Ketchum.
Mayes County Spavinaw	10	1755CST			0	0			Thunderstorm Wind (G52) Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.
Rogers County Claremore	10	1805CST			0	0	5K		Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew trees and power lines down.
Rogers County Verdigris	10	1814CST			0	0	0.50K		Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew trees down and also blew the shutters off a house.
Mayes County 2 N Pryor	10	1820CST			0	0			Thunderstorm Wind (G52)
Tulsa County Collinsville	10	1820CST			0	0			Thunderstorm Wind (G52)^M
Delaware County Kenwood	10	1827CST			0	0			Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew down several trees.
Osage County Fairfax	10	1840CST			0	0	5K		Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew trees and power lines down.
Delaware County 4 E Colcord	10	1855CST			0	0			Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew numerous trees down.
Tulsa County Broken Arrow	10	1900CST			0	0			Thunderstorm Wind (G52) Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs in the Indian Springs area.
Wagoner County Coweta	10	1900CST			0	0	5K		Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew down a large tree. The tree fell on a house and slid down the roof and off to the side of the structure. Many shingles and the eaves to the house were ripped off.
Cherokee County 3 N Tahlequah	10	1902CST			0	0			Thunderstorm Wind (G52)
Wagoner County 3 E Coweta	10	1910CST			0	0			Thunderstorm Wind (G52)
Muskogee County Muskogee	10	1915CST			0	0	5K		Thunderstorm Wind (G61) Thunderstorm winds estimated at 70 miles an hour blew trees and power lines down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>OKLAHOMA, Eastern</u>									
Cherokee County									
Tahlequah	10	1925CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew down a few large trees.									
Okmulgee County									
Beggs	10	1925CST			0	0			Thunderstorm Wind (G51) ^M
Mcintosh County									
5 E Checotah	10	2000CST			0	0			Thunderstorm Wind (G52)
Pushmataha County									
2.5 SW Rattan	11	1830CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew trees down.									
Choctaw County									
3 E Hugo	11	1900CST			0	0			Thunderstorm Wind (G52)
Tulsa County									
Bixby	12	1117CST			0	0			Thunderstorm Wind (G57) ^M
Okmulgee County									
1 S Hector	12	1120CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.									
Cherokee County									
3 S Peggs	12	1210CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew down three trees.									
Cherokee County									
10 NNE Tahlequah	12	1300CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew down a few trees.									
Sequoyah County									
Marble City	12	1305CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.									
Pushmataha County									
Nashoba	12	1530CST			0	0			Thunderstorm Wind (G52)
Osage County									
2 S Wynona	22	1805CST			0	0			Thunderstorm Wind (G52) ^M
Ottawa County									
Miami	22	1900CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.									
Craig County									
6 N Centralia	22	1920CST			0	0			Thunderstorm Wind (G52)
A thunderstorm wind gust was estimated at 60 miles an hour two miles west of Hollow.									
Le Flore County									
Poteau	23	1445CST			0	0			Hail(0.75)
Le Flore County									
Poteau	23	1445CST			0	0	1K		Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew down trees and power lines. The wind also blew out the front window of a business.									
Pushmataha County									
Cloudy	23	1525CST			0	0			Hail(1.00)
Pushmataha County									
3 S Moyers	24	1640CST			0	0	5K		Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew the tops out of a few trees and damaged a few carpools.									
Pushmataha County									
Antlers	24	1655CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down numerous large tree limbs.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

OKLAHOMA, Eastern

Craig County

3 N Welch	24	1900CST			0	0			Thunderstorm Wind (G52)
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Thunderstorm winds estimated at 60 miles an hour blew several large tree limbs down.

OKLAHOMA, Extreme Southeast

NONE REPORTED.

OKLAHOMA, Panhandle

Beaver County

Forgan	11	2140CST			0	0			Hail(0.88)
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Beaver County

Beaver	11	2205CST			0	0			Hail(0.75)
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Severe thunderstorms over the extreme eastern Oklahoma panhandle during the late evening hours produced large hail.

OKLAHOMA, Western, Central and Southeast

Kingfisher County

Kingfisher	08	1700CST			0	0			Hail(0.75)
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Grant County

Manchester	10	1910CST			0	0	0.01K		Thunderstorm Wind
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Two to three inch diameter tree limbs were downed.

Alfalfa County

8 NE Amorita	10	1915CST			0	0			Thunderstorm Wind (G52)
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Woods County

4 NW Capron	10	1950CST			0	0			Thunderstorm Wind (G52)
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Alfalfa County

4 W Burlington	10	2005CST			0	0	0.01K		Thunderstorm Wind
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A 15 inch diameter tree limb was downed.

Woods County

4 SW Alva	10	2035CST			0	0			Thunderstorm Wind (G61)
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Woods County

7 SW Alva	10	2055CST			0	0			Thunderstorm Wind (G52) ^M
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Wind was measured by the Oklahoma mesonet.

Major County

Cleo Spgs	10	2145CST			0	0			Hail(0.75)
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Greer County

3 E Reed	11	1430CST			0	0			Hail(0.75)
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Garvin County

7 W Wynnewood	11	1640CST			0	0			Hail(0.75)
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Garvin County

7 W Wynnewood	11	1640CST			0	0	0.50K		Thunderstorm Wind
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Trees were blown down across a road.

Love County

5 SW Marietta	12	1630CST			0	0			Hail(0.75)
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Pottawatomie County

1 W Earlsboro	18	1620CST			0	0			Hail(0.75)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>OKLAHOMA, Western, Central and Southeast</u>									
Pottawatomie County									
Brooksville	18	1630CST			0	0			Thunderstorm Wind (G57)
Canadian County									
Okarche	20	1600CST			0	0			Hail(2.50)
Blaine County									
6 N Watonga	22	1450CST			0	0			Hail(0.75)
Kingfisher County									
Okarche	22	1525CST 1530CST			0	0			Thunderstorm Wind (G57) ^M
Wind gusts between 59 mph and 66 mph were measured between 1525 CST and 1530 CST.									
Kingfisher County									
Okarche	22	1555CST			0	0			Thunderstorm Wind (G57) ^M
Kingfisher County									
Okarche	22	1600CST			0	0			Hail(2.50)
Kingfisher County									
9 NW Okarche	22	1605CST			0	0			Hail(0.88)
Canadian County									
6 E El Reno	22	1615CST			0	0	1.5K		Thunderstorm Wind
Three power poles were blown down.									
Custer County									
Clinton	22	1615CST			0	0	0.50K		Lightning
Lightning struck a tree on Glenn Smith Road.									
Canadian County									
Calumet	22	1625CST			0	0			Hail(0.75)
Custer County									
1 E Clinton	22	1625CST			0	0	1K		Thunderstorm Wind
The top of a restaurant sign was blown off east of town.									
Roger Mills County									
Strong City	22	1735CST			0	0			Hail(0.75)
Canadian County									
5 WNW El Reno	24	1225CST			0	0			Thunderstorm Wind (G51) ^M
Wind was measured by the Oklahoma mesonet.									
Canadian County									
Piedmont	24	1330CST			0	0	2K		Lightning
Lightning struck an oil tank battery, causing a fire.									
Canadian County									
Yukon	24	1330CST			0	0			Thunderstorm Wind (G57)
Grady County									
Tuttle	24	1405CST			0	0			Thunderstorm Wind (G52)
Oklahoma County									
Oklahoma City	24	1410CST			0	0			Hail(0.75)
Oklahoma County									
Oklahoma City	24	1410CST			0	0	5K		Thunderstorm Wind (G52)
Power poles were also downed on Council and Wilshire.									
Grady County									
Tuttle	24	1412CST			0	0	0.50K		Thunderstorm Wind
A few homes had some shingles blown off their roof, and large tree limbs were downed.									
Grady County									
2 W Tuttle	24	1423CST			0	0	0.50K		Thunderstorm Wind
Large tree limbs were downed, and a business sign was blown over.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OKLAHOMA, Western, Central and Southeast

Oklahoma County

Oklahoma City	24	1428CST			0	0	75K		Lightning
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Lightning struck a house on NW 86th, causing a fire that mostly destroyed the home.

McClain County

Newcastle	24	1435CST			0	0			Thunderstorm Wind (G57)
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Pottawatomie County

1 S Dale	24	1535CST			0	0			Hail(0.75)
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Woods County

16 N Freedom	28	2030CST			0	0			Thunderstorm Wind (G63) ^M
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Wind was measured by the Oklahoma mesonet.

Woods County

16 N Freedom	28	2035CST			0	0			Thunderstorm Wind (G72) ^M
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Wind was measured by the Oklahoma mesonet.

Woods County

16 N Freedom	28	2040CST			0	0			Thunderstorm Wind (G53) ^M
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Wind was measured by the Oklahoma mesonet.

Harper County

11 NE Buffalo	28	2115CST			0	0	2K		Thunderstorm Wind
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Several power poles were downed.

Harper County

18 NE Buffalo	28	2115CST			0	0	2K		Thunderstorm Wind
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Several power poles were downed.

Harper County

7 SE Buffalo	28	2125CST			0	0	2K		Thunderstorm Wind
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Several power poles were downed.

Kay County

Newkirk	28	2145CST			0	0			Thunderstorm Wind (G52)
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Custer County

4 WSW Weatherford	29	0105CST			0	0			Thunderstorm Wind (G56) ^M
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Wind was measured by the Oklahoma mesonet.

Custer County

4 WSW Weatherford	29	0115CST			0	0			Thunderstorm Wind (G52) ^M
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Wind was measured by the Oklahoma mesonet.

Caddo County

7 W Hinton	29	0120CST			0	0			Thunderstorm Wind (G52) ^M
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Wind was measured by the Oklahoma mesonet.

Washita County

Canute	29	0130CST			0	0	0.01K		Thunderstorm Wind
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Large tree limbs were downed.

Caddo County

1 N Lookeba	29	0145CST			0	0	0.01K		Thunderstorm Wind
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Four inch diameter tree limbs were downed.

OREGON, Central and East

Deschutes County

Alfalfa	07	1610PST			0	0			Hail(0.75)
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Crook County

Powell Butte	07	1625PST			0	0			Hail(0.75)
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Jefferson County

Ashwood	07	1705PST			0	0			Hail(1.00)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OREGON, Central and East

Morrow County

Boardman	07	2002PST			0	0			Hail(1.75)
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Union County

La Grande	07	2120PST			0	0			Hail(1.00)
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In addition to the hail, strong wind gusts caused numerous minor power outages in the Grande Ronde Valley according to Oregon Trail Electric Cooperative.

Wallowa County

Enterprise	08	0045PST			0	0			Hail(0.75)
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Jefferson County

13 SW Warm Spgs	09 26	0000PST 0000PST			0	0	5.5M		Wild/Forest Fire
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The Eyerly Fire, sparked by lightning, consumed 23,573 acres and destroyed several structures, including 18 homes, 13 out buildings, three travel trailers, and two cars. In addition, one home and five buildings were damaged.

ORZ041>050

Eastern Columbia River Gorge - North Central Oregon - Central Oregon - Lower Columbia Basin - Foothills Of The Blue Mountains - Blue Mountains - John Day Basin - Ochoco-John Day Highlands - Grand Ronde Valley - Wallowa County

10	0000PST				0	0			Excessive Heat
14	0000PST				0	0			Excessive Heat

A record breaking heat wave shattered many daily record high temperatures across the state, with a few locations breaking all-time records. Some of the warmest locations include Monument with 115 degrees, Dayville 114 degrees, John Day 110 degrees, Pendleton Airport 109 degrees, and Enterprise with 108 degrees.

Grant County

28 ENE Seneca	12 31	0000PST 2359PST			0	0			Wild/Forest Fire
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The Monument Complex Fire, started by lightning, consumed 16,063 acres in Grant and Baker Counties. The fire was not controlled until August 19th.

Deschutes County

2 N Alfalfa	12	1700PST 1900PST			0	0			Thunderstorm Wind (G50)
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Local high winds snapped some trees, while others were uprooted.

Wheeler County

13 WNW Richmond	13 14	0000PST 2359PST			0	0			Wild/Forest Fire
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The Priest Hole Fire was a lightning sparked fire which consumed 680 acres.

Grant County

12 SW Dayville	13 31	0000PST 2359PST			0	0			Wild/Forest Fire
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The 747 Fire was sparked by lightning and consumed 16,856 acres. The fire was not controlled until August 1st.

Grant County

15 SE Seneca	13 31	0000PST 2359PST			0	0			Wild/Forest Fire
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The Malheur Complex Fire was a lightning sparked fire that burned 19,367 acres. The fire was not controlled until August 19th.

ORZ049

Grand Ronde Valley

13	1330PST				0	0	5K		High Wind
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Gusty winds caused damage to a side of a house from an irrigation wheel line in North Powder. The winds also knocked down a number of trees and limbs.

Umatilla County

(Pdt)Pendleton Arpt	13	1514PST 1516PST	0.2	10	0	0	0		Tornado (F0)
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A brief tornado over a runway moved northwest before dissipating.

Union County

19 NNE Imbler	13	1515PST			0	0	1K		Thunderstorm Wind
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Wind gusts ranging from 30 to 40 MPH from a thunderstorm uprooted 4-6 small trees.

ORZ041

Eastern Columbia River Gorge

14	1515PST				0	0	2K		High Wind
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Winds toppled a banner pole in downtown at The Dalles onto a passing vehicle. The peak wind reported by ASOS at The Dalles was 28 knots.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>OREGON, Central and East</u>									
Grant County									
10 NE Izee	15 31	0000PST 2359PST			0	0			Wild/Forest Fire
The Flagtail Fire, sparked by lightning, consumed 8,175 acres along with two structures. The fire was not controlled until August 19th.									
Wallowa County									
5 S Joseph	18	1500PST 1600PST			0	0	1M		Flash Flood
The Wallowa County Sheriff's Office confirmed a mudslide near the Blue Mountain Council Boy Scout Camp at the south end of Wallowa Lake. The mudslide destroyed a dining hall near the boy scout camp. The debri flow in the lake was several feet thick. The mudslide swept away several trees and damaged three vehicles in its path.									
Wallowa County									
2 S Imnaha	19	1515PST 1600PST			0	0	1K		Flash Flood
Nearly stationary thunderstorm with heavy rainfall caused 1-2 feet of water to flow over road to Halfway.									
Deschutes County									
Bend	22	1945PST 2030PST			0	0			Tstm Wind/Hail
Thunderstorms which moved through Deschutes County brought small hail and wind gusts to 40 knots. The winds knocked down tree branches and caused local power outages.									
Wasco County									
12 W The Dalles	23 31	0000PST 0000PST			0	0	10K		Wild/Forest Fire
The Sheldon Ridge Fire, sparked by lightning, consumed 12,681 acres and eight structures, all of which were out buildings. Around 250 homes were threatened by the flames. Oregon National Guard Troops assisted in battling the flames.									
Deschutes County									
12 NW Sisters	23 31	1100PST 2359PST			0	0			Wild/Forest Fire
The Cache Mountain Fire, sparked by lightning, consumed 4,200 acres and 11 structures.									
Wasco County									
6 W Wamic	23	1403PST			0	0			Hail(0.75)
Union County									
Perry	23	1530PST 1630PST			0	0			Lightning
Lightning knocked out power to 100 residents in the Perry and Hilgard areas.									
Jefferson County									
Camp Sherman	23	1620PST			0	0			Hail(0.75)
Wasco County									
3 NE Maupin	23 29	1800PST 0000PST			0	0			Wild/Forest Fire
The White River Fire, sparked by lightning, consumed 28,500 acres and four structures. The fire temporarily closed Highway 216.									
Umatilla County									
5 S Pendleton Arpt	23 25	2030PST 2359PST			0	0			Wild/Forest Fire
Several fires, sparked by lightning, south of the Pendleton Airport consumed around 2,000 acres, including one barn. Most of these fires were confined to grass and sagebrush.									
Wheeler County									
Kinzua	24	1607PST 1617PST			0	0			Hail(1.25)
Half-dollar size hail was reported by a weather spotter.									

OREGON, Northwest

NONE REPORTED.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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OREGON, Southeast

Malheur County

(Ono)Ontario Arpt	07	1045MST 1100MST			0	0			Thunderstorm Wind (G50) ^M
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A line of thunderstorms crossed Malheur County producing outflow winds measured at 50 knots at the Ontario airport.

Baker County

Sumpter to Haines	07	1600PST 1630PST			0	2			Hail(1.50)
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A severe thunderstorm cell dropped 1.5 inch diameter hail that covered the highway in Sumpter and damaged vehicles in the town of Haines. The storm also produced winds that knocked a tree down onto a vehicle, injuring two people inside.

Malheur County

15 NW Jordan Vly	15 21	1500MST 1500MST			0	0			Wild/Forest Fire
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The Mahogany Mountain Fire rapidly spread from 2000 to over 14,000 acres due to strong winds on July 15th, spreading to over 41,000 acres before being contained on July 21st. No structures were lost. Total cost of fighting the fire was \$1.0 million.

Malheur County

East Central Portion	19	1430MST 1500MST			0	0			Flash Flood
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Very heavy rainfall from slow-moving thunderstorms caused flash flooding in east-central Malheur County. About 50 firefighters were stranded near Three Fingers Rock while fighting the Mahogany fire. Low areas of the access road were covered by a foot of water when McCain Creek filled up. Three Fingers Gulch also overflowed its banks and a recreational road near Jordan Creek was washed out.

Malheur County

12 SW Rome	22	1700MST			0	0			Hail(0.75)
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A very warm, moist and unstable airmass allowed afternoon thunderstorms to intensify as they marched northeastward across Malheur County. One thunderstorm dropped hail that measured up to 3/4 inch in diameter just south of Burns Junction.

Malheur County

Ontario	25	1515MST 1545MST			0	0			Thunderstorm Wind (G50)
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A local street was closed in Ontario when thunderstorm winds blew apart a shed and deposited the debris onto the roadway. Construction materials from a building site were also blown onto the road, blocking traffic.

OREGON, Southwest

Curry County

Countywide	11 12	1330PST 2345PST			0	0			Lightning
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See below

Douglas County

Countywide	11 12	1330PST 2345PST			0	0			Lightning
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See below.

Jackson County

Countywide	11 12	1330PST 2345PST			0	0			Lightning
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See below.

Josephine County

Countywide	11 12	1330PST 2345PST			0	0			Lightning
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See below.

Klamath County

Countywide	11 12	1330PST 2345PST			0	0			Lightning
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See below.

Lake County

Countywide	11 12	1330PST 2345PST			0	0			Lightning
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See below.

A Red Flag Warning for dry lightning was issued for fire weather zones 620/621/622/623/624/625 at 1330 PDT on 07/11/02.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OREGON, Southwest

See below.

Douglas County

Countywide	26	1550PST			0	0			Wild/Forest Fire
	28	0800PST							

See below.

Jackson County

Countywide	26	1550PST			0	0			Wild/Forest Fire
	29	1900PST							

See below.

Josephine County

Countywide	26	1550PST			0	0			Wild/Forest Fire
	29	1900PST							

See below.

Klamath County

Countywide	26	1550PST			0	0			Wild/Forest Fire
	27	2100PST							

See below.

Lake County

Countywide	26	1550PST			0	0			Wild/Forest Fire
	27	2100PST							

See below.

A Red Flag Warning was issued for all or part of the above counties at the above times. Fire weather zones 617 through 625 were included in the original warning.

The warning for zones 624/625 was for strong north winds and poor overnight RH recoveries. No observations are currently available, but the winds were quite strong in this warning period. The warning was cancelled at 2100 PDT on 07/27.

The warning for zones 617-623 was initially for poor overnight recoveries combined with moderate northeast winds across the ridgetops.

The warning for zone 617 was cancelled at 0900 PDT on 07/28/02. The warning for the remaining zones remained in place and was extended at 0700 PDT on 07/29/02 for expected Haines Indices of 6. All warnings were cancelled at 1900 PDT on 07/29.

No observations are currently available for verification, but the ongoing fires in this area exhibited extreme behavior during the warning period with very strong winds reported by fire weather personnel. Even if the warning criteria was not strictly met, the forecasters on-station and in the field felt that conditions were critical enough due to ongoing fires and dense, dry fuels in the area.

PACIFIC

NOT RECEIVED.

PENNSYLVANIA, Central

Centre County

Centre Hall	19	1615EST			0	0			Thunderstorm Wind (G50)
			Trees were down in Centre Hall.						

Lancaster County

Buck	19	1655EST			0	0			Thunderstorm Wind (G50)
			Large limbs and power lines were down in Buck.						

Cambria County

Glasgow	23	1214EST			0	0			Thunderstorm Wind (G50)
			Trees were down in Glasgow.						

Clearfield County

10 SE Curwensville	23	1220EST			0	0			Thunderstorm Wind (G50)
			Trees and power poles were reported down 10 miles southeast of Curwensville.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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PENNSYLVANIA, Central

Huntingdon County

Huntingdon	23	1335EST			0	0			Thunderstorm Wind (G50)
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Trees and wires were down in Huntingdon.

Union County

Lewisburg	23	1338EST			0	0			Thunderstorm Wind (G50)
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Trees were down in Lewisburg.

Somerset County

New Centerville	26	1530EST			0	0			Thunderstorm Wind (G50)
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Trees were reported down in New Centerville.

Potter County

8 SE Costello	28	0920EST			0	0			Thunderstorm Wind (G50)
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Trees were reported down 8 miles southeast of Costello.

Warren County

Pittsfield to 3 N Pittsfield	28	1130EST 1140EST	3	100	0	0	35K		Tornado (F1)
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A tornado touched down in Warren County, just north of the town of Pittsfield, on the morning of July 28th, 2002. The tornado damaged 5 homes and knocked down approximately 100 trees. The tornado was 100 yards wide with a path of just over 3 miles long. Wind speeds were estimated to be around 100 mph, rating this tornado as an F1 on the Fujita Scale. The worst damage occurred near Brooks Rock Road north of Pittsfield. It was estimated that the tornado touched down around 12:30 p.m. local time, and remained on the ground for about 10 minutes.

Clinton County

Woolrich	28	1220EST			0	0			Thunderstorm Wind (G50)
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Trees were down in Woolrich.

Lycoming County

Williamsport	28	1240EST			0	0			Thunderstorm Wind (G50)
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Trees and power lines were reported down in Williamsport.

Lycoming County

Tivoli	28	1255EST			0	0			Thunderstorm Wind (G50)
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Trees were down in Tivoli.

Warren County

Clarendon	28	1312EST			0	0			Thunderstorm Wind (G50)
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Trees were reported down in Clarendon.

Elk County

8 N Ridgway	28	1330EST			0	0			Thunderstorm Wind (G50)
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Trees were reported down 8 miles north of Ridgway.

Mckean County

Smethport	28	1335EST			0	0			Thunderstorm Wind (G50)
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Trees were down in Smethport.

Warren County

Starbrick	28	2315EST			0	0			Thunderstorm Wind (G50)
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Trees were reported down in Starbrick.

Clearfield County

1 NE Du Bois	31	1820EST			0	0			Thunderstorm Wind (G50)
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Trees were reported down 1 mile northeast of Dubois.

PENNSYLVANIA, East

PAZ060>062-067>071

Berks - Lehigh - Northampton - Chester - Montgomery - Bucks - Delaware - Philadelphia

01	0000EST				0	0	0		Drought
31	2359EST								

The unseasonably warm and dry weather across Eastern Pennsylvania during the month of July intensified drought conditions. A drought emergency remained in effect for most of Eastern Pennsylvania with mandatory watering restrictions in place. Philadelphia, Montgomery and Bucks Counties were under drought warning status and asked to voluntarily conserve water. Only Carbon and Monroe Counties were in drought watch status. The Delaware River Basin Commission, which oversees water supply

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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PENNSYLVANIA, East

throughout the Delaware River Basin declared a "drought" on December 3, 2001 when the supply of water in the New York City reservoir system dropped below a designated level for early December. The commission declared a drought emergency on December 18, 2001. Both triggered additional reductions in the amount of water released from the reservoirs into the Delaware River and the amount diverted out of the Delaware River Basin to New York City and New Jersey. Diversions to New York City dropped from 800 million gallons a day to 520 million gallons a day. The emergency declaration gave the commission the power to restrict the amount of water suppliers could draw from the basin. It gave the commission the authority to take water from municipal reservoirs to maintain river levels. It could also call for water releases from federal, state and privately owned reservoirs. Water from Lake Nockamixon, the F.E. Walter Reservoir and Lake Wallenpaupack could be used to maintain river levels. Releases from the F.E. Walter Dam were reduced to one-third of normal to save water. They were last used for this purpose in the 1960s. The releases help protect the riverbank and aquatic life and also prevents salt water from flowing up the Delaware River. Salt water intrusion causes corrosion problems for industries and increases water treatment costs for municipalities that depend on the river for their water supply. Maintaining river levels are also important for groundwater reserves that are recharged by the river itself. Due to the dry July, the salt front went from mile marker 62 north to mile marker 73, one mile farther upstream than is normal for July. The emergency declaration also gives the commission the power to request that utilities and other companies that use more than one million gallons of water a day to prepare contingency plans to use less water and submit the plans to the commission.

On a county weighted average July monthly precipitation totals ranged from 0.8 inches in Berks County to 2.1 inches in Philadelphia County. Chester, Delaware and Lehigh Counties all averaged less than one inch of precipitation. Normal monthly precipitation is around 4.3 inches. The New York City Reservoirs which feed the Delaware River decreased for 89.0 percent of capacity on July 1st to 77.1 percent of capacity on July 31st. On July 31st the salt front on the Delaware River was about one mile farther upstream than normal. For the month streamflow on the Delaware and Lehigh Rivers was about 75 percent of normal and on the Schuylkill River was about half of normal.

July total monthly precipitation was 0.35 inches at the Reading Regional Airport, 1.15 inches at the Lehigh Valley International Airport and 2.12 inches at the Philadelphia International Airport.

PAZ060>062-067>071

Berks - Lehigh - Northampton - Chester - Montgomery - Bucks - Delaware - Philadelphia

01	0900EST								
04	1800EST		15	0					Excessive Heat

July started with unseasonably hot and humid weather across Eastern Pennsylvania. The hottest and most humid weather occurred on Independence Day before a cold front quietly moved through the region during the night of the 4th. Highest temperatures were well into the 90s to around 100 degrees and heat indices reached around 105 degrees on the 3rd and 4th. The hot spell was the deadliest of the summer season for the city of Philadelphia as 15 persons perished from heat related causes. Most of the victims were elderly people with underlying illnesses. Most were found in apartments with windows either shut or barely open and no fans or air conditioners. A 44-year-old man was found outdoors and later died in a city hospital. In Bucks County, a 42-year-old man died from the heat while he was cutting the grass.

Highest temperatures included 102 degrees at the Franklin Institute within Philadelphia, 101 degrees in Green Lane (Montgomery County), 99 degrees at the Philadelphia International Airport, the Willow Grove NAS (Montgomery County) and in West Chester (Chester County), 98 degrees in Neshaminy Falls and Perkasio (Bucks County), 97 degrees in Hamburg (Berks County), 96 degrees in Bath (Northampton County), 95 degrees in Reading (Berks County) and the Lehigh Valley International Airport and 94 degrees in East Stroudsburg (Monroe County). F75PH, F64PH, F86PH, M78PH, M40PH, F88PH, M75PH, F77PH, F80PH, F71PH, M45PH, M80PH, M82PH, M81PH, M44OU

PAZ054>055-060>062-067>071

Carbon - Monroe - Berks - Lehigh - Northampton - Chester - Montgomery - Bucks - Delaware - Philadelphia

06	1200EST								
07	1800EST		0	0	0	0	0		Smoke

A northerly flow of air through the lower half of the atmosphere pushed smoke from forest fires in northern Quebec across Eastern Pennsylvania. The smoke reduced visibilities and could be smelled from the afternoon of the 6th into the afternoon of the 7th. Winds started to shift from north on the 7th to the west on the 8th and pushed the smoke farther to the east. In all about 50 fires were burning near James Bay about 500 miles north of Montreal in Quebec Province. The fires consumed about 150,000 acres and caused the evacuation of the Native American village of Nemaska.

PAZ071

Philadelphia

08	0900EST								
09	1800EST		1	0					Excessive Heat

Two days of high temperatures in the 90s claimed the life of a 78-year-old man in Philadelphia. The high temperature on the 9th reached 96 degrees at the Franklin Institute within Philadelphia and 95 degrees at the Philadelphia International Airport. With dewpoint temperatures in the upper 60s on the 9th, afternoon heat indices reached near 100 degrees. A cold frontal passage late in the day on the 9th brought cooler and less humid air into the region. M78PH

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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PENNSYLVANIA, East

PAZ060>062-067>071	Berks - Lehigh - Northampton - Chester - Montgomery - Bucks - Delaware - Philadelphia	15 19	0900EST 1800EST		2	0			Excessive Heat
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Another work week of hot weather affected southeastern Pennsylvania from the 15th through the 19th. High temperatures reached into the 90s in most areas each day. The highest temperatures mainly occurred on the 17th. Humidity levels were high for most of the week, except for the 16th when a weak back door cold front moved through the region. The heat and humidity extended into the Lehigh Valley from the 17th through the 19th. Many locations in the Poconos had high temperatures in the 90s on the 17th also. A second stronger front moved through the state during the evening of the 19th and the early morning of the 20th and ended the string of 90 degree high temperatures. Two men in Philadelphia (a 57-year-old and a 73-year-old) died from hyperthermia. Highest temperatures included 98 degrees in Valley Forge (Chester County) and Lehighton (Carbon County), 97 degrees at the Franklin Institute within Philadelphia, Reading (Berks County) and Bath (Northampton County), 96 degrees in Easton (Northampton County) and Perkasio (Bucks County), 95 degrees at the Philadelphia International Airport, Doylestown (Bucks County) and East Stroudsburg (Monroe County) and 94 degrees in Pottstown (Montgomery County). M73PH, M57PH

Bucks County 2 SW Hulmeville to Bristol	19	1552EST 1600EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down numerous large limbs and wires in both Bensalem and Bristol Townships. PECO Energy reported about 30,000 of its customers lost power from a series of thunderstorms that affected southeastern Pennsylvania on the 19th including Bucks County.

Bucks County Bristol	19	1600EST			0	0	0		Lightning
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A lightning strike and the ensuing fire damaged a business in Bristol Township. A couple of fire fighting units were needed to bring the fire under control.

Bucks County Doylestown	19	1728EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down numerous large limbs and wires in the Doylestown area. PECO Energy reported about 30,000 of its customers lost power from the series of thunderstorms that affected southeastern Pennsylvania on the 19th including Bucks County.

Monroe County 5 NW Mt Pocono Arprt	23	1410EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked down trees and wires in Coolbaugh Township.

Monroe County Pocono Pines to Pocono Lake	23	1427EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked down several trees and wires from Pocono Pines east through Pocono Lakes.

Carbon County Beaver Meadows	23	1437EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked over several trees in Packer Township. Scattered power outages were reported in the township.

Carbon County Northeast Portion	23	1440EST 1700EST			0	0			Flash Flood
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Monroe County Northwest Portion	23	1440EST 1700EST			0	0			Flash Flood
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Thunderstorms with very heavy rain moved through the same locations of Carbon and Monroe Counties. They produced adjusted Doppler Radar Storm Total estimates of three to four inches in Kidder Township in Carbon County and in Tobyhanna and Coolbaugh Townships and in Mount Pocono Borough in Monroe County. An automated gage in Blakeslee along the Monroe/Carbon County line recorded 3.38 inches of rain, most of which fell within an hour. At Mount Pocono Airport, 2.25 inches of rain fell between 3 p.m. and 4 p.m. EDT. The heavy rain caused highway and stream flooding. In Monroe County, flooding led to accidents on Pennsylvania State Routes 115 and 940 in Tobyhanna Township. Other storm totals included 3.08 inches in Mount Pocono Airport and 3.03 inches in Pocono Summit (both in Monroe County).

Monroe County Blakeslee	23	1458EST			0	0			Hail(0.75)
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Monroe County Blakeslee to 2 N Stroudsburg	23	1458EST 1520EST			0	0			Thunderstorm Wind (G52)
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A severe thunderstorm dropped pea to dime size hail in Blakeslee and also downed numerous trees from west to east across the

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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PENNSYLVANIA, East

central third of Monroe County paralleling Interstate 80. Trees were knocked down in Locust Lake, Pocono Lake, Jackson Township and Stroud Township. About 3,000 Pennsylvania, Power and Light customers lost power in the county as a result of downed trees, limbs and lines as well as numerous transformers that were hit by lightning. The most outages were reported in the Neola area of Jackson Township.

Carbon County Weissport

23	1505EST				0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked over several trees in Franklin Township. Scattered power outages were reported in the township.

Berks County Leesport to Maiden Creek

23	1515EST				0	0			Thunderstorm Wind (G50)
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The gust front that was initiated by a severe thunderstorm knocked down trees and wires in Leesport Borough and Ontelaunee and Maiden Creek Townships.

Lehigh County Slatedale to 1 N Macungie

23	1520EST				0	0			Thunderstorm Wind (G52)
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A severe thunderstorm caused widely scattered wind damage in Lehigh County. Trees and wires were knocked down in Washington Township and just southwest of Allentown in Salisbury and Lower Macungie Townships.

Bucks County 1 W Richlandtown

23	1530EST				0	0	10K	0	Tstm Wind/Hail
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A thunderstorm with estimated winds of around 40 mph tore down a rotten 90-foot tall white ash tree in Richland Township. A limb on the tree crashed through the second floor bedroom ceiling and allowed rain to fall through that floor and the one below it. The combination of wind and water damage was estimated at \$10,000. No persons were injured.

Northampton County Bangor to Portland

23	1535EST 1545EST				0	0			Thunderstorm Wind (G52)
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A severe thunderstorm knocked down several trees and wires in the northeast part of Northampton County. Trees and wires were knocked down in Bangor and Portland Boroughs and Upper Mount Bethel Township.

