

**MARCH 2002
VOLUME 44
NUMBER 3**



STORM DATA

**AND UNUSUAL WEATHER PHENOMENA
WITH LATE REPORTS AND CORRECTIONS**



noaa

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NC

Cover: Three to four inches of rain fell over southern Arkansas and four to eight inches of rainfall also occurred in the northern and western sections of the state from March 17th through the 20th. Due to heavy rains, flash flooding and river flooding occurred. The White River at Batesville in Independence County completely covered an access road on March 21, 2002. (Photo courtesy: John Robinson, WCM, Little Rock, AR.)

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STORM DATA

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National Climatic Data Center

Editor: William Angel

Assistant Editors: Stuart Hinson and Rhonda Mooring

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STORM DATA contains all confirmed information on storms available to our staff at the time of publication. Late reports and corrections will be printed in each edition.

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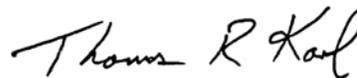
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The editor of **STORM DATA** solicit your help in acquiring photographs (prints or slides; black and white, or color), maps, clippings, etc. of significant or severe weather events (past or present) for use in the "Outstanding Storms of the Month" section of **STORM DATA**. We request our subscribers or other interested persons to mail such items to:

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Asheville, NC 28801
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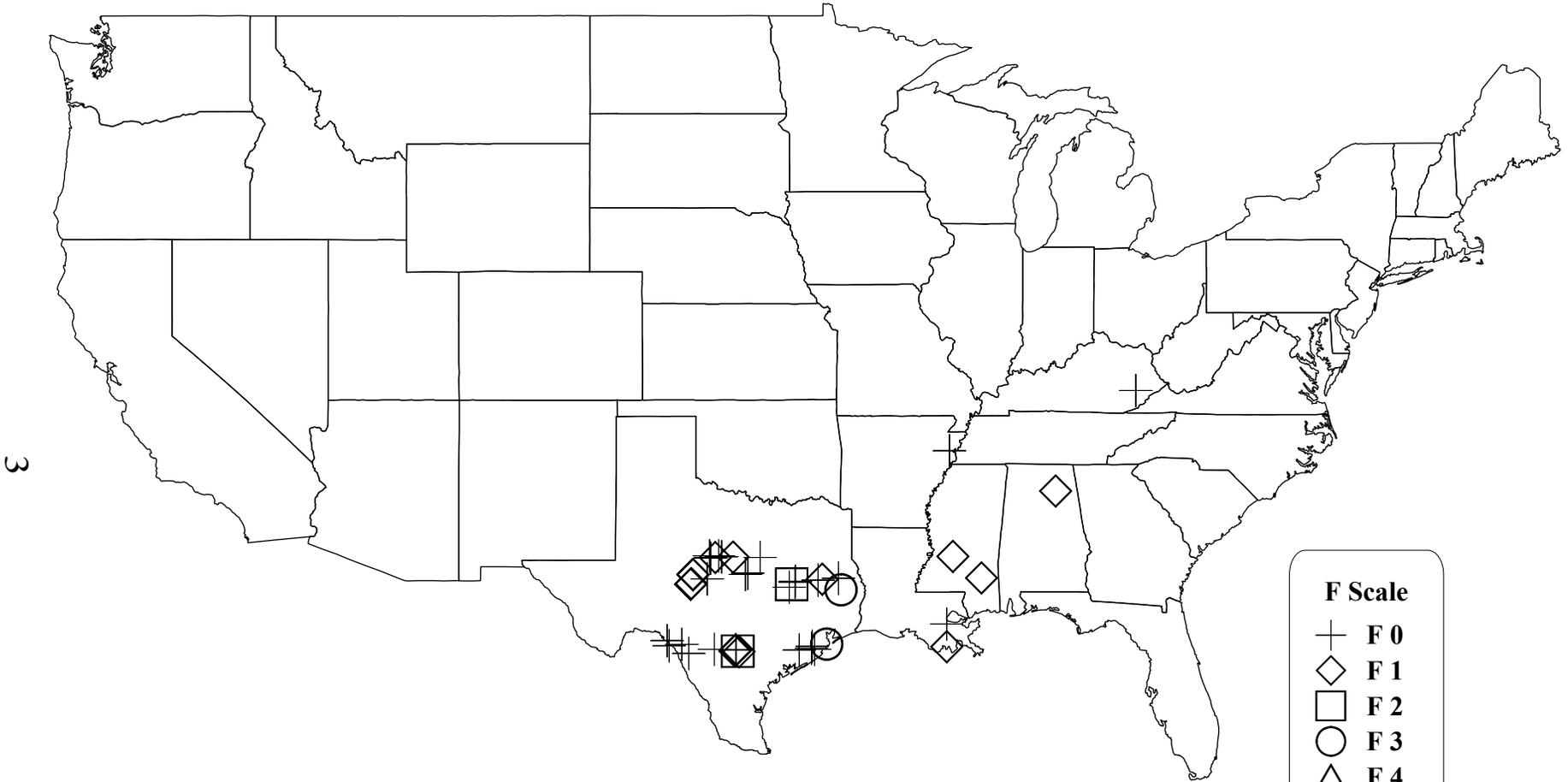
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Thomas R. Karl
Director,
National Climatic Data Center

March 2002 Confirmed Tornadoes



3

F Scale	F0	F1	F2	F3	F4	F5	Total
Number	29	15	2	2	0	0	48

* Total includes 1 - F0 tornado in Kauai Hawaii

F Scale

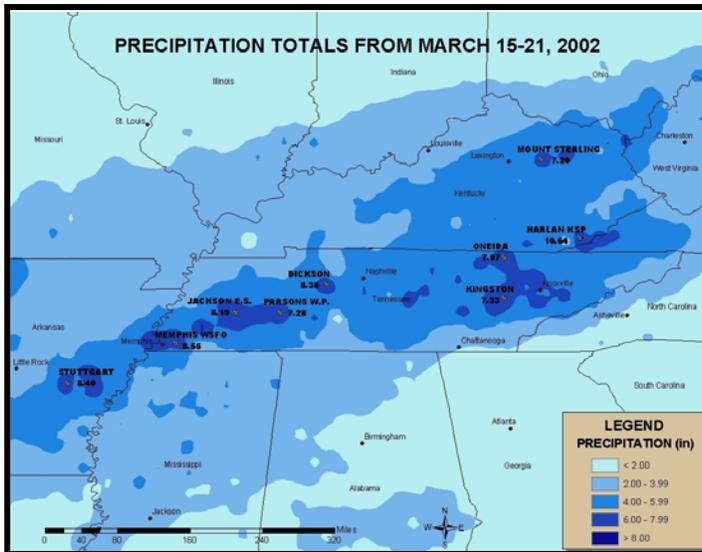
- + F0
- ◇ F1
- F2
- F3
- △ F4
- ⊠ F5

OUTSTANDING STORMS OF THE MONTH

1. Heavy Rains Across Arkansas, Tennessee and Kentucky

During the month of March 2002, cold fronts moved into the southeast United States and stall. Low pressure systems formed in Texas and tracked northeast along the frontal boundary. Warm air from the Gulf of Mexico moved over the cooler air. As a result, widespread clouds and rain occurred. Heavy rains fell

across Arkansas, Tennessee and Kentucky. Rainfall amounts of five to eight inches were common. Flash flooding and river flooding also occurred. The Governor of Tennessee declared 41 counties as a federal disaster area due to the flooding in January and March 2002. Estimated damages to public infrastructure and uninsured private property were placed at \$12 million dollars in Tennessee.



Left: Map courtesy: Steve Ansari, NCDC/NOAA, Asheville, NC

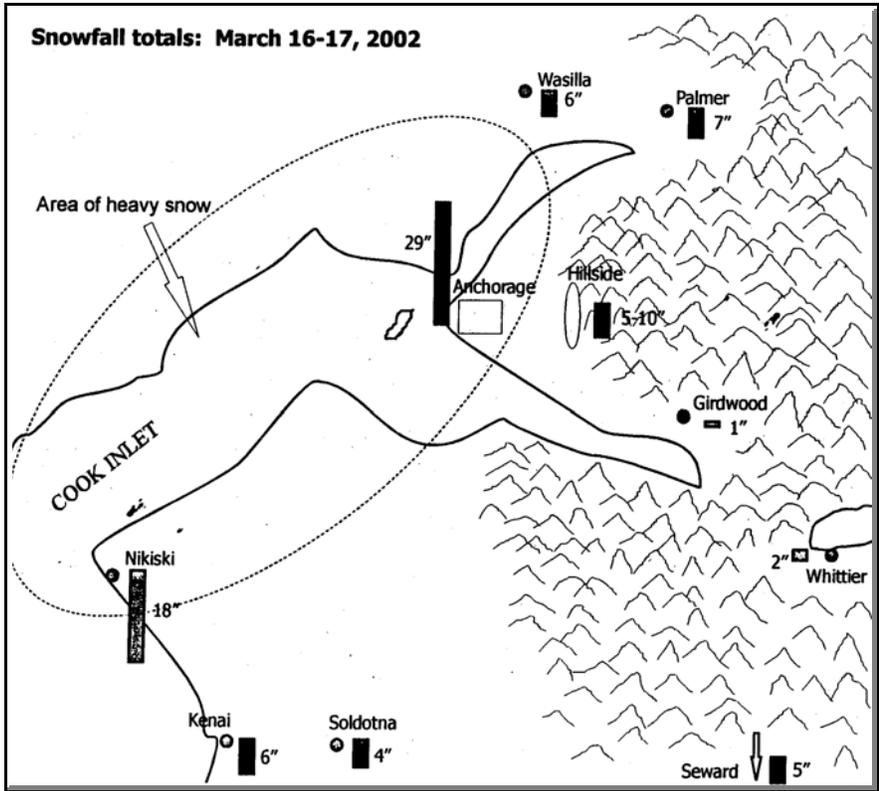
2. Heavy Snow in Vermont

A late season winter storm crossed the southern New England area on March 20, 2002. Moisture from the Gulf of Mexico and Atlantic Ocean was drawn into the storm. Six to twelve inches of heavy snow fell over central and southern Vermont. Numerous accidents were reported and portions of I-89 were closed for a short time.



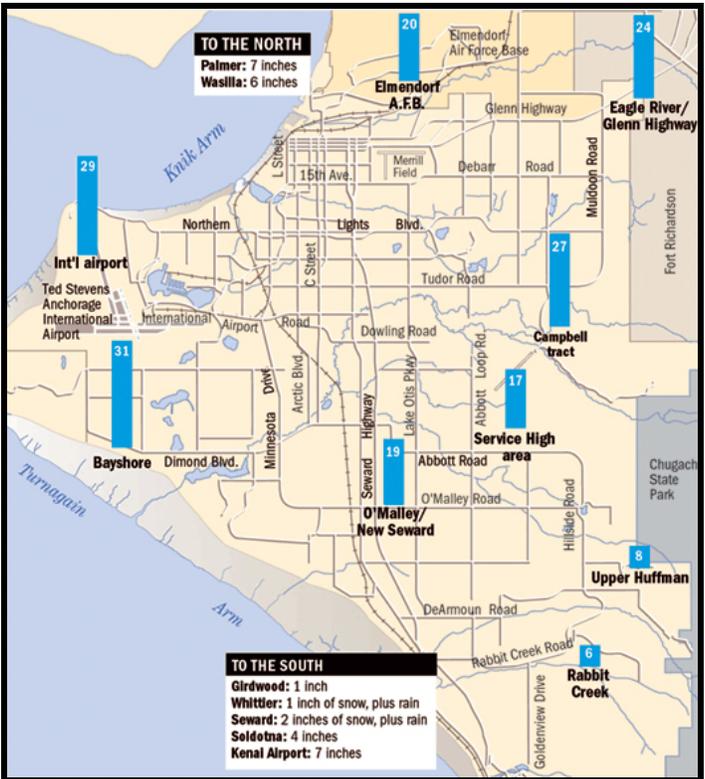
Right: A Ford Explorer lies on its roof on Route 14. (Photo courtesy: Stephen Hogan, WCM, Burlington, VT.)

3. Heavy Snow in Anchorage, AK



A new 24-hour record snowfall total was established for Anchorage, Alaska on March 17, 2002 as 28.7 inches of snowfall was recorded at the International Airport. Higher amounts up to 31 inches of snowfall were observed across southwest Anchorage. The previous record was 15.5 inches in 1955, almost twice the previous record.

Left: Map depicts the area around Anchorage and the snowfall totals. (Map courtesy: Dave Goldstein, WCM, Anchorage, AK.)



Right: A close-up of Anchorage, Alaska area depicting the snowfall totals. (Map courtesy of Ron Engstrom and the Alaska Daily News. Copyright 2002, Used with Permission.)

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ALABAMA, North Central									
Barbour County									
4 NW Mt Andrew	10	1330CST			0	0	1K	0	Thunderstorm Wind (G50)
A few trees were knocked down northwest of Mount Andrew near the Barbour and Bullock county line.									
Montgomery County									
Grady	12	1225CST			0	0	10K	0	Thunderstorm Wind (G55)
Several trees and power lines were knocked down in the vicinity of Grady. One carport was blown down and destroyed.									
Tallapoosa County									
Dadeville	12	1250CST			0	0	5K	0	Thunderstorm Wind (G55)
Numerous trees and power lines were blown down in and around Dadeville.									
Bullock County									
Midway	12	1325CST			0	0	2K	0	Thunderstorm Wind (G50)
A few trees were blown down on CR 47 near Midway.									
Chambers County									
9 S Lafayette	12	1425CST			0	0	3K	0	Hail (1.75)
Golfball size hail was reported south of Lafayette near the Chambers and Lee county line.									
ALZ044									
Montgomery									
16	1600CST				0	0	0	0	Excessive Heat
The afternoon high temperature recorded at Dannelly Field was 85 degrees. This temperature tied the previous record high.									
ALZ044									
Montgomery									
17	1600CST				0	0	0	0	Excessive Heat
The afternoon high temperature observed at Dannelly Field was 85 degrees. This temperature tied the previous record high.									
Franklin County									
Newburg	29	2105CST			0	0	0	0	Hail (0.88)
Franklin County									
Newburg	29	2105CST			0	0	1K	0	Thunderstorm Wind (G50)
Nickel size hail was reported in eastern Franklin County near the city of Newburg. A few trees were also blown over.									
Lawrence County									
Hatton	29	2105CST			0	0	0	0	Hail (0.88)
Nickel size hail was observed in western Lawrence County near the city of Hatton.									
Lawrence County									
Moulton to 8 E Moulton	29	2109CST 2135CST			0	0	10K	0	Hail (1.75)
A supercell thunderstorm produced a swath of hail ranging in size from nickel to golf ball. The area was generally from Moulton to the Caddo community and south. This area covered the east central part of Lawrence County.									
Morgan County									
Trinity	29	2135CST			0	0	0	0	Hail (0.88)
Nickel size hail was observed in the Trinity area.									
Lawrence County									
4 E Moulton	29	2208CST			0	0	0	0	Funnel Cloud
A funnel cloud was reported just east of the city of Moulton.									
Morgan County									
Neel	29	2220CST			0	0	2K	0	Hail (2.00)
Two inch diameter size hail was reported near the city of Neel.									
Morgan County									
Eva	29	2250CST			0	0	0	0	Funnel Cloud
A funnel cloud was sighted near the Eva community.									
Marshall County									
Union Grove	29	2256CST			0	0	0	0	Funnel Cloud
A wall cloud and possible funnel cloud were reported near Union Grove.									

Storm Data and Unusual Weather Phenomena

March 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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ALABAMA, North Central

Marshall County

.7 W Red Hill to 4.3 WSW Albertville	29	2320CST 2336CST	8.7	500	0	0	1.4M	0	Tornado (F1)
-----------------------------------------	----	--------------------	-----	-----	---	---	------	---	--------------

A tornado first touched down at a cemetery just west of Red Hill. The F1 tornado travelled on a near due east path crossing CR 14 (Warrenton Road), a small ridge and SR 79. The tornado then climbed another ridge downing trees. Once on top of the ridge, the tornado paralleled Section Line Road (CR 166) downing trees and power lines and causing damage especially to out buildings, farm buildings, chicken houses, and other weak structures. Most substantial structures affected by the tornado had minimal damage as identified from visual inspection. The tornado ended at CR 152 (Oneonta Cut Off Road). Red Cross officials identified 3 structures with major damage and 18 with minor damage. There were no deaths or injuries reported with this tornado.
Beg. 34 15.404/86 26.232 End: 34 15.291/86 16.998

Dekalb County

Crossville	29	2330CST			0	0	0	0	Hail (0.75)
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Dime size hail was reported in the Crossville area.

Dekalb County

Ft Payne	30	0030CST			0	0	0	0	Hail (0.75)
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Dime size hail was observed just southeast of Fort Payne on Lookout Mountain. Minor roof damage also occurred in the same area.

Cherokee County

Forney	30	0045CST			0	0	0	0	Hail (1.00)
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Quarter size hail was reported near the town of Forney.

Cullman County

West Pt	30	0143CST			0	0	0	0	Hail (0.75)
---------	----	---------	--	--	---	---	---	---	-------------

Dime size hail was reported near West Point.

Fayette County

3 E Fayette	30	0300CST			0	0	2K	0	Thunderstorm Wind (G50)
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Several trees and power lines were blown down just east of the city of Fayette.

Walker County

Countywide	30	0315CST			0	0	3K	0	Thunderstorm Wind (G50)
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A few trees were knocked down across the county.

Tuscaloosa County

2 NW Kellerman to 5 NE Kellerman	30	0953CST 0959CST			0	0	0	0	Hail (0.88)
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Jefferson County

7 W North Johns to 3 E Midfield	30	0959CST 1022CST			0	0	75K	0	Hail (2.00)
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A rotating thunderstorm dropped a large amount of hail from extreme eastern Tuscaloosa County into south central Jefferson County. The hail storm started just to the northwest of Kellerman around 953 AM and moved generally east ending just to the east of Midfield around 1022 AM. The hail size in Tuscaloosa County was from pea to nickel size, and this hail fell mostly in rural eastern Tuscaloosa County. The hail size increased dramatically as the storm entered Jefferson County. The storm left a swath of hail from west of North Johns to just east of Midfield. The hail ranged in size from nickel to just larger than a golf ball and covered the ground in many locations. Several damage reports were received from the Bessemer area. The damage consisted mainly of broken car windshields but a few roofs were also damaged.

Jefferson County

9 SW Bessemer to 7 SE Bessemer	30	1018CST 1038CST			0	0	100K	0	Hail (2.75)
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Shelby County

6 W Helena to 5 E Harpersville	30	1029CST 1114CST			0	0	400K	0	Hail (2.75)
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Talladega County

3 N Childersburg to 13 E Winterboro	30	1110CST 1148CST			0	0	75K	0	Hail (1.50)
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Clay County

8 NW Ashland to 6 E Lineville	30	1138CST 1214CST			0	0	4K	0	Hail (1.00)
----------------------------------	----	--------------------	--	--	---	---	----	---	-------------

Randolph County

5 SW Wedowee to 8 SE Wedowee	30	1211CST 1240CST			0	0	0	0	Hail (0.88)
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Storm Data and Unusual Weather Phenomena

March 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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ALABAMA, North Central

A damaging, rotating thunderstorm developed just south of Interstate 459 near the Shelby and Jefferson County line. The thunderstorm moved eastward across the length of Jefferson, Shelby, Talladega, Clay, and Randolph Counties. Golf ball to baseball size hail fell across Bessemer, Helena and Pelham. This hail caused damage to automobiles, home roofs, and a few businesses. From Chelsea to Harpersville, golf ball size hail was reported. One to one and one half inch diameter size hail was observed west to east across central Talladega County. The hail size gradually became smaller as the storm moved eastward and weakened. The hail size in Clay County was around one inch in diameter and the hail size across Randolph County was approximately nickel size.

Jefferson County

Hoover

30	1100CST								
		0	0	0	0	Hail (1.00)			

Quarter size hail fell in the Riverchase area.

Talladega County

6 S Lincoln

30	1210CST								
		0	0	1K	0	Thunderstorm Wind (G50)			

A few trees were blown down near the Old Lincoln Highway and Sims Road.

Etowah County

Duck Spgs

30	1210CST								
		0	0	0	0	Hail (0.75)			

Etowah County

Duck Spgs

30	1210CST								
		0	0	3K	0	Thunderstorm Wind (G50)			

Trees were blown down in the Duck Springs area. Dime size hail also accompanied this storm.

Montgomery County

Hope Hull

31	1253CST								
		0	0	0	0	Hail (0.88)			

Nickel size hail was reported at the Rodeway Inn along Interstate 65.

Barbour County

Clayton

31	1355CST								
		0	0	6K	0	Thunderstorm Wind (G50)			

A large tree was blown down and landed on an automobile. The vehicle suffered moderate damage.

Barbour County

10 NW Eufaula

31	1415CST								
		0	0	0	0	Hail (0.88)			

Nickel size hail was observed northwest of Eufaula near the Barbour and Russell County line.

Russell County

Cottonton

31	1443CST								
		0	0	0	0	Hail (0.75)			

Dime size hail was reported near the Cottonton community and in the Mahrt community. EMA

Russell County

Ft Mitchell

31	1444CST								
		0	0	0	0	Hail (0.75)			

Dime size hail fell around Fort Mitchell and Twin Springs.

ALABAMA, Southeast

Houston County

Northwest Portion

31	1500EST 1513EST								
		0	0	75K		Thunderstorm Wind			

A tree fell on a house in Dothan. A tree fell on a barn, and a shed was blown over in Wicksburg. A tree fell on a mobile home in north Dothan. Reported by the Houston County EMA.

Houston County

Kinsey

31	1705EST								
		0	0			Hail (0.75)			

Dime size hail. Reported by the NWS office in Birmingham.

ALABAMA, Southwest

Covington County

Red Level

12	1155CST 1157CST								
		0	0			Hail (1.75)			

Golfball hail was reported near Red level. No damage was reported.

Covington County

Andalusia

12	1200CST 1202CST								
		0	0	10K		Thunderstorm Wind (G50)			

Trees and power lines were blown down near Andalusia. The high winds also damaged a couple of outbuildings.

Crenshaw County

Highland Home

12	1210CST 1212CST								
		0	0	10K		Thunderstorm Wind (G50)			

Trees and power lines were blown down near Highland Home. Dime size hail was also reported.

Storm Data and Unusual Weather Phenomena

March 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, Southwest</u>									
Covington County									
Floralia	12	1250CST 1251CST			0	0			Hail (0.75)
Mobile County									
Dawes	31	1120CST 1122CST			0	0	25K		Thunderstorm Wind (G55)
Trees and power lines were blown down near Dawes. Some roof damage occurred to a church and minor damage occurred to some buildings around the church. Dime size hail also occurred.									
Covington County									
Sanford	31	1315CST 1316CST			0	0			Hail (1.75)
Golfball size hail was reported along U. S. Highway 84 just north of Sanford. No damage was reported.									
<u>ALASKA, Northern</u>									
AKZ211									
Srn Seward Peninsula Coast									
10		0755AST 0855AST			0	0			High Wind (G57) ^M
High winds developed along the Southern Seward Peninsula Coast between two opposing weather systems. A 1036mb high over the northern Arctic Coast combined with a 972mb low over the North Pacific helped create strong easterly winds over the area. Wind gusts to 57 knots (66mph) were reported by the AWOS site at Golovin.									
AKZ213									
St Lawrence Is. Bering Strait									
11		0715AST 1255AST			0	0			High Wind (G61) ^M
High winds developed across portions of St. Lawrence Island as a 987mb low deepened and moved northward across the Bering Sea. As the low approached the island, the pressure gradient associated with it strengthened resulting in strong easterly winds. Wind gusts to 61 knots (70mph) were reported at the AWOS site at Gambell.									
AKZ213									
St Lawrence Is. Bering Strait									
13		1955AST 2035AST			0	0			Blizzard
Blizzard conditions occurred briefly across part of St. Lawrence Island during frontal passage. As an occluded front associated with a 977mb low moved across the island from the south, snow and strong winds developed creating blowing snow that reduced visibility to less than 1/4 of a mile at Gambell.									
AKZ209>212-214									
Baldwin Pen. & Selawik Valley - Nrn & Intr. Seward Peninsula - Srn Seward Peninsula Coast - Ern Norton Sound Nulato Hills - Yukon Delta									
15		0855AST			0	0			Blizzard
16		2000AST							
Blizzard conditions were reported across western Alaska at a number of locations including Cape Romanzof, Unalakeet, Nome, Buckland, and Kotzebue. These blizzard conditions resulted from a deepening low pressure system and associated occluded frontal boundary over the southwest Bering Sea that moved northward across the region.									
AKZ225									
Denali									
15		1951AST			0	0			High Wind (G48) ^M
16		1946AST							
High winds developed through the passes of the Central Alaska Range as a trough of low pressure developed north of the mountains. To the south of the mountains, a strong ridge of high pressure extended from a 1040mb high centered over the southern Yukon Territory of Canada. A significant pressure differential between these two features resulted in the development of increased wind speeds. Warning criteria winds were realized as these winds were channelled through the narrow mountain passes. The weather observer in Healy reported winds of 48 knots (55mph).									
AKZ201									
Western Arctic Coast									
16		0856AST 0954AST			0	0			High Wind (G52) ^M
High winds occurred briefly across the Western Arctic Coast during the passage of a warm front. This front was associated with a 994mb low located northeast of St. Lawrence Island. Wind gusts to 52 knots (60 mph) were recorded at the Cape Lisburne AWOS site.									
AKZ207									
Chukchi Sea Coast									
16		0953AST 1345AST			0	0			Blizzard
Blizzard conditions developed along the Chukchi Sea Coast as a warm front pushed north through the region. This front was									

Storm Data and Unusual Weather Phenomena

March 2002

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

ALASKA, Northern

associated with a 994mb low that was centered northeast of St. Lawrence Island. Strong high pressure over eastern Alaska and the Yukon Territory of Canada, coupled with this low, created a significantly strong pressure gradient that resulted in high winds along the northwest coast. These winds, combined with the snow associated with the warm front, created blizzard conditions at Point Hope and Kivalina.

AKZ201

Western Arctic Coast

18 2103AST 0 0 **High Wind (G50)** ^M

High winds occurred for a short period of time at Cape Lisburne on the Western Arctic Coast. These winds developed as a cold front moved northward across the Bering Strait to the Chukchi Sea. Wind gusts to 50 knots (58 mph) were recorded by the AWOS site at Cape Lisburne.

AKZ201

Western Arctic Coast

25 1456AST 0 0 **Blizzard**
26 2010AST

Blizzard conditions developed along portions of the Western Arctic Coast as a cold front slowly moved across this area from the north. This front was pushed south by a 1032mb high pressure system located over the Arctic Ocean. Strong easterly flow around this high resulted in strong winds and blowing snow that reduced visibility to less than 1/4 mile at Point Lay.

ALASKA, Southeast

AKZ025

Juneau Borough-Eastern Chichagof-Admiralty Island

09 0500AST 0 0 **0.50K** 0 **High Wind (G56)** ^M
11 0600AST

A northeasterly downslope wind event occurred on this date in downtown Juneau and Douglas. On the 9th, the "Taku winds" were measured as high as 64 mph on the Juneau Federal Building (85' ASL) and at the South Douglas Island mesonet site (9' ASL). On Sunday the 10th the South Douglas Island site measured a gust to 60 mph. High elevation peak wind readings included the Eagle Crest Ski Resort sensor (2624' ASL) at 81 mph and Sheep Mountain (3542' ASL) at 116 mph. Very minor damage was reported.

AKZ025

Juneau Borough-Eastern Chichagof-Admiralty Island

21 0600AST 0 0 0 0 **High Wind (G55)** ^M
1300AST

Another northeasterly downslope wind event occurred on this date in downtown Juneau and Douglas. The "Taku winds" this time maxed out at 63 mph on the South Douglas Island mesonet site (9' ASL). High elevation peak wind readings included Mount Roberts (1761' ASL) at 68 mph and Sheep Mountain (3542' ASL) at 71 mph. No damage was reported.

ALASKA, Southern

AKZ191

Western Aleutians

02 0700AST 0 0 **High Wind (G69)**
2330AST

A strong 968 mb low curved northwest, from the northwest Pacific, into the Komandorskiye Islands of Russia late Saturday. The front associated with this storm elongated north and east into the central Aleutians just west of Adak at 9 pm AST Saturday, stalling there then dissipating by 9 am AST Sunday. Strong south and southeast winds were observed in advance of the front, while strong southwest winds followed the storm center. A second storm near the Kamchatka Peninsula and its front brought another round of strong south winds to the extreme western Aleutians Sunday.

Strong southeast winds were observed across the extreme western Aleutians Saturday as the storm system and front moved through the area. Observations were missing from noon through 10 pm AST Saturday, however gusts of 67 mph were actually observed at the automated site at Shemya.

AKZ141

Copper River Basin

02 0900AST 0 0 **Heavy Snow**
1900AST

A weakening low in Prince William Sound produced heavy snows in portions of the Copper River Basin. Gulkana Flight Service personnel recorded snowfall totals of 10 inches from midnight through 9:30 am AST Saturday. Reports of total snowfall were unavailable for this event.

AKZ191

Western Aleutians

03 0900AST 0 0 **High Wind (G53)** ^M
2100AST

A moderate frontal system across the western Aleutians was preceded by brisk southeasterly winds. Gusts reached 61 mph at Shemya. Strong winds were confined to the western part of the Aleutians.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property Damage	Crops	
ALASKA, Southern									
AKZ135		Sern P.W. Snd							
	04	1500AST			0	0			High Wind (G78)
	05	0900AST							
	Outflow winds from a massive, 1057 mb high in the northeast corner of the mainland, were estimated at 90 mph around the Copper River Delta.								
AKZ185		Eastern Aleutians							
	07	0100AST			0	0			High Wind (G54) ^M
	A strong front, associated with a 978 mb low 250 miles south of Dutch Harbor Wednesday afternoon, brought strong easterly winds to the Dutch Harbor/Unalaska area Wednesday evening and early Thursday.								
AKZ185		Eastern Aleutians							
	08	1315AST			0	0			High Wind (G65) ^M
	09	0200AST							
	A strong front, moving into and north of the Aleutians, produced strong easterly winds around Dutch Harbor/Unalaska.								
AKZ135		Sern P.W. Snd							
	09	1400AST			0	0			High Wind (G69)
		2300AST							
	Strong outflow winds, estimated gusts at 80 mph, were apparent along the Copper River Delta.								
AKZ111		Matanuska Valley							
	09	1900AST			0	0			High Wind (G74) ^M
	10	0730AST							
	Strong, northeasterly "Matanuska" winds were reported around Palmer. Gusts peaked at 85 mph at midnight Saturday.								
AKZ191		Western Aleutians							
	12	0500AST			0	0			High Wind (G54) ^M
		2200AST							
	A rapidly developing frontal low moved by Amchitka early Tuesday, with a central pressure in the mid 950 millibar range, Tuesday afternoon. Strong winds were observed just east of the storm.								
AKZ155		Kuskokwim Delta							
	12	2315AST			0	0			Blizzard
	13	0615AST							
AKZ155		Kuskokwim Delta							
	13	0100AST			0	0			High Wind (G77) ^M
		0200AST							
	A front, moving northeast across Bristol Bay, was accompanied by strong winds. Blizzard conditions were reported around Nunivak Island. Additionally, wind gusts at Cape Romanzof reached 89 mph as the front passed.								
AKZ155		Kuskokwim Delta							
	15	0000AST			0	0			Blizzard
		1700AST							
AKZ161		Bristol Bay							
	15	0000AST			0	0			High Wind (G52)
		1700AST							
	A moderate frontal system approaching the southwest coast of Alaska, was preceded by locally strong southeast winds, local blizzard conditions and a mix of rain and snow. Local freezing rain was reported across the area.								
	Blizzard conditions were met at Mekoryuk on Nunivak Island...along with gusts to 45 mph. Cape Newenham recorded peak winds of 58 mph, however several observations during the most intense part of the storm were missing.								
AKZ191		Western Aleutians							
	16	1200AST			0	0			High Wind (G59) ^M
	17	0400AST							
	A moderate weather front, associated with a deepening low adjacent to the Kamchatka Peninsula, was accompanied by strong southerly winds along the extreme western Aleutians. Gusts of 68 mph, from the southwest, were recorded at Shemya between noon and 1 pm AST Saturday...post frontal and on the southeast side of the low.								

Storm Data and Unusual Weather Phenomena

March 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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ALASKA, Southern

AKZ101

Anchorage Muni To Bird Creek

16	1800AST	0	0	Heavy Snow
17	2100AST			

A new 24 hour record snowfall was established for Anchorage. Total snowfall for a 24 hour period at the International Airport reached an official 28.7 inches, however reports of 31 inches of snow were received across southwest Anchorage. The new record was nearly twice the old 24 hour record of 15.5 inches set in 1955. Much less snowfall occurred across southeast Anchorage, which remained in a "snow shadow" due to low level, moderate easterly winds moving off the mountains. In fact, just outside of Anchorage, on the way into Turnagain Arm, snowfall totals decreased rapidly...with Girdwood receiving only 3-4 inches. This is typically just opposite of what normally occurs.

An extensive review of the meteorological mechanism for the heavy snow has been undertaken by the Anchorage Forecast Office...however "isentropic uplift" is strongly suspected as a leading cause.

AKZ191

Western Aleutians

18	2030AST	0	0	High Wind (G79) ^M
19	0500AST			

An intense 964 mb storm moved by Amchitka from the North Pacific early Tuesday, curving northwest to Cape Olyutorskiy, Russia as a 990 mb center early Thursday. Strong southeasterly winds preceded the front associated with this storm, with strong southwest winds observed along the south semicircle of the low.

Pre-frontal southeast winds reached 91 mph at Adak at 9:53 pm AST Monday. Gusty west winds in excess of 60 mph were also observed at Shemya as the low passed.

Although significant southeasterly winds were observed across the Pribilofs and eastern Aleutians around Dutch Harbor, speeds were reported under 60 mph in these areas.

AKZ101

Anchorage Muni To Bird Creek

28	1715AST	0	1	Avalanche
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2 dogs and 1 person were buried in an avalanche just west of Harp Mountain. The buried skier was extricated by his partner, 20 minutes after his partner created a breathing hole in the snow for the trapped skier. The dogs weren't as fortunate.

AMERICAN SAMOA

Tutuila

Countywide

20	1300SST	0	0	Urban/Sml Stream Fld
	2359SST			

Showers heavy at times associated with a stationary trough of low pressure over Samoa dumped 2 inches of rainfall in 24 hours causing flooding of low lying areas in the afternoon and into the evenings. Heavy runoffs continued to overflow small streams and caused some minor land slides as grounds has been saturated as it was raining on and off for the last two days. No major damages were reported.

ARIZONA, Central and Northeast

AZZ015

Western Mogollon Rim

01	0000MST	0	0	Drought
31	2300MST			

Record dry weather continued in the month of March in northern Arizona. By March 21st, the Flagstaff airport had the driest winter on record. The normal amount of precipitation between December 21 and March 21 for the Flagstaff airport is 7.08 inches. This season, only 0.72 inches fell. Snow amounts also lagged behind. The normal snow fall amount from July 1 to March 22 is just over 86 inches. This season, 37 inches of snow fell which is only 42% of normal to date. This dry spell has continued since the first of September. In the seven month period...4.20 inches of precipitation fell. This is only 28% of average or 10.90 inches below average. The average snowfall during this period is 95.0 inches. We received 39 inches snow which is 42% of average (56 inches below average).

AZZ012-015-017

Little Colorado River Valley In Coconino County - Western Mogollon Rim - White Mountains

08	0330MST	0	0	High Wind (G56) ^M
	0645MST			

A strong cold front moved across northern Arizona and produced isolated wind gusts over 60 MPH. A spotter in Doney Park recorded a peak wind gust of 65 MPH with shingles blowing off the roof. Another spotter in Leupp reported a wind gust of 62 MPH. The Show Low Airport had a peak wind gust of 58 MPH.

Storm Data and Unusual Weather Phenomena

March 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, Central and Northeast

AZZ011>014-016-040 Chuska Mountains And Defiance Plateau - Little Colorado River Valley In Coconino County - Little Colorado River Valley In Navajo County - Little Colorado River Valley In Apache County - Eastern Mogollon Rim - Northeast Plateaus And Mesas South Of Highway 264

23	0900MST 1800MST				0	0			High Wind (G70) ^M
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An approaching Pacific storm system brought strong and gusty southwest wind to northeastern Arizona. Sustained wind of 30 to 40 MPH were common with numerous gusts between 45 and 55 MPH. Areas of blowing dust were reported with the visibility reduced to one mile near Petrified Forest National Monument. An observer at Eagar reported wind gusts of 50 to 58 mph with a few one foot in diameter trees blown down. Some reported peak wind gusts were: Meteor Crater 81MPH, Eagar 58 MPH, St Johns Airport 51 MPH, Show Low Airport 52 MPH, and Window Rock Airport 50 MPH.

ARIZONA, Northwest

AZZ036 Lake Mead National Recreation Area

01	0200PST 1400PST				0	0	10K		High Wind (G50)
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A dry cold front pushed through the area causing several homes to receive roof damage. Several trees and power lines were also blown over.

AZZ003 Northwest Deserts

13	1530PST				0	0	25K		High Wind (G60)
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Strong winds caused a tree to topple onto a house causing moderate damage to the roof.

ARIZONA, South

NONE REPORTED.

ARIZONA, Southwest

NONE REPORTED.

ARKANSAS, Central and North Central

ARZ003>007-012>016- Boone - Marion - Baxter - Fulton - Sharp - Newton - Searcy - Stone - Izard - Independence - Van Buren - Cleburne - Jackson

01	0700CST 1200CST				0	0			Winter Storm
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Snow and sleet fell over parts of Northern Arkansas on the morning of the 1st. Snowfall amounts between 1 and 3 inches were common across the area. Numerous traffic accidents were reported due to the slippery road conditions.

Storm Data and Unusual Weather Phenomena

March 2002

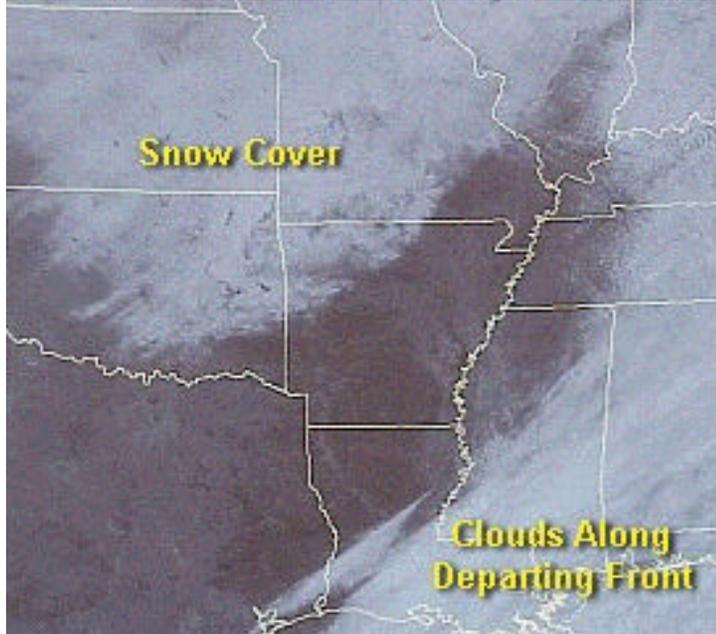
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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ARKANSAS, Central and North Central

ARZ003>005-012>013- Boone - Marion - Baxter - Newton - Searcy - Johnson - Pope - Van Buren - Logan - Conway - Scott - Yell - 021>023-030>031- Polk

037>038-040

02	0800CST 1300CST				0	0			Winter Storm
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In the picture: The satellite showed snow covering the ground across portions of northern and western Arkansas on 03/02/2002. A mixture of snow and sleet fell over portions of Northern and Western Arkansas on the morning of the 2nd. Accumulations up to 2 inches were reported in some areas. Numerous traffic accidents were reported.

Yell County

Danville	08 0405CST				0	0			Thunderstorm Wind (G50)
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Some trees were knocked down and several buildings sustained minor roof and structural damage.

Scott County

Waldron	08 2145CST				0	0			Thunderstorm Wind (G50)
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Some trees were blown down.

Searcy County

1 S St Joe	08 2245CST				0	0			Thunderstorm Wind (G50)
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Thunderstorm winds downed several trees.

Yell County

Dardanelle	09 0105CST				0	0			Hail (0.75)
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Pope County

Russellville	09 0110CST				0	0			Hail (0.75)
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Stone County

7 SW Mountain View	09 0210CST				0	0			Thunderstorm Wind (G50)
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Thunderstorm winds knocked down a few trees and damaged a barn.

Logan County

Booneville	09 0305CST				0	0			Thunderstorm Wind (G50)
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Several buildings sustained roof damage from a severe thunderstorm that moved through Booneville.

Storm Data and Unusual Weather Phenomena

March 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>									
Johnson County									
Clarksville	09	0315CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds damaged the roofs of several buildings in Clarksville. Some fences were also damaged when trees were blown down.									
Boone County									
Harrison	09	0315CST			0	0			Thunderstorm Wind (G50)
Several homes and businesses sustained roof damage in Harrison.									
Newton County									
Deer	09	0320CST			0	0			Thunderstorm Wind (G50)
Several buildings sustained roof damage in and around Deer.									
Searcy County									
Countywide	09	0345CST 0410CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds caused roof damage to numerous buildings across Searcy County.									
Marion County									
Yellville	09	0350CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds damaged the roofs of a few buildings in Yellville.									
Pope County									
Russellville	09	0355CST			0	0			Thunderstorm Wind (G50)
Several buildings sustained roof damage and a number of trees were blown down.									
Pope County									
Atkins	09	0410CST			0	0			Thunderstorm Wind (G50)
Several trees were blown down and some houses sustained roof damage.									
Van Buren County									
Countywide	09	0410CST 0440CST			0	0			Thunderstorm Wind (G50)
Numerous buildings sustained roof damage across Van Buren County.									
Yell County									
1 N Mt George	09	0415CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed at least a dozen trees, with a camper flipped over in the area. About 400 customers lost power for several hours.									
Conway County									
Morrilton	09	0430CST			0	0			Thunderstorm Wind (G50)
A severe thunderstorm moved through the Morrilton area and downed a number of trees and caused roof damage to several buildings.									
Perry County									
Perryville	09	0435CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds damaged the roofs of several buildings in Perryville.									
Stone County									
Countywide	09	0440CST 0500CST			0	0			Thunderstorm Wind (G50)
Numerous homes and businesses sustained roof damage across Stone County.									
Garland County									
Hot Spgs	09	0455CST			0	0			Thunderstorm Wind (G50)
Several homes sustained roof damage from a severe thunderstorm that moved through Hot Springs.									
Faulkner County									
5 S Conway	09	0515CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds damaged a large billboard south of Conway.									
Cleburne County									
1 E Heber Spgs	09	0520CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some large tree limbs. One car was damaged when some of the limbs fell on the vehicle.									

Storm Data and Unusual Weather Phenomena

March 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

Saline County									
Benton	09	0520CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds caused some roof damage to several buildings in Benton.									
Independence County									
Alonzo	09	0525CST			0	0			Thunderstorm Wind (G50)
A house sustained some minor damage from a severe thunderstorm that moved through the area.									
Independence County									
Batesville	09	0535CST			0	0			Thunderstorm Wind (G50)
Several large trees were blown down.									
White County									
Antioch	09	0535CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds destroyed a barn, blew the roof off a house and damaged the chimney on another house. Several trees were also blown down.									
Pulaski County									
1 SE Morgan	09	0540CST			0	0			Thunderstorm Wind (G50)
A few trees were knocked down.									
Lonoke County									
Cabot	09	0540CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed several trees. Some of the trees landed on the roofs of a few houses and caused minor damage.									
Saline County									
Traskwood	09	0540CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds knocked down some power lines.									
Jackson County									
Newport	09	0558CST			0	0			Thunderstorm Wind (G50)
Several trees were blown down.									
Prairie County									
Des Arc	09	0620CST			0	0			Thunderstorm Wind (G50)
Several buildings sustained minor roof damage.									
Woodruff County									
Mc Crory	09	0630CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds caused damage to the roofs of several buildings.									
Woodruff County									
Cotton Plant	09	0630CST			0	0			Thunderstorm Wind (G50)
Several buildings in Cotton Plant sustained roof damage.									
Monroe County									
Clarendon	09	0650CST			0	0			Thunderstorm Wind (G50)
Some trees and power lines were downed at Clarendon.									
Arkansas County									
De Witt	09	0703CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some trees.									

Storm Data and Unusual Weather Phenomena

March 2002

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

ARKANSAS, Central and North Central

Newton County

Western Grove	15	1450CST		0	0			Hail (2.00)
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In the picture: Hail up to two inches in diameter accumulated around a home in Western Grove (Newton County) on 03/15/2002. The picture is courtesy of John Tyner...and is used by permission.

Boone County

Lead Hill	15	1505CST		0	0			Hail (0.75)
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Montgomery County

5 SE Caddo Gap	15	1540CST		0	0			Thunderstorm Wind (G50)
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Thunderstorm winds demolished a carport.

Garland County

Royal	15	1615CST		0	0			Hail (0.88)
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Garland County

Royal	15	1615CST		0	0			Thunderstorm Wind (G61)
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Garland County

Fountain Lake	15	1640CST		0	0			Hail (0.75)
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Garland County

4 NE Fountain Lake	15	1645CST		0	0			Thunderstorm Wind (G50)
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Thunderstorm winds downed some large tree limbs and power lines.

Saline County

Bland	15	1710CST		0	0			Hail (0.75)
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Pulaski County

Little Rock	15	1735CST		0	0			Hail (0.75)
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Pulaski County

North Little Rock	15	1745CST		0	0			Hail (0.75)
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White County

1 E Pangburn	15	2010CST		0	0			Hail (0.75)
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Storm Data and Unusual Weather Phenomena

March 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

Jefferson County

South Portion	17	1618CST 1930CST			0	0			Flash Flood
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Heavy rains resulted in flash flooding over the southern portion of Jefferson County. A number of roads were covered by high water. Several families had to be evacuated from their homes due to the high water in and around Pine Bluff.

Bradley County

Warren	18	0125CST 0230CST			0	0			Flash Flood
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Heavy rains resulted in some minor street flooding in Warren.

Baxter County

Countywide	19 20	0600CST 0600CST			0	0			Flash Flood
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Fulton County

Countywide	19 20	0600CST 0600CST			0	0			Flash Flood
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Izard County

Countywide	19 20	0600CST 0600CST			0	0			Flash Flood
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Newton County

Countywide	19 20	0600CST 0600CST			0	0			Flash Flood
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Sharp County

Countywide	19 20	0600CST 0600CST			0	0			Flash Flood
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Stone County

Countywide	19 20	0600CST 0600CST			0	0			Flash Flood
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Johnson County

Countywide	19 20	0700CST 0600CST			0	0			Flash Flood
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Searcy County

Countywide	19 20	0700CST 0600CST			0	0			Flash Flood
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Boone County

Countywide	19 20	0800CST 0600CST			0	0			Flash Flood
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Marion County

Countywide	19 20	0800CST 0600CST			0	0			Flash Flood
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Logan County

Countywide	19 20	0900CST 0600CST			0	0			Flash Flood
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Pope County

Countywide	19 20	1000CST 0600CST			0	0			Flash Flood
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Scott County

Countywide	19 20	1000CST 0600CST			0	0			Flash Flood
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Storm Data and Unusual Weather Phenomena

March 2002

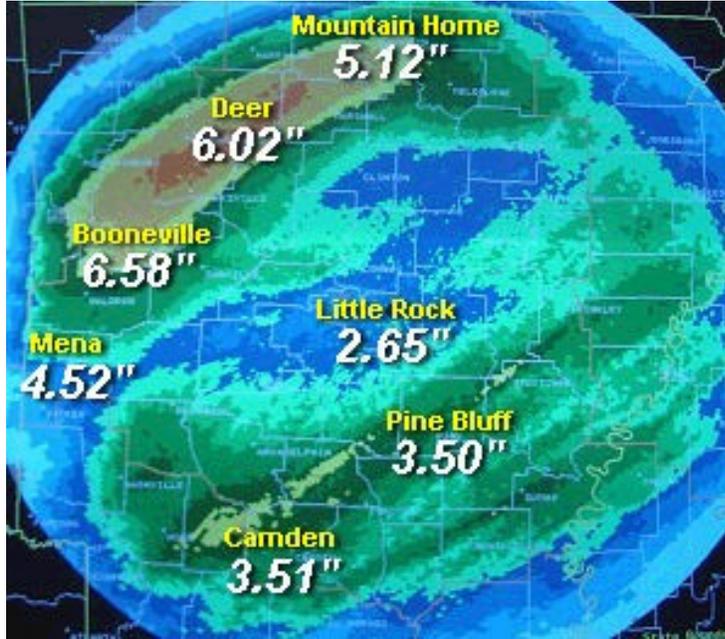
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

ARKANSAS, Central and North Central

Yell County

Countywide

	19	1000CST			0	0			
	20	0600CST							Flash Flood



In the picture: Doppler Weather Radar indicated that 4 to 8 inches of rain was common from northern into western Arkansas from 6 am CST on 03/18/2002 to 6 am CST on 03/20/2002. The heavy rain was along and north of a warm front. On 03/17/2002, the front was farther south...with heavy precipitation evident south of Little Rock.

Heavy rains resulted in widespread flash flooding across the area. Rainfall amounts averaging between 2 and 4 inches fell over a large part of Northern and Western Arkansas from the 17th through the early part of the 20th. Some locations received upwards of 8 inches of rain. Numerous county roads and bridges were covered by high water for as long as 24 hours in some areas. Several roads were also washed out in places due to the high water.

White County

Countywide

	19	1920CST			0	0			
		2200CST							Flash Flood

Heavy rains caused flash flooding to occur over a large part of White County. Between 1 and 3 inches of rain fell over the county resulting in numerous roads to be flooded for several hours.

Saline County

Countywide

	19	2200CST			0	0			
	20	0300CST							Flash Flood

Heavy rain caused flash flooding in portions of Saline County. Several county roads had to be barricaded due to high water.

Clark County

Countywide

	19	2300CST			0	0			
	20	0000CST							Flash Flood

Heavy rains caused flash flooding to occur over a much of Clark County. Between 1 and 2 inches of rain fell over the already saturated ground in the county resulting in numerous roads to be covered by high water.

Johnson County

Harmony

	25	0833CST			0	0			
									Hail (0.75)

Johnson County

1 S Clarksville

	25	1025CST			0	0			
									Hail (1.25)

Hail up to the size of half dollars damaged several cars and stripped the leaves from many trees just south of Clarksville.

Johnson County

Coal Hill

	25	1032CST			0	0			
									Hail (0.88)

Nickel size hail covered the ground at Coal Hill.

Storm Data and Unusual Weather Phenomena

March 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

Johnson County									
Clarksville	25	1041CST			0	0			Hail (1.00)
Johnson County									
Harmony	25	1041CST			0	0			Hail (1.00)
Van Buren County									
4 NE Shirley	25	1142CST			0	0			Hail (0.88)
Van Buren County									
5 SE Shirley	25	1142CST			0	0			Hail (1.00)
Independence County									
Bethesda	25	1210CST			0	0			Hail (0.75)
Searcy County									
Countywide	25	1825CST 2100CST			0	0			Flash Flood
Stone County									
Countywide	25	1840CST 2100CST			0	0			Flash Flood
Izard County									
Countywide	25	1855CST 2100CST			0	0			Flash Flood
Fulton County									
Countywide	25	1900CST 2100CST			0	0			Flash Flood
Sharp County									
Countywide	25	1900CST 2100CST			0	0			Flash Flood
Heavy rains resulted in flash flooding over portions of Northern Arkansas. A number of county roads and low water crossings were covered by high water for several hours across the area.									
Sharp County									
Cherokee Vlg	25	2030CST			0	0			Flash Flood
An elderly man tried to drive through a low water crossing in Cherokee Village and was swept downstream by moving water. His vehicle eventually lodged against a pedestrian crossing at a nearby park and he was rescued there.									
Arkansas County									
Humphrey	29	2055CST			0	0			Hail (0.75)
Jefferson County									
Humphrey	29	2055CST			0	0			Hail (0.75)
Arkansas County									
8 S Stuttgart	29	2120CST			0	0			Hail (0.75)
Arkansas County									
Almyra	29	2130CST			0	0			Hail (0.88)
Arkansas County									
St Charles	29	2145CST			0	0			Hail (0.88)
Arkansas County									
South Portion	29 30	2210CST 0100CST			0	0			Flash Flood
Heavy rains resulted in flash flooding over portions of Arkansas County. Highway 152, about 4 miles south of De Witt, was flooded for a period of time. Several other county roads were also covered by high water.									
Arkansas County									
Lodges Corners	29	2225CST			0	0			Hail (0.75)
Arkansas County									
De Witt	29	2240CST			0	0			Hail (0.88)

Storm Data and Unusual Weather Phenomena

March 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>									
Hot Spring County									
Social Hill	30	0425CST			0	0			Hail (0.75)
Hot Spring County									
Malvern	30	0433CST			0	0			Hail (0.75)
Jefferson County									
Countywide	30	0730CST 0930CST			0	0			Flash Flood
Heavy rains caused flash flooding to occur over portions of Jefferson County. Several county roads and streets in the city of Pine Bluff were covered by high water for a few hours on the morning of the 30th.									
Arkansas County									
Countywide	30	0745CST 0930CST			0	0			Flash Flood
Several county roads were flooded as a result of heavy rains that occurred over Arkansas County on the morning of the 30th.									
Grant County									
Countywide	30	0800CST 0930CST			0	0			Flash Flood
Heavy rainfall caused flash flooding to occur in some areas. Several county roads were under water for a brief period of time.									
Clark County									
Countywide	30	0800CST 0930CST			0	0			Flash Flood
Heavy rainfall caused flash flooding to occur in some areas. Several county roads were under water for a brief period of time. County roads were also washed out near Amity, DeGray and Vaden.									
Calhoun County									
Harrell	30	1025CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew the roof off of a barn at Harrell.									
Bradley County									
Warren	30	1050CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds knocked down some trees and power lines.									
Bradley County									
5 S Warren	30	1050CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some large trees 5 miles south of Warren.									
Drew County									
Wilmar	30	1100CST			0	0			Hail (0.75)
Drew County									
Wilmar	30	1100CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed some power lines. One of the live power lines caused a house fire to ignite. The fire caused major damage to the home.									
Drew County									
Monticello	30	1110CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew down some large trees and caused roof damage to several buildings in Monticello.									
Drew County									
7 E Monticello	30	1120CST			0	0			Thunderstorm Wind (G50)
Several trees were knocked down. Several homes and businesses sustained roof damage from a severe thunderstorm that moved through the area. A large fence was also blown over.									
Desha County									
Mc Gehee	30	1135CST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed some large trees and power lines.									
<u>ARKANSAS, East</u>									
Lawrence County									
3 SE Minturn	09	0600CST 0605CST			0	0	25K		Thunderstorm Wind
A barn was demolished. Three homes were damaged.									

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ARKANSAS, East									
Poinsett County									
Harrisburg	09	0630CST 0635CST			0	0	5K		Thunderstorm Wind
		A few trees were blown down.							
Cross County									
Wynne	09	0700CST 0705CST			0	0	0.01K		Hail (0.75)
St. Francis County									
Colt	09	0700CST 0705CST			0	0	0.01K		Hail (0.75)
Crittenden County									
West Memphis	17	1600CST 1830CST			0	0	1K		Flash Flood
		Several roads were under water.							
Phillips County									
West Helena	17	1730CST 1735CST			0	0	250K		Thunderstorm Wind
		Four businesses were damaged. Four homes were also damaged. Some trees and power lines were knocked down.							
ARZ008-017									
Randolph - Lawrence									
	25	1930CST 2100CST			0	0	2K		Flood
		Some roads and bridges were under water.							
Craighead County									
2 N Jonesboro to Jonesboro	29	1614CST 1630CST			0	0	0.10K		Hail (1.00)
Clay County									
1 E Rector to Piggott	29	1645CST 1658CST			0	0	0.02K		Hail (0.75)
Poinsett County									
1 N Weiner	29	1649CST 1655CST			0	0	0.75K		Hail (1.75)
Craighead County									
1 N Bay to Bay	29	1658CST 1710CST			0	0	0.11K		Hail (1.00)
Craighead County									
Jonesboro	29	1700CST 1705CST			0	0	5K		Thunderstorm Wind
		A chimney was blown down. One house suffered roof damage.							
Poinsett County									
3 N Harrisburg	29	1708CST 1715CST			0	0	0.75K		Hail (1.75)
Poinsett County									
1 W Trumann	29	1708CST 1709CST	0.2	10	0	0	0	0.01K	Tornado (F0)
		A tornado briefly touched down in an open field producing very little damage.							
Craighead County									
Lake City	29	1711CST 1716CST			0	0	0.10K		Hail (1.00)
Poinsett County									
1 W Trumann	29	1718CST 1725CST			0	0	0.01K		Hail (0.75)
Poinsett County									
Lepanto	29	1750CST 1755CST			0	0	0.75K		Hail (1.75)
Mississippi County									
Dyess	29	1759CST 1805CST			0	0	0.01K		Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ARKANSAS, East									
Phillips County									
Elaine	29	2015CST 2020CST			0	0	0.01K		Hail (0.75)
Phillips County									
Helena	31	0305CST 0500CST			0	0	1K		Flash Flood
Some vehicles were washed into a ditch by flood waters.									
ARKANSAS, Northwest									
ARZ001>002-010>011 Benton - Carroll - Washington - Madison									
	02	0600CST 1200CST			0	0			Heavy Snow
An arctic cold front moved southeast across northwest Arkansas during the early morning hours of the 2nd. Meanwhile an upper level system moved northeast out of the desert southwest. This resulted in a large area of precipitation. The precipitation began as rain and changed to freezing rain and sleet and then to snow. Some of the snow was heavy. A few snow accumulations include: Bella Vista...6 inches, Siloam Springs...5 inches, Eureka Springs...5 inches, Berryville...5 inches, Bentonville...4 inches and Huntsville...4 inches.									
Franklin County									
Cecil	08	2155CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew a tree down.									
Benton County									
Bella Vista	09	0200CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew a tree down.									
Madison County									
Aurora	09	0220CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.									
Carroll County									
Green Forest	09	0230CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew a tree down.									
Crawford County									
Figure Five	09	0250CST			0	0			Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour blew a tree down.									
Sebastian County									
Barling	09	0259CST			0	0	1K		Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew several signs down.									
Franklin County									
2 W Ozark	09	0320CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.									
Sebastian County									
Countywide	19 20	0330CST 0300CST			0	0			Flood
Heavy rain fell on and off from the evening hours of the 18th until the early morning hours of the 20th. During this time Fort Smith received 5.32 inches of rain and Midland received 6.23 inches of rain. The result of this heavy rain was widespread flash flooding and flooding. The first report of flooding was at 330 am on the 19th with Highway 252 being under water near Lavaca. Shortly thereafter several county roads were reported to be flooded. Several of these county roads were barricaded and closed during the afternoon and evening hours. By late evening on the 19th Highway 71 was flooded near Mansfield and Highway 255 was flooded at Vache Grass Bridge and at Hickman Bluff.									
Crawford County									
Countywide	19 20	0350CST 0300CST			0	0			Flood
Heavy rain fell on and off from the evening of the 18th to the early morning hours of the 20th. During this time frame Mountainburg received 6.41 inches of rain and Van Buren received 4.76 inches of rain. This excessive rainfall resulted in flash flooding and flooding. The first report of flooding came at 350 am with several low lying roads in the southern part of the county being flooded. This flooding of county roads became more widespread across the whole county as the day progressed. By 1115 pm even State Highway 282 outside of Mountainburg was flooded.									