PAZ060>062-067>071

Berks - Lehigh - Northampton - Chester - Montgomery - Bucks - Delaware - Philadelphia									
28	0900EST				3	0			Excessive Heat
30	1800EST								

Another hot and very humid air mass moved into Eastern Pennsylvania on the 28th. In most areas this hot spell produced some of the highest heat indices of the summer as they reached near 105F and between 105F and 110F in Philadelphia during the afternoon of the 29th. A cold front moved through the region during the night of the 30th. While temperatures on the 31st still reached into the 90s, dew point temperatures and the moisture content of the air mass was considerably lower. The apparent temperature (or heat index) matched and did not exceed the afternoon high temperature. More humid air again moved in during the start of August. The string of days with high temperatures of 90 degrees or higher did not end until August 5th or 6th. There were two reported heat related deaths. In Montgomery County, a 54-year-old male contractor was found lying unconscious on the ground outside a house he was working on. He later died. A 79-year-old woman was found dead in Lansdale. All the windows in her residence were closed and she had no fan or air conditioning. In Philadelphia, an 87-year-old woman perished. The hot weather and high humidity levels taxed electric utilities and the PJM Interconnection issued a usage advisory.

For most places the highest temperatures with the July part of this hot spell occurred on the 29th and included 101 degrees at the Franklin Institute within Philadelphia, 100 degrees in Crum Creek (Delaware County), 98 degrees at the Philadelphia International Airport, West Chester and Valley Forge (Chester County) and Neshaminy Falls (Bucks County), 97 degrees in Reading (Berks County) and Bath (Northampton County), 96 degrees in Pottstown (Montgomery County), Lehigh Valley International Airport and Doylestown (Bucks County), 94 degrees in Morgantown (Berks County) and 93 degrees in East Stroudsburg (Monroe County).

The hot spell at the end of July cemented the month as being well above normal. Monthly mean temperatures averaged about 2 degrees warmer than normal. The July monthly mean temperature at the Philadelphia International Airport was 79.6 degrees, 2.0 degrees above normal and the 11th warmest July on record. There were 17 days that the high temperatures was 90 degrees or higher. The July monthly mean temperature at the Lehigh Valley International Airport was 75.6 degrees, 2.3 degrees above normal. There were 14 days that the high temperatures was 90 degrees or higher. The July monthly mean temperature in Reading was 77.1 degrees, 2.5 degrees above normal. There were 16 days that the high temperatures was 90 degrees or higher. M54OU, F79PH, F87PH

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

PENNSYLVANIA, Northeast

Susquehanna County

Montrose to New Milford	23	1115EST 1125EST			0	0	2K		Thunderstorm Wind (G50)
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Tree down in Montrose. Tree branches and wires down on car in New Milford.

PENNSYLVANIA, Northwest

Crawford County

Crossingville	27	1703EST 1712EST	3	25	0	0	50K		Tornado (F0)
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A small F0 tornado touched down a mile and a half southwest of Crossingville. The tornado then moved northeast along a path approximately three miles in length. The damage path was intermittent along it's entire length. Several dozen trees were downed.

Erie County

Corry	27	1805EST			0	0	30K		Thunderstorm Wind
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Thunderstorm winds downed many trees. One tree fell on a car.

Erie County

Corry	28	0115EST			0	0			Hail(0.75)
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Dime size hail was observed.

Crawford County

Meadville to Saegertown	28	1450EST			0	0	25K		Thunderstorm Wind
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Thunderstorm winds downed a lot of trees in the Meadville and Saegertown areas.

Erie County

Edinboro	28	1625EST			0	0			Hail(0.75)
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Dime size hail was observed near the intersection of Interstate 79 and U.S. Route 6N.

Erie County

Countywide	28	1630EST			0	0	20K		Thunderstorm Wind
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Thunderstorm winds downed several trees across the western portion of the county.

Erie County

Corry	28	1645EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several large tree limbs.

Crawford County

Blooming Vly	28	1720EST			0	0	10K		Thunderstorm Wind
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Thunderstorm winds downed numerous trees and limbs.

Crawford County

Meadville	28	1720EST 1721EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed two large trees and several limbs.

Crawford County

Atlantic	28	1830EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several large tree limbs.

Erie County

Union City	28	2230EST			0	0	10K		Thunderstorm Wind
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Thunderstorm winds downed a few trees and large limbs.

Erie County

Erie	29	1940EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed two trees.

Crawford County

Countywide	29	2000EST			0	0	25K		Thunderstorm Wind
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Thunderstorm winds downed many trees across the county.

Crawford County

Countywide	29	2047EST 2110EST			0	0	25K		Thunderstorm Wind
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Thunderstorm winds downed many trees across the county.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>PENNSYLVANIA, West</u>									
Allegheny County									
Pleasant Hills	01	1715EST 2000EST			0	0			Flood
Heavy thunderstorm rains produced minor flooding along Route 51 in the Pleasant Hills area.									
Westmoreland County									
Greensburg	02	1445EST			0	0			Hail(0.75)
Westmoreland County									
Hostetter	02	1500EST 1700EST			0	0	10K		Flood
Heavy thunderstorm rains produced minor street and basement flooding.									
Westmoreland County									
Jeanette	04	1247EST			0	0			Hail(1.00)
Westmoreland County									
Greensburg	04	1258EST			0	0			Hail(0.75)
Jefferson County									
Stanton	04	1425EST			0	0	2K		Thunderstorm Wind
Thunderstorm winds downed a few large trees.									
Allegheny County									
East Mc Keesport	04	1506EST			0	0			Hail(0.75)
Allegheny County									
North Braddock	04	1506EST			0	0			Hail(0.88)
Westmoreland County									
Greensburg	04	1547EST			0	0			Hail(0.75)
Westmoreland County									
Latrobe	04	1600EST			0	0			Hail(0.75)
Westmoreland County									
Ligonier	04	1610EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several large trees.									
Westmoreland County									
Manor	04	1615EST			0	0	2K		Thunderstorm Wind
Thunderstorm winds downed a few trees.									
Westmoreland County									
Laughlintown	04	1635EST			0	0			Hail(1.00)
Fayette County									
Dunbar	04	2145EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several trees.									
Allegheny County									
1 N Castle Shannon	18	1730EST 1830EST			0	0	100K		Flood
Thunderstorm rains dropped 2 inches of rain in less than an hour, producing flash flooding in the Overbrook section of Pittsburgh. Several cars were stranded in 4 to 5 feet of water at the intersection of Routes 51 and 88. First-floor flooding was also reported in several buildings in the vicinity.									
Washington County									
West Alexander	19	1300EST			0	0			Hail(0.75)
Washington County									
Avella	19	1355EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several large trees onto State Highway 50.									
Fayette County									
Uniontown	23	1415EST 1615EST			0	0	10K		Flood
Thunderstorms producing nearly 2 inches of rain in less than an hour created street flooding in downtown Uniontown, as well as along US Route 40 just west of town.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>PENNSYLVANIA, West</u>									
Greene County									
Brave	23	1615EST 1830EST			0	0			Flood
Torrential thunderstorm rains produced minor roadway and basement flooding.									
Allegheny County									
Pittsburgh	25	1615EST 1830EST			0	0	5K		Flood
Slow-moving thunderstorms produced over 2 inches of rain in less than one hour across the suburbs of Pittsburgh. This heavy rain forced Sewickley Creek out of its banks in Sewickley Heights, flooding Fern Hollow Road. Across the North Hills, the heavily traveled Babcock Boulevard between McKnight Road and Thompson Run Road was closed for a period of time due to roadway flooding.									
Mercer County									
Grove City	26	1215EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several trees.									
Butler County									
Evans City	26	1310EST			0	0	20K		Thunderstorm Wind
Thunderstorm winds downed numerous trees in the Evans City area. These strong winds also collapsed the corner of a building.									
Westmoreland County									
Murrysville	26	1310EST			0	1	200K		Thunderstorm Wind
A microburst hit portions of eastern Murrysville. The length of the damage path was about one quarter of a mile. The width was approximately 200 yards. The strongest winds were estimated to be about 80 MPH.									
The downburst first struck a car dealership on the corner of Puckety Drive and Route 22. The east side of the building was blown out. One car was overturned and several cars were moved. The microburst path continued east along Route 22 and ripped part of a roof from a house on the north side of Route 22. The damage path then continued across Route 22 where a plant nursery sustained significant damage. The roof was torn off and several walls were toppled. Boards, insulation and other debris were thrown downwind to the southeast. There was also one minor injury.									
Westmoreland County									
2 W Latrobe	26	1400EST			0	0			Hail(0.75)
Westmoreland County									
Latrobe	26	1410EST			0	0			Hail(1.00)
Westmoreland County									
Latrobe	26	1420EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several trees in the Latrobe area.									
Forest County									
Tionesta	26	1800EST			0	0			Hail(1.25)
Forest County									
Tionesta	26	1800EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several large trees.									
Clarion County									
Tylersburg	26	1815EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds downed several trees and power lines along State Route 36. One of these trees fell onto a pickup truck.									
Clarion County									
2 N Scotch Hill to 2 E Scotch Hill	26	1825EST 1830EST	2	150	0	0	30K		Tornado (F0)
An F0 tornado with an estimated maximum wind of 70 MPH blew through Cook Forest State Park. This tornado had a total path length of 2 miles and a width of 150 yards. Approximately 60 to 70 trees were downed by this tornado, with one falling onto a parked pickup truck. A roof was also blown off of an outbuilding.									
Jefferson County									
Brockway	26	1905EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several large trees.									
Jefferson County									
Punxsutawney	26	1920EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds downed several trees. One tree fell onto a house, causing minor damage.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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PENNSYLVANIA, West

Clarion County

Clarion	26	2200EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several trees in the Clarion area.

Clarion County

Rimersburg	26	2248EST			0	0	10K		Thunderstorm Wind
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Thunderstorm winds downed numerous trees.

Westmoreland County

Greensburg	27	1414EST 1630EST			0	0	25K		Flood
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Torrential thunderstorm rains produced numerous cases of minor roadway flooding. Some basement flooding was also reported.

Venango County

Chapmanville	28	1520EST			0	0	2K		Thunderstorm Wind
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Thunderstorm winds downed a few trees.

Venango County

Utica	28	1520EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several large trees.

Forest County

3 SW Hunter	28	1615EST			0	0	1K		Thunderstorm Wind
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Thunderstorm winds downed a large tree on Red Brush Road.

Venango County

Plumer	28	1740EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several large trees.

Mercer County

Salem	28	1935EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several trees and power lines.

Mercer County

Transfer	28	1935EST			0	0			Thunderstorm Wind (G50) ^M
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A spotter measured a thunderstorm wind gust to 58 MPH.

Mercer County

Fredonia	29	2020EST			0	0	10K		Thunderstorm Wind
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Thunderstorm winds downed numerous trees.

Westmoreland County

Scottdale	31	1700EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several trees.

PUERTO RICO

Western Interior

San Sebastian	07	1950AST 1955AST			0	0	3K		Lightning
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Lightning struck a utility pole and knocked it down at Culebrinas sector in San Sebastian.

Central Interior

Corozal	12	1400AST 1530AST			0	0			Heavy Rain
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San Juan And Vicinity

Toa Alta	12	1400AST 1530AST			0	0			Heavy Rain
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Strong thunderstorms caused very heavy rain over the north central sections of Puerto Rico. Emergency Manager Officials indicated a tree down in Toa Alta and a mudslide in Corozal.

San Juan And Vicinity

San Juan to Guaynabo	12	1515AST 1525AST			0	0			Funnel Cloud
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A Private Meteorologist and several people spotted a few funnel clouds in the vicinity of Rio Piedras sector and Guaynabo.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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RHODE ISLAND

Kent County

Coventry	23	1535EST			0	0	2K		Thunderstorm Wind (G50)
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Providence County

Providence to Scituate	23	1545EST 1605EST			0	0	5K		Thunderstorm Wind (G50)
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Providence County

Cranston	23	1550EST			0	0			Hail(0.75) Severe thunderstorms downed trees in Coventry, Providence, and Scituate and produced dime sized hail in Cranston .
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SOUTH CAROLINA, Central

Chesterfield County

8 E Jefferson	02	1445EST			0	0	0	0	Thunderstorm Wind (G50) Highway Patrol and Jefferson Police reported trees down on Angelus Road between Jefferson and Chesterfield.
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Fairfield County

Ridgeway	02	1730EST			0	0		0	Thunderstorm Wind (G50) Electric company reported trees and powerlines down on Park Road in Ridgeway .
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Richland County

Blythewood	02	1746EST			0	0		0	Thunderstorm Wind (G50) Sheriff reported trees and powerlines down on Grover Wilson road in Blythewood .
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Aiken County

New Holland	02	1825EST			0	0	0		Hail(0.75) Sheriff reported 3/4 inch hail in New Holland.
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Aiken County

New Holland	02	1815EST			0	3		0	Lightning Three men in a metal shed were struck and injured by lightning, none seriously .
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Aiken County

North Augusta	02	2039EST			0	1		0	Lightning A woman was struck in her home through the telephone line. She was not seriously injured .
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Lancaster County

10 N Lancaster	03	1345EST			0	0	0	0	Hail(0.75) Spotter reported 3/4 inch hail north of Lancaster.
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Chesterfield County

Pageland	03	1400EST			0	0	0	0	Hail(0.75) Sheriff reported 3/4 inch hail in Pageland.
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Lancaster County

1 E Lancaster	03	1410EST			0	0		0	Thunderstorm Wind (G50) Sheriff reported trees down on the east side of Lancaster.
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Lancaster County

4 S Lancaster	03	1415EST			0	0			Hail(1.75) Sheriff reported golf ball size hail at Jones Crossroads.
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Chesterfield County

4 E Chesterfield	03	1545EST			0	0	0	0	Hail(0.75) Sheriff reported 3/4 inch hail between Chesterfield and Cheraw.
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Fairfield County

Mitford	03	1607EST			0	0	0	0	Thunderstorm Wind (G50) Sheriff reported trees down on Heritage road.
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Newberry County

Whitmire to Jalapa	03	1645EST 1705EST			0	0		0	Thunderstorm Wind (G55) Sheriff reported trees down from Whitmire to Jalapa.
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>SOUTH CAROLINA, Central</u>									
Mccormick County									
Mt Carmel	03	1830EST			0	0	0	0	Thunderstorm Wind (G50) Sheriff reported trees down on hwy 823.
Clarendon County									
Summerton	04	1335EST			0	0	0	0	Hail(0.75) Sheriff reported 3/4 inch hail in Summerton.
Orangeburg County									
Santee	04	1430EST			0	0			Hail(0.88) Santee police reported nickel size hail.
Lancaster County									
Pleasant Hill	04	1512EST			0	0	0	0	Thunderstorm Wind (G50) Sheriff reported a couple of trees down in the Pleasant Hill area.
Kershaw County									
Bethune	04	1547EST			0	0			Hail(0.88) Sheriff reported nickel size hail in the Bethune area.
Orangeburg County									
7 E Orangeburg	06	1824EST			0	0		0	Hail(0.88) Highway Patrol reported nickel size hail at I-26 and hwy 301.
Calhoun County									
16 NW St Matthews	06	1825EST			0	0			Hail(0.88) Fire Dept reported nickel size hail near Sandy Run.
Clarendon County									
7 SW Manning	06	1902EST			0	0		0	Thunderstorm Wind (G50) Sheriff reported large limbs down on powerlines with power outages.
Orangeburg County									
Woodford	06	2012EST			0	0	0	0	Hail(0.75) EOC reported dime size hail in Woodford.
Lexington County									
Columbia Arpt	29	1438EST			0	0	75K		Thunderstorm Wind (G55)^M A microburst developed right over the Columbia and produced wind gusts of 60-70mph causing significant damage to several hangers and a few planes.
Lexington County									
2 E Columbia Arpt	29	1445EST			0	0	0	0	Thunderstorm Wind (G50) TV media reported a couple of trees down at Midlands Tech.
Orangeburg County									
10 NW Orangeburg	30	1903EST 1915EST			0	0	0		Hail(0.75) EOC reported 3/4 inch hail in the Wolfton area near hwy 178.
Fairfield County									
2 S Blair	30	1906EST			0	0	8K	0	Thunderstorm Wind (G55) Highway Patrol reported a tree fell onto a tractor trailer.
Newberry County									
Pomaria to Peak	30	2040EST			0	0		0	Thunderstorm Wind (G55) Sheriff reported trees down in Pomaria and Peak.
Fairfield County									
Jenksville	30	2052EST			0	0	0	0	Thunderstorm Wind (G50) Sheriff reported a few trees down in the Jenksville area.
Richland County									
Central Portion	31	1422EST			0	0		0	Thunderstorm Wind (G50) Highway Patrol reported several trees down around the county.
Clarendon County									
Paxville	31	1440EST			0	0		0	Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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SOUTH CAROLINA, Central

Electric coop reported powerlines down in Homebranch near Paxville.									
Sumter County									
5 S Sumter to 6 S Sumter	31	1445EST			0	0	0	0	Thunderstorm Wind (G60)
TV station and Shaw AFB reported trees down south of Sumter.									
Barnwell County									
Barnwell	31	1500EST			0	0		0	Thunderstorm Wind (G60)
Sheriff reported numerous trees down in Barnwell.									
Barnwell County									
1 S Williston	31	1500EST			0	0			Hail(0.88)
Public reported nickel size hail near Williston									
Orangeburg County									
Holly Hill to Eutawville	31	1500EST			0	0		0	Thunderstorm Wind (G55)
EOC reported trees down in Holly Hill and Eutawville.									
Orangeburg County									
Vance	31	1500EST			0	0			Hail(0.75)
EOC reported dime size hail in Vance.									
Aiken County									
2 S Jackson	31	1530EST			0	0	0	0	Hail(0.75)
Savannah River Site reported dime size hail.									
Aiken County									
Windsor	31	1530EST			0	0		0	Thunderstorm Wind (G50)
Electric coop reported trees and powerlines down in Windsor.									
Bamberg County									
1 N Ehrhardt	31	1546EST			0	0	0	0	Thunderstorm Wind (G50)
Highway Patrol reported a couple of trees down on Lodge Road.									
Edgefield County									
6 SW Edgefield	31	1610EST			0	0	0	0	Thunderstorm Wind (G50)
Sheriff reported a few trees down on Murrah Road.									
Orangeburg County									
Orangeburg	31	1615EST			0	0		0	Hail(1.00)
SKYWARN spotter reported 1 inch hail at the Orangeburg Hospital.									
Orangeburg County									
5 NE Orangeburg	31	1630EST			0	0	0	0	Thunderstorm Wind (G50)
Highway Patrol reported trees down along I-26.									
Barnwell County									
Williston	31	1510EST			0	0		0	Thunderstorm Wind (G55)
Newspaper reported several large trees down in Williston.									
Barnwell County									
Williston	31	1512EST			0	0			Hail(1.00)
Newspaper reported quarter size hail in the Williston area.									

SOUTH CAROLINA, North Coastal

SCZ032	Florence								
	01	0630EST 0730EST			0	3	20K		Fog
Heavy fog caused two accidents on Hwy 52 near Florence. The first accident occurred when an 18 wheeler collided head-on with another vehicle. Two other automobiles were involved. The second accident occurred when a cement truck rear ended another truck. There were two minor injuries, and one serious.									
Marlboro County									
Clio	04	1301EST			0	0			Hail(1.50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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SOUTH CAROLINA, North Coastal

Sheriff reported walnut size hail. Several old trees were reported down due to thunderstorm winds.

Darlington County

5 N Hartsville	04	1500EST			0	0	35K		Thunderstorm Wind (G70)
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A National Weather Service storm survey determined that a microburst destroyed a house barn, tore a porch off a barn, and tore shingles from a roof. Numerous trees were also uprooted. The NWS employee estimated winds in excess of 80 mph.

Williamsburg County

2 NW Henry	04	1641EST			0	0			Hail(1.50)
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Law enforcement reported walnut size hail.

Williamsburg County

2 E Hemingway	05	1500EST			0	0			Lightning
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Ebenezer Baptist Church was struck by lightning. No significant damage reported.

Horry County

Shell	05	2200EST			0	0			Thunderstorm Wind (G60)
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Law enforcement reported several trees down.

Florence County

8 SE Florence	05	2220EST			0	0			Thunderstorm Wind (G60)
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Law enforcement reported trees down on Hwy 327 near Moore's Crossroad.

Horry County

Aynor	05	2251EST			0	0			Thunderstorm Wind (G55)
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Tree down on Jordanville Road. Dime size hail was also reported.

Florence County

15 E Lake City	05	2322EST			0	0			Thunderstorm Wind (G60)
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Florence 911 reported a large tree down across Lake City Hwy.

Williamsburg County

Hemingway	05	2340EST			0	0			Thunderstorm Wind (G60)
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Williamsburg 911 reported trees and power lines down.

Georgetown County

Georgetown	11	2045EST 2200EST			0	0			Flood
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Police reported numerous roads flooded in the city. The police blocked off some of the roads. Radar estimated rainfall in the area between two and five inches.

Horry County

Myrtle Beach	20	1100EST			0	0	30K		Lightning
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Lightning cause a fire at the Chuck Wagon Restaurant on Kings Highway.

Horry County

1 W Surfside Beach	20	1800EST			0	0			Thunderstorm Wind (G60)
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Horry county 911 reported trees down.

Marion County

3 SE Britton Neck	20	2035EST			0	0			Thunderstorm Wind (G60)
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Horry county 911 reported trees down along Hwy 378.

Horry County

2 W Conway	20	2035EST			0	0			Thunderstorm Wind (G60)
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911 reported trees down on Hwy 378.

Georgetown County

4 SW Carvers Bay	21	1430EST			0	0			Hail(0.88)
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911 center reported nickel size hail.

Dillon County

Little Rock	30	2122EST			0	0			Thunderstorm Wind (G60)
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Dillon county 911 reported trees down in Little Rock and on Interstate 95 near the Little Pee Dee River Bridge.

Horry County

Loris	31	1600EST			0	0			Hail(0.75)
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Dime size hail reported.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>SOUTH CAROLINA, North Coastal</u>									
Horry County									
2 S Conway	31	1625EST			0	0			Thunderstorm Wind (G60)
			911 center reported trees down on Pitch Landing Road.						
<u>SOUTH CAROLINA, Northwest</u>									
Pickens County									
5 NW Pumpkintown	01	1450EST			0	0			Hail(0.75)
Greenville County									
Greenville	01	1456EST			0	0			Hail(0.75)
			Hail was reported near Bob Jones University.						
Greenville County									
Greenville	01	1456EST 1510EST			0	0	10K		Thunderstorm Wind (G50)
			Numerous trees and large limbs were blown down across the city. At least one tree fell on a house.						
Greenville County									
7 S Greenville	01	1545EST			0	0			Thunderstorm Wind (G50)
			Several trees were blown down near Fork Shoals Rd.						
Union County									
Cross Keys	01	1615EST			0	0	5K		Lightning
			Two cows were killed as a result of lightning. A grass fire was also started.						
Greenville County									
3 W Greenville-Spartan Greenville	01	1630EST 1730EST			0	0			Flash Flood
			Hammett Rd was flooded and barricaded.						
York County									
Rock Hill	01	1700EST			0	0	17K		Lightning
			Lightning caused fires at two homes and at a business.						
York County									
Rock Hill	01	1710EST			0	0			Hail(0.75)
Laurens County									
3 N Waterloo	02	1628EST			0	0			Hail(0.88)
Abbeville County									
Antreville	02	1630EST			0	0			Thunderstorm Wind (G50)
Abbeville County									
Antreville	02	1650EST			0	0			Hail(0.75)
Anderson County									
Belton	02	1656EST			0	0			Hail(1.00)
Anderson County									
5 S Belton	02	1716EST			0	0			Hail(0.75)
Spartanburg County									
Fingerville	02	1905EST			0	0			Hail(0.75)
			Hail was reported from Fingerville to Lake Bowen.						
York County									
1 W Rock Hill	03	1521EST			0	0			Thunderstorm Wind (G50)
			Several trees were blown down along Saluda Rd, Straight Rd, and McConnells Rd.						
Spartanburg County									
Cross Anchor	03	1615EST			0	0			Hail(0.88)
Union County									
Lockhart	03	1620EST			0	0	30K		Thunderstorm Wind (G55)
			Several trees were blown down. One fell on a mobile home.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>SOUTH CAROLINA, Northwest</u>									
Laurens County 3 N Waterloo	03	1628EST			0	0			Hail(0.88)
Anderson County Williamston to Pelzer	03	1652EST 1705EST			0	0	3K		Thunderstorm Wind (G55)
Numerous trees and powerlines were blown down.									
Laurens County 10 NE Laurens	03	1655EST			0	0			Thunderstorm Wind (G55)
Numerous trees were blown down along Fleming Mill Rd.									
Greenville County 2 N Greer	03	1700EST			0	0			Thunderstorm Wind (G55)
Some large trees were blown down.									
Cherokee County 8 NNW Thicketty	03	1745EST			0	0	50K		Thunderstorm Wind (G65)
Two mobile homes were destroyed.									
Greenville County Fountain Inn	03	1747EST			0	0			Hail(0.75)
Spartanburg County Boiling Spgs to 7 N Boiling Spgs	03	1753EST 1815EST			0	0	100K		Thunderstorm Wind (G65)
A house was heavily damaged. Roofs and porches were removed from several mobile homes. Several barns and outbuildings were also destroyed. In addition, numerous trees and powerlines were blown down.									
Greenville County Greenville	03	1801EST			0	0			Hail(0.75)
Abbeville County Donalds	03	1802EST			0	0			Hail(0.88)
Anderson County Honea Path	03	1805EST			0	0			Thunderstorm Wind (G50)
Large tree limbs were blown down.									
Greenwood County 2 S Ware Shoals	03	1805EST			0	0			Thunderstorm Wind (G50)
Several trees were blown down.									
Greenville County Travelers Rest	03	1920EST			0	0			Thunderstorm Wind (G50)
Some trees were blown down.									
Cherokee County Gaffney	04	1740EST			0	0			Hail(1.00)
Cherokee County Gaffney	04	1740EST			0	0			Thunderstorm Wind (G55)
Numerous trees and large limbs were blown down. A railroad crossing gate was also damaged. 5000 residents were without power.									
Cherokee County Gaffney	04	1800EST			0	0	5K		Thunderstorm Wind (G55)
The roof of a convenience store received some damage.									
Cherokee County Gaffney	04	1817EST			0	0			Thunderstorm Wind (G55)
Several trees were blown down on Elm St. A billboard was also blown down in the downtown area.									
Greenville County Greenville	10	1625EST			0	0	10K		Thunderstorm Wind (G50)
Trees and powerlines were blown down. At least one tree fell on a vehicle.									
Greenville County 5 NE Simpsonville	10	1635EST			0	0			Thunderstorm Wind (G50)
Large tree limbs were blown down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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SOUTH CAROLINA, Northwest

Anderson County									
5 NW Belton	10	1645EST 1700EST			0	0	1K		Thunderstorm Wind (G50)
Trees and powerlines were blown down.									
Anderson County									
Iva	10	1730EST			0	0			Thunderstorm Wind (G50)
Some trees and powerlines were blown down.									
Pickens County									
Easley	10	1812EST 1815EST			0	0	1K		Thunderstorm Wind (G50)
Trees and powerlines were blown down.									
Spartanburg County									
Spartanburg	21	1500EST			0	0	30K		Thunderstorm Wind (G60)
A microburst in the Arcadia community caused several trees to snap off at their bases. One tree fell on a mobile home.									
Pickens County									
5 S Dacusville	21	1730EST			0	0			Hail(0.75)
Oconee County									
2 W Walhalla	21	1850EST			0	0			Thunderstorm Wind (G50)
A tree and several large limbs were blown down in and around Walhalla.									
Cherokee County									
7 S Gaffney	22	1645EST			0	0			Thunderstorm Wind (G50)
Some trees were blown down along Lowrys Rd south of Gaffney.									
York County									
5 E Clover	22	1731EST			1	0			Lightning
Lightning struck a tree, which fell on and killed a bicyclist. M?OU									
Greenville County									
2 N Marietta	22	1910EST 1920EST			0	0			Hail(0.75)
Hail covered the ground.									
Oconee County									
2 E Seneca	23	1940EST			0	0			Thunderstorm Wind (G55)
Large trees, up to 30 inches in diameter and 40 feet tall, were blown down.									
Anderson County									
3 NW Williamston	30	1738EST			0	0			Hail(1.00)

SOUTH CAROLINA, South Coastal

SCZ040-042>045-047>050 Allendale - Hampton - Northern Colleton - Dorchester - Berkeley - Jasper - Beaufort - Southern Colleton - Charleston									
	01	0000EST			0	0			Drought
	31	2359EST							
Severe drought conditions continued through the month of July over south coastal South Carolina. Rainfall for the month was 3.65 inches below normal for the month.									
Hampton County									
8 S Hampton	06	1600EST			0	0			Thunderstorm Wind (G50)
Trees, limbs and power lines were down.									
Allendale County									
9 NW Allendale	06	1605EST			0	0			Thunderstorm Wind (G50)
Several large limbs were down.									
Hampton County									
5 S Varnville	06	1630EST			0	0			Thunderstorm Wind (G52)
Numerous trees were down in and around the town.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>SOUTH CAROLINA, South Coastal</u>									
Colleton County									
1 S Jacksonboro	06	1730EST			0	0			Thunderstorm Wind (G50)
			Large limbs and power lines were down.						
Berkeley County									
1 SW Goose Creek	11	1500EST			0	0			Hail(0.75)
Charleston County									
North Charleston	11	1505EST			0	0			Thunderstorm Wind (G50)
			A large tree was blown down.						
Beaufort County									
Beaufort	11	1643EST			0	0			Thunderstorm Wind (G52)
			Numerous trees blown onto power lines in and around the City of Beaufort.						
Colleton County									
5 WSW Jacksonboro	11	1555EST			0	0			Thunderstorm Wind (G52)
			Large limbs and trees were down.						
Beaufort County									
8 E Gardens Corner	11	1600EST			0	0			Thunderstorm Wind (G52)
			Several trees and large limbs were down.						
Jasper County									
10 S Hardeeville	11	1710EST			0	0			Thunderstorm Wind (G52)
			Large limbs and power lines were down.						
Beaufort County									
Bluffton	11	1815EST			0	0			Thunderstorm Wind (G52)
			Numerous trees, large limbs and downed power lines caused widespread power outages.						
Charleston County									
Charleston	15	1820EST 1825EST	0.6	30	0	0			Tornado (F0)
			A brief tornado touch down caused some damage to a storage building for an apartment complex, shingles taken off for the most part, a couple of signs bent, and a few small trees uprooted and some limbs taken out of larger trees. The touchdown was near the CBS affiliate and not far from their Doppler radar.						
Dorchester County									
Summerville	20	1518EST			0	0			Lightning
			Lightning struck a nearby pine tree and traveled to the a house. It blew 20 feet of shingles off the roof and ignited the insulation board between the studs and the brick wall.						
Beaufort County									
Beaufort	20	1920EST			0	0			Thunderstorm Wind (G50)
			Trees and large limbs were blown down.						
Jasper County									
Grahamville	20	1945EST			0	0			Thunderstorm Wind (G50)
			Several trees were down.						
Beaufort County									
Beaufort	20	2025EST			0	0			Thunderstorm Wind (G50)
			Numerous trees and power lines were blown down and several boats were overturned.						
Dorchester County									
2 E St George	21	1520EST			0	0			Thunderstorm Wind (G50)
			Trees and power lines were down.						
Berkeley County									
3 E Bonneau	21	1550EST			0	0			Hail(0.75)
Allendale County									
Martin	21	1631EST			0	0			Thunderstorm Wind (G50)
			Several trees and large limbs were down across roads.						
Hampton County									
Mc Phersonville	21	1735EST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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SOUTH CAROLINA, South Coastal

Several trees and power lines were down.

Colleton County Whitehall	21	1750EST			0	0			Thunderstorm Wind (G50)
									Numerous trees and limbs were down.
Hampton County 5 SE Cummings	21	1800EST			0	0			Hail(1.00)
Berkeley County 15 W Moncks Corner	31	1520EST			0	0			Thunderstorm Wind (G52)
									Several trees down near the intersection of highway 176 and Poplar Hill Dr.
Berkeley County Moncks Corner	31	1525EST			0	0			Thunderstorm Wind (G52)
									Several trees were down.
Colleton County 1 N Ruffin	31	1645EST			0	0			Thunderstorm Wind (G50)
									Large limbs and power lines were down.
Colleton County 4 NE Bennetts Pt	31	1740EST			0	0			Thunderstorm Wind (G52)
									Several trees and large limbs were lines down.

SOUTH DAKOTA, Central and North

Hyde County 23 N Highmore	02	0550CST			0	0			Hail(0.75)
Hand County 7 NW Polo	02	0620CST			0	0			Hail(1.00)
Faulk County 1 S Miranda	02	0649CST			0	0			Hail(1.00)
Spink County 8 NW Redfield	02	0720CST			0	0			Hail(1.75)
Faulk County 4 W Faulkton	02	0742CST			0	0			Hail(0.75)
Spink County 4 NW Athol	02	0820CST			0	0			Hail(0.75)
Spink County 3 SE Brentford	02	0825CST			0	0			Hail(1.00)
Faulk County 4 NE Miranda	02	0840CST			0	0			Hail(0.75)
Faulk County 7 SE Cresbard	02	0910CST			0	0			Hail(0.75)
Spink County 1 SE Ashton	02	0914CST			0	0			Hail(0.88)
Spink County 4 N Frankfort	02	1003CST			0	0			Hail(1.00)
Spink County 14 E Ashton	02	1035CST			0	0			Hail(0.75)
Clark County 5 N Raymond	02	1105CST			0	0			Hail(0.75)
Faulk County Orient	02	0630CST			0	0			Hail(1.50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>SOUTH DAKOTA, Central and North</u>									
Hughes County 15 S Harrold	07	1430CST			0	0			Hail(1.00)
Lyman County 3 NE Kennebec	07	1615CST			0	0			Thunderstorm Wind (G52) Sixty mph winds dislodged a piece of tin from the roof of a barn, knocked a barn door off of its hinges, and downed some large tree branches.
Mepherston County 14 NE Leola	09	1715CST			0	0			Hail(4.50)
Mepherston County 13 NE Leola	09	1716CST			0	0			Hail(1.00)
Brown County 11 NW Frederick	09	1728CST			0	0			Hail(0.75)
Marshall County 2 N Lake City	09	1945CST			0	0			Thunderstorm Wind (G52)
Corson County 9 NW Mc Laughlin	20	0210CST			0	0			Thunderstorm Wind (G52)
Stanley County 5 W Ft Pierre	21	0010CST			0	0			Thunderstorm Wind (G52) Sixty mph winds brought many tree branches down.
Hughes County Pierre	21	0025CST			0	0			Thunderstorm Wind (G51) ^M
Edmunds County Mina	21	0240CST			0	0			Thunderstorm Wind (G52) Many tree branches were brought down near Mina.
Spink County Mellette	21	0245CST			0	0			Thunderstorm Wind (G65) ^M Some tree branches were brought down by winds over 70 mph.
Brown County Groton	21	0300CST			0	0			Thunderstorm Wind (G70) Winds to 80 mph brought down many trees in the Groton cemetery. Some power poles along with many tree branches were also downed in Groton.
Clark County 7 SE Bradley	21	0300CST			0	0			Thunderstorm Wind (G52)
Codington County Florence	21	0300CST			0	0			Thunderstorm Wind (G56)
Brown County 1 NW Aberdeen	21	0320CST			0	0			Thunderstorm Wind (G52)
Day County 6.5 NE Roslyn	21	0327CST			0	0			Thunderstorm Wind (G52)
Marshall County 2 SW Lake City to 2 SE Lake City	21	0350CST 0410CST			0	0			Thunderstorm Wind (G78) Winds of 90 mph or higher uprooted many trees from Roy Lake to Clear Lake south of Lake City and also swept away and damaged many docks, boat lifts, and boats.
Roberts County Sisseton	21	0417CST			0	0			Thunderstorm Wind (G60) ^M
Hyde County Highmore	21	0100CST			0	0			Thunderstorm Wind (G54) ^M Winds over 60 mph brought some trees and branches down in Highmore.
Hughes County 10 NW Pierre	24	1830CST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>SOUTH DAKOTA, Central and North</u>									
Sully County									
8 SW Okobojo	24	1830CST			0	0			Hail(0.75)
Hughes County									
Pierre	24	1840CST			0	0			Thunderstorm Wind (G72) ^M Winds to 80 mph brought down many branches and a few trees in Pierre. A new house under construction was also blown down.
Stanley County									
1 W Ft Pierre	24	1845CST			0	0			Hail(1.00)
Stanley County									
1 W Ft Pierre	24	1845CST			0	0			Thunderstorm Wind (G52)
Lyman County									
14 N Presho	24	1914CST 1915CST	0.1	20	0	0			Tornado (F0) A tornado touched down briefly north of Presho and caused no damage. Path length and width were estimated.
Lyman County									
7 N Kennebec	24	1915CST			0	0			Hail(1.75)
Lyman County									
7 N Kennebec	24	1915CST			0	0			Thunderstorm Wind (G52)
Lyman County									
Reliance	24	1935CST			0	0			Hail(1.00)
Lyman County									
4 SW Oacoma	24	2000CST			0	0			Hail(0.75)
Corson County									
Mc Laughlin	24	2130CST			0	0			Thunderstorm Wind (G52)
Campbell County									
2 S Pollock	24	2145CST			0	0			Thunderstorm Wind (G52)
Edmunds County									
1 W Mina	24	2255CST			0	0			Thunderstorm Wind (G61) Seventy mph winds blew a large trailer across a yard.
Brown County									
Aberdeen Arpt	24	2311CST			0	0			Thunderstorm Wind (G63) ^M Seventy mph winds downed some trees and many branches throughout Aberdeen. Some trees fell on power lines knocking power out for several hours for over 2000 people in Aberdeen. A couple of vehicles were damaged from trees or branches falling on them. A large trailer was also toppled by the strong winds.
Marshall County									
3 E Britton	24	2320CST			0	0			Thunderstorm Wind (G52)
Brown County									
Groton	24	2325CST			0	0			Thunderstorm Wind (G52) Sixty mph winds blew off some large advertising signs at the ball field.
Spink County									
4 E Conde	24	2330CST			0	0			Thunderstorm Wind (G52)
Day County									
6 N Holmquist	24	2353CST			0	0			Thunderstorm Wind (G56)
Roberts County									
Sisseton	25	0011CST			0	0			Thunderstorm Wind (G51) ^M
Grant County									
10 SW Marvin	25	0015CST			0	0			Thunderstorm Wind (G52)
Corson County									
5 E Morristown	26	2130CST			0	0			Thunderstorm Wind (G52)
Jones County									
15 N Draper	26	2200CST			0	0			Thunderstorm Wind (G52)

Storm Data and Unusual Weather Phenomena

July 2002

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SOUTH DAKOTA, Central and North

Lyman County									
13 N Vivian	26	2200CST			0	0			Thunderstorm Wind (G52)
Walworth County									
Selby	26	2200CST			0	0			Thunderstorm Wind (G56)
High winds split a tree in half and brought many branches down in Selby.									
Grant County									
9 SW Marvin	27	0145CST			0	0			Thunderstorm Wind (G52)
Corson County									
6 W Trail City	28	0015CST			0	0			Thunderstorm Wind (G56)
Dewey County									
Timber Lake	28	0030CST			0	0			Thunderstorm Wind (G56)
Edmunds County									
Bowdle	28	0315CST			0	0			Hail(0.75)
Mcpheerson County									
Leola	28	1932CST			0	0			Hail(0.75)
Edmunds County									
3 N Mina	28	2018CST			0	0			Hail(0.75)
Brown County									
1 W Aberdeen	28	2030CST			0	0			Hail(0.75)
Corson County									
2 W Keldron	30	2300CST			0	0			Hail(0.75)
Mcpheerson County									
5 NW Long Lake	31	0200CST			0	0			Hail(0.88)
Mcpheerson County									
6 NW Leola	31	0230CST			0	0			Hail(0.88)
Brown County									
Aberdeen Arpt	31	0237CST			0	0			Thunderstorm Wind (G52) ^M
Day County									
8 SE Pierpont	31	0310CST			0	0			Thunderstorm Wind (G52)
Brown County									
Claremont	31	0315CST			0	0			Thunderstorm Wind (G52)
Sixty mph winds broke off several large tree branches in town.									
Marshall County									
Britton	31	0330CST			0	0			Thunderstorm Wind (G56)
A large tree was downed in Britton along with several large tree branches.									
Roberts County									
2 SE Claire City	31	0400CST			0	0			Hail(0.75)
Roberts County									
2 SE Claire City	31	0400CST			0	0			Thunderstorm Wind (G61)
Seventy mph winds downed many tree branches in town.									

SOUTH DAKOTA, Southeast

Charles Mix County									
3 NE Academy	09	1900CST			0	0			Hail(1.50)
Charles Mix County									
Marty	09	1938CST			0	0			Hail(0.75)
Charles Mix County									
Wagner	09	1958CST			0	0			Hail(0.88)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>SOUTH DAKOTA, Southeast</u>									
Charles Mix County 4 SE Dante	09	2005CST			0	0			Hail(0.75)
Hutchinson County Tripp	09	2023CST			0	0			Hail(1.00)
Bon Homme County Tyndall	09	2028CST 2030CST			0	0			Hail(0.88)
Bon Homme County Avon	09	2030CST			0	0	10K		Thunderstorm Wind (G61) Thunderstorm winds blew down power poles and lines.
Bon Homme County Scotland	09	2035CST			0	0			Thunderstorm Wind (G61) Thunderstorm winds caused tree damage, including large parts of two large trees broken off.
Hutchinson County 2 E Menno	09	2030CST			0	0			Hail(0.75) Large hail and strong winds caused heavy damage to crops. The amount of crop damage was not known.
Charles Mix County 7 NW Geddes	09	2035CST			0	0			Hail(0.88)
Bon Homme County 3 NW Tabor	09	2040CST			0	0			Hail(0.88)
Bon Homme County 4 S Scotland	09	2049CST			0	0			Hail(0.75)
Yankton County 5 E Lesterville	09	2106CST			0	0			Thunderstorm Wind (G52)
Turner County 3 N Center Pt	09	2115CST			0	0			Thunderstorm Wind (G57)
McCook County 2 E Salem	09	2135CST			0	0			Hail(0.75)
Bon Homme County 4 SW Tabor	10	0030CST			0	0			Hail(0.75)
Yankton County 4 NE Lesterville	10	0040CST			0	0			Hail(0.75)
Minnehaha County Sioux Falls	10	0213CST 0300CST			0	0	150K		Flash Flood Heavy rain caused flooding of numerous streets, and caused sewers to back up in a four block area. At least 60 homes suffered significant damage from the flooding of basements by the sewer backup.
Lincoln County Sioux Falls	10	0213CST 0300CST			0	0			Flash Flood Heavy rain caused flooding of several streets.
Beadle County Huron Arpt	21	0226CST			0	0			Thunderstorm Wind (G53) ^M
Beadle County Huron	21	0240CST			0	0	100K		Thunderstorm Wind (G69) Thunderstorm winds caused widespread tree damage. The winds also blew down power lines and poles, resulting in a power outage. Minor damage to homes was also reported.
Kingsbury County 4 NW De Smet	21	0255CST			0	0	1K		Thunderstorm Wind (G52) Thunderstorm winds damaged a shed.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>SOUTH DAKOTA, Southeast</u>									
Union County									
9 E Spink	21	1700CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds broke off branches and smaller debris from trees.
Jerauld County									
11 SE Wessington Spgs	24	1745CST			0	0			Hail(1.50)
Sanborn County									
Woonsocket	24	1749CST			0	0			Hail(1.75)
									Large hail damaged vehicles and crops. The amount of property and crop damage was not known.
Sanborn County									
Letcher	24	1806CST 1807CST			0	0	500K		Hail(2.50)
									Large hail cracked windows and damaged shingles on buildings. The hail also caused severe damage to vehicles. Crop damage was also reported, but the amount of crop damage was not known.
Davison County									
3 N Loomis	24	1815CST			0	0			Hail(1.00)
Hanson County									
Epiphany	24	1825CST			0	0			Thunderstorm Wind (G52)
Sanborn County									
6 SE Letcher	24	1825CST			0	0			Hail(1.75)
									Wind driven large hail damaged a few vehicles and knocked down tree branches. The amount of damage was not known.
Davison County									
Mitchell	24	1827CST 1842CST			0	0	3M		Hail(2.50)
									Large hail caused severe damage to numerous vehicles, including many at car dealerships. Damage also occurred to windows, siding, and shingles on buildings. The hail caused damage to greens at a municipal golf course.
Miner County									
1 S Canova	24	1840CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds caused damage to trees and power lines. The amount of damage was not known.
Mccook County									
Bridgewater	24	1845CST			0	0			Thunderstorm Wind (G61)
Hanson County									
Fulton	24	1847CST			0	0			Hail(0.75)
Hanson County									
Alexandria	24	1859CST			0	0			Hail(1.00)
Davison County									
Mitchell	24	1847CST			0	0			Hail(1.75)
Mccook County									
Salem	24	1900CST			0	0	100K		Thunderstorm Wind (G69)
									Thunderstorm winds caused widespread tree and power line damage. Many trees were blown down, and power lines were down throughout the city with resulting power outages. Minor damage to structures, such as shingles blown off, was also reported.
Mccook County									
Canistota	24	1905CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds caused tree and power line damage. The amount of damage was not known.
Mccook County									
Bridgewater	24	1908CST 1918CST			0	0	50K		Thunderstorm Wind (G61)
									Thunderstorm winds caused widespread tree damage, and also blew down power lines.
Turner County									
3 SE Dolton	24	1910CST			0	0			Thunderstorm Wind (G52)
Mccook County									
2 S Bridgewater	24	1911CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds blew down power lines and caused tree damage. The amount of damage was not known.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>SOUTH DAKOTA, Southeast</u>									
Hutchinson County									
9 N Freeman	24	1925CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds caused tree damage, including several branches down.									
Yankton County									
Volin	24	1931CST			0	0			Hail(0.88)
Minnehaha County									
Ellis	24	1935CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds caused tree damage, including one tree which fell on a power line, causing a power outage.									
Minnehaha County									
Sioux Falls	24	1937CST			0	0			Hail(0.75)
Clay County									
4 SW Wakonda	24	1937CST			0	0			Hail(0.75)
Minnehaha County									
Sioux Falls	24	1938CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds caused tree damage. The winds also blew down a few power lines, with resulting power outages affecting parts of Sioux Falls. The amount of damage was not known.									
Lincoln County									
Beresford	24	2000CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds caused tree damage. The amount of damage was not known.									
Yankton County									
Lesterville	24	2002CST			0	0			Hail(0.75)
Brule County									
7 S Chamberlain	24	2010CST			0	0			Hail(0.88)
Charles Mix County									
2 N Academy	24	2037CST			0	0			Hail(0.88)
Brule County									
15 S Kimball	24	2038CST			0	0			Hail(0.88)
Charles Mix County									
7 NW Platte	24	2043CST			0	0			Hail(0.75)
Charles Mix County									
Platte	24	2053CST			0	0			Hail(0.75)
Charles Mix County									
Geddes	24	2115CST			0	0			Hail(0.75)
Charles Mix County									
Lake Andes	24	2125CST			0	0			Hail(1.75)
Charles Mix County									
Wagner	24	2150CST			0	0			Hail(0.75)
Charles Mix County									
10 SE Wagner	24	2215CST			0	0			Hail(0.75)
Union County									
Elk Pt	25	0040CST			0	0			Hail(0.75)
Clay County									
Vermillion	25	0200CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds caused tree damage. The amount of damage was not known.									
Union County									
North Sioux City	25	0225CST			0	0			Hail(0.75)
Beadle County									
9 SE Huron	28	1135CST			0	0			Hail(0.75)
Large hail damaged crops in the area, but the amount of crop damage was not known.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>SOUTH DAKOTA, Southeast</u>									
Kingsbury County Iroquois	28	1205CST			0	0			Hail(0.75)
Kingsbury County Manchester	28	1211CST			0	0			Hail(0.75)
Kingsbury County De Smet	28	1231CST			0	0			Hail(0.75)
Kingsbury County 4 S Lake Preston	28	1240CST			0	0	100K		Hail(4.50)
									Large hail broke windows in homes and vehicles, and otherwise damaged vehicles. The hail also caused crop damage, but the amount of crop damage was not known.
Sanborn County 16 NE Woonsocket	28	1240CST			0	0			Hail(0.75)
Kingsbury County 5 SW Lake Preston	28	1241CST 1242CST	0.3	50	0	0			Tornado (F0)
									A tornado was observed crossing Lake Thompson, but did not reach land, and caused no reported damage.
Kingsbury County Lake Preston	28	1245CST			0	0			Hail(1.00)
Kingsbury County Lake Preston	28	1245CST			0	0			Thunderstorm Wind (G52)
Kingsbury County 5 SW Lake Preston	28	1245CST			0	2	500K		Hail(2.75)
									Large hail broke windows, and heavily damaged vehicles and boats. Holes were punched by the hail in some of the boats. Two boaters on Lake Thompson were injured by the hail. One was taken to the hospital with a head injury, and the other suffered several welts on the back from hailstone hits. Crop damage also occurred, but the amount of crop damage was not known.
Kingsbury County 2 N Oldham to 10 E Oldham	28	1252CST 1320CST			0	0	500K		Hail(1.75)
									Large hail broke numerous windows in buildings and vehicles in Oldham and rural areas nearby, and caused other damage to vehicles. The hail also caused or along with severe winds contributed to widespread crop damage in the area, with some crops totally destroyed. The amount of crop damage, as well as the part of the crop damage due to hail, could not be determined. However, thousands of acres were believed to be affected.
Kingsbury County 2 N Oldham to 10 E Oldham	28	1252CST 1320CST			0	0	200K		Thunderstorm Wind (G61)
									Thunderstorm winds caused widespread tree damage. The winds also blew down power lines and poles, including many in the town of Oldham. The winds, along with large hail, contributed to widespread crop damage, with some corn and soybean crops totally destroyed. The amount of crop damage, as well as the part due to the winds, could not be determined. However, thousands of acres were believed to be affected.
Kingsbury County 5 S Lake Preston	28	1255CST	0.1	100	0	0	10K		Tornado (F0)
									A brief tornado damaged several farm buildings.
Miner County Carthage	28	1258CST			0	0			Hail(0.75)
Kingsbury County De Smet	28	1300CST			0	0	10K		Lightning
									Lightning struck a livestock barn on the Laura Ingalls Wilder homestead and killed two carriage horses inside. The barn suffered minor damage.
Brookings County 2 NE Sinai	28	1305CST			0	0			Hail(0.75)
									Large hail, accompanied by 50 mph winds, caused crop damage. The amount of crop damage was not known.
Brookings County 3 W Sinai to 2 W Sinai	28	1307CST 1313CST	1	50	0	0			Tornado (F0)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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SOUTH DAKOTA, West

Custer County

Pringle	05	1619MST 1642MST			0	0	0		Flash Flood
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Heavy rain left three to four inches of standing water in the town of Pringle, and water covered roads adjacent to Bear Creek around Pringle. An inch of rain was recorded in ten minutes in Pringle and radar estimates were around 2.5 inches per hour over the area.

Custer County

24 W Custer	06	1210MST			0	0	0		Hail(1.25)
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Custer County

10 E Custer	07	1220MST			0	0	0		Hail(0.88)
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Bennett County

15 N Martin	07	1350MST			0	0	0		Hail(0.75)
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Custer County

18 W Custer	08	1850MST			0	0	0		Hail(1.00)
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Custer County

Blue Bell	08	1954MST			0	0	0		Hail(1.25)
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Pennington County

4 NW Deerfield	18	1715MST			0	0	0		Hail(1.50)
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Perkins County

9 NW Meadow to 6 NW Meadow	19	1605MST 1620MST			0	0	0		Hail(1.75)
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Pennington County

Hill City	19	2045MST			0	0	0		Hail(0.75)
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Pennington County

6 SW Rapid City	19	2137MST			0	0	0		Hail(0.75)
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Meade County

1 N Hereford	19	2212MST			0	0	0		Thunderstorm Wind (G52)
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Three inch diameter tree limbs were blown down.

Perkins County

8 NW Usta	19	2350MST			0	0	0		Hail(1.00)
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Perkins County

8 NW Usta	19	2350MST			0	0	0		Thunderstorm Wind (G52)
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Several large tree limbs were blown down.

Ziebach County

2 W Glad Vly	20	0030MST			0	0	0		Thunderstorm Wind (G52)
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Several tree limbs were blown down.

Pennington County

2 NE Silver City	20	1407MST			0	0	0		Hail(1.50)
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Pennington County

4 N Deerfield	20	1526MST			0	0	0		Hail(0.75)
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Butte County

8 SE Newell	20	1535MST			0	0	0		Hail(1.00)
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Meade County

2 N Black Hawk	20	1607MST			0	0	0		Hail(0.88)
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Meade County

2 N Black Hawk	20	1607MST			0	0	0		Thunderstorm Wind (G52)
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Custer County

6 E Custer	20	1932MST			0	0	0		Thunderstorm Wind (G61) ^M
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

SOUTH DAKOTA, West

Pennington County 3 S Rapid City to 3 E New Underwood	20	1958MST 2025MST			0	0	1M		Thunderstorm Wind (G77)^M
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Meade County (Rca)Ellsworth Afb R	20	2013MST			0	0	0		Thunderstorm Wind (G92)^M
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An extremely strong severe thunderstorm moved over Rapid City and across the adjacent plains east of town. Downburst winds and the associated gust front caused damage along a nearly 30 mile long path. Extensive tree damage occurred throughout the eastern half of the city with countless trees and branches in excess of 24 inch diameter felled. Two roofs were torn off by the winds. Flying debris damaged numerous cars and buildings. The NWS office in downtown Rapid City measured an 80 mph wind gust, with meteorologists noting winds were sustained at 60 to 70 mph for 5 minutes. Ellsworth AFB wind equipment measured a 106 mph wind gust from the thunderstorm as it passed. Costs associated only with tree damage and cleaning up debris were conservatively estimated at \$500,000.

Jackson County Kadoka	20	2230MST			0	0	0		Thunderstorm Wind (G57)
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Lawrence County 8 W Spearfish	23	2025MST			0	0	0		Hail(0.75)
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Custer County 3 SW Hermosa	26	1540MST			0	0	0		Hail(1.00)
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Custer County 6 SE Hermosa	26	1610MST			0	0	0		Hail(0.88)
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Butte County 5 N Belle Fourche	26	1648MST			0	0	0		Thunderstorm Wind (G52)
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A semi trailer was blown a highway.

Meade County Ellsworth Afb	26	1725MST			0	0	0		Hail(1.00)
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Pennington County 2 NE Silver City	26	1730MST			0	0	0		Hail(0.75)
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Harding County 1 N Buffalo	26	1737MST			0	0	0		Thunderstorm Wind (G53)^M
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Haakon County Philip	26	1923MST			0	0	0		Thunderstorm Wind (G50)^M
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Harding County 3 SE Harding	27	1950MST			0	0	0		Thunderstorm Wind (G70)
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Harding County 10 S Harding	27	2015MST			0	0	0		Thunderstorm Wind (G61)
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Harding County 1 N Buffalo	27	2019MST			0	0	0		Thunderstorm Wind (G71)^M
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Several spotters estimated wind gusts of 70 to 80 mph. The Buffalo ASOS measured an 83 mph wind gust as the storm passed.

Butte County 20 NW Belle Fourche to Belle Fourche	27	2000MST 2010MST			0	0	0		Thunderstorm Wind (G52)
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Perkins County 13 W Lodgepole	27	2040MST			0	0	0		Thunderstorm Wind (G52)
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Harding County 1 S Reva	27	2053MST			0	0	0		Thunderstorm Wind (G61)
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Butte County 11 NE Castle Rock	27	2100MST			0	0	0		Thunderstorm Wind (G56)^M
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SDZ001 Harding 31	27	1900MST			0	0	0		High Wind (G53)^M
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Winds gusted to 61 mph at the Buffalo, South Dakota ASOS site behind a particularly potent July cold front.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>TENNESSEE, Central</u>									
Lawrence County 7 E Lawrenceburg	01	2110CST			0	18			Lightning
									Lightning killed 9 cattle when they took shelter under a pecan tree.
Lawrence County Lawrenceburg	01	2110CST			0	0			Thunderstorm Wind (G50)
									EMA office reported power lines were down in the city.
Lawrence County Lawrenceburg	01	2115CST			0	0			Thunderstorm Wind (G55)
									Spotter reported a front porch on a house was destroyed. A chair was picked up and thrown through a glass window.
Lawrence County 2 E Lawrenceburg	01	2120CST			0	0			Thunderstorm Wind (G50)
									EMA office reported a large tree was blown down and blocking a roadway.
Lawrence County 3 N Lawrenceburg	01	2125CST			0	0			Thunderstorm Wind (G50)
									EMA office reported trees were blown down. A farm building was destroyed on Mattox Town Rd.
Grundy County Monteagle	02	1102CST			0	0			Hail(1.00)
									Police reported quarter size hail.
Wayne County South Portion	02	1202CST			0	0			Thunderstorm Wind (G50)
									911 center reported trees down in the southern part of the county.
Montgomery County Clarksville	02	1245CST			0	0			Thunderstorm Wind (G50)
									EMA reported tree limbs were down at Austin Peay Univ.
Williamson County Nolensville	02	1306CST			0	0			Hail(0.75)
									TV-2 reported dime size hail.
Davidson County Southeast Portion	02	1325CST			0	0			Thunderstorm Wind (G50)
									TV-2 reported numerous trees down on Nolensville Rd.
Williamson County Northeast Portion	02	1325CST			0	0			Thunderstorm Wind (G50)
									TV-2 reported numerous trees were down on Nolensville Rd. Trees were one foot in diameter.
Robertson County Cross Plains	02	1330CST 1350CST			0	0			Hail(1.75)
									Public reported golf ball size hail that covered the ground.
Robertson County 5 E Orlinda	02	1410CST			0	0			Thunderstorm Wind (G50)
									NWS employee reported a tree was blown down 2 miles west of I-65 on Hwy 52.
Sumner County 4.3 WSW Portland	02	1415CST			0	0			Thunderstorm Wind (G50)
									NWS employee reported a tree was down on Spring Valley Dr.
White County Countywide	02	1415CST			0	0			Thunderstorm Wind (G50)
									911 center reported trees were down countywide.
White County West Portion	02	1415CST			0	0			Hail(1.75)
									911 center reported golf ball size hail in the western part of the county.
Cannon County Woodbury	02	1435CST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TENNESSEE, Central

Spotter reported numerous trees were blown down around town. There was some roof damage to homes. There was damage to a church just west of Woodbury. News article reported that Higgins Flea Market, which was under construction, was destroyed. There was damage to the Higgins Car Wash and Mini Storage adjacent to the Flea Market site. Winds blew off a section of the roof from the Cannon Community Church, Smith Funeral Home, and several storage buildings directly across the road from the Higgins property. Also, a tree was blown down into the rear of the First Baptist Church. A fallen tree destroyed the back porch to a home on 221 E. High St.

Putnam County 2 W Cookeville	02	1515CST			0	0			Thunderstorm Wind (G50) EMA reported trees were down.
Lincoln County Mc Burg	02	1522CST			0	0			Hail(0.75) Sheriff reported dime size hail.
Lincoln County Countywide	02	1530CST			0	0			Thunderstorm Wind (G50) Sheriff reported trees were blown down around the county.
Wilson County Gladeville	02	1530CST			0	0			Thunderstorm Wind (G50) EMA reported trees and power lines were down.
Wilson County 9.3 SW Lebanon	02	1530CST			0	0			Hail(1.50) EMA reported walnut size hail at Cedars of Lebanon State Park.
Humphreys County New Johnsonville	02	1600CST			0	0			Thunderstorm Wind (G50) Police reported trees and power lines were down in the city.
Giles County Pulaski	02	1605CST			0	0			Thunderstorm Wind (G50) 911 center reported several trees and power lines were down in the city.
Benton County Countywide	02	1630CST			0	0			Thunderstorm Wind (G50) Sheriff's office reported numerous trees and power lines were down.
Dekalb County Smithville	02	2200CST			0	0	10K		Lightning A newspaper article reported that lightning struck the Dekalb County Sheriff's Department through the 911-radio antenna. The bolt knocked out several computer systems and phone lines. Lightning also struck a barn near Liberty, causing a fire. The barn was completely destroyed.
Dekalb County Smithville	02	2215CST			0	0			Thunderstorm Wind (G60) Police reported trees were down. A large, 80-year-old pecan tree was blown onto a home near Alexandria.
Montgomery County South Portion	02	2319CST			0	0			Thunderstorm Wind (G50) Several trees were down.
Wilson County Mt Juliet	02	2320CST			0	0			Thunderstorm Wind (G60) Public reported a roof taken off a brick building. The roof landed on a car. Also, nearby home had a roof taken off from an addition to a home. It occurred near Curd Rd. and Mt. Juliet Rd.
Davidson County Nashville	02	2330CST			0	0			Thunderstorm Wind (G50) Trees and pwr lines were down in the Bordeaux area.
Montgomery County 2.5 E Clarksville	02	2330CST			0	0	200K		Lightning One home in Colonial Estate off Rossview Road was destroyed after a lightning strike. Also, a second home on Lillian Drive was severely damaged by lightning.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>TENNESSEE, Central</u>									
Montgomery County									
Dotsonville	02	2335CST			0	0			Thunderstorm Wind (G50)
									Newspaper article stated that a power line was down.
Williamson County									
Fairview	03	0018CST			0	0			Thunderstorm Wind (G50)
									Trees were down.
Wilson County									
Lebanon	03	1215CST			0	0			Hail(0.75)
									Spotter reported dime size hail just west of Lebanon.
Wilson County									
Mt Juliet	03	1252CST			0	0			Thunderstorm Wind (G50)
									Trees were down in Mt. Juliet. Power lines were down on Quarry Rd.
Wilson County									
Mt Juliet	03	1255CST			0	0	8K		Thunderstorm Wind (G55)
									WEMA reported row of stores had roof damage at intersection of Lebanon Rd. and Mt. Juliet Rd. Also, 2 dug-out roofs were blown off the Mt. Juliet Little League Park, which is located just east of the intersection of Lebanon Road and Mt. Juliet Rd. There was about \$8,000 worth of damage at the Little League Park.
Dickson County									
8 N Dickson	03	1449CST			0	0			Thunderstorm Wind (G50)
									911 center reported a tree was down on Hwy 49.
Montgomery County									
Clarksville	03	1454CST			0	0			Thunderstorm Wind (G50)
									911 center reported power lines were down.
Lewis County									
Hohenwald	03	1610CST			0	0			Thunderstorm Wind (G50)
									Sheriff reported a tree fell on a car.
Franklin County									
Estill Spgs	07	1800CST			0	0			Thunderstorm Wind (G50)
									Sheriff reported trees were down.
Franklin County									
Winchester	07	1800CST			0	0	20K		Lightning
									News article stated that lightning struck a home at 251 Brandi Cir. The wiring inside of the wall caught fire and caused the insulation to ignite. There was some damage to the home.
Van Buren County									
7 E Spencer	07	2025CST			0	0			Thunderstorm Wind (G50)
									Sheriff reported trees were down on Hwy 30E.
Montgomery County									
Ft Campbell	10	1235CST			0	0			Thunderstorm Wind (G50)
									Ham radio reports of trees blown down.
Robertson County									
Adams	10	1255CST 1300CST			0	0			Thunderstorm Wind (G50)
									TDOT reported trees were down.
Sumner County									
Hendersonville	10	1255CST			0	0			Thunderstorm Wind (G50)
									A few trees were down.
Clay County									
East Portion	10	1300CST			0	0			Thunderstorm Wind (G50)
									TDOT reported a tree was down.
Stewart County									
Bumpus Mills	10	1330CST			0	0			Hail(0.75)
									Dime size hail reported at Bumpus Mills Marina.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>TENNESSEE, Central</u>									
Bedford County Northwest Portion	10	1335CST			0	0			Thunderstorm Wind (G50)
									TDOT reported trees were down.
Overton County West Portion	10	1400CST			0	0			Thunderstorm Wind (G50)
									TDOT reported trees were down.
Davidson County Countywide	10	1408CST			0	0			Thunderstorm Wind (G55)
									Davidson county OEM reported numerous trees and scattered power outages. Areas affected were Joelton...Whites Creek and Donelson.
Cheatham County Kingston Spgs	10	1420CST			0	0			Thunderstorm Wind (G50)
									911 center reported a tree was down in the city.
Humphreys County South Portion	10	1500CST			0	0			Thunderstorm Wind (G50)
									TDOT reported 3 trees were blown down in the southern part of the county.
Hickman County East Portion	10	1520CST			0	0			Thunderstorm Wind (G50)
									TDOT reported a tree was down.
Warren County Rock Is	10	1500CST			0	1			Lightning
									A 9 year-old boy was struck by lightning while coming out of the water at Rock Island State Park. He stopped breathing, and his father administered CPR and revived his son. The boy was hospitalized with some burns, and then released.
Davidson County Countywide	12	1420CST 1700CST			0	0			Flash Flood
									EMA and SKYWARN spotters reported flooding on Brown's Creek, Leelan Lane, Granny White Pike, Woodvale Drive, Green Hills and Forest Hills area. By 240 PM CST, Otter Creek Road was closed due to high water. By 308 PM CST, Brown's Creek was out of its banks at the fairgrounds.
Davidson County Nashville	12	1430CST			0	0			Thunderstorm Wind (G50)
									OEM reported a power line was down on Woodale Ln.
Lincoln County West Portion	13	1915CST 2130CST			0	0			Flash Flood
									EMA reported numerous roads were closed due to high water.
Lincoln County Fayetteville	18	1330CST			0	0			Thunderstorm Wind (G50)
									Strong thunderstorm winds pulled back the tin roof from Fayetteville Lumber Store.
Houston County 4 E Erin	21	1640CST 1900CST			0	0			Flash Flood
									EMA reported a bridge was washed out on Highway 49. Highway 49 was also impassable due to high water at this location.
Davidson County 2 SW Nashville	22	1150CST			0	0			Thunderstorm Wind (G50)
									Law enforcement reported numerous trees and power lines down in the West End area.
Bedford County Shelbyville	22	1525CST			0	0			Thunderstorm Wind (G50)
									News article reported several large trees and power lines were down.
Rutherford County Walterhill	22	1545CST			0	0			Thunderstorm Wind (G50)
									Law enforcement reported a tree was blown down. The tree took down a power line. The power line was across a home on Sulfur Spring Road.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TENNESSEE, Central

Lawrence County

Leoma	25	1100CST			0	0	2K		Lightning
Lightning struck a home and caused a house fire on Price Jenkins Rd. The initial point of entry was the wall, and then along an antenna booster cable.									

Maury County

Columbia	28	1230CST			0	0			Thunderstorm Wind (G50)
Strong thunderstorm winds blew down a 170-year-old oak tree at the site of James K. Polk 's vegetable garden. The tree had a circumference of 13 feet and 9 inches. The tree, perhaps, may have been planted by James K. Polk .									

Davidson County

Countywide	30	1131CST 1140CST			0	0			Thunderstorm Wind (G50)
OEM reported 6 trees were blown down along with numerous power lines.									

Benton County

West Portion	30	1210CST			0	0			Thunderstorm Wind (G50)
Sheriff's office reported a tree was down on U.S. Hwy 70.									

Humphreys County

Waverly	30	1225CST			0	0			Thunderstorm Wind (G50)
Sheriff's office reported 2 trees were blown down.									

Dickson County

White Bluff	30	1200CST			0	0	15K		Lightning
A bolt of lightning struck the roof of a home. The lightning caused a hole on the roof and started a fire.									

Putnam County

Monterey	30	1415CST			0	2			Lightning
Sara Nugent, 34 and her son, Chad Nugent, 14, of Old Walton Road, were hurt when they were struck by lightning while sitting on a porch. They had to be airlifted to Erlanger Hospital in Chattanooga for treatment of their injuries.									