Storm Data and Unusual Weather Phenomena

March 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, Northwest

Franklin County

Countywide	19	1000CST			0	0			Flood
	20	0300CST							

Heavy rain fell from time to time from the evening of the 18th to the early morning hours of the 20th. Ozark received 5.33 inches of rain during this time. The cumulative effects of this rainfall resulted in flash flooding and flooding across the county. The first flooding was reported at 10 am when water flowed over some county roads. As the day progressed the flooding worsened and by late afternoon Highway 23 near Turner's Bend was closed. The flooding subsided during the early morning hours on the 20th.

Madison County

Countywide	19	1640CST			0	0			Flood
	20	0300CST							

Heavy rain fell on and off from the evening of the 18th to the early morning hours of the 20th. The cumulative effects of this heavy rainfall was flash flooding and flooding. County roads and low water crossings were first reported to have flooding at 440 pm. This flooding continued into the early morning hours of the 20th.

ARZ019

Crawford

	19	1700CST			0	0			Flood
	20	1000CST							

Lee Creek near Van Buren rose above its flood stage of 23 feet at 5 pm on March 19th. The river crested at 23.9 feet at 1 am on March 20th. The river fell below its flood stage at 10 am the same day.

ARZ019-029

Crawford - Sebastian

	20	0200CST			0	0			Flood
		1600CST							

The Arkansas River near Van Buren rose above its flood stage of 22 feet at 2 am March 20th. The river crested at 23.0 feet at 10 am the same day. The river fell below its flood stage at 4 pm the same day.

Madison County

Huntsville	25	0120CST			0	0			Hail (0.75)
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Madison County

Huntsville	25	0120CST			0	0			Thunderstorm Wind (G52)
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Washington County

Farmington	25	0134CST			0	0			Hail (0.75)
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Sebastian County

Ft Smith	25	0733CST			0	0			Hail (0.75)
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Crawford County

Van Buren	25	0741CST			0	0			Hail (0.75)
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Sebastian County

Barling	25	0741CST			0	0			Hail (0.75)
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Franklin County

Alix	25	1014CST			0	0			Hail (0.88)
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Sebastian County

Ft Smith	25	1325CST			0	0			Hail (0.88)
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Crawford County

7 E Alma	25	1345CST			0	0			Hail (0.75)
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Franklin County

9 N Ozark	25	1400CST			0	0			Hail (0.75)
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Sebastian County

7 SE Greenwood	25	1603CST			0	0			Hail (1.00)
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ARKANSAS, Southeast

Ashley County

Montrose	25	2230CST			0	0			Hail (0.88)
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Chicot County

Lake Vlg	25	2305CST			0	0			Hail (0.75)
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Ashley County

Crossett	31	0200CST			0	0	1K		Flash Flood
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Heavy rains flooded a few roads in and near town. One bridge was also under water.

Storm Data and Unusual Weather Phenomena

March 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, Southwest</u>									
Union County									
5 W El Dorado	17	1630CST			0	0			Thunderstorm Wind (G55)
	Several large trees and power lines were down.								
Hempstead County									
Hope	19	2030CST			0	0			Flash Flood
	Numerous roads in town underwater.								
Union County									
El Dorado	25	2250CST			0	0			Hail (0.75)
Sevier County									
2 W De Queen	30	0715CST 0820CST			0	0			Flash Flood
	Several roads underwater.								
Miller County									
Doddridge	30	0815CST			0	0	40K		Thunderstorm Wind (G60)
	Numerous trees down over county roads. Roof blown off a home and a porch blown down.								
Howard County									
1 S Nashville	30	0930CST			0	0			Flash Flood
	Highway 27 and Trenton Blvd were reported underwater.								
<u>ATLANTIC OCEAN</u>									
Sandy Hook To Manasquan Inlet Nj Out 20Nm									
Sandy Hook Bay	22	2116EST			0	0	0		Marine Tstm Wind
Manasquan Inlet To Little Egg Inlet Nj Out 20Nm									
Barnegat Inlet	22	2222EST			0	0	0		Marine Tstm Wind
	A line of showers marking the leading edge of a strong cold frontal passage helped mix down winds in excess of 40 knots along the northern and central New Jersey coastal waters mainly between 900 p.m. and 1030 p.m. EST. This was the start of a gale event as gusty northwest winds persisted through the night and in many places exceeded the peak gusts with the cold frontal passage after midnight on the 22nd. Peak wind gusts were 49 mph (43 knots) at Barnegat Light (Ocean County) and 47 mph (41 knots) at Sandy Hook.								
New York Harbor									
Bayonne Bridge	26	1020EST			0	0			Marine Tstm Wind
Fire Island Inlet Ny To Sandy Hook Nj Out 20Nm									
Rockaway Inlet	26	1025EST			0	0			Marine Tstm Wind
Long Island Sound W Of New Haven Ct To Port Jefferson Ny									
Kings Point	26	1025EST			0	0			Marine Tstm Wind
<u>CALIFORNIA, Extreme Southeast</u>									
CAZ032 Riverside County Eastern Deserts									
01	0800PST				0	0			High Wind (G50)
	High winds knocked a semi-truck off Interstate 10 near Eagle Mountain Road. A motor home also sustained wind damage in the same area.								
<u>CALIFORNIA, North Central</u>									
	NONE REPORTED.								

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
CALIFORNIA, Northeast									
CAZ072			Greater Lake Tahoe Area						
		06 0500PST			0	0	0		Heavy Snow
		07 0500PST							
		Kirkwood ski area at 7600 feet reported 18 inches of snow in 24 hours with a storm total of 24 inches.							
CAZ072-072			Greater Lake Tahoe Area						
		06 0510PST			0	0	0		Heavy Snow
		08 0630PST							
		Heavy snow fell over the mountains of California. At Kirkwood Ski area at 7800 feet, 12-15 inches of snow fell in a 24 hour period, and a 48 hour storm total of 39-45 inches was reported. Squaw Valley Ski area reported a 24 hour total of 10 inches at 6200 feet and 14 inches at 8200 feet. The storm total was 20 inches at 6200 feet and 36 inches at 8200 feet over a 48 hour period.							
CAZ072-072-072-072-072			Greater Lake Tahoe Area						
		06 0630PST			0	0	0		Heavy Snow
		07 0655PST							
		Several ski resorts reported heavy snow. At Northstar they had 12 inches in 12 hours at 7300 feet and 22 inches at 8600 feet. Squaw Valley reported 14 inches at 6200 feet and 24 inches at 8200 feet in 24 hours. Boreal ski at 7200 feet reported 30 inches of snow in 24 hours with a total of 35-36 inches. Sierra at Tahoe ski reported 18-24 inches of snow in 24 hours at 8100 feet. Alpine Meadows ski reported 16 inches of snow at 7000 feet and 22 inches at 8600 feet in 24 hours.							
CAZ073			Mono						
		06 0700PST			0	0	0		Heavy Snow
		07 0700PST							
		Spotter in Mammoth reported 16-24 inches of snow at 9000 feet and 14 inches of snow at 8200 feet in 24 hours.							
CAZ072			Greater Lake Tahoe Area						
		06 1600PST			0	0	0		Heavy Snow
		07 1600PST							
		CALTRANS reported a storm total of 21 inches in 24 hours at 6100 feet.							
CAZ072			Greater Lake Tahoe Area						
		06 1730PST			0	0			Heavy Snow
		07 1730PST							
		CALTRANS reported 12 inches of snow at 6340 feet and 24 inches at 7377 feet in 24 hours in Meyers.							
CAZ070-070			Surprise Valley						
		07 1040PST			0	0	0		Heavy Snow
		1410PST							
		The Bureau of Land Management reported 4 3/4 inches of snow in 3 hours in Cedarville at 4600 feet. Spotters reported 2 inches of snow in Eagleville (elevation 4640 feet), 3 inches at Lake City (elevation 4559 feet) and up to 6 inches in Cedarville (elevation 4630 feet).							
CAZ071			Lassen/Eastern Plumas/Eastern Sierra						
		07 1455PST			0	0	0		Heavy Snow
		1655PST							
		The Agricultural Inspection Station reported 1-2 inches of snow in 2 hours at 4850 feet near Hallelujah Junction.							
CAZ073			Mono						
		09 1640PST			0	0	0		High Wind (G52) ^M
		At Mono Lake, CA., a spotter reported sustained winds of 50 mph and gusts to 60 mph.							
CAZ072			Greater Lake Tahoe Area						
		10 0610PST			0	0	0		Heavy Snow
		1810PST							
		CALTRANS reported 15 inches of snow in 12 hours at 6100 feet in Kingvale.							
CAZ073			Mono						
		22 0450PST			0	0	0		Heavy Snow
		0750PST							
		Mammoth Ranger Station reported 6 inches of snow in 3 hours at 8000 feet.							
CAZ072-072			Greater Lake Tahoe Area						
		22 1900PST			0	0	0		Heavy Snow
		23 0935PST							

Storm Data and Unusual Weather Phenomena

March 2002

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

Reports of heavy snowfall. Boreal Ski Area reported 14-16 inches of snow in 12 hours at 7200 feet. The Alpine County Sheriff's Office reported 6-8 inches of snow in 12 hours in Markleville (elevation 5500 feet).

CAZ073-073-073

Mono

22	1950PST				0	0	0		
23	0800PST								Heavy Snow

Several reports of heavy snow in the Mammoth Area. The US Forest Service reported a snowfall rate of 2 inches per hour at the Ranger Station (elevation 7500 feet) and 2.5 inches per hour at Crowley Lake (elevation 6780 feet). Mammoth Ski area reported 12 inches in 12 hours at 8900 feet. A spotter in June Lakes reported 8-12 inches in 12 hours at 7640 feet.

CALIFORNIA, Northwest

CAZ001

Redwood Coast

12	1200PST				0	1			
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A man climbing on rocks was knocked down by waves. He fell 8 feet onto other rocks receiving minor injuries.

CALIFORNIA, South Central

CAZ089-091-095-098>099

W Central S.J. Valley - Sw S.J. Valley - Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert

01	0000PST 1600PST				0	0			
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While gusty wind began in the Kern Mountains and Deserts late in the afternoon of February 28th, much of the highest wind was observed over Interior Central California in the early hours of the 1st. On the West Side of the San Joaquin Valley, automated stations reported northwest wind gusts to 52 MPH at Los Banos around 1100 PST and Kettleman City had sustained wind of 29 MPH. In the Kern Mountains, Jawbone RAWS reached gusts to 45 MPH (from 1753 PST on Feb 28th into the 1st of March) with Tehachapi area gusts to 44 MPH at 2245 PST on Feb 28th. In the Kern Desert, gusts to 53 MPH and 54 MPH were reported at Indian Wells Canyon and Laurel Mountain, respectively; 58 MPH at Inyokern Airport, and one peak gust of 63 MPH at Government Peak at 0851 PST on the 1st.

CAZ090>092

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

02	0630PST 0730PST				0	0			
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Overnight low temperatures dropped to the low 30s F., including 32F at Merced and Allensworth and 31F at Lemoore causing concern among deciduous crop growers in the Central and South San Joaquin Valley.

CAZ092

Se S.J. Valley

03	0530PST 0700PST				0	0			
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In the Southeast San Joaquin Valley, overnight low temperatures dropped to the low 30s with Allensworth reporting 31F and Porterville at 32F.

CAZ096>097

S Sierra Mtns - Tulare Cty Mtns

06	1200PST				0	0			
07	2200PST								Winter Storm

A substantial amount of snow was reported with this early March event. In the Southern Sierra Nevada Chilkoot Meadows reported 26 inches of snow in 24 hours, Agnew Pass reported 31" and West Woodchuck Meadow had 28" within a 48-hour period. In the Tulare County Mountains Pascoes had 19" within 24-hours and 26" within 48-hours with Lodgepole reporting 14" within a 24-hour period.

CAZ096

S Sierra Mtns

07	1530PST 1900PST				0	0			
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CAZ095-099

Kern Cty Mtns - Se Kern Cty Desert

07	2056PST				0	0			
08	0600PST								Wind

CAZ098

Indian Wells Vly

07	2145PST				0	0	50K		
08	0600PST								High Wind (G92) ^M

A vigorous frontal passage through Central California led to strong northwest wind that posed problems for travel on Highway 14 in the Indian Wells Valley of Kern County where the wind blew over two trucks. Indian Wells RAWS reported gusts to 92Kts at 0013 PST on the 8th with gusts to 65Kts at Inyokern Airport at 2145 PST on the 7th. Other Kern County Mountain and Desert reports included wind gusts to 37Kts at Edwards AFB, 50Kts at Mojave Airport, and gusts to 60 MPH at Walker Pass. Some thundershower and shower activity was reported in the Southern Sierra Nevada in the later afternoon hours.

Storm Data and Unusual Weather Phenomena

March 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

CAZ089>092 W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley
09 0300PST 0700PST 0 0 Frost

On the morning of the 9th, temperatures again dipped to freezing to concern deciduous crop growers in the Central and Southern San Joaquin Valley. Overnight lows included 25F at Coalinga AWOS, 31F at Jasmin, and 32F at Mendota, Merced, Lemoore, and Porterville.

CAZ095-098>099 Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert
13 0956PST 2100PST 0 0 High Wind (G83) M

In the Tehachapi Mountains northwest wind provided sustained 10-minute wind speeds of 73 MPH with a peak gust of 93 MPH. In the Kern Deserts widespread wind gusts in excess of 50 MPH were reported with peak gusts in and around Government Peak of 96 MPH. Inyokern Airport reported gusts to 45Kts and Mojave Airport gusting to 50Kts.

CAZ089>091 W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley
13 1102PST 2100PST 0 0 Wind

While High Wind was occurring in the Kern County Mountains and Deserts, the West Side of the Central and Southern San Joaquin Valley experienced gusty wind with speeds sustained at 27 MPH/gusts to 36 MPH at Hilmar in Merced County, the Kettleman Hills reporting gusts to 42 MPH, and Lemoore indicating gusts to 37 MPH in Kings County. Local utility reports indicated 6,000 customers went without power in the Central San Joaquin Valley between Noon and 3 PM PST due to downed power lines and trees in Fresno and Madera City vicinities.

CAZ089>092 W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley
15 0311PST 0800PST 0 0 Frost

Another cool morning this spring posed a threat to Central and South San Joaquin Valley agriculture. Overnight low temperatures included 28F at Coalinga, 29F at Lemoore, 30F at Belridge and Allensworth, 31F at Jasmin, and 32F at Wasco and Merced.

CAZ098>099 Indian Wells Vly - Se Kern Cty Desert
16 1200PST 18 0401PST 0 0 Wind

Windy conditions prevailed for much of the period from the 16th through the 18th in the Kern Desert areas. Indian Wells Canyon had gusts consistently in the upper 40s to low 50s MPH range with gusts in the upper 50s to around 70 MPH as reported by a remote sensor unit at Government Peak. Mojave Airport Tower had gusts to 40Kts on the 16th.

CAZ095 Kern Cty Mtns
16 1300PST 18 0420PST 0 0 Winter Weather

CAZ093>094-096>097 S Sierra Foothills - Tulare Cty Foothills - S Sierra Mtns - Tulare Cty Mtns
16 1810PST 17 2120PST 0 0 Snow

Significant snow occurred not only in the typically higher elevations of the Southern Sierra Nevada but also in the foothill areas as well at elevations down to at least 3000 feet M.S.L. On lower elevation roadways in Madera County 2" of snow fell with Yosemite Valley and Lodgepole receiving 5" of new snow, Badger Pass 8", Poison Ridge and Charlotte Lake 7", and Hume Lake 11". In the Kern Mountains gusty wind compounded the problem with snow accumulations on area highways. Ridge winds in the Tehachapi Pass sustained 50 MPH and Walker Pass had gusts to 49 MPH. In the meantime 4" of snow accumulated at Glennville and 14" of new snow was reported at Greenhorn Summit. Interstate-5 over the Grapevine was closed due to snowfall.

CAZ089>092 W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley
19 0400PST 0800PST 0 0 Frost

This cool March continued for the Central and South San Joaquin Valley as overnight low temperatures again caused concern for local agriculture interests. Reported minimums included 28F at Coalinga, 30F at Allensworth and Porterville, 31F at Merced, Lemoore, and Jasmin, and 32F at Arvin.

CAZ096 S Sierra Mtns
22 1600PST 24 0400PST 0 0 Winter Storm

CAZ097 Tulare Cty Mtns
22 1600PST 24 0400PST 0 0 Snow

Snow totals for this winter type event in the higher elevations of the Southern Sierra Nevada (and Tulare County Mountains) included 26" at Paradise Meadows, 23" at Poison Ridge, 20" at Agnew Pass and Big Meadows, and 19" at Tamarack Summit and Pascoes.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
CALIFORNIA, South Central									
Fresno County									
(Fat) Air Terminal	23	1317PST 1600PST			0	0			Thunderstorm
Fresno County									
(Fch) Chandler Af	23	1317PST 1600PST			0	0			Thunderstorm
Kern County									
(Bfl) Meadows Field Ap	23	1317PST 1600PST			0	0			Thunderstorm
Thunderstorms occurred within 10 SM of Bakersfield and Fresno airports during the early and mid afternoon of the 23rd.									
CAZ095-098>099 Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert									
	24	0448PST 1600PST			0	0			Wind
Windy conditions again prevailed in the Kern Mountains and Deserts on the 24th. Jawbone Canyon reported northwest wind gusts to 51 MPH, Mojave Airport gusts to 52 MPH, and Indian Well Canyon had gusts to 54 MPH.									
CALIFORNIA, Southeast									
CAZ028 San Bernardino County Deserts									
	13	1100PST 1300PST			0	6	60K		Dust Storm
Strong winds over 50 mph caused visibilities to drop to near zero on Interstate 15 near Yermo. These low visibilities caused two seven-car pile-ups, injuring several people. The interstate was closed for an hour due to the low visibilities and damaged vehicles. Power lines were also blown down in Barstow creating power outages for about 2,800 people.									
CALIFORNIA, Southwest									
CAZ048 San Bernardino County Valley/The Inland Empire									
	01	0830PST 1200PST			0	0	30K		High Wind (G43) ^M
High winds destroyed a scoreboard and flipped over a car near Devore.									
San Bernardino County									
Grand Terrace	02	1245PST 1400PST			0	0	5K		Wild/Forest Fire
A wild fire fanned by 30-40 mph winds, consumed a 20 foot by 20 foot stack of wooden pallets and 5 acres of brush before it was put out.									
CAZ060>061 Apple And Yucca Valleys - Coachella Valley									
	13	0900PST 1220PST			0	1	170K		High Wind (G56)
CAZ060>061 Apple And Yucca Valleys - Coachella Valley									
	13	1130PST 1815PST			0	0	40K		Dust Storm
High winds whipped up dust across the deserts, reducing visibility to zero along all major highways. The winds also flipped over a Semi-tractor trailer in the Coachella Valley and tore a roof off a Community College building									
CAZ043 San Diego County Coasts									
	16	0600PST 1800PST			0	3	60K		Winter Weather Mix
Gusty 15-20 knot winds over San Diego Bay and just off Imperial Beach disrupted a Sailing Regatta. Very rough seas were present off the coast, due to the combination of four foot wind waves and an eight foot northwest swells. Two boats were dismantled, several others sustained breakage, and several crewmen were knocked overboard. So many of the assist boats were busy towing in broken down boats that the race was cancelled									
CAZ061 Coachella Valley									
	16	1817PST			0	0			Dust Storm
Riverside County									
Corona	17	1542PST 1730PST			0	0			Wild/Forest Fire
High wind caused a dust storm in the Coachella Valley and aggravated a brush fire the next day. More than 100 acres burned before the fire was controlled.									

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CALIFORNIA, Southwest

CAZ055>056-058-060 San Bernardino County Mountains - Riverside County Mountains - San Diego County Mountains - Apple And

Yucca Valleys

	17	1500PST			0	32			Heavy Snow
	18	0742PST							

**San Diego County
(San)San Diego Intl**

	17	2330PST			0	0			Lightning
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CAZ048

San Bernardino County Valley/The Inland Empire

	18	1050PST			0	0			High Wind (G56) ^M
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Border Patrol agents rescued five separate groups of people who were lightly clad and suffering from hypothermia in the San Diego Mountains near Pine Valley. Whiteout conditions were reported over the High Desert areas. The snow level was near 2500 feet. More than 12 inches of snow fell above 6000 level in less than 12 hours. Thunderstorms were present during the middle of the night. Lightning struck an aircraft on final approach into San Diego International Airport. Small hail was reported over the Apple Valley.

San Diego County

Camp Pendleton

	21	1200PST			0	0			Wild/Forest Fire
	22	0600PST							

A brush fire that began from a live artillery exercise, burned 2400 acres before full containment. There were no injuries, and no structures were damaged. Visibility at the Camp Pendleton airport was briefly down to 1 1/4 miles in smoke.

Orange County

**Yorba Linda to
Fullerton**

	23	2337PST			0	0			Urban/Sml Stream Fld
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Standing water on State Route 91 from heavy rain.

San Diego County

3 W (Crq)Palomar Arpt

	24	0540PST			0	0			Funnel Cloud
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San Diego County

5 W (Crq)Palomar Arpt

	24	1820PST 1824PST			0	0			Funnel Cloud
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CAZ048>050-050

San Bernardino County Valley/The Inland Empire - Riverside County Valley/The Inland Empire - San Diego County Valleys

	31	0000PST 2359PST			0	0			Fog
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Dense fog with visibility near zero, formed over the inland valleys.

CALIFORNIA, Upper

CAZ081-081-081

Central Siskiyou County

	09	1144PST 1319PST			0	0			High Wind (G63) ^M
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The RAWS at Weed Airport recorded a sustained wind of 43 mph.

A High Wind Warning was issued for the Shasta Valley around Weed at 2102 PST on 03/08 and expired at 09/1845 PST. The above observations verified the warning. The Weed RAWS highest sustained and highest peak wind are listed above, but several other observations from the same sensor also met high wind warning criteria. A second High Wind Warning was issued for the same area at 1845 on 03/09, but it did not verify and was downgraded to a Wind Advisory at 0550 PST on 03/10.

CAZ082

South Central Siskiyou County

	10	0830PST			0	0			Heavy Snow
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Mt. Shasta Ski Park reported 11 inches of snow overnight.

A Heavy Snow Warning was issued for California zones CAZ080/082 at 0540 PST on 03/09/02 and expired at 1445 PST on 03/10/02. The above report was the only one received that verified the warning.

CALIFORNIA, West South Central

Los Angeles County

Los Angeles

	13	1250PST			0	0			Wind
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Los Angeles County

Studio City

	13	1350PST			0	0			Wind
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Los Angeles County

Hollywood

	13	1455PST			0	0			Wind
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Gusty west winds between 30 and 40 mph knocked down some trees across Los Angeles county, producing some minor damage. In Los Angeles, the gusty winds knocked over a 50 foot tree onto a van. In Studio City, the winds knocked down a tree onto a UPS truck. In Hollywood, the winds knocked down a tree onto a car. No injuries were reported with any of the incidents.

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March 2002

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CALIFORNIA, West South Central

Los Angeles County

.5 S Long Beach	13	1745PST			0	0			Wind
Gusty northwest winds between 30 and 40 mph knocked a 16 foot boat into the breakwater in Long Beach Harbor. No one was injured, but the boat sank.									

CALIFORNIA, Western

NONE REPORTED.

CARIBBEAN SEA AND TROPICAL ATLANTIC

Deerfield Beach To

Ocean Reef Fl

20 E Government Cut	11	1430EST			0	0			Waterspout
A pilot reported a waterspout in the Atlantic									

Deerfield Beach To

Ocean Reef Fl

5 SE Port Everglades	11	1500EST			0	0			Waterspout
A waterspout was sighted by a pilot in the Atlantic.									

Jupiter Inlet To

Deerfield Beach Fl Out

20Nm

30 E Jupiter Inlet	21	1143EST			0	0			Waterspout
A pilot reported a waterspout in the Atlantic.									

COLORADO, Central and Northeast

COZ035>036-038>041-043>044-048 Larimer & Boulder Counties Between 6000 & 9000 Feet - Jefferson & W Douglas Counties Above 6000 Feet / Gilpin / Clear Creek / Ne Park Counties Below 9000 Feet - Larimer County Below 6000 Feet / Nw Weld County - Boulder & Jefferson Counties Below 6000 Feet / W Broomfield County - N Douglas County Below 6000 Feet / Denver / W Adams & Arapahoe Counties / E Broomfield County - Elbert / C & E Douglas Counties Above 6000 Feet - C & S Weld County - Morgan County - Logan County

01		0000MST 1000MST			0	0			Winter Storm
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Upslope conditions allowed for heavy snow to develop, especially in and near the Front Range Foothills. Storm totals included: 14 inches at Eldorado Springs and near Genesee, 13 inches at Lookout Mountain and Horsetooth Inlet Bay, 12 inches at Coal Creek Canyon, Crescent Park, 1 mile north of Loveland and Red Feather Lakes, 10 inches, 2 miles east of Boulder and Nederland, 9 inches at the Boulder NOAA Campus and Morrison, 8 inches at Broomfield, Erie, Estes Park, Golden, Louisville, Littleton and Platteville. Elsewhere, snow amounts ranged from 5 to 7 inches.

COZ035>036

Larimer & Boulder Counties Between 6000 & 9000 Feet - Jefferson & W Douglas Counties Above 6000 Feet / Gilpin / Clear Creek / Ne Park Counties Below 9000 Feet

08		2300MST			0	0			High Wind (G82) ^M
09		1000MST							

High winds occurred across portions of the Front Range Foothills. Peak wind reports included: 95 mph (82 kt) 1 mile south of Fritz Peak, 88 mph (76 kt) atop Niwot Ridge and 73 mph (63 kt) 4 miles east-northeast of Nederland.

COZ035

Larimer & Boulder Counties Between 6000 & 9000 Feet

14		0000MST 0930MST			0	0			Heavy Snow
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Heavy snow developed in the foothills of Boulder County. Snow amounts included 9 inches, 3 miles southwest of Jamestown, and 7 inches, 4 miles east northeast of Nederland.

COZ045>046

C & E Adams & Arapahoe Counties - N & Ne Elbert County Below 6000 Feet / N Lincoln County

24		1200MST 1700MST			0	0	0		Heavy Snow
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Thunderstorms that formed along a stationary boundary, triggered locally heavy snowfall, up to 2 inches per hour, along parts of Interstate 70 from around Byers to Arriba. A storm spotter, 20 miles northeast of Byers, measured just over 6 inches of snow. Heavy snow was also reported between Flagler and Arriba, causing snowpacked roads and extremely poor visibilities. The combination of poor road conditions and careless driving resulted in multiple accidents along Interstate 70 near Arriba.

Storm Data and Unusual Weather Phenomena

March 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, Central and Northeast

COZ035>036 Larimer & Boulder Counties Between 6000 & 9000 Feet - Jefferson & W Douglas Counties Above 6000 Feet / Gilpin / Clear Creek / Ne Park Counties Below 9000 Feet

28	0800MST				0	0			High Wind (G83) ^M
	0945MST								

High winds developed over portions of the Front Range Foothills. Peak wind gusts included: 95 mph (83 kts), 2.5 miles north of Estes Park, 81 mph (70 kts), 1 mile south of Fritz Peak, 72 mph (63 kts) at Rollinsville and 70 mph (61 kts) at Blackhawk.

COLORADO, East Central

COZ090>092 Yuma County - Kit Carson County - Cheyenne County

01	0400MST				0	0			Winter Storm
	1600MST								

A strong winter storm provided eastern Colorado with 2 to 5 inches of snow. The storm produced north winds of 25 to 35 mph...which created areas of blowing and drifting snow. Visibility was reduced below one mile, creating hazardous driving conditions along Interstate 70. The strong winds combined with temperatures in the single digits, produced wind chill readings between 15 and 25 degrees below zero.

COZ091>092 Kit Carson County - Cheyenne County

24	1000MST				0	0			Winter Storm
	1800MST								

A narrow band of 4 to 8 inches of snow developed along and south of a Flagler to Burlington line on March 24th. This band of heavy snow reduced visibilities below one mile and closed Interstate 70 from Limon to Oakley.

COLORADO, South Central and Southeast

COZ066-068-070-074 Southern Sangre De Cristo Mountains - Western Fremont And Northern Custer Counties - Wet Mountains - Upper Huerfano River Basin/Walsenburg And Vicinity

01	0230MST				0	0			Heavy Snow
	1500MST								

Arctic air pushing south across the region combined with an upper level system moving across northern New Mexico produced heavy snow across portions of southern Colorado. Some of the heavier amounts include: In Fremont county...12 miles northeast of Texas Creek received 6 inches...around Beulah in Pueblo county 8 inches was noted...in Huerfano county...6 to 7 inches was measured in and around Walsenburg with 10 to 11 inches of snow accumulating at La Veta and Cuchara. Lesser amounts from 1 to 4 inches were logged from the Colorado Springs areas into the Upper Arkansas River Valley.

COZ059-061 W Lake / W Chaffee County - Eastern San Juan Mountains

08	0030MST				0	0			Heavy Snow
	1600MST								

A vigorous upper level storm system moved from southwest Colorado and then into central Colorado producing some heavy snows over the southwest and central mountains. Some of the heavier snows were 12 inches at Santa Maria reservoir in Mineral county and 14 inches of snow at the Wolf Creek Ski area, which is also located in Mineral county. More than 8 inches of snow fell in the higher elevations of the Sawatch Range in central Colorado. An isolated high wind gust was also noted in Custer county where winds of 75 mph were recorded approximately 7 miles west of Westcliffe.

COZ067-071 Teller County/Rampart Range/Pikes Peak - Southern El Paso County/Colorado Springs And Vicinity

24	1500MST				0	0			Heavy Snow
	2030MST								

A burst of convective snow struck the Colorado Springs area, bringing 4 to 9 inches of snow. Snow also fell in the mountains west of Colorado Springs. Lesser amounts of 2 to 5 inches were noted in Fremont, western Pueblo, Custer, and Huerfano counties.

COLORADO, West

COZ002-004-009>010-012 Central Yampa River Basin - Elkhead And Park Mountains - Grand And Battlement Mesas - Gore And Elk Mountains/Central Mountain Valleys - West Elk And Sawatch Mountains

01	0000MST				0	0			Heavy Snow
	2000MST								

An unseasonably cold storm system produced 6 to 10 inches of snow in the northern and central mountains of western Colorado, with three to five inches at the lower elevations of the Northwest Plateau. Gusty northwest winds of 20 to 30 mph over the higher elevations produced areas of blowing and drifting snow.

COZ002>005-008>010-012>013-017>019 Central Yampa River Basin - Roan And Tavaputs Plateaus - Elkhead And Park Mountains - Upper Yampa River Basin - Central Colorado River Basin - Grand And Battlement Mesas - Gore And Elk Mountains/Central Mountain Valleys - West Elk And Sawatch Mountains - Flattop Mountains - Uncompahgre Plateau And Dallas Divide - Northwestern San Juan Mountains - Southwestern San Juan Mountains

07	0400MST				0	0			Winter Storm
	1200MST								

Storm Data and Unusual Weather Phenomena

March 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

A series of moist Pacific weather systems lead to a protracted winter storm that produced 8 to 20 inches of new snow in the mountains of western Colorado and four to six inches at the lower elevations of northwest Colorado. The highest amount reported was at Gothic with 29 inches, while the ski areas of Crested Butte and Aspen Highlands reported 22 inches and 21 inches, respectively. In addition, wind gusts of 40 to 60 mph were common in the mountains, with a peak wind gust of 70 mph reported on Red Mountain Pass in the San Juan Mountains.

COZ001>004-006>010-012>013-017>018 **Lower Yampa River Basin - Central Yampa River Basin - Roan And Tavaputs Plateaus - Elkhead And Park Mountains - Grand Valley - Debeque To Silt Corridor - Central Colorado River Basin - Grand And Battlement Mesas - Gore And Elk Mountains/Central Mountain Valleys - West Elk And Sawatch Mountains - Flattop Mountains - Uncompahgre Plateau And Dallas Divide - Northwestern San Juan Mountains**

13	1400MST	0	0		Winter Storm
14	1600MST				

A cold Pacific airmass and strong cold front pushed south through western Colorado, generally producing 8 to 14 inches of snow in the mountains. Steamboat Springs and Snowmass Ski Areas both reported 18 inches of snow, with 15 inches at Aspen Mountain Ski Area. At lower elevations, four to eight inches of snow were common. However, 12 inches fell at Maybell in the Northwest Plateau. Winds of 40 to 60 mph created widespread blowing and drifting snow over the higher elevations. The highest wind gusts reported were 75 mph at Snowmass Ski Area, 72 mph at Aspen Highlands Ski Area, 66 mph at Telluride Ski Area and 64 mph at Crested Butte Ski Area.

COZ010 **Gore And Elk Mountains/Central Mountain Valleys**

14	1455MST	1	0		Avalanche
	1500MST				

A backcountry skier was killed when she triggered an avalanche on the back side of Aspen Mountain, at an elevation around 9800 feet. The four foot deep soft-slab avalanche traveled about 200 vertical feet and buried the victim under five feet of snow. F39OU

COZ010 **Gore And Elk Mountains/Central Mountain Valleys**

14	1455MST	1	2		Avalanche
	1500MST				

A group of backcountry skiers triggered a large soft-slab avalanche about four miles south of Ashcroft at an elevation of 11,000 feet. The avalanche was estimated to be 600 to 800 feet across and traveled 300 to 400 vertical feet. One person was buried and killed, two others injured and two were buried, but not hurt. M63OU

COZ018 **Northwestern San Juan Mountains**

15	1315MST	1	1		Avalanche
	1320MST				

Two out-of-bounds skiers triggered a soft-slab avalanche east of the Telluride Ski Area at an elevation of 11,800 feet. The slide traveled 2200 vertical feet, killing one person and seriously injuring another. The victim was not recovered until weeks later, as debris at the bottom of the slide was estimated to be 30 feet deep and hardpacked. F31OU

COZ003-009-012-018>019 **Roan And Tavaputs Plateaus - Grand And Battlement Mesas - West Elk And Sawatch Mountains - Northwestern San Juan Mountains - Southwestern San Juan Mountains**

16	0000MST	0	0		Heavy Snow
17	1200MST				

A moist Pacific storm system moved into the mountains of western Colorado, producing widespread 6 to 12 inch amounts of snow in the mountains. However, observers on the Grand Mesa reported 12 to 18 inches and Durango Mountain resort received 16 inches in a 36 hour period.

COZ013 **Flattop Mountains**

17	1330MST	1	0		Avalanche
	1335MST				

Snowmobilers triggered a medium-sized soft-slab avalanche on Pagoda Peak, 36 miles southwest of Steamboat Springs in northeast Rio Blanco County. The slide buried and killed one man under 3 feet of snow while still on his snowmobile and partly buried another person. The slide was 300 to 400 feet wide and traveled 400 vertical feet. M31OU

COZ019 **Southwestern San Juan Mountains**

31	1030MST	0	0	0.50K	Avalanche
	1035MST				

Two ice climbers were caught and buried waist deep in an avalanche five miles west of Silverton, at an elevation of 11,000 feet. They lost climbing equipment and other gear, but were uninjured.

CONNECTICUT, Northeast

NONE REPORTED.

Storm Data and Unusual Weather Phenomena

March 2002

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

CONNECTICUT, Northwest

NONE REPORTED.

CONNECTICUT, Southern

NONE REPORTED.

DELAWARE

DEZ001>004

New Castle - Kent - Inland Sussex - Delaware Beaches

01	0000EST	0	0	0	
31	2359EST				Drought

Delaware entered arch 2002 with considerably dry conditions. Twenty-one of the thirty gaged streams in Maryland and Delaware as well as seven of the seventeen monitored groundwater wells were at record low levels. They were lower than the levels set during the 1950s and 1960s droughts including the Christina River. The Brandywine Creek was flowing at record lows in spite of being bolstered by a 5 million gallon a day release from the Marsh Creek Reservoir in Chester County. The state also asked Pennsylvania to preserve as much water as it can in case of emergency. On March 5th Governor Ruth Ann Minner declared a statewide drought warning with special emphasis on New Castle County because of its reliance on surface water. The governor asked 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. The state cancelled the annual trout stocking at Gravel Hill Pond near Georgetown because water levels were too low. Plans were also made to tap the Hoopes Reservoir for water if necessary. The lack of precipitation in the Delaware River Basin forced the Delaware River Basin Commission to continue its drought emergency declaration for its entire drainage basin.

Conditions improved as the month wore on. Precipitation events on March 2nd and 3rd, 12th and 13th, 17th and 18th, 20th, 26th and 27th and 31st caused monthly precipitation in Delaware to be above normal. This was the first month since June of 2001 that the entire state was wetter than normal. On a county weighted average, March monthly precipitation totals were 4.0 inches in New Castle and Kent Counties and 4.6 inches in Sussex County. Normal is around 3.7 inches. The monthly precipitation total was 5.40 inches in Georgetown (Sussex County) and 4.05 inches at the New Castle County Airport. In spite of precipitation returning to normal levels, concern remained about crops, especially the winter wheat crop. At the end of the month 38 percent of the state's soil was short or very short of moisture. The percentage last year on March 31st was 25 percent.

DEZ001>004

New Castle - Kent - Inland Sussex - Delaware Beaches

10	0600EST	0	0	0	
	1900EST				Wind

A strong cold frontal passage before dawn ushered in one of the coldest air masses of the winter season on the 10th. Scattered thunderstorms accompanied its passage. The surface pressure difference (pressure gradient) between a high pressure system in the Mississippi Valley and a very intense low pressure system (around 970 millibars) just east of James Bay produced windy conditions throughout the daylight hours on the 10th. As the high pressure system moved closer to Delaware late in the day, winds diminished. Peak wind gusts averaged between 35 and 50 mph and included 48 mph in Dover (Kent County), 44 mph at the New Castle County Airport and 37 mph in Georgetown (Sussex County).

DEZ001>004

New Castle - Kent - Inland Sussex - Delaware Beaches

21	2000EST	0	0	0	
22	0000EST				Wind

A strong cold front moved through Delaware during the evening of the 21st. It was accompanied by wind gusts of between 30 and 45 mph. The strong gusty winds persisted throughout the night, although the strongest wind gusts occurred with the cold frontal passage and during the ensuing evening hours. Peak wind gusts included 45 mph at the New Castle County Airport, 44 mph in Delaware City (New Castle County), 41 mph in Dover (Kent County) and 33 mph in Georgetown (Sussex County).

DISTRICT OF COLUMBIA

DCZ001

District Of Columbia

21	1700EST	0	0	0	
22	0400EST				Strong Wind

A strong arctic cold front pushed through the region during the evening of the 21st. This front ushered in strong northwest winds that gusted as high as 58 MPH. The highest winds occurred between 6 PM and Midnight on the 21st, but gusty conditions continued through 4 AM on the 22nd. Minor structural damage was reported in isolated locations, in addition to downed trees and power lines. Up to 4000 customers across the District were without power for several hours. A fallen tree downed a power line which set two cars on fire at 14th and Tuckerman streets in Northwest. A wind gust of 52 MPH was recorded at Reagan Washington National Airport at 8:10 PM on the 21st. Children's Hospital recorded a wind gust of 58 MPH shortly after midnight on the 22nd.

FLORIDA, East Central

Indian River County

9 W Vero Beach	26	1450EST	0	0	0	0	
							Hail (0.88)

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					Killed	Injured	Property	Crops	
<u>FLORIDA, East Central</u>									
Martin County									
Indiantown	26	1628EST			0	0	0	0	Hail (0.75)
Volusia County									
De Land	26	1845EST			0	0	0	0	Hail (0.75)
Brevard County									
Palm Bay	26	2055EST			0	0	2K	0	Thunderstorm Wind
Thunderstorm winds blew down a few large trees in Palm Bay destroying a small shed and a fence.									
<u>FLORIDA, Extreme Southern</u>									
NONE REPORTED.									
<u>FLORIDA, Northeastern</u>									
Marion County									
Dunnellon	12	2100EST			0	0	0.50K		Tstm Wind/Hail
Large branches from pine tree snapped off by thunderstorm winds and landed on car.									
Alachua County									
5 SE (Gnv)Gainesville A	12	2113EST			0	0			Urban/Sml Stream fld
Flooding of State Road 20 reported by amateur radio operator.									
St. Johns County									
Crescent Beach	24	1600EST			1	0			Rip Currents
42 Year old man attempted to rescue children and was caught in a rip current. Taken to Flagler Hospital and died on 03/25/02. M42IW									
Flagler County									
5 N Bunnell	26	1805EST 1810EST			0	0			Tstm Wind/Hail
Pea sized hail reported by the public and EMA.									
Columbia County									
2 W Lake City	31	2125EST			0	0	0.10K		Thunderstorm Wind
large trees down across US Highway 90 and Fortress Rd.									
<u>FLORIDA, Northwest</u>									
Calhoun County									
Countywide	03	0200EST 0600EST			0	0	10K		Flood
Approximately 80 percent of the county dirt roads were closed. Reported by the Calhoun County EMA.									
Leon County									
Countywide	03	0200EST 0600EST			0	0	1M		Flood
An estimated 90 homes sustained significant water damage. Several residences in the Carriage Estates mobile home park were evacuated due to high water. Numerous motorists were rescued from stranded vehicles. Numerous county roads and Tallahassee streets were closed. Reported by the Tallahassee Police and Leon County EMA.									
Wakulla County									
Countywide	03	0200EST 0600EST			0	0	20K		Flood
Some county roads were closed. State Highway 267 received minor flooding, with some homes isolated by high waters. Reported by the Wakulla County EMA.									
Jefferson County									
Countywide	03	0300EST 0700EST			0	0	20K		Flood
Numerous county roads were closed with some dirt roads washed out. Seven to eleven inches of rain fell over the northern half of the county, with widespread flooding in the Lloyd and Thompson Valley areas. A local state of emergency was declared by county officials. Reported by the Jefferson County EMA.									
Madison County									
Countywide	03	0300EST 0700EST			0	0	10K		Flood
Numerous county roads were closed. Between six and 10 inches of rain was recorded.									

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FLORIDA, Northwest

Leon County

Tallahassee **03** **0412EST** **0** **0** **100K** **Lightning**

Lightning sparked a fire that severely damaged a house. Reported by the Tallahassee Democrat.

Bay County

Bayou George **12** **1536EST** **0** **0** **75K** **Thunderstorm Wind**

A double wide trailer was destroyed, a roof was blown off a house, and trees were toppled. Reported by the Panama City News Herald.

Bay County

Southwest Portion **12** **1545EST** **0** **0** **Hail (0.75)**

Dime size hail near the coast. Reported by the Bay County EMA.

Bay County

Southwest Portion **12** **1545EST** **0** **0** **2K** **Thunderstorm Wind**

Trees down at Sand Hill. Reported by the Bay County EMA.

Jackson County

Marianna Muni Arpt **12** **1545EST** **0** **0** **250K** **Thunderstorm Wind**

The roof of an airport hanger was blown off and destroyed a nearby plane. A platform in front of a car dealership fell across power lines on Lafayette Street. Reported by the Jackson County EMA.

Gulf County

Northeast Portion **12** **1640EST** **0** **0** **50K** **Thunderstorm Wind**

A building was destroyed. Reported by the Gulf County Sheriff.

Liberty County

Summatra **12** **1725EST** **0** **0** **5K** **Thunderstorm Wind**

Trees and power lines down on State Highway 65. Reported by the Liberty County Sheriff.

Franklin County

Countywide **12** **1730EST**
1740EST **0** **0** **15K** **Thunderstorm Wind**

Numerous trees and power lines down in Apalachicola, Carrabelle, St. George Island and East Point. Reported by the Franklin County EMA.

Leon County

Tallahassee **12** **1755EST** **0** **0** **Hail (0.75)**

Dime size hail at the intersection of Tharpe and North Monroe Streets. Reported by Tallahassee Police.

Wakulla County

Countywide **12** **1755EST**
1800EST **0** **0** **10K** **Thunderstorm Wind**

Some trees and power lines down. Reported by the Wakulla County Sheriff.

Taylor County

Perry **12** **1907EST** **0** **0** **1K** **Thunderstorm Wind**

Windows blown out of a house on Holt Road. Reported by the Taylor County EMA.

Madison County

Countywide **12** **1910EST**
1920EST **0** **0** **2K** **Thunderstorm Wind**

Numerous trees down. Reported by the Madison County EMA.

FLORIDA, Southern

NONE REPORTED.

FLORIDA, West Central

FLZ039

Levy
01 **0100EST**
0600EST **0** **0** **Freeze**

Cold high pressure, which had produced widespread freezing temperatures from Tampa Bay north on February 28th, continued its grip along the nature coast on March 1. Minimum temperatures across much of Levy County ranged from 27 to 30, lasting up to 5 hours. East winds arrived before daybreak, warming temperatures above 32 before 7 AM.

FLZ049>052-055>057-060>062-065 Pasco - Pinellas - Hillsborough - Polk - Manatee - Hardee - Highlands - Sarasota - De Soto - Charlotte - Lee

02 **1100EST**
1800EST **0** **0** **7K** **Wind**

Storm Data and Unusual Weather Phenomena

March 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

A departing high pressure system combined with an approaching cold front to produce strong and gusty south winds across the central coastal counties from late morning through the afternoon. Sustained winds ranged from 25 to 30 mph, with a period of gusts in excess of 40 mph between noon and 2 pm. Minor damage was noted across the area, including roof trusses from a building which was under construction in Holiday (Pasco Co). A portion of decaying outer paneling was stripped at a multi-unit residence in Winter Haven by estimated 40 to 50 mph gusts. Several vendor tents were blown down at a weekend celebration in Cape Coral (Lee Co), and a sailing competition was cancelled due to the gusts. The winds enhanced a small brush fire along highway 41 in Charlotte Co. A few large limbs were reported down in Brooksville (Hernando Co), just north of the area of strongest winds.

FLZ039-042>043

Levy - Citrus - Sumter

05	0300EST 0800EST				0	0			Freeze
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Modified arctic air filtered into northern and portions of west central Florida early on the 5th, courtesy of yet another strong high pressure system with origins in the Canadian prairies. Temperatures fell into the upper 20s and lower 30s prior to daybreak, warming quickly above freezing thereafter. No significant damage was reported along the peninsula, as the coldest air (lower 20s) was confined to the panhandle.

FLZ039-042>043-048

Levy - Citrus - Sumter - Hernando

08	0500EST 0900EST				0	0			Fog
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A weakening and departing surface high pressure system produced a light east flow of relatively cool moist air underneath a warmer air mass just off the earth's surface. Widespread dense fog developed over the nature coast (Hernando County to Levy County) before daybreak, and continued through mid morning. Visibility was reduced to 1/4 mile or less in most areas before the fog burned off shortly after 9 AM.

Citrus County

3 N Floral City

26	1445EST 1450EST				0	0	0.25K		Tstm Wind/Hail
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An estimated 55 mph thunderstorm wind gusts knocked down several 1 to 2 inch diameter tree limbs on a resident's property near Floral City.

Hillsborough County

5 NW Tampa

28	1415EST				0	0	7K		Whirlwind
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A "whirlwind", occurring when a fairly strong sea breeze interacted with mechanical atmospheric mixing under clear, dry conditions, produced considerable damage at a home in the Town 'N' Country section of Hillsborough County. Three cement support poles were lifted from the ground, and a metal rod was reportedly driven through the home's roof.

FLORIDA, West Panhandle

Escambia County

Pensacola

12	1200CST 1202CST				0	0	20K		Thunderstorm Wind (G50)
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Trees and power lines were blown down and a couple of buildings suffered minor roof damage in Pensacola.

Santa Rosa County

Milton

26	1030CST 1031CST				0	0	10K		Thunderstorm Wind (G50)
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Trees and power lines were blown down east of Milton.

Escambia County

Bellevue

31	1000CST 1001CST				0	0	15K		Lightning
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Lightning struck a home in the Bellevue area. The strike started a fire in the attic and was put out by the fire department. The attic suffered major damage.

GEORGIA, East Central

Meduffie County

Thomson

31	1245EST				0	0			Hail (1.00)
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Post Office reported 1 inch hail in Thomson.

Columbia County

Evans

31	1310EST				0	0			Hail (1.00)
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Spotter reported 1 inch hail in Evans.

Columbia County

2 NE Evans

31	1310EST				0	0			Hail (2.00)
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TV 26 meteorologist reported 2 inch hail.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<u>GEORGIA, East Central</u>									
Richmond County									
Augusta	31	1330EST			0	0			Hail (0.75)
			Spotter reported 3/4 inch hail in Augusta.						
Richmond County									
Augusta	31	1338EST			0	0			Hail (1.75)
			Spotter reported golf ball size hail in west Augusta.						
Richmond County									
Augusta	31	1420EST			0	0			Hail (0.75)
			General public reported dime size hail in Augusta.						
<u>GEORGIA, Lower</u>									
Camden County									
St Marys	03	1100EST			0	0			Urban/Sml Stream Fld
			Highway 40 at interstate 95 flooded at overpass. Spur 40 near Crooked River Elementry School flooded to one foot depth. Numerous secondary roads flooded in St. Marys.						
Wayne County									
Screvan	12	1900EST			0	0	0.20K		Tstm Wind/Hail
			Thunderstorm winds knocked over pine trees and damaged storage sheds.						
Atkinson County									
Willacochee	12	1930EST			0	0			Tstm Wind/Hail
			Power line down and traffic lights out.						
Glynn County									
Brunswick	26	1750EST			0	0			Tstm Wind/Hail
			Pea sized hail reported by spotter.						
<u>GEORGIA, North and Central</u>									
GAZ001>009-011>016- Dade - Walker - Catoosa - Whitfield - Murray - Fannin - Gilmer - Union - Towns - Chattooga - Gordon -									
019>025-027-030>039- Pickens - Dawson - Lumpkin - White - Floyd - Bartow - Cherokee - Forsyth - Hall - Banks - Jackson - Madison									
041>062-066>076- - Polk - Paulding - Cobb - North Fulton - Gwinnett - Barrow - Clarke - Oconee - Oglethorpe - Wilkes -									
078>086-089>098- Haralson - Carroll - Douglas - South Fulton - De Kalb - Rockdale - Walton - Newton - Morgan - Greene -									
102>113 Taliaferro - Heard - Coweta - Fayette - Clayton - Spalding - Henry - Butts - Jasper - Putnam - Hancock -									
Warren - Troup - Meriwether - Pike - Upson - Lamar - Monroe - Jones - Baldwin - Washington - Glascock -									
Jefferson - Harris - Talbot - Taylor - Crawford - Bibb - Twiggs - Wilkinson - Johnson - Emanuel - Muscogee -									
Chattahoochee - Marion - Schley - Macon - Peach - Houston - Bleckley - Laurens - Treutlen - Stewart -									
Webster - Sumter - Dooly - Crisp - Pulaski - Wilcox - Dodge - Telfair - Wheeler - Montgomery - Toombs									
	01	0000EST			0	0			Unseasonably Cold
	05	1200EST							
			The second Arctic cold front to affect Georgia within a one week period surged through north and central Georgia during the morning and early afternoon of the 3rd. Temperatures were just beginning to moderate from the extreme cold observed during the last couple of days of February. For example, Macon still set a new record low temperature of 20 degrees Fahrenheit on March 1st. Temperatures during the first 5 days of March averaged around 15 degrees below normal, but the height of the cold outbreak occurred on the 4th and 5th when temperatures averaged about 20 degrees below normal across most of north and central Georgia. While this Arctic blast was slightly less intense than the one which affected the same area the last couple of days of February, it was certainly significant. High temperatures on the 4th struggled to rise above the freezing mark across north Georgia and struggled to rise into the 40s across central Georgia, after widespread morning lows of 20 to 25 and teens in the north mountains. The coldest readings were observed during the morning of the 5th when lows of 15 to 20 were common in the north and 20 to 25 in the central. Blairsville in the northeast Georgia mountains recorded a low of 12 degrees on the morning of the 5th for the lowest reading.						
Forsyth County									
Coal Mtn	09	1442EST			0	0			Tstm Wind/Hail
			The public reported approximately 1/2 inch diameter hail.						
Crawford County									
Zenith	12	1550EST			0	0			Hail (1.00)
			The public reported quarter size hail near U.S. Highway 341 and House Road.						
Macon County									
4 W Oglethorpe	12	1550EST			0	0			Hail (1.00)
			The public reported quarter size hail.						

Storm Data and Unusual Weather Phenomena

March 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

Bibb County

**Lizella to
3 N Macon** **12** **1630EST
1650EST** **0** **0** **Hail (1.75)**

Several reports of dime to golf ball size hail were received from the county. The public reported dime to quarter size hail up to 10 minutes in duration in the Lizella area. An amateur radio operator reported dime to quarter size hail in the Lake Wildwood Subdivision 6 miles west-northwest of Macon. The public reported golf ball size hail on the north side of Macon and nickel size hail in Macon.

Jones County

2 SW Griswold **12** **1705EST** **0** **0** **Hail (1.00)**

The Jones county 911 center reported nickel to quarter size hail 10 miles south of Gray.

Toombs County

Vidalia **12** **1845EST** **0** **0** **Hail (0.75)**

The Georgia State Patrol reported dime size hail.

Crawford County

9 NE Knoxville **12** **1930EST** **0** **0** **Hail (0.75)**

An amateur radio operator reported dime size hail on U.S. Highway 80/Georgia Highway 22 about 4 miles east-northeast of Sandy Point near the Bibb county line.

GAZ003

Catoosa

14 **0750EST** **0** **0** **Fog**

Early morning dense fog contributed to one of the deadliest and costliest chain reaction accidents in Georgia's history. The incident occurred on both the north and southbound lanes of Interstate 75 at the Ringgold exit in a valley area. Eyewitness reports indicated that the fog was patchy but visibility was near zero in the area where the incident occurred, while good visibilities were noted at the tops of nearby ridges. Thus it was like "driving into a wall" at speeds of 75 mph. Five people were killed and 39 injured in the 125 car and truck pileup. The incident began in the northbound lane and was quickly repeated in a similar fashion in the southbound lane. There were 21 eighteen-wheel trucks and 41 passenger vehicles involved in the deadly accident in the northbound lane and four 18-wheel trucks and 21 passenger vehicles involved in the southbound lane. Traffic was backed up for miles for the entire day as the northbound lanes remained shutdown through midnight and into the next day while the southbound lanes were not opened until nearly 10 pm in the evening.

GAZ001>009-011>016-019>025-027-030>039-041>062-066>076-078>086-089>098-102>113

Dade - Walker - Catoosa - Whitfield - Murray - Fannin - Gilmer - Union - Towns - Chattooga - Gordon - Pickens - Dawson - Lumpkin - White - Floyd - Bartow - Cherokee - Forsyth - Hall - Banks - Jackson - Madison - Polk - Paulding - Cobb - North Fulton - Gwinnett - Barrow - Clarke - Oconee - Oglethorpe - Wilkes - Haralson - Carroll - Douglas - South Fulton - De Kalb - Rockdale - Walton - Newton - Morgan - Greene - Taliaferro - Heard - Coweta - Fayette - Clayton - Spalding - Henry - Butts - Jasper - Putnam - Hancock - Warren - Troup - Meriwether - Pike - Upson - Lamar - Monroe - Jones - Baldwin - Washington - Glascock - Jefferson - Harris - Talbot - Taylor - Crawford - Bibb - Twiggs - Wilkinson - Johnson - Emanuel - Muscogee - Chattahoochee - Marion - Schley - Macon - Peach - Houston - Bleckley - Laurens - Treutlen - Stewart - Webster - Sumter - Dooly - Crisp - Pulaski - Wilcox - Dodge - Telfair - Wheeler - Montgomery - Toombs

15 **1200EST** **0** **0** **Unseasonably Warm**
21 **0000EST**

Unseasonably warm temperatures prevailed across north and central for several days as a summer like ridge of high pressure aloft and a Bermuda like surface high pressure system dominated the southeastern United States. High temperatures for several days rose into the 80s with lows only in the 50s and 60s. These readings are some 20 degrees above normal for this time of year. The heat wave culminated on the 17th when Columbus reached a record high temperature of 88 degrees, while Atlanta, Athens, and Macon reported readings not far behind with 83, 84, and 84 degrees, respectively. Columbus also set a new record high temperature on the 16th with a high of 85 degrees. Columbus had 5 consecutive days of high in the 80s and Macon had four. Normal high temperatures for this time of year are in the 60s with lows in the 40s.