Putnam County

Cookeville	30	1443CST			0	0	30K		Lightning
Lightning struck the top of a three-story brick house on Russell Strausse Rd. This started a fire in the attic and caused some damage to the sheetrock.									

TENNESSEE, East

Bledsoe County

South Portion	02	1300CST			0	0	20K		Thunderstorm Wind
Utility company reported several trees downed in the southern portion of the county .									

Hawkins County

2 E Mt Carmel	02	1335EST			0	0			Hail(0.75)
Dime size hail was reported 2 miles east of Mt. Carmel									

Sullivan County

1 W Kingsport	02	1335EST			0	0			Hail(0.75)
Dime size hail was reported 1 mile west of Kingsport.									

Greene County

Baileyton	02	1415EST			0	0	10K		Thunderstorm Wind
The highway department reported trees down in the north end of the county near Baileyton.									

Hawkins County

Rogersville	02	1500EST			0	0			Lightning
Lightning struck the roof of the Great American Mountain Magic Restaurant and caused significant damage.									

Hawkins County

Rogersville	02	1505EST			0	0	20K		Thunderstorm Wind
Trees were reported down in Rogersville and Striggersville.									

Cocke County

1 E Newport	02	1730EST			0	0	10K		Thunderstorm Wind
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>TENNESSEE, East</u>									
Trees were reported down 1 mile east of Newport.									
Sevier County									
Countywide	02	1740EST			0	0	25K		Thunderstorm Wind
Trees were reported down across the county.									
Grainger County									
Rutledge	02	1755EST			0	0	25K		Thunderstorm Wind
Numerous large trees were reported down in and around Rutledge.									
Sullivan County									
Kingsport	02	1800EST			0	0	20K		Thunderstorm Wind
Numerous trees and power lines were reported down in Kingsport.									
Jefferson County									
Douglas Lake North	02	1820EST			0	1			Lightning
A 17 year old female received shock from lightning strike while leaning against a metal camping trailer.									
Carter County									
Blue Spg	02	1830EST			0	0			Hail(0.75)
Dime size hail was reported at Blue Spring.									
Blount County									
Knoxville McGhee Tys	02	1901EST			0	0	1K		Thunderstorm Wind
The ASOS at McGhee Tyson Airport recorded a 59 mph wind gust.									
Loudon County									
Countywide	02	1935EST			0	0	25K		Thunderstorm Wind
Trees were reported down across the county.									
Monroe County									
Madisonville	02	1940EST			0	0	15K		Thunderstorm Wind
Trees were reported down in Madisonville.									
Hamblen County									
Morristown	02	1941EST			0	0	10K		Thunderstorm Wind
Trees were reported down along Kidwells Ridge road.									
Grainger County									
Rutledge	02	2000EST			0	0	20K		Thunderstorm Wind
Numerous large trees were reported down at Rutledge and across the remainder of the county.									
Roane County									
Rockwood	02	2005EST			0	0	20K		Thunderstorm Wind
Newspaper report indicated that thunderstorm winds caused damage to a pontoon boat as well as roof damage to two adjacent homes in Rockwood.									
Anderson County									
Clinton	02	2110EST			0	0	25K		Thunderstorm Wind
Numerous trees were reported down countywide. One tree was downed on 25W near the Knox County line and another was reported down on Tilleary Road.									
Loudon County									
Lenoir City	02	2130EST			0	0	25K		Thunderstorm Wind
Numerous trees were reported down in Lenoir City and across the remainder of the county.									
Carter County									
Elizabethton	03	1415EST			0	0	10K		Thunderstorm Wind
Trees were reported down around Elizabethton.									
Washington County									
Countywide	03	1432EST 1500EST			0	0	20K		Thunderstorm Wind
Several trees were reported down across the county.									
Unicoi County									
Unicoi	03	1435EST			0	0			Hail(1.00)
Quarter size hail was reported in Unicoi.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>TENNESSEE, East</u>									
Sullivan County Piney Flats	03	1450EST			0	0			Hail(1.00)
Quarter size hail was reported at Piney Flats.									
Greene County Greeneville	03	1540EST			0	0	15K		Thunderstorm Wind
Trees were reported down in Greeneville and in other parts of the county.									
Sullivan County Kingsport	03	1540EST			0	0	15K		Thunderstorm Wind
Numerous trees were reported down in the Kingsport vicinity.									
Hawkins County Surgoinsville	03	1600EST			0	0	10K		Thunderstorm Wind
Trees were reported down at Surgoinsville.									
Greene County Mosheim	03	1610EST			0	0	25K		Thunderstorm Wind
Numerous trees were reported down from the highway 107 cut-off through Mosheim.									
Hancock County Kyles Ford	03	1620EST			0	0	1K		Thunderstorm Wind
Trained spotter indicated that numerous large tree branches were downed in 60 mph and higher wind gusts .									
Claiborne County Tazewell	03	1750EST			0	0			Hail(0.88)
Dime to nickel size hail was reported at Tazewell.									
Union County Maynardville	03	1750EST			0	0	35K		Thunderstorm Wind
Numerous trees and power lines were reported down in Maynardville and countywide. Also, some homes and barns were damaged from the strong wind gusts.									
Knox County Knoxville	03	1815EST			0	0	35K		Thunderstorm Wind
Numerous trees were reported down in Knoxville and across the county.									
Anderson County Oliver Spgs	03	1830EST			0	0	20K		Thunderstorm Wind
A large tree was downed on two buildings of the Oliver Springs Public Library.									
Loudon County Loudon	03	1845EST			0	0	10K		Thunderstorm Wind
The dome atop the Loudon County Courthouse was damaged by thunderstorm wind gusts and a tree fell into a rear window of the second story of the building.									
Roane County Rockwood	03	1905EST			0	0	20K		Thunderstorm Wind
Numerous trees and power lines were reported down in Rockwood and across the county.									
Meigs County Decatur	03	1945EST			0	0	20K		Thunderstorm Wind
Numerous trees were reported down in Decatur and across the county.									
Rhea County Spring City	03	1950EST			0	0	25K		Thunderstorm Wind
Numerous trees were reported down in Spring City and across the county.									
Meminn County Englewood	03	1955EST			0	0	5K		Thunderstorm Wind
A tree was reported down on highway 418 in Englewood.									
Blount County Louisville	03	2045EST			0	0	25K		Thunderstorm Wind
Trees and power lines were reported down in Louisville.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>TENNESSEE, East</u>									
Johnson County Neva	04	1530EST 1630EST			0	0			Flash Flood
									Flooding was reported on highway 167 where water was flowing across the road.
Johnson County Mountain City	04	1530EST 1730EST			0	0			Flash Flood
									A number of roads were closed due to high water.
Carter County 1 S Oak Grove	04	1545EST			0	0	10K		Thunderstorm Wind
									Several trees were reported down in the Powder Branch area.
Sullivan County Piney Flats	04	1605EST			0	0	10K		Thunderstorm Wind
									Numerous trees were reported down at Piney Flats and Bluff City.
Washington County Gray	04	1611EST			0	0	10K		Thunderstorm Wind
									Several trees were reported down in and around Gray.
Cocke County Newport	04	1745EST			0	0	25K		Thunderstorm Wind
									Numerous trees and limbs were downed on power lines and elsewhere across the county including a large tree which fell on a storage shed at 520 Freeman Avenue.
Mcminn County Etowah	07	1655EST 1718EST			0	0	15K		Thunderstorm Wind
									Several trees were reported down at Etowah.
Rhea County Washington	10	1245EST			0	0	35K		Thunderstorm Wind
									Numerous trees were reported down on Highway 30 in the Old Washington community east of Dayton. Also, four columns on the front porch of a resident on Purser Road were torn down.
Meigs County Decatur	10	1300EST			0	0	10K		Thunderstorm Wind
									Trees were reported down in Decatur.
Monroe County Countywide	10	1440EST			0	0	25K		Thunderstorm Wind
									Six trees were reported down across the county.
Monroe County Tellico Plains	10	1445EST			0	0	20K		Thunderstorm Wind
									Trees and limbs were downed on power lines in Tellico Plains.
Hamilton County Signal Mtn	10	1455EST			0	0	15K		Thunderstorm Wind
									Several trees were reported down in the Dallas Bay community on Signal Mountain.
Marion County Jasper	10	1630CST 1730CST			0	0	20K		Thunderstorm Wind
									Several trees were reported down in and around Jasper.
Anderson County Oak Ridge	21	1800EST			0	0	50K		Thunderstorm Wind
									A large oak tree weighing approximately 70 tons fell on a three bedroom home as a result of thunderstorm wind gusts caving in a section and cracking the walls and foundation.
Greene County Greeneville	22	1600EST			0	0	15K		Thunderstorm Wind
Monroe County Tellico Plains	22	1620EST			0	0			Hail(0.75)
									Dime size hail was reported in and around Tellico Plains.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>TENNESSEE, East</u>									
Hawkins County Countywide	22	1640EST			0	0	15K		Thunderstorm Wind
	Several trees were reported down across the county.								
Mcminn County Athens	22	1700EST			0	0	70K		Thunderstorm Wind
	Thunderstorm wind gusts tore the roof off of a business on Washington Avenue which slammed into a bed and breakfast next door damaging the home. Also, a plate-glass window was blown out and several trees were downed in the storm.								
Bradley County Charleston	22	1730EST			0	0	25K		Thunderstorm Wind
	Numerous trees were downed in and around Charleston. Also, a camper was blown onto a truck in Charleston.								
Marion County 5 SE Whitwell	22	1815EST			0	0			Hail(0.75)
	Dime size hail covered the ground 5 miles southeast of Whitwell.								
Carter County Elizabethton	22	1845EST			0	0	25K		Thunderstorm Wind
	Numerous trees were reported down in Elizabethton and across the county.								
Marion County Powells Xrd	22	1850EST			0	0	10K		Thunderstorm Wind
	Three trees were reported down in the Powells Crossroads area.								
Sullivan County 1 W Jacob to 3 SW Friendship	23	1745EST 1750EST			0	3	20K	20K	Thunderstorm Wind
	Wind downed a tree onto a van carrying juveniles near Jacobs Creek Camp. Several persons were injured and transported to the hospital. Other trees were downed at Little Oak Campground near Friendship.								
Loudon County 3 NE Lenoir City	23	1925EST			0	0		2K	Thunderstorm Wind
	Numerous large limbs and a few small trees down on Hidden Valley Lane.								
Blount County Maryville to Friendsville	23	1925EST 1935EST			0	0	20K	15K	Thunderstorm Wind
	Numerous trees and powerlines downed.								
Knox County 5 W Knoxville	23	2015EST			0	0		10K	Thunderstorm Wind
	4 trees knocked down in West Knoxville.								
Monroe County Sweetwater	25	1710EST			0	0		5K	Thunderstorm Wind
	4 trees reported down in Sweetwater.								
Polk County Benton	29	1845EST			0	0		5K	Thunderstorm Wind
	Trees down reported by dispatch.								
Bledsoe County Pikeville	29	1930EST			0	0		5K	Thunderstorm Wind
	Numerous trees down								
Hawkins County 5 W Rogersville	30	1440EST			0	0		5K	Thunderstorm Wind
	Trees down on Carters Valley Road and Slate Hill Road								
Sullivan County Blountville	30	1445EST			0	0	15K	5K	Thunderstorm Wind
	Trees down on powerlines.								
Knox County 5 N Knoxville	30	1530EST			0	0		5K	Thunderstorm Wind
	Trees down on Jones, Tazewell, and Maloneyville Roads.								

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>TENNESSEE, East</u>									
Anderson County									
5 N Clinton	30	1620EST			0	0	5K		Thunderstorm Wind
			Trees down on Norris Freeway and New River Highway.						
Roane County									
Countywide	30	1625EST			0	0	15K		Thunderstorm Wind
			Trees down countywide.						
Claiborne County									
5 S Tazewell	30	1630EST			0	0	5K		Thunderstorm Wind
			Several Trees down.						
Union County									
5 S Maynardville	30	1630EST			0	0	5K		Thunderstorm Wind
			Trees down in the southern part of the county.						
Knox County									
Halls Xrds	30	1645EST			0	0	5K		Thunderstorm Wind
			Trees down.						
Loudon County									
5 N Loudon	30	1710EST			0	0	10K		Thunderstorm Wind
			Trees down on Poplar Springs, Chili, and Sugarlimb Roads.						
Blount County									
5 N Maryville	30	1715EST			0	0	5K		Thunderstorm Wind
			Trees down northern half of county.						
Sevier County									
1 W Gatlinburg	30	1715EST			0	0	5K		Thunderstorm Wind
			Trees down on Wiley Oakley Drive.						
Bradley County									
Cleveland	30	1730EST			0	0	20K	15K	Thunderstorm Wind
			Trees and powerlines down at Hanna and Harrison Pike. Trees down on a mobile home.						
Polk County									
5 N Benton	30	1735EST			0	0			Thunderstorm Wind (G60)
			Lots of Debris on Highway 411 and York roads.						
Monroe County									
Madisonville	30	1745EST			0	0	5K		Thunderstorm Wind
			Trees down						
<u>TENNESSEE, West</u>									
Hardin County									
Burnt Church	01	1410CST 1415CST			0	0	0.01K		Hail(0.75)
Mcnairy County									
Stantonville	01	1510CST 1515CST			0	0	10K		Thunderstorm Wind
			Some trees and power lines were knocked down.						
Chester County									
Henderson	02	1543CST 1550CST			0	0	0.10K		Hail(1.00)
Mcnairy County									
Rose Creek	02	1600CST 1615CST			0	0	10K		Thunderstorm Wind
			Some shingles, power lines and tree limbs were blown down.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>TENNESSEE, West</u>									
Hardeman County									
Teague	02	1630CST 1635CST			0	0	5K		Thunderstorm Wind
									Several trees were knocked down.
Madison County									
Adair	02	1630CST 1635CST			0	0	0.01K		Hail(0.75)
Gibson County									
Brazil	02	1655CST 1700CST			0	0	5K		Thunderstorm Wind
									A few trees and power lines were blown down.
Madison County									
Medon	02	1707CST 1715CST			0	0	0.05K		Hail(0.88)
Hardeman County									
Silerton	02	1710CST 1715CST			0	0	5K		Thunderstorm Wind
									A couple of trees were blown down.
Gibson County									
Trenton	02	1720CST 1725CST			0	0	5K		Thunderstorm Wind
									A few trees and power lines were blown down.
Crockett County									
Alamo	02	1730CST 1735CST			0	0	5K		Thunderstorm Wind
									A couple of trees were knocked down.
Lauderdale County									
Halls	02	1800CST 1805CST			0	0	5K		Thunderstorm Wind
									Some trees were blown down.
Lauderdale County									
Halls	02	1930CST 1945CST			0	0	10K		Thunderstorm Wind
									Several trees and power lines were knocked down.
Fayette County									
Piperton	02	1950CST 1955CST			0	0	5K		Thunderstorm Wind
									A few trees were blown down.
Shelby County									
Arlington to Eads	02	1955CST 2005CST			0	0	10K		Thunderstorm Wind
									Several trees were knocked down. One tree fell on a house.
Shelby County									
Memphis	10	1800CST 1805CST			0	0	10K		Thunderstorm Wind
									The metal roof to a storage building was damaged in the southeast part of Memphis. A few trees were also blown down.
Fayette County									
Countywide	10	1810CST 1825CST			0	0	5K		Thunderstorm Wind
									Several trees were blown down.
Decatur County									
Parsons	12	1230CST 1330CST			0	0	1K		Flash Flood
									A few streets were flooded.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TENNESSEE, West

Hardin County

Counce	12	1235CST 1335CST			0	0	1K		Flash Flood
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Some roads were covered with water.

Shelby County

Memphis	14	1525CST 1625CST			0	0	2K		Flash Flood
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Several roads in East Memphis were flooded with up to two feet of water in some locations.

Madison County

Jackson	23	1230CST 1235CST			0	0	5K		Thunderstorm Wind
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A few trees were blown down. One tree fell on a house.

Fayette County

Lambert	23	1315CST 1320CST			0	0	25K		Thunderstorm Wind
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One mobile home was flipped over. One house had its roof blown off. Numerous trees were blown down .

Carroll County

Buena Vista	30	1145CST 1150CST			1	0	0		Lightning
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One man was killed by a lightning strike while outside working at his home.

M66OU

TEXAS, Central

San Saba County

Countywide	03	0000CST 0200CST			0	0	5K		Flash Flood
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Law enforcement reported significant street flooding in the San Saba area. Creeks and streams also overflowed their banks along State Highway 16 north of San Saba.

Brown County

North Portion	03	0230CST 1130CST			0	0	7K		Flash Flood
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Law enforcement reported several roads covered with water, mainly in the north and west sections of the county. There were some evacuations near the community of Bangs due to rising waters along Jim Ned Creek.

Coleman County

East Portion	03	0315CST 1030CST			0	0	8K		Flash Flood
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Law enforcement reported several roads under water over the North and East portions of the county .

Runnels County

Central Portion	03	0400CST 0515CST			0	0			Flash Flood
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Elm Creek north of Ballinger overflowed its banks for about one hour after heavy rains fell over the central portions of Runnels County.

Callahan County

South Portion	03	0500CST 1130CST			0	0	7K		Flash Flood
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Law enforcement reported several roads under water over the southern portions of Callahan county .

A slow moving tropical wave started to produce heavy rains over portions of west central Texas in the early morning hours of July 3rd. The first short lived round of flooding was confined to mainly the Heartland and Northwest Hill Country. The damage from this first round of flooding was due to road washouts.

Coleman County

East Portion	04	0100CST 0500CST			0	0	4K		Flash Flood
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For the second night in a row, heavy rains produced areas of flooding over the northeast portions of Coleman County.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, Central

Brown County

West Portion

04	0200CST 0500CST			0	0	5K		Flash Flood
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For the second night in a row, heavy rains have fallen over the northwest portions of Brown County.

Coke County

Southwest Portion

04	1700CST 1800CST			0	0			Flash Flood
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Coke County emergency management reported that Farm to Market Road 2034 was closed for a time due to high water.

Tom Green County

Northwest Portion

04	1810CST 2000CST			0	0			Flash Flood
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A slow moving thunderstorm that moved out of Coke County down U.S. Highway 87 produced torrential rains along the highway from near Water Valley to Grape Creek. Rainfall reports of over 2 inches in 30 minutes was common in this area. Several low water crossings in northwest Tom Green county flooded as the storm moved through.

The slow moving tropical wave dumped heavy rains for the second night in a row over the Heartland counties of Brown and Coleman counties. Some reports of up to 10 inches in the two day period were noted in these areas. During the late afternoon and early evening, scattered thunderstorms developed in the Concho Valley. One thunderstorm in particular developed over southwest Coke County. This thunderstorm was very slow moving and produced very heavy rains as it moved to the south into northern Tom Green County before dissipating. Rainfall amounts with this thunderstorm ranged from 2 to 5 inches. Farm Road 2034 in southwest Coke county had to be closed for a time due to high water, and a few low water crossings in northwest Tom Green County had water moving through them.

San Saba County

Northeast Portion

05	0410CST 0650CST			0	0	5K		Flash Flood
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Heavy rains continue to fall over northeast San Saba county causing road closures over the eastern portions of the county .

Mason County

Countywide

05	1030CST 1600CST			0	0	100K		Flash Flood
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Heavy rains during the early morning hours produced widespread flooding over a large part of Mason County. There were numerous road closures during the height of the flooding. The majority of the property damage received was from road washouts.

Kimble County

Countywide

05	1050CST 1600CST			0	0	80K		Flash Flood
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Heavy rains fell across Kimble County producing widespread flooding throughout the county. At the height of the flood several roads were closed due to high water, including Highway 377. Most of the property damage was due to road washouts.

The slow moving tropical wave continued to dump heavy rains in the northwest hill country and the Heartland during the early morning hours. These heavy rains of up to 8 inches produced widespread flooding, and closed several roads in San Saba, Mason, and Kimble Counties.

Brown County

Countywide

06 08	0140CST 2200CST			0	0	42M		Flood
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Numerous showers and thunderstorms developed over Brown County just after midnight on the 6th. These thunderstorms remained nearly stationary through much of the night producing 12 to 14 inch rainfalls. This is in combination to the 6 to 8 inches of rain that had fallen in the days preceding the flood. The rain in Brown County fell directly into the catchments of the Jim Ned Creek, and Pecan Bayou, which empty into Lake Brownwood. Lake Brownwood crested on Sunday morning of the 7th, 7.7 feet over its spillway. Major flooding in Brownwood begins around 6 feet over the spillway. The flooded Pecan Bayou turned much of the Brownwood business district into a giant lake. Commerce Street in Brownwood was flooded with waist deep water. In Brownwood and Early, there were 54 homes with major damage, and 6 with minor damage. At Lake Brownwood there were 110 homes with major damage and 40 with minor damage.

Coleman County

Countywide

06 07	0145CST 0800CST			0	0	800K	20K	Flood
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Rains of 10 to 12 inches fell over Coleman County in the early morning hours of the 6th. This is in addition to the 8 to 10 inches that had fallen over the area in the days leading up to this flood. The area along Jim Ned Creek and Lake Coleman were hit especially hard. As the Coleman County police department was performing a water rescue on Jim Need Creek near Burkett, they were quoted saying, "a wall of water is flowing down Jim Need Creek." Several roads and fences were damaged in the county, crops ruined and livestock missing. In the Lake Coleman area, there were four homes with major damage and 2 homes with minor damage.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, Central

Callahan County

Countywide

06	0225CST 1000CST				0	0	800K		Flash Flood
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Portions of Callhan County received as much as 12 inches of rain in the early morning hours of the 6th. This resulted in flooding throughout the county, however the southern portion of the county took the brunt of the flooding, where one home received major damage and two others received minor damage. The damages to the counties road system was significant with \$400,000 in damages to the southern portion of the county alone.

Taylor County

Countywide

06 07	0430CST 2100CST				0	0	15M		Flood
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The tropical wave that had plagued south central Texas over the past several days moved to the north on the morning of the 6th. Thunderstorms moved into Taylor county around 3 AM. Rainfall rates of 2 to 3 inches per hour produced rainfall amounts of up to 12 inches in the southern portions of the county. A fire station on the south side of Abilene reported 5.2 inches of rain in less than 2 hours. The automated weather station at the Abilene airport reported 4 inches in 2 hours. This rainfall produced flooding of low water crossings and some creek flooding during the morning in Abilene. Worse flooding was yet to come however, as the heaviest rains occurred to the south of Abilene, in the Buffalo Gap, Tuscola, Ovalo and Lake Abilene areas. Water from these areas flowed in the Elm Creek, Cat Claw Creek, and Ceader Creek, then into the city of Abilene. Cat Claw Creek, and Elm Creek crested at record levels on the evening of the 6th. The flood waters did not recede significantly until the evening of the 7th. Around 1000 residents had to evacuate to higher ground. The flooding throughout the county resulted in significant property damage with 31 homes destroyed, 339 receiving major damage, and 322 received minor damage.

Haskell County

South Portion

06	0500CST 0900CST				0	0			Flash Flood
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Heavy rains of 2 to 4 inches flooded some low water crossings over the southern portion of the county. No other damages were reported from the flooding.

Shackelford County

Albany

06	0550CST 0750CST				0	0			Flash Flood
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Shackelford County was on the northern fringes of an area of very heavy rains. There was some significant street flooding reported in Albany for a few hours.

Jones County

Countywide

06	0640CST 1200CST				0	0	1M		Flash Flood
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Jones County received very heavy rains on the morning of the 6th. These rains resulted in some flooding in the Hamlin and Anson areas. Three homes were flooded, but many county roads were washed out. A news paper article stated that around 450 miles of road were damaged in some way by the flooding. The most severe damage was in the northwest portion of the county.

Fisher County

East Portion

06	0700CST 1000CST				0	0			Flash Flood
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Heavy rains of 2 to 5 inches flooded several roads in the eastern portion of Fisher County on the morning of the 6th. There was no damage reported as a result of the flooding.

Nolan County

Sweetwater

06	0800CST 1000CST				0	0			Flash Flood
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Lake Sweetwater received about 4 inches of rain on the morning of the 6th. This resulted in a few road closures in the northern portions of the county. A few low water crossings in Sweetwater were flooded as well.

The tropical wave that has been producing heavy rains over South Central Texas peaked in intensity during the early morning hours of the 6th over the Big Country and Heartland Counties of West Central Texas. Numerous thunderstorms developed shortly after midnight across northern sections of Coleman and Brown Counties. into southern Callhan County, then spread west into the Abilene area around 3 AM. Tropical rainfall rates of 2 to 3 inches per hour produced rainfall amounts of 10 to 14 inches directly over the Jim Ned Creek and Pecan Creek basins in northern Coleman and Brown Counties, and southern sections of Callahan and Taylor Counties. The Cities of Abilene and Brownwood received significant damage as the result of the flooding that followed the heavy rains.

Tom Green County

Countywide

06	1000CST 1200CST				0	2	100K		Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, Central

Thunderstorms developed over Tom Green County on the evening of the 6th. These thunderstorms dropped around 4 inches of rain in a short amount of time. Several low water crossings throughout the county became flooded. A couple and their son were swept into Live Oak Creek as they tried to navigate a flooded roadway. They were trapped for about one and half hours until help finally arrived. The couple received minor injuries as a result, and lost most of their belongings. In San Angelo many water rescues were performed as streets became flooded.

Sutton County

Sonora

07	0150CST 0350CST				0	0			Flash Flood
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Significant street flooding was reported in Sonora.

Fisher County

Countywide

07	1535CST 1900CST				0	0			Flash Flood
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Law enforcement reported several road closures throughout the county as a result of high water.

Nolan County

Sweetwater

07	1600CST 1700CST				0	0			Flash Flood
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Some flooding of low water crossings resulted in the closing of some roads around Sweetwater.

The last gasps of the tropical wave that resulted in widespread flooding from south central Texas to the Big Country produced some flooding over the Edwards Plateau and the Big Country on the 7th.

Callahan County

1 S Clyde

13	1545CST				0	0			Hail(0.75)
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Callahan County

1 S Clyde

13	1545CST				0	0			Thunderstorm Wind (G50)
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Tree limbs were snapped due to strong thunderstorm winds.

Tom Green County

San Angelo Mathis Fl

13	1624CST				0	0			Thunderstorm Wind (G50)^M
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Isolated pulse severe thunderstorms formed during the peak of afternoon heating.

San Saba County

Countywide

14	0745CST 1245CST				0	0			Flash Flood
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Numerous roads were closed throughout San Saba county as a result of flooding.

Coleman County

Coleman

14	0800CST 0900CST				0	0			Flash Flood
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Significant street flooding was reported in Coleman.

Kimble County

3 E Segovia

14	1409CST 1500CST				0	0			Flash Flood
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FM 479 was closed for a time due to high water over the road.

An upper level low produced showers and thunderstorms that dumped up to 8 inches of rain in Coleman, San Saba, and Kimble Counties. This rain fell over saturated ground from heavy rains about a week prior to this event. San Saba County was hardest hit with several roads closed due to the flooding.

Jones County

1 E Hamlin

28	1540CST				0	0	3K		Thunderstorm Wind (G52)
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High winds downed several trees and power lines around Hamlin.

Jones County

3 SE Hawley

28	1545CST				0	0	1K		Thunderstorm Wind (G61)
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High winds downed several trees near Hawley.

Tom Green County

4 NW San Angelo

28	1820CST				0	0			Hail(0.75)
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Tom Green County

4 NW San Angelo

28	1820CST				0	0			Thunderstorm Wind (G52)
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Tom Green County

San Angelo

28	1843CST				0	0			Hail(0.88)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, Central

Tom Green County

San Angelo

28

1850CST
1950CST

0

0

Flash Flood

Significant street flooding reported on the north and east sides of San Angelo.

Tom Green County

4 SE San Angelo

28

1910CST

0

0

Thunderstorm Wind (G52)^M

Taylor County

Merkel

28

1930CST

0

0

Hail(1.75)

Golfball size hail was reported during a thunderstorm at Merkel.

Tom Green County

5 SE San Angelo

28

1930CST

0

0

10K

Thunderstorm Wind

Several power lines were downed for about a four mile stretch. There was also some awning damage to a convenience store.

Taylor County

1 N Tye

28

1955CST

0

0

6K

Thunderstorm Wind

A barn was destroyed due to high winds near Tye.

Taylor County

Tye

28

1956CST

0

0

Hail(1.75)

Golfball size hail reported at Tye.

Taylor County

Lawn

28

2015CST

0

0

Hail(0.75)

Taylor County

Lawn

28

2015CST

0

0

1K

Thunderstorm Wind

Several power lines were downed due to high winds at Lawn.

Scattered severe thunderstorms developed over the Big Country and Concho Valley in the late afternoon and early evening on the 28th. These thunderstorms produced winds to 70 mph and hail up to golfball size. The hardest hit areas were just to the west of Abilene and to the southeast of San Angelo.

TEXAS, Central Southeast

Madison County

Normangee

07

2342CST

0

0

3K

Thunderstorm Wind

Trees blown down.

Madison County

Madisonville

08

0012CST

0

0

5K

Thunderstorm Wind

Hospital door blown in.

Madison County

1 N Madisonville

08

0012CST

0

0

15K

Thunderstorm Wind

Tree blown down onto a home on HWY 75 just north of Madisonville.

Houston County

Crockett

08

1830CST

0

0

3K

Thunderstorm Wind

Trees blown down.

Colorado County

Eagle Lake

08

1846CST

0

0

5K

Thunderstorm Wind

Trees and powerlines blown down.

Burleson County

Snook

08

2005CST

0

0

5K

Thunderstorm Wind

Trees and powerlines blown down.

Burleson County

Tunis

08

2015CST

0

0

5K

Thunderstorm Wind

Trees and powerlines blown down.

Walker County

Riverside

13

1635CST
1640CST

0

0

5K

Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, Central Southeast

Hail across the northern part of the entire county.

Wharton County

Hungerford	13	2050CST			0	0	25K		Flash Flood
	14	0200CST							

Roads flooded, some impassable, in Hungerford. Water in two homes.

Brazos County

Bryan	14	0844CST			0	0	20K		Flash Flood
		1300CST							

Several roads impassable and creeks (Peach and Lick) overflowing in Bryan/College Station area. Bridge on Peach Creek Road washed out near HWY 6.

Grimes County

Plantersville	14	1120CST			0	0	3K		Flash Flood
		1300CST							

High water at FM 1774 at CR 209 near Plantersville.

Wharton County

Countywide	15	0752CST			0	0	3K		Flash Flood
		0945CST							

Several secondary roads across the county were closed due to flooding.

Jackson County

West Portion	16	0842CST			0	0	3K		Flash Flood
		1000CST							

Minor street flooding on county roads across the western portion of the county.

TEXAS, Extreme West

El Paso County

8 NNW El Paso Intl Arpt	01	1710MST			0	0			Thunderstorm Wind (G52)
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Outflow from a severe thunderstorm gusted to 60 mph in northeast El Paso.

El Paso County

20 ENE El Paso Intl Arpt	02	1630MST			0	0			Hail(1.00)
		1640MST							

El Paso County

20 ENE El Paso Intl Arpt	02	1630MST			0	0	5K		Thunderstorm Wind (G66) ^M
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Hudspeth County

25 W Cornudas	02	1645MST			0	0	10K		Thunderstorm Wind (G70)
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El Paso County

20 ENE El Paso Intl Arpt	02	1650MST			0	0			Flash Flood
		1730MST							

A supercell thunderstorm moved southward into far west Texas and produced wind gusts as high as 80 mph which blew over a number of small water tanks and a mobile home. Quarter size hail also accompanied the storm, and flash flooding of two large arroyos left mud and debris on several roads in the area.

Hudspeth County

6 E Dell City	04	1800MST			0	0	5K		Thunderstorm Wind (G61)
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A rapidly moving line of thunderstorms produced wind gusts to 70 mph which resulted in roof damage and doors blown off a house east of Dell City.

El Paso County

10 N El Paso Intl Arpt	19	2200MST			0	0			Flash Flood
		2230MST							

The Martin Luther King Highway in extreme northeast El Paso was closed due to mud covering the road.

TEXAS, Mid - South

Victoria County

(Vct)Victoria Rgnl A	16	0833CST			0	0			Flash Flood
		1130CST							

Street Flooding reported by Law Enforcement. A foot of standing water.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>TEXAS, Mid - South</u>									
Victoria County (Vct)Victoria Rgnl A	16	1120CST 1415CST			0	0			Flash Flood
									Law Enforcement report numerous street and road closure.
<u>TEXAS, North</u>									
Bell County Countywide	02	1600CST 1800CST			0	0	2K		Flash Flood
									Numerous streets and county roads were closed due to flooding from heavy rains.
Eastland County Countywide	06	1130CST 1455CST			0	0	25K	25K	Flash Flood
									Many county roads were washed out. Many crops were washed out or flooded from the heavy rain.
Eastland County Eastland	06	1130CST 1355CST			0	0			Flash Flood
									the Interstate 20 access road was flooded.
Eastland County Scranton	06	1130CST 1455CST			0	0	2K		Flash Flood
									FM 1864 closed due to high water.
Leon County Normangee	06	2342CST			0	0			Thunderstorm Wind (G52)
									A tree was blown down by high winds.
Hood County 5 S Granbury	12	1435CST			0	0	10K		Thunderstorm Wind
									A church steeple was blown off and several trees were blown down 4 to 6 miles south of Granbury on Highway 144 near Indian Harbor.
Denton County Denton	12	1615CST			0	0			Thunderstorm Wind (G52)
									Trees were blown down by high winds.
Ellis County Midlothian	12	1630CST			0	0	5K		Lightning
									Lightning started a fire in the attic of a house.
Dallas County Garland	12	1645CST			0	0			Hail(0.75)
									Occurred at the intesection of Interstate 30 and Zion Road.
Mclennan County Mc Gregor	13	1437CST			0	0			Hail(0.88)
Hamilton County Hamilton	13	1624CST			0	0	2K		Thunderstorm Wind (G52)
									Power lines were blown down by high winds.
Ellis County Palmer	14	1920CST			0	0	2K		Thunderstorm Wind (G52)
									Power lines and large tree limbs were blown down.
Ellis County Palmer	14	1929CST			0	0			Hail(0.88)
Henderson County Northwest Portion	16	0950CST 1150CST			0	0			Flash Flood
									Several roads were under water.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, North

Henderson County

West Central Portion	16	1010CST 1110CST			0	0	3K		Flash Flood
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Two cars were swept off roads in the western part of the county.

Limestone County

Kosse	16	1025CST 1205CST			0	0			Flash Flood
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Water over Highway 14 north of Kosse, and Highway 1246 west of Thornton flooded.

Kaufman County

South Central Portion to Countywide	16	1110CST 1635CST			0	0	20K		Flash Flood
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County Road 3396 flooded at a creek crossing, County Road 274 flooded between Highway 148 and the county line. County Road 4043 was also flooded, and some homes were flooded.

Ellis County

Ovilla	17	1645CST			0	0	30K		Lightning
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Lightning struck two houses, starting fires in both homes.

Fannin County

Honey Grove	24	1315CST			0	0	5K		Thunderstorm Wind
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Power lines were blown dwn by high winds.

Fannin County

Lamasco	24	1315CST			0	0	5K		Thunderstorm Wind
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A carport was damaged by high winds.

Tarrant County

Ft Worth	30	1655CST			0	0			Thunderstorm Wind (G52)
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A tree and some signs were blown down by high winds.

TEXAS, North Panhandle

Potter County

Amarillo	03	0056CST			0	0			Hail(0.75)
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Potter County

Amarillo	03	0058CST			0	0			Hail(1.00)
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Randall County

6 S Amarillo	03	0103CST			0	0			Hail(0.88)
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Randall County

6 SW Amarillo	03	0110CST			0	0			Hail(0.88)
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Randall County

2 SW Amarillo	03	0110CST			0	0			Hail(0.75)
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Severe thunderstorms developed during the late night and early morning hours over the south central Texas panhandle producing large hail.

Oldham County

Vega to 4 E Vega	06	0300CST 0530CST			0	0	45K		Flash Flood
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Numerous cars were stranded in high water in the town of Vega.

Thunderstorms with very heavy rainfall produced flooding in the extreme western Texas panhandle where around four and a half inches of rain fell. Wreckers were busy pulling stranded cars out of the high water and water was up to and in a mobile home's back door.

Potter County

1 E Amarillo	22	1525CST			0	0			Hail(0.88)
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Potter County

Amarillo	22	1558CST 1700CST			1	0	30K		Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, North Panhandle

Underpasses in the city of Amarillo were flooded and motorists were stranded. One forty-nine year old adult male was killed during a rescue attempt after the motorist attempted to drive through a flooded underpass. Water continued to rise rapidly to a height of approximately fourteen feet. The victim could not swim. M49VE

Roberts County **12 W Miami**

22	1630CST								
		0	0	65K	Thunderstorm Wind (G61)				

Power poles were reported blown down and damage occurred to an irrigation system near the Farm to Market Road 2391 and 282 junction.

A line of thunderstorms containing very heavy rainfall moved up from the south across the south central Texas panhandle during the early evening hours. The very heavy rains produced major flooding which resulted in the death of a man. Severe thunderstorms containing damaging winds raked across the eastern Texas panhandle a short time later in the evening.

Randall County **15 ESE Canyon**

23	1600CST								
		0	0	Hail(0.88)					

An isolated severe thunderstorm with hail developed over the Palo Duro Canyon State Park during the early evening hours.

Hutchinson County **17 N Stinnett**

27	1905CST								
		0	0	15K	Thunderstorm Wind (G52)				

A shed and trees were reported blown down.

Hutchinson County **Fritch**

27	1915CST								
		0	0	10K	Thunderstorm Wind (G56)				

Powerlines were reported down in the town of Fritch.

Hutchinson County **18 N Stinnett**

27	1923CST								
		0	0	15K	Thunderstorm Wind (G52)				

Powerlines were reported down.

Hutchinson County **16 N Stinnett**

27	1930CST 2030CST								
		0	0	Flash Flood					

Fifteen inches of water was reported over the roadway at the intersection of Highways 207 and 281. No cars were stranded and no injuries were reported.

Hutchinson County **Borger**

27	1945CST								
		0	0	800K	Thunderstorm Wind (G80)				

Numerous trees and powerlines were reported down in the city of Borger. Major structural damage reported to buildings. No injuries were reported.

Hutchinson County **7 NE Borger**

27	2010CST								
		0	0	Thunderstorm Wind (G52)					

Hutchinson County **5 E Borger**

27	2015CST 2115CST								
		0	0	Flash Flood					

Water was reported covering the road on Highway 152 five miles east of Borger. No cars were reported stranded and no injuries were reported.

Carson County **1 S Conway**

27	2045CST								
		0	0	Thunderstorm Wind (G52)					

Armstrong County **Claude**

27	2100CST								
		0	0	20K	Thunderstorm Wind (G52)				

Damage was reported to the roofs of two barns.

Severe thunderstorms containing flooding rainfall and damaging winds developed during the evening hours across the central and southern Texas panhandle. A microburst hit the city of Borger shortly before sunset causing extensive damage but no injuries.

Sherman County **Stratford**

28	1745CST								
		0	0	Hail(0.88)					

Sherman County **2 S Stratford**

28	1804CST								
		0	0	Hail(1.00)					

Sherman County **Stratford**

28	1824CST								
		0	0	Thunderstorm Wind (G52)^M					

Sherman County **20 SE Stratford**

28	1828CST								
		0	0	Thunderstorm Wind (G56)					

Numerous tree limbs were reported down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, North Panhandle

Sherman County

14 SE Stratford	28	1833CST			0	0			Hail(1.00) Severe thunderstorms developed during the early evening hours over the northern Texas panhandle producing large hail and high winds.
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TEXAS, Northeast

Angelina County

Lufkin	07	1920CST			0	0			Thunderstorm Wind (G68) Numerous trees down across the city.
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TXZ136

Smith

11	1600CST			1	0			Excessive Heat Man died from heat stroke while working on his vehicle outside his home. He was found by his neighbor. M35OU
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Nacogdoches County

4 S Woden	12	1455CST			0	0			Thunderstorm Wind (G52) Several large trees down.
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Nacogdoches County

5 E Nacogdoches	12	1500CST			0	0	80K		Thunderstorm Wind (G62) Roof was ripped off a barn.
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Panola County

5 NW Carthage	12	1512CST			0	0			Hail(0.75)
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Sabine County

9 N Hemphill	12	1545CST			0	0			Thunderstorm Wind (G52) Several trees down across Hwy 21.
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Sabine County

4 N Pineland	12	1545CST			0	0			Thunderstorm Wind (G52) Large trees down across Hwy 1.
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Shelby County

Shelbyville	13	1430CST			0	0			Thunderstorm Wind (G58) Numerous trees down on FM 2427, FM 2261, and Hwy 417 east.
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Harrison County

3 N Marshall	24	1450CST			0	0			Thunderstorm Wind (G55) ^M Several large trees and power lines blown down.
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Nacogdoches County Nacogdoches

25	1357CST			0	0			Hail(1.00)
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Nacogdoches County Nacogdoches

25	1400CST			0	0	22K		Thunderstorm Wind (G56) Numerous trees blown down. A metal awning was blown off a gas station.
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Nacogdoches County 5 SW Nacogdoches

25	1410CST			0	0			Thunderstorm Wind (G57) ^M Several large trees blown over.
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TEXAS, South

TXZ248>255

Zapata - Jim Hogg - Brooks - Kenedy - Starr - Hidalgo - Willacy - Cameron

01	0000CST			0	0			Drought
31	2359CST							

Severe drought conditions persisted across Deep South Texas during the period.

Jim Hogg County

Hebbronville	15	1450CST 1630CST			0	0			Flash Flood
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Intense thunderstorms produced up to 4 inches of rain in an hour and flash flooding in Hebbronville.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>TEXAS, South</u>									
Starr County									
La Gloria	15	1755CST 2000CST			0	0			Flash Flood
Law enforcement officials reported flash flooding over Highway 755 in La Gloria.									
Jim Hogg County									
4 W Hebronville	16	0400CST 0645CST			0	0			Flash Flood
Flash flooding of Highway 1017 west of Hebronville was reported by the Hebronville Fire Department.									
Zapata County									
Escobas	16	0530CST 0830CST			0	0			Flash Flood
Law enforcement officials reported flash flooding over Highway 16 near Escobas.									
TXZ248									
Zapata									
	16	0800CST			0	0			Flood
	18	1200CST							
Flooding of the Arroyo Veleno was reported 10 miles north of the City of Zapata along Highway 16.									
<u>TEXAS, South Central</u>									
TXZ191									
Hays									
	01	0000CST			0	0			Flood
	08	1305CST							
Heavy rainfall for the last two days of June causing a rise on the San Marcos River. The San Marcos River crested at Luling at 33.73 feet on July 5 at 1830CST. 20.0 feet is flood stage.									
Gillespie County									
Southeast Portion									
	01	0230CST 1700CST			0	0			Flash Flood
General 3 to 4 inch totals fell across the county, with isolated amounts of up to 7 inches in the eastern part of the county. Flash flooding at this time affected low water crossings. Damage was limited to rural roads.									
Bexar County									
Countywide									
	01	0400CST 1300CST			0	0			Flash Flood
General 3 to 4 inch totals were reported over Bexar County, with isolated amounts of up to 5 inches across the northern part of the county. Flash flooding was reported across most low water crossings in the county.									
Guadalupe County									
West Portion									
	01	0630CST 0800CST			0	0			Flash Flood
General 2 to 3 inch totals were reported with isolated totals to 5 inches in the western part of the county. Low water crossings filled quickly with minor damage reported.									
Atascosa County									
Countywide									
	01	0715CST 1230CST			0	0			Flash Flood
General 3 to 4 inch totals were indicated with isolated amounts of 5 inches in the north central part of the county. Little or no damage was indicated.									
Frio County									
Southwest Portion									
	01	0815CST 1230CST			0	0			Flash Flood
General 3 to 4 inch totals fell across the county. The greatest amounts were in the southwest part of the county, where 7 inch totals were recorded. Low water crossings were filled very quickly and damage was reported to some roads.									
Zavala County									
Southeast Portion									
	01	1130CST 1330CST			0	0			Flash Flood
General 2 to 3 inch totals fell across the county with isolated totals of up to 5 inches in the southeast part of the county. Flash flooding was reported over low water crossings with minor damage to roads.									
Dimmit County									
Northeast Portion									
	01	1145CST 1300CST			0	0			Flash Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, South Central

General 3 in amounts fell over the northern half of the county, with up to 5 inches in the extreme northeast along the Zavala and LaSalle County borders.

Heavy rainfall began falling before midnight on the first from Bandera County across Bexar County and into Wilson County. Additional showers and thunderstorms formed between Carrizo Springs, Crystal City, Pearsall and Cotulla. With soils already soaked from the heavy rainfall of June 29 and 30, flash flooding developed very early in the morning and continued past noon for most counties.

TXZ205

Bexar

01	1243CST				0	0			Flood
11	0052CST								

The Medina River crested at Elmendorf at 63.16 feet on July 6 at 0000CST, where flood stage is 35.0 feet.

Kendall County Countywide

01	1500CST				0	0			Flash Flood
	1900CST								

General 3 to 4 inch totals were reported countywide during this additional rain period, with the heavies rain of up to 6 inches in the south part of the county. All low water crossings in the county were now flooded with flash flooding on most small creeks and streams as well.

Bexar County Countywide

01	1630CST				4	0			Flash Flood
	2200CST								

Additional 2 to 3 inch totals fell across Bexar County with isolated totals of up to 6 inches in the north central part of the city of San Antonio. Flash flooding developed very quickly and was countywide in its coverage. Small streams and creeks were also flash flooding. Officials reported more than 230 high water rescues in San Antonio from the night of July 1 through noon on July 2. Damage was reported to numerous roads and bridges across the county. An elderly couple apparently attempted to drive home from a restaurant during the severe flash flooding late Monday evening, despite the pleas of the restaurant patrons. Their bodies were recovered near 0930CST on July 4 in their submerged automobile in Olmos Creek. A young man and his friend were playing near swollen Apache Creek when both were swept into the creek on the afternoon of July 1. The two were rescued and the friend recovered quickly, but the first young man slipped into a coma. He died on July 5 after being removed from life support. The body of a fourth victim was found in a drainage pipe by a city public work crew while cleaning debris on the afternoon of July 2. He had apparently drowned during the evening of July 1 and the body had been swept into the pipe. M70VE, F59VE, M11IW, M32OU

Comal County Countywide

01	1830CST				0	0			Flash Flood
02	1700CST								

General 3 to 4 inch totals fell across the county with isolated amounts of up to 10 inches in the western part of the county. Flash flooding was reported countywide from the late afternoon of July 1 through the remainder of the night and into the next morning and afternoon. Widespread damage was indicated to roads and bridges.

TXZ205

Bexar

01	1953CST				0	0			Flood
06	0852CST								

Leon Creek crested at IH-35 near San Antonio at 27.23 feet on July 2 at 1800CST, where flood stage is 15.0 feet.

Additional showers and thunderstorms continued to develop through the afternoon and into the evening of July 1 over the Kendall-Bexar-Comal County area. An additional rainfall of up to 10 inches fell during this period, with the rain continuing through the morning of July 2 over Comal County. This, added to the previous amounts, and in view of soils that were long since saturated, produced widespread flash flooding across the three counties. Damage was now becoming widespread to roads and bridges across the three counties.

Hays County South Portion

01	2030CST				0	0			Flash Flood
02	0300CST								

General 2 inch totals across the county with isolated amounts of up to 5 inches fell in the south part of the county. Flash flooding developed slowly due to less saturated soils than the counties to the south. No significant damage was reported at this time.

Travis County West Portion

01	2130CST				0	0			Flash Flood
02	0100CST								

General 1 to 2 inch totals fell in Travis County with isolated amounts of up to 4 inches from Camp Mabry through the western part of the county. Flash flooding developed slowly in the more flood-prone western part of the county and continued just past midnight. No significant damage was reported in this part of the flooding.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

Kendall County

Countywide

01	2330CST				0	0			Flash Flood
02	2000CST								

An additional 3 to 4 inches of rain fell during the late night hours over Kendall County, with isolated totals of up to 7 inches in the extreme southwest. By now, flash flooding was taking place countywide, with severe flooding over the south and west portions. Damage to roads and bridges continued.

Bandera County

Countywide

02	0030CST				0	0			Flash Flood
	1800CST								

General 4 to 6 inch totals fell across the county, with isolated amounts of up to 12 inches in the eastern half. The Medina River, already in flood since noon on the previous day, continue to build, and flash flooding was reported across all of the county. Damages to roads and bridges continued to be reported. All low water crossings were closed and travel was very hazardous.

Medina County

Countywide

02	0100CST				0	0			Flash Flood
	2100CST								

General 3 to 4 inch totals were reported in the northern part of the county, with isolated totals of up to 5 inches. Flash flooding began shortly after midnight and continued through most of the day. By mid-afternoon, low water crossings in the county were flooded and road closures were widespread. Water was reported going over the spillway at Medina Dam by the afternoon of July 2.

Uvalde County

North Portion

02	0100CST				0	0			Flash Flood
	1700CST								

General 3 to 4 inch totals began falling just before midnight over the northern part of Uvalde County, with isolated totals of up to 6 inches. Flash flooding was reported between Concan and Utopia as well as in the Garner Park area. Campers in Concan were stranded and unable to leave the area. Portions of Utopia were evacuated.

Kerr County

East Portion

02	0200CST				0	0			Flash Flood
	1700CST								

General 2 to 3 inch totals were indicated over Kerr County with isolated totals of up to 7 inches in the eastern half of the county. Flash flooding developed in the early morning hours and continued into the afternoon. Stranded Kerrville residents had to be rescued from their roof tops by boat. All low water crossings were flooding over eastern Kerr County. Numerous roads were closed with widespread damage reported.

Blanco County

South Portion

02	0400CST				0	0			Flash Flood
	1000CST								

General 2 inch rains fell over Blanco County. Heavier totals to 4 inches in the south part of the county produced flash flooding from just before sunrise to the mid-morning period. By this time, more than 15 inches of rain has fallen over many parts of Blanco County. Flash flooding is widespread and damage has been indicated to numerous roads and bridges across the county.

Burnet County

South Portion

02	0400CST				0	0			Flash Flood
	1200CST								

General 2 inch rainfall was reported over the county, with isolated totals to 4 inches in the south part of the county. Flash flooding developed in the south part of the county before sunrise and continued until noon. Damage to roads was reported to be minimal at this time.

During the late night hours of July 1, showers and thunderstorms formed between San Marcos and Austin, as well as between Uvalde, Kerrville and Blanco. Moving slowly northward, they produced heavy rainfall and flash flooding across the Hill Country and the Austin area. No additional deaths resulted from this flooding, but damages were widespread to roads and bridges.

TXZ205

Bexar

02	0015CST				0	0			Flood
12	1500CST								

The Medina River crested at San Antonio near US281 (South) at 55.65 feet on July 4 at 1515CST, where flood stage is 20.0 feet. The Medina River crested at Somerset at 41.84 feet on July 6 at 1200CST. Flood stage is 18.0 feet.

TXZ189

Kendall

02	0300CST				0	0			Flood
05	1930CST								

The Guadalupe River crested at Comfort at 31.33 feet on July 4 at 0930CST, where flood stage is 21.0 feet.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

Wilson County

Countywide

02	0315CST 1730CST				0	0			Flash Flood
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General 3 to 4 inch totals were reported across the county with isolated amounts of up to 7 inches over the western part of the county. Flash flooding was occurring over all low water crossings. Creeks and small streams were also reported flooding.

De Witt County

Countywide

02	0400CST 1700CST				0	0			Flash Flood
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General 2 to 3 inch totals fell over DeWitt County. Isolated totals of up to 5 inches were indicated between Cuero and Westhoff. Damage to roads was not indicated.

Karnes County

Countywide

02	0400CST 1700CST				0	0			Flash Flood
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General 3 to 4 inch totals fell across the county. Flash flooding developed in the early morning hours and continued until afternoon. Damage was still reported to be spotty to roads in the county.

Lavaca County

Countywide

02	0400CST 1300CST				0	0			Flash Flood
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General 3 to 4 inch totals were reported over Lavaca County, with most low water crossings flooded. No significant damage was reported at this time.

Gonzales County

Southwest Portion

02	0430CST 1700CST				0	0			Flash Flood
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General 1 to 2 inch rains fell across the county, with isolated amounts totals of 4-5 inches in the southwest part. This produced flash flooding over several low water crossings from the early morning hours until the late afternoon. Damage was reported to be spotty over county roads.

Guadalupe County

Countywide

02	0430CST 1800CST				0	0			Flash Flood
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General 3 inch totals fell over the county with isolated amounts of up to 7 inches in the western part of the county. Flash flooding redeveloped in the early morning hours over soils that had been soaked by the previous day's rainfall. The flash flooding continued into the late afternoon but produced little damage.

Scattered showers and thunderstorms redeveloped over Wilson, Karnes, DeWitt and Lavaca Counties and began spreading slowly northward over already saturated soils. The general 2 to 4 inch rainfalls had up to 7 inch totals embedded within them. Again, no lives were lost in this part of the flooding, but damage to roads and bridges continued.

Caldwell County

West Portion

02	0545CST 1300CST				0	0			Flash Flood
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General 3 to 4 inch rainfall was indicated over the western part of Caldwell County. Flash flooding was reported, but little damage was indicated to roads at this time.

Hays County

Countywide

02	0545CST 1900CST				0	0			Flash Flood
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General 3 to 4 inch rains fell over the county, with isolated totals of up to 6 inches in the west. Flash flooding redeveloped very quickly. More than 70 roads were reported to be closed. Damage was widespread to rural roads, mainly in the western part of the county.

Llano County

Countywide

02	0630CST 1800CST				0	0			Flash Flood
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General 3 to 4 inch totals over the county brought the flash flooding of low water crossings over the county from near sunrise into the late afternoon. Damage was generally to roads in the county, and was reported to be very spotty.

Fayette County

South Portion

02	0700CST 1700CST				0	0			Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

General 2 inch totals fell over the county with isolated amounts of up to 5 inches in the south part of the county. Flash flooding was reported between Muldoon, Flatonia and Schulenburg from through much of the morning and afternoon. Scattered damage was reported to roads in the south part of the county.

Bastrop County South Portion

02	0730CST				0	0			Flash Flood
	1500CST								

General 2 to 3 inch totals fell across the county. Flash flooding was spotty over the county from the morning into the mid afternoon.

Travis County Countywide

02	0730CST				0	0			Flash Flood
	1800CST								

General 3 to 4 inch rainfall over the county was indicated, with isolated totals of up to 7 inches. Flash flooding redeveloped very quickly in the morning and continued into the afternoon. A sinkhole was reported at Burnet Road and Koenig Lane. Walnut Creek flooded out mobile homes in East Austin. Widespread damage has been reported to roads and bridges.

Bexar County Countywide

02	1000CST				0	0			Flash Flood
	03 0500CST								

Additional 3 to 4 inch totals fell across the county, with as much as 9 inches in some locations. Flash flooding developed immediately and continued through the remainder of the day, into the evening, and finally ended in the early morning hours of July 3. More than 100 freeways or streets were closed. Flooding closed Interstate 10 just north of San Antonio. Public safety officers in boats, high-water vehicles and helicopters staged rescues across San Antonio. Damage by now was widespread to roads and bridges across Bexar County, with numerous evacuations and considerable damage to homes.

Williamson County Countywide

02	1000CST				0	0			Flash Flood
	1400CST								

General 2 to 3 inch totals over the county, with isolated amount of up to 4 inches, was sufficient to begin flash flooding in the mid morning and continue into the mid afternoon. More than 30 roads were reported flooded. Damage is reported to roads and bridges.

Additional heavy rainfall developing over Gillespie and Llano Counties, as well as between Fayette and Travis Counties, caused low water crossings to fill quickly and redeveloped flash flooding across the area. The showers and thunderstorms spread westward through mid morning.

TXZ187

Bandera

02	0700CST				0	0			Flood
	05 1502CST								

The Medina River crested at Bandera at 36.13 feet on July 4 at 1100CST, where flood stage is 13.0 feet.

TXZ188

Gillespie

02	0730CST				0	0			Flood
	06 0308CST								

The Pedernales River crested at 25.8 feet at Johnson City on July 4 at 1000CST, where flood stage is 22.0 feet.

TXZ203

Uvalde

02	0849CST				0	0			Flood
	0940CST								

The Frio River crested at Concan at 31.23 feet on July 2 at 0930CST, where 11.0 is flood stage. It crested again at Concan at 20.14 feet on July 5 at 1130CST.

TXZ190

Blanco

02	1009CST				0	0			Flood
	05 1626CST								

The Blanco River crested at Wimberly at 25.71 feet on July 5 at 0830CST. Flood stage is 13.0 feet.

TXZ205

Bexar

02	1319CST				0	0			Flood
	1904CST								

Cibolo Creek crested at Selma at 22.31 feet on July 2 at 1500CST, where flood stage is 17.0 feet.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm
					Killed	Injured	Property Crops

TEXAS, South Central

TXZ222	Karnes	02 1505CST 08 0507CST			0	0	Flood
	Cibolo Creek crested at Falls City at 30.13 feet on July 4 at 0815CST, where 17.0 feet is flood stage.						
TXZ192	Travis	02 1533CST 03 1730CST			1	0	Flood
	Barton Creek crested at Loop 360 in Austin at 17.9 feet on July 2 at 1810CST, where flood stage is 11.0 feet. An off-duty Austin firefighter drowned in flooded Barton Creek as he was kayaking near Loop 360.						
	M36BO						
TXZ192	Travis	02 1557CST 03 0329CST			0	0	Flood
	Onion Creek crested at Highway 183 near Austin, at 23.8 feet on July 2 at 2100CST, where flood stage is 17.0 feet.						
Lee County West Portion		02 1600CST 1800CST			0	0	Flash Flood
	General 2 to 3 inch totals over Lee County with isolated amounts to 4 inches in the western part of the county caused low water crossings to flood briefly. No damages were indicated.						
TXZ203	Uvalde	02 1806CST 06 0936CST			1	0	Flood
	The Sabinal River crested at Sabinal at 38.28 feet on July 5 at 1345CST, where flood stage is 12.0 feet. The body of a man was recovered late on the afternoon of July 2. He had been trying to remove objects from the flood waters of the Sabinal River with his tractor when he was swept off the tractor and drowned.						
	M74VE						
TXZ223	Gonzales	02 1842CST 12 0140CST			0	0	Flood
	The Guadalupe River crested at Gonzales at 42.24 feet on July 7 at 0015CST, where flood stage is 31.0 feet.						
Frio County Northwest Portion		02 2000CST 2130CST			0	0	Flash Flood
	General 2 to 3 inch rains fell over the northwestern part of the county. Over the saturated soils, brief flash flooding developed once again in the late evening.						
Dimmit County Northeast Portion		02 2230CST 03 1300CST			0	0	Flash Flood
	Heavy rain redeveloped in the evening over Dimmit and Zavala Counties and continued into the early morning hours. General 4 to 6 inch totals fell over the two counties with isolated totals of up to 9 inches in eastern Zavala County and up to 12 inches in the northeastern part of Dimmit County. Widespread flash flooding developed over the adjacent areas of the two counties and continued through the remainder of the night and the next morning, ending near noon the following day. Considerable damage was indicated to roads and bridges over the two counties.						
Zavala County East Portion		02 2230CST 03 1300CST			0	0	Flash Flood
	Heavy rain redeveloped in the evening over Dimmit and Zavala Counties and continued into the early morning hours. General 4 to 6 inch totals fell over the two counties with isolated totals of up to 9 inches in eastern Zavala County and up to 12 inches in the northeastern part of Dimmit County. Widespread flash flooding developed over the adjacent areas of the two counties and continued through the remainder of the night and the next morning, ending near noon the following day. Considerable damage was indicated to roads and bridges over the two counties.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

Bandera County

Countywide	02	2300CST			0	0			Flash Flood
	03	1300CST							

Scattered thunderstorms just before midnight over Bandera County produced general 4-6 inch totals countywide, with isolated amounts of up to 10 inches. With soils completely saturated, immediate flash flooding redeveloped across the county and continued until noon. Widespread damage to roads and bridges was reported. Homes were also flooded and evacuations were carried out.

Frio County

Countywide	03	0230CST 0500CST			0	0			Flash Flood
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Additional 2 inch rain totals over the county with isolated amounts of up to 4 inches in the western part of the county caused flash flooding to redevelop and continue through the early morning hours.

Atascosa County

South Portion	03	0300CST 0500CST			0	0			Flash Flood
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General 3 to 4 inch rainfall over the southern part of Atascosa County caused flash flooding for the early morning hours.

Blanco County

Countywide	03	0300CST 0500CST			0	0			Flash Flood
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Additional 1 to 2 inch totals countywide with isolated amounts of up to 4 inches produced brief flash flooding in the early morning hours over the county.

Comal County

Countywide	03	0300CST 0630CST			0	0			Flash Flood
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General 4 to 6 inch totals with isolated amounts of up to 8 inches caused a very rapid resumption of flash flooding across the entire county. Considerable damage was indicated to county roads and bridges. Road closures were widespread through the early morning.

Kerr County

East Portion	03	0300CST 0500CST			0	0			Flash Flood
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General 4 to 6 inch totals with isolated amounts of up to 8 inches over the east part of the county caused devastating flash flooding. More than 100 homes suffered flood damage in Kerrville. Some were knocked off their slabs and carried downstream by floodwaters. Most roads in the eastern part of Kerr County were closed due to flooding in the early morning, with many closed for the remainder of the day due to damage.

Real County

South Portion	03	0300CST 1200CST			0	0			Flash Flood
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General 3 to 4 inch totals with isolated totals of 7 inches over the southern part of Real County caused very dangerous flash flooding over this flood-prone area. Campers were stranded in their camps along the Frio River from southern Real County into northern Uvalde County and were unable to escape until that afternoon. Widespread damage was reported to roads and bridges over the south half of the county.

Medina County

Countywide	03	0330CST 0500CST			0	0			Flash Flood
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General 3 inch rain totals fell countywide, with as much as 7 inches in some locations. Flash flooding continued to be a problem through the early morning hours.

Kendall County

Countywide	03	0400CST 0900CST			0	0			Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

General 5 to 7 inch totals over the county, with isolated amounts as high as 12 inches, caused widespread flash flooding through the mid morning period over Kendall County. Damage was becoming widespread to roads and bridges and travel was very hazardous.

Uvalde County Countywide

03	0400CST 1500CST								
		0	0						Flash Flood

General 4 to 6 inch totals fell in Uvalde County, causing widespread flash flooding. In addition, totals of up to 10 inches over the northern part of the county caused devastating flooding and trapped scores of campers and vacationers along the Frio River, who could not be rescued until afternoon.

Gillespie County South Portion

03	0430CST 0900CST								
		0	0						Flash Flood

Additional rainfall of 2 to 3 inches over the south part of the county, with isolated amount of 5 inches, caused widespread, dangerous flash flooding to redevelop. Roads and bridge sustained damage, with numerous closures due to flooding through the mid morning and due to damage through the remainder of the day.

Hays County West Portion

03	0500CST 0900CST								
		0	0						Flash Flood

The western part of Hays County received between 3 and 4 inches of rain, with some locations getting up to 5 inches. Flash flooding developed very quickly across this part of the county in the early morning hours and continued until mid morning.

Travis County Countywide

03	0600CST 0900CST								
		0	0						Flash Flood

General 2 to 3 inch rain totals over the county, with isolated amounts of up to 4 inches in the south and west parts of the county, caused flash flooding over the entire area. The flash flooding continued from around sunrise to the mid morning. By the following day, flow into Lake Travis will bring it to its full elevation of 681 feet above Mean Sea Level.

Burnet County Countywide

03	0800CST 1200CST								
		0	0						Flash Flood

General 2 to 3 inch totals over Burnet County, along with isolated amounts of up to 4 inches, redeveloped flash flooding through the morning hours. Several county roads were closed due to flooding, with considerable damage reported.

TXZ205

Bexar

03	0824CST								
06	0932CST	0	0						Flood

The Guadalupe River crested at Spring Branch at 43.75 feet on July 3 at 1115CST, where flood stage is 30.0 feet.

Williamson County Countywide

03	0830CST 1230CST								
		0	0						Flash Flood

General 2 to 3 inch rains over Williamson County in the early morning hours caused flash flooding to redevelop. Isolated rain totals of up to 4 inches were received across the county and the flooding continued until just past noon.

Heavy rain developed again just before midnight of July 3 over much of South Central Texas along and west of the I-35 corridor. The repeated heavy rainfall produced general 3 to 4 inch rains over most of the counties from the Hill Country southward to US90. Flash flooding began in the early morning hours and continued generally until the late morning. Most low water crossings in the multi-county area were reported to be flooded and road closures were widespread.

TXZ228

Dimmit

03	0543CST								
09	0625CST	0	0						Flood

The Nueces River crested at Asherton at 30.21 feet on July 4 at 1515CST, where 20.0 feet is flood stage.

Bandera County Countywide

03	1300CST 1700CST								
		0	0						Flash Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

General 2 to 3 inch totals were reported over the county, with isolated to 4 inches. The town of Bandera was reporting flooding, with widespread flooding and flash flooding in the area around the town. Vacationers were stranded in numerous locations around the county.

Medina County Countywide

03	1330CST 1630CST				0	0			Flash Flood
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General 2 to 3 inch totals fell, redeveloping the flash flooding over much of the county for a brief time.

Kendall County Countywide

03	1400CST 1600CST				0	0			Flash Flood
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An additional 2 inches of rain fell over Kendall County, with isolated totals to 4 inches in the northern part. This caused a brief resumption of flash flooding in the mid afternoon period.

Kerr County Countywide

03	1400CST 1600CST				0	0			Flash Flood
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An additional 2 to 3 inches fell over Kerr County, with isolated totals of up to 8 inches in the eastern part of the county. Flash flooding developed almost immediately over low water crossings and rural roads. Damage to roads and bridges increased, especially over the eastern part of the county.

Real County Southeast Portion

03	1430CST 1630CST				0	0			Flash Flood
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Brief flash flooding resulted from general rainfall of 1-2 inches, with up to 5 inches in the southeast part of the county. Numerous roads were closed and additional evacuations were required in camps and vacation spots along the Frio River.

Frio County Countywide

03	1500CST 1800CST				0	0			Flash Flood
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General 1 to 2 inch rainfall fell across the county, with up to 5 inches both east and west of Pearsall. Brief flash flooding was reported over SH85 and FM117. No significant addition damage was indicated.

Comal County West Portion

03 04	1630CST 0200CST				0	0			Flash Flood
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Only around 1 inch of rain fell over the western part of Comal County, but with streams and creeks already at or above flood stage, additional flash flooding developed over most low water crossings. More damage was reported to area roads and a bridge was washed away on FM306.

Bexar County Countywide

03 04	1830CST 0000CST				0	0			Flash Flood
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An additional 2 inches of rain fell over Bexar County, with amounts as high as 5 inches in the extreme western part of the county. County streams and creeks had remained at or above flood stage as the result of rainfall on July 2, so additional flash flooding over most county low water crossings and low roads was reported, continuing through the evening. Damage was generally confined to roads and bridges.

Atascosa County North Portion

03	1900CST 2200CST				0	0			Flash Flood
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An additional 2 to 3 inches of rain, with totals of up to 9 inches, falls across the northern part of Atascosa County, with flash flooding continuing into the late evening.

Kendall County Countywide

03 04	2000CST 1500CST				1	0			Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

Burnet County

Countywide

04	0230CST 1700CST				0	0			Flash Flood
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An additional two inches of rain fell along the Burnet -Llano County line, with isolated totals near 4 inches between Marble Falls and Burnet. Flash flooding redeveloped quickly and continued through the early morning hours, into the afternoon. Due to high water levels and the rapid rate of flow of the water, Lake Marble Falls is closed to boating and swimming.

Llano County

East Portion

04	0230CST 0400CST				0	0			Flash Flood
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An additional two inches of rain fell along the Burnet -Llano County line, with isolated totals near 3 inches. Brief flash flooding redeveloped in the eastern part of the county.