Macon County

**Oglethorpe to
Montezuma** **16** **1450EST
1503EST** **0** **0** **Tstm Wind/Hail**

The Macon county 911 center and the county police reported pea size hail.

Bartow County

Cartersville **16** **1915EST** **0** **0** **Tstm Wind/Hail**

The public reported 1/2 to less than 3/4 inch diameter hail in Cartersville.

GAZ009-016

Towns - White

22 **0100EST
0105EST** **0** **0** **0.50K** **High Wind**

High winds associated with a late season Arctic cold front blew down a couple of trees, one was blown down on the road 1 mile north of Young Harris in Towns county and another in Cleveland in White county.

Storm Data and Unusual Weather Phenomena

March 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>									
Marion County 6 NW Five Pts	26	1415EST 1430EST			0	0	8K		Thunderstorm Wind
									The Marion county sheriff reported that thunderstorm winds blew down several trees, blew the top off a latched down camper, and knocked a barn over.
Floyd County Rome	30	0215EST			0	0			Hail (1.00)
									The public reported quarter size hail.
Floyd County Rome	30	0215EST			0	0	0.50K		Thunderstorm Wind
									The public reported that some small trees were blown down.
Douglas County 2 S Douglasville	30	2030EST			0	0			Hail (1.00)
									An off duty National Weather Service employee reported that quarter size hail covered the ground at his house.
Fulton County 6 NNE Atlanta	30	2100EST			0	0			Urban/Sml Stream Fld
									The public reported street flooding in the Buckhead community. Rainfall reports in this area indicated that from 2.50 to 3.00 inches of rain had fallen during the afternoon and evening, with 1.50 inches just in the 40 minute period between 900 pm and 940 pm EST.
Henry County 2 SW Scarboroughs Xrc	30	2100EST 2115EST			0	0			Hail (1.75)
									The public reported hail ranging in size from dime to golf ball near the Clayton county line in extreme northwest Henry county.
Clayton County Rex	30	2110EST			0	0			Hail (1.00)
									The public reported quarter size hail. Some patio furniture was also blown about, but no wind damage was reported.
Rockdale County 2 S Conyers	30	2130EST			0	0	150K		Lightning
									A storm spotter reported that lightning struck a house and set it on fire. The house was fully engulfed in flames just a short time later. No injuries were reported.
Fulton County East Pt to 2 NNE Atlanta	31	1403EST 1416EST			0	0			Hail (0.75)
									Several reports of dime size hail were received from the public from East Point to Lakewood Heights and the southeast Atlanta area to Piedmont Park just northeast of Atlanta.
Gwinnett County 1 E Norcross	31	1410EST 1430EST			0	0			Urban/Sml Stream Fld
									An amateur radio operator reported that 1 to 1 1/2 inches of rain fell in a 30 minute period during a thunderstorm causing some minor street flooding on the east side of Norcross.
De Kalb County Decatur	31	1415EST			0	0			Hail (0.88)
									The public reported nickel size hail.
Fulton County Lakewood Hgts to 2 W College Park	31	1416EST 1430EST			0	0	1K		Thunderstorm Wind
									The public reported that some siding was torn off a house in the Lakewood Heights area of southeast Atlanta and some arm size branches were blown out of trees at the intersection of Interstate 85 and Camp Creek Parkway, about 2 miles west of Hartsfield International Airport.
Gwinnett County 2 W Centerville	31	1430EST			0	0	2K		Thunderstorm Wind
									The public reported that two trees were blown down which damaged a fence.
Gwinnett County Centerville	31	1435EST 1445EST			0	0			Hail (1.00)
									Several reports were received from the public of hail ranging in size from dime to quarter size. In one instance in the Centerville area, the ground was completely covered with hail which fell up to 3 minutes at one location.
Sumter County 3 S Americus	31	1455EST			0	0			Tstm Wind/Hail
									An amateur radio operator reported pea size hail.

Storm Data and Unusual Weather Phenomena

March 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

Sumter County

Americus 31 1510EST 0 0 2K **Thunderstorm Wind**

The Sumter county 911 center reported that three trees and a power line were blown down in Americus.

Washington County

3 NE Harrison 31 1545EST 0 0 3K **Thunderstorm Wind**

An amateur radio operator reported that a few trees and a couple of power lines were down near the intersection of Georgia Highway 231 and News Bridge Road.

Laurens County

Dublin 31 1555EST 0 0 2K **Thunderstorm Wind**

The Laurens county 911 center reported that a few power lines were down.

Telfair County

1 E Jacksonville 31 1815EST 0 0 **Hail (0.88)**

The public reported dime size hail on Georgia Highway 117.

GEORGIA, Northeast

GAZ010

Rabun

10 0600EST 0 0 1K **High Wind (G50)**

Strong winds following a cold front resulted in some downed trees and power lines.

Elbert County

Elberton 26 1318EST
1325EST 0 0 **Hail (0.75)**

Pea to dime size hail was reported covering the ground.

Elbert County

Elberton 26 1318EST
1325EST 0 0 2K **Thunderstorm Wind (G50)**

Power lines were blown down and a railroad crossing gate was destroyed.

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**

01 0000EST 0 0 **Drought**

31 2359EST

Drought conditions continued over southeast Georgia. Rainfall was slightly above normal at a few places but rainfall generally occurred in scattered thunderstorms.

Candler County

Metter 26 1630EST
1633EST 0 0 **Hail (1.00)**

Chatham County

**8 SW Savannah to
3 SE Garden City** 26 1630EST
1636EST 0 0 **Hail (1.75)**

McIntosh County

2 WSW Eulonia 26 1755EST 0 0 **Thunderstorm Wind (G50)**

Several trees down.

Effingham County

Guyton 31 1340EST 0 0 **Thunderstorm Wind (G50)**

Several powerlines were down.

GEORGIA, Southwest

Decatur County

3 W Bainbridge 12 1645EST 0 0 **Hail (0.75)**

Public reported dime size hail.

Brooks County

Northeast Portion 12 1840EST 0 0 1K **Thunderstorm Wind**

Trees down. Reported by the Brooks County EMA.

Lowndes County

Valdosta 12 1920EST 0 0 100K **Thunderstorm Wind**

Two homes damaged. Reported by the Lowndes County EMA.

Storm Data and Unusual Weather Phenomena

March 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, Southwest</u>									
Mitchell County									
Pelham	26	1630EST			0	0	75K		Lightning
	Lightning sparked a fire which destroyed a warehouse on Highway 19 just south of Pelham.								
Mitchell County									
Northeast Portion	31	1430EST			0	0	20K		Thunderstorm Wind
	A roof was blown off a house, trees and power lines down between State Highway 93 and Hatcher Hill Road. Reported by the Mitchell County EMA.								
Colquitt County									
Moultrie	31	1930EST			1	0	10K		Thunderstorm Wind
	An elderly man was killed when a pine tree snapped and fell on the cab of his truck while driving during a severe thunderstorm. Reported by the Courier Herald. M66VE								
<u>GULF OF MEXICO</u>									
Cameron La To High Is Tx Out 20Nm									
Mouth Of Sabine River	01	1200CST			0	0			Marine Tstm Wind
	Sea Rim State Park C-MAN reported 53 mph wind gust during a thunderstorm.								
Galveston Bay									
12 ESE Texas City	01	1200CST			0	0			Marine Tstm Wind
	The Galveston Bay Entrance North Jetty recorded a 35 knot wind gust using the Hgports observing system.								
High Is To Freeport Tx Out 20Nm									
5 ENE Galveston	01	1200CST			0	0			Marine Tstm Wind
	The Galveston Bay Entrance South Jetty recorded a 35 knot wind gust using the Hgports system.								
Atchafalaya R To Cameron La Out 20Nm									
Marsh Island	01	1800CST			0	0			Marine Tstm Wind
	Weather buoy recorded 43 kt wind gust in a thunderstorm.								
Pt O'Connor To Aransas Pass									
Port Aransas	09	1152CST			0	0			Marine Tstm Wind
Matagorda Ship Chnl To Pt Aransas Out 20Nm									
Pltfm 17Se Prt Arnsas	09	1230CST			0	0			Marine Tstm Wind
Matagorda Ship Chnl To Pt Aransas Tx 20 To 60Nm									
Pltfm 17Se Prt Arnsas	09	1230CST			0	0			Marine Tstm Wind
Corpus Christi To Baffin Bay									
Bob Hall Pier	09	1247CST			0	0			Marine Tstm Wind
Pt Aransas To Baffin Bay Tx 20 To 60Nm									
Bob Hall Pier	09	1247CST 1250CST			0	0			Marine Tstm Wind
Pt Aransas To Baffin Bay Tx Out 20Nm									
Bob Hall Pier	09	1247CST			0	0			Marine Tstm Wind
Sw Pass Of The Ms R To Atchafalaya R La Out 20Nm									
20 S Venice	12	1030CST			0	0			Marine Tstm Wind

Storm Data and Unusual Weather Phenomena

March 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>									
Pascagoula Ms To Sw Pass Of Ms R 20 To 60Nm									
45 E Venice	12	1149CST			0	0			Marine Tstm Wind
Pascagoula Ms To Sw Pass Of Ms R 20 To 60Nm									
45 E Venice	12	1155CST			0	0			Marine Tstm Wind
Pensacola Fl To Pascagoula Ms Out 20Nm									
Perdido Key	12	1200CST 1202CST			0	0			Marine Tstm Wind
A wind gust of 35 knots was measured from a station along the coast.									
Apalachicola To Destin Fl Out 20Nm									
Grayton Beach	12	1530EST			0	0			Waterspout
Waterspout sighted south of the U.S. Highway 331 bridge. Reported by the Walton County EMA.									
Gulf Side Of The Lower Keys Out 20Nm									
8 ENE Big Pine Key	22	0939EST 0945EST			0	0			Waterspout
Lake Ponchartrain And Lake Maurepas N Lake Pontchartrain									
	26	0615CST			0	0			Marine Tstm Wind
Mobile Bay Point Clear									
	31	1200CST 1205CST			0	0			Marine Tstm Wind
Several small boats reported wind speeds of 35 to 40 knots and very rough seas over Mobile Bay. The boats were able to make it ashore without any damage.									
Destin To Pensacola Fl Out 20Nm									
Pensacola Beach	31	1415CST 1416CST			0	0			Marine Tstm Wind
<u>HAWAII</u>									
Hawaii County									
Honolulu	05	1545HST 2030HST			0	0			Flash Flood
Up to four inches of rain fell in northern and eastern parts of the Big Island of Hawaii during the afternoon and evening hours on the 5th of March. Four homes were flooded in Honolulu and two were hit by lightning. A landslide forced the closure of Highway 19 just on the Hilo side of the Honolulu turnoff for about 19 hours, beginning at 4 PM on the 5th. The closure of the highway, the main north to south artery in eastern Hawaii, snarled traffic and caused disruptions to normal activities from Honokaa to Hilo. However, no serious injuries were reported.									
Hawaii County									
Kamuela to Honokaa	06	0320HST 0440HST			0	0			Heavy Rain
Heavy showers produced minor stream and drainage ditch flooding and ponding of roadways in northern and northeastern sections of the island of Hawaii. There were no reports of significant property damage or injuries.									
Honolulu County									
Kahaluu to Pearl City	06	0645HST 0945HST			0	0			Heavy Rain
Heavy showers caused ponding of roadways and minor stream and drainage ditch flooding in windward and south central areas of Oahu. No serious injuries or property damage were reported.									

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
HAWAII									
Hawaii County									
Volcano to Pahala	06	1435HST 1730HST			0	0			Heavy Rain
									Heavy showers produced ponding of roadways and minor stream and drainage ditch flooding in southeastern areas of the Big Island of Hawaii. However, there were no reports of significant property damage or injuries.
Hawaii County									
3 W Hilo to Pepeekeo	06	1535HST 1830HST			0	0			Heavy Rain
									Heavy showers caused minor stream and drainage ditch flooding and ponding of roadways in and around Hilo town. No serious injuries or property damage were reported.
Kauai County									
Hanalei to Wailua	07	0420HST 0635HST			0	0			Heavy Rain
									Heavy showers caused ponding of roadways and minor stream and drainage ditch flooding in windward and mountain areas of Kauai. There were no reports of significant property damage or injuries, however.
Honolulu County									
Hauula to Kaneohe	07	0420HST 1010HST			0	0			Heavy Rain
									Heavy showers produced minor drainage ditch and stream flooding and ponding of roadways in windward parts of Oahu. However, no serious injuries or property damage were reported.
Honolulu County									
Countywide	07	1505HST 2225HST			0	0			Heavy Rain
									Heavy showers produced ponding of roadways and minor stream and drainage ditch flooding over most of Oahu. However, there were no reports of serious property damage or injuries.
Kauai County									
5.5 NNW Anahola to Kapaa	07	1600HST			0	0			Heavy Rain
									Heavy showers caused ponding of roadways and minor drainage ditch and stream flooding in eastern and northeastern parts of Kauai. No significant property damage or injuries were reported.
Honolulu County									
Kaaawa to Pearl City	09 10	2100HST 0015HST			0	0			Heavy Rain
									Heavy showers caused minor stream and drainage ditch flooding and ponding of roadways in windward and south central sections of Oahu. No serious injuries or property damage were reported, however.
HIZ001									
Kauai	12	0700HST 2000HST			0	0			High Surf
									A storm low far northwest of the state generated surf of 12 to 18 feet along the north- and northwest-facing shores of the Garden Isle of Kauai. However, no serious injuries or property damage were reported.
Kauai County									
3 N Anahola to 2.5 S Anahola	12	1300HST 1620HST			0	0			Heavy Rain
									Heavy showers produced minor stream and drainage ditch flooding and ponding of roadways in and around Anahola in Kauai. There were no reports of serious injuries or property damage.
Honolulu County									
Wahiawa to Waipahu	13	1245HST 1610HST			0	0			Heavy Rain
									Heavy showers caused ponding of roadways and minor stream and drainage ditch flooding in central and southwest parts of Oahu. Small hail was also reported by a member of the public near Wahiawa. There were no reports of significant property damage or injuries, however.
HIZ004-008									
North And East Hawaii Including Windward Kohala / Hamakua / Hilo / Puna - South Hawaii Including Kau	16 19	0800HST 1800HST			0	0			High Surf
									A trade wind swell generated surf of 5 to 10 feet along the east-facing shores of the Big Island of Hawaii. No serious injuries or

Storm Data and Unusual Weather Phenomena

March 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

property damage were reported.

Honolulu County

Countywide

16	1240HST 2145HST				0	0			Heavy Rain
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Heavy showers and thunderstorms being ignited by an advancing cold front produced ponding of roadways and minor stream and drainage ditch flooding over much of Oahu. No significant injuries or property damage were reported.

Kauai County

6 W Hanalei to 14 WSW Hanalei

16	1630HST 1930HST				0	0			Heavy Rain
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Heavy showers and thunderstorms being triggered by an advancing cold front caused minor stream flooding in northwestern areas of Kauai, along the Na Pali Coast. Twelve hikers were stranded near a swollen stream and had to be rescued by helicopter. However, there were no reports of serious injuries or property damage otherwise.

Maui County

Countywide

17	0615HST 0915HST				0	0			Heavy Rain
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A slow-moving cold front generated heavy showers and isolated thunderstorms over most of Maui County, which caused ponding of roadways and minor stream and drainage ditch flooding. However, there were no reports of serious injuries or property damage.

HIZ001>003-005>007

Kauai - Oahu - Maui - Molokai - Lanai - West Hawaii Including Leeward Kohala And Kona

17	1030HST				0	0			Strong Wind
19	1000HST								

Low pressure to the north of the islands and building high pressure to the west of Hawaii generated north to northeast winds of 30 to 40 mph, with gusts to 50 mph, from Kauai to the western parts of the Big Island. Three boats anchored off Mala Wharf on Maui broke loose from their moorings because of the strong winds, and two sailboats ran aground at the Mala boat launching ramp. Neither sailboat was severely damaged. Also, a rescue crew from Coast Guard Station Maalaea in Maui assisted a 37-foot vessel that had been demasted off Lanai late Monday, March 18th. There were no other reports of serious property damage or injuries.

Hawaii County

Kamuela to Pahala

17	1400HST 1700HST				0	0			Heavy Rain
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Heavy showers being induced by a weakening cold front were falling across northern, eastern and southern parts of the Big Island of Hawaii. However, there were no reports of serious injuries or property damage.

Kauai County

Anahola

24	1455HST 1510HST	1	30		0	0	60K		Tornado (F0)
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At 1455 HST, a tornado touched down in Anahola Valley near the park and then skipped over homes and moved toward Anahola's Bayview and Papaa areas before moving to the south end of neighboring Moloaa Valley and dissipating. Six homes sustained roof and wall damage in the Bayview and Papaa locales. Small trees and several sheds were also destroyed. The tornado track was not continuous. The average path width was 30 yards.

Kauai County

Hanalei

25	0100HST 2200HST				0	0			Flash Flood
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Heavy showers fell over much of northern and eastern sections of Kauai. The rainfall was heavy enough to cause flooding of roadways leading to and from the Hanalei Bridge, which was closed for 21 hours on the 25th because of the flooding.

Kauai County

Countywide

25	2250HST				0	0			Heavy Rain
26	0215HST								

Heavy showers produced minor stream and drainage ditch flooding and ponding of roadways over most of the island of Kauai. There were no reports of significant property damage or injuries.

Kauai County

Hanalei to Lihue

26	1515HST 1700HST				0	0			Heavy Rain
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Heavy showers and thunderstorms caused ponding of roadways and minor drainage ditch and stream flooding in northern and eastern areas of Kauai. No serious property damage or injuries were reported, however.

Kauai County

Countywide

28	2200HST				0	0			Heavy Rain
29	0100HST								

Showers and thunderstorms produced minor stream and drainage ditch flooding and ponding of roadways across much of Kauai.

Storm Data and Unusual Weather Phenomena

March 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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HAWAII

However, there were no reports of significant injuries or property damage.

Kauai County

Countywide

29	0515HST 0855HST				0	0			Heavy Rain
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Heavy showers and thunderstorms caused ponding of roadways and minor stream and drainage ditch flooding over most of the Garden Isle of Kauai. There were no reports of serious injuries or property damage.

Kauai County

Kekaha to 7 N Kalaheo

29	1100HST 1405HST				0	0			Heavy Rain
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Heavy showers produced minor drainage ditch and stream flooding and ponding of roadways in southwestern and central areas of Kauai. No serious injuries or property damage were reported, however.

Honolulu County

Countywide

29	1805HST 2100HST				0	0			Heavy Rain
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Heavy showers caused ponding of roadways and minor stream and drainage ditch flooding over most of Oahu. There were no reports of significant property damage or injuries.

HIZ001>007

Kauai - Oahu - Maui - North And East Hawaii Including Windward Kohala / Hamakua / Hilo / Puna - Molokai - Lanai - West Hawaii Including Leeward Kohala And Kona

30	0600HST				0	0			High Surf
31	2359HST								

A storm low north of the state generated surf of 15 to 20 feet along the north- and northwest-facing shores of all the islands and 6 to 10 feet along the west-facing shores of the Big Island of Hawaii. Lifeguards, especially on Oahu and Maui, were busy with helping several surfers and swimmers in distress over Saturday and Easter Sunday, the 30th and 31st of March, respectively. However, there were no reports of serious injuries or property damage.

HIZ004-007>008

North And East Hawaii Including Windward Kohala / Hamakua / Hilo / Puna - West Hawaii Including Leeward Kohala And Kona - South Hawaii Including Kau

31	1140HST 2359HST				0	0			High Wind (G51) ^M
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A jet stream over the Big Island of Hawaii produced west to southwest winds of 50 to 60 mph near the summits of Mauna Kea and Mauna Loa. However, there were no reports of significant property damage or injuries.

HAWAII WATERS

Channels Between The Islands

15 NW Barbers Point

16	1700HST 1715HST				0	0			Waterspout
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An airline pilot reported a waterspout in the Kauai Channel just west of the Waianae coast on Oahu. However, there were no reports that this weather phenomenon caused any serious injuries or property damage.

IDAHO, Extreme Southeast

NONE REPORTED.

IDAHO, North

IDZ005>008

Northern Clearwater Mountains - Southern Clearwater Mountains - Orofino / Grangeville Region - Lower Hells Canyon / Salmon River Region

07	0400MST 1900MST				0	0			Heavy Snow
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Late winter storm brought heavy snow to north central Idaho. Snowfall ranged from 5 to 6 inches in the valleys to one to two feet in the mountains. Highest snowfall amounts recorded were 24 inches at Hemlocke Butte and 26 inches at Cool Creek.

IDZ005

Northern Clearwater Mountains

11	1400MST				0	0			Heavy Snow
12	1400MST								

Winter storm brought heavy snow and strong winds to the mountains of Clearwater County. Heavy snow began in the afternoon of March 11 and lasted 24 hours. Strong winds over 45 mph occurred during the morning of March 12. Snowfall ranged from 10 inches at Hemlocke Butte, 13 inches at Elk Butte, to 21 inches at Cool Creek.

Storm Data and Unusual Weather Phenomena

March 2002

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

IDAHO, North

IDZ005>006

Northern Clearwater Mountains - Southern Clearwater Mountains

18	1322MST	0	0		Heavy Snow
19	1900MST				

Early spring storm brought heavy snow to north central Idaho. In the northern Clearwater Mountains snowfall ranged from 18 inches at Cool Creek and Hemlocke Butte to 30 inches at Shanghai Summit. In the southern Clearwater Mountains snowfall ranged from 5 to 8 inches at the lower elevations up to one foot over the mountains.

IDAHO, Northwest

IDZ001>004-027

Northern Panhandle - Coeur D'Alene Area - Idaho Palouse - Central Panhandle Mountains - Lewis And Southern Nez Perce

05	2200PST	0	0		Heavy Snow
07	0400PST				

A late-season arctic cold front moved south through the Idaho panhandle from late on the afternoon of the 5th through the 6th. Moist air overran the dome of cold air and brought heavy snow to much of the panhandle, excluding Boundary County. Even the bottom of the Lewiston-Clarkston valley received 1 to 2 inches of snow. Snowfall totals from the evening of the 5th through the morning of the 7th include: Lookout Pass Ski Area...15", Silver Mountain Ski Area...14", Saint Maries...8.5", Avery...8.5", Plummer...7", Wallace...6.5", Spirit Lake...6", Harrison...6", Winchester...5.7", Coeur D'Alene...5", Kellogg...4.5", Athol...4.4", Potlatch...4", and Nez Perce...4".

IDZ001-004

Northern Panhandle - Central Panhandle Mountains

11	0400PST	0	0		Heavy Snow
12	0400PST				

Moist jet stream winds from the west-southwest pointed directly into the Inland Northwest for most of the day on March 11, bringing heavy snow to the mountains of the Idaho panhandle, while valley locations below 4000 feet experienced mostly rain. Snowfall totals with this storm include: Schweitzer Ski Area...14", Mica Creek SNOTEL...14", Lookout Pass Ski Area...13", Lookout SNOTEL...13", Bear Mountain SNOTEL...12", Mosquito Ridge SNOTEL...12", Humboldt SNOTEL...12", and the Sunset SNOTEL...11".

IDZ001

Northern Panhandle

15	1800PST	0	0		Heavy Snow
17	0600PST				

The combination of a warm front moving into an unstable air mass caused locally heavy snow over the far northern Idaho panhandle, mainly on the 16th. Snowfall totals with this event include: Schweitzer Mountain Ski Area...18", Hidden Lake SNOTEL...15", Schweitzer Bowl SNOTEL...13", and the Bear Mountain SNOTEL...11".

IDZ001>002-004

Northern Panhandle - Coeur D'Alene Area - Central Panhandle Mountains

18	0600PST	0	0		Heavy Snow
	2200PST				

Persistent snow showers on this day brought heavy snow to parts of the central Idaho panhandle. Snowfall totals include: Lost Lake SNOTEL...14", Bear Mountain SNOTEL...12", Mosquito Ridge SNOTEL...11", Schweitzer Mountain Ski Area...10", Wallace...6.2", Coeur D'Alene...5-7", Harrison...5", Alder Creek...5", Athol...4.5", Bovill...4", Sandpoint...3.8", and Saint Maries...3.6".

IDZ001>002-004

Northern Panhandle - Coeur D'Alene Area - Central Panhandle Mountains

19	2000PST	0	0		Heavy Snow
20	1000PST				

On this first day of spring, a polar air mass moving in from the north underneath strong moist westerly flow led to heavy snows over the central and northern Idaho panhandle. Early on the morning of the 20th, a narrow east-west band of snow set up directly over Coeur D'Alene and the Silver Valley, further enhancing snowfall there. Snowfall totals include: Lost Lake SNOTEL...43", Humboldt Gulch SNOTEL...28", Lookout Pass Ski Area...22", Mosquito Ridge SNOTEL...22", Bear Mountain SNOTEL...18", Mica Creek SNOTEL...17+", Schweitzer Bowl SNOTEL...12", Silver Mountain Ski Area...10", Wallace...7.9", Alder Creek...7.5", Avery...7.1", Coeur D'Alene...6.5", Priest River...3.4", Moscow...3", and Potlatch...3".

IDZ027

Lewis And Southern Nez Perce

24	0200PST	0	0		Heavy Snow
	1000PST				

Heavy snow fell on the Camas Prairie generally above 3000 feet. Winchester received 6.6 inches of snow with this storm.

IDAHO, Southeast

IDZ018>019-022>023-032

Sawtooth Mountains - Upper Snake Highlands - South Central Highlands - Caribou Highlands - Lost River / Pahsimeroi

07	2000MST	0	0		Heavy Snow
08	1200MST				

Heavy snow fell in the mountains of southeast Idaho. 6 to 12 inches were reported at SNOTEL sites above 6500 feet. Macks Inn, Island Park and Ashton recorded 8 inches and Wayan recorded 6 inches.

Storm Data and Unusual Weather Phenomena

March 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

IDZ018>019-022>023-031 **Sawtooth Mountains - Upper Snake Highlands - South Central Highlands - Caribou Highlands - Big And Little Wood River Region**

12	1200MST				0	0			Heavy Snow
13	1600MST								

Heavy snow fell in the central mountains and eastern and southern highlands of Idaho with 6 to 12 inches of snow above 6000 feet. The snow was heavy enough along with strong winds causing blowing snow during the day on the 13th to close interstate 84 between Burley and the Utah border. Victor near the Wyoming border had 6 inches of snow and although heavy snow was not reported in the valleys, many locations reported 3 to 5 inches including Idaho Falls, Blackfoot, and Pocatello.

IDZ019

Upper Snake Highlands

12	1500MST				1	0			Avalanche
	1530MST								

A 16 year old snowmobiler was killed in an avalanche in the Big Hole Mountains near Victor. An overhang broke free and swept him into a stand of trees. M16OU

IDZ019

Upper Snake Highlands

22	1430MST				1	0			Avalanche
	1500MST								

An avalanche killed a snowmobiler east of Bald Peak on Targhee Pass in Fremont County. The avalanche was 200 yards wide and traveled 250 yards. The individual was buried under 25 feet of snow and was unable to be rescued. M26OU

IDAHO, Southwest

NONE REPORTED.

ILLINOIS, Central

ILZ027>031-036>037-040>041 **Knox - Stark - Peoria - Marshall - Woodford - Fulton - Tazewell - Schuyler - Mason**

01	1700CST				0	0			Heavy Snow
03	0000CST								

Snowfall totals of 6 to 8 inches were measured in the central Illinois counties along and west of the Illinois River from early in the evening on the 1st through the 2nd. Strong northwest winds, with gusts approaching 40 mph produced significant blowing and drifting snow. Most roads were snow and ice covered, with numerous traffic accidents reported.

McLean County

Danvers **08 0526CST** **0 0 0 Hail (0.75)**

ILZ027-030>031-037>038-042-045-051-053-055>056-061-068-073 **Knox - Marshall - Woodford - Tazewell - Mclean - Logan - Champaign - Sangamon - Macon - Douglas - Coles - Shelby - Crawford - Lawrence**

09	0200CST				0	2			High Wind (G76) ^M
	1700CST								

High, gradient winds of 40 to 50 mph developed in central and southeast Illinois early in the morning of the 9th. A measured gust of 87 mph was reported by an observer in Arcola, in Douglas county. Other measured gusts included 65 mph in Galesburg (Knox county), 62 mph in Tremont (Tazewell county), 61 mph in Oblong (Crawford county) and 58 mph at the NWS office in Lincoln (Logan county). The high winds were responsible for blowing a pickup truck off of I-39 in eastern Marshall county, resulting in 2 injuries. There were numerous reports of downed power poles, power lines, and trees. There were also several reports of minor damage to roofs and storage sheds.

Knox County

Galesburg to 2.4 SSE Rio **09 0315CST** **1 0 0 Thunderstorm Wind (G50)**
0321CST

As a severe thunderstorm moved northeast across Knox County, it blew down several trees and power lines. Also, 2.4 miles south southeast of Rio on IL Route 150 at 2500 N, the thunderstorm winds caused a woman to lose control of her car. She slid sideways and struck a utility pole. She was killed in the crash. No other injuries or deaths were reported. F26VE

ILZ029-031-036>038-045 **Peoria - Woodford - Fulton - Tazewell - Mclean - Champaign**

25	0500CST				0	0			Winter Storm
	1200CST								

Snowfall totals of 2 to 4 inches, along with significant blowing and drifting snow, created near whiteout conditions in Peoria, Woodford, northern Tazewell and northwest McLean counties the morning of the 25th. Numerous accidents occurred as a result of

Storm Data and Unusual Weather Phenomena

March 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, Central

the snow covered roads and decreased visibility. Northern parts of Fulton county reported one-half inch of sleet, mixed with freezing rain. Ice accumulations around one-quarter inch were observed at the ASOS in Champaign.

ILZ044>046-051>057-061>063	Piatt - Champaign - Vermilion - Sangamon - Christian - Macon - Moultrie - Douglas - Coles - Edgar - Shelby - Cumberland - Clark								
	25	2100CST			0	0			Winter Storm
	26	0900CST							

Freezing rain late in the evening of the 25th into the early morning hours of the 26th produced one-quarter to one-half inch of ice in the counties between I-72 and I-70. The freezing rain changed to sleet, then snow before daybreak. Snowfall amounts ranging from 4 to 7 inches, with significant blowing and drifting, occurred along a line from Pana through Monticello to Danville. The combination of ice and snow resulted in downed power lines and tree limbs, along with dozens of traffic accidents the morning of the 26th.

ILLINOIS, Northeast

ILZ003>006-008-010>014-019>023-032>033-039	Winnebago - Boone - Mchenry - Lake - Ogle - Lee - De Kalb - Kane - Du Page - Cook - La Salle - Kendall - Grundy - Will - Kankakee								
	02	0900CST			0	0			Winter Storm
	03	0400CST							

Snow began falling across northern Illinois late on Friday March 1st and continued into the morning hours of Saturday March 2nd. Snowfall amounts with the first wave of this winter storm ranged from 3 to 5 inches with Amboy in Lee county receiving 6 inches by 9 am Saturday. The second wave of the storm began during the early afternoon hours of Saturday March 2nd and continued into the early morning hours of Sunday March 3rd. Storm total snowfall amounts ranged from 6 to 11 inches. Rockford airport received the most reporting 11.1 inches. Some other totals include 10.9 inches at Midway and 9.9 inches at Ohare airports in Cook county, 9.2 inches at Lake Villa in Lake county, 8.0 inches at De Kalb in De Kalb county, 7.1 inches in Peru in La Salle county and 7.0 inches in Aurora in Kane county.

ILZ003>006-008-010>014-019>023-032>033-039	Winnebago - Boone - Mchenry - Lake - Ogle - Lee - De Kalb - Kane - Du Page - Cook - La Salle - Kendall - Grundy - Will - Kankakee - Livingston - Iroquois - Ford								
	09	1152CST			4	4	200K		High Wind (G51) ^M
		2000CST							

Strong low pressure moved across the upper midwest on Saturday, March 9th. Winds were sustained between 40 and 50 mph during most the afternoon and evening hours, with wind gusts to 60 mph. Trees, branches, utility poles and wires were blown down across all of north central and northeast Illinois. Three people were killed when scaffolding being used on the John Hancock Center downtown fell some 40 stories to the street below, where it crushed two cars. Four other people were injured. A driver of a semi truck was killed when his truck was blown over on northbound Interstate 57 near US 30 in Matteson in Cook county. Another semi was blown over in Paw Paw in Lee county. A window was blown out at the Des Plaines Oasis on Interstate 90. Part of a roof was torn off a motel in Peru and a roof was torn off a church in Marseilles, both in La Salle county. F20VE, F20VE, F30VE, M44VE

ILLINOIS, Northwest

ILZ001>002-007-009-015>018-024>026-034>035	Jo Daviess - Stephenson - Carroll - Whiteside - Rock Island - Henry - Bureau - Putnam - Mercer - Henderson - Warren - Hancock - McDonough								
	01	1700CST			0	0			Winter Storm
	03	0400CST							

March roared in like a lion. A late season winter storm gathered strength as it moved from the Southern Plains into the Lower Ohio Valley. Just days earlier an arctic front blew through the region sending temperatures plummeting. As the storm system approached, low level southerly winds pumped abundant gulf moisture up and over this shallow cold airmass, resulting in heavy snow. Storm total accumulations ranged from 3 to 8 inches, with the heaviest occurring mainly north of Highway 34. Warmer air also surged northward, resulting in the snow changing to rain or a mixture of rain and sleet for a while south of Highway 34, reducing storm total accumulations in this area. Slippery roads lead to numerous minor traffic accidents. Also, the snow forced postponement or cancellation of many events. As the storm system began to depart late Saturday, strong northwest winds on the backside enveloped the region sending wind chills plummeting into the single digits and teens below zero. Blowing and drifting snow was also reported.

Hancock County

Dallas City to Nauvoo	09	0233CST							
					0	0			Thunderstorm Wind (G70) ^M

Hancock County

Durham	09	0240CST							
					0	0			Thunderstorm Wind (G61)

Many tree limbs and several large trees down.

Henderson County

Terre Haute	09	0245CST							
					0	0			Thunderstorm Wind (G52)

Tree limbs down.

Storm Data and Unusual Weather Phenomena

March 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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ILLINOIS, Northwest

McDonough County

Macomb	09	0300CST			0	0			Thunderstorm Wind (G70) Major damage to a factory roof on the west edge of the city. A large section of the roof was removed. Also, a block wall and several sprinkler pipes were damaged. One 2x8 piece of wood from the damaged roof was tossed 60 feet and pierced the roof on another section of the factory.
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McDonough County

Macomb	09	0300CST			0	0			Thunderstorm Wind (G52) Part of a chimney was blown off a residence.
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Mercer County

Aledo	09	0300CST			0	0			Thunderstorm Wind (G70) A homestead in rural Aledo suffered heavy damage. High winds shattered windows and destroyed a barn, three empty grain storage bins, a fence, several dog houses and a children's swing set.
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Mercer County

1 W Hamlet	09	0300CST			0	0			Thunderstorm Wind (G61) Garage torn off house, barn destroyed and large trees snapped.
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Rock Island County

Reynolds	09	0300CST			0	0			Thunderstorm Wind (G61) Two machine sheds collapsed.
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Warren County

Roseville	09	0300CST			0	0			Thunderstorm Wind (G52) Several 6 to 8 inch diameter tree limbs down.
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Rock Island County

Coal Vly	09	0310CST			0	1			Thunderstorm Wind (G52) Window blown out of a residence. Flying debris injured a woman.
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Mercer County

3 SE Norwood	09	0315CST			0	0			Thunderstorm Wind (G52) Power lines down.
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Henry County

Atkinson	09	0340CST			0	0			Thunderstorm Wind (G52) Large tree toppled, and 20 foot boat overturned. A strong arctic front extended from Central Wisconsin into Northwest Missouri early Friday morning. Temperatures across the front at 6 A.M. Friday ranged from the middle 20s in the far Northwest Iowa to the middle and upper 50s in Northwest and West Central Illinois. Much colder air was poised to the north of the region with temperatures in the single digits and teens in the Northern Plains. This arctic front and the large temperature gradient across it combined with a vigorous upper level disturbance ejecting from the Southwestern United States to ignite severe thunderstorms. Initial development occurred from Central Iowa into North Central Missouri late Friday afternoon and evening. These storms then evolved into a squall line, which raced eastward through much of Northwest and West Central Illinois during the overnight and early morning on Saturday, producing many reports of wind damage. Most of the damage occurred along and south of Interstate 80, where winds ranged from 60 to 80 mph. One woman was injured in Coal Valley in Rock Island County when she was hit by flying debris in her home.
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ILZ002-009-015>016-024 Stephenson - Whiteside - Rock Island - Henry - Mercer

	09	1300CST 1600CST			0	0			High Wind (G49) ^M Light pole at the Freeport High School football field knocked down. Peak wind gust of 56 mph measured in Freeport. Strong winds associated with an intense low pressure system, produced some damage across portions of Northwest and West Central Illinois. Wind speeds were generally in the range of 30 to 40 mph, with gusts of 50 to 60 mph.
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ILLINOIS, South

ILZ075>078-080>094 Jefferson - Wayne - Edwards - Wabash - Perry - Franklin - Hamilton - White - Jackson - Williamson - Saline - Gallatin - Union - Johnson - Pope - Hardin - Alexander - Pulaski - Massac

	09	0900CST 1400CST			0	0	3K		Wind Minor property damage was caused by strong west winds around the back side of an intense low pressure system. Winds gusted to around 45 MPH for several hours. Some exact wind measurements from automated observing sites included: 45 MPH at Harrisburg and Mount Vernon, and 42 MPH at Carbondale. Just west of Pinckneyville, gusts to 48 MPH occurred. A couple of power lines were blown down in Carmi.
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ILZ081-084

Franklin - Jackson	10 31	0900CST 2359CST			0	0			Flood
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Storm Data and Unusual Weather Phenomena

March 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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ILLINOIS, South

The Big Muddy River rose above flood stage at Murphysboro on March 10 and remained there through the end of the month. At Plumfield, flood stage was exceeded from the 20th through month's end. The river was never more than about two feet over flood stage at Plumfield. At Murphysboro, the first crest on March 14 was about four feet above flood stage. The second crest on March 28 was about 8 feet over the 16-foot flood stage. Flooding was minor, affecting mainly undeveloped low-lying areas.

ILZ087-090>094

Gallatin - Pope - Hardin - Alexander - Pulaski - Massac

20	1300CST				0	0	3K		Flood
31	2359CST								

The Ohio River rose above flood stage at most locations along the Illinois shore on March 20th or 21st. At Shawneetown, where flood stage is 33 feet, the river crested at 43.70 feet on the morning of the 29th. At Golconda, where flood stage is 40 feet, the river crested at 44.12 feet on the 28th. Crests at Brookport, Grand Chain, and Cairo were all 7 to 8 feet above flood stage on the 26th and 27th. The impact of this flooding was minor to moderate. Several county roads were closed near Shawneetown. Water reached the power house at Lock and Dam 53 near Grand Chain. Low-lying agricultural bottomlands were flooded, but planting season had not yet begun.

ILZ083

White

20	1800CST				0	0			Flood
31	2359CST								

The Little Wabash River rose above flood stage at Carmi on March 20 and remained there through month's end. The crest on March 27 was about two feet over the 27-foot flood stage. Flooding was confined mainly to low-lying rural areas and bottomlands. A few county roads were inundated, and oil wells in flood-prone areas along the river were shut down.

Wayne County

1 W Wayne City

29	1139CST				0	0			Hail (0.88)
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Wayne County

1 SE Barnhill

29	1204CST				0	0			Hail (1.00)
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Nickel size hail was reported near Wayne City. Quarter size hail was reported at the intersection of Interstate 64 and U.S. Highway 45.

Hamilton County

Aden

29	1210CST				0	0			Hail (0.88)
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White County

Centerville

29	1215CST				0	0	3K		Thunderstorm Wind (G50)
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Two power poles were blown down.

ILLINOIS, Southwest

ILZ095-097

Adams - Pike

02	1000CST				0	0			Winter Storm
	1800CST								

A winter storm struck parts of west central Illinois on Saturday, March 2, crippling transportation across the area. About 1/2 inch of sleet fell first, followed by 3 to 4 inches of snow. In addition, 20 to 30 mile an hour winds caused considerable blowing and drifting snow. Road crews reported that as soon as they would clear a road of snow, the wind would blow it full again.

Adams County

Quincy

09	0220CST				0	0			Thunderstorm Wind (G55)
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A fast moving line of thunderstorms hit Quincy early Saturday morning causing widespread wind damage. Trees and power lines were down knocking out power to about 10,000 customers. Several homes and businesses suffered major roof damage. In several cases, the debris from the blown off roofs struck other buildings causing damage. Downed trees and limbs also struck buildings and vehicles causing damage.

ILZ095>097

Adams - Brown - Pike

09	0600CST				0	0			High Wind (G43)
	1800CST								

Strong west to northwest winds behind a cold front made for a windy day across west central Illinois. Wind gusts of 40 to 50 mph were common across the region. There was scattered damage to roofs, power poles and outbuildings throughout the area.

ILZ058>059-064-097>102

Greene - Macoupin - Bond - Pike - Calhoun - Jersey - Madison - St. Clair - Monroe

09	0600CST				0	0			High Wind (G43)
	1800CST								

Strong winds behind a cold front rocked the region Saturday. Wind gusts of 40 to 50 mph were common across the region. Area electric companies reported scattered power poles and power lines down across the area. An estimated 25,000 customers lost power at various times in the Metro East area of St. Louis. There was also scattered damage to trees, billboards and street signs.

Storm Data and Unusual Weather Phenomena

March 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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ILLINOIS, Southwest

ILZ058>060-098>100

Greene - Macoupin - Montgomery - Calhoun - Jersey - Madison

25 1800CST

0 0

Winter Storm

26 0600CST

A winter storm brought sleet and snow to parts of southwest Illinois. Sleet began falling the evening of the 25th and accumulated to 1 inch in many areas. The sleet changed to snow during the early morning hours of the 26th and accumulated to 3 to 4 inches. The combination of sleet and snow made for extremely hazardous travel conditions across the area.

Madison County

1 E Alton

28 1255CST

0 0

Hail (0.75)

A local television station reported 3/4 inch hail just east of Alton.

Monroe County

New Hanover

29 1009CST

0 0

Hail (1.00)

The public reported hail up to 1 inch in New Hanover.

INDIANA, Central

INZ029-035-043>044

Tippecanoe - Fountain - Vermillion - Parke

04 0645EST

0 0

Flood

07 0400EST

Flooding affected mainly agricultural bottomland.

	Flood Stage	Crest	Date of Crest
Lafayette	11.0	12.12	03/04
Covington	16.0	16.15	03/05
Montezuma	14.0	15.16	03/05

INZ021-030>031-031-037-037>042-047-047>049-056>057-064>065-071

Carroll - Clinton - Howard - Boone - Tipton - Hamilton - Madison - Delaware - Randolph - Marion - Hancock - Henry - Shelby - Rush - Bartholomew - Decatur - Jackson

09 1155EST

0 1

18K

High Wind (G63) ^M

1500EST

A strong cold front pushed across central Indiana during the late morning and afternoon of March 9. Trees and power lines were reported down in many counties. Roofs were blown off buildings in Greentown in Howard county. At the Indianapolis International Airport, an airplane rudder was damaged and an airplane windshield was broken due to the high winds. In Delaware county, a woman was injured when her car was hit by a gate blown open by the wind.

INZ029-035-043>044-051-060

Tippecanoe - Fountain - Vermillion - Parke - Vigo - Sullivan

09 1415EST

0 0

Flood

17 0600EST

Flooding mainly affected agricultural land and a few county roads.

	Flood Stage	Crest	Date of Crest
Lafayette	11.0	12.89	03/10
Covington	16.0	17.33	03/11
Montezuma	14.0	17.29	03/11
Terre Haute	14.0	15.31	03/12
Riverton	15.0	16.77	03/13

Jackson County

Kurtz

15 2310EST

0 0

Flash Flood

16 0030EST

Parts of State Road 58 were flooded.

Lawrence County

Bedford

15 2345EST

0 0

Flash Flood

16 0100EST

Parts of State Road 37 were flooded.

INZ071

Jackson

16 1415EST

0 0

Flood

17 0300EST

Storm Data and Unusual Weather Phenomena

March 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, Central

Heavy rains caused the East Fork White River to go to 12.71 feet near Seymour, where flood stage is 12.0 feet.

INZ061-067

Greene - Knox

25	0001EST				0	0			Flood
31	2359EST								

INZ021-028>031-035>037-039>046-049-051-054

Carroll - Warren - Tippecanoe - Clinton - Howard - Fountain - Montgomery - Boone - Hamilton - Madison - Delaware - Randolph - Vermillion - Parke - Putnam - Hendricks - Henry - Vigo - Morgan

25	2200EST				0	0			Winter Storm
26	1300EST								

An area of low pressure along with late season cold air brought a wintery mix of precipitation to much of central Indiana on March 25 and 26. A mixture of snow, sleet, and freezing rain fell across central Indiana throughout the storm. Some locations received up to 4 inches of snow with a little ice while other locations received a quarter of an inch of ice with around an inch of snow. Numerous automobile accidents occurred, and some power lines were downed due to the weight of the ice.

INZ070>071

Lawrence - Jackson

26	1215EST				0	0			Flood
31	0700EST								

Heavy rains near the end of the month caused some flooding of the East Fork White River.

	Flood Stage	Crest	Date of Crest
Seymour 2N	12.0	15.77	03/27
Bedford 8SE	20.0	20.77	03/30

**Daviess County
Washington**

28	1755EST				0	0			Hail (1.00)
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INZ040-047-053

Madison - Marion - Owen

30	0645EST				0	0			Flood
31	2359EST								

Heavy rains near the end of the month brought flooding to portions of the White river. Most areas effected were bottomland, and a few roads were flooded.

INZ029-035-043>044-051-060

Tippecanoe - Fountain - Vermillion - Parke - Vigo - Sullivan

30	1015EST				0	0			Flood
31	2359EST								

INDIANA, Northeast

INZ003>004

La Porte - St. Joseph

03	1100EST				0	0	0		Heavy Snow
04	1100EST								

An area of low pressure moved across Northern Indiana, bringing with it a mixed bag of precipitation. While only light to moderate accumulations of snow fell across the area as the low moved through, heavy lake effect snow bands set up, bringing from 6 to 8 inches of snow to the area by the morning of the 4th.

INZ003>009-012>018-020-022>027-032>034

La Porte - St. Joseph - Elkhart - Lagrange - Steuben - Noble - De Kalb - Starke - Pulaski - Marshall - Fulton - Kosciusko - Whitley - Allen - White - Cass - Miami - Wabash - Huntington - Wells - Adams - Grant - Blackford - Jay

09	1150CST				0	0	0		High Wind (G55) ^M
	1400CST								

An unusually strong cold front moved through the region during the daylight hours of the 9th. A strong pressure gradient existed with the front as 3 hour pressure falls of 4 millibars ahead of the front combined with 3 hour pressure rises of 11 millibars. Winds just above the surface ranged from 70 to 80 mph. The combination of these 2 factors was tapped by a narrow line of showers immediately ahead of the cold front. Widespread reports of trees, tree limbs and power lines being blown down were received as surface winds of 50 to 70 mph were experienced by many areas. Damage was mainly confined to the northeast part of the county.

INDIANA, Northwest

INZ001>002

Lake - Porter

02	2000CST				0	0			Winter Storm
03	0400CST								

Snow began falling late on Friday March 1st and continued into the morning hours of Saturday March 2nd. The second part of this

Storm Data and Unusual Weather Phenomena

March 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, Northwest

storm began Saturday afternoon and continued into the early morning hours of Sunday March 3rd. Storm total snowfall amounts ranged from 5 to 9 inches. Lowell in Lake county reported 8.5 inches and the Indiana Dunes in Porter county reported 6.6 inches.

INZ001>002-010>011-019 Lake - Porter - Newton - Jasper - Benton

09	1500CST 2000CST				0	0			High Wind (G51) ^M
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Strong low pressure moved across the upper midwest on Saturday, March 9th. Winds were sustained between 40 and 50 mph during most of the afternoon and evening hours, with wind gusts to 60 mph. Trees, branches, utility poles, and wires were blown down across all of northwest Indiana. Several semi trucks and tractor trailers were blown over on interstates in northwest Indiana, though no injuries were reported.

INDIANA, South Central

INZ089

Perry

22	1300EST				0	0			Flood
28	0500EST								

The Ohio River at Tell City crested at 42.0 feet just before sunrise on March 25. Flood stage at Tell City is 38 feet. Minor flooding occurs at this level. Water covers sections of IN 66 between Rome and Derby Indiana.

INZ089

Perry

23	2300EST				0	0			Flood
26	2000EST								

The Ohio River at Cannelton Lock crested at 43.3 feet just before sunrise on March 25. Flood stage at Cannelton is 42 feet. Minor flooding occurs at this level.

Dubois County

Ferdinand

29	1430EST				0	0			Hail (1.00)
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Perry County

1 NW Gatchel

29	1430EST				0	0			Hail (0.75)
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Perry County

Leopold

29	1445EST				0	0			Hail (0.88)
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Perry County

Leopold

29	1445EST				0	0			Thunderstorm Wind (G70)
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Crawford County

Leavenworth

29	1500EST				0	0			Thunderstorm Wind (G60) ^M
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Harrison County

Mauckport

29	1500EST				0	0	10K		Thunderstorm Wind (G70)
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Trees were downed and roofs were blown off buildings.

Harrison County

New Amsterdam

29	1500EST				0	0			Thunderstorm Wind (G60) ^M
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Harrison County

Valley City

29	1502EST				0	0			Hail (0.75)
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Harrison County

3 S Corydon

29	1510EST				0	0			Thunderstorm Wind (G70)
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Harrison County

Mauckport

29	1515EST				0	0	20K		Thunderstorm Wind (G70)
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Severe thunderstorms produced large hail over parts of South central Indiana. Thunderstorm winds uprooted trees and downed power lines over much of the area. Trees were blown on to mobile homes in the Mauckport area. Four 25 to 30 foot tall cedar trees were blown down near Corydon.

INDIANA, Southeast

INZ050-058>059-066-073>074-080

Wayne - Fayette - Union - Franklin - Ripley - Dearborn - Switzerland

09	1323EST 1640EST				0	0	92K		High Wind (G59) ^M
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High winds in excess of 60 mph downed trees, signs, and power lines throughout southeast and east central Indiana early in the afternoon. Several thousand people were left without power for prolonged periods of time due to the widespread nature of the damage to the power lines and utility poles.

INZ050-058>059-066

Wayne - Fayette - Union - Franklin

26	0250EST 0600EST				0	0			Winter Storm
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Storm Data and Unusual Weather Phenomena

March 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, Southeast

A warm front stretched along the length and just south of I-70 in Indiana. Along and north of the front...significant ice accumulations of 1/2 inch occurred, bringing down trees and powerlines for portions of east central and southeast Indiana.

INDIANA, Southwest

INZ081>082-085>088

Gibson - Pike - Posey - Vanderburgh - Warrick - Spencer

09	0900CST								
	1400CST				0	0	6K		Wind

Minor property damage was caused by strong west winds around the back side of an intense low pressure system. Winds gusted to around 50 MPH for several hours. Some exact wind measurements from automated observing sites included: 47 MPH at Evansville, 58 MPH just east of Winslow, and 56 MPH just north of Princeton. Power lines were blown down in Winslow, and a couple of trees were topped in Poseyville.

Pike County

**2 E Cato to
Winslow**

15	2245CST								
	16 0200CST				0	0			Flash Flood

Route 56 was barricaded between Otwell and Cato due to flooding. A road in Winslow was flooded.

INZ085>088

Posey - Vanderburgh - Warrick - Spencer

21	1400CST								
	31 2359CST				0	0			Flood

The Ohio River rose above flood stage on the 21st at Newburgh Lock, on the 22nd at Mount Vernon, and on the 26th at Evansville. The river crested about 7 feet above flood stage at Newburgh and Mount Vernon. At Evansville, where the flood stage is relatively high, the crest was less than an inch above flood stage. At Newburgh, minor flooding occurred, affecting mainly agricultural land. Near Mount Vernon, farm land and some roads were flooded in places southwest and west of town. The river began to recede by the end of the month.

Posey County

3 W Poseyville

29	1240CST								
					0	0	4K		Thunderstorm Wind (G52)

A barn roof was blown off. Power lines were down.

Gibson County

St James

29	1245CST								
					0	0			Hail (0.75)

Vanderburgh County

Stacer

29	1245CST								
					0	0			Hail (0.75)

Dime size hail fell at Interstate 64 and U.S. Highway 41.

Vanderburgh County

Darmstadt

29	1245CST								
					0	0	5K		Thunderstorm Wind (G65)

Thunderstorm winds blew down a large barn. A tree was blown onto a house. In the same area, some siding was blown off a house.

Warrick County

Lynnville

29	1255CST								
					0	0			Hail (1.50)

Spencer County

**St Meinrad to
Santa Claus**

29	1320CST								
					0	0	10K		Thunderstorm Wind (G55)

At St. Meinrad, the roof was blown off a turkey house, and some farm buildings were damaged. Trees were blown down in Santa Claus, and the tops were broken off street lights.

Spencer County

**Dale to
Gentryville**

29	1321CST								
					0	0			Hail (0.88)

Nickel size hail was reported in Dale. Dime size hail fell at Gentryville.

IOWA, Central

**IAZ026>028-035>039-
046>050-057>059**

Franklin - Butler - Bremer - Webster - Hamilton - Hardin - Grundy - Black Hawk - Greene - Boone - Story - Marshall - Tama - Audubon - Guthrie - Dallas

01	1700CST								
	02 1400CST				0	0	80K		Heavy Snow

An Arctic cold front dropped southeast across the state on the 28th and became stationary southeast of Iowa by the morning of the first. Iowa was under a dome of Arctic air for one of the few times during this nearly record warm winter. Southwest flow aloft prevailed over the area as low pressure developed over the southern Plains. As the low intensified, strong southerly winds developed in the low levels pushing warmer and more moist air over the top of the dome of cold air that was in place over Iowa. The actual track of the surface low was well to the south of Iowa. Snow broke out during the late afternoon hours over west central Iowa and

Storm Data and Unusual Weather Phenomena

March 2002

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

spread east during the overnight hours. A band of heavy snow about 50 to 75 miles wide developed from west central into northeast Iowa. Snowfall amounts in this band were in excess of 6 inches in most areas, however the highest totals were little more than 8 inches. The snowfall was quite uniform with little in the way of any convective elements in the snow band. Northerly winds increased during the second half of the storm. This caused considerable drifting snow, however blowing snow was quite limited owing to the fact that there was no snow on the ground prior to the storm, and there was not even any snow in the ditches. Drifting was a problem with reports of drifts of 5 to 10 feet high in places. The storm did cause some disruption in travel and activities, however as winter storms go in the central Plains, the event was not a major event.

IAZ004>007-015>017-023>025-033>035-044>045 **Emmet - Kossuth - Winnebago - Worth - Palo Alto - Hancock - Cerro Gordo - Pocahontas - Humboldt - Wright - Sac - Calhoun - Webster - Crawford - Carroll**

08	1600CST								
09	0300CST								Ice Storm

A spring storm system developed during the afternoon of the 8th. A strong frontal boundary extended from low pressure in southwest Kansas, northeast across southeast Iowa, into southern Wisconsin. Late in the afternoon, a strong upper level system moved out of the Rockies and begin to lift northeast into the central U.S. Warm and moist air was drawn north ahead of the low pressure system. Dew point temperatures reached the mid to upper 50s over northern Missouri into southeast Iowa. The warm air was lifted over a cold dome of air located over northwest Iowa, where surface temperatures were in the 20s. Freezing rain was widespread over northwest, north central, and west central Iowa. Thunderstorms with freezing rain were also reported with the system. Many places received one quarter inch or more of ice accretion. Areas toward Storm Lake and Estherville reported widespread one quarter to one half inch of ice accretion. The ice did cause scattered power outages in these areas. Spotty power outages were reported as well, however about the time it became critical the colder air moved into northwest Iowa. This changed the precipitation over to ice pellets and light snow.

Cass County

Massena	08	2155CST							Thunderstorm Wind (G61)
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Adams County

4 N Carbon	08	2159CST							Thunderstorm Wind (G56)
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Ringgold County

2 N Kellerton	08	2245CST							Thunderstorm Wind (G65)
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Clarke County

3 S Hopeville	08	2250CST							Thunderstorm Wind (G59)
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Boone County

Boone	08	2305CST							Thunderstorm Wind (G51) ^M
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Decatur County

Lamoni Arpt	08	2308CST							Thunderstorm Wind (G50) ^M
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Clarke County

Osceola	08	2325CST							Thunderstorm Wind (G50)
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Warren County

Indianola	08	2325CST							Thunderstorm Wind (G65)
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Two semi-tractortrailer rigs blown of U.S. Highway 65. One driver received minor injuries.

Clarke County

3 S Osceola	08	2329CST							Thunderstorm Wind (G61)
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Driver of semi-tractortrailer rig received minor injuries as rig was blown off the highway.