TXZ186

Kerr

04 05	0453CST 1633CST				0	0			Flood
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The Guadalupe River crested at Hunt at 16.70 feet on July 5 at 0745CST, where flood stage is 12.0 feet. It crested at Kerrville at 14.56 feet on July 5 at 1100CST, where flood stage is 9.0 feet.

Bexar County

Countywide

04	0800CST 1700CST				0	0			Flash Flood
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Two more inches of rain fell across Bexar County in the early morning hours. Isolated additional totals were up to 4 inches, again in the western part of the county. With streams and creeks still at or above flood stage, flash flooding redeveloped across most county roads and continued through the morning and afternoon.

By late in the afternoon of July 3, heavy rain was located from Uvalde to Kerrville and Fredericksburg, and between Hondo and San Antonio. Rainfall of up to 6 inches was reported in the heavier downpours and flash flooding redeveloped quickly across the area.

Comal County

Countywide

04	1130CST 1500CST				0	0			Flash Flood
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Spotty showers and thunderstorms dropped an additional 2 inches of rain over the county, with totals of up to 7 inches west of New Braunfels and south of Canyon Dam. Flash flooding redeveloped just before noon and continued into the mid afternoon. For the first time in history, Canyon Dam sends water over the spillway. Thousands are evacuated along the banks of the Guadalupe and in the city of New Braunfels.

Atascosa County

Southeast Portion

04	1400CST 2000CST				0	0			Flash Flood
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An additional 2 to 3 inches of rain falling over the southeast portion of the county, near the Karnes County line, caused more flash flooding problems from the mid afternoon into the early evening.

Karnes County

Southwest Portion

04	1530CST 1900CST				0	0			Flash Flood
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A general 2 inch rain falling over the southwest portion of the county, near the Atascosa County line, produced flash flooding that lasted from mid afternoon into early evening.

TXZ206

Comal

04 12	1945CST 0215CST				0	0			Flood
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The Guadalupe River crested at Sattler at 35.55 feet on July 6 at 1000CST, where 9.0 is flood stage. It crested at New Braunfels above the Comal River on July 6 at 1315CST, where flood stage is 7.0 feet. It crested at New Braunfels below the Comal River on July 6 at 1845CST, where flood stage is 13.0 feet.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, South Central

Bexar County

Countywide

04 2300CST
05 1200CST

0 0

Flash Flood

inches. With streams and creeks still flooded, flash flooding redeveloped over most county roads, continuing until noon.

Blanco County

Countywide

05 0000CST
1200CST

0 0

Flash Flood

Generally 2 to 3 inches of rain fell over Blanco County, with isolated totals to 5 inches in the extreme southern part. Flash flooding redeveloped almost immediately and continued through the morning.

Burnet County

Countywide

05 0000CST
1600CST

0 0

Flash Flood

General 2 inch rainfall over Burnet County, with isolated totals to 4 inches south of Marble Falls, caused flash flooding to redevelop very quickly. It continued into the mid afternoon.

Comal County

Countywide

05 0000CST
1500CST

0 0

Flash Flood

An additional 1 to 2 inches of rain fell over Comal County, with isolated totals of up to 4 inches just west of New Braunfels. Flash flooding redeveloped almost immediately and continued until the mid afternoon.

Gillespie County

Countywide

05 0000CST
1200CST

0 0

Flash Flood

An additional 2 to 3 inches of rain fell over the county, with up to 5 inches in the southeast. Flash flooding developed very quickly and continued through the morning.

Kendall County

Countywide

05 0030CST
1800CST

0 0

Flash Flood

The additional rainfall over Kendall County averaged near 2 inches with up to 6 inches in the Boerne area. Flash flooding redeveloped immediately, as creeks and streams remained flooded countywide.

Widespread showers and thunderstorms redeveloped on the evening of July 4 between San Antonio, Boerne, Fredericksburg and Marble Falls. Rainfall from the system was generally in the 2 to 3 inch range, with isolated totals to 6 inches near Boerne. Most county creeks and streams had remained flooded through the day and with the additional rainfall, immediate flash flooding developed. The flooding continued into the afternoon for most locations.

Wilson County

West Portion

05 0200CST
0900CST

0 0

Flash Flood

General rainfall of 2 to 3 inches over the western part of the county, with isolated totals of up to 5 inches, caused flash flooding to redevelop in the early morning hours. The flash flooding ended in the mid morning.

Karnes County

South Portion

05 0230CST
0500CST

0 0

Flash Flood

An additional 2 inches of rain over the south part of the county, with isolated totals of up to 5 inches, redeveloped flash flooding through the early morning hours.

Hays County

West Portion

05 0330CST
0700CST

0 0

Flash Flood

General 2 inch rainfall over the western part of the county, with isolated totals of up to 4 inches, resulted in additional flash flooding that continued through the early morning hours.

Caldwell County

West Portion

05 0430CST
1100CST

0 0

Flash Flood

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

General 1 to 2 inches of rain over the western part of Caldwell County caused flash flooding through the morning.

Travis County West Portion

05	0430CST 1000CST				0	0			Flash Flood
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Two additional inches of rain fell over the western part of Travis County. Isolated totals reached near 4 inches. This produced another round of flash flooding over the western part of the county through the mid morning hours. The city of Austin extends a boating ban to lake Travis. The ban was already in effect for Town Lake.

Guadalupe County Countywide

05	0500CST 0700CST				0	0			Flash Flood
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An additional 1 to 2 inches of rain in the Schertz-Marion-Cibolo area in the western part of Guadalupe County, redeveloped brief flash flooding near sunrise.

Additional showers and thunderstorms formed from Falls City and Floresville near Seguin near midnight. The storms moved northward into the Seguin-Lockhart-San Marcos and Austin areas Heavy rain during the early morning hours. Rainfall of 2 to 3 inches was generally indicated, along with isolated totals to near 5 inches in many locations.

Bandera County Countywide

05	0230CST 1200CST				0	0			Flash Flood
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General 2 to 3 inch rainfall with totals of up to 5 inches north of Bandera caused the flash flooding to redevelop very quickly across the county and continue through the morning.

Medina County Countywide

05	0230CST 1200CST				0	0			Flash Flood
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Rainfall averaging around 2 inches fell just west of Medina Lake and produced a resurgence of flash flooding through the morning hours. The increase in rain totals raise concerns that the additional inflow into Medina Dam could overtop the structure. Questions were raised as to the stability of the structure, and, as a result, an evacuation was ordered for communities immediately below the Dam. More than 4,000 persons were evacuated Friday evening after having just returned on Thursday from a previous evacuation.

Atascosa County Countywide

05	0300CST 1000CST				0	0			Flash Flood
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An additional 1 to 2 inches of rain, added to the accumulations from the previous several days, cause flash flooding over low water crossings through most of the morning.

Kerr County Southeast Portion

05	0300CST 1900CST				0	0			Flash Flood
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Additional rainfall over the southeast part of Kerr County averaged 1 to 2 inches. This accumulation, added to the flooding already present in all county streams and creeks, caused flash flooding to continue through the late afternoon. Heavy rain began forming again near midnight from Jourdanton to Hondo and moved northward into Bandera and Kerr Counties. The additional 2 inch rains were sufficient to redevelop flash flooding over the four counties that continued through the morning.

TXZ206

Comal									
05	0545CST				0	0			Flood
09	0951CST								

The Comal River at New Braunfels crested at 19.73 feet on July 8 at 1800CST, where flood stage is 15.0 feet.

TXZ188

Gillespie									
05	0957CST				0	0			Flood
	1552CST								

The Pedernales River crested at Fredericksburg at 27.40 feet on July 5 at 1315CST, where flood stage is 22.0 feet.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

TXZ207

Guadalupe

05 1251CST
08 0142CST

0 0

Flood

The Guadalupe River crested at Seguin at 31.00 feet on July 6 at 2010CST, where flood stage is 19.0 feet.

Bandera County

East Portion

13 1300CST
1800CST

0 0

Flash Flood

Localized rainfall of 4 inches in 2 hours, combined with the saturated soils, caused a brief resumption of flash flooding in the eastern half of Bandera County.

Kerr County

Kerrville to Center Pt

13 1300CST
1700CST

0 0

Flash Flood

Between 2 and 3 inches of rain fell in 2 hours between Kerrville and Center Point. Flash flooding redeveloped over this central part of the county through the afternoon.

Gillespie County

Luckenbach

13 1500CST
1700CST

0 0

Flash Flood

Luckenbach received nearly 3 inches of rain in just under 2 hours. Area streams and creeks flooded low water crossings through the late afternoon. Significant damage was reported to most of the businesses in Luckenbach. Homes also had considerable damage in them.

Burnet County

North Portion

13 1530CST
1700CST

0 0

Flash Flood

The northern part of Burnet County received 3 inches of rain in about 2 hours. The area experienced flash flooding through the late afternoon.

Williamson County

Northwest Portion

13 1530CST
1800CST

0 0

Flash Flood

Up to 3 inches of rain in just under 2 hours fell over northwestern Williamson County. Flash flooding redeveloped quickly and continued through the late afternoon.

Real County

North Portion

13 1600CST
1800CST

0 0

Flash Flood

Nearly 3 inches of rain in under 2 hours fell over the north portion of Real County. Flash flooding developed over that half of the county and continued through the late afternoon.

Lavaca County

Southeast Portion

13 1900CST
2230CST

0 0

Flash Flood

Lavaca County southeast of US77 received nearly 4 inches of rain in 2 hours. Because the area soils remained very wet from rainfall during the week of July 4, flash flooding developed quickly and continued into the early evening.

De Witt County

Southeast Portion

13 2030CST
2300CST

0 0

Flash Flood

Up to 4 inches of rain fell in 2 hours south of a line from Nordheim to Cuero. Since area soils were still saturated from rainfall of the previous week, flash flooding developed and continued until nearly midnight.

On Friday, July 12, a large low pressure system settled over the southern Great Plains, sending a series of weather disturbances southeastward toward South Central Texas. Scattered showers and thunderstorms developed in the afternoon and continued into the evening hours from the Hill Country eastward, producing locally heavy rain and beginning to saturate the soils still moist from the devastating rains earlier in July. Another disturbance arrived on Saturday, July 13, from the northwest, and came a little further south, bringing scattered to numerous showers and thunderstorms to the Texas Hill Country and adjacent parts of South Central Texas on Saturday afternoon and evening of July 13th. These storms produced widespread 1 to 2 inch rain totals, with local amounts of up to 4 inches, causing brief flooding over several counties.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

Gillespie County

West Portion

14	1200CST 1500CST				0	0			Flash Flood
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Up to 3 inches of rain fell in 2 hours over western Gillespie County, producing brief flash flooding through the early afternoon .

Kendall County

South Portion

14	1330CST 1630CST				0	0			Flash Flood
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Up to 3 inches of rain fell in just under 2 hours in the southern part of Kendall County near Boerne. Brief flash flooding developed and continued through the mid afternoon.

Lee County

Countywide

14	1330CST 1630CST				0	0			Flash Flood
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General 1 to 2 inch rainfall over Lee County, along with isolated totals of as much as 4 inches, caused brief flash flooding across the county.

On Sunday, July 14, another disturbance came around the low and further south. This caused showers and thunderstorms to evolve further south, and brought a large area of showers and thunderstorms to not only the Texas Hill Country, also across South Central Texas. Strong gusty winds accompanied some of the thunderstorms, with wind gusts of 35 to near 50 mph. Heavy rains in areas brought more localized flooding problems and caused rivers and streams to increase flow again. The showers and thunderstorms became numerous enough in the afternoon of Sunday the 14th to form a mesoscale boundary that moved southward across South Central Texas and to the coastal plains further south the night of the 14th and morning of the 15th.

Comal County

Southwest Portion

15	1500CST 1700CST				0	0			Flash Flood
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General rainfall of 2 to 3 inches fell in around 2 hours west of New Braunfels in the early afternoon. Brief flash flooding developed that ended in the late afternoon. There was no significant damage.

Dimmit County

Northeast Portion

15	1530CST 1700CST				0	0			Flash Flood
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General 1 to 2 inch rains fell in the Big Wells area. Isolated totals in that area reached near 4 inches. Brief flash flooding developed west to near Brundage and south to Valley Wells. No damage was reported.

Bexar County

Southeast Portion

15	1630CST 1800CST				0	0			Flash Flood
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Most sections of eastern Bexar County received 1 inch of rain in the mid afternoon. Rainfall was heaviest in the Elmendorf area where a general 2 inch rain occurred, along with isolated totals to near 4 inches. Brief flash flooding redeveloped in southeast Bexar County. No damage was indicated.

Guadalupe County

South Portion

15	1630CST 1800CST				0	0			Flash Flood
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The south part of Guadalupe County received from 2 to 4 inches of rainfall during the mid afternoon. Brief flash flooding was indicated from Seguin southward, with no damage noted.

Medina County

South Portion

15	1630CST 2000CST				0	0			Flash Flood
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Rainfall over Medina County was generally an inch or less in the mid afternoon. The south part of the county received general 2 inch rainfall with isolated amounts reported to near 4 inches. Brief flash flooding developed between Yancey and Natalia, ending in the early evening.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Central

Frio County

Countywide

15	1700CST 1900CST				0	0			Flash Flood
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Widespread 2 to 3 inch rainfall fell on Frio County through the early and mid afternoon. Isolated areas received up to 5 inches of rain. Flash flooding was reported during the early evening, then dissipated without significant damage.

Uvalde County

South Portion

15	1700CST 1900CST				0	0			Flash Flood
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Southern Uvalde County received a general 1 to 2 inch rain. Areas southeast of Uvalde reported up to 4 inch totals. Brief flash flooding was indicated from the late afternoon into the early evening. No damage was reported.

Zavala County

Countywide

15	1700CST 1900CST				0	0			Flash Flood
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Rainfall over Zavala County was general, with most locations receiving 1 to 2 inches. Isolated totals to near 3 inches were reported, along with brief flash flooding and no damage.

De Witt County

Countywide

15	1730CST 1930CST				0	0			Flash Flood
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DeWitt County received a general 2 to 3 inch rain, with up to 5 inches near Nordheim. Brief flash flooding was reported from late afternoon to early evening. No damage was indicated.

Atascosa County

Southwest Portion

15	1830CST 2100CST				0	0			Flash Flood
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A general 1 to 2 inch rainfall was indicated over southern Atascosa County, with totals of up to 6 inches between Charlotte and Hindes. Brief flash flooding was indicated with the heavier amounts through the early evening. Minor damage was reported to county rural roads.

Karnes County

Southeast Portion

15	1830CST 2300CST				0	0			Flash Flood
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During the late afternoon, the southeast section of Karnes County from Helena to Runge to Kenedy received between 3 and 4 inches of rainfall with some reports of up to 9 inches. Flash flooding developed very quickly and continued until almost midnight. Damage was generally confined to rural roads and a few low water crossings.

Gonzales County

Southeast Portion

15	1900CST 2030CST				0	0			Flash Flood
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Gonzales County south and east of the city of Gonzales received a widespread rainfall of 1 to 2 inches, with isolated amounts of up to 5 inches. Brief flash flooding developed, but ended in the mid evening period. No significant damage was reported.

Wilson County

North Portion

15	1900CST 2100CST				0	0			Flash Flood
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Northern Wilson County received a general 1 inch rain, with areas between LaVernia and Sutherland Springs reporting nearly 4 inches. Brief flash flooding developed in the early evening, but ended without significant damage.

With soils already saturated from rainfall on July 12 through 14, scattered thunderstorms re-developed near noon of July 15, in advance of a weak upper level system approaching from the southwest. Rainfall in an area from New Braunfels to Uvalde to Carrizo Springs to Cuero and back to New Braunfels was generally between 1 and 3 inches, with isolated totals of up to five inches. Flash flooding began in the mid afternoon and continued into the evening.

De Witt County

Southeast Portion

16	0800CST 1600CST				0	0			Flash Flood
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Rainfall from the scattered showers and thunderstorms continued from early morning into the late morning, with general accumulations of 1 to 2 inches and isolated totals of up to 5 inches. Flash flooding persisted through the morning and into the mid afternoon. Damage was generally confined to county roads.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, South Central

Fayette County

South Portion

16	0830CST 1100CST				0	0			Flash Flood
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Scattered showers and thunderstorms, more numerous over the south part of the county, produced general rainfall of 3 to 4 inches. Soils were already saturated, and flash flooding developed very quickly, continuing through the morning. No significant damage was reported.

Gonzales County

East Portion

16	0830CST 1100CST				0	0			Flash Flood
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General 3 to 4 inch rains fell from Gonzales eastward through the early morning hours, causing flash flooding to develop quickly due to the saturated nature of county soils. The flash flooding continued through most of the morning. No significant damage was indicated.

Lavaca County

Countywide

16	0830CST 1300CST				0	0			Flash Flood
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Scattered showers and thunderstorms dropped rainfall of 1 to 2 inches over most of Lavaca County during the early morning hours. Isolated totals of 5 inches were reported between Moulton and Hallettsville. Flash flooding developed rapidly and continued through the morning and just past noon. Minor damage was reported to roads, mainly around Moulton.

Karnes County

Southeast Portion

16	1030CST 1300CST				0	0			Flash Flood
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Spreading westward during the morning hours from the Cuero area into southeastern Karnes County, scattered showers and thunderstorms produced rainfall of 2 to 3 inches with isolated amounts near 4 inches. With soils being saturated already, flash flooding developed in the mid morning and continued just past noon. Little or no significant damage was reported.

Scattered showers and thunderstorms began forming shortly in the early morning hours in an area from Cuero to Hallettsville to LaGrange to Gonzales. Rainfall was generally between 2 and 4 inches over the area, with isolated totals of up to 6 inches between LaGrange, Cuero, and Gonzales. Soils had remained saturated from previous rainfall and flash flooding developed shortly after sunrise and continued through the morning. The flash flooding generally continued through the remainder of the morning.

Comal County

East Portion

16	1100CST 1300CST				0	0			Flash Flood
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General 1 to 2 inch rainfall across Comal County, with isolated totals to near 4 inches, caused brief flash flooding near the noon period. No damage was indicated.

Dimmit County

East Portion

16	1200CST 1600CST				0	0			Flash Flood
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General 1 to 2 inch rains fell with isolated totals to near 4 inches near Big Wells. Flash flooding occurred through the mid afternoon. No damage was indicated.

Frio County

Countywide

16	1200CST 1600CST				0	0			Flash Flood
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Widespread 2 to 3 inch rains fell over Frio County, with isolated amounts to 6 inches in the Pearsall area. Soils were already saturated from previous rainfall, and flash flooding developed quickly. It continued into the late afternoon.

Maverick County

South Portion

16	1200CST 1400CST				0	0			Flash Flood
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Scattered showers and thunderstorms produced general rain totals of 1 to 2 inches with isolated amounts to 3 inches near El Indio. No damage was indicated.

Zavala County

Countywide

16	1200CST 1400CST				0	0			Flash Flood
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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TEXAS, South Panhandle

Lamb County

1 NE Amherst	27	1805CST			0	0			Thunderstorm Wind (G54) ^M
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The West Texas Mesonet station northeast of town measured 62 mph thunderstorm wind gusts.

TEXAS, Southeast

Newton County

Newton	07	2144CST			0	0	5K		Thunderstorm Wind
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Numerous trees and power lines were blown down.

Jasper County

Kirbyville	07	2150CST			0	0	5K		Thunderstorm Wind
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Numerous trees and power lines were blown down.

Tyler County

Spurger	07	2224CST			0	0	5K		Thunderstorm Wind
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Trees and power lines were blown down along Highway 92.

Hardin County

Village Mills	07	2249CST			0	0	5K		Thunderstorm Wind
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Numerous trees and power lines were blown down.

Jefferson County

Groves	16	0800CST			0	0	1.5M		Thunderstorm Wind (G65)
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High winds associated with a severe thunderstorm blew down numerous trees and power lines. The most significant damage was to the Groves Middle School, where the gymnasium lost part of its roof and one wall.

Jasper County

Jasper	24	1745CST			0	0	5K		Thunderstorm Wind
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Several trees and power lines were blown down.

Newton County

Bon Wier	24	1802CST			0	0	5K		Thunderstorm Wind
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Several trees and power lines were blown down on Highway 363.

TEXAS, West

Presidio County

Presidio	02	1635CST 1640CST			0	0	200K	0	Thunderstorm Wind (G50)
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A severe thunderstorm produced damaging outflow winds in Presidio. A warehouse was destroyed and four homes lost roofs. Small hail collected up to 6 inches deep in some locations around town. Slightly larger hail occurred approximately 30 minutes later, around 615 PM CDT, as the main core of the severe thunderstorm moved over the community.

Presidio County

Presidio	02	1700CST 1900CST			0	0	0	0	Flash Flood
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Rainfall amounts of approximately 2.5 inches in less than one hour resulted in road flooding and minor flooding of a few homes in Presidio.

Presidio County

Presidio	02	1715CST			0	0	0	0	Hail(0.88)
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Upton County

1 NW Mc Camey	03	1425CST			0	0	0	0	Hail(0.75)
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Jeff Davis County

Valentine	03	2030CST 2200CST			0	0	0	0	Flash Flood
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Flooding was reported along Highway 90 near the community of Valentine. The cooperative observer in Valentine reported 2.8 inches of rainfall in one hour.

Glasscock County

8 W Garden City	04	1913CST	0.2	50	0	0	0	0	Tornado (F0)
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A brief tornado was reported along highway 137.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>TEXAS, West</u>									
Glasscock County									
13 NNW Garden City	04	1930CST 2200CST			0	0	0	0	Flash Flood
									Water was reported covering Highway 137, north of Highway 158.
Brewster County									
Alpine	05	0230CST 0250CST			0	0	0	0	Flash Flood
									Flooding was reported by law enforcement on roadways in the city of Alpine.
Brewster County									
Alpine Muni Arpt	05	1525CST			0	0	0	0	Thunderstorm Wind (G54) ^M
Scurry County									
6 NW Snyder	06	1000CST 1100CST			0	0	15K	0	Flash Flood
									Flooding was reported along Highway 84. This resulted in two car accidents. However, no injuries were reported.
Gaines County									
28 NW Seminole	06	1240CST			0	0	0	0	Hail(0.75)
									A severe thunderstorm produced dime size hail on the Gaines County and Lea County New Mexico border.
Pecos County									
15 N Ft Stockton to Ft Stockton	06	2025CST 2300CST			0	0	0	0	Flash Flood
									Flooding caused road closures on Highway 18 in Pecos County.
Brewster County									
Marathon	06	2130CST			0	0	0	0	Hail(0.75)
Brewster County									
7 W Marathon	06 07	2135CST 0100CST			0	0	0	0	Flash Flood
									Flooding was reported along Highway 90 between Marathon and Altuda.
Pecos County									
20 SE Ft Stockton	06 07	2300CST 0100CST			0	0	0	0	Flash Flood
									Flooding was reported along Highway 285 southeast of Fort Stockton.
Terrell County									
29 NNE Sanderson	06 07	2300CST 0800CST			0	0	0	0	Flash Flood
									Flooding was reported along Farm to Market Road 2286, 12 miles north of the intersection of Farm to Market roads 2286 and 2400.
Scurry County									
Snyder	12	1630CST 1645CST			0	0	0	0	Thunderstorm Wind (G50)
									Reports from the local newspaper indicate that strong winds from a thunderstorm resulted in damage to trees and power lines in the city of Snyder. Local officials responded to no less than four reports of large trees blocking roadways after being blown down by the storm. Based on a summary of the reports...it seems likely a wet microburst affected the city.
Scurry County									
Snyder	12	1635CST 1650CST			0	0	8K	0	Flash Flood
									The local newspaper reported that local officials were called to aide a motorist when their car stalled in rapidly rising water between 21st and 22nd Streets in Snyder. No injuries were reported.
Brewster County									
4 SE Study Butte	18	1800CST 1930CST			0	0	0	0	Flash Flood
									Heavy rains caused Alamito Creek to wash over Old Maverick Road on the west side of the Big Bend National Park.
Midland County									
6 SE Midland to 10 E Midland	28	1858CST 1925CST			0	0	0	0	Flash Flood
									Residents in the Valley View community reported as much as 6 inches of rain fell during a microburst event. This resulted in flooding over several county roads southeast of the city of Midland.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

TEXAS, West

Midland County

6 SE Midland to 10 E Midland	28	1858CST 1925CST			0	0	250K	0	Thunderstorm Wind (G78)
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A survey of the damage area southeast of Midland indicated that a microburst caused this event. Based on damage patterns, it is evident that the impact point from the microburst was west of Farm to Market Road 1213, north of County Road 150, east of County Road 1160, and south of County Road 144. The worst of the damaged appeared to be south of County Road 144 and also along County Road 150. Estimated wind speeds of 80-100 mph occurred with the microburst.

Three mobile homes in the Valley View area were destroyed, while other homes sustained roof and window damage. One horse was also killed by flying debris. A center pivot irrigation system was destroyed as it was blown out of a field onto a nearby county road. A completely full oil tank battery and numerous powerlines were also blown down during the event.

The 00Z Midland upper air sounding from Sunday evening also suggested the potential for microburst and thunderstorms were forecast for Midland County. Damage estimates for the entire event are estimated in the \$250,000 range.

Reagan County

11 N Stiles	28	2020CST 2025CST			0	0	0	0	Thunderstorm Wind (G52)
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Thunderstorm winds blew down a large flag pole and a few large limbs off trees.

Pecos County

31 W Ft Stockton	29	1440CST			0	0	0	0	Thunderstorm Wind (G50)
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Reeves County

20 E Balmorhea	29	1440CST			0	0	0	0	Thunderstorm Wind (G50)
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TXZ058

Reeves County And Upper Trans Pecos

29	1441CST			0	2	90K	0	Dust Storm
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An eleven vehicle wreck occurred in zero visibilities, due to blowing dust, along Interstate 10 at mile marker 225...or 17 miles east of Balmorhea. Two minor injuries were reported. Interstate 10 was closed for two hours and traffic in the west bound lane was backed up for a number of miles into western Pecos County.

A reporter from a local newspaper interviewed people traveling on Interstate 10 in regard to the accident. Travelers reported having to pull off of the interstate on the Reeves/Pecos County line because of high thunderstorm winds and blowing dust. Winds were estimated to be 60 mph.

Pecos County

25 SE Ft Stockton to 45 SE Ft Stockton	29	1600CST 1800CST			0	0	0	0	Flash Flood
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Pecos County law enforcement reported Highway 285 was flooded and impassable.

Presidio County

25 S Marfa	29	1930CST 2130CST			0	0	0	0	Flash Flood
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The Texas Department of Transportation reported flooding of secondary roads south of Marfa including Farm to Market Road 169.

TEXAS, Western North

Archer County

1 S Megargel	07	1715CST			0	0			Funnel Cloud
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This funnel cloud was observed by the Megargel Fire Department and was described as very thin and extending very close to the ground.

Baylor County

2 SSE Westover	07	1715CST			0	0			Funnel Cloud
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This funnel cloud was observed by the Megargel Fire Department from Archer County and was described as very thin and extending very close to the ground.

Clay County

Petrolia	12	1400CST			0	0			Hail(1.00)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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UTAH, East

UTZ022>025-027>029 **Southeast Utah - Eastern Uinta Mountains - Eastern Uinta Basin - Tavaputs Plateau - Grand Flat And Arches - La Sal & Abajo Mountains - Canyonlands / Natural Bridges**

01	0000MST								
31	2359MST			0	0				Drought

Extreme to exceptional drought conditions continued throughout the eastern quarter of Utah during the month of July. The persistent drought continued to heighten the risk of wildfires and caused problems for agricultural interests. See the August 2000 Storm Data publication for a continuation report on the drought in the eastern quarter of Utah.

Grand County

12 NW Thompson to 22 N Thompson	01	0000MST							
	31	2359MST			0	0			Wild/Forest Fire

The Rattle Fire, Black Canyon Fire, and Diamond Fire which began burning on the Tavaputs Plateau in June (see the June 2002 Storm Data publication) were combined into what was named the Rattle Complex. Containment of the complex occurred on July 31st. A total of 94,519 acres were consumed by the fires. The cost of fighting the fires was 11.3 million dollars.

Daggett County

1 N Dutch John to 3 S Dutch John	01	1200MST							
	08	1800MST			0	0	50K		Wild/Forest Fire

This human caused fire became known as the Mustang Fire. Three outbuildings and one other structure were destroyed, and highway 191 was temporarily closed. The Flaming Gorge Dam and Power Plant were threatened by the fire. The fire consumed 20,038 acres. The cost of fighting the fire was 2.5 million dollars.

San Juan County

11 NE La Sal	06	1200MST							
	08	1800MST			0	0			Wild/Forest Fire

This wildfire was named the Carpenter Fire. Several campgrounds were evacuated. The fire consumed 1,250 acres.

San Juan County

5 S Eastland	11	1200MST							
	16	1800MST			0	0			Wild/Forest Fire

This wildfire became known as the Horse Fire. This fire consumed 1,250 acres. The cost of fighting the fire was 186,000 dollars.

San Juan County

8 NE La Sal	14	1200MST							
	18	1200MST			0	0			Wild/Forest Fire

This lightning caused wildfire became known as the Hang Dog fire. Thirty residences and several other structures were threatened and evacuations were ordered. On the 18th of July this fire was included in the Canyon Complex. (See the Canyon Complex entry for a continuation on this fire)

San Juan County

15 NW Blanding	15	1200MST							
	18	1200MST			0	0			Wild/Forest Fire

This lightning caused wildfire became known as the Hammond fire. This fire was included in the Canyon Complex on July 18th. (See the Canyon Complex entry for a continuation on this fire)

Grand County

30 N Crescent Jct	17	1200MST							
	31	2359MST			0	0			Wild/Forest Fire

This lightning caused wildfire became known as the County Line Fire. The fire consumed 3504 acres by the end of the month. (See August 2002 Storm Data Publication for a continuation of this wildfire)

San Juan County

8 NE La Sal	18	0600MST							
	21	1800MST			0	0			Wild/Forest Fire

The Canyon Complex consisted of the Hang Dog and Hammond wildfires. The Hang Dog fire occurred 8 miles northeast of La Sal, Utah, and the Hammond fire occurred 15 miles northwest of Blanding, Utah. Both of these fires were caused by lightning. Combined, these fires consumed 9,800 acres of forest consisting of mixed timber and brush. These fires were contained on the 21st of July. The cost of fighting these fires was 1.6 million dollars.

Grand County

21 NNE Harley Dome	23	1539MST							
		1541MST			0	0			Thunderstorm Wind (G85) ^M

Uintah County

19 N Vernal	27	1350MST							
		1654MST			0	0			Flash Flood

A flash flood ran across US Highway 191 and deposited a significant amount of debris onto the road.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>UTAH, East</u>									
San Juan County									
3 S Monticello	27	1440MST 1730MST			0	0			Flash Flood
Flash flood waters ran up to a foot deep across US Highway 191.									
Uintah County									
.5 S Jensen	27	1935MST 1945MST			0	0			Hail(0.75)
San Juan County									
Monticello	28	1340MST 1440MST			0	0			Heavy Rain
Heavy rain resulted in 2 to 3 inches of water flowing across Highway 191.									
<u>UTAH, West and Central</u>									
Sevier County									
Monroe to Richfield	14	1500MST 1600MST			0	0	10K	5K	Tstm Wind/Hail
A strong thunderstorm ripped through the Sevier Valley, knocking down a 200-foot section of building in Richfield, and blowing down large trees in Monroe. The strongest recorded wind gust was 48 mph (42 kts), but stronger gusts likely occurred with this storm.									
Rich County									
Randolph	16	1515MST 1520MST			0	0	0	0	Hail(0.75)
A severe thunderstorm deposited 3/4 inch hail about 3 miles south of Randolph.									
Cache County									
Logan	18	1300MST			0	0	0	0	Funnel Cloud
A funnel cloud was spotted briefly near Logan.									
Garfield County									
Antimony	23	1510MST 1610MST			0	0	0	0	Flash Flood
Heavy rains in Garfield County produced flash flooding 10 miles south of Antimony, with 6 inch to 1 foot deep water across the roadway.									
Wayne County									
South Portion	25	1630MST 1830MST			0	0	0	0	Flash Flood
Flash flooding was reported on Highway 24 near Capitol Reef National Park. The Fremont River was reported out of its banks, and was crossing the road.									
Millard County									
Delta	25	1632MST			0	0	0	0	Thunderstorm Wind (G50) ^M
A severe thunderstorm in Delta produced a wind gust of 58 mph (50 kts).									
Tooele County									
St John Station	25	1745MST			0	0	0	0	Thunderstorm Wind (G56) ^M

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

UTAH, West and Central

A severe thunderstorm wind gust of 64 mph (56kts) was recorded at the St. John substation.

Salt Lake County Countywide

25	1800MST 1900MST				2	0	0	0	Lightning
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One 28-year-old male and one 23-year-old female, a husband and wife, were struck and killed by lightning near the summit of Lone Peak in the Wasatch Mountain Range just southeast of Salt Lake City. The experienced climbers saw the storm coming and were moving toward a more sheltered location when they were struck. A third climber was stunned but not injured, and climbed down for help.

M28OU, F23OU

Tooele County Vernon

25	1800MST				0	0	0	0	Thunderstorm Wind (G56)^M
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A severe thunderstorm gust to 64 mph (56 kts) was recorded at Vernon Hills.

Juab County Central Portion to Countywide

25	1813MST				0	0	0	0	Thunderstorm Wind (G54)^M
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A severe thunderstorm produced a wind gust of 62 mph (54 kts) at Mud Springs.

Utah County Orem

25	1858MST				0	0	0	0	Thunderstorm Wind (G52)
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Spotters in Orem estimated thunderstorm wind gusts of 50-60 mph (43-52 kts). Some minor tree damage was reported.

Wasatch County Heber City

25	1910MST 1930MST				0	0	30K	10K	Thunderstorm Wind (G61)
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Thunderstorm winds estimated at 60-70 mph (52-61 kts) blew through portions of Heber City, blowing down trees and power lines and taking shingles off roofs.

Utah County Provo

26	1828MST				0	0	50K	10K	Thunderstorm Wind (G62)^M
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A 71 mph (62 kts) wind gust was reported from a severe thunderstorm. Several trees and power poles were knocked down or damaged. There was also damage to cars and structures.