Lucas County

3 SSW Chariton	08	2330CST							Thunderstorm Wind (G61)
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Warren County

New Virginia	08	2330CST							Thunderstorm Wind (G70)
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Warren County

Indianola	08	2340CST							Thunderstorm Wind (G54)
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Polk County

Des Moines Arpt	08	2343CST							Thunderstorm Wind (G51) ^M
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Polk County

Runnells	08	2355CST							Thunderstorm Wind (G61)
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Warren County

Hartford	08	2355CST							Thunderstorm Wind (G70)
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Appanoose County

Plano	09	0000CST							Thunderstorm Wind (G56)
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Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
IOWA, Central									
Jasper County									
5 W Newton Muni Arpt	09	0009CST			0	0	1.5M		Thunderstorm Wind (G87)
Jasper County									
Colfax	09	0010CST			0	0	5K		Thunderstorm Wind (G52)
Jasper County									
Newton Muni Arpt	09	0012CST			0	0	5K		Thunderstorm Wind (G55) ^M
Marshall County									
7 S Marshalltown	09	0026CST			0	0	30K		Thunderstorm Wind (G61)
Marshall County									
Ferguson	09	0030CST			0	0	5K		Thunderstorm Wind (G56)
Marshall County									
Le Grand	09	0035CST			0	0	50K		Thunderstorm Wind (G70)
Mahaska County									
2 S Cedar	09	0047CST			0	0	30K		Thunderstorm Wind (G65)
Bremer County									
Plainfield	09	0052CST			0	0	10K		Thunderstorm Wind (G61)
Wapello County									
Ottumwa	09	0052CST			0	0	5K		Thunderstorm Wind (G52)
Tama County									
Garwin	09	0053CST			0	0	10K		Thunderstorm Wind (G56)
Tama County									
Traer	09	0054CST			0	0	10K		Thunderstorm Wind (G56)
Tama County									
Dysart	09	0055CST			0	0	5K		Thunderstorm Wind (G52)

As the storm system mentioned above lifted out of the southern Plains a line of thunderstorms formed near the strong frontal boundary. Strong divergence aloft combined with increasing instability resulted in rapid development of linear thunderstorms. Several bow elements were embedded in the line as well. Most of the storms produced hail, and in some cases enough to cover the ground. The hail was small with mostly pea size being reported. High were were the main feature with the storms. Numerous reports of 60 to 80 MPH winds were received. Structural damage was reported with some of the storms. For example, high winds destroyed grain bins on one farm in Cass County at Massena. In Ringgold County, the storms damaged garage doors and walls and blew several animal shelters away. As the storms moved into Clarke County, high winds struck a rural home south of Hopeville. One man was caught outside and was lifted by the winds and thrown into the porch. He was hospitalized with 5 broken ribs. In Marshall County, corn cribs were blown away south of Marshalltown and the roof was ripped off of a house in Le Grand. Several reports of trees and power line being downed were received across the south half of the state. The storms spread northeast toward the end of the event with winds around 70 MPH pushing northeast as far as Bremer County. Plainfield reported wind damage as 70 MPH winds swept through the city around 0100. Some of the worst damage occurred in Jasper County in the town of Lambs Grove. A microburst formed at the apex of a small bow echo. Winds tore through the area with speeds near 100 MPH. Six houses sustained severe damage and several other buildings in the area were destroyed by the high winds. Countless trees were downed in the area as well. Damage was similar to that of an F1 tornado. Damage was in the millions of dollars in the community. One homestead sustained \$500,000 damage as a 40 by 70 foot machine building and its contents were destroyed. Two people were injured from the storms. In Clarke County, two semi-tractortrailer rigs were overturned as the gust front hit the area. One of the drivers sustained minor injuries. In Warren County, high winds overturned a semi-tractortrailer rig on U.S. Highway 65 in Indianola. The driver of that rig also received minor injuries.

IAZ004>007-015>017-023>028-033>039-044>050-057>062-070>075-081>086-092>097 Emmet - Kossuth - Winnebago - Worth - Palo Alto - Hancock - Cerro Gordo - Pocahontas - Humboldt - Wright - Franklin - Butler - Bremer - Sac - Calhoun - Webster - Hamilton - Hardin - Grundy - Black Hawk - Crawford - Carroll - Greene - Boone - Story - Marshall - Tama - Audubon - Guthrie - Dallas - Polk - Jasper - Poweshiek - Cass - Adair - Madison - Warren - Marion - Mahaska - Adams - Union - Clarke - Lucas - Monroe - Wapello - Taylor - Ringgold - Decatur - Wayne - Appanoose - Davis

09	0600CST	0	0	2.5M	High Wind (G54) ^M
	1600CST				

Intense low pressure located northeast of Iowa, combined with high pressure building into the area produced a very strong pressure gradient across the state. The low pressure deepened to below 990 mb as it approached Lake Superior during the afternoon. Winds gusted to over 50 MPH in most places throughout the day on the 9th. A few locations reported winds gusting in excess of 60 MPH. Several reporting sites in the CWA had sustained winds of 40 MPH or more for a period of a few hours during the day as the low intensified. Scattered damage was reported around the state along with spotty power outages. For the most part, damage was limited to trees and some roof damage to out buildings. Though not major, the damage was quite widespread.

Storm Data and Unusual Weather Phenomena

March 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>									
Linn County									
1 E Fairfax	09	0208CST			0	0			Hail (0.75)
Lee County									
Donnellson	09	0215CST			0	0			Thunderstorm Wind (G61)
Barn destroyed.									
Lee County									
1 N Keokuk	09	0215CST			0	0			Thunderstorm Wind (G70)
Just north of Keokuk along Highway 218, a barn completely collapsed and another one was pushed off it's foundation. Also, a garage was destroyed, several billboards were damaged, and a trailer was overturned.									
Linn County									
Cedar Rapids	09	0215CST			0	0			Thunderstorm Wind (G52)
Large 40 foot tree toppled. The tree was estimated at 120 years old.									
Lee County									
Ft Madison	09	0220CST			0	0			Thunderstorm Wind (G52)
Tree limbs and power lines down.									
Johnson County									
Hills	09	0225CST			0	0	200K		Thunderstorm Wind
A property suffered heavy damage. A large sliding door to a metal building was blown down and destroyed, a fence was damaged, a semi-trailer was tipped over and moved, the tin roof on an old shed was torn off, and an empty grain elevator was tipped over and moved. Additionally, many water tanks and other supplies that were piled around had been jumbled and thrown around. The owner credited some rail cars parked along the west side of the property with limiting the damage by providing a break from the wind. Also, a pole building on an adjacent lot northeast of the property was upended and destroyed with tractors and other equipment inside. The equipment suffered damage but was still driveable. Across the street from the pole building, a residence lost a chimney. Just east of that residence, was another residence which suffered the most damage seen in town. The home had damage on all four sides with windows broken out, siding damaged, a chimney destroyed, shingles removed and roof damage. A child was asleep in a first floor bedroom when the home was damaged. The mother reported that it was very difficult opening the door to the bedroom because of the force of the wind. The child was in bed with broken glass throughout the room and in the bed, but luckily there were no injuries. There was mud and debris plastered on the walls and in the room. Also, there was an old truck parked on a street on the east side of the home that was pushed into another vehicle parked nearby. Power lines were down, and the home was without power until 4:30 pm Saturday. Across the street from this residence was another home which suffered some roof damage, damage to a chimney and a playhouse which was tipped over and moved. There were also trees down throughout town.									
Lee County									
Sandusky	09	0225CST			0	0			Thunderstorm Wind (G70)
Trailer blown off road, and roof torn off building.									
Cedar County									
Cedar Bluff	09	0230CST			0	0			Thunderstorm Wind (G61)
A large tree was uprooted and fell on a cabin, while a roof was blown off another cabin. A metal shed was also destroyed on another property.									
Cedar County									
3 W Clarence	09	0230CST			0	0			Thunderstorm Wind (G61)
The roofs were blown off 2 buildings at a farmstead.									
Cedar County									
Tipton	09	0230CST			0	0	50K		Thunderstorm Wind (G61)
The Tipton Country Club suffered heavy damage. A large cart shed was destroyed and blown into a parking area south of the clubhouse. Damage to the carts in the shed was minor. Several large trees were blown down. A roof was peeled back on another shed, holes were punched in a third shed, the roof was blown off a small structure next to the pool, and approximately 9 trees were damaged or destroyed. At Country Estates, the skirting was blown off several homes, and a roof was blown off a barn.									
Des Moines County									
Burlington	09	0230CST			0	0			Thunderstorm Wind (G52) ^M
Des Moines County									
West Burlington	09	0230CST			0	0			Thunderstorm Wind (G52)
Tree limbs and power lines down.									
Des Moines County									
Burlington	09	0235CST			0	0			Thunderstorm Wind (G52)
Several large tree limbs down along Sycamore Street.									
Jones County									
Oxford Jct	09	0255CST			0	0			Thunderstorm Wind (G57) ^M
Windows blown out of a house, and several tree limbs 6 to 8 inches in diameter knocked down.									

Storm Data and Unusual Weather Phenomena

March 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, Northwest

accidents. The snow was accompanied by winds gusting to 45 mph, causing blowing and drifting snow with near zero visibilities at times.

IAZ001>003

Lyon - Osceola - Dickinson

14	0900CST 2300CST				0	0	200K		Winter Storm
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Widespread icing from freezing rain made travel difficult, and at times impossible. Damage to power lines and trees occurred, especially in the Spirit Lake area, where significant power outages were reported for the second time in a week. One to three inches of snow fell on top of the ice, except in northwestern Lyon County where up to 5 inches fell.

IOWA, Southwest

Fremont County

Riverton

07	2336CST				0	0			Hail (1.00)
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Hail between dime and quarter size was reported by law enforcement personnel in Riverton.

IAZ043-055>056

Monona - Harrison - Shelby

08	1700CST 2355CST				0	0			Winter Storm
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Freezing drizzle or light freezing rain that was falling over the area Friday afternoon quickly became heavier freezing rain and then sleet by early Friday evening (03/08/02) as a line of thunderstorms developed across the area. The thunderstorms were also accompanied by pea size to 1/2 inch hail. The sleet turned to snow before ending as colder air was drawn into the system. Around 1 inch of a mix of glaze from freezing rain and sleet fell over a large part of the area and then snowfall of 1 inch to as much as 5 inches fell on top of the glaze. In addition, northwest winds gusting between 30 and 45 mph created difficult driving conditions due to the slick conditions causing many vehicles to slide off the roads. The winds and glaze also caused numerous power fluctuations and brief and isolated power outages. However, the outages were not as severe as the winter storm that struck parts of the area a month earlier.

The heaviest snow fell to the northwest through north of Omaha, with Little Sioux, Iowa reporting 5 inches for the heaviest total.

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	1300CST				0	2			Winter Storm
02	0600CST								

A combination of freezing rain, sleet, and snow along with strong winds with blowing and drifting snow plus cold temperatures produced adverse conditions over all the area. Snowfall totals ranged from 2 to 4 inches across much of the area. Slick roads lead to a number of accidents. Two people were injured near Herington when a pickup they were in slid off the roadway.

Cloud County

Miltonvale

08	1918CST				0	0			Hail (0.88)
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Clay County

8 W Clay Center

08	1930CST				0	0			Hail (0.75)
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Dickinson County

Manchester

08	1956CST				0	0			Hail (0.75)
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Clay County

Wakefield

08	2006CST				0	0			Hail (0.75)
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KSZ022>024-038>039 **Riley - Pottawatomie - Jackson - Wabaunsee - Shawnee**

08	2009CST 2105CST				0	0	202K		High Wind (G60)
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Strong outflow from thunderstorms nearby caused high winds to reach speeds of 70 mph in places as they spread from west to east over a 5 county area. In Paxico tree limbs were downed and a junior high school extensively damaged. A 20 by 40 foot hole was found in the roof of the school. In Delia the siding was blown off of a house.

Pottawatomie County

7 E Westmoreland

08	2022CST				0	0	7K		Thunderstorm Wind (G54)
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Strong winds blew part of the roof off of a trailer home.

Dickinson County

Herington

08	2036CST				0	0			Hail (0.75)
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Wabaunsee County

Alma

08	2040CST				0	0	6K		Thunderstorm Wind (G60)
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Strong winds blew down trees and damaged several buildings.

Storm Data and Unusual Weather Phenomena

March 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, East</u>									
Pottawatomie County									
3 SE St Marys	08	2045CST			0	0			Thunderstorm Wind (G60)
Morris County									
2 W Council Grove	08	2050CST			0	0			Hail (0.75)
Jackson County									
9 NNW Delia	08	2057CST			0	0			Hail (0.75)
Lyon County									
4 S Emporia	08	2150CST			0	0			Hail (0.75)
Osage County									
Osage City	08	2153CST			0	0			Hail (0.75)
Lyon County									
Neosho Rapids	08	2200CST			0	0			Hail (1.00)
Osage County									
10 N Lyndon	08	2200CST			0	0			Hail (1.00)
Brown County									
Everest	08	2115CST			0	0	6K		Thunderstorm Wind (G60)
Strong winds damaged a home, an outbuilding, and destroyed a shed.									
Shawnee County									
(Foe)Forbes Fld Tope	08	2131CST			0	0			Thunderstorm Wind (G59)
Lyon County									
Americus	08	2132CST			0	0			Hail (0.75)
Shawnee County									
Topeka	08	2140CST			0	0	1M		Thunderstorm Wind (G65)
Strong downburst winds damaged 40 cars at a dealership in Topeka. Roof damage was also noted at the dealership salesroom.									
Lyon County									
6 ENE Emporia	08	2137CST			0	0			Hail (0.75)
Douglas County									
Eudora	08	2210CST			0	0			Hail (0.75)
Franklin County									
2 N Pomona	08	2228CST			0	0			Hail (1.00)
Franklin County									
4 N Ottawa	08	2241CST			0	0			Hail (0.75)
Franklin County									
4 W Wellsville	08	2247CST			0	0			Hail (0.75)
Franklin County									
4 W Wellsville	08	2247CST			0	0			Thunderstorm Wind (G52)
Douglas County									
1 NW Baldwin	08	2254CST			0	0			Hail (0.75)

Thunderstorms developed over north central Kansas early in the evening of the 8th. Many became severe and produced numerous reports of large hail and damaging winds as they moved to the east before finally exiting the area late in the evening. Strong winds damaged many buildings and residences across the area. But the most damaging event of all occurred in Topeka where downburst winds damaged 40 cars at a dealership plus the roof of the dealership itself. Total damage from this event alone was estimated at 1 million dollars. In addition, powerful straightline winds moved away from the thunderstorms and did considerable damage in a corridor bounded by the Kansas River on the north and Interstate 70 on the south and extended from Manhattan to just west of Topeka. Winds in this area were estimated as high as 70 mph. The most noticeable damage from this part of the event occurred in Paxico where the winds left a 20 foot by 40 foot gaping hole in the roof of the Junior High school. Ironically, this was the second consecutive year this school had been damaged from severe weather. Total damage from the March 8 event was estimated at 1.22 million dollars.

KANSAS, Extreme Southeast

KSZ073-097-101

Bourbon - Crawford - Cherokee

02	0200CST				0	0	0		Winter Storm
	1400CST								

A late winter storm brought a variety of winter weather across southeast Kansas during the morning hours of March 2nd. Strong low pressure developed over Arkansas the evening of March 1st, which moved copious amounts of moisture northward across the region. An arctic air mass moved through the area that early morning, dropping temperatures 20 to 30 degrees in six hours.

Storm Data and Unusual Weather Phenomena

March 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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KANSAS, Extreme Southeast

Before the snow started, a shallow layer of warm air aloft provided an hour or two of freezing rain, mixed with heavy sleet at times. Between one tenth and one quarter of an inch of ice accumulated on roadways before the heavy snow began. Between four and six inches of snow fell across southeast Kansas, with the heaviest around Columbus. Whiteout conditions were common over southeast Kansas during the morning as northerly winds up to 40 mph caused considerable blowing and drifting snow. Numerous car accidents were reported but no serious injuries.

Crawford County Pittsburg

09 0001CST 0 0 65K Thunderstorm Wind (G65)

A squall line formed over southeast Kansas and swept across Crawford County early Saturday morning. It produced significant damage to the Pittsburg State University physical education building. Only minor damage occurred across the rest of the county, which was confined to broken windows and downed power poles.

KANSAS, North Central

Jewell County Mankato

08 1846CST 0 0 0 0 Hail (0.75)

KSZ005>007

Phillips - Smith - Jewell

24 2100CST 0 0 0 0 Winter Storm
25 0700CST

A narrow swath of snow fell during the overnight hours across a part of north-central Kansas. Snowfall generally ranged from 4 to 7 inches across an area from southern Phillips county to northern Jewell county. Wind gusts over 30 mph made for poor road conditions and treacherous travel in spots.

KANSAS, Northeast

KSZ057

Miami

02 1130CST 0 0 Winter Storm
03 0800CST

Five inches of snow reported with considerable blowing and drifting of snow.

KSZ060

Linn

02 1130CST 0 0 Heavy Snow
03 0800CST

Five to six inches of snow with 2 foot snow drifts.

A late season snow storm moved across extreme eastern Kansas. Snowfall from two to six inches was reported. Gusty northwest winds caused considerable blowing and drifting of snow with hazardous driving conditions.

Atchison County

Effingham 08 2130CST 0 0 Thunderstorm Wind (G52) ^M

Doniphan County

Troy 08 2135CST 0 0 Thunderstorm Wind (G57) ^M

Leavenworth County

Leavenworth 08 2213CST 0 0 Hail (0.75)

Leavenworth County

4 W Linwood 08 2225CST 0 0 Hail (0.88)

Wyandotte County

Bonner Spgs 08 2243CST 0 0 Hail (0.75)

Wyandotte County

Kansas City 08 2245CST 0 0 Hail (0.75)

Johnson County

5 W Olathe 08 2258CST 0 0 Hail (0.75)

Johnson County

Gardner 08 2300CST 0 0 Hail (1.00)

Miami County

1 E Paola 08 2318CST 0 0 Hail (0.88)

KANSAS, Northwest

KSZ001>004-013>016-027>029 Cheyenne - Rawlins - Decatur - Norton - Sherman - Thomas - Sheridan - Graham - Wallace - Logan - Gove

01 0600MST 0 0 Winter Storm
1600MST

A strong winter storm provided northwest Kansas with 2 to 5 inches of snow. The storm produced north winds of 25 to 35

Storm Data and Unusual Weather Phenomena

March 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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KANSAS, Northwest

mph...which created areas of blowing and drifting snow. Visibility was reduced below one mile, creating hazardous driving conditions along Interstate 70. The strong winds combined with temperatures in the single digits, produced wind chill readings between 15 and 25 degrees below zero.

KSZ001>002-013-016-027 **Cheyenne - Rawlins - Sherman - Graham - Wallace**

24	1100MST 1900MST			0	0			Winter Storm
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A band of 4 to 8 inches of snow fell across portions of northwest Kansas on March 24th. The heavy snow reduced visibilities below one mile, which caused numerous accidents along Interstate 70. The interstate was closed from Limon, Colorado to Oakley, Kansas due to traffic accidents and heavy snowfall.

KANSAS, Southeast

KSZ051>053-067>072-082>083-091>096-098>100 **Mcpherson - Marion - Chase - Reno - Harvey - Butler - Greenwood - Woodson - Allen - Kingman - Sedgwick - Harper - Sumner - Cowley - Elk - Wilson - Neosho - Chautauqua - Montgomery - Labette**

01	2200CST			0	0			Winter Storm
02	0600CST							

Low pressure developed rapidly over New Mexico during the morning. As the low moved east into West Texas, it deepened considerably, allowing rich gulf moisture to surge north across East Texas and Oklahoma and into Kansas. An upper-level impulse lifting northeast across the Southern Plains induced sufficient lift to produce bands of snow across Central Kansas late in the afternoon. By evening, the snow increased in both coverage and intensity, and between 10 PM and midnight, moderate to heavy snow occurred across that part of Central Kansas generally along, and southeast, of a line from Hutchinson to McPherson. By midnight, the snow had overspread South-Central and most of Southeast Kansas. Accumulations were 3-6 inches, with the greater amounts occurring across Southeast Kansas where the snow was occasionally convective. However, northerly winds of 30-40 mph whipped across the region resulting in widespread blowing and drifting snow that frequently reduced visibilities to around 1/4 mile.

Ellsworth County

Ellsworth	08	1807CST		0	0			Hail (0.88)
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Ellsworth County

Ellsworth	08	1810CST		0	0			Hail (0.75)
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Barton County

1 E Great Bend	08	1812CST		0	0			Hail (1.00)
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Barton County

4 N Great Bend	08	1823CST		0	0			Hail (1.00)
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Lincoln County

2 W Westfall	08	1829CST		0	0			Hail (0.88)
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Barton County

7 S Great Bend	08	1838CST		0	0			Hail (1.00)
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Barton County

5 SE Great Bend	08	1843CST		0	0			Hail (1.00)
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Rice County

5 SE Chase	08	1857CST		0	0			Hail (1.00)
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Ellsworth County

1 SW Kanopolis	08	1900CST		0	0			Hail (1.00)
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Ellsworth County

Ellsworth	08	1905CST		0	0			Hail (0.75)
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Reno County

Abbyville	08	1912CST		0	0			Hail (1.00)
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Rice County

Lyons	08	1920CST		0	0			Hail (0.88)
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Rice County

Lyons	08	1920CST		0	0			Thunderstorm Wind (G54) ^M
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Reno County

Langdon	08	1926CST		0	0			Hail (0.75)
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Reno County

5 W Arlington	08	1930CST		0	0			Hail (1.75)
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Storm Data and Unusual Weather Phenomena

March 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>									
Reno County									
Hutchinson	08	1930CST			0	0	25K		Thunderstorm Wind (G56)
			Downed power lines severed power to approximately 155-160 residences.						
Saline County									
4 S Salina	08	1931CST			0	0			Hail (0.75)
Reno County									
3 NW Hutchinson	08	1934CST			0	0			Hail (0.75)
Saline County									
Brookville	08	1935CST			0	0			Hail (0.75)
Reno County									
4 NE Arlington	08	1936CST			0	0			Hail (0.75)
Kingman County									
8 W Kingman	08	1938CST			0	0			Hail (1.00)
Reno County									
Arlington	08	1939CST			0	0			Hail (0.75)
Kingman County									
Kingman	08	1945CST			0	0	25K		Thunderstorm Wind (G61)
			Power lines and power poles downed on west side of town along highway 54.						
Mepherson County									
5 W Mc Pherson	08	1946CST			0	0			Hail (0.75)
Mepherson County									
3 SW Conway	08	1947CST			0	0			Hail (0.75)
Mepherson County									
5 W Mc Pherson	08	1950CST			0	0			Hail (0.88)
Kingman County									
Kingman	08	1953CST			0	0			Thunderstorm Wind (G53) ^M
			Measured by KSN weather lab at Kingman elementary school.						
Reno County									
Pretty Prairie	08	1954CST			0	0			Hail (0.75)
Reno County									
2 E Hutchinson	08	1959CST			0	0			Hail (0.75)
Sedgwick County									
Wichita	08	2000CST			0	0	50K		Thunderstorm Wind (G52)
			Fallen limbs damaged cars at Wichita State. A fence surrounding Levitt Arena was damaged. Limbs hitting power lines severed power to 265 residences.						
Sumner County									
1 N Oxford	08	2000CST			0	0	5K		Thunderstorm Wind (G63) ^M
			Exit 19 sign for Wellington blown down.						
Kingman County									
Spivey	08	2007CST			0	0			Hail (1.00)
Reno County									
8 E Hutchinson	08	2011CST			0	0			Hail (0.75)
Kingman County									
10 E Kingman	08	2017CST			0	0			Hail (0.75)
Harper County									
Corwin	08	2020CST			0	0			Hail (0.75)
Harper County									
2 S Harper	08	2020CST			0	0			Thunderstorm Wind (G52)
Harper County									
Harper	08	2028CST			0	0			Hail (1.00)
Harvey County									
2 SE Newton	08	2028CST			0	0			Hail (1.00)
Marion County									
Tampa	08	2030CST			0	0			Hail (0.75)
Sedgwick County									
5 E Andale	08	2030CST			0	0			Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 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>									
Sedgwick County									
Cheney	08	2032CST			0	0			Hail (0.75)
Harvey County									
7 NE Newton	08	2038CST			0	0			Hail (1.00)
Harper County									
Harper	08	2043CST			0	0			Thunderstorm Wind (G52)
Harvey County									
Sedgwick	08	2043CST			0	0			Hail (1.00)
Sedgwick County									
Wichita	08	2043CST			0	0			Thunderstorm Wind (G53) ^M
		Mid-Continent Airport.							
Sedgwick County									
Wichita	08	2044CST			0	0			Thunderstorm Wind (G50) ^M
		North Wichita.							
Sumner County									
5 NW Conway Spgs	08	2047CST			0	0			Thunderstorm Wind (G56)
Butler County									
Andover	08	2052CST			0	0			Thunderstorm Wind (G60) ^M
Sumner County									
4 N Argonia	08	2052CST			0	0			Hail (0.75)
Sedgwick County									
Maize	08	2058CST			0	0			Thunderstorm Wind (G56)
Sedgwick County									
Viola	08	2058CST			0	0			Hail (0.75)
Harvey County									
Newton	08	2100CST			0	0	25K		Thunderstorm Wind (G56)
		Downed power lines severed power to approximately 155-160 residences.							
Butler County									
Towanda	08	2102CST			0	0			Thunderstorm Wind (G52)
Chase County									
1 NE Elmdale	08	2105CST			0	0			Hail (0.88)
Butler County									
4 SW Cassoday	08	2112CST			0	0	25K		Thunderstorm Wind (G56)
		Semi overturned on Kansas turnpike at mile marker 73.							
Butler County									
El Dorado	08	2115CST			0	0	50K		Thunderstorm Wind (G56)
		On Kansas Turnpike, one semi-trailer overturned. Three miles away, a second semi-trailer was involved in a two-vehicle accident. No injuries or fatalities reported with either mishap. Downed power lines severed power to approximately 155-160 residences.							
Sumner County									
4 S Milan	08	2115CST			0	0			Thunderstorm Wind (G56)
Butler County									
Potwin	08	2117CST			0	0	20K		Thunderstorm Wind (G56)
		Large poles downed.							
Butler County									
Rose Hill	08	2130CST			0	0			Thunderstorm Wind (G52)
Sumner County									
Belle Plaine	08	2130CST			0	0			Hail (1.00)
Cowley County									
Arkansas City	08	2138CST			0	0			Thunderstorm Wind (G64) ^M
		KSN Weather Lab.							
Butler County									
2 S Rose Hill	08	2150CST			0	0			Thunderstorm Wind (G56)
		Large branches downed.							
Sumner County									
2 S Oxford	08	2154CST			0	0			Hail (0.88)
Greenwood County									
Fall River Res	08	2215CST			0	0			Thunderstorm Wind (G52)

Storm Data and Unusual Weather Phenomena

March 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>									
Chautauqua County									
Sedan	08	2236CST			0	0			Thunderstorm Wind (G52)
Woodson County									
Yates Center	08	2245CST			0	0			Thunderstorm Wind (G52)
Chautauqua County									
Sedan	08	2258CST			0	0	15K		Thunderstorm Wind (G52)
									Power lines downed.
Elk County									
4 N Howard	08	2258CST			0	0			Thunderstorm Wind (G52)
									Limbs downed.
Allen County									
3 NE Iola	08	2300CST			0	0	100K		Thunderstorm Wind (G78)
									Dairy farm hit. Damage summary: Roof blown off a machine shop, a lean-to blown over, downed power lines, and most of the cattle pens that were tossed. One head of cattle sustained minor injuries. One quarter mile east of the dairy farm, a delivery truck was blown onto it's side.
Allen County									
Iola	08	2302CST			0	0	50K		Thunderstorm Wind (G61)
									Windows blown out of unspecified number of cars and businesses. Trees and power lines downed.
Montgomery County									
Coffeyville	08	2325CST			0	0			Thunderstorm Wind (G50) ^M
									Coffeyville ASOS.
Montgomery County									
Coffeyville	08	2339CST			0	0	75K		Thunderstorm Wind (G70)
									Large section of roof torn from a church and blown onto adjacent building.
Neosho County									
Earlton	08	2344CST			0	0	10K		Thunderstorm Wind (G56)
									Power lines downed.
Labette County									
2.5 S Altamont	09	0000CST			0	0	20K		Thunderstorm Wind (G61)
									Roof and rafters of shed lifted intact and blown 30-50 yards east of shed's location. Minor damage to outbuildings. A few limbs greater than 2 inches in diameter downed.
Labette County									
2 S Altamont	09	0000CST 0005CST			0	0	100K		Thunderstorm Wind (G65)
									Extensive damage at a farm. Damage summary: Machine shed lifted off foundation and destroyed with all machinery stored inside strewn. Machine shed blew into neighbor's yard, hitting two barns. Of the two barns, one was unroofed while the second lost nearly half it's roof. Numerous shingles were torn off the house. Gates to a third barn were blown down. Pool damaged.
<u>KANSAS, Southwest</u>									
Stafford County									
9 NNW Hudson	08	1745CST			0	0			Hail (1.00)
Stafford County									
9 NNW Hudson	08	1745CST			0	0	50K		Thunderstorm Wind (G87)
									Pivot sprinkler was completely destroyed by the wind.
<u>KENTUCKY, Central</u>									
Clinton County									
Countywide	17	2120EST			0	0			Flash Flood
	18	0130EST							
									Water covered roads over much of the county. Highway 127S 5 miles south of Albany, Miller Road between SR 1590 and Highway 90, parts of Highway 696 were all covered with water. There was flooding on Bald Rock Road in the extreme southeast part of the county.
Monroe County									
Tompkinsville	17	2205EST 2330EST			0	0			Flash Flood
									State Road 163 south of Tompkinsville had 8 to 10 inches of water over the roadway.

Storm Data and Unusual Weather Phenomena

March 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>KENTUCKY, Central</u>									
KYZ042			Bourbon						
	19	1900EST			0	0			Flood
	21	2100EST							
	Stoner Creek at Paris crested at 23.4 feet late on March 20. Flood stage at Paris is 18 feet. Moderate flooding occurs at this level. Water enters some homes below the water plant, and parts of the city park are flooded.								
KYZ043			Nicholas						
	19	2300EST			0	0			Flood
	24	0900EST							
	The Licking River at Blue Licks Spring crested at 34.6 feet late in the evening on March 20. Flood stage at Blue Licks Spring is 25 feet. Minor flooding occurs at this level with some flooding of crop lands.								
Grayson County									
Countywide	20	0430EST 1200EST			0	0			Flash Flood
	Numerous roads were impassable. Creeks and streams were out of their banks.								
Boyle County									
Countywide	20	0700EST 1030EST			0	0			Flash Flood
	Widespread flooding was reported with numerous small streams and creeks out of their banks and some roads were closed.								
Larue County									
Countywide	20	0700EST 1200EST			0	0			Flash Flood
	Widespread flooding was reported with numerous small streams and creeks out of their banks and some roads were closed. Highway 470 was flooded. Phillips Lane was flooded.								
Marion County									
Countywide	20	0700EST 1030EST			0	0			Flash Flood
	Widespread flooding was reported with numerous small streams and creeks out of their banks and some roads were closed.								
Mercer County									
Countywide	20	0700EST 1200EST			0	0			Flash Flood
	Most county roads were flooded. Some primary roads were impassable in places, including Highways 127 and 68.								
Washington County									
Countywide	20	0700EST 1030EST			0	0			Flash Flood
	Widespread flooding was reported with numerous small streams and creeks out of their banks and some roads were closed.								
Bourbon County									
Paris	20	0820EST 1200EST			0	0			Flash Flood
	Six to eight streets in the city of Paris were closes by high water. Low lying areas were flooded and Highway 460E was closed.								
Green County									
Countywide	20	0830EST 1200EST			0	0			Flash Flood
	Numerous roads and city streets were closed due to high water. Low lying areas were under water.								
Taylor County									
Countywide	20	0830EST 1200EST			0	0			Flash Flood
	Numerous roads and city streets were closed due to high water. Low lying areas were under water.								
Garrard County									
Countywide	20	0900EST 1200EST			0	0			Flash Flood
	A couple of county roads were closed and mud slides were reported.								
Fayette County									
Lexington	20	0945EST 1200EST			0	0			Flash Flood
	The intersection of New Circle Road and Richmond Road was closed by high water. The Winchester Road exit from Interstate 64 was closed.								

Storm Data and Unusual Weather Phenomena

March 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>KENTUCKY, Central</u>									
Jessamine County									
Countywide	20	0945EST 1200EST			0	0			Flash Flood
Major roads were closed by high water, including a portion of Highway 68. A female was rescued from a vehicle trapped by rising water. Numerous roads and bridges were closed or impassable.									
Clark County									
Countywide	20	1000EST 1045EST			0	0			Flash Flood
Several roadways were closed by high water. There were mud slides east of Winchester. Motorists had to be rescued from vehicles in Winchester.									
Edmonson County									
Countywide	20	1000EST 1045EST			0	0			Flash Flood
Several roadways were closed by high water.									
Harrison County									
Countywide	20	1000EST 1045EST			0	0			Flash Flood
Several roadways were closed by high water.									
Hart County									
Countywide	20	1000EST 1045EST			0	0			Flash Flood
Several roadways were closed by high water.									
Madison County									
Countywide	20	1000EST 1200EST			0	0			Flash Flood
One road was closed by high water. Numerous roads were covered with water.									
Scott County									
Countywide	20	1000EST 1045EST			0	0			Flash Flood
Several roadways were closed by high water.									
Nicholas County									
Countywide	20	1030EST 1200EST			0	0			Flash Flood
Two county roads were closed by high water.									
KYZ026									
		Ohio							
	20	0630EST			0	0			Flood
	22	1030EST							
Rough River at Dundee crested at 25.6 feet late in the morning of March 21. Flood stage at Dundee is 25 feet. Minor flooding occurs at this level. At this level, a section of highway about half a mile long near the bridge begins to flood.									
KYZ057									
		Madison							
	20	0800EST			0	0			Flood
	21	2300EST							
The Kentucky River at Ford crested at 28.0 feet on the evening of March 20. Flood stage at Ford is 26 feet. Minor flooding occurs at this level.									
KYZ048									
		Jessamine							
	20	1100EST			0	0			Flood
	22	1500EST							
The Kentucky River at High Bridge crested at 34.5 feet early in the morning of March 21. Flood stage at High Bridge is 30 feet. Minor flooding occurs at this level.									
KYZ037									
		Harrison							
	20	1200EST			0	0			Flood
	21	1800EST							
The South Fork of the Licking River at Cynthiana crested at 20.5 feet late in the afternoon on March 20. Flood stage at Cynthiana is 20 feet. Minor flooding occurs at this level. Some area streets were covered with water.									

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
KENTUCKY, Central									
KYZ045		Nelson							
	20	1500EST			0	0			Flood
	24	0700EST							
	The Rolling Fork of the Salt River at Boston crested at 43.7 feet on the evening of March 22. Flood stage at Boston is 35 feet. Moderate flooding occurs at this level. A few homes and trailers are flooded outside of Boston.								
KYZ061		Butler							
	20	1600EST			0	0			Flood
	28	1300EST							
	The Green River at Rochester crested at 19.8 feet early in the afternoon on March 23. Flood stage at Rochester is 17 feet. Minor flooding occurs at this level.								
KYZ035		Franklin							
	20	1900EST			0	0			Flood
	23	1330EST							
	The Kentucky River at Frankfort crested at 35.8 feet late in the evening of March 21. Flood stage at Frankfort is 31 feet. Minor flooding occurs at this level. Parts of Kentucky 420 were flooded.								
KYZ061		Butler							
	20	1900EST			0	0			Flood
	24	0500EST							
	The Green River at Woodbury crested at 38.3 feet on the morning of March 22. Flood stage at Woodbury is 33 feet. Minor flooding occurs at this level. The river floods lowlands around the town and several county roads.								
KYZ063		Hart							
	21	1000EST			0	0			Flood
		1900EST							
	The Green River at Munfordville crested at 28.3 feet early in the afternoon on March 21. Flood stage at Munfordville is 28 feet. Minor flooding occurs at this level. The city park under the U.S. 31W bridge is flooded.								
KYZ062		Edmonson							
	21	1000EST			0	0			Flood
	22	2200EST							
	The Green River at Brownsville crested at 19.9 feet on the morning of March 22. Flood stage at Brownsville is 18 feet. Minor flooding occurs at this level. The river begins to overflow the lock walls and some of the lower banks.								
KYZ030		Jefferson							
	23	1100EST			0	0			Flood
	25	0200EST							
	The Ohio River at Louisville crested at 23.8 feet just before sunrise on March 24. Flood stage at the McAlpine Lock upper gage is 23 feet. Minor flooding occurs at this level. Some sections of River Road are flooded near Cox's Park.								
Ohio County									
Beaver Dam	26	0300EST			0	0			Flash Flood
		0435EST							
	Water was over US Highway 62 just west of the Beaver Dam city limits.								
Breckinridge County									
Big Spg	26	0330EST			0	0			Flash Flood
		0600EST							
	Highway 333 near Big Springs was impassable due to high water.								
KYZ026		Ohio							
	26	1530EST			0	0			Flood
	27	2230EST							
	Rough River at Dundee crested at 25.9 feet early in the afternoon of March 27. Flood stage at Dundee is 25 feet. Minor flooding occurs at this level. At this level, a section of highway about half a mile long near the bridge begins to flood.								
Meade County									
Wolf Creek	29	1455EST			0	0			Hail (0.75)
Meade County									
Payneville	29	1507EST			0	0			Hail (1.50)
Meade County									
Brandenburg	29	1510EST			0	0	10K		Hail (1.75)
	Vehicles were damaged by large hail.								

Storm Data and Unusual Weather Phenomena

March 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>KENTUCKY, Central</u>									
Meade County									
Doe Vly Estates	29	1515EST			0	0	100K		Hail (1.75)
									Roofs were destroyed, siding on homes was destroyed, windows were shattered, gutters and vehicles were dented. The ground was covered by golfball size hail.
Bullitt County									
Shepherdsville	29	1520EST			0	0			Hail (2.00)
Hardin County									
Ft Knox	29	1523EST			0	0			Hail (1.00)
									The army air field at Fort Knox also recorded a 42 knot wind gust and observed a funnel cloud.
Breckinridge County									
Union Star	29	1525EST			0	0			Thunderstorm Wind (G65)
									Telephone lines were downed.
Jefferson County									
Valley Station	29	1525EST			0	0			Hail (0.75)
Bullitt County									
Shepherdsville	29	1530EST			0	0			Hail (1.75)
Hardin County									
West Pt	29	1530EST			0	0			Hail (1.75)
Bullitt County									
.5 S Shepherdsville	29	1540EST			0	0			Hail (2.00)
Bullitt County									
Shepherdsville	29	1545EST			0	0			Thunderstorm Wind (G65)
									Trees were blown down.
Nelson County									
Bardstown	29	1545EST 1547EST			0	0			Hail (1.75)
Nelson County									
Coxs Creek	29	1545EST			0	0			Hail (1.75)
Nelson County									
Coxs Creek	29	1550EST			0	0			Thunderstorm Wind (G65)
									Trees were blown down.
Spencer County									
Wakefield	29	1550EST			0	0			Hail (0.88)
Washington County									
Willisburg	29	1615EST			0	0			Hail (1.00)
Anderson County									
Ashbrook	29	1620EST			0	0			Hail (0.75)
Anderson County									
Lawrenceburg	29	1620EST			0	0			Hail (1.00)
Mercer County									
Harrodsburg	29	1630EST			0	0			Hail (0.75)
Woodford County									
Nonesuch	29	1630EST			0	0			Hail (0.75)
Nelson County									
Bardstown	29	1635EST			0	0			Hail (1.75)
Washington County									
Springfield	29	1640EST			0	0			Thunderstorm Wind (G65)
									Trees were downed and electric power was knocked out.
Jessamine County									
Nicholasville	29	1645EST			0	0			Hail (1.00)
Washington County									
Springfield	29	1645EST			0	0			Hail (1.75)
Madison County									
Redhouse	29	1655EST			0	0			Hail (0.88)
Madison County									
Redhouse	29	1655EST			0	0			Thunderstorm Wind (G65)
									Trees were downed.

Storm Data and Unusual Weather Phenomena

March 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>KENTUCKY, Central</u>									
Washington County									
Countywide	29	1700EST			0	0	75K		Thunderstorm Wind (G75)
	Widespread wind damage was reported around the county. Two barns and two silos were destroyed. Power lines were downed.								
Mercer County									
Harrodsburg	29	1710EST 1711EST			0	0			Hail (1.00)
Madison County									
Waco	29	1715EST			0	0			Hail (0.75)
Mercer County									
Burgin	29	1725EST			0	0			Tstm Wind/Hail
	There was a 60 mph wind gust along with 1.75 inch hail.								
Garrard County									
Bryantsville	29	1728EST			0	0			Hail (1.00)
Garrard County									
Bryantsville	29	1728EST			0	0			Thunderstorm Wind (G60) ^M
Madison County									
4 SW Richmond	29	1740EST			0	0			Hail (0.75)
Madison County									
Kingston	29	1755EST			0	0	10K		Thunderstorm Wind (G75)
	Trees were downed and a building was destroyed.								
Madison County									
Waco	29	1755EST			0	0			Hail (0.88)
Madison County									
Waco	29	1800EST			0	0			Hail (1.00)
Larue County									
Hodgenville	29	1905EST			0	0			Hail (0.75)
Boyle County									
Perryville	29	1945EST			0	0			Hail (0.75)
Logan County									
Adairville	29	1945EST			0	0			Hail (0.75)
Warren County									
Alvaton	29	2005EST			0	0			Hail (1.00)
Simpson County									
Providence	29	2015EST			0	0			Hail (0.75)
Taylor County									
10 N Campbellsville	29	2015EST			0	0			Hail (0.88)
Allen County									
Alonzo	29	2024EST			0	0			Thunderstorm Wind (G65)
	Trees were blown down.								
Metcalfe County									
Center	29	2025EST			0	0			Thunderstorm Wind (G65)
Metcalfe County									
Edmonton	29	2030EST			0	0			Hail (0.75)
Adair County									
Columbia	29	2055EST			0	0			Thunderstorm Wind (G65)
	Power lines were downed.								
Allen County									
Amos	29	2055EST			0	0			Hail (0.75)
<u>KENTUCKY, Eastern</u>									
Fleming County									
Fairview	15	1945EST			0	0	0	0	Hail (0.88)
Wayne County									
Monticello	17	0600EST 0900EST			0	0			Urban/Sml Stream Fld
	Some Monticello city streets had standing water due to water backup.								

Storm Data and Unusual Weather Phenomena

March 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>KENTUCKY, Eastern</u>									
Whitley County									
Williamsburg	17	0815EST 1015EST			0	0			Urban/Sml Stream Fld
			A small amount of water was reported over interstate 75. Mud Creek came out of its banks.						
Knox County									
Barbourville	17 18	2000EST 0900EST			0	0	50K	0	Flash Flood
			Heavy rains during the afternoon and evening of March 17, resulted in repeated episodes of flash flooding. Numerous roads were flooded, a bridge was washed out, and a trailer was washed away.						
Bell County									
10 E Pineville to Pineville	17 18	2015EST 0900EST			0	0	10K	0	Flash Flood
			Heavy rains that fell caused several roads to be closed across Bell County.						
Mccreary County									
5 S Stearns	17 18	2030EST 0900EST			0	0	10K	0	Flash Flood
			A trained spotter reported 4.3 inches of rain had fallen since March 16. This resulted in repeated episodes of flash flooding and numerous road closures.						
Whitley County									
10 SW Williamsburg	17 18	2145EST 0900EST			0	0	50K	0	Flash Flood
			Heavy rains that fell on March 17 and 18 resulted in numerous road closures and evacuations across Whitley County. Part of Highway 92W, near the McCreary County line, was washed away.						
Laurel County									
London	17	2155EST 2300EST			0	0	10K	0	Flash Flood
			24 Hour rainfall amounts between four and five inches, caused several roads to be flooded.						
Harlan County									
Closplint	17 18	2155EST 0900EST			0	0	50K	0	Flash Flood
			Heavy rains that fell on March 17 and March 18 caused several evacuations as well as numerous road closures across much of Harlan County. 12 hour rainfall amounts exceeded three inches.						
Pulaski County									
Somerset	17 18	2200EST 0900EST			0	0	50K	0	Flash Flood
			Heavy rains caused a wall of an abandoned store to collapse, a tree to fall, and sewers to back up.						
Wayne County									
Monticello	17 18	2220EST 0500EST			0	0	10K	0	Flash Flood
			Heavy rains during March 17th caused repeated episodes of flash flooding. Several roads were flooded.						
KYZ085>088									
Whitley - Knox - Bell - Harlan									
	17 23	2345EST 0138EST			0	0	26.5M		Flood
			The Cumberland River flooded between March 18th and 23rd due to relentless heavy rains. A total of 300 residents were displaced along the Cumberland River, 5 bridges were destroyed, and several vehicles were swept away.						
Leslie County									
Stinnett	18	0015EST 0900EST			0	0	50K	0	Flash Flood
			Heavy rains fell on March 17 and March 18 causing homes to be evacuated and several roads to be flooded.						
Clay County									
2 S Manchester	18	0300EST 1200EST			0	0	10K	0	Flash Flood
			Heavy rains that fell on March 17 and 18 caused several roads to flood.						

Storm Data and Unusual Weather Phenomena

March 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>KENTUCKY, Eastern</u>									
Floyd County									
Wayland	18	0500EST 0800EST			0	0	0	0	Urban/Sml Stream Fld
									A few homes in Wayland and Estill Bottom had water around them.
Pike County									
10 S Pikeville	18	0645EST 0900EST			0	0	5K	0	Flash Flood
									Heavy rains that fell on March 17 and 18 caused several roads to flood.
Letcher County									
Whitesburg	18	0700EST			0	0	0	0	Urban/Sml Stream Fld
									A small amount of water was reported over highway 15.
KYZ111-114>115									
			Lee - Owsley - Perry						
	18	0742EST			0	0	300K		Flood
	21	0013EST							
									Heavy rains flooded the Kentucky River and produced up to 300,000 dollars worth of damage along the north fork in Perry County.
KYZ107									
			Johnson						
	19	1623EST			0	0	50K	0	Flood
	20	0700EST							
									Prolonged rains caused streams and creeks to flood resulting in several road closures near Paintsville.
KYZ106									
			Morgan						
	19	1800EST			0	0	10K	0	Flood
	20	1000EST							
									Prolonged rains caused streams and creeks to rise out of their banks. Several roads were flooded.
KYZ044									
			Fleming						
	20	0145EST 1100EST			0	0	10K	0	Flood
									Prolonged rains caused streams and creeks to flood, resulting in numerous road closures.
KYZ051									
			Bath						
	20	0225EST 1000EST			0	0	10K	0	Flood
									Prolonged rainfall caused streams and creeks to flood, resulting in numerous road closures.
KYZ050									
			Montgomery						
	20	0230EST 1100EST			0	0	10K	0	Flood
									Prolonged rains caused streams and creeks to overflow their banks. This resulted in several road closures.
KYZ052									
			Rowan						
	20	0400EST 1100EST			0	0	30K	0	Flood
									Prolonged rains caused streams and creeks to climb out of their banks. Numerous roads were flooded and homes along Triplett Creek in Morehead had to be evacuated.
KYZ044-052									
			Fleming - Rowan						
	20	0428EST 0945EST			0	0	500K		Flood
									The Licking River flooded due to heavy rains. 75 percent of the homes in Farmers were damaged and numerous roads were flooded.
KYZ059									
			Powell						
	20	0621EST 1100EST			0	0	10K	0	Flood
									Prolonged rains caused streams and creeks to flood. This resulted in numerous road closures across Powell County.
KYZ104									
			Elliott						
	20	0645EST 1100EST			0	0	7K	0	Flood
									Prolonged rains caused streams and creeks to overflow their banks. Several roads were flooded.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<u>KENTUCKY, Eastern</u>									
KYZ060		Menifee							
	20	0700EST 1100EST			0	0	5K	0	Flood
		Prolonged rains caused creeks and streams to overflow. Several roads were flooded.							
KYZ058		Estill							
	20	0730EST 1100EST			0	0	10K	0	Flood
		Prolonged rains caused streams and creeks to climb out of their banks. This resulted in numerous road closures across Estill County.							
Estill County									
Irvine	29	1805EST			0	0	0	0	Hail (0.75)
Lee County									
4 N Beattyville	29	1818EST			0	0			Hail (0.75)
Lee County									
Heidelberg	29	1820EST			0	0			Hail (1.00)
Breathitt County									
Jackson	29	1838EST			0	0			Hail (0.75)
Breathitt County									
2 N Jackson	29	1841EST			0	0			Hail (0.75)
Breathitt County									
Jackson	29	1843EST			0	0			Hail (0.75)
		Dime sized hail was covering the ground at the Lakeside subdivision.							
Breathitt County									
Haddix	29	1845EST	0.1	20	0	0	1K		Tornado (F0)
		An F0 tornado briefly touched down and ripped off a portion of tin roofing of a house.							
Fleming County									
Fairview	29	2015EST			0	0			Hail (0.75)
Fleming County									
Flemingsburg	29	2030EST			0	0			Hail (0.75)
Rowan County									
Morehead	29	2115EST			0	0			Hail (0.75)
		Penny sized hail reported at the junction of U.S. Route 60 and KY Route 32.							
Powell County									
3 E Slade	29	2125EST			0	0			Hail (0.75)
Estill County									
2 NW Irvine	29	2130EST			0	0			Hail (0.75)
Lee County									
Zoe	29	2200EST			0	0			Hail (0.75)
Wolfe County									
Pine Ridge	29	2210EST			0	0			Hail (0.75)
<u>KENTUCKY, Northeast</u>									
KYZ101>103-105		Greenup - Carter - Boyd - Lawrence							
	01	0000EST			0	0			Monthly Precipitation
	31	2300EST							
		Total monthly precipitation was 7 to 9 inches. Grayson had 9 inches, Ashland and Carter Caves both measured 8.4 inches. Normal March precipitation is 3.5 to 4 inches.							
KYZ101>103		Greenup - Carter - Boyd							
	09	1645EST 1800EST			0	0	35K		High Wind
		A strong cold front whipped across northeast Kentucky. A narrow and brief line of showers was associated with the front. Winds							

Storm Data and Unusual Weather Phenomena

March 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, Northeast

gusted into the 45 to 65 mph range. Trees and power lines were blown down.

KYZ101>103-105

Greenup - Carter - Boyd - Lawrence

20	0100EST				0	0	3M		Flood
21	0100EST								

Light rain moved into northeast Kentucky during the predawn hours of the 19th. Light to moderate rainfall fell during the 19th, as a warm front tired to lift north from the Tennessee Valley. The heaviest rains occurred from 0100 to 0800E on the 20th, ahead of the low pressure wave on the strong frontal boundary. Rains then diminished during the morning of the 20th. Rain totals from the 30 hour event were 2.5 to 4.5 inches, with roughly 60% of the total occurring in about 6 hours on the 20th. The axis of the heaviest rain was generally along the Interstate 64 corridor, from Olive Hill to Ashland. Rain totals included 4.5 inches from Ashland, 4.3 inches from Carter Caves, 4.2 inches from Grayson, and 3.7 inches from Warnock. Automated gauges showed around 4.3 inches at Cannonsburg of Boyd County. Automated gauges from Potato Knob and Sinking Creek in Carter County indicated 4.1 inches. In Greenup County, Culp Creek measured 3.6 inches, while the Greenup EOC had 3.3 inches. Lawrence County received the lower limit of rain. Charlie reported 2.7 inches of rain.

Widespread small stream, poor drainage, and urban flooding occurred during the morning hours of the 20th. Many people were stranded as roads became flooded. River flooding along the Little Sandy River occurred later in the day.

The office of emergency management director in Carter County said, "it's devastation all over the county." Olive Hill, Norton Branch, and Hitchens were hardest hit. The headwaters of Tygarts Creek flooded at least two-thirds of the city buildings in Olive Hill. The fire station saw almost 2 feet of water inside. Residents called it the highest water since the 1937 flood. On Norton Branch, a unoccupied mobile home was carried off and became wedged under an old railroad trestle.

The Little Sandy River crested at Grayson around 2300E on the 20th at 29.2 feet. Flood stage is 21 feet.

Preliminary damage assessment indicated 2 mobile homes were destroyed in Carter County. Three single family homes and 2 mobile homes had major damage. One county bridge was destroyed. Damage estimated to public structures, such as roads, were around \$400,000.

In Boyd County, houses and trailers along Shopes Creek were surrounded by water. Rescue workers evacuated families by boat. Flooded basements and streets were widespread in Ashland and Westwood. Preliminary damage assessment in Boyd County indicated 1 single family home and 2 mobile homes were destroyed. Twenty-five single family homes and 4 mobile homes had major damage. Estimates for public assistance, mainly for road damage and debris removal, was on the order of \$250,000.

Most of the water problems in Greenup County were along Tygarts Creek and the Little Sandy River. This affected homes, bridges, and Routes 2, 7 and 1. Tygarts Creek crested at the base of the covered bridge at Bennett's Mill. Repairs to road slippage in Greenup County were estimated at \$400,000. Preliminary damage assessment indicated 2 mobile homes were destroyed in Greenup County. Four single family homes and 5 mobile homes had major damage.

In Lawrence County, precautionary evacuations were along Cat Fork, west of Fallsburg. State officials estimated about \$240,000 damage for bridge repair and debris removal in the county. No homes were affected.

After local emergencies were declared, Governor Patton requested federal assistance from President Bush. On the 4th of April, the 4 northeast Kentucky counties were included in FEMA disaster declaration 1407. This provided both individual and public assistance.

KENTUCKY, Northern

KYZ089>098-100

Carroll - Gallatin - Boone - Kenton - Campbell - Owen - Grant - Pendleton - Bracken - Robertson - Lewis

09	1415EST				0	0	93K		High Wind (G55)
	1700EST								

High winds in excess of 60 mph blew down numerous trees, power lines, utility poles, and various signs. Several thousand power outages were noted due to the widespread nature of the winds and the resulting damage.

Mason County

Mays Lick

15	1942EST				0	0			Hail (0.75)
	1944EST								

Boone County

Walton

15	2050EST				0	0	15K		Thunderstorm Wind (G55)
	2055EST								

Several trees were blown down. A barn and a house were damaged. Two mobile homes at the Speedway were damaged.

KYZ094>096-098>100

Owen - Grant - Pendleton - Robertson - Mason - Lewis

20	0100EST				0	0			Flood
	0800EST								

Very heavy rainfall caused area creeks and streams to rise out of their banks and several roads were closed due to the high water.

Storm Data and Unusual Weather Phenomena

March 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>KENTUCKY, Northern</u>									
Lewis County									
4 N Head Of Grassy	20	0700EST 0730EST			0	0			Flash Flood
The Laurel elementary school was evacuated due to rapid rises on area creeks.									
Lewis County									
Countywide	20	1030EST 1045EST			0	0			Flash Flood
Numerous roads were flooded due to rapid rises in area creeks.									
Lewis County									
Countywide	20	1100EST 1120EST			0	0			Flash Flood
Numerous roads were flooded due to rapid rises in area creeks.									
KYZ099>100									
Mason - Lewis									
26		0900EST 0930EST			0	0			Flood
Continuous rain over a one day period in this area caused some creeks and streams to overflow their banks and close area roadways.									
<u>KENTUCKY, Southwest</u>									
KYZ001>022									
Fulton - Hickman - Carlisle - Ballard - Mccracken - Graves - Livingston - Marshall - Calloway - Crittenden - Lyon - Trigg - Caldwell - Union - Webster - Hopkins - Christian - Henderson - Daviess - Mclean - Muhlenberg - Todd									
09		0700CST 1400CST			0	0	4K		Wind
Strong west winds gusted from 40 to 50 MPH for several hours around the back side of an intense low pressure system. Some exact wind measurements from automated observing sites included: 42 MPH at Paducah, 40 MPH at Owensboro, and 47 MPH at Henderson. Observers at Fort Campbell near Hopkinsville reported a gust to 50 MPH. The strong winds caused some damage to power lines, especially in the Owensboro area. About 1,000 customers were without power when wind damaged lines along Kentucky 1389. In Owensboro, an antenna and a tree limb were down at a couple of residences. On the Ohio River near Owensboro, a fishing tournament was stopped by the dangerous winds and waves. One boat sank and several fishermen were stranded on an island. Coast Guard and other emergency personnel rescued boaters, and there were no injuries.									
KYZ020>021									
Mclean - Muhlenberg									
20		0400CST			0	0			Flood
31		2359CST							
The Green River rose above flood stage at Paradise on March 20, and at Calhoun on March 22. The crest was about 8 feet above flood stage at Paradise and about 4 feet above flood stage at Calhoun. Moderate flooding occurred near Calhoun, with thousands of acres flooded in the Island, Rumsey, and Jewel City areas. Planting season had not yet begun, so there was little or no crop damage.									
Christian County									
3 SW Hopkinsville	20	1030CST 1600CST			0	0			Flash Flood
The Little River rose out of its banks, flooding Little River Church Road.									
KYZ004>005-007-010-014-018>019									
Ballard - Mccracken - Livingston - Crittenden - Union - Henderson - Daviess									
22		1900CST			0	0			Flood
31		2359CST							
The Ohio River rose above flood stage on the 22nd and 23rd at most locations along the western Kentucky shore. At J.T. Meyers Lock near Uniontown, the river crested at 43.57 feet on March 28. Flood stage there is 37 feet. At Smithland, the crest was just over two feet above flood stage on March 26. Paducah crested almost five feet above its 39-foot flood stage on March 26. Along the entire shore, flooding was minor to moderate, affecting mainly bottomland and surrounding low-lying areas.									
Ballard County									
Lovellsville	25	2100CST 2300CST			0	0			Flash Flood
Mccracken County									
Lone Oak	25	2100CST 2300CST			0	0			Flash Flood
Livingston County									
Countywide	25	2350CST			0	0			Flash Flood
	26	0300CST							
A large area of showers and thunderstorms persisted for several hours, producing hourly rainfall rates around one half inch per hour									

Storm Data and Unusual Weather Phenomena

March 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, Southwest

over saturated ground. Rainfall totals were around 3 inches. A vehicle accident near Paducah involved one car which overturned into a drainage ditch. The driver was partially submerged for an extended period of time, and was rescued shortly before floodwaters would have drowned him. Champion Creek in McCracken County flooded two roads, a state road and a county road. The county road was closed. A couple of intersections in the city of Paducah were flooded and were closed. In Ballard County, Mayfield Creek overflowed onto U.S. Highway 62 near Lovelaceville. In Livingston County, Highway 133 near Salem was barricaded due to 18 inches of water.

Ballard County

La Center	29	1556CST			0	0			Hail (0.75)
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McCracken County

(Pah)Barkley Arpt Pa to Paducah	29	1557CST 1609CST			0	0			Hail (0.75)
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A severe thunderstorm produced a swath of marble to dime size hail across the Paducah area. Dime size hail was observed at the Paducah National Weather Service office and near downtown Paducah.