VERMONT, North and Central

Grand Isle County South Hero

03	2005EST				0	0			Hail(0.75)
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A cold front along the Canadian-United States border triggered locally severe thunderstorms Wednesday night, July 3rd.

Lamoille County Hyde Park

03	2115EST				0	0	5K		Thunderstorm Wind
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Lamoille County Morrisville

03	2120EST				0	0	5K		Thunderstorm Wind
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A cold front, along the Canadian-United States border, triggered locally severe thunderstorms Wednesday night, July 3rd. Numerous trees were blown down in the towns of Hyde Park and Morrisville.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
<u>VERMONT, North and Central</u>									
Caledonia County									
Lyndonville	03	2215EST			0	0			Hail(0.75)
A cold front, along the Canadian-United States border, triggered locally severe thunderstorms Wednesday night, July 3rd.									
Orleans County									
Greensboro	04	1220EST			0	0			Hail(1.50)
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe.									
Washington County									
Warren	04	1255EST			0	0			Hail(1.00)
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe.									
Washington County									
Roxbury	04	1315EST			0	0			Hail(0.75)
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe.									
Orange County									
Brookfield	04	1345EST			0	0	5K		Thunderstorm Wind
Orange County									
Braintree	04	1350EST			0	0	5K		Thunderstorm Wind
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe. Numerous trees were blown down in both Brookfield and Braintree.									
Chittenden County									
Hinesburg	04	1352EST			0	0	5K		Thunderstorm Wind
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe. Numerous trees were blown down in Hinesburg.									
Orange County									
Brookfield	04	1440EST 1442EST			0	0			Funnel Cloud
Orange County									
Brookfield	04	1440EST			0	0			Hail(1.75)
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe. In Brookfield large hail and a funnel cloud were reported.									
Orange County									
Union Vlg	04	1555EST			0	0	5K		Thunderstorm Wind
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe. In Union Village, trees were blown down by thunderstorm winds.									
Windsor County									
Taftsville	04	1740EST			0	0			Hail(1.00)
A cold front moved across the area with thunderstorms during the afternoon and evening of July 4th. A few storms were severe.									
Windsor County									
3 E Woodstock	04	1750EST 1800EST			1	0			Lightning
As a thunderstorm was ending near Quechee, Vermont, a male in his late 30's was struck by the final lightning bolt of a thunderstorm. The bolt struck the individual's tent. Initially, after the strike, the individual reportedly spoke, then lapsed into unconsciousness followed by cardiac arrest and death. M?CA									
Addison County									
Salisbury	15	1350EST			0	0	5K		Thunderstorm Wind
A cold front moved southeast from Canada and triggered afternoon thunderstorms. A few of the storms were severe. Trees were blown down in Salisbury, Vermont.									
Rutland County									
Brandon	15	1400EST			0	0	5K		Thunderstorm Wind
A cold front moved southeast from Canada and triggered afternoon thunderstorms. A few of the storms were severe. Trees were blown down in Brandon, Vermont.									
Windsor County									
Plymouth	15	1440EST			0	0			Hail(0.88)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

VERMONT, North and Central

Windsor County

Reading	15	1455EST			0	0			Hail(0.75)
A cold front moved southeast from Canada and triggered afternoon thunderstorms. A few of the storms were severe with large hail.									

Orleans County

Newport Center	17	2115EST			0	0			Hail(0.88)
A warm front moved across the area during the afternoon and evening. A few thunderstorms were triggered with large hail reported in Newport Center.									

Rutland County

Chittenden	23	1135EST			0	0	10K		Thunderstorm Wind
A cold front moved southeast across Vermont and triggered late morning and afternoon thunderstorms. A thunderstorm in Rutland county resulted in downed trees and power lines.									

VERMONT, South

VTZ013>014

Bennington - Windham

05	2000EST				0	0			Smoke
07	2359EST								
Smoke, from many forest fires across the Nemiscau region of northern Quebec, became trapped under a subsidence inversion, and was transported south across southern Vermont from the evening hours of July 5, to the late evening of July 7. The forest fires were sparked by exceptionally hot and dry weather over that part of Canada followed by an unusual amount of thunderstorm activity, resulting in many lightning strikes. The circulation between high pressure over Hudsons Bay and a low pressure off the Canadian Maritimes transported the smoke southward. The smoke obscured the sky, and even reduced surface visibilities to as low as one mile, especially on the early morning of July 7. Advisories were issued warning people with respiratory problems to remain indoors and all individuals to curb outside activity. No major problems were reported to the National Weather Service as a result of this smoke. By late Sunday, July 7, the low pressure weakened and moved further east, allowing the wind to back into more of a westerly direction, finally dissipating the smoke.									

VIRGIN ISLANDS

NONE REPORTED.

VIRGINIA, East

Chesterfield County

Chesterfield	03	1505EST			0	0			Hail(0.75)
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Mecklenburg County

3 S Bracey	05	1645EST			0	0			Hail(0.75)
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Isle Of Wight County

Isle Of Wight	14	0800EST 1400EST			0	0			Heavy Rain
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Southampton County

Courtland	14	0800EST 1400EST			0	0			Heavy Rain
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Surry County

Dendron	14	0800EST 1400EST			0	0			Heavy Rain
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Sussex County

Wakefield	14	0800EST 1400EST			0	0			Heavy Rain
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Portions of interior southeast Virginia received between 3 and 4 inches of rain within six hours.

York County

Seaford	19	1705EST			0	0	2K		Thunderstorm Wind
Trees and power lines down.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>VIRGINIA, East</u>									
Emporia County									
1 E Emporia	20	1550EST			0	0	1K		Thunderstorm Wind
			Large limbs down. Limbs blocking Route 58.						
Chesterfield County									
3 E Midlothian	27	1500EST			0	0	5K		Thunderstorm Wind
			Couple trees down. Sheet metal roof of auto body shop partially torn off.						
<u>VIRGINIA, Extreme Southwest</u>									
Scott County									
Gate City	02	1340EST			0	0			Hail(0.75)
			Dime size hail was reported in Gate City.						
Scott County									
Gate City	02	1515EST			0	0			Hail(0.88)
			Nickel size hail was reported in Gate City.						
Washington County									
Abingdon	02	1600EST			0	0			Hail(0.75)
			Dime size hail was reported in Abingdon.						
Russell County									
1 E Lebanon to Lebanon	02	1605EST			0	0			Hail(1.00)
			Quarter size hail was reported 1 mile east of Lebanon.						
Russell County									
Countywide	02	1650EST			0	0	20K		Thunderstorm Wind
			Numerous trees were reported down across the county.						
Wise County									
Coeburn	02	1655EST			0	0			Hail(1.00)
			Quarter size hail was reported at Coeburn.						
Wise County									
Wise	02	1810EST			0	0			Hail(0.75)
			Dime size hail was reported at Wise.						
Washington County									
Countywide	03	1400EST 1600EST			0	0			Flash Flood
			Flooding was reported across the county.						
Washington County									
Countywide	03	1500EST 1600EST			0	0			Flash Flood
			A number of roads were closed across the county.						
Washington County									
Countywide	03	1520EST			0	0	15K		Thunderstorm Wind
			Trees were reported down across the county.						
Scott County									
Countywide	03	1610EST			0	0	20K		Thunderstorm Wind
			Utility company reported power outages from seven different locations where trees were downed on power lines.						
Washington County									
Countywide	03	1610EST			0	0	20K		Thunderstorm Wind
			Trees were reported down across the county.						
Lee County									
Pennington Gap	03	1630EST			0	0			Hail(1.25)
			Quarter to half dollar size hail was reported at Pennington Gap.						
Washington County									
Countywide	04	1500EST			0	0	20K		Thunderstorm Wind

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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VIRGINIA, Extreme Southwest

Trees were reported down in various locations across the county.

Russell County

2 N Rosedale

04 1542EST 0 0 Hail(1.75)

Golfball size hail was reported 2 miles north of Rosedale.

VIRGINIA, North

VAZ025>031-036>042-050>057

Augusta - Rockingham - Shenandoah - Frederick - Page - Warren - Clarke - Nelson - Albemarle - Greene - Madison - Rappahannock - Fauquier - Loudoun - Orange - Culpeper - Prince William - Fairfax - Arlington - Stafford - Spotsylvania - King George

02 1000EST 0 0 Excessive Heat
04 2000EST

High pressure remained stationary off the Delmarva coastline during the 1st week of July. This resulted in a prolonged period of hot and humid weather across the Mid Atlantic region. Between July 2nd and 4th, high temperatures rose into the lower to middle 90s and dew points reached into the lower 70s. This resulted in heat index values reaching 100 to 110 degrees during the afternoon.

Highland County

Mc Dowell

02 1700EST 0 0 Hail(1.75)

Golfball sized hail covered the ground.

A thunderstorm with large hail moved through Highland County during the evening of the 2nd. Near McDowell, a sheriff reported golfball sized hail covering the road around 6 PM EDT.

Frederick County

Gore

05 0143EST 0 0 1K Thunderstorm Wind

Trees were downed onto Route 259.

A thunderstorm with high winds moved through Frederick County during the pre-dawn hours of the 5th. The storm downed trees onto Route 259 near Gore.

Frederick County

Gore

09 1710EST 0 0 2K Thunderstorm Wind

A power line was downed onto Emma Row Lane.

Frederick County

Gainesboro

09 1715EST 0 0 0.50K Thunderstorm Wind

A tree was downed onto Apple Pie Ridge Road.

Frederick County

Clear Brook

09 1730EST 0 0 5K Thunderstorm Wind

Power lines were downed onto Welltown Road.

Loudoun County

West Portion

09 1805EST 0 0 5K Thunderstorm Wind
1815EST

Trees were downed.

Loudoun County

Leesburg

09 1815EST 0 0 2K Thunderstorm Wind

Power lines were downed.

Albemarle County

6 SE Crozet

09 1850EST 0 0 1K Thunderstorm Wind

Trees were downed at mile marker 113 on Interstate 64.

Augusta County

Countywide

09 1900EST 0 0 5K Thunderstorm Wind

Trees were downed.

Scattered thunderstorms moved through Northern and Central Virginia between 5 and 8 PM EDT on the 9th. The strongest storms produced wind gusts in excess of 55 MPH in Augusta, Albemarle, Loudoun, and Frederick counties. In Frederick County, a power line was downed onto Emma Row Lane in Gore. A tree was downed onto Apple Pie Ridge Road in Gainesboro. Power lines were downed onto Welltown Road in Clear Brook. In Loudoun County, trees were downed across the western portion of the county. Power lines and tree branches were downed in Leesburg. In Albemarle County, trees were downed at mile marker 113 on Interstate 64 about 6 miles southeast of Crozet. In Augusta County, scattered trees were downed countywide.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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VIRGINIA, North

Fairfax County

Chantilly

16 2350EST **0** **0** **100K** **Lightning**

A lightning fire severely damaged the attic and roof of a home.

An early morning thunderstorm produced a lightning bolt which struck a home in Chantilly around 12:50 AM EDT on the 17th. A Tulip Tree Court home sustained \$100,000 damage from a fire which was caused by lightning. Electrical wiring, the second story ceiling, and the roof of the home were damaged.

VAZ036>038-040>042-050>057

Nelson - Albemarle - Greene - Rappahannock - Fauquier - Loudoun - Orange - Culpeper - Prince William - Fairfax - Arlington - Stafford - Spotsylvania - King George

22 1000EST **0** **0** **Excessive Heat**
23 2000EST

Another round of hot and humid weather occurred across Northern and Central Virginia on July 22nd and 23rd. Heat indexes rose to between 98 and 105 degrees both days.

Shenandoah County

Countywide

23 1428EST **0** **0** **Flash Flood**
1530EST

Water covered a road in Orkney Springs.

Shenandoah County

Forestville

23 1448EST **0** **0** **0.50K** **Thunderstorm Wind**

A tree was downed onto South Middle Road.

Page County

Rileyville

23 1515EST **0** **0** **Hail(1.75)**

Golfball sized hail fell.

Page County

Rileyville

23 1515EST **0** **0** **2K** **Thunderstorm Wind**

Several trees were downed near Route 340.

Winchester (C)

Winchester

23 1645EST **0** **0** **Flash Flood**
1730EST

Roads were underwater.

Albemarle County

Countywide

23 2000EST **0** **0** **Flash Flood**
2200EST

Several roads were closed by flooding.

Scattered thunderstorms moved through the Shenandoah Valley and the Central Piedmont during the afternoon and evening of the 23rd. In Shenandoah County, heavy downpours flooded a road in Orkney Springs. High winds downed a tree onto South Middle Road in Forestville. In Frederick County, roads were reported underwater in Winchester. A total of 2.1 inches of rain was recorded at Cross Junction. In Page County, a severe storm dumped golfball sized hail and blew down several trees near Route 340 in Rileyville. In Albemarle County, several roads were closed by rushing water, including a few surrounding the University of Virginia campus near Charlottesville.

Winchester (C)

Winchester

27 1230EST **0** **0** **Heavy Rain**
1330EST

Clarke County

Boyce

27 1325EST **0** **0** **5K** **Thunderstorm Wind**

Twenty trees were downed.

Fauquier County

Broad Run

27 1340EST **0** **0** **1K** **Thunderstorm Wind**

Trees were downed.

Fauquier County

Warrenton

27 1347EST **0** **0** **1K** **Thunderstorm Wind**

Wires were downed.

Fairfax County

Centreville

27 1407EST **0** **0** **0.50K** **Thunderstorm Wind**

Large tree limbs were downed.

Thunderstorms with damaging winds and heavy rainfall moved through Northern Virginia between 1 and 4 PM EDT on the 27th. In Frederick County, standing water covered roads in Winchester after a heavy downpour. Winds estimated between 40 and 45

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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VIRGINIA, North

MPH were also reported. In Clarke County, twenty trees were downed in Boyce. In Fauquier County, trees were downed in Broad Run and wires were downed in Warrenton. In Fairfax County, large tree branches were downed in Centreville.

VAZ025>031-036>042-050>057

Augusta - Rockingham - Shenandoah - Frederick - Page - Warren - Clarke - Nelson - Albemarle - Greene - Madison - Rappahannock - Fauquier - Loudoun - Orange - Culpeper - Prince William - Fairfax - Arlington - Stafford - Spotsylvania - King George

28	1000EST								
29	2000EST			0	0				Excessive Heat

A large area of high pressure sat off the Mid-Atlantic coast during the last week of July. This caused a warm and moist south wind to blow into the region for several days, resulting in another heat wave. The hottest days were the 28th and 29th of July when temperatures rose into the 90s and heat index values reached 100 to 110 degrees. Power companies reported record electricity use on the 29th. Several jurisdictions reported an increase of emergency room visits due to the heat.

VIRGINIA, Northwest

**Dickenson County
Countywide**

02	1845EST 1900EST								
				0	0	3K			Thunderstorm Wind

Scattered locations throughout the county had trees and power lines blown down.

VIRGINIA, Southwest

**Wythe County
6 NW Wytheville**

01	1710EST								
				0	0	0.50K			Hail(0.88)

Thunderstorms during the late afternoon of the 1st produced hail up to nickel size, resulting in minor damage to an automobile.

**Montgomery County
Blacksburg**

02	1416EST								
				0	0				Hail(1.00)

**Giles County
2 N Ripplemead**

02	1435EST								
				0	0	0			Thunderstorm Wind

**Montgomery County
Blacksburg**

02	1510EST								
				0	0				Hail(1.00)

**Pulaski County
Pulaski**

02	1510EST								
				0	0	0			Thunderstorm Wind

**Bath County
4 W Healing Spgs**

02	1545EST								
				0	0				Hail(1.00)

**Carroll County
3 W Byllesby**

02	1600EST								
				0	0	0			Thunderstorm Wind

**Grayson County
Fries**

02	1600EST								
				0	0				Hail(0.88)

**Grayson County
Fries**

02	1600EST								
				0	0	0			Thunderstorm Wind

**Wythe County
5 SE Wytheville**

02	1605EST								
				0	0	0			Thunderstorm Wind

**Carroll County
2 NW Fries Jct**

02	1615EST								
				0	0				Hail(0.88)

**Carroll County
2 NW Fries Jct**

02	1615EST								
				0	0	0			Thunderstorm Wind

**Botetourt County
Fincastle**

02	1625EST								
				0	0				Hail(2.00)

**Montgomery County
Elliston**

02	1625EST								
				0	0				Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>VIRGINIA, Southwest</u>									
Botetourt County									
Fincastle	02	1634EST			0	0			Hail(0.75)
Lexington (C)									
Lexington	02	1645EST			0	0			Hail(0.80)
Lexington (C)									
Lexington	02	1645EST			0	0	0		Thunderstorm Wind
Montgomery County									
Shawsville	02	1645EST			0	0			Hail(1.00)
Henry County									
Horse Pasture	02	1815EST			0	0			Hail(0.75)
Campbell County									
5 W Rustburg	02	1830EST			0	0			Hail(1.00)
									Thunderstorms during the afternoon of the 2nd produced hail up to 2 inches in diameter and damaging winds .
									Thunderstorm winds downed trees 2 miles north of Ripplemead, onto Mt Olivet Road and Faxon Road in Pulaski, 5 miles southeast of Wytheville, onto Route 94, three miles west of Byllesby, Fries, 2 miles northwest of Fries Jct, and in Lexington .
Carroll County									
3 S Fancy Gap	03	1309EST			0	0			Hail(0.75)
Carroll County									
Fancy Gap	03	1322EST			0	0			Hail(0.75)
Campbell County									
Gladys	03	1346EST			0	0			Hail(0.88)
Appomattox County									
Spout Spg	03	1405EST			0	0			Hail(0.75)
Appomattox County									
Appomattox	03	1410EST			0	0			Hail(0.75)
Bedford County									
Huddleston	03	1420EST			0	0			Hail(0.75)
Carroll County									
Hillsville	03	1420EST			0	0			Hail(1.00)
Appomattox County									
Appomattox	03	1430EST			0	0			Hail(1.00)
Botetourt County									
Glen Wilton	03	1507EST			0	0			Hail(0.75)
Botetourt County									
1 NW Lick Run	03	1515EST			0	0	0		Thunderstorm Wind
Martinsville (C)									
Martinsville	03	1518EST			0	0	0		Thunderstorm Wind
Martinsville (C)									
Martinsville	03	1520EST			0	0			Hail(0.75)
Pittsylvania County									
Dry Fork	03	1528EST			0	0			Hail(0.75)
Craig County									
Paint Bank	03	1550EST			0	0			Hail(0.75)
Craig County									
Paint Bank	03	1550EST			0	0	0		Thunderstorm Wind
Roanoke County									
2.5 SW Glenvar	03	1600EST			0	0			Hail(1.00)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

VIRGINIA, Southwest

Montgomery County									
Blacksburg	03	1610EST			0	0			Hail(0.75)
Salem (C)									
Salem (C)	03	1625EST			0	0			Hail(0.75)
Craig County									
2 S New Castle	03	1630EST			0	0	0		Thunderstorm Wind
Montgomery County									
Blacksburg	03	1630EST			0	0			Hail(1.00)
Montgomery County									
Blacksburg	03	1630EST			0	0			Hail(1.00)
Patrick County									
Meadows Of Dan	03	1630EST			0	0			Hail(0.75)
Tazewell County									
Tazewell	03	1638EST			0	0			Hail(1.00)
Pulaski County									
Pulaski	03	1640EST			0	0	0		Thunderstorm Wind
Montgomery County									
Blacksburg	03	1655EST 1745EST			0	0	0		Flash Flood
Montgomery County									
Blacksburg	03	1655EST			0	0			Hail(0.75)
Giles County									
Pembroke	03	1656EST			0	0			Hail(1.00)
Tazewell County									
Tazewell	03	1711EST			0	0			Hail(0.75)
Montgomery County									
Blacksburg	03	1715EST 1745EST			0	0	0		Flash Flood
Pulaski County									
Fairlawn	03	1720EST			0	0			Hail(0.88)
Giles County									
Pembroke	03	1745EST 1820EST			0	0			Flash Flood
Tazewell County									
Tazewell	03	1750EST 1845EST			0	0	0		Flash Flood
Giles County									
2 W Staffordsville	03	1755EST 1900EST			0	0			Flash Flood
Floyd County									
Indian Vly	03	1800EST			0	0			Hail(1.00)
Thunderstorms during the afternoon of the 3rd produced damaging winds, flash flooding, and hail up to 1 inch in diameter.									
Thunderstorm winds downed trees in Paint Bank, Pulaski, 2 miles south of New Castle, large tree limbs and power lines 1 miles northwest of Lick Run, and large tree limbs in Martinsville									
Heavy thunderstorm rains caused flash flooding in Pembroke, 2 miles west of Staffordsville, Tazewell, downtown Blacksburg and on the Campus of Virginia Tech in Blacksburg.									
Alleghany County									
9 S Clifton Forge City	03 04	2327EST 2327EST			0	0	125K		Lightning
Lightning during the late evening of the 3rd struck a house, starting a fire which destroyed the house.									

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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VIRGINIA, Southwest

Carroll County									
Hillsville	04	1500EST			0	0			Hail(0.75)
Pulaski County									
Dublin	04	1500EST			0	0	64K		Lightning
Patrick County									
Meadows Of Dan	04	1615EST			0	0			Hail(0.75)
Patrick County									
Patrick Spgs	04	1620EST			0	0	0		Thunderstorm Wind
Tazewell County									
Tazewell	04	1915EST			0	0			Hail(0.75)
Tazewell County									
Tazewell	04	1915EST			0	0	0		Thunderstorm Wind

Thunderstorms during the afternoon of the 4th produced damaging winds, damaging lightning, and hail up to dime size .

Thunderstorm winds downed trees in Patrick Springs and uprooted small trees in Tazewell .

Lightning struck the New River Valley County Jail causing significant damage to the security system .

Rockbridge County

1 N Lexington	04 05	2220EST 0015EST			0	0	15K		Flash Flood
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Thunderstorms during the late evening of the 4th and very early morning of the 5th produced flash flooding that closed several roads 1 mile north of Lexington. In addition some homes reported flooding and water in basements.

Franklin County									
3.5 NW Burnt Chimney	05	1418EST			0	0			Hail(0.88)
Franklin County									
Boones Mill	05	1434EST			0	0			Hail(1.00)
Roanoke County									
5 SE Cave Spg	05	1443EST			0	0			Hail(0.75)
Bedford County									
Hardy	05	1515EST			0	0			Hail(0.75)
Bedford County									
8 SW Moneta	05	1515EST			0	0	0		Thunderstorm Wind
Bedford County									
Moneta	05	1520EST			0	0	35K		Thunderstorm Wind
Bedford County									
Forest	05	1530EST			0	0			Hail(0.75)
Lynchburg (C)									
Lynchburg	05	1600EST			0	0			Hail(0.75)

Thunderstorms during the afternoon of the 5th produced damaging winds and hail up to one inch in diameter .

Thunderstorm winds downed numerous trees and power lines in Moneta. Damage was done to the roofs of several homes and a shed was blown down. Thunderstorm winds also blew a tree onto Route 666, eight miles southwest of Moneta.

Pittsylvania County

1 S Chatham to 1 S Chalk Level	20	1655EST			0	0			Hail(1.00)
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Thunderstorms during the afternoon of the 20th produced hail up to one inch in diameter .

Montgomery County

Elliston	23	1550EST			0	0			Hail(1.00)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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VIRGINIA, Southwest

Rockbridge County

2 SW Natural Bridge Sta	23	1555EST			0	0	0		Thunderstorm Wind
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Rockbridge County

Glasgow	23	1600EST			0	0	5K		Lightning
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Franklin County

3 NE Burnt Chimney	23	1625EST			0	0	0		Thunderstorm Wind
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Thunderstorms during the afternoon of the 23rd produced damaging winds, dangerous lightning, and hail up to one inch in diameter.

Thunderstorm winds downed large trees 3 miles northeast of Burnt Chimney and trees and power lines 2 miles southwest of Natural Bridge Station.

Lightning struck the town hall building in Glasgow, damaging the computers in the building.

Giles County

Mountain Lake	25 26	2315EST 0030EST			0	0	15K		Flash Flood
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Giles County

Pearisburg	25 26	2315EST 0030EST			0	0	150K		Flash Flood
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Giles County

Pembroke	25 26	2315EST 0030EST			0	0	750K		Flash Flood
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Thunderstorms during the late evening of the 25th and the early morning of the 26th produced significant flash flooding in Pearisburg and especially in Pembroke in Giles County. In Pearisburg numerous roads were flooded with several washed away. Damage was done to four businesses and several residences. In Pembroke, Doe Creek flooded numerous residences with eight businesses reporting water damage. This included a tire business that was completely destroyed and an auto dealership which suffered significant damage. Flash flooding also damaged the hotel at Mountain Lake.

WASHINGTON, Northeast

Spokane County

1 S Millwood	07	0000PST			0	0	15K		Lightning
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Lightning struck the roof of an apartment building north of the intersection of Sprague and Argonne, igniting a fire that burned a 6-by-22 foot hole in the roof of the apartment. The residents of the apartment escaped without injury.

Grant County

Ephrata	07	2200PST			0	0	150K		Lightning
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A direct hit by lightning set a two-story home on Johnson Road ablaze, completely destroying the home and its contents. The family living in the home escaped without injury.

Spokane County

Deer Park	08	0240PST			0	0	6K		Lightning
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Lightning caused extensive damage to the electrical system of one of the wells in Deer Park's water system.

WASHINGTON, Northwest

NONE REPORTED.

WASHINGTON, Southeast

Klickitat County

7 NE Lyle	07	1555PST			0	0	1K		Thunderstorm Wind
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Strong winds from a thunderstorm caused a suspension bridge to collapse across the Klickitat River between Lyle and Pitt.

Benton County

Kennewick	07	1815PST			0	0			Hail(0.88)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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WASHINGTON, Southeast

Benton County

Kennewick	07	1825PST			0	0	20K		Thunderstorm Wind
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Ham radio operator reported trees blown into cars and homes.

Benton County

Prosser	07	2020PST			0	0			Hail(0.75)
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Benton County

Hanford	07	2115PST			0	0			Hail(0.75)
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Franklin County

Pasco	07	1821PST			0	0	770K		Thunderstorm Wind (G66) ^M
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Strong wind gusts from a thunderstorm flipped two small airplanes at the Tri-Cities airport in Pasco. Five feeding bunks at DeVries Dairy were also destroyed. The winds knocked out power to thousands of residents in the county, and toppled many trees.

Franklin County

Pasco	07	1830PST			0	0			Hail(0.75)
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Hail from this storm severely damaged thousands of acres of crops in Pasco. Some of the hardest hit crops were tomatoes, cucumbers, corn, green beans, and peppers.

Franklin County

10 NNE Pasco	07	1830PST			0	0			Thunderstorm Wind (G73) ^M
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WAZ024-024>030

East Columbia River Gorge - East Slopes Southern Cascades - Kittitas Valley - Yakima Valley - Lower Columbia Basin - Blue Mountain Foothills - Northwest Blue Mountains

10	0000PST				0	0			Excessive Heat
14	0000PST				0	0			Excessive Heat

A record breaking heat wave shattered many daily record high temperatures across the state. Some of the warmest locations include Prosser with 111 degrees, Walla Walla with 110 degrees, and Sunnyside with 109 degrees.

Benton County

9 NNE Prosser	13	0200PST 1100PST			0	0			Wild/Forest Fire
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The Crosby Road Fire, sparked by lightning, consumed 2,000 acres and one structure.

WASHINGTON, Southwest

NONE REPORTED.

WEST VIRGINIA, East

WVZ048>053-055

Grant - Mineral - Hampshire - Morgan - Berkeley - Jefferson - Hardy

02	1000EST				0	0			Excessive Heat
04	2000EST				0	0			Excessive Heat

High pressure remained stationary off the Delmarva coastline during the 1st week of July. This resulted in a prolonged period of hot and humid weather across the Mid Atlantic region. Between July 2nd and 4th, high temperatures rose into the lower to middle 90s and dew points reached into the lower 70s. This resulted in heat index values reaching 100 to 110 degrees during the afternoon.

Pendleton County

Harper	02	1736EST			0	0			Hail(1.00)
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Quarter sized hail fell.

Hardy County

Moorefield	02	2105EST			0	0			Hail(0.75)
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Dime sized hail fell.

Thunderstorms with large hail moved through Pendleton and Hardy Counties on the evening of the 2nd. In Pendleton County, quarter sized hail was reported in Harper. In Hardy County, dime sized hail fell in Moorefield.

Hampshire County

Levels	09	1650EST			0	0	2K		Thunderstorm Wind
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A tree was downed onto a power line.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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WEST VIRGINIA, East

Morgan County

Central Portion	09	1654EST			0	0	1K		Thunderstorm Wind
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Tree branches were downed along Route 522.

Jefferson County

Shepherdstown	09	1746EST			0	0	5K		Thunderstorm Wind
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Trees were downed in town and along Route 230.

Thunderstorms with damaging winds moved through the Eastern Panhandle between 5 and 7 PM EDT. In Hampshire County, a tree was downed onto a power line in Levels. In Morgan County, tree branches were downed along Route 522. In Jefferson County, trees were downed in Shepherdstown and along Route 230.

Hampshire County

Levels	23	1618EST 1718EST			0	0			Flash Flood
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Two feet of water covered a road and small creeks overflowed their banks.

Thunderstorms with heavy rainfall moved across Hampshire County during the evening of the 23rd. In Hampshire County, small creeks and streams overflowed their banks after heavy downpours. Two feet of water covered a road in Levels.

Grant County

Countywide	27	0730EST 1030EST			0	0			Flash Flood
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Several roads, creeks, and basements were flooded.

Showers and thunderstorm with very heavy rainfall moved through Grant County during the morning of the 27th. Widespread flooding was reported in and around Bayard. Several basements were flooded. Al Brown Road was closed by high water. Buffalo Creek overflowed its banks in several places and rose high enough to touch the bottom of the Route 90 bridge. Rainfall totals included 3.02 inches in Bayard and 2.35 inches in Petersburg.

WVZ048>053-055

Grant - Mineral - Hampshire - Morgan - Berkeley - Jefferson - Hardy

	28	1000EST			0	0			Excessive Heat
	29	2000EST							

A large area of high pressure sat off the Mid-Atlantic coast during the last week of July. This caused a warm and moist south wind to blow into the region for several days, resulting in another heat wave. The hottest days were the 28th and 29th of July when temperatures rose into the 90s and heat index values reached 98 to 110 degrees.

WEST VIRGINIA, North

Marshall County

Moundsville	01	1740EST 2000EST			0	0	5K		Flood
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Heavy thunderstorm rains produced street flooding up to two feet deep in Moundsville.

Marshall County

Moundsville	01	1745EST			0	0	2K		Thunderstorm Wind
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Thunderstorm winds downed a few trees.

Brooke County

Wellsburg	04	1445EST			0	0	5K		Thunderstorm Wind
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Thunderstorm winds downed several trees.

Monongalia County

Morgantown	04	2250EST			0	0			Hail(0.75)
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Monongalia County

Daybrook	23	1550EST 1800EST			0	0			Flood
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Torrential thunderstorm rains produced minor roadway flooding from Upper Day Run along State Route 218.

WEST VIRGINIA, Southeast

Greenbrier County

Lewisburg	02	1310EST			0	0			Hail(0.88)
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Greenbrier County

1 N Lewisburg	02	1328EST			0	0			Hail(0.75)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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WEST VIRGINIA, Southeast

Summers County									
3.5 NW Lick Creek	02	1330EST			0	0			Hail(0.75)
Greenbrier County									
Lewisburg	02	1335EST			0	0	0		Thunderstorm Wind
Monroe County									
Sinks Grove	02	1356EST			0	0			Hail(0.75)
Monroe County									
1 NW Union	02	1420EST			0	0	0		Thunderstorm Wind
Monroe County									
1 NW Union	02	1425EST			0	0			Hail(0.80)
Mercer County									
Kellysville	02	1430EST			0	0			Hail(1.00)

Thunderstorms during the afternoon of the 2nd produced hail up to quarter size and damaging winds.

Thunderstorm winds downed trees in Lewisburg and 1 mile northwest of Union.

Greenbrier County									
Alderson	24	2045EST 2200EST			0	0	5K		Flash Flood

Thunderstorms during the evening of the 24th produced flash flooding in Alderson in Greenbrier County. Several roads in town were reported under water and a number of homes reported flooded basements.

WEST VIRGINIA, West

Raleigh County									
Beckley	02	1537EST			0	0			Hail(1.00)
Clay County									
2 N Clay	02	1540EST			0	0			Hail(0.75)
Raleigh County									
Southwest Portion	02	1545EST 1800EST			0	0	5K		Flash Flood
Rains of 2 to 4 inches fell between 1430 and 1730E in the vicinity of Lester, Crab Orchard, and Sophia. Main Street in Sophia had 1 to 2 feet of water for a brief time. No evacuations were required, but several basements and roads were flooded.									
Boone County									
Jeffrey	02	1600EST			0	0			Hail(1.00)
Boone County									
Whitesville	02	1604EST			0	0			Hail(1.25)
Nicholas County									
Craigsville	02	1620EST			0	0			Hail(1.25)
Nicholas County									
Summersville	02	1631EST			0	0			Hail(0.75)
Logan County									
Amherstdale	02	1655EST			0	0			Hail(1.00)
Pocahontas County									
2 E Linwood	02	1720EST			0	0			Hail(0.88)
Nickel size hail fell on the mountain ridge at Snowshoe.									
Mcdowell County									
Welch	03	1740EST			0	0			Hail(0.75)
Wyoming County									
Cyclone	03	1901EST			0	0			Hail(1.00)
Randolph County									
Beverly	09	1700EST			0	0	1.5K		Lightning

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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WEST VIRGINIA, West

Lightning struck the steeple of the Presbyterian Church, built after the Civil War. Quick action by fire fighters saved the wooden church.

Upshur County

North Portion

09	2345EST				0	0	5K		Flash Flood
10	0200EST								

Numerous roadways were flooded by small streams in the Lorentz to Nebo vicinity. A few basements were also flooded.