Carlisle County

Bardwell	29	1608CST			0	0			Hail (0.75)
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Marshall County

1 N Sharpe to 1 W Draffenville	29	1635CST 1650CST			0	0			Hail (0.88)
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Nickel size hail was reported near the 19-mile marker on Interstate 24. Dime size hail fell near Draffenville.

Fulton County

Hickman	29	1638CST			0	0			Hail (0.75)
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Graves County

Pryorsburg to Wingo	29	1650CST			0	0			Hail (0.75)
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Calloway County

2 W Lynn Grove to Stella	29	1711CST 1713CST			0	0			Hail (0.75)
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Trigg County

4 NW Cadiz	29	1729CST			0	0	2K		Thunderstorm Wind (G50)
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A tree was down, and a tree limb broke a window on a house.

Christian County

Howell	29	1815CST			0	0	2K		Thunderstorm Wind (G50)
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Wind blew the roof off a barn and carried it 1000 feet. The sides of the barn were also damaged.

Todd County

Guthrie	29	1823CST			0	0			Hail (1.75)
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Todd County

Guthrie	29	1823CST			0	0			Thunderstorm Wind (G50)
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Large tree limbs were blown down.

LAKE ERIE

Mi Waters Of Lake Erie

12 W Stony Point	09	1525EST			0	0			Marine Tstm Wind
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A strong cold front moved across Lake Erie late in the afternoon on the 9th. A line of showers (not producing lightning) developed along this front. Winds in excess of 50 knots occurred with these showers.

LAKE HURON

Inner Saginaw Bay & Sw Of Pt Au Gres To Bay Port Mi

2 S Saginaw River Mouth	09	1545EST			0	0			Marine Tstm Wind
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Storm Data and Unusual Weather Phenomena

March 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 HURON</u>									
Outer Saginaw Bay & Sw Of Alabaster To Pt Austin Mi									
Port Austin	09	1625EST			0	0			Marine Tstm Wind
Pt Austin To Hbr Beach Mi									
Port Austin	09	1625EST			0	0			Marine Tstm Wind
Lh Pt Austin To Hbr Beach Mi 5Nm Offshore To Intl Border									
Port Austin	09	1630EST			0	0			Marine Tstm Wind
Pt Sanilac To Pt Huron Mi									
Port Huron	09	1635EST 1645EST			0	0			Marine Tstm Wind
Lh Pt Sanilac To Pt Huron 5Nm Offshore To Intl Border									
Port Huron	09	1640EST			0	0			Marine Tstm Wind
Lh Hbr Beach To Pt Sanilac 5Nm Offshore To Intl Border									
22 WSW Port Sanilac	09	1645EST			0	0			Marine Tstm Wind
Hbr Beach To Pt Sanilac Mi									
22 WSW Port Sanilac	09	1650EST			0	0			Marine Tstm Wind
A strong cold front passed across Lake Huron late in the afternoon of the 9th. A line of showers (not producing lightning) developed along this cold front. Wind speeds in excess of 50 knots accompanied these showers across Lake Huron.									
<u>LAKE ST CLAIR</u>									
Detroit River									
3 NW Belle Isle	09	1600EST			0	0			Marine Tstm Wind
Lake St Clair (U.S. Portion)									
3 W Metropolitan Beach	09	1610EST			0	0			Marine Tstm Wind
St Clair River									
Port Huron	09	1615EST			0	0			Marine Tstm Wind
St Clair River									
Port Huron	09	1617EST			0	0			Marine Tstm Wind
A strong cold front moved across Southeast Michigan late in the afternoon on the 9th. A line of showers (not producing lightning) developed along the cold front and produced winds of 50 knots over Lake St Clair and the St Clair and Detroit Rivers.									
<u>LOUISIANA, Northeast</u>									
Morehouse Parish									
Beekman	09	0500CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down from Beekman to Vaughn.									
Richland Parish									
Countywide	09	0505CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down across the parish.									
Morehouse Parish									
Bonita	15	2205CST			0	0			Hail (1.00)
Morehouse Parish									
Bastrop	25	2250CST			0	0			Hail (0.88)
Morehouse Parish									
Bonita	25	2300CST			0	0			Hail (1.00)

Storm Data and Unusual Weather Phenomena

March 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>LOUISIANA, Northeast</u>									
East Carroll Parish									
5 N Lake Providence	30	0030CST			0	0			Hail (0.75)
Richland Parish									
5 S Mangham	30	1935CST			0	0			Hail (1.75)
Franklin Parish									
Baskin	30	1945CST			0	0	5K		Thunderstorm Wind
Straight-line winds from a severe thunderstorm damage a porch on a house and peeled a roof back on a barn in the area.									
Franklin Parish									
Winnsboro	30	1945CST			0	0	1K		Thunderstorm Wind
Several trees and large limbs were blown down onto roads.									
Morehouse Parish									
Beekman	31	0030CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down across the parish.									
Franklin Parish									
Winnsboro	31	0035CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down across the parish.									
Morehouse Parish									
Beekman	31	0200CST			0	0	1K		Flash Flood
Several roads in the area were covered with water and impassable due to very heavy rainfall.									
<u>LOUISIANA, Northwest</u>									
Natchitoches Parish									
Natchitoches	01	0730CST			0	0			Hail (0.75)
Sabine Parish									
Converse	11	0820CST			0	1			Lightning
A man was struck by lightning inside his home but only suffered minor injuries.									
Bossier Parish									
(Bad)Barksdale Afb	12	0200CST			0	0	10M		Lightning
Lightning caused a fire at the 8th Air Force Headquarters on Barksdale Air Force Base. The fire burned for more than 12 hours doing major damage to the third floor of the structure.									
Caddo Parish									
Shreveport	20	0030CST			0	0	5K		Lightning
Lightning hit a vocational school doing minor electrical damage.									
Natchitoches Parish									
Goldonna	20	1106CST			0	0	5K		Lightning
Lightning hit an elementary school doing minor electrical damage.									
Caddo Parish									
Shreveport	25	2115CST			0	0			Hail (0.75)
Hail fell on Wallace Lake Rd. in south Shreveport.									
De Soto Parish									
Benson	25	2130CST			0	0			Hail (0.88)
Bossier Parish									
Haughton	25	2140CST			0	0			Hail (0.75)
Webster Parish									
10 W Minden	25	2145CST			0	0			Hail (0.75)
Red River Parish									
5 N Coushatta	25	2155CST			0	0			Hail (1.00)
Claiborne Parish									
Homer	25	2205CST			0	0			Hail (0.75)
Red River Parish									
Coushatta	25	2210CST			0	0			Hail (1.00)

Storm Data and Unusual Weather Phenomena

March 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>LOUISIANA, Northwest</u>									
Claiborne Parish									
Colquitt	25	2222CST			0	0			Hail (1.00)
Natchitoches Parish									
Chestnut	25	2245CST			0	0			Hail (1.00)
Winn Parish									
10 W Dodson	25	2300CST			0	0			Hail (0.75)
LAZ001 Caddo									
30		0855CST			0	0	12K		High Wind (G50)
Winds in association with a cold front blew awnings off a local casino and did roof damage to a garage at the same establishment.									
Caldwell Parish									
6 W Columbia	30	1920CST			0	0			Hail (0.75)
Hail fell along Highway 4.									
De Soto Parish									
Kickapoo	30	1955CST			0	0			Hail (0.88)
Webster Parish									
Springhill	30	2035CST			0	0			Hail (0.75)
Webster Parish									
Minden	30	2115CST			0	0			Hail (0.75)
Caddo Parish									
Shreveport	31	0250CST 0252CST			0	0			Hail (0.75)
Sabine Parish									
10 S Many	31	0545CST			0	0			Hail (1.00)
<u>LOUISIANA, Southeast</u>									
St. James Parish									
Vacherie	20	1215CST	0.2	20	0	0	40K		Tornado (F0)
A tornado briefly touched down causing roof damage to two houses and knocking one of the homes off of its cinder blocks.									
East Baton Rouge Parish									
Baton Rouge	26	0535CST			0	0	65K		Lightning
A lightning strike caused a fire that damaged sixty five golf carts outside a building.									
St. John The Baptist Parish									
Reserve	26	0615CST			0	0	20K		Thunderstorm Wind
A ten foot corner section of a house and an adjacent garage were damaged by thunderstorm winds. Shingles were peeled off of several nearby houses.									
St. Tammany Parish									
Slidell	26	0630CST			0	2			Lightning
A lightning strike traveled through a home's electrical wiring and injured 17 and 15 year old females using curling irons. Both girls were later hospitalized.									
Jefferson Parish									
Kenner	26	0700CST			0	0	50K		Lightning
A lightning strike caused a fire that damaged a duplex.									
Pointe Coupee Parish									
Ventress	31	0605CST			0	0	100K		Thunderstorm Wind
Thunderstorm winds partially removed the roofs on a few homes, damaged the roof of a barn, threw a horse trailer into a tree, knocked down power lines, snapped off trees, and blew a tree down on an abandoned house causing heavy damage along Highway 414.									

Storm Data and Unusual Weather Phenomena

March 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>									
East Baton Rouge Parish									
2.5 E Baker	31	0610CST			0	0	1K		Thunderstorm Wind
Trees and power lines were blown down in the Comite Drive area.									
Livingston Parish									
Countywide	31	0630CST			0	0	2K		Thunderstorm Wind
Numerous trees and power lines were blown down across the parish blocking a number of roadways.									
Tangipahoa Parish									
Arcola	31	0730CST			0	0	8K		Thunderstorm Wind
Thunderstorm winds damaged the roofs of a house and mobile home.									
Washington Parish									
10 E Franklinton	31	0815CST			0	0			Hail (0.75)
Washington Parish									
Rio	31	0820CST			0	0			Hail (1.00)
Washington Parish									
Rio	31	0820CST			0	0	1K		Thunderstorm Wind
Thunderstorm winds broke the tops of trees off along Highway 1074.									
Terrebonne Parish									
8 S Houma to 9 SE Houma	31	1040CST 1055CST	0.5	30	0	0	75K		Tornado (F1)
A tornado destroyed one mobile home, damaged four houses, and downed power lines.									
Lafourche Parish									
Raceland	31	1102CST			0	0			Hail (0.75)
<u>LOUISIANA, Southwest</u>									
LAZ028-031>033-043>044-052 Rapides - Allen - Evangeline - St. Landry - Acadia - Lafayette - Vermilion									
	01	1200CST 1500CST			0	0	165K		High Wind (G35)
High winds associated with a strong cold front downed trees and power lines across central and south-central Louisiana.									
Rapides Parish									
Boyce	16	0200CST			0	0	5K		Thunderstorm Wind
Several trees and power lines were blown down.									
Vernon Parish									
5 E Leesville	25	2237CST			0	0	5K		Thunderstorm Wind
Trees were blown down on power lines.									
Beauregard Parish									
6 W De Ridder	25	2238CST			0	0	5K		Thunderstorm Wind
Some trees and power lines were downed.									
Avoyelles Parish									
5 N Marksville	25	2353CST			0	0			Hail (0.88)
Rapides Parish									
5 E Pineville	26	0030CST			0	0	5K		Thunderstorm Wind
Trees and power lines were downed.									
Evangeline Parish									
Chataignier	26	0130CST			0	0	60K		Thunderstorm Wind
Seven homes were damaged from high winds associated with a severe thunderstorm. The roof was completely torn off one mobile home. An elderly woman inside the house protected herself by climbing in a bathtub and covering herself with a big blanket and a painting.									
Vernon Parish									
Anacoco	31	0605CST			0	0			Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 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, North</u>									
MEZ030			Coastal Washington		0	0			High Wind (G54) ^M
	03	0400EST 1600EST							
			Strong winds associated with an intensifying area of low pressure lifting from the Great Lakes to Quebec Province produced wind gusts in excess of 60 mph along the Downeast coast.						
MEZ030			Coastal Washington		0	0			High Wind (G52) ^M
	10	0300EST 1100EST							
			Strong winds associated with an intensifying area of low pressure lifting through western Quebec Province produced wind gusts of around 60 mph along the Downeast coast.						
MEZ010>011- 015>017-029>032			Central Piscataquis - Central Penobscot - Southern Penobscot - Interior Hancock - Central Washington - Coastal Hancock - Coastal Washington - Southern Piscataquis - Northern Washington						
	20	1700EST			0	0			Winter Storm
	21	0500EST							
			Low pressure tracking through the Gulf of Maine produced 8 to 12 inches of snow across Downeast areas. Localized totals up to 15 inches were reported across eastern portions of Washington county.						
MEZ001>006-010			Northwest Aroostook - Northeast Aroostook - Northern Somerset - Northern Piscataquis - Northern Penobscot - Southeast Aroostook - Central Piscataquis						
	26	2000EST			0	0			Winter Storm
	27	0800EST							
			Low pressure tracking across Maine produced 7 to 12 inches of snow across much of northern Maine.						
<u>MAINE, South</u>									
MEZ018>020-023>025			Interior York - Interior Cumberland - Androscoggin - Coastal York - Coastal Cumberland - Sagadahoc						
	10	0800EST 2200EST			0	0			Strong Winds
			Strong, gusty west winds downed limbs onto power lines causing scattered power outages. Peak wind gusts were measured at 51 mph in Sanford and 43 mph in Portland and Wiscasset. The strong winds developed behind a cold front that moved through the area early in the day.						
MEZ007>009- 012>014-018>028			Northern Oxford - Northern Franklin - Central Somerset - Southern Oxford - Southern Franklin - Southern Somerset - Interior York - Interior Cumberland - Androscoggin - Kennebec - Interior Waldo - Coastal York - Coastal Cumberland - Sagadahoc - Lincoln - Knox - Coastal Waldo						
	20	1500EST			0	0			Heavy Snow
	21	0300EST							
			An area of low pressure moving east-northeast from the Ohio Valley on the morning of the 20th brought from 5 to 10 inches of snow across much of the state. The heaviest amounts fell in a wide band across the interior and foothills of western and central Maine where 8 to 10 inches of snow fell. Lesser amounts fell in the northern mountains and along the immediate coast where snowfall amounts were generally in the 5 to 7 inch range.						
MEZ007>009			Northern Oxford - Northern Franklin - Central Somerset						
	26	1400EST			0	0			Heavy Snow
	27	0200EST							
MEZ012>014			Southern Oxford - Southern Franklin - Southern Somerset						
	26	1400EST			0	0			Moderate Snowfall
	27	0200EST							
			An area of low pressure moving northeast from the Mississippi Valley on the morning of the 26th to central Maine on the morning of the 27th brought a mixture of precipitation to the state. Much of the precipitation fell as snow in the mountains where accumulations were generally in the 6 to 12 inch range. In the foothills, the snow was mixed with sleet and freezing rain, and accumulations generally ranged from 3 to 6 inches. Along the coast and in the interior, much of the precipitation fell as rain and accumulations ranged from near 0 to about 4 inches						
<u>MARYLAND, Central</u>									
Allegany County									
West Portion	01	1130EST			0	0			Wild/Forest Fire
	13	1200EST							
			Drought conditions resulted in very dry timber and brush. This caused a brush fire that began on Wills Mountain on March 1st to quickly spread. The fire burned 100 acres of woodland before being contained on the 2nd. The fire was extinguished on the 13th.						

Storm Data and Unusual Weather Phenomena

March 2002

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

MARYLAND, Central

MDZ002>003

Allegany - Washington

09 2100EST
10 1000EST

0 0 10K Strong Wind

A strong cold front which crossed the region late on the 9th was accompanied by gusty northwest winds up to 57 MPH. Some locations reported downed trees and power lines in addition to minor structural damage due to the high wind. In Allegany County, a number of trees were downed, awnings were damaged, and signs were broken in Cumberland. In Frostburg, a tree was downed onto Chestnut Street and a stop sign was blown off a pole. In LaVale, a tree fell onto a parked car and another fell onto the roof of a home on Buchanan Avenue. In Washington County, a 52 MPH gust was recorded in Hagerstown and a 57 MPH gust was measured in Smithsburg.

MDZ002

Allegany

17 1200EST
2100EST

0 0 Winter Weather

Light rain fell across Allegany County during the afternoon and early evening hours of the 17th. At elevations above 1500 feet, surface temperatures were just below freezing for much of the day so the rain froze on contact with sidewalks, metal objects, and trees. Spotters in higher elevations just outside of Frostburg reported a 1/8 inch ice accumulation that made sidewalks slippery. Temperatures warmed above freezing by late evening, bringing the freezing rain to an end.

**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

21 1700EST
22 0400EST

0 0 Strong Wind

A strong arctic cold front pushed through the region during the evening of the 21st. This front ushered in strong northwest winds that gusted as high as 59 MPH. The highest winds occurred between 6 PM and 11 PM, but gusty conditions continued through 4 AM on the 22nd. Minor structural damage was reported in isolated locations, in addition to downed trees and power lines. Over 5000 power outages were reported across the Washington and Baltimore suburbs. A wind warning was posted for the Chesapeake Bay Bridge near Annapolis. Measured wind gusts included 59 MPH at Parkton (Baltimore County), 56 MPH at Smithsburg (Washington County), 51 MPH at the University of Maryland - Baltimore Campus, 50 MPH at Tall Timbers (St. Mary's County), 47 MPH at Hagerstown, 46 MPH in Laurel (Howard County) and in downtown Baltimore, 45 MPH at Patuxent River Naval Air Station (St. Mary's County), and 41 MPH at BWI Airport.

MARYLAND, Northeast

**MDZ008-012-015-
019>020**

Cecil - Kent - Queen Annes - Talbot - Caroline

01 0000EST
31 2359EST

0 0 0 Drought

March 2002 was the first month since August of 2001 where precipitation was wetter than normal. Precipitation events on March 2nd and 3rd, 12th and 13th, 17th and 18th, 20th and 31st resulted in above normal precipitation for the Maryland Eastern Shore. On a county weighted average, March monthly precipitation totals ranged from 4.1 inches in Cecil County to 4.6 inches in Talbot County. Normal is around 3.6 inches. At the beginning of the month 21 of the 30 gaged streams in Maryland and Delaware as well as 7 of the 17 of monitored groundwater wells were at record low levels. They were lower than the levels set during the 1950s and 1960s droughts. Flow into Chesapeake Bay was only half of normal. The drought, high salt levels in the bay and unseasonably warm weather have made disease more widespread in Chesapeake Bay and caused one of the lowest oyster harvests on record. Controlled burns were getting out of control because of how dry the ground and fuels were. Another result of the drought was the cancellation of seasonal soil testing (percolation) for anyone seeking septic tank permits because of dramatically low groundwater levels. The rains of March helped prime the soil for the spring planting and temporarily halted central Maryland (including Cecil County) from being upgraded from drought warning to drought emergency status. Nevertheless, the Maryland Department of the Environment continued its drought warning for all of the Maryland Eastern Shore. No formal water restrictions were in place, but water conservation continued to be emphasized.

**MDZ008-012-015-
019>020**

Cecil - Kent - Queen Annes - Talbot - Caroline

10 0700EST
1900EST

0 0 0 Wind

A strong cold frontal passage before dawn ushered in one of the coldest air masses of the winter season on the 10th. Scattered thunderstorms accompanied its passage. The surface pressure difference (pressure gradient) between a high pressure system in the Mississippi Valley and a very intense low pressure system (around 970 millibars) just east of James Bay produced windy conditions throughout the daylight hours on the 10th. As the high pressure system moved closer to Maryland late in the day, winds diminished. Peak wind gusts averaged between 40 and 50 mph. The peak wind gust at the Baltimore-Washington International Airport was 49 mph.

Storm Data and Unusual Weather Phenomena

March 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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MARYLAND, Northeast

MDZ008-012-015-019>020 Cecil - Kent - Queen Annes - Talbot - Caroline

21	1900EST 2200EST				0	0	0		Wind
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A strong cold front moved through the Maryland Eastern Shore during the evening of the 21st. It was accompanied by wind gusts of around 40 mph inland and around 50 mph along the bay. The strong gusty winds persisted throughout the night, although the strongest wind gusts occurred with the cold frontal passage and during the ensuing evening. Peak wind gusts included 52 mph in Tolchester (Kent County) and 41 mph at the Baltimore-Washington International Airport.

MARYLAND, South

NONE REPORTED.

MARYLAND, West

**Garrett County
Countywide**

09	2045EST 2100EST				0	0	10K		Thunderstorm Wind
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MDZ001

Garrett									
09	2100EST				0	0	10K		High Wind
10	0200EST								

A deepening area of low pressure moving eastward across the northern Great Lakes swept a strong cold front across western Maryland during the late afternoon/early evening hours of the 9th. This intensifying low produced a large area of strong low-level winds, both ahead of and behind the cold front, with winds between 70 - 80 MPH present just a few thousand feet off the surface by the mid-afternoon hours. As showers formed during the day, these strong winds were occasionally brought down to the surface. To further complicate matters, by the late afternoon hours enough instability was present to produce a line of severe thunderstorms along the main cold front as it entered western Maryland. This combination of strong gradient winds and severe thunderstorm winds produced widespread damage across the area, mostly in the form of downed trees and power lines. These high winds continued after the cold frontal passage, downing trees and power lines, until the early morning hours of the 10th. At that time, the surface low moved off into Quebec and the strong gradient winds finally diminished.

MDZ001

Garrett									
22	0400EST 0900EST				0	0			Winter Storm

A late-season storm spread between 4 and 6 inches of snow across Garrett County. The highest snowfall totals were generally confined to the ridges above 2500 feet.

MASSACHUSETTS, Central and East

MAZ024

Nantucket									
10	1053EST				0	0			High Wind (G52) ^M

A wind gust to 60 mph was recorded at Nantucket Memorial Airport.

MAZ002-004>005-008>009

Western Franklin - Northern Worcester - Western Middlesex - Western Hampshire - Western Hampden

20	1000EST 2200EST				0	0			Heavy Snow
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A late season winter storm brought heavy snow to the higher elevations of western and north central Massachusetts. Storm totals of 6 to 8 inches were widely reported in western parts of Franklin, Hampshire, and Hampden Counties. Amounts of 5 to 9 inches were observed in northern Worcester County, and totals averaged 4 to 8 inches in western Middlesex County, primarily north and west of Interstate 495. Dozens of accidents were reported as a result of slippery roads and poor visibility. Two injuries were indirectly attributed to the storm. A father and son were involved in an accident in Tewksbury, when the car they were riding in struck another vehicle head-on during the height of the storm.

A strengthening low pressure system passed south of New England on the 20th, bringing 3 to 6 inches of snow to much of interior Massachusetts before an eventual change to rain. Only the higher elevations remained all snow during the storm. Rain fell from Bristol and Plymouth Counties to Cape Cod and the Islands.

Storm Data and Unusual Weather Phenomena

March 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, West

MAZ001

Berkshire

**20 1600EST
1900EST**

0 0

Winter Storm

An area of low pressure developed in the Ohio Valley early on March 20th. The low then tracked east along the Mason-Dixon line during the day, and off the mid Atlantic coast by evening. Moisture from both the Gulf of Mexico and Atlantic ocean was drawn into the storm. The air was just cold enough for the moisture to fall in the form of snow across Berkshire County. This snowstorm, on the first day of astronomical spring, was elevation dependent, as heavy amounts of snow accumulated across the higher terrain of the Berkshires. The most snowfall reported in the county was 10.5 inches in the town of Florida. With the exception of some vehicular accidents, no other significant problems were reported to the National Weather Service office in Albany, NY as a result of this early spring storm.

MICHIGAN, East

MIZ047>048-053

Midland - Bay - Saginaw

**02 0600EST
2200EST**

0 0

Winter Storm

A storm system developed across the southern plains and mid Mississippi River valley and moved northeast across central Michigan. Snowfall developed during the morning of the 2nd. The snowfall changed over to rain late in the morning in locations south of a Bad Axe to Owosso line. North of this line, the precipitation remained in the form of snow well into the evening. A band of heavy snow affected locations from southwest Lower Michigan across central Michigan and into the tri cities region. By late in the evening of the 2nd, snowfall had totaled 12 inches across much of Midland county. Snowfall amounts in Bay county ranged from 8 to 10 inches, while in Saginaw county, amounts ranged from 6 to 9 inches, with the higher amounts reported in the northwestern part of the county.

MIZ069

Oakland

03 1200EST

1 0

Extreme Cold

In Troy, an 84-year-old woman was found dead on the patio outside her retirement home. Hypothermia was the suspected cause of death.
F84OU

**MIZ047>049-053>055-
060>063-068>070-
075>076-082>083**

Midland - Bay - Huron - Saginaw - Tuscola - Sanilac - Shiawassee - Genesee - Lapeer - St. Clair - Livingston - Oakland - Macomb - Washtenaw - Wayne - Lenawee - Monroe

**09 1500EST
10 0400EST**

0 2 780K

High Wind (G61)

A very strong cold front moved across southeast Michigan during the late afternoon hours of the 9th. A line of showers developed along the cold front. Very strong winds and brief heavy rain were associated with these showers. Behind the line of showers, powerful winds brought much colder air into the region. A low pressure system, which moved across the northern Great Lakes during the afternoon of the 9th, strengthened during the evening as it moved northeast of the region. This allowed the strong winds to continue into the early morning hours of the 10th. In addition to the winds, temperatures dropped from readings in the 50s during the early afternoon of the 9th, to the 20s by late evening. Wind gusts measured between 60 and 70 MPH affected southeast Michigan during the passage of the cold front. Winds as high as 50 to 60 MPH continued into the night.

Hundreds of trees, power lines and utility poles were blown down across southeast Michigan. Falling trees caused damage to several homes throughout the region. High winds also tore roofing material and siding off of many homes and businesses. A few cars were also struck by falling trees and branches. An estimated 180,000 homes and businesses across southeast Michigan lost power due many powers lines being blown down. A summary of some of the other damages are listed by county as follows:

Bay: The large statue and sign at the Big Boy restaurant on North Euclid Ave. toppled over onto the parking lot, causing damage to a pickup truck.

Genesee: A roof was blow off a portion of Bentley High School in Burton, damaging the school's library and GenNet Distance Learning Center. Several computers in the schools library were destroyed when they were drenched by heavy rains following the roofs demise. The Cantonese Gourmet restaurant on South Saginaw St near Belvedere Ave. in Flint also had part of its roof blown off. No injuries were reported at these two locations.

Huron: A mother and daughter escaped serious injury when high winds ripped the roof off their trailer home north of Port Hope and sent the structure tumbling across their yard. Several barns across the county were destroyed by the high winds. The bleachers at the Bad Axe ball diamonds were also destroyed by a falling tree.

Lenawee: At least two barns on the South County Line Highway were blown down. High winds also blew down part of the frame of a new professional building under construction on the west side of Blissfield. An Adrian woman escaped injury as she was driving westbound on US 223 near Humphrey Highway in Palmyra Township when a tree fell onto the road and struck her car.

Monroe: The rubber membrane roof on Ida Elementary School (Ida Township) was ripped off. A part of the awning at the Clark Gas

Storm Data and Unusual Weather Phenomena

March 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, East

Station on S. Monroe St. and Jones Ave. collapsed due to high winds. A couple of barns across the county were destroyed. A semi-truck was blown over by high winds on US-23 just north of the Dundee on-ramp. The driver was reported to be unhurt. Twenty-eight vehicles were damaged when the plastic signs at Spirit Ford broke and shards were sent across the car lot.

Oakland: High winds shattered windows in the grand-stands at the Hazel Park Raceway.

Saginaw: Foam insulation and siding was ripped of List Elementary and Frankenmuth High Schools in Frankenmuth. A 21-year old female driver suffered minor injuries when a tree fell on her moving car in Saginaw.

Sanilac: Deckerville High School in Deckerville lost about 25 percent of its gym roof due to the high winds. About 35 fifth and sixth graders were in the gym at the time. Noone was injured. Several barns were also destroyed throughout the county.

Washtenaw: High winds shattered the windows at a restaurant in Ann Arbor, injuring one person.

Wayne: At the Sacred Heart Catholic Church in Detroit, a steeple that had topped the sanctuary for 127 years fell onto the street. The roof caved in on the St. Cyrl of Jerusalem's bus garage in Lincoln Park. In Grosse Point Park, a wall collapsed at Young Furniture where a second story was under construction.

MIZ053

Saginaw

10	0500EST								
11	1045EST			0	0				Flood

The Cass River at Frankenmuth rose above flood stage of 17.0 feet at 5 am on the 10th. It crested at 18.57 feet at 2 am on the 11th and fell below flood stage at 10:45 am on the 11th. There was some minor flooding of Heritage Park in the city of Frankenmuth. Just downstream, in Bridgeport Township, several residents along the river reported basement and backyard flooding.

MIZ083

Monroe

25	1200EST								
	2000EST			0	0				Heavy Snow

A low pressure system moved from central Tennessee to western Pennsylvania during the day on the 26th. An upper level disturbance north of this surface low helped to produce an area of snowfall across the far southern sections of southeast Michigan. Hardest hit was Monroe County where 5 to 8 inches of snowfall was measured. Other locations south of Interstate 94 generally saw 3 to 5 inches, while places north saw little if any snowfall.

MICHIGAN, Extreme Southwest

MIZ077>078

Berrien - Cass

02	1000EST								
				0	0	0			Heavy Snow

An area of low pressure moved across Northern Indiana, bringing with it a mixed bag of precipitation. North of the low, a band of moderate to heavy snow fell across Berrien and Cass counties where 6 inches of snow had fallen through 10 am on the 2nd. As the low moved northeast, very cold air moved over the unfrozen waters of southern Lake Michigan, resulting in widespread heavy lake effect snow across the same area. When all was said and done, a total of 6 to 12 inches of snow fell across Berrien and Cass counties.

MIZ077>081

Berrien - Cass - St. Joseph - Branch - Hillsdale

09	1237EST								
	1415EST			0	0	0			High Wind

An unusually strong cold front moved through the region during the daylight hours of the 9th. A strong pressure gradient existed with the front as 3 hour pressure falls of 4 millibars ahead of the front combined with 3 hour pressure rises of 11 millibars. Winds just above the surface ranged from 70 to 80 mph. The combination of these 2 factors was tapped by a narrow line of showers immediately ahead of the cold front. Widespread reports of trees, tree limbs and power lines being blown down were received as surface winds of 50 to 70 mph were experienced by many areas.

MICHIGAN, North

MIZ008-015>036-041>042

Chippewa - Mackinac - Emmet - Cheboygan - Presque Isle - Charlevoix - Leelanau - Antrim - Otsego - Montmorency - Alpena - Benzie - Grand Traverse - Kalkaska - Crawford - Oscoda - Alcona - Manistee - Wexford - Missaukee - Roscommon - Ogemaw - Iosco - Gladwin - Arenac

02	0000EST								
03	1500EST			0	0				Heavy Snow

A major winter storm moved through the Great Lakes region on March 2nd and 3rd. The snow began across northern Michigan during the predawn hours of the 2nd and continued until the morning hours on the 3rd. The storm brought widespread reports of 10 to 16 inches of snowfall to northern Michigan, with the heaviest snowfall rates of 1 to 2 inches per hour occurring during the afternoon and evening hours on the 2nd. The snow was particularly wet and heavy across northeast Lower Michigan and numerous tree limbs and power lines were downed in this area.

Storm Data and Unusual Weather Phenomena

March 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, North

MIZ008-015>017-019

Chippewa - Mackinac - Emmet - Cheboygan - Charlevoix

**08 0300EST
1200EST**

0 0

Winter Storm

A surge of unseasonably warm air moved across Michigan on the 8th ahead of a strong low pressure system in the Central Plains. This warm surge helped to cause a wintry mix of weather across eastern Upper and far northern Lower Michigan. Snowfall totals were generally less than 6 inches, but the the snow combined with freezing rain and sleet to create hazardous travel conditions across the region.

MIZ008-015>023-025>028-031

Chippewa - Mackinac - Emmet - Cheboygan - Presque Isle - Charlevoix - Leelanau - Antrim - Otsego - Montmorency - Benzie - Grand Traverse - Kalkaska - Crawford - Manistee

**09 1800EST
10 1400EST**

0 0

Blizzard

MIZ024-029-034-042

Alpena - Oscoda - Roscommon - Arenac

**09 1800EST
2200EST**

0 0

High Wind (G50)

MIZ030-032>033-035>036

Alcona - Wexford - Missaukee - Ogemaw - Iosco

**09 1800EST
10 1400EST**

0 0

Winter Storm

A major winter storm passed northeast through Michigan into Ontario on the 9th, with the associated cold front passing through during the afternoon hours. Strong winds and lake effect snow showers were widespread across northern Michigan in the wake of the cold front. The wind and snow caused blizzard or near blizzard conditions across much of northern Michigan soon after the frontal passage, with these conditions persisting into the 10th across many areas.

The blizzard conditions were the worst and most persistent across eastern Upper Michigan and resulted in the most significant impacts. Major highways were closed across the region during the event and several shelters were opened to house stranded travelers.

MIZ020

Leelanau

**21 0000EST
1200EST**

0 0

Heavy Snow

An area of low pressure moved across Lower Michigan on the 21st, bringing locally heavy 6 inch snowfall totals.

MIZ008

Chippewa

**22 0500EST
2000EST**

0 0

Heavy Snow

An area of low pressure moved across Lower Michigan on the 21st. Heavy lake effect snow showers in the wake of the system brought up to 9 inches of snow to the Lake Superior snow belt on the 22nd.

MICHIGAN, Upper

MIZ001-005>006

Keweenaw - Marquette - Alger

**01 0000EST
1400EST**

0 0

Heavy Snow

As a surface trough passed over Michigan's Upper Peninsula, northerly winds and arctic air moving across Lake Superior created heavy lake effect snow across the highlands of the Keweenaw Peninsula and over the higher terrain of northern Marquette and Alger counties. Phoenix reported 13 inches of snow in 24 hours, Big Bay and Wetmore reported 12 inches of snow, and Munising got 11.3 inches.

MIZ002-005>007-009-013>014

Ontonagon - Marquette - Alger - Luce - Gogebic - Delta - Schoolcraft

**03 0000EST
1600EST**

0 0

Winter Storm

A winter storm moved from the mid Mississippi River valley into the western Great Lakes region. The storm, combined with intense lake effect snow showers that followed, deposited varying amounts of snowfall across the Upper Peninsula of Michigan. Strong winds of 30 to 45 mph also created near blizzard condition across the area. Bessemer reported 10 inches of snowfall, and white out conditions were reported near Rockland. The National Weather Service Office measured 16 inches of new snow and Gwinn reported 10 inches. Shingleton, Wetmore and Traunik reported 12 to 14 inches of snowfall in 24 hours and 12 inches of new snow was reported in Luce County from Two Heart to Tahquamenon Park. Rock and Perkins received 10 inches of snowfall, and 10 to 12 inches of new snow fell over Schoolcraft County from Manistee north.

MIZ003

Houghton

**05 0400EST
1000EST**

0 0

Heavy Snow

Storm Data and Unusual Weather Phenomena

March 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, Upper

A lake effect snow band set up over part of the Keweenaw Peninsula. Ten inches of new snow fell in Houghton and Lake Linden in 12 hours.

MIZ001>005-009-011>014 Keweenaw - Ontonagon - Houghton - Baraga - Marquette - Gogebic - Dickinson - Menominee - Delta - Schoolcraft

08	0500EST 1800EST				0	0			Winter Storm
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An intense storm system developed over the central plains and strengthened as it moved toward the Western Great Lakes, spreading a mix of snow, sleet, freezing rain and even isolated thunderstorms over the Upper Peninsula of Michigan. Two inches of snow, sleet and ice fell on Iron Mountain. Ten to twelve inches of snow fell over the Ironwood area in 12 hours. Ontonagon and Bruce Crossing reported 12 to 14 inches of new snow. A combination of snow, sleet and ice covered the Escanaba area 2 to 3 inches deep. Freezing rain coated the Menominee area with 1/2 inch of ice. Watton reported 8 inches of new snow in 12 hours and downtown Baraga reported 12 inches. The Weather Service Office in Marquette measured 10 inches of new snow and downtown Marquette had a combination of snow and sleet. Phoenix reported 12 inches of snowfall, and Houghton and Calumet received 14 inches of snow in 12 hours.

MIZ005>007-011>014 Marquette - Alger - Luce - Dickinson - Menominee - Delta - Schoolcraft

09	0000EST 1400EST				0	0			Ice Storm
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MIZ001>007-009>010-014 Keweenaw - Ontonagon - Houghton - Baraga - Marquette - Alger - Luce - Gogebic - Iron - Schoolcraft

09	0400EST				0	0			Winter Storm
10	2300EST								

MIZ002-006>007-014 Ontonagon - Alger - Luce - Schoolcraft

09	1900EST				0	0			Blizzard
10	1600EST								

A powerful winter storm that formed east of the Rockies intensified as it tracked northeast across Wisconsin and eastern Upper Michigan. Ahead of the storm system, freezing rain, sleet and rain fell over Michigan's Upper Peninsula. Temperatures rose into the lower 40s across the central and eastern parts of the Upper Peninsula where local flooding was reported on many roadways due to snow melt and rainfall. Temperatures quickly fell back below freezing with the passage of the trailing cold front. Storm force northwest winds were recorded over Lake Superior with winds over 40 mph across much of western and northern Upper Michigan. Blizzard conditions were observed and made driving almost impossible. Lake effect snow, heavy at times, combined with strong northwest winds that gusted to over 60 mph to produce widespread white outs. Power outages occurred with downed power lines, and numerous minor traffic accidents were reported, including one 5 car pile-up. Some roads were closed when snowplow crews could not keep up with falling and blowing snow.

Freezing rain coated Negaunee, Marquette and Harvey with 1/4 to 1/2 inch of ice, and left a 1/4 inch coating of ice in Felch, Bark River, and over most of Iron, Alger and Schoolcraft Counties. A combination of sleet and freezing rain left an accumulation of ice varying from 1/4 to 1 1/2 inches thick in Menominee County. Newberry reported 1/2 inch accumulation of ice from the freezing rain.

Ironwood and Bessemer reported 8 inches of new snow in 12 hours. Rockland received 10 inches of snow in 24 hours, 11 inches of new snow fell in Herman with considerable blowing and drifting. Ten inches of snowfall in 24 hours was measured at the National Weather Service Office with blizzard conditions reported over the west half of Marquette County. Seney reported 8 to 10 inches of snow with 2 to 3 foot drifts. Shingleton reported 9 inches of snow and Newberry reported 14 inches with considerable blowing and drifting.

High winds of 50 to 60 mph knocked down trees and power lines and caused blizzard conditions in Ontonagon, Houghton, Keweenaw, Marquette, Alger, Luce and Schoolcraft Counties. Some main highways were closed because of zero visibility and snow drifts blocking the road.

MIZ001>006-009>011 Keweenaw - Ontonagon - Houghton - Baraga - Marquette - Alger - Gogebic - Iron - Dickinson

15	0200EST 1400EST				0	0			Winter Storm
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A winter storm system that developed over the central plains tracked across central Lake Michigan and Lower Michigan and pulled moisture from the Gulf of Mexico north into Michigan's Upper Peninsula. Arctic air already in place and gusty northwest winds across Lake Superior, combined to enhance the snowfall. The snow was wet and heavy, causing hazardous driving conditions and made snow removal more difficult. Snowfall reports included 14 inches at Ironwood and Iron River, 12 inches in Ontonagon, 18 inches in Rockland. Houghton and Phoenix reported 12 inches of new snow. Baraga reported 16 inches while the Marquette National Weather Service Office measured 12 inches. Deerton and Sagola got 10 inches and Grand Marais received 8 inches.

MIZ005>006-009 Marquette - Alger - Gogebic

21	0700EST 1100EST				0	0			Heavy Snow
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Storm Data and Unusual Weather Phenomena

March 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

Cold arctic air pouring across Lake Superior produced bands of lake effect snow showers. Snowfall amounts ranged from 12 inches in Skandia to 1.5 inches in Iron Mountain. Melstrand reported 9 inches of new snow and Ironwood received 8 inches. The Marquette National Weather Service Office received 6 1/2 inches of new snow to push the season snowfall total to 286 inches, a new record.

By the end of the month, another 14.6 inches of snow fell at the Marquette Weather Office, pushing the season total to 300.6 inches and setting a new March record monthly total of 83.1 inches.

MICHIGAN, West

MIZ037>040-043>046-050>052-056>058-064>065-071>072 **Mason - Lake - Osceola - Clare - Oceana - Newaygo - Mecosta - Isabella - Muskegon - Montcalm - Gratiot - Ottawa - Kent - Ionia - Allegan - Barry - Van Buren - Kalamazoo**

02	0100EST	0	0						
04	0700EST								Winter Storm

A winter storm produced heavy snow across most of southwestern and south central lower Michigan, dumping anywhere from 12 to 18 inches of snow to the north and west of the track of the low pressure system, to under 4 inches across far south central lower Michigan close to the track of the low. Snow developed well out ahead of the low pressure area during the early morning hours of the 2nd and continued through the day. Once the low pressure area passed by to the east lake enhanced snowfall began.

Approximately 16 inches of snow fell across Mason, Oceana, Muskegon, Ottawa, Allegan, and western Kent counties. The maximum snowfall reported was in Ludington (Mason county), where 18" of snow fell. A foot or more of snow fell across Lake, Osceola, Clare, Newaygo, Mecosta, Isabella, Montcalm, Ionia, and western portions of Barry and Kalamazoo counties. Generally 8 to 10 inches of snow fell across Gratiot county. Much lighter snowfall totals of less than 6 inches were reported across Clinton, Eaton, Ingham, Calhoun and Jackson counties.

MIZ037>040-043>046-050>052-056>059-064>067-071>074 **Mason - Lake - Osceola - Clare - Oceana - Newaygo - Mecosta - Isabella - Muskegon - Montcalm - Gratiot - Ottawa - Kent - Ionia - Clinton - Allegan - Barry - Eaton - Ingham - Van Buren - Kalamazoo - Calhoun - Jackson**

09	1254EST 1827EST	0	0	485K					
									High Wind (G62)

A very strong area of low pressure produced numerous reports of wind gusts over 60 m.p.h. across southern lower Michigan, with sustained winds of 30 to 40 m.p.h. High wind damage across the area ranged from downed trees and power lines to property damage. Property damage reports included a barn that was blown down in Montcalm county and structural damage to the porch of a home in the Lansing area (Ingham county). The highest wind gust reported was 80 m.p.h. in Montague, in Muskegon county, at about 8:30 p.m. EST.

MINNESOTA, Central and South Central

MNZ045

Kanabec

07	1600CST	0	0						
08	0200CST								Winter Storm

A warm front which developed over central Minnesota in advance of a low pressure system over eastern Colorado, was the mechanism which allowed moisture laden air from the south to produce 6 to 7 inches of snow in Kanabec county, just north of Mora.

MNZ041>045-047>070-073>078-082>085-091>093

Douglas - Todd - Morrison - Mille Lacs - Kanabec - Stevens - Pope - Stearns - Benton - Sherburne - Isanti - Chisago - Lac Qui Parle - Swift - Chippewa - Kandiyohi - Meeker - Wright - Hennepin - Anoka - Ramsey - Washington - Yellow Medicine - Renville - Mcleod - Sibley - Carver - Scott - Dakota - Redwood - Brown - Nicollet - Le Sueur - Rice - Goodhue - Watonwan - Blue Earth - Waseca - Steele - Martin - Faribault - Freeborn

08	1800CST	0	0						
09	1600CST								Winter Storm

A winter storm that intensified over Eastern Kansas during the evening hours on the 8th, tracked northeast across central Iowa by midnight, and then moved into West Central Wisconsin by the late morning hours on the 9th. A band of snow between 3 and 5 inches fell from Southwestern to East Central Minnesota, and was accompanied by 25 to 35 mph winds, which produced considerable blowing and drifting snow. Farther to the south a band of freezing rain produced 1/4 inch to 3/4 inch of ice, from South Central Minnesota into Wisconsin.

MNZ042>045-048>070-073>078-082>085-091

Todd - Morrison - Mille Lacs - Kanabec - Pope - Stearns - Benton - Sherburne - Isanti - Chisago - Lac Qui Parle - Swift - Chippewa - Kandiyohi - Meeker - Wright - Hennepin - Anoka - Ramsey - Washington - Yellow Medicine - Renville - Mcleod - Sibley - Carver - Scott - Dakota - Redwood - Brown - Nicollet - Le Sueur - Rice - Goodhue - Watonwan - Blue Earth - Waseca - Steele - Martin

14	0800CST	0	0						
15	0400CST								Winter Storm

An area of surface low pressure moved from the Oklahoma Panhandle during the early morning hours on Thursday the 14th, to

Storm Data and Unusual Weather Phenomena

March 2002

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

MINNESOTA, Central and South Central

northeastern Kansas by noon, and then proceeded to the Milwaukee, Wisconsin area by the early morning hours on Friday the 15th. Heavy snow fell across a wide swath of Central and South Central Minnesota. Some snowfall totals of note include: Dawson - 21.0 inches; Mora and Montevideo - 18.0 inches; St. Cloud and Willmar - 17.5 inches; Olivia - 17.0 inches; Foley and Canby - 16.0 inches; Hutchinson, New London, Buffalo, Benson, and Litchfield all with 15.0 inches; Cambridge - 14.0 inches; Granite Falls, Onamia, and Madison all with 14.0 inches; Redwood Falls and Vesta - 12.0 inches; Milaca, Gaylord, and New Hope all with 11 inches; Chanhassen - 10.8 inches; Little Falls, Elk River, and Fridley all with 10 inches.

MINNESOTA, Northeast

MNZ012-019>021-033>038 Northern Cook / Northern Lake - Central St. Louis - Southern Lake - Southern Cook - Southern Cass - Crow Wing - Northern Aitkin - Southern Aitkin - Southern St. Louis / Carlton - Pine

07	1200CST	0	0						
08	0900CST								Heavy Snow

Six to twelve inches of snow fell in the area. The greatest amounts were just inland from Lake Superior with 12 inches reported near Finland, 11" at Duluth, Silver Bay, and near Two Harbors.

MNZ010-012-018>021-025>026-033>038 Koochiching - Northern Cook / Northern Lake - Northern Itasca - Central St. Louis - Southern Lake - Southern Cook - Northern Cass - Southern Itasca - Southern Cass - Crow Wing - Northern Aitkin - Southern Aitkin - Southern St. Louis / Carlton - Pine

09	0100CST	0	0						
	1600CST								Heavy Snow

Most of the event was heavy snow, but it started out as freezing rain and sleet in areas from Duluth and south. Most of northeastern Minnesota received six or more inches of snow. The highest amounts were 9 to 8 inches from Crow Wing County northward through Cass County and Koochiching County. Winds were gusting over 30 miles an hour, causing low visibilities and drifting.

MNZ038

Pine

14	1400CST	0	0						
15	0500CST								Heavy Snow

Twenty inches of snow fell in Askov.

MINNESOTA, Northwest

MNZ001>009-013>017-022>024-027>032-040 West Polk - Norman - Clay - Kittson - Roseau - Lake Of The Woods - West Marshall - East Marshall - North Beltrami - Pennington - Red Lake - East Polk - North Clearwater - South Beltrami - Mahnomen - South Clearwater - Hubbard - West Becker - East Becker - Wilkin - West Otter Tail - East Otter Tail - Wadena - Grant

08	1535CST	0	0						
09	1600CST								Winter Storm

Strong winds and snow combined to produce visibilities as low as a quarter mile to a half mile. The strongest wind was reported at Halstad, where a MNDOT RWIS site reported a 47 mph wind gust. Fergus Falls also gusted up to 42 mph and Bemidji gusted up to 43 mph. Four to six inches of new snow was common across the area.

MINNESOTA, Southeast

MNZ095

Fillmore

01	1830CST	0	0						
02	1600CST								Winter Storm

A winter storm affected the southeast tip of Minnesota, producing snow accumulations around 6 inches. Strong north winds of 15 to 25 mph accompanied the snow, causing blowing and drifting.

MNZ079-086

Wabasha - Dodge

08	1900CST	0	0						
	2300CST								Winter Storm

Freezing rain produced a glaze of ice, causing hazardous driving conditions. The freezing rain was also accompanied by thunder and lightning at times.

MNZ079-086>088-094>096

Wabasha - Dodge - Olmsted - Winona - Mower - Fillmore - Houston

09	0910CST	1	6	55K					
	1600CST								Blizzard

As a deep low pressure moved into the northern Great Lakes, it produced west winds of 30 to 40 mph, with gusts around 50 mph. Even though only an inch or less of new snow had fallen, the very strong winds produced whiteout conditions, with visibility 1/4 mile or less. The poor visibility combined with falling temperatures caused numerous accidents, one of which resulted in a fatality near Byron (Olmsted County), when a vehicle rolled over. Some highways were closed due to the strong winds and icy roads, including a portion of Interstate 90 near Rochester. M10VE

Storm Data and Unusual Weather Phenomena

March 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, Southwest

MNZ071>072-080>081-089>090-097>098 **Lincoln - Lyon - Murray - Cottonwood - Nobles - Jackson - Pipestone - Rock**

14	1000CST 2359CST		0	0	100K	Winter Storm
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Snow was preceded by freezing rain, with a wide variation in how the area was affected. From Pipestone to Tracy and north, including Marshall, heavy snow accumulated 8 to 16 inches, with the 16 inches reported at Tracy. The snowfall made travel difficult, and some roads were blocked due to drifting. Further south, from Luverne to Windom and south to Jackson, the precipitation was mainly freezing rain, although 2 to 5 inches of snow fell on top of the ice. Power line damage and outages were reported in the Windom and Jackson areas, and the ice accumulation also caused widespread minor tree damage. Travel was extremely difficult due to ice covered roads, and also the snow that fell on top of the ice.

MINNESOTA, West

NONE REPORTED.

MINNESOTA, West Central

MNZ039-046 **Traverse - Big Stone**

14	1000CST 2200CST		0	0		Winter Storm
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Heavy snow of 6 to 11 inches fell across Big Stone and Traverse counties from the morning to the late evening hours. Along with the heavy snow came strong north winds reducing visibilities in blowing snow and making travel very difficult. Schools opened late or were closed for the day. Some snowfall amounts included, 6 inches at Browns Valley and Wheaton, 7 inches at Ortonville, and 11 inches at Artichoke Lake.

MISSISSIPPI, Central

Lamar County

	2 W Oloh	12	1520CST		0	0		Hail (0.75)
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Marion County

	1 N Columbia	12	1520CST		0	0		Hail (0.75)
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Lamar County

	Lumberton	12	1555CST		0	0		Hail (0.75)
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Forrest County

	Petal	12	1615CST		0	0		Hail (0.88)
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Forrest County

	Hattiesburg	12	1643CST		0	0		Hail (0.88)
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Forrest County

	Mc Callum	12	1643CST		0	0		Hail (0.88)
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Jones County

	Moselle	12	1650CST		0	0		Hail (0.75)
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Forrest County

	Brooklyn	12	1658CST		0	0		Hail (0.75)
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Lawrence County

	Monticello	15	1500CST		0	0		Hail (0.88)
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Simpson County

	5 SW Mendenhall	15	1535CST		0	0	20K		Thunderstorm Wind
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A couple of rural homes had roof and structural damage.

Smith County

	3 W Raleigh	15	1630CST		0	0	50K		Thunderstorm Wind
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Straight-line winds damaged a barn, destroyed a chicken house, and downed numerous trees west of the city of Raleigh.

Madison County

	Flora	15	1645CST		0	0	20K		Thunderstorm Wind
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Several trees were blown down in and near Flora in the western portion of the county. A few trees landed on homes resulting in substantial roof damage.

Jefferson Davis County

	Bassfield	15	1650CST		0	0		Hail (0.88)
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Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
MISSISSIPPI, Central									
Marion County									
10 NE Columbia	15	1650CST			0	0	25K		Thunderstorm Wind
Several trees were blown down across northeastern portion of the county, resulting in roof damage to a few rural homes. A tractor shed was also destroyed.									
Yazoo County									
7 E Yazoo City	15	1700CST			0	0	1K		Thunderstorm Wind
A few trees were blown down east of Yazoo City.									
Jones County									
3 NW Laurel to 2 NW Laurel	15	1903CST 1908CST	1	300	0	0	3.3M		Tornado (F1)
A tornado formed about three miles northwest of Laurel or between the cities of Laurel and Soso in northwest Jones County. The tornado moved northeast 1 mile, before dissipating two miles northwest of the Laurel. West Jones County High School and Middle School sustained significant, structural damage. Most of the roof had collapsed along with other, structural damage which made the facility inhabitable. Damage costs to the school alone exceeded 2.5 million dollars per one county official. One home and one mobile home were also destroyed. Otherwise, ten to twelve homes sustained major damage along with several trees that were uprooted by the tornado.									
Leflore County									
Schlater	15	1930CST			0	0	40K		Thunderstorm Wind
Damaging winds from a severe thunderstorm blew a cotton trailer into the walls of a QuickStop convenient store. The store sustained severe structural damage to a wall along with major roof damage.									
Yazoo County									
Yazoo City	16	0320CST			0	0	1K		Thunderstorm Wind
A few trees were blown down across town.									
Hinds County									
4 W Byram to 3 NW Byram	16	0510CST 0515CST	2	300	0	0	1.4M		Tornado (F1)
The tornado touched down approximately four miles west of the city of Byram, then tracked northeast two miles. The worst damage occurred along and near Spring Wood Drive and Springdale Road, where nine homes sustained major, structural damage. Thirty other homes sustained minor damage in the area. Otherwise, several trees and power lines were either blown down or uprooted.									
Rankin County									
Brandon	16	0650CST			0	0	30K		Thunderstorm Wind
Trees were blown down onto two homes in the Castlewoods subdivision, resulting in minor damage. Other trees were knocked down across the area as well.									
Jones County									
1 SW Laurel	20	1750CST			0	0	1K		Thunderstorm Wind
A few trees were blown down across town.									
Washington County									
Greenville	25	2340CST			0	0			Hail (0.75)
Washington County									
Greenville	25	2340CST			0	0			Hail (0.88)
Franklin County									
Bude	26	0045CST			0	0			Hail (1.00)
Adams County									
Natchez	26	0107CST			0	0	1K		Thunderstorm Wind
A few trees were blown down across town.									
Franklin County									
Bude	26	0200CST			0	0	25K		Lightning
Lightning struck a barn and caught it on fire. Barn was destroyed.									
Franklin County									
Meadville	26	0200CST			0	0			Hail (1.00)
Lincoln County									
10 SW Brookhaven	26	0215CST			0	0			Hail (0.75)
Marion County									
3 SW Columbia	26	0345CST			0	0	1K		Thunderstorm Wind
Numerous trees were blown down on Kokomo Road.									

Storm Data and Unusual Weather Phenomena

March 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>									
Bolivar County									
6 W Duncan	29	2320CST			0	0	5K		Thunderstorm Wind
	Straight-line winds from a severe thunderstorm overturned an eighteen wheel truck and trailer near the intersection of Highways 1 and 444.								
Bolivar County									
Shelby	29	2335CST			0	0	1K		Thunderstorm Wind
	Another eighteen wheel truck was blown down near town. Also, numerous trees were blown down across the area.								
Claiborne County									
Port Gibson	30	1915CST			0	0			Hail (1.00)
Hinds County									
7 W Pocahontas	30	2035CST			0	0			Hail (0.75)
Madison County									
Flora	30	2055CST			0	0			Hail (1.75)
Carroll County									
Carrollton	30	2230CST			0	0			Hail (0.75)
	31	2230CST							
Washington County									
Glen Allan	31	0030CST			0	0			Hail (1.75)
	Golf ball sized hail fell around the intersection of Highways 1 and 436.								
Grenada County									
Grenada	31	0100CST			0	0	5K		Flash Flood
	Very heavy rainfall across the area resulting in a vehicle being washed off the road into a flooded ditch.								
Montgomery County									
Duck Hill	31	0225CST			0	0			Hail (0.75)
Yazoo County									
Benton	31	0225CST			0	0			Hail (0.75)
Leflore County									
Greenwood	31	0300CST			0	0	1K		Flash Flood
	Several roads, including county road 297 were impassable due to flood waters from very heavy rainfall.								
Franklin County									
6 N Meadville	31	0320CST			0	0			Hail (0.88)
Carroll County									
Countywide	31	0500CST			0	0	5K		Flash Flood
	Several county roads were washed out. Many others were underwater.								
<u>MISSISSIPPI, North</u>									
Lee County									
Tupelo	08	1500CST 1505CST			0	0	1K		Thunderstorm Wind
	A couple of trees were knocked down.								
Lafayette County									
Oxford	15	2005CST 2010CST			0	0	0.11K		Hail (1.00)
Union County									
Etta	15	2008CST 2015CST			0	0	0.01K		Hail (0.75)
Tate County									
12 E Independence	16	1520CST 1525CST			0	0	0.05K		Hail (0.88)
Coahoma County									
Clarksdale	29	2230CST 2235CST			0	0	10K		Hail (1.00)
	Twenty-seven cars in a car lot were damaged by the hail.								
Pontotoc County									
Toccopola	30	0028CST 0035CST			0	0	0.05K		Hail (0.88)

Storm Data and Unusual Weather Phenomena

March 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, North</u>									
Yalobusha County									
Water Vly	30	0030CST 0035CST			0	0	0.01K		Hail (0.75)
Pontotoc County									
Randolph to Buckhorn	30	0040CST 0100CST			0	0	0.12K		Hail (1.00)
Yalobusha County									
5 N Oakland	30	0045CST 0050CST			0	0	5K		Thunderstorm Wind
Some power lines were knocked down.									
Calhoun County									
Bruce	30	0110CST 0115CST			0	0	5K		Thunderstorm Wind
A few trees were blown down.									
Lee County									
Nettleton	30	0120CST 0125CST			0	0	0.01K		Hail (0.75)
<u>MISSISSIPPI, South</u>									
Hancock County									
Fenton	12	1250CST			0	0			Hail (0.75)
Amite County									
6 W Liberty	26	0140CST			0	0			Hail (1.00)
One inch diameter hail occurred along Highway 24.									
Pike County									
Holmesville	26	0234CST			0	0			Hail (1.00)
One inch diameter hail occurred along Highway 98.									
Hancock County									
Clermont Harbor	31	1015CST			0	0			Hail (0.75)
Hancock County									
Clermont Harbor	31	1015CST			0	0			Funnel Cloud
Jackson County									
Hurley	31	1115CST			0	0			Hail (1.00)
<u>MISSISSIPPI, Southeast</u>									
Perry County									
Richton	12	1715CST 1716CST			0	0			Hail (0.75)
Stone County									
3 S Whites Crossing	31	0944CST 0945CST			0	0			Hail (0.75)
Dime size hail was reported near the community of Big Level.									
George County									
Benndale	31	1020CST 1021CST			0	0			Hail (0.75)
<u>MISSOURI, East</u>									
MOZ018>019- 026>027-034>036- 041>042-047>052-059			Knox - Lewis - Shelby - Marion - Monroe - Ralls - Pike - Boone - Audrain - Moniteau - Cole - Osage - Callaway - Montgomery - Lincoln - Gasconade						
	02	0600CST 2000CST			0	0			Winter Storm

A winter storm struck central and northeast Missouri on Saturday, March 2, crippling transportation across much off the area. About a 1/2 inch of sleet fell first, followed by 4 to 6 inches of snow. In addition, winds of 20 to 30 mph came with the snow causing poor visibility and drifting snow. Road crews reported that the wind would blow snow back on some roads as soon as they pushed it off.

Storm Data and Unusual Weather Phenomena

March 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>									
Shelby County									
Clarence	09	0145CST			0	0			Thunderstorm Wind (G55)
Shelby County									
Shelbina	09	0150CST			0	0			Thunderstorm Wind (G55)
A fast moving line of thunderstorms brought damaging winds to parts of south Shelby County. Numerous farm buildings in the Clarence and Shelbina areas were either destroyed or suffered major roof damage. In Shelbina, several businesses suffered roof and or window damage. Power poles and lines were down throughout the area.									
Audrain County									
Mexico	09	0200CST			0	0			Thunderstorm Wind (G51)
A fast moving line of thunderstorms brought 60 mph wind gusts to Mexico. There was tree, power line, and some minor roof damage scattered across town.									
MOZ018>019-026>027-034>036-041>042-049>052-059-061>065									
Knox - Lewis - Shelby - Marion - Monroe - Ralls - Pike - Boone - Audrain - Osage - Callaway - Montgomery - Lincoln - Gasconade - St. Charles - Franklin - St. Louis - St. Louis (C) - Jefferson									
	09	0600CST 1800CST			0	0			High Wind (G43)
Strong winds behind a cold front rocked much of central and east Missouri Saturday causing scattered damage. Wind gusts of 40 to 50 mph were common across the area. Area electric companies reported scattered power outages as some power poles and lines were downed by the winds. Close to 50,000 customers lost power at various times in the St. Louis area. Some billboards and street signs were also damaged by the wind.									
Iron County									
Viburnum	15	0100CST			0	0			Hail (0.75)
Storm spotters reported 3/4 inch hail in Viburnum.									
Washington County									
Potosi	15	0148CST			0	0			Hail (1.75)
The public reported a brief period of golfball size hail in Potosi.									
MOZ041>042-049-051>052-059>065									
Boone - Audrain - Osage - Montgomery - Lincoln - Gasconade - Warren - St. Charles - Franklin - St. Louis - St. Louis (C) - Jefferson									
	25	1800CST			0	0			Winter Storm
	26	0600CST							
A winter storm dumped sleet and snow across parts of central and eastern Missouri. Sleet began falling the evening of March 25 and accumulated up to 1 inch in many areas. The sleet changed to snow by the early morning hours of the 26th. Altogether from 3 to 4 inches of sleet/snow covered the ground. The combination of sleet and snow made travel extremely hazardous across the area. Highway 40/Interstate 64 in St. Louis had to be closed for a while due to the icy conditions as did the Martin Luther King Bridge on the Mississippi River.									
St. Charles County									
St Paul	28	1215CST			0	0			Hail (1.00)
St. Charles County									
3 E St Paul	28	1220CST			0	0			Hail (1.75)
The public reported 1 inch hail covering the ground in St. Paul. The Sheriff Department reported golfball size hail 3 miles east of St. Paul.									
<u>MISSOURI, Lower</u>									
MOZ113									
Dunklin									
	25	2300CST			0	0	1K		Flood
	26	0130CST							
Several roads were flooded.									
Dunklin County									
Holcomb	29	1700CST 1705CST			0	0	0.01K		Hail (0.75)
<u>MISSOURI, Northeast</u>									
Clark County									
5 E Wayland	09	0145CST			0	0			Thunderstorm Wind (G61)
Top of grain bin blown off.									

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
MISSOURI, Northeast									
Clark County									
Wyaconda	09	0145CST			0	0			Thunderstorm Wind (G61)
			Trees down.						
Scotland County									
11 SE Memphis	09	0145CST			0	0			Thunderstorm Wind (G61)
			Machine shed damaged.						
			A strong arctic front extended from Central Wisconsin into Northwest Missouri early Friday morning. Temperatures across the front at 6 A.M. Friday ranged from the middle 20s in the far Northwest Iowa to the middle and upper 50s in Northeast Missouri. Much colder air was poised to the north of the region with temperatures in the single digits and teens in the Northern Plains. This arctic front and the large temperature gradient across it combined with a vigorous upper level disturbance ejecting from the Southwestern United States to ignite severe thunderstorms. Initial development occurred from Central Iowa into North Central Missouri late Friday afternoon and evening. These storms then evolved into a squall line, which raced eastward through much of Northeast Missouri during the overnight and early morning on Saturday, producing several reports of wind damage.						
MISSOURI, Northwest									
MOZ007>008-016>017-021-046-054 Putnam - Schuyler - Sullivan - Adair - Clinton - Cooper - Henry									
	01	1345CST			0	0			Heavy Snow
	03	1200CST							
			Six inches of snow reported in Livonia.						
MOZ015-024-032-037 Grundy - Linn - Chariton - Jackson									
	02	1525CST			0	0			Winter Storm
	03	1200CST							
			Four inches of snow in Trenton with near blizzard conditions at times due to blowing and drifting of snow.						
			A vigorous late winter storm moved across the Midwest. This storm spread two to six inches of snow across northwest Missouri. Strong gusty northwest winds caused considerable blowing and drifting of the snow. Driving was hazardous and numerous accidents were reported.						
Andrew County									
Amazonia	07	2214CST			0	0			Hail (0.75)
De Kalb County									
Union Star	07	2258CST			0	0			Hail (0.88)
Andrew County									
3 N Helena	07	2300CST			0	0			Hail (0.88)
De Kalb County									
Fairport	07	2323CST			0	0			Hail (1.75)
De Kalb County									
2 NW Santa Rosa	07	2328CST			0	0			Hail (1.00)
Daviess County									
Pattonsburg	07	2335CST			0	0			Hail (0.75)
Daviess County									
3 N Jameson	08	0003CST			0	0			Hail (0.75)
Grundy County									
3 N Brimson	08	0018CST			0	0			Hail (0.75)
Holt County									
Fortescue	08	2155CST			0	0			Thunderstorm Wind (G52)
			Trees reported down.						
Andrew County									
Savannah	08	2200CST			0	0	1K		Thunderstorm Wind (G52)
			Power lines and trees reported down.						
Nodaway County									
Burlington Jct	08	2202CST			0	0			Thunderstorm Wind (G52)
Platte County									
Bean Lake	08	2205CST			0	0			Thunderstorm Wind (G58) ^M
Platte County									
Edgerton	08	2225CST			0	0			Thunderstorm Wind (G52)
Platte County									
Weston	08	2225CST			0	0			Hail (1.25)

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
MISSOURI, Northwest									
Gentry County									
Albany	08	2235CST			0	0			Thunderstorm Wind (G52)
Gentry County									
Stanberry	08	2235CST			0	0			Thunderstorm Wind (G57) ^M
Clinton County									
Plattsburg	08	2258CST			0	0			Thunderstorm Wind (G52)
			Numerous trees blown down.						
Clay County									
Gladstone	08	2302CST			0	0			Hail (1.00)
Harrison County									
Cainsville	08	2313CST			0	0	1K		Thunderstorm Wind (G52)
			Power lines reported down.						
Ray County									
9 W Rayville	08	2325CST			0	0			Hail (1.00)
Daviess County									
Gallatin	08	2326CST			0	0			Thunderstorm Wind (G52)
Cass County									
Belton	08	2328CST			0	0			Hail (0.75)
Mercer County									
Mill Grove	08	2330CST			0	0			Thunderstorm Wind (G52)
			Large tree reported down.						
Grundy County									
2 NW Spickard	08	2335CST			0	0			Thunderstorm Wind (G57) ^M
Grundy County									
2 WNW Tindall	08	2335CST			0	0			Thunderstorm Wind (G52) ^M
Cass County									
5 SW Garden City	08	2340CST			0	0	10K		Thunderstorm Wind (G52)
			Roof tiles blown off. Automobile had windshield shattered and roof dented in. TV antenna blown over. A single wide trailer moved 4 feet of its foundation.						
Sullivan County									
Harris	08	2352CST			0	0			Thunderstorm Wind (G51) ^M
Livingston County									
Wheeling	09	0000CST			0	0			Hail (0.75)
			Also reported 60 mph wind gust.						
Carroll County									
Carrollton	09	0003CST			0	0			Thunderstorm Wind (G50)
Carroll County									
Carrollton	09	0010CST			0	0	25K		Thunderstorm Wind (G57)
			Roof blown off a house. Silo blown over onto church.						
Chariton County									
4 N Dalton	09	0015CST			0	0	2K		Thunderstorm Wind (G52)
			Small barn blown over.						
Linn County									
Brookfield	09	0020CST			0	0			Hail (0.75)
Putnam County									
Unionville	09	0029CST			0	0	8K		Thunderstorm Wind (G57)
			Roof blown off a 4H building.						
Saline County									
Marshall	09	0045CST			0	0			Hail (0.75)
Pettis County									
Sedalia	09	0055CST			0	0			Thunderstorm Wind (G52)
			Large tree blown down on highway 65.						
Macon County									
Excello	09	0105CST			0	0	40K		Thunderstorm Wind (G57)
			Barn destroyed and large power poles downed.						

Storm Data and Unusual Weather Phenomena

March 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
MISSOURI, Northwest									
Adair County									
2 E Kirksville	09	0120CST			0	0	15K		Thunderstorm Wind (G57)
	Large trees uprooted. Roof blown off a house and garage door blown in.								
Cass County									
Harrisonville	29	0615CST			0	0			Hail (0.75)
Pettis County									
10 S Sedalia	29	0719CST			0	0			Hail (0.75)
MISSOURI, Southeast									
MOZ076-086>087-100-107>112-114 Perry - Bollinger - Cape Girardeau - Wayne - Carter - Ripley - Butler - Stoddard - Scott - Mississippi - New Madrid									
	09	0700CST 1400CST			0	0			Wind
	Strong west winds around the back side of an intense low pressure system gusted to around 45 MPH for several hours. Some exact wind measurements from automated observing sites included: 40 MPH just west of Perryville, 46 MPH at Cape Girardeau, and 44 MPH at Poplar Bluff.								
MOZ100 Wayne									
	09	1800CST			0	0			Flood
	10	2000CST							
	The St. Francis River was above flood stage at Patterson on March 9 and 10. The river crested at 19.09 feet around 3 A.M. on March 10, about 3 feet over flood stage. Minor flooding of low-lying areas occurred, mostly rural and agricultural bottomlands.								
Stoddard County									
1 SW Dexter to Dexter	15	2003CST 2008CST			0	0			Hail (1.25)
	Dime to half-dollar size hail fell in Dexter for several minutes.								
MOZ100 Wayne									
	20	0900CST 2000CST			0	0			Flood
	The St. Francis River was above flood stage for a while on March 20. The crest was only about 6 inches above the 16-foot flood stage, which caused only minor flooding of low-lying rural areas.								
Butler County									
Countywide	25	1630CST 2200CST			0	0	25K		Flash Flood
Stoddard County									
Countywide	25	1730CST 2200CST			0	0	10K		Flash Flood
Bollinger County									
Countywide	25	1800CST 2200CST			0	0			Flash Flood
Cape Girardeau County									
Whitewater	25	1900CST 2200CST			0	0			Flash Flood
Perry County									
Countywide	25	1900CST 2200CST			0	0			Flash Flood
Ripley County									
Countywide	25	1900CST 2200CST			0	0			Flash Flood
Scott County									
Countywide	25	1900CST 2200CST			0	0	10K		Flash Flood
	A large area of slow-moving showers and thunderstorms persisted for an extended period of time, producing up to an inch of rain per hour. Rainfall totals were around 3 inches on average, with locally higher amounts. In Butler County, two houses and one outbuilding had water in them. A low water crossing on a rural road was impassable, and several other roads were flooded with up to 4 feet of water. Vehicle rescues were conducted in Butler County, and Highway 142 in Neelyville was closed. In Bollinger County, low water crossings on secondary roads were impassable. In Stoddard County, some washouts were reported on gravel roads, and numerous secondary roads had water over them. In Ripley County, Highway 142 at Naylor was completely flooded, and a couple of rural roads								

Storm Data and Unusual Weather Phenomena

March 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

were underwater. In Scott County, numerous roads were flooded, and water was over at least one bridge. Low water crossings in Perry County had water in them

MOZ114

New Madrid

27	0900CST				0	0			
29	1400CST								Flood

The Mississippi River rose above flood stage at New Madrid on March 27 and crested about one half foot above flood stage the next day. Minor flooding of mainly agricultural low-lying bottomlands occurred.

New Madrid County

New Madrid	29	1630CST			0	0			Hail (0.75)
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MISSOURI, Southwest

MOZ055>058-066>071-077>081-088>091-093>094-101>103	Benton - Morgan - Miller - Maries - Vernon - St. Clair - Hickory - Camden - Pulaski - Phelps - Barton - Cedar - Polk - Dallas - Laclede - Jasper - Dade - Greene - Webster - Newton - Lawrence - Mcdonald - Barry - Stone
-----------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

02	0200CST 1400CST				0	0	0		Winter Storm
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A late winter storm brought a variety of winter weather across southeast Kansas and portions of southwest, west central and central Missouri, during the morning and afternoon hours of March 2nd.

Strong low pressure developed over Arkansas the evening of March 1st, which moved copious amounts of moisture northward across the region. An arctic air mass moved through the area that early morning, dropping temperatures 20 to 30 degrees in six hours.

Before the snow started, a shallow layer of warm air aloft provided an hour or two of freezing rain, mixed with heavy sleet at times. Between one tenth and one quarter of an inch of ice accumulated on roadways before the heavy snow began. Between four to nine inches of snow fell northwest of a line from Stone County, northeast across Greene, Webster, Laclede, Pulaski and Phelps counties in less than eight hours. The heaviest snow fell in a band 30 miles wide from near Columbus, Kansas, eastward across Joplin, Greenfield, Bolivar and Buffalo.

Whiteout conditions were common over southwest and west central Missouri during the morning as northerly winds up to 40 mph caused considerable blowing and drifting snow. Numerous car accidents and indirectly related weather injuries were reported during the storm.

Barton County

4 N Lamar	09	0041CST			0	0	10K		Thunderstorm Wind (G65)
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Jasper County

Carl Jct	09	0050CST			0	0	0		Thunderstorm Wind (G58)
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Benton County

7 W Edwards	09	0110CST			0	0	0		Thunderstorm Wind (G58)
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Newton County

Neosho	09	0110CST			0	0	0		Thunderstorm Wind (G60)
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Hickory County

1.5 S Quincy	09	0115CST			0	0	2K		Thunderstorm Wind (G58)
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Mcdonald County

Anderson	09	0135CST			0	0	25K		Thunderstorm Wind (G58)
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Polk County

5 N Pleasant Hope	09	0205CST			0	0	0		Thunderstorm Wind (G60)
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Dallas County

Long Lane	09	0215CST			0	0	0		Thunderstorm Wind (G58)
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Greene County

5 S Fair Grove	09	0215CST			0	0	0		Thunderstorm Wind (G65)
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Lawrence County

Aurora	09	0215CST			0	0	0		Thunderstorm Wind (G58)
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Camden County

Osage Beach	09	0218CST			0	0	5K		Thunderstorm Wind (G65)
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A squall line formed over eastern Kansas prior to midnight and swept through western and central Missouri early morning March 9th. Although no major damage was reported, minor damage was reported to homes, outbuildings and power poles.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
MISSOURI, Southwest									
Howell County									
Pottersville	09	0430CST			0	0	10K		Thunderstorm Wind (G60)
A mobile homes roof was blown off near Pottersville.									
Shannon County									
Eminence	09	0440CST			0	0	0		Thunderstorm Wind (G60)
Numerous large trees were blown down.									
Phelps County									
Rolla	15	1200CST 1205CST			0	0	0		Hail (0.75)
Dade County									
Everton	15	1205CST 1210CST			0	0	0		Hail (0.75)
Greene County									
Fair Grove	15	1344CST			0	0	0		Hail (0.75)
Stone County									
Kimberling City	15	1410CST			0	0	0		Hail (0.75)
Laclede County									
Phillipsburg	15	1418CST			0	0	0		Hail (0.75)
Taney County									
3 N Walnut Shade	15	1430CST			0	0	0		Hail (0.75)
Taney County									
4 NE Protem	15	1430CST			0	0	0		Hail (0.75)
Pulaski County									
Buckhorn	15	1446CST			0	0	0		Hail (0.75)
Howell County									
Caulfield	15	1618CST 1620CST			0	0	0		Hail (0.75)
MOZ082-092-096>098- Texas - Wright - Douglas - Howell - Shannon - Ozark - Oregon									
105>106									
	19	1030CST			0	0	60K		Flood
	20	1500CST							
A heavy rainfall event developed the morning of March 19th, and continued through the overnight hours of March 20th. Bands of rainfall produced between two and four inches over portions of south central Missouri during an 18 to 24 hour period. The ground was already wet due to recent heavy rainfall, and with the addition of another two to four inches, widespread flooding developed.									
Numerous low water crossings were impassable, and major roadways were closed due to the high water. Even though the rainfall ended before sunrise on Wednesday, runoff continued which led to the roadways remaining closed through the afternoon of March 20th. The worst areas were in Howell, Oregon, Douglas, and Shannon counties where some bridges were water covered during the height of the event. Some corrugated pipes were washed out and some basement flooding was reported.									
In addition to the low water crossings, bridges, and county roads flooded, river flooding developed which included the Big Piney River rising above flood stage Tuesday evening.									
Benton County									
2 W Mora	29	0719CST			0	0	0		Hail (0.75)
Morgan County									
5 N Stover	29	0735CST			0	0	0		Hail (1.00)
Miller County									
3 N Eldon	29	0755CST			0	0	0		Hail (1.75)

Storm Data and Unusual Weather Phenomena

March 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

MTZ009-048

North Rocky Mountain Front - Southern Rocky Mountain Front

04	0400MST 1200MST				0	0			High Wind (G56)
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A high wind event occurred over the Rocky Mountain Front during the morning hours of the 4th. Wind gusts were estimated at 65 mph at 0900 MST 18 West of Pendroy, and at 60 mph at 0930 MST in East Glacier. Visibilities were reduced below one half mile at times due to blowing snow.

MTZ008>009-014>015-048-055

Beaverhead - North Rocky Mountain Front - Southern Lewis And Clark - Madison - Southern Rocky Mountain Front - Gallatin

05	0000MST				0	0			Winter Storm
06	2200MST								

Heavy snow developed over the Rocky Mountain Front early on the 5th, and then moved into Southwest Montana throughout the day. The snow continued to fall through the evening hours of the 6th. Total snow accumulations generally ranged from 6 to 8 inches over Southwest Montana, to 10 to 20 inches over the Rocky Mountain Front. Emergency travel only was advised over the Northern Rocky Mountain Front during much of this time.

Here is a list of some of the total snow accumulations from this event:: St. Mary 16 inches; Great Divide Sky Resort 15 inches; East Glacier Ranger Station 12 inches; Wise River 8 inches; Maudlow 9 SE 8 inches; and Silver Star 7 inches.

MTZ014-050>054

Southern Lewis And Clark - Judith Basin - Fergus - Jefferson - Broadwater - Meagher

07	1400MST 2200MST				0	0			Winter Storm
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A band of heavy snow moved through Southwest and Central Montana during the afternoon and evening hours of the 7th. Snowfall rates were near 2 inches per hour for several hours, as a band of snow moved northeast from Helena to Lewistown. Snow accumulations generally ranged from 6 to 8 inches over the plains, and up to 10 inches in the mountains. Emergency travel only was advised on Highway 12 in the Helena Vicinity.

MTZ010-048

Eastern Glacier - Southern Rocky Mountain Front

08	0000MST 1200MST				0	0			Extreme Cold
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Due to a fresh snow cover, and clearing skies on the 7th, the overnight temperatures plummeted to record levels on the morning of the 8th. Cut Bank had a record daily and monthly low temperature of 34 degrees Fahrenheit below zero, while Black Leaf fell to 40 degrees Fahrenheit below zero.

MTZ010-048

Eastern Glacier - Southern Rocky Mountain Front

10	1300MST				0	0			High Wind (G69) ^M
11	0400MST								

A high wind event occurred over parts of the Rocky Mountain Front beginning on the afternoon of the 10th, and ending during the early morning hours on the 11th. Sustained winds of 40 mph occurred at Cut Bank at 1540 MST, and an 80 mph wind gust was recorded at the Choteau Airport at 1530 MST.

MTZ009-048

North Rocky Mountain Front - Southern Rocky Mountain Front

11	0600MST				0	0			Winter Storm
12	0200MST								

A winter storm occurred over the higher elevations of the Rocky Mountain Front on the 11th. The heaviest snow was mainly confined to areas above 5000 feet. The Pike Creek, Waldron and Mount Lockhart SNOTEL sites, all reported over one inch of water equivalent during this event.

MTZ009-012-014-048-050>051-054

North Rocky Mountain Front - Cascade - Southern Lewis And Clark - Southern Rocky Mountain Front - Judith Basin - Fergus - Meagher

19	1500MST				0	0			Winter Storm
20	1200MST								

An area of heavy snow fell across the Rocky Mountain Front, and portions of Central Montana on the 19th and 20th. The snow began to fall over the Rocky Mountain Front on the afternoon of the 19th and then moved into Central Montana early on the 20th. The snow was heavy at times, with visibilities less than one half mile at times. Emergency travel only was in effect on some roads in the Helena area.

Here is a list of some of the total snow accumulations from this event: 26 inches at East Glacier; 20 to 30 inches at the Great Divide Ski Resort in Lewis and Clark County; 20 to 24 inches at Showdown Ski Resort in Meagher County; 13 inches at Lewistown 10 E; and 6 to 8 inches across the plains of Cascade, Judith Basin, and Fergus counties, along with the Rocky Mountain Front.

Storm Data and Unusual Weather Phenomena

March 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

MTZ016-018-059-061			Central And Se Phillips - Daniels - Northern Phillips - Northern Valley		0	0			Heavy Snow
		05 0100MST 1400MST							

A strong and moist winter storm brought heavy snow to portions of northeast Montana. The Port of Morgan reported the highest snow total with 10 inches, Malta reported 9 inches, Opheim had 8 inches and Scobey received 6 inches of snow.

MTZ021>022-026			Petroleum - Garfield - Prairie		0	0			Heavy Snow
		19 1800MST 20 1200MST							

A winter storm that affected Southeast Montana clipped the southern edge of the NWS Glasgow county warning area. A band of snow of 6 to 9 inches covered Southern Petroleum, Southern Garfield and Prairie Counties.

MONTANA, South

MTZ028			Wheatland		0	0			Heavy Snow
		08 0900MST							
			2 to 3 feet of new snow in the mountains just above Cooke City						

MTZ028			Wheatland		0	0			Heavy Snow
		08 0900MST							
			8 inches of new snow in Cooke City						

MTZ028			Wheatland		0	0			Heavy Snow
		08 0900MST							
			6 inches of snow in Livingston						

MTZ028			Wheatland		0	0			Heavy Snow
		08 0900MST							
			6 inches of snow in Nye						

MTZ028			Wheatland		0	0			Heavy Snow
		08 0900MST							
			6 inches of snow 4 miles south of Mcleod						

MTZ028			Wheatland		0	0			Heavy Snow
		08 0900MST							
			5 inches of new snow in Harlowton						

MTZ029			Musselshell		0	0			Heavy Snow
		08 0900MST							
			5 inches of new snow in Lavina						

MTZ029			Musselshell		0	0			Heavy Snow
		08 0900MST							
			5 inches of snow in Ryegate						

MTZ035			Yellowstone		0	0			Heavy Snow
		08 0900MST							
			4 inches of new snow at Billings airport						

MTZ028			Wheatland		0	0			Heavy Snow
		08 0900MST							
			4 inches of new snow in Mcleod						

MTZ033			Fallon		0	0			Heavy Snow
		08 0900MST							
			4 inches of snow in Baker						

MTZ029			Musselshell		0	0			Heavy Snow
		08 0900MST							
			4 inches of new snow in Roundup						

MTZ040			Park		0	0			High Wind (G59) ^M
		12 1700MST							
			59 mph sustained winds in Livingston						

Storm Data and Unusual Weather Phenomena

March 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>										
MTZ056			Western Carbon							
		12 2103MST			0	0			Heavy Snow	
			8 inches of new snow in Red Lodge							
MTZ034			Stillwater							
		14 1530MST			0	0			Heavy Snow	
			6 inches of new snow in Reed Point							
MTZ056			Western Carbon							
		14 1530MST			0	0			Heavy Snow	
			12-14 inches of new snow on Red Lodge Mountain							
MTZ058			Southern Rosebud							
		14 1530MST			0	0			Heavy Snow	
			5 inches of new snow in Birney							
MTZ037			Carter							
		14 1530MST			0	0			Heavy Snow	
			5 inches of new snow 20 miles west of Alzada							
MTZ041			Sweet Grass							
		20 0730MST			0	0			Heavy Snow	
			6 inches of new snow 8 miles north of Big Timber							
MTZ032			Custer							
		20 0800MST			0	0			Heavy Snow	
			9 inches of new snow in Miles City							
MTZ031			Northern Rosebud							
		20 0800MST			0	0			Heavy Snow	
			10 inches of new snow in Forsyth							
MTZ033			Fallon							
		20 0800MST			0	0			Heavy Snow	
			12 inches of new snow in Baker							
MTZ030			Treasure							
		20 0800MST			0	0			Heavy Snow	
			12 inches of new snow in Hysham							
MTZ029			Musselshell							
		20 1700MST			0	0			Heavy Snow	
			10 inches of new snow in Roundup							
MTZ031			Northern Rosebud							
		20 1800MST			0	0			Heavy Snow	
			12 inches of new snow in Colstrip							
MTZ037			Carter							
		24 1700MST			0	0			Heavy Snow	
			5 inches of new snow in Alzada							
<u>MONTANA, West</u>										
MTZ002-043			West Glacier Region - Blackfoot Region							
		01 0600MST			0	0			Heavy Snow	
		1600MST								
			Heavy snow blanketed the West Glacier and Blackfoot Regions on the morning of April 1, 2002, with 8-10 inches at Marias Pass, 9 inches at Moss Peak and 6 inches reported at Seeley Lake Ranger Station.							
MTZ001>007-043			Kootenai/Cabinet Region - West Glacier Region - Flathead/Mission Valleys - Lower Clark Fork Region - Missoula / Bitterroot Valleys - Bitterroot / Sapphire Mountains - Butte / Pintlar Region - Blackfoot Region							
		05 1700MST			0	0			Heavy Snow	
		07 2200MST								
			Late winter storm brought heavy snow to western Montana for two days, as an arctic frontal boundary met up with a moist pacific							

Storm Data and Unusual Weather Phenomena

March 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

airmass. Snowfall totals ranged from 6 to 12 inches in the valleys with one to two feet common in the mountains. Local whiteout conditions prevailed as the arctic front passed through, causing snow drifts over a foot in many areas. Commercial flights into the Butte Airport were canceled for most of the day on March 7th. Highest snowfall totals recorded in the mountains were Hoodoo Basin and Poorman Creek with 33 inches, and Marias Pass with 35 inches.

MTZ001>002-004-006-043 Kootenai/Cabinet Region - West Glacier Region - Lower Clark Fork Region - Bitterroot / Sapphire Mountains - Blackfoot Region

11	1400MST				0	0			Heavy Snow
12	1400MST								

Winter storm brought heavy snow and strong winds to the mountains of western Montana. Heavy snow began in the late afternoon of March 11 and lasted for 24 hours. Locally strong wind gusts over 50 mph occurred in the morning of March 12. Snowfall ranged from 6 to 8 inches just above 4000 feet, with one to two feet reported over the higher elevations. Highest snowfall amounts recorded were 16 inches at Badger Pass and 17 inches at Flattop Mountain in Flathead County. 24 inches of new snow was recorded at Hoodoo Basin in Mineral County.

MTZ001>002-004>006 Kootenai/Cabinet Region - West Glacier Region - Lower Clark Fork Region - Missoula / Bitterroot Valleys - Bitterroot / Sapphire Mountains

18	1322MST				0	0			Heavy Snow
21	0000MST								

MTZ001>003-043 Kootenai/Cabinet Region - West Glacier Region - Flathead/Mission Valleys - Blackfoot Region

20	0430MST				0	0			Blizzard
21	0000MST								

A major winter like spring storm developed over western Montana as Pacific moisture and an arctic front combined to dump record breaking heavy snow over the region for three days. Local blizzard conditions developed over portions of western Montana on the third day, as the arctic front pushed over the Continental Divide and southward into the Bitterroot Valley. North winds increased to between 30 and 40 mph just behind the arctic front, with most roads declared emergency travel only by the DOT. Many northwest Montana schools were closed down. Average snowfall in the valleys ranged from 6 to 12 inches, with one to two feet of new snow in the mountains. The West Glacier and Blackfoot Regions received the most snow with 29 to 39 inches reported. Kalispell Airport broke a three day snowfall record with 20 inches and a record low temperature of 10 degrees on March 20. In the Mission Valley, snow drifts of 3 to 4 feet were reported.

NEBRASKA, Central

NEZ025>029-037>038-059-070>071 Thomas - Blaine - Loup - Garfield - Wheeler - Logan - Custer - Lincoln - Hayes - Frontier

01	1000CST				0	0			Winter Storm
	1500CST								

A winter storm brought heavy snow, strong winds, and cold wind chills values as low pressure moved across Kansas. Snowfall amounts of 6 to 7 inches accumulated in portions of Hayes, Frontier, Lincoln, Logan, Thomas, Blaine, Loup, Garfield, and Wheeler counties. Snowfall amounts of 8 to 10 inches accumulated in southeast Custer county. Temperatures in the single digits with north winds of 20 to 30 mph created wind chill values of 10 to 20 below zero.

NEZ004>010-022>026-094 Sheridan - Eastern Cherry - Keya Paha - Boyd - Brown - Rock - Holt - Garden - Grant - Hooker - Thomas - Blaine - Western Cherry

14	0600CST				0	0			Winter Storm
	1800CST								

A low pressure system moved northeast across Kansas into southeast Nebraska and brought heavy snow to much of north central Nebraska. Strong north winds gusting to near 50 mph also caused near zero visibility during the afternoon of March 14th. The heaviest snowfall amounts of 10 to 20 inches fell across northern Sheridan and northern Cherry counties. Snowfall amounts ranging from 3 to 8 inches occurred over much of the remainder of north central Nebraska.

NEZ010

Holt

18	2100CST				0	0			Heavy Snow
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A convective band of heavy snow fell across the southeastern half of Holt county during the evening. Snow amounts ranged from three to nine inches over the area.

NEBRASKA, East

NEZ015-033>034-043>045-050>051-065>066-078 Thurston - Cuming - Burt - Colfax - Dodge - Washington - Butler - Saunders - Seward - Lancaster - Saline

08	1700CST				0	0			Winter Storm
	2355CST								

Freezing drizzle or light freezing rain that was falling over the area Friday afternoon quickly became heavier freezing rain and then sleet by early Friday evening (03/08/02) as a line of thunderstorms developed across the area. The thunderstorms were also

Storm Data and Unusual Weather Phenomena

March 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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NEBRASKA, West NEZ001>002

Sioux - Dawes

13	0900MST				0	0			Heavy Snow
14	1500MST								

Heavy snow fell across much of the northern portion of the Nebraska panhandle. Hardest hit was the area along and near the Pine Ridge where Crawford and Chadron, NE, reported 15 to 18 inches of snowfall.

NEVADA, North

NONE REPORTED.

NEVADA, South NVZ020

Las Vegas Valley

01	0030PST				1	0	100K		High Wind (G59) ^M
	1200PST								

A dry cold front pushed through the Las Vegas valley with winds gusting to over 50 mph. A Las Vegas man was killed when strong winds blew his motorcycle into a center concrete median. The motorcycle then struck a light pole throwing the man from his bike killing him instantly. Strong winds over the southern part of the valley blew down power lines which started a fire inside a horse corral, killing three horses. Around town, several trees were snapped and power lines were downed along with a few homes reporting significant roof damage.

M36VE

NEVADA, West NVZ002

Greater Lake Tahoe Area

05	1430PST				0	0	0		Heavy Snow
07	1430PST								

Mt. Rose ski area reported heavy snow with a storm total of 26-38 inches in 48 hours at 8840 feet.

NVZ002

Greater Lake Tahoe Area

07	0833PST				0	0	0		Heavy Snow
	1733PST								

The Washoe County Sheriffs Office station in Incline Village reported whiteout conditions, less than 1/4 mile visibility with snow falling at 2-3 inches per hour. Estimate of 8-10 inches in 9 hours and a storm total of 15-18 inches at 6300 feet.

NVZ003

Greater Reno/Carson City/Minden Area

07	1422PST				0	0	0		High Wind (G54) ^M
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RAWS sensor north of Reno recorded a wind gust to 62 mph.

NVZ003

Greater Reno/Carson City/Minden Area

07	1445PST				0	0	0		Heavy Snow
	1615PST								

Spotter in Empire reported 4 inches of snow in 90 minutes at 4900 feet.

NVZ004

Western Nevada Basin And Range

07	1630PST				2	0	150K		Winter Storm
	1700PST								

NHP reported a multi vehicle accident resulting in two deaths. Between 4:30 and 5:00 pm, a snowstorm hit the Fernley area reducing visibility to 1/4 mile. One semi lost control and spun out on I-80 about 6 miles east of Fernley, blocking the lanes and causing other vehicles to stop. Two sedans, a pickup, and another semi were all stopped when a third semi also lost control and was unable to stop. It overturned and crushed one of the sedans, killing both occupants. The driver was a 47 year old female from Winnemucca, NV., and her passenger was a 56 year old male, also from Winnemucca. The two sedans and pickup were totalled and two of the semis had moderate damage. Damage was estimated at \$150,000. F47VE, M56VE

NVZ003

Greater Reno/Carson City/Minden Area

10	0223PST				0	0	0		High Wind (G65) ^M
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Spotter report of wind gust to 75 mph in Gardnerville.

NVZ002

Greater Lake Tahoe Area

22	1900PST				0	0	0		Heavy Snow
23	0700PST								

Spotter in Incline Village reported 8 inches of snow in 12 hours at 6200 feet.

Storm Data and Unusual Weather Phenomena

March 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

NHZ005>010-013>014 Southern Grafton - Southern Carroll - Sullivan - Merrimack - Belknap - Strafford - Interior Rockingham - Coastal Rockingham

10 0800EST 0 0 Strong Winds
2200EST

Strong, gusty west winds downed limbs onto power lines causing scattered power outages. About 1500 customers were affected, some without electrical service for up to 10 hours. Most of the outages occurred in Barrington, Dover, Rochester, Farmington, Strafford, and Durham. Peak wind gusts were measured at 46 mph in Laconia and 45 mph in Concord. The strong winds developed behind a cold front that moved through the area early in the day.

NHZ001-007>008 Northern Coos - Sullivan - Merrimack

18 0900EST 0 0 Moderate Snowfall
19 1000EST

A weakening area of low pressure moving eastward from the Great Lakes brought a moderate snowfall to much of the state. Snowfall accumulations were generally in the 3 to 6 inch range across much of the state with 1 to 3 inches across the southeastern part of the state.

NHZ001>010-013 Northern Coos - Southern Coos - Northern Grafton - Northern Carroll - Southern Grafton - Southern Carroll - Sullivan - Merrimack - Belknap - Strafford - Interior Rockingham

20 1300EST 0 0 Heavy Snow
21 1500EST

An area of low pressure moving east-northeast from the Ohio Valley on the morning of the 20th brought from 5 to 10 inches of snow across much of the state. The heaviest amounts fell in a band from Merrimack County through Carroll County where 7 to 9 inches of snow fell. Lesser amounts fell in the Connecticut River valley west of the White Mountains where snowfall amounts ranged from 2 to 4 inches. Snowfall amounts were also lighter along the immediate coast.

NHZ001 Northern Coos

23 1400EST 0 0 Heavy Snow
24 0700EST

A weak area of low pressure moving through southeastern Canada and an associated cold front brought heavy snow to the higher terrain of northern Coos County. Snowfall amounts ranged from 3 to 10 inches.

NHZ001 Northern Coos

26 1400EST 0 0 Heavy Snow
2330EST

NHZ002-004 Southern Coos - Northern Carroll

26 1400EST 0 0 Moderate Snowfall
2330EST

An area of low pressure moving northeast from the Mississippi Valley on the morning of the 26th to central Maine on the morning of the 27th brought a mixture of precipitation to the state. Much of the precipitation fell as snow in northern Coos County where accumulations were generally in the 6 to 10 inch range. In the southern Coos and northern Carroll Counties, the snow was mixed with sleet, freezing rain, and rain, and accumulations generally ranged from 3 to 5 inches. Along the coast and in the remainder of the state, much of the precipitation fell as rain and accumulations ranged from near 0 to about 3 inches.

NEW HAMPSHIRE, Southern

NHZ011>012 Cheshire - Hillsborough

20 1000EST 0 0 Heavy Snow
2200EST

A late season winter storm brought heavy snow to the higher elevations of southern New Hampshire. Storm totals of 5 to 10 inches were widely reported in Cheshire and Hillsborough Counties. Some specific totals include 10 inches at MacDowell Dam; 9 inches in Jaffrey, Franconstown, Hillsborough, and Peterborough; and 8 inches in Walpole, Marlow, and Keene. Totals of 6 inches were reported in Dublin, Winchester, Swanzey, Nashua, Merrimack, and Hudson.

Several hundred electric customers were left without power. Dozens of accidents were also reported, with 6 injuries indirectly attributed to the storm. In Chesterfield, a series of accidents closed a portion of Route 63. Traffic slowed to a crawl on the F.E. Everett Turnpike during the afternoon and evening due to poor visibility and slippery roads.

NEW JERSEY, Northeast

Bergen County

Teaneck 10 0130EST 0 0 Thunderstorm Wind (G50)

As a line of thunderstorms swept east across the region, an isolated severe thunderstorm produced high winds that downed a few trees onto power lines in Teaneck.

Storm Data and Unusual Weather Phenomena

March 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

NJZ001-007>010-012>026

Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean

01	0000EST	0	0	0	Drought
31	2359EST				

New Jersey entered March 2002 with considerably dry conditions and a drought warning in effect for most of the state. The northern New Jersey and New York City Reservoirs were at about 40 percent of capacity, well below normal. Most of the state's shallow groundwater wells were at the lowest levels ever for this time of year. Most of the surface streams and rivers were flowing at only about 25 percent of normal. The South River in Atlantic County ran dry. There was a record number (500) of wells being replaced throughout the state through early March. All precipitated Governor Jim McGreevey to declare a drought emergency for the state of New Jersey on March 4th. The drought emergency placed an immediate ban on non-essential use of water. Water could be served in restaurants only by request. Vehicles and boats could only be washed commercially. Grass watering was banned except in the Raritan Basin and North Coastal New Jersey (every other day). There was a limit to the amount of watering for newly seeded or sodded grass. Gardens, trees and shrubs could only be watered using a hose or watering can. Golf courses must cut back usage by 50 percent. Athletic fields could only be watered overnight. Washing of streets, roads, sidewalks, driveways, garages, parking areas and patios with potable water was banned. Only commercial power washing of surfaces permitted. Running water through fountains, artificial waterfalls and reflection pools were prohibited except to support wildlife. Flushing of sewer lines with potable water was banned. Pools, hot tubs and jacuzzis can be filled as long as they have the consent of the local water provider. Any pool drained prior to March 11th could be refilled and a pool could be drained (for repairs) and refilled once. Major water consumers (>200,000 gallons a day) must develop contingency plans for incremental reductions to 50 percent. Water companies serving more than 10,000 people have to make sure the equipment that allows them to transfer water to other providers is working properly. Water releases from Lake Hopatcong was reduced from 7.5 to 4.4 million gallons per day to maximize water storage. There was a moratorium of new water allocation registrations to businesses seeking to use 100,000 gallons a day. This was extended to requests for any developments as small as two homes. Water was being pumped from central (Raritan Valley) New Jersey to help northeast New Jersey.

Along with the water restrictions came a ban on controlled burns as the Forest Service was heading into what usually is the start of the spring fire season. Recreational fires and open burns had to be coordinated with the New Jersey Forest Fire Service. Only outdoor barbecues and religious ceremonies that involved a fire were not banned. The unseasonably dry weather continued the fire season through the winter. The Forest Service responded to 1,116 wildfires between October 1, 2001 and March 25th, the most in 30 years. The drought not only could cause fires to spread quicker, but the streams and ponds used by the firefighters as water sources were drying out. Brooks and swamps that normally act as natural barriers to fire were running low. The drought can also prolong underground turf fires that can burn for days.

Effects of the drought on individual counties included in Sussex County, one well company had 200 well deepening contracts on back order. Well problems occurred in at least five townships. In Warren County, Christmas tree farms were showing stress. In Morris County, Roxbury Township issued a moratorium on all new water connections. In Hunterdon County, drought emergencies were declared (Raritan Basin) in Clinton and Glen Garden Boroughs. Wells were running dry in Hampton Borough and Cherryville. There was an eight week waiting list for drillers. In Ocean County, Brick Township may cancel the spring little league and soccer seasons because a total watering ban of athletic fields was in effect. In Burlington County, there was a seven week back log for deepening wells. In Atlantic County, wells were being replaced at twice the rate of 2001. In Cumberland County, irrigation ponds were dry. In Cape May County, the salt water line had moved north about 300 feet since last year and was under Lower Township. Once salt water infiltrates a well, it becomes brackish and unusable. There are about 9,000 private wells in Lower Township.

The drought had other affects across the area. Sprinkler system, garden centers, pond design, pool companies, landscapers and wholesale nurseries were expected to suffer because of the restrictions. Some frogs and salamanders are not expected to reproduce this year because most of the 3,000 to 5,000 vernal (winter) pools they lay their eggs in are dry. Wildlife in general was expected to be threatened by higher concentrations of lawn chemicals, pesticides, septic runoff and pollutants in the streams. A farmer's fish population died after he pumped water from the Manasquan River into his pond. The trout restocking went as scheduled, but the state avoided stocking them in smaller streams and brooks. Due to the lack of feed and warm weather there have been more nuisance bear sightings and deer have damaged more of the corn and alfalfa crops. The high number of acorns left on the ground led to a boom in the wild turkey population. Lower ground water levels led to poorer water quality that needed further treatment. Laundromat businesses were booming because people were afraid of running out of well water. Commercial car washes were also doing well. New golf course openings may be cancelled or postponed in Hunterdon and Mercer Counties. The winter wheat crop was suffering. The spring allergy season started earlier and stronger because of the dry, warm weather. The low level of Lake Hopatcong was expected to harm the local economy. The Budweiser Plant in Newark had to start using water from the Raritan River instead of the Wanaque Reservoir. The lack of standing water was expected to diminish the impact of mosquitoes and West Nile Disease.

The Delaware River Basin Commission, which oversees water supply throughout the Delaware River Basin declared a "drought" on December 3rd 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 18th. 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

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Property	Crops	Character of Storm
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NEW JERSEY, South and Northwest

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. On March 1st, the salt front along the Delaware River was five miles farther upstream than normal. 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.

Conditions improved in New Jersey as the month wore on. Precipitation events on March 2nd and 3rd, 13th, 17th and 18th, 20th, 26th and 31st resulted in above normal precipitation for most of the state. The March 2nd and 3rd precipitation event was the heaviest event in some locations since September of 2001. This was the first month since June of 2001 that the statewide average monthly precipitation (4.35 inches preliminary average) was wetter than normal (4.17 inches). On a county weighted average, March monthly precipitation totals ranged from 3.0 inches in Sussex County to 4.8 inches in Atlantic County. Monthly precipitation totals were 4.21 inches in Trenton and 5.61 inches at the Atlantic City International Airport. Soil moisture in farms reached down to about 10 inches by the end of the month. Reservoirs and groundwater levels started to improve, but were still below normal. Most are normally near capacity by the end of the month. The Northern New Jersey reservoirs increased from about 40 percent to 48 percent of capacity during the month. The Spruce Run Reservoir in Hunterdon County increased from 32 to 40 percent of capacity. In Monmouth County, the Swimming River Reservoir was overflowing and the other its two reservoirs were up to about 85 percent of capacity. A monitoring groundwater well in Hunterdon County rose five feet during the month. The New York City Reservoirs which feed the Delaware River increased from 39.3 percent of capacity on March 1st to 50.2 percent of capacity on April 1st. The salt front on the Delaware River was only 2 miles farther upstream than normal on April 1st. But, average flow for the major streams and rivers were still only about 50 percent of normal.

Hunterdon County

Lambertville to	02	2100EST							
Reaville	03	0300EST			0	0	0	0	Heavy Rain

Mercer County

Washington Crossing to	02	2100EST							
Mt Rose	03	0300EST			0	0	0	0	Heavy Rain

Morris County

Countywide	02	2100EST							
	03	0300EST			0	0	0	0	Heavy Rain

Somerset County

Far Hills to	02	2100EST							
Blawenburg	03	0300EST			0	0	0	0	Heavy Rain

A low pressure system that developed along the Gulf Coast States on the second moved northeast through Pennsylvania during the early morning of the 3rd and brought a significant precipitation event for New Jersey. In most locations, it was the wettest single precipitation event since either August or September of 2001. Storm totals averaged between 0.50 inches and 1.50 inches. The heaviest rain fell across northern Mercer, southern Hunterdon, western Somerset and Morris Counties. Some poor drainage flooding occurred, but streams were running so low prior to the rain that they did not flood. Rain spread from south to north across the state between 5 p.m. and 8 p.m. EST on the 2nd. The heaviest rain fell between 900 p.m. EST on the 2nd and 300 a.m. EST on the 3rd. The rain ended by daybreak on the 3rd. Specific storm totals included 1.52 inches in Long Valley (Morris County), 1.49 inches in Gillette (Morris County), 1.48 inches in Neshanic (Somerset County), 1.40 inches in Washington's Crossing (Mercer County) and 1.28 inches in Flemington (Hunterdon County).

Monmouth County

Spring Lake	04	1600EST							
					1	0	0	0	Heavy Surf

Rough surf, that was caused by the weekend low pressure system, caused the drowning death of a lone surfer on Monday March 4th. The 28-year-old male surfer was surfing by himself off of the Lorraine Avenue Beach in Spring Lake. He disappeared about 4 p.m. EST that afternoon and his body was pulled from the ocean about one hour later. M28IW

Warren County

Countywide	10	0100EST 0115EST							
					0	0			Thunderstorm Wind (G50)

A line of strong to severe thunderstorms moved through Warren County shortly after midnight EST on the 10th. Numerous tree limbs and a few trees were knocked down throughout the county. A house under construction had plywood blown off its roof.

Sussex County

Montague to	10	0105EST 0120EST							
Fredon					0	0			Thunderstorm Wind (G50)

Storm Data and Unusual Weather Phenomena

March 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

A line of strong to severe thunderstorms moved through Sussex County a little after midnight EST on the 10th. The worst reported wind damage occurred in the western half of the county where several trees were knocked down.

Morris County

Dover

10	0135EST				0	0			Thunderstorm Wind (G50)
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A severe thunderstorm tore down numerous large limbs in Dover Town. Most of the town lost power overnight.

NJZ001-007>010-012-014>026

Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean

10	0400EST				0	0			Wind
	1900EST								

NJZ013

Western Monmouth

10	0400EST				0	0			High Wind
	1900EST								

A strong cold frontal passage before dawn ushered in one of the coldest air masses of the winter season on the 10th. A line of thunderstorms accompanied its passage and produced some wind damage on its own in the northwest part of the state just after midnight. The surface pressure difference (pressure gradient) between a high pressure system in the Mississippi Valley and a very intense low pressure system (around 970 millibars) just east of James Bay produced more windy conditions from just before dawn into the early evening of the 10th. As the high pressure system moved closer to New Jersey late in the day, winds diminished. The worst reported wind damage occurred in Keansburg in Monmouth County. At 515 a.m. EST the winds tore off a section of a roof of an apartment building and knocked down several power lines. Forty people were evacuated from the building, several were sheltered at the New Point Comfort Fire Company. They were permitted to return to the building later that evening. Elsewhere in Monmouth County, the strong winds knocked down three telephone poles at 11 a.m. EST in Middletown Township and caused one road closure.

Peak wind gusts averaged between 35 and 55 mph and included 54 mph in Keansburg (Monmouth County), 49 mph in Sparta Mountain (Sussex County), 48 mph in Atlantic City (Atlantic County), 47mph in Mountain Creek (Sussex County), 46 mph in Sandy Hook (Monmouth County), 45 mph at the Atlantic City International Airport and Lumberton (Burlington County), 43 mph in Cape May Harbor (Cape May County), 41 mph on Long Beach Island (Ocean County), 40 mph in Trenton (Mercer County), 39 mph in Morristown (Morris County) and Somerville (Somerset County) and 36 mph in Millville (Cumberland County).

Ocean County

Bayville

10	1415EST				0	0			Wild/Forest Fire
	1715EST								

Two separate marsh fires occurred in the Bayville section of Berkeley Township (Ocean County). Strong gusty northwest winds helped spread the fires quickly. Both occurred during the afternoon and within a mile of each other. The first fire occurred on Bay Boulevard as a brush fire, but strong winds helped spread it. The fire damaged the deck and parts of the exterior of one house on Bay Boulevard and forced the evacuation of the Windows on the Bay Restaurant. The second fire occurred on Sloop Creek. A roadway was closed, but no damage occurred.

Monmouth County

Port Monmouth

10	1700EST				0	0	0	0	Wild/Forest Fire
	1900EST								

A brush fire, largely exacerbated the strong gusty westnorthwest winds, scorched about 200 acres of brush in the Port Monmouth section of Middletown Township around 5 p.m. EST. The fire began near Main Street and Broadway. The strong winds fanned the fire and brought it close to several houses on Park Avenue, but none were damaged. About 100 firefighters fought the blaze which was extinguished about two hours later.

NJZ001-007>010-012-015-017>019

Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Mercer - Gloucester - Camden - Burlington

17	1500EST				0	0			Wintry Mix
	1800EST								

A wintry mix of snow, sleet, freezing rain and rain occurred across much of New Jersey west of the New Jersey Turnpike from the afternoon of the 17th through the afternoon of the 18th. In Gloucester, Camden and Burlington Counties snow began falling between 3 p.m. EST and 4 p.m. EST on the 17th. Precipitation was mixed with some rain and sleet from the start in Camden and Gloucester Counties. After 8 p.m. EST precipitation fell as mainly rain with some sleet mixed in from time to time into the early morning of the 18th. Accumulations were under an inch. Across Mercer County and the Raritan River Basin, snow began between 4 p.m and 6 p.m EST and fell moderately at times. The change to sleet and plain rain took longer as mixed precipitation fell throughout the evening. Precipitation fell as plain rain from the early morning on the 18th until it ended during that day. Snow and sleet accumulations averaged 1 to 3 inches. Across Morris, Warren and Sussex Counties, snow began falling between 6 p.m. EST and 9 p.m. EST on the 17th. Sleet began mixing in after midnight EST with pockets of freezing rain in some of the higher terrain valleys. Plain rain occurred from around 6 a.m. EST onward on the 18th, but a mixed bag of precipitation persisted throughout the day across Sussex County until the event ended around 6 p.m. EST on the 18th. Snowfall and sleet accumulations averaged 1 to 2 inches as the heaviest precipitation remained south of the region. Ice accretions from the freezing rain were less than one-quarter of an inch. Since this

Storm Data and Unusual Weather Phenomena

March 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

event occurred on a Sunday night, no significant accidents were reported. High temperatures from the 14th through the 16th averaged in the 60s north and the 70s south. This probably helped keep road surfaces relatively warm and ice free throughout this event. Some slippery bridges and overpasses were reported during the morning commute on the 18th in Sussex County. Most of the accumulations reported were on grassy surfaces.

Specific accumulations included 4.0 inches in Pottersville (Somerset County), 3.3 inches in Lambertville (Hunterdon County), 2.0 inches in Pennington (Mercer County) and Rockaway (Morris County), 1.8 inches in Wantage (Sussex County), 1.4 inches in New Brunswick (Middlesex County), 1.0 inch in Morristown and Long Valley (Morris County), Belvidere (Warren County) and Princeton (Mercer County), 0.5 inches in Mount Laurel (Burlington County) and 0.3 inches in Maple Shade (Burlington County).

A strong cold front moved through the northeast on the 16th and brought in considerably colder air. A high pressure system built into eastern Canada and northern New England on the 17th and helped lock the cold air in place, especially at and within the lowest 5000 feet of our atmosphere. Meanwhile a weak low pressure system developed on the old cold frontal boundary in the Tennessee Valley during the morning of the 17th. It moved eastward off the Carolina coast on the 18th. Because the low was so far south and weak, the heaviest precipitation remained from the Philadelphia suburbs and southern New Jersey southward with this event. On the other hand, since the low was relatively weak, so was the onshore flow and thus the longer it took to scour the cold air from the lower layers of the atmosphere.

NJZ001-008

Sussex - Morris

20	0300EST 1500EST	0	0	0	0	Snow
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An elevation dependent snow fell across the higher terrain of Northwest New Jersey on the 20th. There was enough cold air in place over the higher terrain and the precipitation intensity was heavy enough to have precipitation fall as snow. Meanwhile in the valleys and lower elevations, precipitation fell as mainly rain. In Sussex (Sussex County), New Jersey the entire event was rain. Snow began over the higher terrain before daybreak on the 20th. Precipitation changed to rain before it ended in the afternoon on the 20th. In Morris County, Mount Olive Township dismissed school children early. Specific accumulations included 4.5 inches in High Point (Sussex County) and 3.5 inches in Wantage (Sussex County). No serious accidents were reported. The low pressure system responsible for the higher terrain snow moved from southern Texas on the 19th northeast into the Ohio Valley the morning of the 20th and then east off the Delmarva Peninsula during the evening of the 20th.

NJZ001-007>010-012>026

Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean

21	1900EST	0	0	0	0	Wind
22	0600EST					

NJZ013

Western Monmouth

22	0100EST	0	0	0	0	High Wind (G51) ^M
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A strong cold front moved through New Jersey during the evening of the 21st. It was accompanied by wind gusts of around 40 mph inland and around closer to 50 mph along the shore. The strong gusty winds persisted throughout the night. In inland locations the strongest wind gusts occurred with the cold frontal passage and during the ensuing evening. But, along coastal areas, wind gusts intensified after midnight EST and peaked at between 45 and 60 mph during the early morning of the 22nd. Peak wind gusts included 59 mph in Keansburg (Monmouth County), 55 mph in Sandy Hook (Monmouth County) and Barnegat (Ocean County), 43 mph at the Cape May Ferry Terminal (Cape May) and the Atlantic City International Airport, 39 mph in Sussex (Sussex County) and Somerville (Somerset County), 37 mph in Millville (Cumberland County), 36 mph in Trenton (Mercer County) and 33 mph in Lumberton (Burlington County).

Gloucester County

National Park

22	0700EST 1500EST	0	0	0	0	Wild/Forest Fire
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A wildfire destroyed about 10 acres of brush in National Park (Gloucester County).

Gloucester County

Thorofare

24	0700EST 1500EST	0	0	0	0	Wild/Forest Fire
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A wildfire destroyed over 20 acres of brush in West Deptford Township. The drought contributed to the increase in the number of wild and brush fires in Gloucester County. Through March 28th, there were 163 brush fires in the county as compared to 76 at the same time in 2001.

NJZ001

Sussex

26	0700EST 2000EST	0	0	0	0	Ice Storm
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A large high pressure system moved across southern Canada on the 25th and was centered just northwest of Maine the morning of the 26th. It pumped unseasonably cold air into Sussex County New Jersey and temperatures early on the 26th were below freezing. Meanwhile a low pressure system moved from Oklahoma on the 25th into the Tennessee Valley on the 26th. This low pumped

Storm Data and Unusual Weather Phenomena

March 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

warmer air aloft above its warm frontal boundary toward Northwest New Jersey. While it was warm enough aloft for precipitation to fall as rain, as it reached the surface, it froze on contact. Precipitation started as freezing rain with some sleet around daybreak on the 26th. It changed quickly to rain in many of the warmer valleys, but persisted into the early evening across the higher terrain in the northwest part of the state. Since most of the precipitation fell during the day and air temperatures were fairly close to freezing, roadway conditions were reported in good shape. The indirection insolation through the clouds was enough to keep most road surfaces wet and not icy. But, around one-quarter of an inch of ice did accrue on other exposed surfaces. In the early evening on the 26th, the low pressure system was nearing the area and pulled in enough warm air from the Atlantic Ocean to change the freezing rain to rain just as thunderstorms with heavier rain were moving into Sussex County.

NEW MEXICO, Central and North

NMZ001>021-026 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

01	0001MST								
31	2359MST				0	0			Drought

Dry late winter and early spring conditions continued to raise fears of an early and extended fire weather season, while projections for snow melt runoff of only 30-40 percent of normal threatened a lack of irrigation water as farmers were gearing up for planting season and first waterings of alfalfa.