Randolph County

5 W Coalton to Elkins

10	0015EST				0	0	75K		Flash Flood
	0200EST								

Water damaged carpets and the wooden floors at the YMCA on Davis Ave. in Elkins.

Rains of 2 to 3.75 inches fell along the Route 33 corridor in Upshur County, on east, to Elkins of Randolph County. Buckhannon measured 3.6 inches of rain, while Elkins had 3.25 inches. Two inches of rain fell in Elkins during just an hour. No evacuations were required.

Logan County

Lyburn to Man

19	0730EST				0	0	800K		Flash Flood
	0930EST								

Rains of 2.5 to 3.5 inches in less than 3 hours, flooded creeks and roads. A coal sediment pond, about 10 feet deep, 100 feet wide, and 250 feet long, overflowed along Winding Shoals Branch. The sludge rushed down the hollow, damaging around a dozen homes. About 35 people lived in the hollow. Luckily, no one was injured. One woman escaped out the back door of a mobile home and up a hillside. She said, "I just knew we were going to die." About 10 vehicles were destroyed. The recovery efforts included the coal company buying new homes and vehicles for the residents.

Boone County

Turtle Creek to Ramage

19	0830EST				0	0	25K		Flash Flood
	0945EST								

Rains of 2 to 3 inches fell in less than 3 hours. Creeks flooded roads and surrounded mobile homes. Routes 10 and 16 were affected in this vicinity. Fire fighters evacuated residents along Low Gap Hollow, as water threatened homes. In the aftermath, mud, rocks, and logs covered Route 16 in Low Gap Hollow.

Fayette County

Oak Hill to Scarbro

25	1500EST				0	0	2K		Flash Flood
	1700EST								

Several roads were flooded and closed after 2 to 3 inches of rain. No evacuations occurred. Homes were not damaged.

Logan County

Blair

27	1310EST				0	0	25K		Flash Flood
	1415EST								

Spruce Fork flooded after 2 to 3 inches of rain in 3 hours. Logan County Emergency Services said, an overflow of a coal sediment pond also created some standing water in basements and yards.

WISCONSIN, Extreme Southwest

NONE REPORTED.

WISCONSIN, Northeast

Vilas County

10 W Land O Lakes

17	1520CST				0	0			Thunderstorm Wind (G60)
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Thunderstorms developed in a warm and humid atmosphere along the outflow of an earlier thunderstorm. One of the storms uprooted eight 80 foot tall pine trees. Two of the trees landed on cabins and one destroyed a car.

Vilas County

Eagle River

21	0230CST				0	0			Thunderstorm Wind (G50)
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Vilas County

Lac Du Flambeau

21	0230CST				0	0			Thunderstorm Wind (G50)
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Oneida County

Lake Tomahawk to Minocqua

21	0340CST				0	0			Thunderstorm Wind (G50)
	0343CST								

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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WISCONSIN, Northeast

Oneida County									
Rhinelanders	21	0340CST			0	0			Thunderstorm Wind (G50)
Oneida County									
10 N Tripoli	21	0355CST			0	0			Thunderstorm Wind (G60)
Vilas County									
Arbor Vitae	21	0600CST			0	0			Lightning
Thunderstorms developed along a warm front and downed numerous trees and power lines in north central Wisconsin. Lightning from one of the thunderstorms set fire to a home in Arbor Vitae, destroying the entire structure.									
Vilas County									
Manitowish Waters	21	1442CST			0	0			Hail(0.75)
Vilas County									
5 N Boulder Jct	21	1500CST			0	0			Hail(0.75)
Vilas County									
Eagle River to Phelps	21	1510CST			0	0			Thunderstorm Wind (G50)
Oneida County									
.2 N Lake Tomahawk	21	1515CST			0	0			Thunderstorm Wind (G52)
Forest County									
Alvin	21	1540CST			0	0			Thunderstorm Wind (G50)
Florence County									
Tipler to Spread Eagle	21	1555CST			0	0	5K		Thunderstorm Wind (G50)
Marathon County									
Edgar	21	1710CST			0	0			Thunderstorm Wind (G52)
Lincoln County									
Merrill	21	1715CST			0	0			Thunderstorm Wind (G50)
Langlade County									
Elcho	21	1720CST			0	0			Thunderstorm Wind (G50)
Marathon County									
(Auw)Wausau Muni Arp 4 S Wausau	21	1728CST 1740CST			0	0			Thunderstorm Wind (G54) ^M
Langlade County									
Antigo	21	1755CST			0	0			Thunderstorm Wind (G50)
Menominee (C)									
Countywide	21	1810CST			0	0			Thunderstorm Wind (G50)
A cold front moved into a hot, humid and unstable airmass across Wisconsin leading to the development of severe thunderstorms in the central and north central parts of the state. High winds tore the roof off a warehouse in Wausau, otherwise damage from the storms consisted mainly of downed trees and powers lines. As of noon the next day there were still 2,200 customers without power in north central Wisconsin according to a press release from a utility company. As many as 7,500 customers lost power at some time during the storms.									
New record high temperatures were set at Appleton (Outagamie co.) 99 degrees; Antigo (Langlade co.), Sturgeon Bay (Door co.) and Manitowoc (Manitowoc co.) 97 degrees and at Green Bay (Brown co.) 96 degrees. Wausau tied its record high of 95 degrees.									
Oneida County									
Minocqua to Lake Tomahawk	27	1635CST 1640CST			0	0			Thunderstorm Wind (G52)
Oneida County									
Rhinelanders	27	1640CST			0	0			Thunderstorm Wind (G50)
Vilas County									
St Germain	27	1640CST			0	0			Thunderstorm Wind (G50)
Lincoln County									
Tomahawk	27	1647CST			0	0			Hail(0.88)

Storm Data and Unusual Weather Phenomena

July 2002

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WISCONSIN, Northeast

Florence County 2 NE Long Lake	27	1720CST			0	0			Thunderstorm Wind (G50)
Forest County Crandon	27	1725CST			0	0			Thunderstorm Wind (G50)
Forest County 1.5 S Laona to Laona	27	1745CST 1800CST			0	0			Thunderstorm Wind (G51) ^M

Thunderstorms developed into a line as they entered a very unstable airmass over northern Wisconsin. These storms produced strong winds that downed numerous trees and power lines as they passed through north central Wisconsin. Heavy rains and large hail were also reported with the storms.

Marathon County 3 N Abbotsford to Athens	28	2039CST 2055CST			0	0			Thunderstorm Wind (G52)
Marathon County Rib Falls	28	2110CST			0	0			Thunderstorm Wind (G50)
Marathon County Edgar	28	2112CST			0	0			Thunderstorm Wind (G52)
Marathon County Athens	28	2119CST			0	0			Thunderstorm Wind (G52)
Marathon County Marathon	28	2122CST			0	0			Thunderstorm Wind (G50)
Lincoln County 8 W Merrill to 4 N Merrill	28	2124CST 2134CST			0	0			Thunderstorm Wind (G52)
Marathon County 4 SW Wausau	28	2129CST			0	0			Thunderstorm Wind (G50)
Marathon County Rib Falls	28	2140CST			0	0			Thunderstorm Wind (G50)

A thunderstorm complex that moved from southern Minnesota into a very unstable airmass over Wisconsin developed into a series of bow echoes that made their way across the state. Strong winds from these storms downed numerous trees and power lines as they moved through central and parts of north central Wisconsin. In western Marathon county a weather spotter for a local television station reported frequent wind gusts to 60 mph for about 10 minutes as the storms passed.

Lincoln County 10.5 NW Merrill to 9.5 NW Merrill	30	1747CST 1750CST	1.2	150	0	0			Tornado (F0)
Marathon County 6 N Spencer to Abbotsford	30	1748CST 1750CST			0	0			Thunderstorm Wind (G60)
Marathon County Edgar	30	1800CST			0	0			Thunderstorm Wind (G50)
Lincoln County 5 N Merrill to 9.5 NE Merrill	30	1808CST 1828CST	9	200	0	0	100K		Tornado (F0)
Lincoln County Merrill to 1 NE Merrill	30	1810CST 1815CST			0	0	25K		Thunderstorm Wind (G60)
Lincoln County Irma	30	1813CST			0	0			Hail(0.75)
Lincoln County Gleason to 1 SW Doering	30	1820CST 1823CST			0	0	25K		Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>WISCONSIN, Northeast</u>									
Marathon County									
3 W (Cwa)Cen Wi Arpt .8 W (Cwa)Cen Wi Arpt	30	1822CST 1828CST	2.2	100	0	0			Tornado (F0)
Marathon County									
Wausau Arpt to Wausau	30	1824CST 1826CST			0	0			Thunderstorm Wind (G52) ^M
Lincoln County									
8.5 NE Merrill	30	1825CST	0.1	25	0	0	5K		Tornado (F0)
Langlade County									
Antigo	30	1835CST			0	0			Thunderstorm Wind (G50)
Portage County									
Stevens Pt	30	1845CST			0	0			Thunderstorm Wind (G50)
Shawano County									
Countywide	30	1850CST 1938CST			0	0	100K		Thunderstorm Wind (G55)
Lincoln County									
Tomahawk	30	1852CST			0	0			Hail(1.00)
Menominee (C)									
Countywide	30	1858CST 1913CST			0	0			Thunderstorm Wind (G55)
Waushara County									
Coloma	30	1920CST			0	0			Thunderstorm Wind (G50)
Oconto County									
6 E Suring to Little Suamico	30	1925CST 1955CST			0	0	75K		Thunderstorm Wind (G60)
Waushara County									
Wautoma to 1 NE Mt Morris	30	1928CST 1930CST			1	1			Thunderstorm Wind (G55)
		M11CA							
Waushara County									
Saxeville	30	1945CST			0	0			Thunderstorm Wind (G52) ^M
Brown County									
Countywide	30	1950CST 2015CST			0	0			Thunderstorm Wind (G50)
Winnebago County									
Winneconne	30	2000CST			0	0			Thunderstorm Wind (G57) ^M
Calumet County									
Sherwood	30	2010CST			0	0			Thunderstorm Wind (G57) ^M
Door County									
Sturgeon Bay	30	2010CST			0	0			Hail(1.00)
Outagamie County									
Kimberly	30	2013CST			0	0			Thunderstorm Wind (G50)
Kewaunee County									
Countywide	30	2015CST 2040CST			0	0			Thunderstorm Wind (G55)
Winnebago County									
Neenah	30	2015CST			0	0	60K		Thunderstorm Wind (G56) ^M
Marinette County									
2 SE Coleman to Peshtigo	30	2035CST 2055CST			0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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WISCONSIN, Northeast

Door County

Ellison Bay to Washington Is	30	2045CST 2055CST			0	0			Thunderstorm Wind (G55)
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Manitowoc County

Manitowoc	30	2055CST			0	0			Thunderstorm Wind (G50)
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Thunderstorms moved through Wisconsin in very warm and unstable air ahead of a cold front. Severe thunderstorm winds and tornadoes downed trees and power lines and damaged buildings across a large swath of central, north central and east central Wisconsin. Thousands of trees and power lines were downed by high winds from the storms. An 11 year old Boy Scout was killed and another was seriously injured when trees landed on their tent at Camp Napowan (Waushara co.).

High winds pushed a house off its foundation and blew a boat and trailer into a neighbor's yard near Merrill (Lincoln co.). Some downed trees damaged or destroyed buildings or vehicles when they fell. A church steeple was toppled by high winds and a tree landed on an SUV, boat and trailer in Neenah (Winnebago co.) According to utility company news releases, nearly 20,000 customers were without power at some time during the storms. As of noon the next day there were still about 3,250 customers in the Green Bay (Brown co.) area without electricity.

The hardest hit areas appeared to be in Marathon, Lincoln, Shawano and Oconto counties. Three of the four confirmed tornadoes touched down in Lincoln county and the other touched down in Marathon county. A tornado that touched down 5 miles north of Merrill (Lincoln co.) skipped along the ground for 9 miles, destroying a barn and another structure, tearing roofs from some buildings and moving others from their foundations. Another tornado briefly touched down about 8.5 miles northeast of Merrill demolishing a mobile home and snapping trees and tree limbs. The other Lincoln county tornado touched down 10 miles northwest of Merrill and skipped along the ground for 1.25 miles. A tornado skipped along the ground for 2 miles in Mosinee (Marathon co.) causing significant tree damage on a hill east of the Wisconsin River.

WISCONSIN, Northwest

Washburn County

6 NW Minong	21	0430CST			1	0			Lightning
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Lightning struck a nearby tree and killed a man while asleep in a tent. M31CA

Ashland County

Glidden	21	1401CST			0	0			Hail(1.00)
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Ashland County

Glidden	21	1401CST			0	0			Thunderstorm Wind (G50)
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Numerous trees and power lines were blown down.

Sawyer County

Exeland	21	1410CST			0	0			Hail(1.75)
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Iron County

Mercer	21	1435CST			0	0			Thunderstorm Wind (G50)
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Numerous trees and power lines were blown down.

Price County

2 W Phillips	21	1442CST			0	0			Hail(0.88)
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A few trees were also blown down.

Price County

1 E Fifield	21	1505CST			0	0			Thunderstorm Wind (G50)
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Numerous trees were blown down and blocking Hwy 70.

Price County

Phillips	21	1514CST			0	0			Hail(0.75)
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Burnett County

Danbury	27	1340CST			0	0			Thunderstorm Wind (G60)
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Numerous trees were blown down.

Burnett County

Webb Lake	27	1400CST			0	0			Thunderstorm Wind (G60)
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Numerous trees were blown down.

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<u>WISCONSIN, Northwest</u>									
Douglas County Wascott	27	1440CST			0	0			Thunderstorm Wind (G60)
			Numerous trees were blown down.						
Sawyer County Couderay	27	1510CST			0	0			Thunderstorm Wind (G60)
			Numerous trees and power lines were blown down.						
Sawyer County Radisson	27	1515CST			0	0			Thunderstorm Wind (G60)
			Numerous trees and power lines were blown down.						
Sawyer County Loretta	27	1540CST			0	0			Thunderstorm Wind (G60)
			Numerous trees were blown down.						
Sawyer County 14 E Winter	27	1545CST			0	0			Thunderstorm Wind (G60)
			Trees were blown down at Big Bear Lodge.						
Ashland County 4 SW Butternut	27	1555CST			0	0			Thunderstorm Wind (G60)
			Trees and power lines were blown down.						
Price County 5 SW Phillips	27	1557CST			0	0			Thunderstorm Wind (G60)
			Numerous trees and power lines were blown down.						
Price County 6 S Prentice	27	1606CST			0	0			Thunderstorm Wind (G60)
			Trees were blown down.						
Iron County 2 SE Powell	27	1630CST			0	0			Thunderstorm Wind (G60)
			Numerous trees were blown down.						
Ashland County 2 S Glidden	30	1834CST			0	0			Hail(0.75)
Ashland County Glidden	30	1850CST			0	0			Hail(1.00)
Douglas County 7 E Superior	31	0838CST			0	0			Thunderstorm Wind (G56) ^M
Douglas County 12 S Superior to Superior	31	0900CST			0	0			Thunderstorm Wind (G55)
			Trees were blown down at Pattison State Park.						
Douglas County Blueberry	31	0903CST			0	0			Thunderstorm Wind (G55)
			Trees were blown down.						
Bayfield County 3 S Washburn	31	0920CST			0	0			Hail(0.88)
Price County 2 S Fifield	31	1200CST			0	0			Thunderstorm Wind (G55)
			Trees and power lines were blown down.						

WISCONSIN, Southeast

WIZ046>047-051- 056>060-062>072	Marquette - Green Lake - Fond Du Lac - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha	01 03	0600CST 1800CST	0	0			Excessive Heat
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

WISCONSIN, Southeast

A heat wave, which started on June 30, 2002, continued through the first three days of July, 2002, across south-central and southeast Wisconsin. Maximum temperatures were in the lower to mid 90s and overnight lows in the upper 60s to mid 70s, both about 10 to 15 degrees above normal. A 62-year-old City of Milwaukee man died due to secondary heat-related stress (indirect death). No other deaths were reported, however, dozens of people received first-aid treatment at various community festivals. Heat index values were in the 95 to 104 range. Milwaukee Mitchell Field recorded a minimum of 75 on July 3rd, tying the old record set back in 1965 and 1921.

WIZ046>047-051>052-056>060-062>072

Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha

08	1100CST 2359CST	0	0	20K	10K	10K	10K	10K	Excessive Heat
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A single-day heat wave affected a few counties in south-central and southeast Wisconsin, resulting in about a dozen people being treated for the affects of heat at local hospitals. Maximum temperatures were in the lower to mid 90s, and morning lows were in the lower 70s. Afternoon heat index values reached 105 to 108 for at least 3 hours in Rock, Walworth, Racine, and Kenosha counties, meeting the official threshold value for daytime heat indices which is 105 or higher for 3 hours or more. Elsewhere across south-central and southeast Wisconsin heat indices were in the 95 to 104 range. Southwest winds of 13 to 22 kts (15 to 25 mph) offered little relieve.

Sheboygan County

08	1145CST	0	0	20K					Thunderstorm Wind (G61)
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Sheboygan County

08	1630CST	0	0	10K					Thunderstorm Wind (G61)
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Sheboygan County

08	1800CST 2100CST	0	0						Urban/Sml Stream Fld
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Rock County

08	1845CST	0	0						Thunderstorm Wind (G52)
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Washington County

08	1913CST 1916CST	0	0	10K					Thunderstorm Wind (G56)
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Washington County

08	1923CST	0	0	10K					Thunderstorm Wind (G56)
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Washington County

08	1927CST	0	0						Thunderstorm Wind (G52)
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Fond Du Lac County

08	1930CST 2130CST	0	0	10K					Flash Flood
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Flash flooding closed some roads and washed out some gravel shoulders on the south side of the city of Fond du Lac. Rainfall amounts of 3 to 5 inches were noted, based on WSR-88D estimates and spotter reports. Water depths on US Hwy 41 between 151 and 175 reached 4 to 5 feet.

Ozaukee County

08	1940CST 1950CST	0	0						Thunderstorm Wind (G52)
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Milwaukee County

08	1942CST	0	0						Thunderstorm Wind (G56)
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Waukesha County

08	2200CST	0	0						Thunderstorm Wind (G52)^M
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Kenosha County

09	0000CST 0200CST	0	0						Urban/Sml Stream Fld
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A series of severe thunderstorms moved southeast through southeast Wisconsin with powerful winds that toppled trees and power lines, as well as damaging some structures. Damage to power lines resulted in the loss of electrical power to 12,000 customers in the Milwaukee area. Northwest of Beechwood (Sheboygan Co.), the winds destroyed one small metal shed, and rolled over a propane tank. Northeast of Ootsburg (Sheboygan Co.), the powerful winds toppled dozens of trees near Kohler/Andrea State Park, and damaged a couple homes. In Washington County, a car and boat in Hartford were damaged by toppled trees, and a shed near Jackson was blown down. Heavy rains associated with training thunderstorm cells created urban flooding in the city of Kenosha when .71 inches of rain fell in only 11 minutes (at the rate of 5.07 inches per hour). Likewise, urban flooding developed in the city of Sheboygan when 1.81 inches of rain fell in 70 minutes ending at 1910CST (...and 3.57 inches in past 5 hours). Synoptically, a

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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WISCONSIN, Southeast

mesoscale convective system moved southeast through Wisconsin overnight on the 7th and in the early morning hours of the 8th. The trailing edge of this system brushed Sheboygan county with isolated severe weather at mid-day. The outflow boundary left over from the MCS focused new thunderstorm development between Fond du Lac and Milwaukee as the low-level jet intensified while a short-wave aloft moved through the area.

WIZ046>047-051-056>058-062>072

Marquette - Green Lake - Fond Du Lac - Sauk - Columbia - Dodge - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha

21	0000CST 2359CST	0	0					Excessive Heat
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Excessive heat affected most of south-central and southeast Wisconsin on July 21st. This turned out to be the hottest day of the summer of 2002 for this area. Interestingly, no heat-related deaths were reported up to the initial time of the publication of this report. After overnight lows in the 70s, afternoon temperatures rose to the mid 90s to around 100, about 10 to 15 degrees above normal for the minimums, and 15 to 20 degrees above normal for the maximums. Afternoon heat indices generally peaked in the 105 to 110 range for several hours, but briefly hit 112 in Racine, Janesville, and Wisconsin Dells. Milwaukee Mitchell Field tied its daily high minimum of 78 degrees, set back in 1932. Locations to hit the century mark for maximum temperatures were: 101 in West Allis, and 100 at Mt. Mary College, both in Milwaukee County. Elsewhere, Delavan (Walworth Co.) and Richfield (Washington Co.) topped out at 100. Milwaukee Mitchell Field and Madison Truax Field peaked at 98.

Racine County

Raymond

26	0100CST	0	0	3K	2K			Thunderstorm Wind (G56)
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WIZ066

Milwaukee

26	1000CST 1800CST	0	0					Excessive Heat
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An isolated severe thunderstorm pulsed up over Racine County, resulting in wind damage to some corn crop near Raymond, as well as some roof shingle damage to a few homes. In Milwaukee County, a 45-year-old male died from heat-related causes. The medical examiner indicated that heat was a secondary, or contributing cause of death (indirectly-related). This excessive heat event didn't meet the daytime heat index criteria, therefore it isn't an official excessive heat event. Maximum temperatures in Milwaukee County were only in the upper 80s to lower 90s, and heat indices were below 105.

Waukesha County

Waukesha

27	0000CST 0300CST	0	0					Urban/Sml Stream Fld
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Slow-moving thunderstorms over the city of Waukesha dumped 2.36 inches of rain from 2330CST on July 26th to 0110CST on July 27th, resulting in urban flooding. Water depths on some city streets reached 1 foot.

Iowa County

Cobb

27	2147CST	0	0					Hail(0.75)
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Iowa County

Dodgeville

27	2203CST	0	0					Thunderstorm Wind (G52)
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Iowa County

**Hollandale to
4 ESE Hollandale**

27	2245CST 2255CST	0	0					Thunderstorm Wind (G56)
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Dane County

1 S Stoughton

27	2250CST 2254CST	0	0					Thunderstorm Wind (G52)
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Rock County

Edgerton

27	2315CST	0	0					Thunderstorm Wind (G52)
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Rock County

5 E Milton

27	2320CST 2330CST	0	0	10K				Thunderstorm Wind (G56)
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Scattered severe storms with large hail and damaging winds affected parts of south-central Wisconsin during the overnight hours. The storms were triggered by an old outflow boundary that pushed southeast from earlier convection in southeast Minnesota. Strong low-level warm-air advection fueled the storms, but fortunately, a cap prevented more widespread severe weather.

Iowa County

3 E Arena

30	1943CST	0	0					Hail(0.75)
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Dane County

Black Earth

30	1955CST	0	0					Thunderstorm Wind (G56)
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Fond Du Lac County

Ripon

30	2000CST	0	0					Thunderstorm Wind (G52)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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WISCONSIN, Southeast

Marquette County

3.6 NW Budsin	30	2030CST			0	0			Thunderstorm Wind (G56)
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A line of thunderstorms, some severe, developed along a cold front moving east across Wisconsin. Isolated severe weather resulted in the form of large hail and damaging winds. The powerful winds toppled trees and felled tree branches snapped several power lines. Maximum temperatures were in the lower 90s with surface dewpoints around 70.

WISCONSIN, Southwest

Grant County

West Portion	06	0920CST 1220CST			0	0	1.5K	3.5K	Flash Flood
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Richland County

West Portion	06	0956CST 1115CST			0	0	1K	2.5K	Flash Flood
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Rainfall totals of 3 to 6 inches caused localized flash flooding. Law enforcement officials reported an anhydrous ammonia tank floating in 2 to 3 feet of water near Beetown (Grant County).

Taylor County

5 W Medford	21	1639CST			0	0			Thunderstorm Wind (G56)
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Buffalo County

Cream	21	1655CST			0	0			Thunderstorm Wind (G53)
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Clark County

Longwood	21	1740CST			0	0			Thunderstorm Wind (G52)
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Clark County

3 W Loyal	21	1745CST			0	0			Thunderstorm Wind (G53)
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Monroe County

Sparta	21	1917CST			0	0			Thunderstorm Wind (G52)
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Jackson County

Alma Center	21	1920CST			0	0			Thunderstorm Wind (G55)
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Winds estimated at 60 to 65 mph knocked down several trees and power lines.

Crawford County

Mt Sterling	27	2034CST			0	0	1.2K	2K	Thunderstorm Wind (G56) ^M
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An amateur radio operator measured wind gusts of 65 mph, which knocked down some trees and power lines.

Buffalo County

6 S Mondovi	28	1830CST			0	0			Hail(0.88)
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Buffalo County

Nelson	28	1859CST			0	0	0.75K		Thunderstorm Wind (G56) ^M
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Buffalo County

Nelson	28	1900CST			0	0			Thunderstorm Wind (G50)
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Storm spotters measured wind gusts of 65 mph, which blew down large limbs and branches.

Buffalo County

Buffalo City	30	1631CST			0	0	0.50K		Hail(0.88)
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Taylor County

Gilman	30	1638CST			0	0	1.5K		Hail(1.75)
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La Crosse County

La Crosse	30	1739CST			0	0	2K		Thunderstorm Wind (G57)
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Clark County

Owen	30	1740CST			0	0	7.5K	5K	Thunderstorm Wind (G61)
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Clark County

Owen	30	1745CST			0	0	4K	8K	Thunderstorm Wind (G70)
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Clark County

Abbotsford	30	1747CST			0	0	15K		Thunderstorm Wind (G61)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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WISCONSIN, Southwest

Clark County Abbotsford	30	1750CST			0	0	7K		Thunderstorm Wind (G61)
La Crosse County West Salem	30	1751CST			0	0	1K		Thunderstorm Wind (G55)
Vernon County 5 S Genoa	30	1800CST			0	0	0.75K		Thunderstorm Wind (G55)
Clark County 1 N Riplinger	30	1810CST			0	0	3.5K		Thunderstorm Wind (G70)
Clark County Colby	30	1820CST			0	0	5K	20K	Thunderstorm Wind (G61)
Adams County New Rome	30	1905CST			0	0	25K		Thunderstorm Wind (G70)

Winds estimated at 70 to 80 mph knocked down numerous trees and power lines. Some buildings sustained damaged in Abottsford (Clark County). A maple tree farm near Colby (Clark County) was hit hard by the severe winds, with an estimated 20 percent of the trees a total loss. In Adams County, a mobile home park was heavily damaged near the town of New Rome.

WISCONSIN, West

Rusk County 6 NW Ladysmith to 12 N Bruce	21	1410CST			0	0			Hail(1.75)
Dunn County 4 S Ridgeland	21	1558CST			0	0			Hail(0.75)
Rusk County 5 NW Bruce	27	1515CST			0	0			Thunderstorm Wind (G52)
Power lines down.									
Pepin County Pepin	28	1720CST			0	0			Hail(0.75)
Pepin County 3 SE Stockholm	28	1734CST			0	0			Hail(1.75)
St. Croix County Somerset	28	1810CST			0	0			Thunderstorm Wind (G52)
Trees down.									
Pepin County Pepin	28	1820CST			0	0			Thunderstorm Wind (G50)
Large branches and power lines down.									
St. Croix County New Richmond Arpt	28	1825CST			0	0			Thunderstorm Wind (G51) ^M
St. Croix County Deer Park	28	1828CST			0	0	10K		Thunderstorm Wind (G55)
Numerous trees down, including one on a truck and boat.									
Eau Claire County Eau Claire	28	1855CST			0	0			Thunderstorm Wind (G52)
Scattered trees down.									
Eau Claire County 6 E Altoona	28	1910CST			0	0			Thunderstorm Wind (G52)
Several trees down.									
Dunn County Knapp	30	1555CST			0	0			Hail(0.75)
Pierce County Spring Valley	30	1555CST			0	0			Hail(0.75)

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>WISCONSIN, West</u>									
Pierce County									
Olivet	30	1630CST			0	0			Hail(0.88)
Dunn County									
Menomonie	30	1640CST 1653CST			0	0			Hail(0.75)
Pierce County									
Elmwood	30	1645CST			0	0			Hail(0.75)
Eau Claire County									
7 SW Eau Claire	30	1700CST			0	0			Thunderstorm Wind (G52)
			Trees and large branches down.						
Dunn County									
2 S Elk Mound	30	1710CST			0	0			Hail(0.75)
<u>WYOMING, Central and West</u>									
Fremont County									
10 W Ft Washakie	01 15	0000MST 1700MST			0	0			Wild/Forest Fire
			The South Fork Two wildfire was started by lightning. The fire burned 15,000 acres.						
Park County									
50 NW Wapiti	07 26	0000MST 1800MST			0	0			Wild/Forest Fire
			The Broad Wildfire was started by lightning. The fire burned 9,140 acres in Yellowstone National Park, 20 miles southeast of Mammoth.						
Natrona County									
10 SW Casper	07	2030MST			0	0			Thunderstorm Wind (G69)
			Reported on Bessemer Bend road.						
Sublette County									
12 W Daniel	13 26	0000MST 0000MST			0	0			Wild/Forest Fire
			The Mule Wildfire was started by lightning. The fire burned 3,932 acres.						
Park County									
South Portion	16	1300MST 1430MST			0	0	275K		Flood
			Strong thunderstorms caused flash flooding across portions of southern Park County. The first area of flash flooding and damage was reported near Valley. Heavy rain washed out bridges and portions of gravel roads. Also, the heavy rain and runoff resulted in 4 to 5 feet of mud on the roads. The second area of flash flooding and damage occurred between Cody and Wapiti, along Rattlesnake Creek. A 10 foot wall of mud and rock slid through cabins. Also, 1.03 inches of rain fell in Wapiti. The third area of flash flooding and damage occurred west of Meeteetse, near Pitchfork Ranch and Poverty Flats. Two to three bridges were damaged, as well as a 200 yard long, 6 feet wide portion of a road. The Park County Emergency Manager estimated the damage from the flash flooding between \$250,000 and \$300,000.						
Hot Springs County									
4 W Grass Creek	21	1510MST			0	0			Hail(0.88)
Hot Springs County									
Grass Creek	21	1540MST			0	0			Hail(0.88)
			Pea to nickle size hail accumulated to a depth of 1 foot.						
Fremont County									
Pavillion	21	1633MST			0	0			Hail(0.75)
Fremont County									
8 N Riverton	21	1710MST			0	0			Hail(0.75)
Fremont County									
Riverton	22	2015MST			0	0			Thunderstorm Wind (G52)
			Windows were blown out out of a house.						

Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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WYOMING, Central and West

Fremont County

Riverton	22	2100MST			0	0			Thunderstorm Wind (G52)
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A two by four piece of wood was blown through an automobile windshield.

Hot Springs County

5 E Grass Creek	23	1355MST			0	0			Hail(0.75)
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Teton County

Moose	23	1510MST			0	0			Hail(1.00)
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Teton County

Moran	23	1530MST			0	0			Hail(0.75)
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Teton County

8 E Moran	23	1600MST			0	0			Hail(1.00)
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Sweetwater County

27 S Rock Spgs	26	1200MST			0	0			Wild/Forest Fire
	31	1800MST							

The Pepper Wildfire was started by lightning. The fire burned 1,027 acres.

WYOMING, Extreme Southwest

Uinta County

Ft Bridger	19	1345MST 1350MST	0.5	20	0	0	0	0	Tornado (F0)
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A small tornado was reported over open country near Fort Bridger, Wyoming. It remained over open country and dissipated, causing no damage.

WYOMING, North Central

Sheridan County

Leiter	17	2345MST			0	0			Thunderstorm Wind (G60)
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WYOMING, Northeast

Campbell County

3 S Gillette	08	1625MST			0	0	0.50K		Thunderstorm Wind (G52)
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Campbell County

3 E Gillette to 10 E Gillette	08	1630MST 1645MST			0	0	70K		Thunderstorm Wind (G61)
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A severe thunderstorm moved across Campbell County producing damaging winds. Straight line winds broke several large tree branches and blew over a shed 3 miles south of Gillette. Three miles east of Gillette a single wide mobile home was rolled onto a pickup truck. Another mobile home at the same location was moved three feet. Both of these mobile homes were at a sales lot, and were not tied down or secured in any way. Ten miles east of Gillette a trained spotter estimated winds at 70 mph.

Weston County

12 W Upton	08	1703MST			0	0	0		Thunderstorm Wind (G61)
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Several 3-4 inch diameter tree branches were blown down.

Weston County

14 NE Upton	08	1802MST			0	0	0		Hail(0.75)
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Weston County

16 NW Clareton	18	2045MST			0	0	0		Hail(1.75)
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Crook County

5 SE Alva to 3 S Beulah	23	1955MST 2005MST			0	0	0		Hail(0.75)
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Storm Data and Unusual Weather Phenomena

July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

WYOMING, Northeast

Crook County									
Alva	26	1620MST			0	0	0		Thunderstorm Wind (G52)
Campbell County									
Echeta	27	1810MST			0	0	0		Thunderstorm Wind (G60) ^M
Crook County									
18 NW New Haven	27	1850MST			0	0	0		Thunderstorm Wind (G52)
Crook County									
Hulett	27	1917MST			0	0	0		Thunderstorm Wind (G52)

WYOMING, Southeast

Albany County									
51 N Laramie	03	1345MST 1350MST			0	0			Hail(1.00)
Platte County									
25 SW Wheatland	03	1405MST 1409MST			0	0			Hail(0.75)
Goshen County									
14 W Hawk Spgs	03	1424MST 1429MST			0	0			Hail(0.88)
Laramie County									
3 SE Cheyenne	03	1432MST 1437MST			0	0			Hail(0.75)
Platte County									
10 N Chugwater	03	1447MST 1451MST			0	0			Hail(0.75)
Laramie County									
Cheyenne	03	1455MST 1500MST			0	0			Hail(0.75)
Albany County									
5 SE Buford	03	1600MST 1604MST			0	0			Hail(0.88)
Carbon County									
18 N Medicine Bow	22	1715MST 1722MST			0	0			Hail(1.50)

Storm dropped large amounts of hail with sizes up to 1 1/2 inches. Heavy rain also occurred creating local areas of drifted hail as well as washing out a few rural roads.