NMZ005-008-011>012-016>017 Northeast Highlands - Westcentral Mountains - Central High Plains/Estancia Valley County - Conchas Lake/Guadalupe - Lincoln County High Plains/Hondo Valley - Capitan/Northern Sacramento Mountains

08	1400MST								
	1900MST				0	2			High Wind (G52) ^M

Gusty winds swept over northern and central New Mexico causing widespread blowing dust and whipping small fires into uncontrollable blazes. Six people died and 17 others were injured in a chain reaction crash involving 14 cars, several tractor trailers and a school bus on Interstate 40 near Cuervo in Guadalupe County where winds carried smoke from an accidental fire northward over the highway. Visibility was estimated at near zero for about a quarter mile along the highway during the peak of the fire. Several other motorists were injured in McKinley county when their recreational vehicle was blown off the road.

Lincoln County

5 E Alto to	24	1330MST							
7 NE Alto	26	1800MST			0	0	5M		Wild/Forest Fire

Winds of 45 to 55 mph whipped an accidental fire into a fast moving wildfire that consumed 12,000 acres and 20 homes before crews and air tank attacks gained control in much lighter winds.

NEW MEXICO, South Central and Southwest

NONE REPORTED.

NEW MEXICO, Southeast

NMZ028 Eddy County Plains

08	1300MST								
					0	0	50K	0	High Wind (G58)

NWS spotters reported a multi vehicle pile-up on Highway 285 3 miles north of Artesia. The collision was the result of high winds and blowing dust...which significantly lowered visibilities. Damage amounts are estimated...and no injuries were reported. The winds were the result of a tight surface pressure gradient across southeast New Mexico.

NEW YORK, Central

Steuben County

Countywide	09	2100EST							
		2200EST			0	0			Thunderstorm Wind (G60)

Numerous trees and wires down countywide including Hornell and Addison.

Yates County

Friend to Starkey	09	2130EST							
		2200EST			0	0			Thunderstorm Wind (G60)

Trees and power lines down. Also reported in Milo Center.

Seneca County

Countywide	09	2140EST							
		2220EST			0	0			Thunderstorm Wind (G60)

Scattered trees and small limbs down on power lines.

Storm Data and Unusual Weather Phenomena

March 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>NEW YORK, Central</u>									
Cayuga County	09	2200EST 2210EST			0	0	5K		Thunderstorm Wind (G60) ^M
Countywide									Scattered trees and small limbs down on wires countywide. 60 mph wind measured in Weedsport. Also in Weedsport aluminum roofing torn off house.
Schuyler County	09	2200EST 2225EST			0	0	5K		Thunderstorm Wind (G60)
Countywide									Trees and wires down countywide but mostly in Cayuta and Odessa. House damaged in Cayuta with minor damage to 2 skylights and numerous shingles.
Chemung County	09	2210EST 2245EST			0	0			Thunderstorm Wind (G60)
Countywide									Numerous trees and wires down countywide.
Tompkins County	09	2215EST 2245EST			0	0			Thunderstorm Wind (G60)
Countywide									Trees and wires down countywide.
Tioga County	09	2245EST 2305EST			0	0			Thunderstorm Wind (G60)
Countywide									Trees and wires down countywide.
Oneida County	09	2300EST 2330EST			0	0	25K		Thunderstorm Wind (G60)
Countywide									Widespread wind damage to trees and power lines countywide. Structural damage to houses and businesses in Rome at 23:15 EST.
Broome County	09	2315EST 2345EST			0	0			Thunderstorm Wind (G60)
Countywide									Trees and power lines down countywide including Vestal and Binghamton.
Cortland County	09	2315EST			0	0			Thunderstorm Wind (G60)
Homer to Cincinnatus									Trees and power lines down in Homer and Cincinnatus.
Chenango County	09	2325EST 2355EST			0	0			Thunderstorm Wind (G60)
Countywide									Trees and power lines down countywide including Afton, Bainbridge, Coventry, and Guilford.
Otsego County	09 10	2350EST 0020EST			0	0			Thunderstorm Wind (G60)
Countywide									Trees, power lines, and poles down including Unadilla, Middlefield, Oneonta, and Springfield.
Delaware County	10	0000EST 0030EST			0	0			Thunderstorm Wind (G60)
Countywide									Numerous trees and wires down.
Sullivan County	10	0045EST			0	0			Thunderstorm Wind (G60)
Monticello									Trees and wires down. Also reported in Hankins. Damage occurred with a squall line of severe thunderstorms as a strong cold front moved through the region.
NYZ009-037									
									Northern Oneida - Southern Oneida
	10	1400EST			0	0			Heavy Snow
	11	1300EST							
									A cold west to east wind down the length of Lake Ontario brought lake effect snow into central and northern Oneida County. The lake effect band of snow moved south into the county during the afternoon of the 10th. The band remained nearly stationary the night of the 10th into the 11th from Camden to Holland Patent. The band of snow lifted back north as it diminished in intensity late morning to early afternoon on the 11th. Snowfall totals in central and northern Oneida County were 6 to 12 inches. Most locations south of Oneida Lake and the New York state thruway had less than 6 inches.

Storm Data and Unusual Weather Phenomena

March 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, Central

NYZ009-037

Northern Oneida - Southern Oneida

20	0500EST 2100EST				0	0			Heavy Snow
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Strong low pressure moved quickly from the Tennessee Valley to New Jersey on the 20th. A cold moist southeast flow set up ahead of the low on the back side of a high pressure area in New England. The greatest snowfall amounts of 6 to 9 inches were at the highest elevations in Oneida County. At lower elevations snowfall amounts were less due to temperatures above freezing. The snow also mixed with or changed to rain in the afternoon and evening.

NYZ009

Northern Oneida

22	1300EST				0	0			Heavy Snow
23	0400EST								

A band of lake effect snow moved north into Northern Oneida County early in the afternoon on the 22nd. The band intensified toward evening. The flow was west to east down the entire length of Lake Ontario. Snowfall rates were up to 2 inches an hour. Snowfall amounts were mostly between 6 and 12 inches. The greatest snowfall amount by far was reported by the NWS cooperative observer in Boonville. He reported a 24 hour snowfall amount of 23.3 inches at 10 AM. The band lifted north out of the county as it weakened early on the 23rd. Warmer air moved in combined with winds backing to the southwest.

NYZ009-036>037-045>046-056>057

Northern Oneida - Madison - Southern Oneida - Chenango - Otsego - Broome - Delaware

26	0700EST 2300EST				0	0	40K		Ice Storm
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A slow moving strong surface low brought abundant moisture into the area on the 26th. That morning the surface low was in West Virginia. That evening the low was near Erie, Pennsylvania with a warm front in Pennsylvania. The low continued moving northeast to be in Maine the morning of the 27th. The storm brought rain to valleys but freezing rain to the higher elevations of the affected area. Total rainfall was one inch to two and a half inches. Temperatures of the air and the surface were both near freezing so the amounts of freezing rain were only up to an inch. During the afternoon, some locations rose to and above freezing only to fall back below freezing late in the afternoon and early evening. Trees and wires were downed by the weight of the ice. More than 10,000 residents lost power. across the six county area. Over 1,000 residents still had no power two days later on the afternoon of the 28th.

Broome County

**Vestal to
Kirkwood**

26	1853EST 2200EST				0	0	5K		Flash Flood
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The Choconut Creek flooded in Vestal. The Stratton Mill Creek flooded in Kirkwood. The city of Binghamton had urban street flooding.

Delaware County

Davenport

26	1929EST 2330EST				0	0			Flash Flood
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The Charlotte Creek in the town of Davenport was out of its banks flooding county route 11.

Otsego County

Emmons

26	1929EST 2330EST				0	0			Flash Flood
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The Charlotte Creek flooded near Emmons.

Flash flooding was due to an inch and a half to two and a half inches of precipitation mostly in the form of rain. Most of the rain fell in a 12 hour period during the day on the 26th. The rain fell onto a saturated snow covered ground. Snow depths were only a few inches with water equivalents less than an inch. Creeks and streams flooded in the area the evening of the 26th. The Susquehanna River also flooded on the 27th and 28th. The rain was caused by a strong slow moving surface low in West Virginia the morning of the 26th. That evening the low moved to Erie, Pennsylvania before picking up speed to be in Maine the morning of the 27th. Broome, Delaware, and Otsego Counties were in an overrunning event on the north side of a warm front.

NYZ045-055>056

Chenango - Tioga - Broome

27	0630EST				0	0			Flood
28	2200EST								

Minor flooding occurred on the Susquehanna River in New York on the 27th and 28th. This was due to an inch and a half to two and a half inches of precipitation mostly in the form of rain. Most of the rain fell in a 12 hour period during the day on the 26th. The rain fell onto a saturated snow covered ground. Snow depths were only a few inches with water equivalents less than an inch. Creeks and streams flooded in the area the evening of the 26th. The Susquehanna River at Bainbridge rose to flood stage of 13 feet at 8:30 AM on the 27th. The river at Bainbridge crested at 13.47 feet 9 PM on the 27th then fell below flood stage at 6 AM on the 28th. The Susquehanna River at Conklin rose to flood stage of 11 feet at 6:30 PM on the 27th. The river at Conklin crested at 12.13 feet at 7:45 PM on the 27th. The stage at Conklin fell below flood stage at 10 PM on the 28th. The Susquehanna River at Waverly rose to the flood stage of 11 feet at 8 AM on the 27th. The river at Waverly crested at 11.47 feet at 7:45 PM on the 27th before falling back below flood stage at 8 AM on the 28th.

Storm Data and Unusual Weather Phenomena

March 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, Coastal

Orange County

Greenville to Warwick	10	0129EST 0134EST			0	0			Thunderstorm Wind (G52)
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As a line of thunderstorms swept east across the region, scattered severe thunderstorms produced high winds that downed many trees onto power lines at several locations including Greenville, Middletown, and Warwick.

NEW YORK, East

NYZ041-043-050

Northern Saratoga - Washington - Southern Saratoga

03	1648EST				0	0	50K		High Wind
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A line of showers, right ahead of a powerful cold front, produced destructively strong non-convective wind gusts across Saratoga and Washington Counties, late on the afternoon of Sunday, March 3rd. In Saratoga County, wind gusts blew a roof off a house in the town of Greenfield. A tree blew through a house in Halfmoon and numerous trees and wires were blown down in Corinth. In Washington County, trees and wires were blown down in the town of Cambridge.

NYZ039-041>043-047-050-060

Fulton - Northern Saratoga - Warren - Washington - Schoharie - Southern Saratoga - Western Columbia

09 10	2300EST 0300EST				0	0	224K		High Wind (G64) ^M
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The pressure gradient between deep low pressure over Ontario, and high pressure off the southeast coast, produced a strong southerly flow across eastern New York on the evening of March 9. Then, a strong cold front moved across the region shortly after midnight, early on March 10th. A line of showers and embedded thunderstorms accompanied the front. Strong winds ahead of and along the front produced some damage across a few counties. Law enforcement personnel reported a large number of trees and power lines down in Warren and Washington Counties. In Saratoga County, a very large tree limb was blown onto power lines disrupting power to many customers. Trees and wires were reported down in and around the city of Saratoga Springs. In Schoharie County, a wind gust was clocked to 64 mph in the town of Summit. In Columbia County, a large tree fell onto a home in Philmont, causing structural damage to the roof and attic of the house. In Lake George, Warren County, downed electrical wires may have triggered a fire that in turn, destroyed a boat repair business, nine boats and two nearby cabins. In Fulton County, a large tree fell onto a cabin, damaging the roof.

The National Weather Service in Albany New York determined that all the wind damage was the result of non-convective gradient winds.

NYZ033-039-041-051-058-063

Hamilton - Fulton - Northern Saratoga - Western Albany - Western Greene - Western Ulster

20	1500EST 2000EST				0	0			Winter Storm
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An area of low pressure developed in the Ohio Valley early on March 20th. The low then tracked east along the Mason-Dixon line during the day, and off the mid Atlantic coast by evening. Moisture from both the Gulf of Mexico and Atlantic ocean was drawn into the storm. The air was just cold enough for the precipitation to fall mostly in the form of snow across eastern New York. This snowstorm, on the first day of astronomical spring, was elevation dependent, as a swath of 6 to 12 inches accumulated across the higher terrain of the Catskills and Western Adirondacks as well as the northern rim of the Mohawk Valley. Some specific snowfall amounts included 7.0 inches at Northville, Fulton County, 8 at Phoenicia, Ulster County, 9.7 at Galway, Saratoga County, and 11.8 inches at Platte Clove in Greene County. The snowstorm produced quite a few vehicular accidents. However, no other significant problems were reported to the National Weather Service office at Albany, NY.

NYZ032>033-039-042-047>048

Northern Herkimer - Hamilton - Fulton - Warren - Schoharie - Western Schenectady

26	1800EST 2359EST				0	0	62K		Winter Storm
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A low pressure area deepened as it tracked just to the lee of the Appalachians in both Pennsylvania and New York on March 26. This storm had a copious supply of moisture associated with it. Cold air, dammed on the east side of the mountains, held its ground, which produced an extended interval of frozen and freezing precipitation across Warren, Herkimer, northern Hamilton as well as the elevated portions of Fulton, Schoharie and Schenectady counties. Around an inch of water equivalent accumulated in these areas, with the precipitation falling mostly as a mixed bag of snow, sleet and even freezing rain. This scenario resulted in about a half to an inch of ice buildup across portions of these counties. The build up of ice, exasperated by 35 mph winds, brought down many trees and some power lines in these areas. In addition, North Creek in Warren County reported 6.5 inches of snow, followed by sleet and freezing rain. At the height of the storm, over 17,000 customers lost electrical power, more than 7,000 in Fulton County alone.

NEW YORK, North

NYZ034>035

Western Essex - Eastern Essex

03	1600EST 1645EST				0	0	10K		High Wind
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A complex storm system, with centers over Lake Huron and central New York state on Sunday morning, March 3rd, moved northeast. This system consolidated into one storm and reached Labrador early Monday, March 4th. Strong winds accompanied the

Storm Data and Unusual Weather Phenomena

March 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, North

associated cold front which moved across the area during the late afternoon and evening of March 3rd. Trees were reported down across Essex county, New York, especially in the towns of Wilmington and Ticonderoga, with power out in Westport.

NYZ026-026-029

Northern St. Lawrence - Southern St. Lawrence

09	2115EST				0	0	30K		High Wind (G55) ^M
10	0040EST								

A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the late night of March 9th and early morning of March 10th. Strong winds were associated with this low pressure system and strong cold front during the late night of March 9th and early morning of March 10th. At Massena International Airport, winds measured by ASOS were 63 mph (55 knots). In addition, trees and power lines were reported blown down across the entire county.

NYZ027-030

Northern Franklin - Southern Franklin

09	2300EST				0	0	10K		High Wind (G56)
10	0315EST								

A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the late night of March 9th and early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the late night of March 9th and early morning of March 10th. In the town of South Bombay, New York, winds were estimated at 64 mph (56 knots). In addition, trees and power lines were reported blown down in Saranac, NY with a tree blown down in Gabriels, NY.

NYZ034>035

Western Essex - Eastern Essex

10	0100EST				0	0	30K		High Wind
	0300EST								

A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the early morning of March 10th. There were numerous power outages due to the high winds across all of Essex county, with the most impacted portion being the southern half of the county. The towns with the most damage reported included: Minerva, Schroon, Westport and Moriah. In Ticonderoga, a large new barn was destroyed.

NYZ028

Northeast Clinton

10	1205EST				0	0			High Wind (G48) ^M
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A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the early morning of March 10th. At Clinton County Airport (Plattsburgh, NY) winds measured by ASOS were 55 mph (48 knots).

NYZ030>031-034

Southern Franklin - Southwest Clinton - Western Essex

20	1500EST				0	0	15K		Light Snow
	2200EST								

A late season winter storm moved northeast from the Tennessee Valley early Wednesday, March 20th passing across southern New England Wednesday night. Snow spread across the area during the morning and became steadier during the afternoon into the early night hours. Accumulations of the wet snow were generally 3 to 6 inches. Heaviest amounts fell in the Adirondacks, with lesser amounts elsewhere in northern New York.

NYZ026-029>031-034

Northern St. Lawrence - Southern St. Lawrence - Southern Franklin - Southwest Clinton - Western Essex

26	1400EST				0	0	50K		Mixed Precipitation
	2359EST								

A late season storm system moved northeast from the Tennessee Valley on the morning of Tuesday, March 26th and passed across New England during the night of March 26th and early Wednesday morning, March 27th. Snow overspread the area during the afternoon of the 26th, then mixed with or changed to sleet and freezing rain during the early night hours. In general, across this area around 4 inches of snow fell with some icing.

NYZ027>028-035

Northern Franklin - Northeast Clinton - Eastern Essex

26	1600EST				0	0	30K		Winter Storm
	2359EST								

A late season storm system moved northeast from the Tennessee Valley on the morning of Tuesday, March 26th and passed across New England during the night of March 26th and early Wednesday morning, March 27th. Snow overspread the area during the afternoon of the 26th, becoming steadier and heavier before changing to sleet and freezing rain late at night. Travel conditions were hazardous with the wet snow and ice. In general, between 5 and 8 inches of snow and ice fell across the area. A few specific accumulations included: Both Peru (Clinton county) and Mineville (Essex county) reported 8 inches with lesser amounts in western portions of these counties.

NEW YORK, West

NYZ001>003-010>011

Niagara - Orleans - Monroe - Erie - Genesee

03	1100EST				0	0	400K		High Wind (G52)
	1600EST								

Storm Data and Unusual Weather Phenomena

March 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

Low pressure over Indiana deepened as it moved northeast. The strong southwest flow was funneled up the length of Lake Erie and produced damage across the Niagara Frontier. Trees and power lines were downed. Structural damage was also reported in Erie and Niagara Counties.

NYZ005>006-008-010-019>020 Northern Cayuga - Oswego - Lewis - Erie - Chautauqua - Cattaraugus

04	0640EST								
05	0650EST								Heavy Snow

Cold air crossing the relatively warm, unfrozen waters of Lakes Erie and Ontario produced lake effect snows. Off Lake Erie, snow showers and squalls began Sunday evening (3rd) and focused over the western southern tier counties with overnight accumulations around a foot. The band held together close to the lake through most of the daylight hours of the 4th, despite the strong March sun. The band intensified during the evening as it drifted north into central Erie County. Six to fourteen inches of snow fell over the southern suburbs of Buffalo between 9PM Monday and 6AM Tuesday. Specific amounts included: Arkwright 23"; Sherman 22"; Perryburg 21"; South Dayton and Hamburg 14"; Dunkirk and Sinclairville 12"; Westfield and West Seneca 10"; Warsaw 9"; Orchard Park 8"; Franklinville and Colden 7"; and Angelica 6".

Off Lake Ontario, a strong single band developed over Oswego and Lewis Counties. The band meandered little so some areas got over a foot. The band drifted south briefly dropping over a half a foot over northern Cayuga County. Specific amounts reported: North Osceola 14"; Highmarket 12"; Oswego 11" and Martville 7".

NYZ001>008-010>014-019>021 Niagara - Orleans - Monroe - Wayne - Northern Cayuga - Oswego - Jefferson - Lewis - Erie - Genesee - Wyoming - Livingston - Ontario - Chautauqua - Cattaraugus - Allegany

09	1902EST								
	2350EST								High Wind (G57) ^M

Monroe County Webster

09	2020EST								
									Thunderstorm Wind (G54) ^M

Low pressure over Wisconsin deepened as it moved across Lake Superior and into northern Ontario. Strong winds accompanied and followed the passage of a cold front. The damaging winds affected the entire area, downing trees and power lines and causing some structural damage. Nearly 100,000 customers completely lost power with thousands others experiencing brief power outages. In Rochester, a roof was blown off a building supply store. In Groveland, a vehicle was towing a 17' sailboat on I-390 when the boat and trailer were overturned by the wind. In Portage, a train struck a tree that had fallen across the tracks. The train was damaged and could not continue. In Mendon, a two-story, 100-year-old barn was pushed over. In Lyndonville, a recreational trailer dealer sustained damage to a third of the inventory.

Erie County Angola

09	2145EST								
									Seiche

Winds over 50 knots on Lake Erie caused the water level to rise at the eastern end of the lake. The lake exceeded the 8' flood stage and peaked at 9.63" at 11:40PM on the 9th.

NYZ006-010-012-019>020 Oswego - Erie - Wyoming - Chautauqua - Cattaraugus

10	1000EST								
11	0300EST								Heavy Snow

A strong cold front crossed the region during the evening hours of March 9th dropping temperatures thirty to forty degrees. The cold air produced lake effect snow bands off Lake Erie during the wee hours of the 10th. The bands started in the Buffalo area and extended to Rochester for a few hours around daybreak before settling south during the day. Amounts were generally six to eight inches but 30 to 40 mph winds on Sunday created hazardous conditions in blowing and drifting snow. Road closures were reported. East of Lake Ontario, the activity was slower getting organized. Generally, around four inches fell over Lewis and northern Oswego counties during Sunday afternoon but the activity consolidated and settled over Oswego county Sunday night. Six to ten inches fell over much of central southern Oswego County.

NYZ005>006-008-019>020 Northern Cayuga - Oswego - Lewis - Chautauqua - Cattaraugus

22	1130EST								
23	0700EST								Heavy Snow

A sharp cold front crossed the area on Thursday the 21st. As the cold air built into the region lake effect snows developed southeast of Lakes Erie and Ontario. Off Lake Ontario, a very intense band extended across northern Cayuga, Oswego, and southern Lewis counties. The band lifted north a bit during the evening into southern Jefferson and Lewis Counties. Storm amounts ranged from one to two feet over the Tug Hill of Oswego and Lewis Counties.

Off Lake Erie, the event was somewhat less pronounced, though nevertheless impressive considering the time of year. It peaked overnight Friday to Saturday over northern Chautauqua and Cattaraugus counties where up to a foot fell.

Storm Data and Unusual Weather Phenomena

March 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, Central</u>									
Davidson County									
Lexington	09	1846EST			0	0			Hail (0.88)
Nickel size hail was reported at the Walmart in Lexington.									
Richmond County									
Steen Town	16	1530EST			0	0			Thunderstorm Wind (G50)
Trees were blown down and outbuildings were damaged from the intersection of Old Peggymill Road and Colesville Road to the Scotland County line.									
Scotland County									
Countywide	16	1540EST			0	0			Thunderstorm Wind (G60)
Old Wire Road, McFarland Road, and Scotch Grove Road were blocked by fallen trees. At Hwy 501 and Scotch Grove Road, three homes were damaged and several agricultural buildings and vehicles were destroyed. Several mobile homes were blown off their foundations and damaged by fallen trees near Wagram.									
Guilford County									
Greensboro	26	1710EST			0	0	220K		Lightning
Lightning started a fire that destroyed the third floor of a home.									
Wake County									
Raleigh	26	1910EST			0	0			Thunderstorm Wind (G50)
Trees were blown over onto power lines on Boylan Ave.									
Wake County									
Raleigh	26	1940EST			0	0			Hail (0.75)
Dime size hail was reported at Creedmoor and Lynn Road.									
Cumberland County									
3 W Fayetteville	31	1310EST			0	0			Hail (1.75)
Cumberland County									
Hope Mills	31	1403EST			0	0			Hail (1.00)
Johnston County									
Parkers Mill	31	1445EST			0	0			Hail (0.88)
Sampson County									
15 W Clinton	31	1445EST			0	0			Hail (1.75)
Wayne County									
5 S Dudley	31	1450EST			0	0			Hail (0.75)
Cumberland County									
Hope Mills	31	1510EST			0	0			Hail (0.88)
Wayne County									
Fremont	31	1515EST			0	0			Hail (1.00)
Sampson County									
Salemburg	31	1530EST			0	0			Hail (1.75)
Stanly County									
3 E Oakboro	31	1535EST			0	0			Hail (1.25)
Montgomery County									
Troy	31	1600EST			0	0			Hail (0.88)
Anson County									
Ansonville	31	1630EST			0	0			Hail (1.75)
Golfball sized hail was reported near Sugartown Road and Polkville Road.									
Lee County									
Sanford	31	1650EST			0	0			Hail (1.75)
Wake County									
5 N Raleigh	31	1720EST			0	0			Hail (0.88)
Nickel size hail reported at Durant and Litchford Roads.									
Wake County									
Raleigh	31	1845EST 1930EST			0	0			Flash Flood
6 to 12 inches of water blocked traffic on Glenwood Ave. and Wade Ave.									

Storm Data and Unusual Weather Phenomena

March 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 Coastal

NONE REPORTED.

NORTH CAROLINA, Extreme Southwest

NONE REPORTED.

NORTH CAROLINA, North Coastal

NONE REPORTED.

NORTH CAROLINA, Northwest and North Central

NCZ001-018	Ashe - Watauga								
	10	0800EST			0	2	8K		High Wind
		1100EST							

High winds on the 10th produced damage across northwest North Carolina.

High winds downed trees across Watauga and Ashe counties. A car dealership in West Jefferson had windows blown out by the high winds. A car was damaged by a falling limb in Blowing Rock. Two occupants received minor injuries.

NORTH CAROLINA, South Coastal

Robeson County									
6 NNE Maxton	16	1553EST			0	1	750K		Thunderstorm Wind (G90)
		1600EST							

A NWS Storm survey determined that straight line thunderstorm winds produce extensive damage to a trailer park in the northern part of Robeson county. 18 structures in all were damaged. 8 mobile homes were completely destroyed with one double wide trailer moved 10 feet off its foundation. A large metal electrical tower in the area was also blown down. A woman was injured in her mobile home during the event, dislocating her elbow. Large hail was also produced from the strong thunderstorm, with 2.5" hail reported in the area.

Robeson County									
Lumber Bridge	31	1335EST			0	0			Thunderstorm Wind (G52)

Public reported an estimated 60 mph wind gust.

Robeson County									
2 NW Lumberton	31	1454EST			0	0			Hail (0.75)

Ham radio operator reported dime size hail.

Robeson County									
5 SE St Pauls	31	1515EST			0	0			Hail (0.75)

Retired school principal reported dime size hail.

Robeson County									
2 W Lumberton	31	1609EST			0	0			Hail (1.75)

Ham radio operator reported golfball size hail.

Bladen County									
3 NW Tar Heel	31	1630EST			0	0			Hail (1.00)

Spotter reported quarter size hail.

Robeson County									
Lumberton	31	1815EST			0	0			Hail (0.75)

911 center reported dime size hail.

NORTH CAROLINA, Southwest

NCZ033-050-065	Avery - Mitchell - Henderson								
	10	0600EST			0	0	3K		High Wind (G50)

Strong winds following a cold front reached damaging levels in a few locations. Most damage was limited to downed trees and power lines, which blocked roads for a while in some areas.

Alexander County									
Taylorsville	15	1500EST			0	0	0.30K		Dust Devil

A large dust devil damaged a chicken pen.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<u>NORTH CAROLINA, Southwest</u>									
Polk County									
Columbus	16	1045EST			0	0	3K		Hail (0.88)
The hail caused several traffic accidents in the Columbus area.									
Rutherford County									
Henrietta	16	1108EST			0	0			Hail (0.75)
Cleveland County									
Boiling Spgs	16	1120EST			0	0			Hail (0.88)
Jackson County									
Webster to 3 ESE Cullowhee	17	0855EST 0910EST			0	0	10K		Thunderstorm Wind (G65)
The roof was torn off of a manufactured home and blown 250 feet into another home along Caney Fork 3 ESE of Cullowhee. In addition, trees were reported down in Webster, and several power lines were blown down in Cullowhee.									
Haywood County									
Waynesville	17	0900EST			0	0	2K		Thunderstorm Wind (G50)
Several trees were blown down in and around Waynesville. Some were blown onto power lines, resulting in outages.									
Madison County									
Countywide	17	0900EST 1030EST			0	0			Flash Flood
Minor flooding occurred along Laurel Creek. Excessive rainfall also resulted in rock and mudslides near Marshall.									
Buncombe County									
2 ESE Asheville	17	0930EST			0	0	1K		Thunderstorm Wind (G50)
A few trees were reported blown down.									
Madison County									
8 WNW Marshall	18	0700EST 0900EST			0	0	15K		Flash Flood
Flooding along small streams resulted in a road being washed out off of Highway 209. Several vehicles were involved in accidents as a result.									
Union County									
Monroe	31	1410EST			0	0			Hail (0.88)
Rowan County									
Gold Hill	31	1455EST			0	0			Hail (0.88)
Union County									
Indian Trail	31	1500EST			0	0			Hail (1.00)
Union County									
Fairview	31	1507EST 1517EST			0	0			Hail (1.75)
Mecklenburg County									
Pineville	31	1516EST			0	0			Hail (1.75)
Mecklenburg County									
Matthews	31	1520EST			0	0			Hail (1.75)

NORTH DAKOTA, Central and West

NONE REPORTED.

NORTH DAKOTA, East

NDZ030	Trail								
	07	1317CST			0	0			Heavy Snow
	08	0117CST							
A band of heavy snow fell across Trail county, with Mayville and Clifford each reporting 6 inches.									

Storm Data and Unusual Weather Phenomena

March 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 DAKOTA, East

NDZ008-014>016-024-026>030-038>039-049-052>054 **Pembina - Benson - Ramsey - Eastern Walsh - Eddy - Nelson - Grand Forks - Griggs - Steele - Trail - Barnes - Cass - Ransom - Sargent - Richland - Western Walsh**

08	1535CST								
09	1116CST				0	0			Winter Storm

Strong winds and snow combined to produce visibilities between a quarter mile and a half mile across the area. The Fargo airport reported a 46 mph wind gust and the Grand Forks airport reported a 40 mph wind gust. Three to five inches of new snow were common across the area.

OHIO, East

Coshocton County

	Countywide	09	1700EST 1715EST				10K		Thunderstorm Wind
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Muskingum County

	Countywide	09	1700EST 1715EST				10K		Thunderstorm Wind
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OHZ039>041-048>050-057>059-068>069 **Tuscarawas - Carroll - Columbiana - Coshocton - Harrison - Jefferson - Muskingum - Guernsey - Belmont - Noble - Monroe**

09	1715EST 2300EST						110K		High Wind
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Carroll County

	Countywide	09	1745EST 1800EST				10K		Thunderstorm Wind
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Guernsey County

	Countywide	09	1745EST 1800EST				10K		Thunderstorm Wind
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Harrison County

	Countywide	09	1745EST 1800EST				10K		Thunderstorm Wind
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Noble County

	Countywide	09	1745EST 1800EST				10K		Thunderstorm Wind
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Tuscarawas County

	Countywide	09	1745EST 1800EST				10K		Thunderstorm Wind
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Belmont County

	Countywide	09	1800EST 1815EST				50K		Thunderstorm Wind
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Numerous trees and power lines downed by thunderstorm winds. A few trees fell on parked cars.

Columbiana County

	Countywide	09	1800EST 1815EST				10K		Thunderstorm Wind
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Jefferson County

	Countywide	09	1800EST 1815EST				10K		Thunderstorm Wind
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Monroe County

	Countywide	09	1800EST 1815EST				10K		Thunderstorm Wind
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A deepening area of low pressure moving eastward across the northern Great Lakes swept a strong cold front across east central Ohio during the late afternoon hours of the 9th. This intensifying low produced a large area of strong low-level winds, both ahead of and behind the cold front. Winds between 70 - 80 MPH were present just a few thousand feet off the surface across the area by the mid-afternoon hours. As showers formed during the day, these strong winds were occasionally brought down to the surface. To further complicate matters, by the late afternoon hours enough instability was present to produce a line of severe thunderstorms along the main cold front as it entered east central Ohio. This combination of strong gradient winds and severe thunderstorm winds produced widespread damage across the area, mostly in the form of downed trees and power lines. These high winds continued after the cold frontal passage, downing trees and power lines, until the early morning hours of the 10th. At that time, the surface low moved off into Quebec and the strong gradient winds finally diminished. It is estimated that around 15,000 people were left without electricity in east central Ohio in the wake of this wind event.

Storm Data and Unusual Weather Phenomena

March 2002

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

OHIO, North
OHZ012>014

Lake - Geauga - Ashtabula

03	1800EST				0	0	160K	Heavy Snow
04	2000EST							

Westerly flow caused lake effect snow showers to develop during the afternoon of the 3rd with the heaviest snow falling during the early morning hours of the 4th. Up to 14 inches of snow fell in Ashtabula County with around 10 inches in Lake County and 6 inches in northern Geauga County.

OHZ003-006>014-017>023-027>033-036>038-047

Lucas - Wood - Ottawa - Sandusky - Erie - Lorain - Cuyahoga - Lake - Geauga - Ashtabula - Hancock - Seneca - Huron - Medina - Summit - Portage - Trumbull - Wyandot - Crawford - Richland - Ashland - Wayne - Stark - Mahoning - Marion - Morrow - Holmes - Knox

09	1430EST				2	8	8.8M	High Wind (G55) ^M
10	0200EST							

A strong and very fast moving cold front raced east across northern Ohio during the late afternoon and early evening hours. Damaging winds occurred along and behind this front. A 41 year old male was struck and killed by a falling tree in Lorain (Lorain County). A second fatality occurred in Cuyahoga Falls (Summit County) when a 63 year old male was struck and killed by a falling tree. Peak wind gusts include: 69 mph at Toledo Express Airport (Lucas County) at 258 pm; 55 mph at Mansfield Lahm Airport (Richland County) at 415 pm; 63 mph at Findlay Airport (Hancock County) at 423 pm; 62 mph at the Lorain County Airport at 429 pm; 62 mph at Cleveland Hopkins Airport (Cuyahoga County) at 448 pm; 58 mph at Toledo Metcalf Airport (Wood County); 53 mph at the Wayne County Airport at 454 pm; 51 mph at the Ashtabula County Airport at 517 pm; 60 mph at Akron-Fulton Airport (Summit County) at 520 pm; 62 mph at Akron-Canton Airport (Summit County) at 523 pm; 63 mph at the Youngstown-Warren Regional Airport (Trumbull County) at 607 pm; 54 mph at the Marion County Airport at 610 pm. Other measured wind gusts include; 100 mph at Bowling Green (Wood County); 78 mph at the Huron County Airport; 75 mph at Burton (Gauga County); 75 mph at Fremont Airport (Sandusky County); 74 mph at Louisville (Stark County); 65 mph at Medina (Medina County). Thousands of trees and hundreds of power poles were downed in northern Ohio. Widespread power outages occurred with several hundred thousand people without power at the peak of the storm. Over a million dollars in damage occurred at a school construction site in Struthers (Mahoning County). A fire truck responding to an emergency was blown over in Trumbull County injuring two people. Three mobile homes were destroyed in Sandusky County injuring three people. Two additional people were injured by a falling tree in Ravenna (Portage County). A large poultry farm building was leveled in Marion County. A large building collapsed in North Baltimore (Wood County) and damaged two adjacent buildings forcing the closure of three businesses. A woman was seriously injured in Maple Heights (Cuyahoga County) by flying glass and debris. Several buildings were destroyed in Wyandot County and an historic covered bridge was severely damaged. Two homes were destroyed in Ottawa County. Two cargo containers were blown off of a moving train and into Sandusky Bay (Erie County). Other buildings were destroyed in Seneca, Hancock, Crawford, Morrow, Ashland and Stark counties. Hundreds of other buildings sustained damage and over 100 cars were damaged or destroyed by debris and fallen trees. M41BF, M63UT

OHZ011>014

Cuyahoga - Lake - Geauga - Ashtabula

22	0000EST				0	0	325K	Heavy Snow
	2000EST							

Lake effect snow showers developed during the early morning hours behind a strong cold front. Westerly winds behind the front gusted to over 30 mph much of the day causing significant blowing and drifting and whiteout conditions. Snowfall measuring was hampered by the strong winds but accumulations were generally 4 to 6 inches with drifts up to several feet in depth.

OHZ003-006>014-017>023-027>033-036>038-047

Lucas - Wood - Ottawa - Sandusky - Erie - Lorain - Cuyahoga - Lake - Geauga - Ashtabula - Hancock - Seneca - Huron - Medina - Summit - Portage - Trumbull - Wyandot - Crawford - Richland - Ashland - Wayne - Stark - Mahoning - Marion - Morrow - Holmes - Knox

24	2000EST				0	0	1.6M	Winter Storm
25	1800EST							

Heavy snow developed to the north of a stationary front stretching across far southern Ohio. Snow accumulations ranged from 6 to 8 inches. Some freezing rain also mixed with the snow south and east of a line from Marion to Mansfield to just north of Youngstown. The snow was very wet and heavy making conditions on untreated roadways very treacherous.

OHZ003-006>010-012>013-017>022-027>032-036>038-047

Lucas - Wood - Ottawa - Sandusky - Erie - Lorain - Lake - Geauga - Hancock - Seneca - Huron - Medina - Summit - Portage - Wyandot - Crawford - Richland - Ashland - Wayne - Stark - Marion - Morrow - Holmes - Knox

26	0100EST				0	0	3.5M	Winter Storm
	2200EST							

Low pressure moved northeast across Ohio causing freezing rain to develop in advance of a warm front stretching east from the low. The freezing rain first began during the early morning hours south of a line from Marion to Akron. By daybreak the freezing rain had spread north to near Lake Erie. Ice accumulations of a quarter inch were reported most areas with ice accumulations of one half inch in portions of Holmes and Stark Counties. Cold air filtering into northern Ohio behind the low caused snow to develop during the afternoon and evening hours. Nearly 5 inches of snow fell in Lucas County with as much as 3 inches of snow as far east as Cleveland (Cuyahoga County). Little if any snow accumulated southeast of a Marion to Youngstown line. Very treacherous conditions existed on untreated roadways, especially during the morning hours.

Storm Data and Unusual Weather Phenomena

March 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

**OHZ001>002-004>005- Williams - Fulton - Defiance - Henry - Paulding - Putnam - Van Wert - Allen
015>016-024>025**

09	1410EST 1533EST								High Wind (G63)
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An unusually strong cold front moved through the region during the daylight hours of the 9th. A strong pressure gradient existed with the front as 3 hour pressure falls of 4 millibars ahead of the front combined with 3 hour pressure rises of 11 millibars. Winds just above the surface ranged from 70 to 80 mph. The combination of these 2 factors was tapped by a narrow line of showers immediately ahead of the cold front. Widespread reports of trees, tree limbs and power lines being blown down were received as surface winds of 50 to 70 mph were experienced by many areas. 2 miles northeast of Edon, the roof was blown off of a barn. This roof struck a transmission pole, which snapped off. The metal roof then became entangled in the wires. Also, a 90 foot tree that was over 100 years old was uprooted in the area.

OHIO, Southeast

OHZ087

Lawrence

01	0000EST								
31	2300EST								Monthly Precipitation

Total monthly precipitation was 8 to 9 inches across southern portions of the county. South Point had 8.6 inches, more than double the normal value.

**OHZ066>067-075>076- Perry - Morgan - Athens - Washington - Jackson - Vinton - Meigs - Gallia - Lawrence
083>087**

09	1645EST 1815EST					75K			High Wind
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A strong cold front blew through southeast Ohio. A narrow and brief line of showers was associated with the front. Winds gusted into the 45 to 70 mph range. Numerous trees and power lines were blown down. In Somerset of Perry County, 40 foot trees were snapped in half. Law enforcement in Meigs County reported damage to barns, also a few windows were blown out of buildings.

OHZ085>087

Meigs - Gallia - Lawrence

20	0200EST 1800EST					750K			Flood
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Rains of 4 to 5 inches fell on southern Lawrence County in a 30 hour period on the 19th until after dawn on the 20th. The heaviest rains fell in about a 6 hour period, before dawn on the 20th. The most rain appeared to have fallen along the Ohio River. The storm total at South Point was 4.8 inches. Automated gauges indicated 4.2 inches at Rankin Creek, with 4.0 inches at Kitts Hill and Procterville. Some of the flooded streams included Solida Creek, Charley Creek, Buffalo Creek, Symmes Creek, and Indian Guyan Creek. Urban and poor drainage flooding also occurred. Four people and 2 pets were rescued from the top of their vehicles on Charlie Creek Road in Lawrence County shortly after 0600E. Rain amounts diminished to the north. In northern Lawrence County, Waterloo had 2.9 inches of rain.

Governor Taft declared a state of emergency in Lawrence County. According to the Ohio Emergency Management Agency, four homes were destroyed. On the order of 26 homes sustained major damage in Lawrence County, while another 60 homes had minor damage. Four businesses along Solida Road near South Point sustained water damage.

Rains of 1.5 to 2.5 inches affected Gallia and Meigs Counties. Damage was restricted to roads in Gallia and Meigs Counties.

OHIO, Southwest

**OHZ026-034>035-
042>046-051>056-
060>065-070>074-
077>082-088**

**Hardin - Mercer - Auglaize - Darke - Shelby - Logan - Union - Delaware - Miami - Champaign - Clark -
Madison - Franklin - Licking - Preble - Montgomery - Greene - Fayette - Pickaway - Fairfield - Butler -
Warren - Clinton - Ross - Hocking - Hamilton - Clermont - Brown - Highland - Adams - Pike - Scioto**

09	1243EST 1740EST					971K			High Wind (G73) ^M
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A widespread area of high winds blew down trees, power poles, and various other smaller structures and signs. At one time, approximately 100,000 people were without power. One man was killed when his semi tractor overturned, and several others were injured in automobile accidents, and when trees fell on the buildings that they were in. Two people were briefly trapped in a mobile home when a tree fell on it. The hardest hit area was just southwest of Columbus in Grove City where an 84 mph wind was recorded and several structures at the high school were damaged or destroyed. M54VE

**Delaware County
Countywide**

09	1610EST 1620EST					3K			Thunderstorm Wind (G50)
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Several trees were blown down in the eastern part of the county.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<u>OHIO, Southwest</u>									
Franklin County									
Countywide	09	1610EST 1620EST			0	0	4K		Thunderstorm Wind (G50)
			Several trees were blown down in the eastern part of the county.						
Fairfield County									
Lancaster	09	1630EST 1635EST			0	0	4K		Thunderstorm Wind (G50)
			Trees were blown down in town.						
Licking County									
Newark	09	1635EST 1640EST			0	0	3K		Thunderstorm Wind (G50)
			Trees were blown down in town.						
OHZ081									
		Adams							
	16	0015EST			0	0			Flood
			One foot of water covered state route 247.						
OHZ088									
		Scioto							
	20	0100EST 0900EST			0	0			Flood
			Very heavy rainfall caused area creeks and streams to rise out of their banks and several roads were closed due to the high water.						
OHZ026-034>035-042									
		Hardin - Mercer - Auglaize - Darke							
	25	1200EST			0	0			Winter Storm
			A warm front situated west to east over central Ohio caused west central Ohio and portions of the northern Miami Valley to receive up to 6 inches of snowfall.						
OHZ026-034>035-042>046-051>053-060>062									
		Hardin - Mercer - Auglaize - Darke - Shelby - Logan - Union - Delaware - Miami - Champaign - Clark - Preble - Montgomery - Greene							
	26	0115EST 0800EST			0	0			Winter Storm
			A warm front bisected the state of Ohio along and just south of the I-70 corridor. A low pressure system moved along the boundary, bringing widespread rain and freezing rain. Numerous areas received a half inch of ice which brought down trees and powerlines, and caused several accidents due to slippery roads.						
OHZ081-088-088									
		Adams - Scioto							
	26	0825EST 1000EST			0	0			Flood
			Continuous rain over a one day period in this area caused some creeks and streams to overflow their banks and close area roadways.						
Greene County									
Xenia	29	1840EST 1850EST			0	0	12K		Thunderstorm Wind (G55)
			Thunderstorm winds knocked down trees and powerlines, and tore part of the roof off of a multi-unit apartment building.						
<u>OKLAHOMA, Eastern</u>									
OKZ054>058-060>071-073>074									
		Osage - Washington - Nowata - Craig - Ottawa - Tulsa - Rogers - Mayes - Delaware - Creek - Okfuskee - Okmulgee - Wagoner - Cherokee - Adair - Muskogee - McIntosh - Pittsburg - Haskell							
	02	0200CST 1200CST			0	0			Heavy Snow
			An arctic cold front moved southeast across eastern Oklahoma during the night of the first and second of March. Meanwhile, an upper level system moved northeast out of the desert southwest. The result was a large area of precipitation. The precipitation began as rain and turned first to freezing rain and sleet and then to snow from northwest to southeast across the area during the early morning hours. The snow fell at a rate of up to 2 inches an hour at some places and was accompanied by lightning and thunder. The snow tapered off to flurries around noon. A few accumulations include: Pryor...9 inches, Vinita...9 inches, Miami...8 inches, Oologah...8 inches, Claremore...6 inches, Tulsa...6 inches, Wagoner...6 inches, Muskogee...6 inches, Bartlesville...5 inches, Okmulgee...5 inches, Stigler...4 inches, Tahlequah...4 inches and McAlester...4 inches.						
Tulsa County									
1 E Collinsville	08	2355CST			0	0	10K		Thunderstorm Wind (G61)
			Thunderstorm winds estimated at 70 miles an hour blew a tractor trailer off the road near the intersection of Highway 169 and 136th street north. The tractor trailer tipped over.						

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
OKLAHOMA, Eastern									
Tulsa County									
Glenpool	08	2355CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a few trees down.
Craig County									
7 E Centralia	09	0005CST			0	0			Thunderstorm Wind (G56) ^M
Craig County									
Welch	09	0005CST			0	0			Thunderstorm Wind (G59) ^M
Ottawa County									
Miami	09	0030CST			0	0			Thunderstorm Wind (G50) ^M
Wagoner County									
Porter	09	0030CST			0	0	25K		Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour damaged a mobile home and destroyed a shed and a barn.
Mayes County									
Pryor	09	0036CST			0	0	1K		Thunderstorm Wind (G52)
									Thunderstorm winds estimated at 60 miles an hour blew shingles off a roof of a home.
Delaware County									
2 NW Eucha	09	0050CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a few trees down.
Mayes County									
Pryor	09	0102CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a tree down.
Mcintosh County									
5 W Eufaula	09	0110CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a tree down.
Cherokee County									
2 S Tahlequah	09	0115CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a tree down.
Adair County									
Bunch	09	0120CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a tree down.
Pittsburg County									
Dow	09	0140CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.
Sequoyah County									
Vian	09	0145CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a tree down.
Haskell County									
Stigler	09	0152CST			0	0	2K		Thunderstorm Wind (G52)
									Thunderstorm winds estimated at 60 miles an hour blew a power line down.
Sequoyah County									
3 S Muldrow	09	0156CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a few trees down.
Pushmataha County									
Antlers	09	0208CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.
Le Flore County									
Wister	09	0245CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.
Le Flore County									
Poteau	09	0248CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds estimated at 60 miles an hour blew down large tree limbs.
Choctaw County									
Ft Towson	09	0250CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 miles an hour blew a tree down.
Latimer County									
5 NNW Wilburton	15	1230CST			0	0			Hail (0.88)

Storm Data and Unusual Weather Phenomena

March 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

Haskell County

3 E Kinta **15** **1300CST** **0** **0** **Hail (1.00)**

Le Flore County

Countywide **18** **2336CST** **0** **0** **Flood**
20 **0300CST**

Heavy rain on and off from the evening hours on the 18th to the early morning hours of the 20th. Wister reported 6.46 inches of rain during this time frame. Flooding was reported across numerous parts of the county due to this heavy rain. The first report of flooding came at 1136 pm on the 18th when law enforcement in Poteau reported four streets blocked off due to street flooding. At 340 am on the 19th Ridge Road was closed due to flooding. County roads near Panama were reported to be flooded around 1017 am. By 250 pm old Highway 112 was closed near Poteau. This road was closed into the early morning hours of the 20th. On the evening of the 19th flooding was also reported in the vicinity of Hodgens and Heavener.

Pushmataha County

Countywide **19** **0345CST** **0** **0** **Flood**
20 **0300CST**

Heavy rain fell on and off from the evening of March 18 until the the evening of March 19. 7.49 inches of rain fell in Antlers and 5.20 inches of rain fell in Clayton. This excessive amount of rain resulted in flash flooding and longer term flooding as time passed. The first report of flooding came at 342 am when Dozier Road near Antlers was closed. As time progressed numerous reports of county roads across the remainder of the county were received. Water remained over numerous county roads into the early morning hours of the 19th.

OKZ076

Le Flore

19 **0700CST** **0** **0** **Flood**
21 **0300CST**

The Poteau River near Poteau rose above its flood stage of 24 feet at 7 am cst on March 19th. The river crested at 28.7 feet at 9 pm the same day. The river fell below its flood stage at 3 am cst on March 21st.

OKZ076

Le Flore

19 **0800CST** **0** **0** **Flood**
23 **1200CST**

The Poteau River near Panama rose above its flood stage of 29 feet at 8 am cst on March 19th. The river crested at 42.4 feet at 6 pm on March 20th. The river crested at 42.4 feet at 6 pm and March 20th. The river fell below its flood stage at noon on March 23rd. During its crested extensive flooding of agricultural lands occurred. Williams Road east of Panama was closed due to the flooding. The river came within a foot or two of effecting a water treatment plant.

Latimer County

Countywide **19** **0950CST** **0** **0** **Flood**
20 **0300CST**

Heavy rain fell on and off from the evening of the 18th to the early morning hours on the 20th. During this time frame Wilburton reported 6.05 inches of rain. The excessive rain resulted in flash flooding and flooding across the county. The first report of flooding came at 950 am cst when water was reported to be flowing over Highway 2 one mile north of Wilburton. Shortly thereafter flooding was reported on numerous county roads across the county. By 1105 pm on the 19th water was reported to be flowing over Highway 82 between Red Oak and Talihina and also on Highway 82 between Red Oak and Lequire. The rain subsided during the early morning hours of the 20th and the flooding abated.

Pittsburg County

Countywide **19** **0955CST** **0** **0** **Flood**
20 **0300CST**

Heavy rain fell on and off from the early morning hours of the 19th to the early morning hours of the 20th. During this time frame McAlester recorded 4.61 inches of rain. This excessive rain resulted in flash flooding and longer term flooding. The first report of flooding was water flowing over Highway 63 four miles west of Haileyville at 955 am. This road and and Highway 31 three miles west of McAlester were closed due to flooding shortly thereafter. As the day progressed water was reported over several county roads. The flooding continued into the early morning hours of the 20th.

Choctaw County

Countywide **19** **1005CST** **0** **0** **100K** **Flood**
20 **0300CST**

Heavy rain fell on and off across Choctaw county from the late evening hours on the 18th to the evening hours of the 19th. 4.90 inches of rain was reported near Hugo during this time frame. The heavy rainfall resulted in considerable flash flooding and flooding across the county. The first reports of flooding came around 1005 am. Highway 70 eight miles west of Hugo was reported to be covered by water and several county roads were reported to be barricaded due to high water. Later that afternoon Highway 70 was also under water west of Soper and near Boswell. Highway 109 was also under water at several locations between Ord and Froggville. The flooding was so severe that many county roads were washed out and a few bridges were damaged.

Storm Data and Unusual Weather Phenomena

March 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									
Haskell County									
Countywide	19	1900CST			0	0			Flood
	20	0300CST							
Heavy rain fell on and off from the evening of the 18th until the evening of the 19th. The cumulative effects of this rainfall resulted in flooding and flash flooding during the evening and early morning hours of the 19th and 20th. Most of the flooding occurred on county roads and low water crossings.									
Sequoyah County									
Countywide	19	1932CST			0	0			Flood
	20	0300CST							
Heavy rain fell on and off from late on the evening of the 18th to during the evening on the 19th. The cumulative effects of the heavy rainfall was eventually flash flooding and flooding. At 732 pm on the 19th some county roads in the vicinity of Sallisaw were flooding. This flooding lasted into the early morning hours on the 20th.									
Tulsa County									
Sand Spgs	24	1949CST			0	0			Hail (0.75)
Creek County									
1 E Kellyville	24	1950CST			0	0			Hail (0.75)
Tulsa County									
4 W Owasso	24	2003CST			0	0			Hail (0.75)
Creek County									
2 N Kiefer	24	2005CST			0	0			Thunderstorm Wind (G52)
Okfuskee County									
Paden	24	2005CST			0	0			Hail (0.75)
Tulsa County									
Glenpool	24	2005CST			0	0			Hail (0.75)
Tulsa County									
1 NE Owasso	24	2020CST			0	0			Hail (0.75)
Pawnee County									
Ralston	24	2035CST			0	0			Hail (0.88)
Rogers County									
2 SE Oologah	24	2035CST			0	0			Hail (0.88)
Okfuskee County									
Okemah	24	2038CST			0	0			Hail (1.75)
Tulsa County									
Bixby	24	2043CST			0	0			Hail (1.75)
Tulsa County									
Bixby	24	2043CST			0	0			Thunderstorm Wind (G52)
Okfuskee County									
Pharoah	24	2047CST			0	0			Hail (0.88)
Tulsa County									
Broken Arrow	24	2054CST			0	0			Hail (0.75)
Okmulgee County									
Henryetta	24	2100CST			0	0			Hail (1.75)
Okfuskee County									
Bearden	24	2105CST			0	0			Hail (1.75)
Okmulgee County									
Grayson	24	2115CST			0	0			Hail (0.75)
Osage County									
Wynona	24	2120CST			0	0			Hail (0.75)
Mcintosh County									
Checotah	24	2124CST			0	0			Hail (0.75)
Mcintosh County									
Rentiesville	24	2129CST			0	0			Hail (1.00)
Mcintosh County									
3 SW Checotah	24	2140CST			0	0			Hail (1.00)
Wagoner County									
Porter	24	2140CST			0	0			Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 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>OKLAHOMA, Eastern</u>									
Pawnee County									
Cleveland	24	2150CST			0	0			Hail (0.88)
Pittsburg County									
Canadian	24	2151CST			0	0			Hail (0.75)
Pittsburg County									
Canadian	24	2151CST			0	0			Thunderstorm Wind (G52)
Mcintosh County									
2 S Eufaula	24	2157CST			0	0			Hail (0.75)
Haskell County									
Enterprise	24	2215CST			0	0			Hail (1.00)
Muskogee County									
Muskogee	24	2215CST			0	0			Hail (0.75)
Cherokee County									
10 NNE Tahlequah	24	2228CST			0	0			Hail (0.75)
Sequoyah County									
Marble City	24	2240CST			0	0			Hail (0.75)
Rogers County									
Claremore	24	2241CST			0	0			Hail (1.00)
Delaware County									
4 SE Grove	24	2335CST			0	0	1K		Thunderstorm Wind (G61)
Thunderstorm winds estimated at 70 miles an hour damaged the roofs of a few outbuildings.									
Adair County									
3 N Baron	25	0103CST			0	0			Hail (0.88)
Adair County									
Westville	25	0115CST			0	0			Hail (1.75)
Pittsburg County									
Pittsburg	25	1043CST			0	0			Hail (0.75)
Latimer County									
Damon	25	1113CST			0	0			Hail (1.75)
Latimer County									
Wilburton	25	1120CST			0	0			Hail (0.75)
Latimer County									
Panola	25	1123CST			0	0			Hail (1.00)
Le Flore County									
Panama	25	1200CST			0	0			Hail (0.75)
Latimer County									
Wilburton	25	1325CST			0	0			Hail (1.00)
<u>OKLAHOMA, Extreme Southeast</u>									
Mccurtain County									
Wright City	02	0020CST			0	0			Hail (0.75)
Mccurtain County									
Wright City	02	0030CST			0	0			Hail (0.75)
Mccurtain County									
Garvin	20	0005CST			0	0			Flash Flood
High water across Highway 70 halting east-west bound traffic across the southern half of the county.									
Mccurtain County									
2 S Idabel	30	0810CST			0	0			Flash Flood
County roads under water.									
<u>OKLAHOMA, Panhandle</u>									
OKZ001>003									
Cimarron - Texas - Beaver									
08		1330CST			0	0	1.5K		High Wind (G52)
09		0000CST							
A deepening surface low pressure system moved east across southern Kansas producing a strong pressure gradient over the									

Storm Data and Unusual Weather Phenomena

March 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

Marshall County

Southeast Portion	18	2230CST			0	0			Flash Flood
	19	0230CST							

Water problems, due to recent heavy rain, were reported between Kingston and Woodville.

Bryan County

East Portion	18	2330CST			0	0			Flash Flood
	19	0330CST							

Some roads were closed over southern and eastern parts of Bryan County, due to heavy rain.

Bryan County

8 E Durant	19	0730CST			0	0			Flash Flood
		0900CST							

Old Highway 70, near Blue River, was closed due to high water. West Samstone Rd. was also closed.

Marshall County

12 S Madill	19	0900CST			0	0			Flash Flood
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A county road was closed due to high water.

Grady County

Tuttle	24	1945CST			0	0	150K		Thunderstorm Wind
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Top layers of the southwest corner of the Tuttle High School roof were blown off, exposing about 10 rooms. Several heating and air conditioning units were also blown loose. The roof of the district's wrestling room, which is located about 100 yards to the east of the high school, was also damaged.

Pottawatomie County

Shawnee	24	1948CST			0	0			Hail (1.00)
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Canadian County

Mustang	24	1955CST			0	0			Hail (0.75)
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McClain County

Newcastle	24	1955CST			0	0	5K		Thunderstorm Wind
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The roof was blown off a barn in the 800 block of State Highway 130.

Lincoln County

5 W Prague	24	2000CST			0	0			Hail (0.75)
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Lincoln County

Prague	24	2000CST			0	0			Hail (0.75)
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Cleveland County

3 NW Moore	24	2003CST			0	0			Hail (1.00)
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Cleveland County

2 W Moore	24	2005CST			0	0			Hail (1.50)
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Cleveland County

3 NW Norman	24	2005CST			0	0			Thunderstorm Wind (G66) ^M
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Wind was reported by the Oklahoma mesonet.

Cleveland County

3 N Norman	24	2005CST			0	0	2K		Thunderstorm Wind
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A portion of a tin roof of a warehouse was peeled off, near the intersection of Tecumseh Road and Interstate 35.

Cleveland County

2 NW Moore	24	2007CST			0	0			Hail (1.50)
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Cleveland County

1 NW Moore	24	2010CST			0	0			Hail (2.00)
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Hail was reported near NW 12th and Sante Fe.

Seminole County

2 N Little	24	2010CST			0	0			Hail (1.00)
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Lincoln County

2 N Chandler	24	2013CST			0	0			Hail (0.75)
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Lincoln County

2 E Stroud	24	2013CST			0	0			Hail (0.75)
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Lincoln County

5 S Warwick	24	2015CST			0	0			Hail (1.00)
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Cleveland County

Moore	24	2020CST			0	0	50K		Hail (1.75)
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Roof damage, due to large hail, was also reported.

Storm Data and Unusual Weather Phenomena

March 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

Seminole County

1 N Schoolton 24 2025CST 0 0 Hail (1.00)

Pottawatomie County

Shawnee 24 2030CST 0 0 250K Thunderstorm Wind
The roofs of four buildings at Remington Place Apartments were blown off, affecting 56 residences.

Oklahoma County

Oklahoma City 24 2031CST 0 0 Hail (0.88)

Lincoln County

4 WNW Sparks 24 2035CST 0 0 Hail (0.75)

Oklahoma County

Choctaw 24 2040CST 0 0 Hail (0.75)
Hail was reported near the intersection of Reno and Choctaw Road.

Pottawatomie County

5 NE Shawnee 24 2040CST 0 0 Hail (2.75)

Seminole County

2 N Little 24 2045CST 0 0 Hail (0.75)

Seminole County

Seminole 24 2045CST 0 0 35K Thunderstorm Wind
A front porch and two garages were destroyed by high winds.

Lincoln County

3 E Meeker 24 2048CST 0 0 Hail (1.00)

Lincoln County

1 W Prague 24 2100CST 0 0 Hail (1.00)

Pottawatomie County

Shawnee 24 2100CST 0 0 Hail (1.00)

Hughes County

9 W Wetumka 24 2108CST 0 0 Hail (1.00)

Hughes County

3 NE Wetumka 24 2115CST 0 0 Hail (1.00)

Seminole County

Bowlegs 25 0032CST 0 0 Hail (1.00)

Hughes County

3 NE Wetumka 25 0100CST 0 0 Hail (0.88)

Several supercell thunderstorms developed during the evening of the 24th, along and just behind a strong cold front that moved through the area. Numerous occurrences of large hail, with the largest hail stone reported to be baseball size (2.75 inches in diameter), and several areas of significant wind damage accompanied these thunderstorms. Tuttle in Grady County, and Shawnee in Pottawatomie County, were two areas hit hardest by the high wind speeds.

Jefferson County

15 S Ringling 25 0656CST 0 0 Hail (1.00)

Love County

3 W Overbrook 25 0725CST 0 0 Hail (1.00)

Marshall County

6 NW Lebanon 25 0740CST 0 0 Hail (1.75)

Love County

1 SW Rubottom 25 0812CST 0 0 Hail (0.88)

Love County

10 N Leon 25 0830CST 0 0 Hail (1.00)

Pontotoc County

Ada 25 0835CST 0 0 Hail (0.88)

Carter County

7 S Ardmore 25 0859CST 0 0 Hail (1.00)

Carter County

Ardmore 25 0905CST 0 0 Hail (0.88)
Hail was reported near Interstate 35 at exit 33.

Johnston County

Bromide 25 0931CST 0 0 Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 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>OKLAHOMA, Western, Central and Southeast</u>									
Johnston County									
Bromide	25	0952CST			0	0			Hail (0.88)
Coal County									
2 E Clarita	25	1005CST			0	0			Hail (0.88)
<u>OREGON, Central and East</u>									
ORZ050									
Wallowa County									
	09	2020PST			0	0	0		High Wind (G50) ^M
ORZ048									
Ochoco-John Day Highlands									
	18	1500PST			0	0			Heavy Snow
	19	0552PST							
	8 inches at Austin in Grant County.								
ORZ050									
Wallowa County									
	24	0600PST			0	0			Heavy Snow
		1645PST							
	11 inches near Imnaha. Trees down and power outages which affected 300 people.								
<u>OREGON, Northwest</u>									
ORZ011									
Northern Oregon Cascades									
	05	0300PST			0	0			Heavy Snow
	06	1200PST							
	Heavy snow fell in the North Oregon Cascades. Timberline Lodge on Mt Hood reported 14 inches, Mt Bachelor and Mt Hood Meadows reported 12 inches, Santiam Pass and Government Camp 10 inches, Bennett Pass 7 inches, and Willamette Pass reported 6 inches.								
ORZ001>004-004>005-007-009>011									
Northern Oregon Coast - Central Oregon Coast - Coast Range Of Nw Oregon - Central Coast Range Of W Oregon - Lower Columbia - Central Willamette Valley - Western Columbia River Gorge - North Oregon Cascades Foothills - Northern Oregon Cascades									
	07	0100PST			0	0			Heavy Snow
	08	1800PST							
	A late season winter storm blanketed Northwest Oregon with heavy snow. Storm snowfall totals in the Cascades include: Timberline Lodge on Mt Hood and Willamette Pass 11 inches, Mt Hood Meadows 10 inches, and Santiam Pass and Bennett Pass 7 inches. Along the coast, Nehalem reported 4 inches, Tillamook 3 inches, Astoria 2 inches and Lincoln City 1 to 2 inches. In the Coastal Mountains, Wilson River Summit had 5 inches, and Sunset Summit 3 inches. Three inches fell at Hood River in the Columbia River Gorge. In the Willamette Valley, 1 to 2 inches was reported in Colton, Clarks and Council Crest, along with 3 inches in Corvallis. Along the Lower Columbia River, both Clatskanie and Rainier reported an inch.								
ORZ001>002									
Northern Oregon Coast - Central Oregon Coast									
	11	0500PST			0	0			High Wind (G56) ^M
		1800PST							
	A strong Pacific storm produced high winds along the North and Central Oregon coast. Netarts reported sustained winds of 45 mph with gusts to 65 mph, Newport Jetty reported 45 mph with gusts 52 mph, Florence 43 mph, and Garibaldi 44 mph.								
ORZ003-011									
Coast Range Of Nw Oregon - Northern Oregon Cascades									
	11	1200PST			0	0			Heavy Snow
	13	1200PST							
	A powerful Pacific storm dumped heavy snow on the Cascades and Coast Mountains. Snowfall totals for the 48 hour storm in the Cascades included 42 inches at Timberline Lodge on Mt Hood, 27 inches at Mt Hood Meadows, 23 inches Bennett Pass, 28 inches at Santiam Pass, 22 inches at Government Camp, 15 inches at Tombstone Summit, and 14 inches at Blue Box Pass. In the Coastal Mountains Sunset Summit reported 3 inches.								
ORZ003-009>011									
Coast Range Of Nw Oregon - Western Columbia River Gorge - North Oregon Cascades Foothills - Northern Oregon Cascades									
	15	0300PST			0	0			Heavy Snow
	17	1200PST							
	A powerful Pacific storm dumped very heavy snow over Northwest Oregon, particularly in the Cascades. Storm snowfall totals in the Cascades included 32 inches at Timberline Lodge on Mt Hood, 28 inches at Santiam Pass, 25 inches at Willamette Pass, 21 inches at Tombstone Summit and Mt Hood Meadows, 20 inches at Bennett Pass, and 17 inches at Government Camp. In the Coast Mountains, 5 inches fell at Sunset Summit and Wilson River Summit, 4 inches at Vernonia, and 3 inches at Swiss Home and Mist. In the Cascade Foothills, 9 inches fell at Brightwood, 5 inches at Detroit, 4 inches at McKenzie Bridge, and 3 inches at Estacada. In the Columbia River Gorge, Corbett reported 3 inches.								

Storm Data and Unusual Weather Phenomena

March 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, Northwest

ORZ011

Northern Oregon Cascades

18 0800PST

0 0

Heavy Snow

19 0800PST

Another powerful Pacific storm dumped more heavy snow on the Cascades. Storm snowfall totals include 24 inches at Timberline Lodge on Mt Hood, 22 inches at Mt Hood Meadows, 16 inches at Government Camp, 13 inches at Bennett Pass, and 10 inches at Santiam Pass.

OREGON, Southeast

NONE REPORTED.

OREGON, Southwest

ORZ026

Jackson County

07 0754PST

0 0

Heavy Snow

Spotter JA20 near Ashland at 2400 feet reported 4 inches of snow overnight.

A Snow Advisory was in effect for this area at the time. This report is the only one that verified a Heavy Snow Warning. Given the altitude of this report, it is likely that it is not representative of the whole area and that most areas did verify within the Snow Advisory criteria.

ORZ021>022

South Central Oregon Coast - Curry County Coast

09 1200PST

0 0

High Wind (G56) ^M

Cape Blanco recorded a sustained wind of 56 mph gusting to 83 mph.

A High Wind Warning was issued for the coastal headlands of ORZ021/022 at 0540 PST on 03/09 and expired 1445 PST on 03/10. The above observation at Cape Blanco records the peak sustained wind and peak gust, but high wind warning criteria was met here continuously between 1000 and 1400 PST on 03/09. The Gold Beach observation recorded above was the only one there that met high wind warning criteria.

ORZ021

South Central Oregon Coast

10 0900PST

0 0

High Wind (G55) ^M

Cape Blanco recorded sustained winds 55 mph gusting to 64 mph.

A High Wind Warning was issued for the coastal headlands of ORZ021/022 at 1845 PST on 03/09 and expired at 1450 PST on 03/10. The above observation lists the peak sustained wind and peak gust at Cape Blanco, but observations exceeded high wind warning criteria continuously from 0800 PST to 1300 PST on 03/10.

PACIFIC

GUZ002

Micronesia

01 0000SST

1 0

50M

100M

Hurricane

04 0000SST

SUPERTYPHOON MITAG

On the morning of the 25th Scatterometer data had shown a weak circulation south of Pohnpei near 4N 158E. Near midnight on the morning of February 27 the circulation moved west to a location near 285 miles east-southeast of Chuuk. At 6am on the 27th the circulation had strengthened to become Tropical

Depression 02W. By the evening of the 27th Tropical Depression 02W had become a Tropical Storm. The tropical storm moved slowly westward over the next few days intensifying only slightly. By the night of the 28th the storm was located 20 miles south-southeast of Weno Chuuk. Wind gust of 47 mph were recorded at the Chuuk WSO during the afternoon of the 28th. By midnight on March 1 Tropical Storm Mitag inched closer to Weno Chuuk passing 35 miles southwest. WSO Chuuk had 6.94 inches of rain during the 24 hour period ending 2200L on the 28th.

Damage on Chuuk

No deaths or injuries were reported.

Flooding and landslides. Heavy flooding resulting mostly from overflowing man-hole and trapped run-off water flooded many homes on Weno in the Seletiw area. The flooded home received damage to household goods, appliances and personal property. A few minor landslide also occurred on two of the islands in the lagoon, Fason in Tol Municipality and Eot Municipality.

The Tropical Storm increased its forward speed on the 1st, going from 10 mph in the early morning to 16 mph by noon time. The storm passed over or very close to Puluwat during the late morning hours of the 1st. Moving further west Tropical Storm Mitag increased strength becoming a typhoon by that evening. During that night Mitag passed 50 miles south of Satawal.

Around noon on the 2nd, Typhoon Mitag passed less than 30 miles south of Woleai. Reports from Woleai said power was knocked

Storm Data and Unusual Weather Phenomena

March 2002

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

PACIFIC

out, all breadfruit trees and most of the coconut trees and also the thatched roof houses were blown down. Residents of Woleai sought shelter in the Elementary and High School facilities. Winds were estimated to have gusted as high as 105 mph.

During the early morning hours of the 3rd the typhoon passed over the atoll of Sorol. Sorol was uninhabited at the time. Just before noon that day Mitag passed 50 miles south of Yap. Just after noon the typhoon passed 60 miles northwest of Ngulu.

Maximum gust WSO YAP from SE at 75 mph at 1310 on the 3rd
 NGULU AMOS from SW at 63 mph at 1400 on the 3rd
 ULITHI AMOS from E-NE at 49 mph at 0300 on the 3rd

24 Hr rainfall

WSO YAP received 3.70 inches ending at 1600L on the 3rd with a storm total was 3.89 inches
 NGULU AMOS received 10.05 inches ending at 1500L on the 3rd
 ULITHI AMOS received 1.00 inch ending at 0600L on the 3rd

Damage on Yap

No injuries or deaths were reported.

Island power failed at 1300L on the 3rd due to some lines being ripped off the poles by high winds. Island power was restored at 1600L on the 5th.

Northern clockwise through southern shores of the main Island of Yap was heavily destroyed, mainly due to the thunderous storm surge pounding the shoreline. Private dwellings along the shore was washed away. Even some concrete buildings close to the shoreline was destroyed by the surf. Destiny Hotel in Gilman was completely demolished. In some areas, the strong tidal surge went inland as far as 600 feet.

Part of the roof at the Yap International Airport terminal was ripped off. The boarding area, check-in area, waiting area, and arrival area flooded with rain water and debris.

Most of the roads and causeways in Colonia were under 4 to 5 feet of water. The whole length of the Colonia Park Seawall was damaged by high tide and strong currents from the storm.

Numerous trees were damaged or knocked down across Yap. The fallen trees blocked many roads. On the southern most tip of Yap much damage was done to food crops and residential areas. The southeastern side of the tip had about 95 % damage from the shoreline up to 400 meters inland. The western side of the southern tip only had 30 % overall damage. The Church of St. Francis Assisi in Guroor near the southern tip of Yap lost part of its stone platform due to the strong currents from the storm surge. In Magachgil to the south of Guroor, many coconut trees were either uprooted or broken in half.

Many Taro crops had salt water intrusion caused by the sea inundating them. Those Taro patches that were not destroyed by the inundation had plants die later on due to salt water intrusion into the roots or even from salt spray.

A sample of crop damage on Yap

Land Taro	50 to 90% damage
Taro	10 to 50% damage
Papaya	40 to 50% damage
Banana	70 to 90% damage
Sweet Potatoes	0 to 80% damage
Pumpkin	0 to 70% damage
Breadfruit	60 to 80% damage
Coconut	40 to 50% damage
Mangoes	5% damage
Betel Nut	60% damage
Pepper leaves	80% damage

During the evening of the 3rd Typhoon Mitag passed about 200 miles north of Koror in Palau. Some wind gust were observed on the northern islands of Kay Angle. No damage was reported.

Storm Data and Unusual Weather Phenomena

March 2002

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

PACIFIC

Indirect effects of the Typhoon.

The damage to the food crops on some of the small islands in Yap and Chuuk States caused hardships on the people there. With Taro crops filled with salt water and banana and breadfruit trees destroyed or damaged many people went hungry on the small islands. A death on Nomwim Atoll in Chuuk State has been attributed to health problems caused in the wake of Typhoon Mitag. Some of the islands only had food for one to two weeks.

A man in Palau died as an indirect result of the storm. 36 year old Akino Isamu was helping his friend to cut down a coconut tree in Peleliu. They thought it posed a danger to a house if strong winds from the typhoon reached Palau. When the tree was cut and started to fall, Akino tried to avoid it but guessed wrongly. The tree fell directly on him, pinning him to the ground. M36UT

PENNSYLVANIA, Central

PAZ004>006-010>012-017>019-024>028-033>037-041>042-045>046-049>053-056>059-063>066 - Warren - Mckean - Potter - Elk - Cameron - Northern Clinton - Clearfield - Northern Centre - Southern Centre - Cambria - Blair - Huntingdon - Mifflin - Juniata - Somerset - Bedford - Fulton - Franklin - Tioga - Northern Lycoming - Sullivan - Southern Clinton - Southern Lycoming - Union - Snyder - Montour - Northumberland - Columbia - Perry - Dauphin - Schuylkill - Lebanon - Cumberland - Adams - York - Lancaster

09	1930EST	0	0	50K	High Wind (G50)
10	0500EST				

A strong cold front approached central Pennsylvania during the afternoon of March 9, 2002. Southwest winds increased during the afternoon across the region. By evening, a line of showers accompanying the cold front entered the western edge of the CTP forecast area. Damaging winds accompanied the front and occurred after the frontal passage as winds shifted to the west. Wind speeds were estimated to be between 50 and 60 mph. After crossing the central portions of the region, the line of showers intensified into a line of convection with lightning and thunder. More intense damage was noted with the front as it crossed the eastern portions of the region. Damaging winds continued throughout the night. All 36 CTP zones reported multiple trees and wires down during an approximately nine hour period from 7:30 p.m. EST on the 9th through 5:00 a.m. on the 10th.

In addition to trees and wires, more notable property damage occurred. Significant damage to a house and barn in Carlisle, Cumberland County, was reported. The house had its roof blown off, while the roof of a 30 by 80 foot barn was lifted off. A roof was also blown off of a building in Lancaster, Lancaster County. A drive-in movie screen was destroyed by winds, estimated to be around 70 mph in Danville, Montour County. A section of a warehouse in Milton, Northumberland County, sustained serious damage. Also in Northumberland County, in the town of McEwensville, several homes and garages were damaged. In addition, 15,000 homes lost power in Altoona, Blair County.

Union County

Lewisburg

09	2235EST	0	0		Thunderstorm Wind (G50)
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Trees were down.

Snyder County

Selinsgrove

09	2245EST	0	0		Thunderstorm Wind (G50)
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Trees were reported down in Selinsgrove.

Lycoming County

Hughesville

09	2248EST	0	0		Thunderstorm Wind (G60) ^M
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A 60 mph thunderstorm wind gust was recorded.

Sullivan County

Nordmont

09	2250EST	0	0		Thunderstorm Wind (G50)
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Trees and wires were reported down.

Montour County

Danville

09	2250EST	0	0		Thunderstorm Wind (G50)
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Trees and wires were reported down in Danville.

Northumberland County

Sunbury

09	2300EST	0	0		Thunderstorm Wind (G50)
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Trees were downed.

Storm Data and Unusual Weather Phenomena

March 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, East

Snowfall and sleet accumulations averaged around one inch as the heaviest precipitation remained south of the region. Across the Poconos, snow began falling between 4 p.m. and 6 p.m. EST on the 17th. Sleet, rain and freezing rain began mixing in with the snow after midnight EST on the 18th. The change to plain rain took most of the daylight hours on the 18th to go from the southern valleys in the early morning to the higher terrain in the mid-afternoon. Snow and sleet accumulations averaged around one inch as the heaviest precipitation remained south of the region. Ice accretions from the freezing rain were less than one-quarter of an inch. Since this event occurred on a Sunday night, no significant accidents were reported. High temperatures from the 14th through the 16th averaged in the 60s north and the 70s south. This probably helped keep road surfaces relatively warm and ice free throughout this event. Most of the accumulations reported were on grassy surfaces.

Specific accumulations included 3.3 inches in Palm (Montgomery County), 2.8 inches in Newtown (Bucks County), 2.0 inches in Tobyhanna (Monroe County) and Warrington (Bucks County), 1.0 inch in Mount Pocono (Monroe County), Easton (Northampton County), Springtown (Bucks County), Hatfield (Montgomery County) and Doylestown (Bucks County), 0.9 inches in Albrightsville (Carbon County), 0.8 inches in Allentown (Lehigh County), 0.5 inches in East Stroudsburg (Monroe County) and Wynnewood (Montgomery County) and 0.2 inches in West Chester (Chester County).

A strong cold front moved through the northeast on the 16th and brought in considerably colder air. A high pressure system built into eastern Canada and northern New England on the 17th and helped lock the cold air in place, especially at and within the lowest 5000 feet of our atmosphere. Meanwhile a weak low pressure system developed on the old cold frontal boundary in the Tennessee Valley during the morning of the 17th. It moved eastward off the Carolina coast on the 18th. Because the low was so far south and weak, the heaviest precipitation remained from the Philadelphia suburbs and southern New Jersey southward with this event. On the other hand, since the low was relatively weak, so was the onshore flow and thus the longer it took to scour the cold air from the lower layers of the atmosphere.

PAZ054>055

Carbon - Monroe

20	0100EST 1600EST								
		0	0	0	0	0	0	0	Snow

An elevation dependent snow fell across the higher terrain of the Poconos on the 20th. There was enough cold air in place over the higher terrain and the precipitation intensity was heavy enough to have precipitation fall as snow. Meanwhile in the valleys and lower elevations, precipitation fell as mainly rain. Snow began over the higher terrain shortly after midnight on the 20th. Even there precipitation changed briefly to rain before it ended late in the afternoon on the 20th. Freezing rain briefly mixed in during the afternoon before the change to plain rain. The worst reported accident occurred in Polk Township (Monroe County) when a motorist drove into a telephone pole. The driver and passenger were not seriously injured. In Monroe County, afternoon kindergarten classes were cancelled and the morning kindergarten classes were not dismissed until the end of the school day. While the snow caused problems in the higher terrain, the heavy rain at lower elevations caused a rockslide five miles north of Jim Thorpe. Rocks slid onto the tracks of the Northfork Southern Railroad. No injuries or significant damage occurred. Specific accumulations included 5 inches in Penn Forest Township (Carbon County), 4 inches in Tobyhanna and Pocono Summit (Monroe County) and 0.7 inches in East Stroudsburg (Monroe County). The low pressure system responsible for the higher terrain snow moved from southern Texas on the 19th northeast into the Ohio Valley the morning of the 20th and then east off the Delmarva Peninsula during the evening of the 20th.

PAZ054>055

Carbon - Monroe

21	1830EST 2130EST								
		0	0	0	0	0	0	0	Snow Squalls

PAZ054>055-060>062-067>071

Carbon - Monroe - Berks - Lehigh - Northampton - Chester - Montgomery - Bucks - Delaware - Philadelphia

21	1830EST 2230EST								
		0	0	0	0	0	0	0	Wind

A strong cold front moved through Eastern Pennsylvania during the evening of the 21st. It was accompanied by wind gusts of between 40 and 50 mph in most places. The strong gusty winds persisted throughout the night, although the strongest wind gusts occurred with the cold frontal passage and during the ensuing evening. The strong gusty winds were complicated by snow squalls which accompanied the cold frontal passage in the Poconos. Near whiteout conditions were reported with the heavier squalls. No serious accidents or injuries were reported. Peak wind gusts included 49 mph at the Lehigh Valley International Airport, 48 mph at Northeast Philadelphia Airport, 46 mph at Reading (Berks County), Pottstown (Montgomery County) and Wilkes-Barre/Scranton International Airport (Luzerne County), 45 mph in Lancaster (Lancaster County), 43 mph at the Philadelphia International Airport and 41 mph in Doylestown (Bucks County). Snowfall accumulations included 1.5 inches in Pocono Summit (Monroe County), 1.0 inch in White Haven (Luzerne County) and Log Tavern Pond (Pike County) and 0.5 inches in Tobyhanna (Monroe County).

PAZ054>055

Carbon - Monroe

26	0600EST 2000EST								
		0	0	0	0	0	0	0	Ice Storm

A large high pressure system moved across southern Canada on the 25th and was centered just northwest of Maine the morning of the 26th. It pumped unseasonably cold air into the Poconos and temperatures early on the 26th were below freezing. Meanwhile a low pressure system moved from Oklahoma on the 25th into the Tennessee Valley on the 26th. This low pumped warmer air aloft above its warm frontal boundary toward the Poconos. While it was warm enough aloft for precipitation to fall as rain, as it reached the

Storm Data and Unusual Weather Phenomena

March 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

surface it froze on contact. Precipitation started as freezing rain around daybreak on the 26th. It changed quickly to rain in some of the warmer valleys, but persisted into the early evening across the higher terrain of northern Carbon and Monroe Counties. Since most of the precipitation fell during the day and air temperatures were fairly close to freezing, roadway conditions were reported in good shape. The indirection insolation through the clouds was enough to keep most road surfaces wet and not icy. But, around one-quarter of an inch of ice did accrue on other exposed surfaces. In the early evening on the 26th, the low pressure system was nearing the area and pulled in enough warm air from the Atlantic to change the freezing rain to rain just as thunderstorms with heavier rain were moving into the Poconos.

PENNSYLVANIA, Northeast

Bradford County

Countywide	09	2225EST 2320EST			0	0			Thunderstorm Wind (G60)
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Trees and wires down.

Susquehanna County

Countywide	09	2315EST 2345EST			0	0			Thunderstorm Wind (G60)
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Trees down countywide.

Luzerne County

Countywide	09	2325EST 2355EST			0	1	10K		Thunderstorm Wind (G60)
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Trees and wires down countywide. Tree fell on car in Dallas township at 1135 PM EST. 1 injury with this event. Tree fell on house in Kingston township.

Lackawanna County

Countywide	09 10	2330EST 0000EST			0	0			Thunderstorm Wind (G60)
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Scattered reports of trees and wires down countywide.

Wyoming County

Mehoopany	09	2330EST			0	0			Thunderstorm Wind (G60)
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Trees down across state road 4002. Scattered damage countywide.

Pike County

Lackawaxen	10	0045EST			0	0			Thunderstorm Wind (G60)
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Trees and wires down in Lackawaxen township.
Damage occurred with a squall line of severe thunderstorms as a strong cold front moved through the region.

Bradford County

Rome	26	1835EST 2200EST			0	0			Flash Flood
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Wysox Creek flooded.

Susquehanna County

Montrose	26	1911EST 2315EST			0	0			Flash Flood
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Several small streams in the Montrose area went out of their banks. Flash flooding was due to an inch and a half to two and a half inches of precipitation mostly in the form of rain. Most of the rain fell in a 12 hour period during the day on the 26th. The rain fell onto a saturated snow covered ground. Snow depths were only a few inches with water equivalents less than an inch. Creeks and streams flooded in the area the evening of the 26th. The Susquehanna River also flooded on the 27th and 28th. The rain was caused by a strong slow moving surface low in West Virginia the morning of the 26th. That evening the low moved to Erie, Pennsylvania before picking up speed to be in Maine the morning of the 27th. Bradford and Susquehanna Counties were in an overrunning event on the north side of a warm front.

PAZ038>039

Bradford - Susquehanna

27		0630EST			0	0			Flood
28		2200EST							

Minor flooding occurred on the Susquehanna River in New York on the 27th and 28th. This was due to an inch and a half to two and a half inches of precipitation mostly in the form of rain. Most of the rain fell in a 12 hour period during the day on the 26th. The rain fell onto a saturated snow covered ground. Snow depths were only a few inches with water equivalents less than an inch. Creeks and streams flooded in the area the evening of the 26th. The Susquehanna River at Bainbridge rose to flood stage of 13 feet at 8:30 AM on the 27th. The river at Bainbridge crested at 13.47 feet 9 PM on the 27th then fell below flood stage at 6 AM on the 28th. The Susquehanna River at Conklin rose to flood stage of 11 feet at 6:30 PM on the 27th. Bainbridge and Conklin river gages are the forecasts points before and after the river dips briefly into Susquehanna County. The river at Conklin crested at 12.13 feet at 7:45 PM on the 27th. The stage at Conklin fell below flood stage at 10 PM on the 28th. The Susquehanna River at Waverly rose to the flood stage of 11 feet at 8 AM on the 27th. The river at Waverly crested at 11.47 feet at 7:45 PM on the 27th before falling back below flood stage at 8 AM on the 28th. The Waverly, New York river gage is actually located in Sayre, Pennsylvania.

Storm Data and Unusual Weather Phenomena

March 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, Northwest

PAZ001>003	Northern Erie - Southern Erie - Crawford								
	03	1800EST			0	0	225K		Heavy Snow
	04	2000EST							
Westerly flow caused lake effect snow showers to develop during the afternoon of the 3rd with the heaviest snow falling during the early morning hours of the 4th. Nearly 15 inches of snow fell at Waterford in Erie County with 7 inches in northern Crawford County. Officially, 9.9 inches of snow fell at Erie International Airport.									
PAZ001>003	Northern Erie - Southern Erie - Crawford								
	09	1730EST			0	0	550K		High Wind (G52) ^M
	10	0400EST							
A strong and very fast moving cold front raced east across northwestern Pennsylvania during the early evening hours. Damaging winds occurred along and behind this front. A 60 mph gust was measured at the Meadville Airport (Crawford County) at 636 pm with a 55 mph gust at Erie International Airport (Erie County) at 758 pm. Many trees and power poles were downed and scattered power outages also occurred. Several dozen buildings and homes were damaged by the strong winds.									
PAZ001>002	Northern Erie - Southern Erie								
	10	0300EST			0	0	400K		Heavy Snow
		2000EST							
Westerly winds behind a strong cold front caused lake effect snow showers to develop during the early morning hours. Up to 10 inches of snow fell across inland sections of Erie County with 4 to 6 inches of snow near Lake Erie. Westerly winds gusted in excess of 40 mph for much of the day causing whiteout conditions and significant blowing and drifting problems.									
PAZ001>003	Northern Erie - Southern Erie - Crawford								
	22	0000EST			0	0	300K		Heavy Snow
		2000EST							
Lake effect snow showers developed during the early morning hours behind a strong cold front. Westerly winds behind the front gusted to over 30 mph much of the day causing significant blowing and drifting and whiteout conditions. Snowfall measuring was hampered by the strong winds but accumulations were generally 4 to 8 inches with a maximum of 10 inches near Union City in southeastern Erie County. Snow drifts several feet in depth were reported.									
PAZ001>003	Northern Erie - Southern Erie - Crawford								
	24	2000EST			0	0	200K		Winter Storm
	25	1800EST							
Heavy snow developed to the north of a stationary front stretching across southern Ohio and West Virginia. Snow accumulations ranged from 6 to 8 inches with a maximum of 8.3 inches at Erie International Airport. The snow was very wet and heavy making conditions on untreated roadways very treacherous.									

PENNSYLVANIA, West

Beaver County									
Countywide	09	1845EST			0	0	10K		Thunderstorm Wind
		1900EST							
Lawrence County									
Countywide	09	1845EST			0	0	10K		Thunderstorm Wind
		1900EST							
Mercer County									
Countywide	09	1845EST			0	0	10K		Thunderstorm Wind
		1900EST							
Washington County									
Countywide	09	1845EST			0	0	10K		Thunderstorm Wind
		1900EST							
Allegheny County									
Countywide	09	1900EST			0	0	50K		Thunderstorm Wind
		1915EST							
Strong thunderstorm winds blew the roof off of a Pitcarin business.									
Butler County									
Countywide	09	1900EST			0	0	20K		Thunderstorm Wind
		1915EST							
Butler 911 Center received over 100 reports of trees and/or power lines down.									
PAZ007>009-013>016-020>023-029>032	Mercer - Venango - Forest - Lawrence - Butler - Clarion - Jefferson - Beaver - Allegheny - Armstrong - Indiana - Washington - Westmoreland - Greene - Fayette								
	09	1900EST			0	0	215K		High Wind
	10	0200EST							

Storm Data and Unusual Weather Phenomena

March 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>PENNSYLVANIA, West</u>									
Venango County									
Countywide	09	1900EST 1915EST			0	0	10K		Thunderstorm Wind
Armstrong County									
Countywide	09	1930EST 1945EST			0	0	10K		Thunderstorm Wind
Clarion County									
Countywide	09	1930EST 1945EST			0	0	10K		Thunderstorm Wind
Forest County									
Countywide	09	1930EST 1945EST			0	0	10K		Thunderstorm Wind
Greene County									
Countywide	09	1930EST 1945EST			0	0	10K		Thunderstorm Wind
Fayette County									
Countywide	09	1945EST 2000EST			0	0	10K		Thunderstorm Wind
Westmoreland County									
Countywide	09	1945EST 2000EST			0	0	10K		Thunderstorm Wind
Indiana County									
Countywide	09	2000EST 2015EST			0	0	10K		Thunderstorm Wind
Jefferson County									
Countywide	09	2000EST 2015EST			0	0	10K		Thunderstorm Wind
<p>A deepening area of low pressure moving eastward across the northern Great Lakes swept a strong cold front across western Pennsylvania during the late afternoon/early evening hours of the 9th. This intensifying low produced a large area of strong low-level winds, both ahead of and behind the cold front, with winds between 70 - 80 MPH present just a few thousand feet off the surface by the mid-afternoon hours. As showers formed during the day, these strong winds were occasionally brought down to the surface. To further complicate matters, by the late afternoon hours enough instability was present to produce a line of severe thunderstorms along the main cold front as it entered western Pennsylvania. This combination of strong gradient winds and severe thunderstorm winds produced widespread damage across the area, mostly in the form of downed trees and power lines. These high winds continued after the cold frontal passage, downing trees and power lines, until the early morning hours of the 10th. At that time, the surface low moved off into Quebec and the strong gradient winds finally diminished. It is estimated that around 25,000 people were left without electricity in western Pennsylvania in the wake of this wind event.</p>									
Allegheny County									
Elizabeth	21	0600EST 1000EST			0	0	5K		Flood
Washington County									
Charleroi	21	0600EST 0900EST			0	0	5K		Flood
<p>Heavy rains of 1.00 to 2.50 inches across the Monongahela River basin resulted in minor flooding on the Monongahela River in southwest Pennsylvania. The Monongahela River crested at Charleroi at 28.1 feet (flood stage 28.0 feet) at 7 AM on March 21st, while just a bit further upstream at Elizabeth, the river crested at 7:30 AM on March 21st at 20.2 feet (flood stage 20.0 feet).</p>									
PAZ030-032									
Westmoreland - Fayette									
	22	0500EST 0900EST			0	0			Winter Storm
<p>A late-season storm spread between 1 and 3 inches of snow across the majority of Fayette and Westmoreland Counties. However, along the higher ridges over the far eastern sections of the counties, snow accumulations reached 4 to 6 inches.</p>									
PAZ007-009-015>016									
Mercer - Forest - Clarion - Jefferson									
	25	1300EST 1800EST			0	0			Winter Storm
<p>Another late-season winter storm spread between 4 and 6 inches of wet, heavy snow and sleet across portions of western Pennsylvania.</p>									

Storm Data and Unusual Weather Phenomena

March 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

PAZ014-021>023-029>032 **Butler - Allegheny - Armstrong - Indiana - Washington - Westmoreland - Greene - Fayette**

26	1220EST 2100EST				0	0	85K		Flood
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Little Buffalo Creek rose out of its banks in the Marwood area.

Another 1.0 to 1.5 inches of rain over relatively saturated ground produced widespread small stream flooding across western Pennsylvania on the 26th.

PUERTO RICO

North Central

Vega Baja 22 1600AST
1700AST 1 0 High Surf

Three people were on the reef away from the shore when large breaking waves swept them away. A 16 year old man drowned while the others were rescued. M16IW

San Juan And Vicinity

Central Portion 28 1315AST
1325AST 0 0 Tstm Wind/Hail

General public reported pea size hail in Rio Piedras sector in San Juan and in Guaynabo.

Northwest

Hatillo 29 1700AST
1715AST 0 0 Funnel Cloud

A weather spotter sighted two funnel clouds off the coast of Hatillo.

RHODE ISLAND

NONE REPORTED.

SOUTH CAROLINA, Central

Saluda County

**8 W Saluda to
5 N Saluda** 09 1836EST
1841EST 0 0 0 0 Thunderstorm Wind (G50)

Sheriff reported trees down west to north of saluda.

Lexington County

**5 E Lexington to
7 E Lexington** 09 1920EST
1926EST 0 0 0 Thunderstorm Wind (G50)

Fire dept. reported powerlines down and a large highway sign down on I-26 near St. Andrews.

Orangeburg County

**Bowman to
Branchville** 27 1632EST
1645EST 0 0 0 Thunderstorm Wind (G50)

Edisto Electric reported power outages from Bowman to Branchville. Some trees down on powerlines.

Orangeburg County

18 E Orangeburg 27 1700EST 0 0 0 Thunderstorm Wind (G60)

Emergency manager reported 75% of roof torn off of a mobile home located at 282 Hampshire Ct.

Aiken County

Monetta 31 1400EST 0 0 0 Hail (0.75)

Spotter reported 3/4 inch hail in Monetta.

Lexington County

Leesville 31 1410EST 0 0 Hail (1.75)

Public reported golf ball size hail in Leesville.

Calhoun County

3 W St Matthews 31 1430EST 0 0 0 0 Thunderstorm Wind (G50)

Sheriff reported trees down on hwy 6.

Lexington County

2 W Lexington 31 1440EST 0 0 0 Hail (0.75)

Spotter reported 3/4 inch hail on hwy 378.

Sumter County

5 N Sumter 31 1447EST 0 0 0 Hail (0.75)

Highway Patrol reported dime size hail.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<u>SOUTH CAROLINA, Central</u>									
Fairfield County									
Blair	31	1500EST			0	0	0	0	Thunderstorm Wind (G50)
			Sheriff reported trees down.						
Sumter County									
5 SW Sumter to 1 W Sumter	31	1500EST 1530EST			0	0	0	0	Thunderstorm Wind (G60)
			Highway dept reported trees down on hwys 120, 76, and 378.						
Lee County									
Spring Hill	31	1515EST			0	0			Hail (1.75)
			Emergency manager reported golf ball size hail in Spring Hill.						
Clarendon County									
Paxville	31	1540EST			0	0	0		Hail (0.75)
			Post Office reported dime size hail in Paxville.						
Sumter County									
Sumter	31	1715EST			0	0	0		Hail (0.75)
			Emergency manager reported dime size hail in Sumter.						
Chesterfield County									
4 NW Cheraw	31	1725EST			0	0			Hail (1.00)
			Coop observer reported 1 inch hail.						
Sumter County									
2 E Sumter	31	1815EST			0	0	0	0	Thunderstorm Wind (G50)
			Highway dept reported a few trees down on hyw 378						
Calhoun County									
9 SE St Matthews	31	1915EST			0	0	0	0	Thunderstorm Wind (G50)
			Sheriff reported some trees down near Creston.						
<u>SOUTH CAROLINA, North Coastal</u>									
Marlboro County									
7 E Bennettsville	31	1242EST			0	0			Hail (1.50)
			Spotter reported pea to ping pong ball size hail.						
Florence County									
2 W Florence	31	1425EST			0	0			Hail (0.88)
			Law enforcement reported dime size hail.						
Darlington County									
6 E Darlington	31	1500EST			0	0			Hail (1.00)
			One inch hail reported near a convenience store.						
Dillon County									
Bingham	31	1510EST			0	0			Hail (0.75)
			Sherriff's office reported dime size hail.						
Florence County									
2 W Florence	31	1512EST			0	0			Hail (0.88)
			Spotter reported dime to nickel size hail.						
Marlboro County									
Brownsville	31	1515EST			0	0			Hail (0.75)
			Farmer reported dime size hail.						
Darlington County									
3 E Darlington	31	1547EST			0	0			Hail (0.75)
			Sherrif's department reported dime size hail.						
Florence County									
Florence	31	1620EST			0	0			Hail (1.50)
			Public reported ping pong ball size hail.						

Storm Data and Unusual Weather Phenomena

March 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>									
Anderson County									
5 S Anderson	09	1655EST			0	0	1K		Thunderstorm Wind (G50)
									Power lines and a tree were blown down at Good Hope Church Rd. and Sam McGee Rd.
Abbeville County									
2 W Due West to Donalds	09	1710EST 1720EST			0	0	1K		Thunderstorm Wind (G55)
									A couple of trees were reported blown down around Due West, and several trees were blown down in Donalds.
SCZ003									
Greenville Mountains									
	10	0600EST			0	0	1K		High Wind (G50)
									Strong winds following a cold front resulted in some downed trees and power lines.
Union County									
Jonesville	17	0605EST			0	0			Hail (0.75)
Laurens County									
Cross Hill	26	1400EST			0	0	10K		Thunderstorm Wind (G60)
									A house was reported to have received substantial damage.
Union County									
Monarch Mills	31	1415EST			0	0			Hail (1.00)
Chester County									
7 W Lowrys	31	1430EST			0	0	1K		Thunderstorm Wind (G50)
									Several trees and a power line were reported blown down.
Chester County									
8 W Edgemoor	31	1430EST 1438EST			0	0			Hail (1.00)
Chester County									
Chester	31	1440EST			0	0			Hail (1.00)
Chester County									
Chester	31	1445EST 1530EST			0	0	2K		Urban/Sml Stream Fld
									Torrential rainfall caused local flooding in Chester. Water entered at least 2 homes within a low-lying area of town.
York County									
Rock Hill Bryant Arp	31	1450EST			0	0			Hail (0.88)
<u>SOUTH CAROLINA, South Coastal</u>									
SCZ040-042>045-047>050									
Allendale - Hampton - Northern Colleton - Dorchester - Berkeley - Jasper - Beaufort - Southern Colleton - Charleston									
	01	0000EST			0	0			Drought
	31	2359EST							Drought conditions continued over south coastal South Carolina. Wildfires became more prevalent with numerous small fires throughout the month.
Jasper County									
3 E Gillisonville	02	1350EST			0	0			Thunderstorm Wind (G50)
									Numerous trees and powerlines down.
Beaufort County									
Pritchardville	26	1645EST			0	0			Hail (0.75)
Dorchester County									
3 NW Harleyville	26	1700EST			0	0			Thunderstorm Wind (G50)
									Several trees and large limbs down.
Hampton County									
Hampton	31	1450EST			0	0			Thunderstorm Wind (G50)
									Several large limbs and powerlines were down.

Storm Data and Unusual Weather Phenomena

March 2002

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

Colleton County

Williams 31 1455EST 0 0 **Thunderstorm Wind (G50)**
A few large trees were down.

Hampton County

1 E Crockettville 31 1920EST 0 0 **Thunderstorm Wind (G50)**
There were several trees down.

SOUTH DAKOTA, Central and North

SDZ018>023-033>037-045-048-051 **Spink - Clark - Codington - Grant - Hamlin - Deuel - Stanley - Sully - Hughes - Hyde - Hand - Jones - Lyman - Buffalo**

14 0300CST 0 0 **Winter Storm**
2100CST

Heavy snow of 6 to 16 inches fell across parts of central and northeast South Dakota from the early morning to the evening hours. Some freezing rain fell across parts of the area before changing over to snow. Also, the winds increased from the north resulting in blowing snow and reduced visibilities. The combination of ice, heavy snow, and blowing snow resulted in very difficult travel conditions. There were several accidents across the area along with many vehicles sliding off the road. Schools either started late or were closed. Some snowfall amounts included, 6 inches at Blunt, 7 inches at Murdo, 8 inches at Stephan and Clark, 9 inches at Gann Valley and Miller, and 11 inches at Highmore and Watertown. Locations with a foot or more of snowfall included, 12 inches at Hayti and Milbank, 14 inches at Castlewood and Presho, 15 inches at Clear Lake, and 16 inches at Kennebec.

SOUTH DAKOTA, Southeast

SDZ038>040-050-052>067 **Beadle - Kingsbury - Brookings - Gregory - Jerauld - Sanborn - Miner - Lake - Moody - Brule - Aurora - Davison - Hanson - Mccook - Minnehaha - Charles Mix - Douglas - Hutchinson - Turner - Lincoln**

14 0800CST 0 0 210K **Winter Storm**
2359CST

Widespread heavy snow was preceded by freezing rain. Precipitation from the Chamberlain to Huron areas and east to Brookings was mainly snow, with accumulations ranging from 8 inches in several areas to 19 inches at Huron. The heavy snow on top of the ice made travel difficult, and in places impossible, as some roads were blocked. Cattle losses were suspected from the heavy wet snow occurring during calving season, but in most cases specific numbers were not available. Over the Southeast part of the affected area, including near and just south of Sioux Falls, damage to power lines due to icing was reported, with several power outages in Sioux Falls. Three to six inches of snow fell on top of the ice in this area.

SOUTH DAKOTA, West

SDZ043 **Jackson**

06 0505MST 2 1 250K **Ice Storm**

Freezing drizzle produced a thin coating of ice over Interstate I-90 19 miles west of Kadoka in Jackson County. A Semitrailer pulling a car hauler lost control on the westbound side of the interstate. The driver was ejected and died as the truck slid into the median and overturned. A passenger in the sleeper area of the truck was injured. The car hauler separated from the cab and continued into the eastbound lane where it struck an oncoming semitrailer rig. This impact killed the driver of the eastbound truck, and seriously injured the passenger. Four vehicles came off the car hauler. One of these vehicles came to rest in the eastbound lane where it was struck by a third semitrailer, producing no injuries. A pickup truck rolled after sliding off the road while avoiding the accident scene, with no injuries to the driver. Light freezing drizzle was reported around the area starting after midnight and changed to snow about an hour after this accident. F40VE, F43VE

SDZ024>030-032-041>044-046>047-049 **Northern Black Hills - Northern Foot Hills - Rapid City - Southern Foot Hills - Central Black Hills - Southern Black Hills - Custer Co Plains - Haakon - Fall River - Shannon - Jackson - Bennett - Mellette - Todd - Tripp**

13 1000MST 0 0 0 **Winter Storm**
14 1845MST

A potent synoptic storm system intensified as it moved out of the Rockies and across the Northern Plains. This storm spread heavy snow over much of northeastern Wyoming and western South Dakota as it slowly moved eastward. Snow began during late morning on the 13th and persisted through the afternoon of the 14th. Most areas of western South Dakota received 6 to 10 inches of snow. The heaviest snowfall occurred over south central South Dakota, where 12 to 18 inches of snow were reported. Gusty northwest winds accompanied the snow and caused reduced visibilities and some drifting snow.

SDZ030>031-041 **Custer Co Plains - Pennington Co Plains - Fall River**

18 0045MST 0 0 0 **Heavy Snow**
1240MST

An upper level disturbance moved out of the Rockies and across the adjacent plains. This spread light snow over much of western South Dakota. Locally heavy snowfall occurred over extreme Southwestern South Dakota. Six to 8 inches were reported over the eastern portions of Custer, Pennington, and Fall River Counties, with the heaviest snow was 11 inches near Oelrichs in Fall River County.

Storm Data and Unusual Weather Phenomena

March 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, West</u>									
SDZ012>013-031			Butte - Northern Meade Co Plains - Pennington Co Plains						
	24	0325MST 1530MST			0	0	0		Winter Storm
			A compact storm system moved from Eastern Montana, across western South Dakota, and into Nebraska. Light snowfall was reported over most of western South Dakota; however a swath of heavy snow developed across eastern Butte, Meade, and the plains of Pennington Counties. Generally six inches of snow fell in this area, with a report of eight inches in central Meade County.						
SDZ013-031			Northern Meade Co Plains - Pennington Co Plains						
	27	1619MST 1633MST			0	0	0		High Wind (G61) ^M
			Winds increased quickly behind a cold front moving through the area. Winds were sustained around 35 to 45 mph with gusts around 70 mph.						
<u>TENNESSEE, Central</u>									
Sumner County									
Gallatin	15	1300CST			0	1			Lightning
			Bill Haynes, a 24 year old veteran of the Gallatin Fire Department, was answering an emergency call when lightning surged through the telephone line. The jolt threw him back in his chair. Haynes was treated and released from Sumner Medical Center. He was left with a tingling sensation in his arm. The lightning knocked out the telephones and computers at the fire hall and nearby Gallatin City Hall.						
Cannon County									
Countywide	16	2200CST 2330CST			0	0			Flash Flood
			High water, along with mud and some debris, on roads. A 500 pound propane tank was washed out of a yard and into the creek on Gassaway Road. Gassaway Road was also blocked by a mud slide.						
Cannon County									
Countywide	16	2300CST			0	0			Thunderstorm Wind (G50)
			TDOT reported several trees down.						
Bedford County									
Countywide	17	0118CST 0400CST			0	0			Flash Flood
			Spotter reported flooding of many highways across the county.						
Marshall County									
Countywide	17	0118CST 0400CST			1	0			Flash Flood
			Flooding of many highways across the county. At 215 AM, according to TEMA, a 17 year-old male was swept away as he and two other teens tried to push a stalled pick up truck across flooded Old Belfast Rd. The teen either slipped off the side of the road or stepped off the side of the road. His body was found 200 yards away in a drain pipe. M171W						
TNZ026-056-059>060-062-075-096			Cheatham - Perry - Williamson - Maury - Rutherford - Bedford - Lincoln						
	17	0145CST			0	0			Flood
	22	1200CST							
			The Harpeth River crested at 16.4 feet in Kingston Springs, flood stage is 15 feet. Flooding occurred along agricultural bottom land.						
Van Buren County									
Countywide	17	0500CST 0800CST			0	0			Flash Flood
			911 center reported Highway 285 was closed.						
Warren County									
Countywide	17	0510CST 0800CST			0	0			Flash Flood
			911 center reported many road closures and stranded vehicles.						
Dickson County									
North Portion	17	1745CST 2230CST			1	0			Flash Flood
			Sheriff reported Jones Creek Road was under water. Also, EMA reported that a 46 year old man was swept away near White Bluff around 8 PM CST on Trace Creek Rd. Rock Church Road near Dickson was under water. Dickson County Schools were closed Monday March 18 because of road closures. M46VE						

Storm Data and Unusual Weather Phenomena

March 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, Central</u>									
Davidson County									
Nashville	17	1800CST 2230CST			0	0			Flash Flood
Spotter reported Hadley Drive in Old Hickory was flooded. Also, Central Pike had 1 to 2 feet of water near the Davidson county and Wilson county line. By 755 PM, there was 3-4 feet of water near the fairgrounds. 2 cars were stranded on Nolensville Rd.									
Macon County									
Countywide	17	1815CST 2300CST			0	0			Flash Flood
Sheriff's office reported several county roads under water.									
Wilson County									
Countywide	17	1900CST 2300CST			0	0			Flash Flood
EMA reported numerous roads were flooded. Cedar Creek flooded a little league park and moved a dumpster 300 yards in Mt. Juliet.									
Wilson County									
3 NE Mt Juliet	17	1900CST			0	0			Thunderstorm Wind (G50)
Off duty NWS employee reported 2 large trees were blown down in the Verona Hills subdivision.									
Fentress County									
3 NW Jamestown	17	1930CST 2330CST			0	0			Flash Flood
Poplar Cove Road was under water.									
Sumner County									
Countywide	17	1930CST 2300CST			0	0			Flash Flood
Highway 109 had high water. Woman had to be rescued from her vehicle in Sumner county.									
Clay County									
Celina	17	1945CST 2300CST			0	0			Flash Flood
Streets flooded around Celina and Wet Mill Creek. One bridge was washed out. Celina EMA reported flooding on back roads.									
Rutherford County									
Countywide	17	2030CST 2300CST			0	0			Flash Flood
Spotter reported many roads becoming flooded around the county. Old Nashville Highway was closed from La Vergne to Murfreesboro. At one point, 6 roads were closed. 9 homes received minor damage, and one home had moderate damage. Several people had to be rescued from their cars. 7 people had to receive shelter at the Shoney's Inn.									
Putnam County									
Countywide	17 18	2300CST 0200CST			0	0			Flash Flood
Standing water on many secondary roads.									
Cheatham County									
Countywide	17	1800CST 2200CST			0	0			Flash Flood
EMA reported several roads closed around the county.									
Jackson County									
Countywide	17	2000CST 2300CST			0	0			Flash Flood
EMA reported minor flooding on secondary roads.									
Smith County									
Countywide	17	2000CST 2300CST			0	0			Flash Flood
EMA reported state and county roads closed due to high water. One bridge was washed out. School was cancelled on Monday March 18.									
Cannon County									
Woodbury	17 18	2200CST 0030CST			0	0			Flash Flood
EMA reported 2 roads closed. One public building, a dentist's office and a Hardee's received moderate flood damage.									
Dekalb County									
Countywide	17 18	2200CST 0000CST			0	0			Flash Flood
EMA reported minor flooding on secondary roads. 2 families had to be evacuated from their mobile homes.									

Storm Data and Unusual Weather Phenomena

March 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>									
Overton County									
Countywide	17	2200CST			0	0			Flash Flood
	18	0400CST							
	EMA reported minor flooding in back roads.								
Maury County									
Countywide	17	2300CST			0	0			Flash Flood
	18	0400CST							
	EMA reported 5 roads closed. One home had major damage, and another home had moderate damage. 2 people had to be evacuated.								
Montgomery County									
Countywide	17	2300CST			0	0			Flash Flood
	18	0400CST							
	Newspaper reported high water on many roads.								
Macon County									
Countywide	18	0000CST			0	0			Flash Flood
		0400CST							
	EMA reported many roads closed due to high water. Some land and gravel was washed out at a bridge. There were missing culverts and tiles, and debris was covering the roads. School was cancelled on Monday March 18.								
Bedford County									
Countywide	18	0600CST			0	0			Flash Flood
		0800CST							
	Sheriff's office reported streams and creeks out of their banks. 10 roads were closed, mainly near Bell Buckle. Schools were closed.								
Coffee County									
Countywide	18	0600CST			0	0			Flash Flood
		0800CST							
	Sheriff's office reported high water on many roads, and as a result, some roads were closed. Streams and creeks were out of their banks.								
Cumberland County									
Countywide	18	0600CST			0	0			Flash Flood
		0830CST							
	EMA reported high water on roads. Streams and creeks were out of their banks.								
Fentress County									
Countywide	18	0600CST			0	0			Flash Flood
		0830CST							
	Sheriff's office roads and schools were closed. Streams and creeks were out of its banks. A woman had to be rescued from her car that was stuck in 4 feet of water at Pall Mall.								
Giles County									
Countywide	18	0600CST			0	0			Flash Flood
		0800CST							
	Sheriff's office reported streams and creeks out of their banks.								
Grundy County									
Countywide	18	0600CST			0	0			Flash Flood
		0830CST							
	TDOT reported water on many roads.								
Lawrence County									
Countywide	18	0600CST			0	0			Flash Flood
		0800CST							
	Sheriff's office reported streams and creeks out of their banks.								
Lincoln County									
Countywide	18	0600CST			0	0			Flash Flood
		0800CST							
	Sheriff's office reported many streams and creeks out of their banks. Several roads were closed.								
Marshall County									
Countywide	18	0600CST			0	0			Flash Flood
		0800CST							
	EMA reported roads closed due to high water.								
Moore County									
Countywide	18	0600CST			0	0			Flash Flood
		0800CST							
	Sheriff's department reported low spots on roads had high water.								

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
TENNESSEE, Central									
Van Buren County									
Spencer	18	0600CST 0830CST			0	0			Flash Flood
911 center reported a road was partially closed in Spencer.									
Warren County									
Countywide	18	0600CST 0830CST			0	0	201K		Flash Flood
911 center reported several roads closed due to high water. EMA director estimated damage to roads at \$201K.									
White County									
Countywide	18	0600CST 0800CST			0	0			Flash Flood
Sheriff's office reported many streams and creeks out of their banks.									
Benton County									
Camden	20	0200CST 0500CST			0	0			Flash Flood
TDOT reported low lying roads in the Camden area were partially closed.									
Stewart County									
Countywide	20	0200CST 0500CST			0	0			Flash Flood
TDOT reported streams and creeks out of their banks. A few roads were washed out.									
Cheatham County									
Ashland City	20	0600CST 0800CST			0	0			Flash Flood
A road was closed in Ashland City and also at Pond Creek Rd.									
Dickson County									
Countywide	20	0600CST 0800CST			0	0			Flash Flood
TDOT reported a few roads were closed.									
Montgomery County									
South Portion	20	0600CST 0730CST			0	0			Flash Flood
TDOT reported high water on roads in the southern part of the county. Governor Don Sundquist declared 41 counties in Tennessee, mainly east and middle Tennessee, as a federal disaster, due to flooding in January and March of 2002. Estimated damages to public infrastructure and uninsured private property was placed at \$12,000,000.									
Grundy County									
10 NW Altamont	29	0940CST			0	0			Hail (0.75)
Dime size hail reported.									
Dickson County									
2.5 SE Dickson	29	1940CST			0	0			Thunderstorm Wind (G85)
NWS storm survey indicated straight line wind damage was on Old Columbia Road and Marshall Stuart Drive. The winds took the roof off of Sanker's Market. A trailer was flipped over across the street. About 2000 feet to the west, a roof was damaged to a warehouse owned by Sumiden Wire Products Corp.									
Bedford County									
15 NE Shelbyville	29	2000CST			0	0			Thunderstorm Wind (G50)
Law enforcement reported large tree down on Highway 82 E.									
Lincoln County									
Fayetteville	29	2135CST			0	0			Hail (1.75)
Golf ball size hail reported.									
Giles County									
Campbellsville	29	2200CST			0	0			Thunderstorm Wind (G50)
EMA director reported trees down just north of Campbellsville in the northwest part of the county.									
Lawrence County									
South Portion	31	0630CST 0830CST			0	0			Flash Flood
TDOT reported scattered areas in southern Lawrence county had some road flooding. Barricades were up, especially near Loretto.									

Storm Data and Unusual Weather Phenomena

March 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>									
Blount County									
Countywide	17	0845EST			0	0			Flash Flood
	18	2000EST							
Knox County									
Countywide	17	0852EST			0	0			Flash Flood
	18	2000EST							
Loudon County									
Countywide	17	0857EST			0	0			Flash Flood
	18	2000EST							
Meigs County									
Countywide	17	0901EST			0	0			Flash Flood
	18	2000EST							
Roane County									
Countywide	17	0903EST			0	0			Flash Flood
	18	2000EST							
Sevier County									
Countywide	17	0906EST			0	0			Flash Flood
	18	2000EST							
Bledsoe County									
Countywide	17	0930CST			0	0			Flash Flood
	18	1900CST							
Rhea County									
Countywide	17	1040EST			0	0			Flash Flood
	18	2000EST							
Cocke County									
Countywide	17	1730EST			0	0			Flash Flood
	18	2000EST							
Jefferson County									
Countywide	17	1730EST			0	0			Flash Flood
	18	2000EST							
Sequatchie County									
Countywide	18	0700CST			0	0			Flash Flood
		1900CST							
Greene County									
Countywide	18	0730EST			0	0			Flash Flood
		2000EST							
Hawkins County									
Countywide	18	0745EST			0	0			Flash Flood
		2000EST							
Anderson County									
Countywide	18	0800EST			0	0			Flash Flood
		2000EST							
McMinn County									
Countywide	18	0800EST			0	0			Flash Flood
		2000EST							
Monroe County									
Countywide	18	0800EST			0	0			Flash Flood
		2000EST							
Morgan County									
Countywide	18	0800EST			0	0			Flash Flood
		2000EST							
Grainger County									
Countywide	18	0815EST			0	0			Flash Flood
		2000EST							
Hamblen County									
Countywide	18	0815EST			0	0			Flash Flood
		2000EST							
Washington County									
Countywide	18	0845EST			0	0			Flash Flood
		2000EST							

Storm Data and Unusual Weather Phenomena

March 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, East

Widespread flooding occurred across most of East Tennessee. Rainfall totals between five and eight inches were reported in 36 hours. Total damage estimates were calculated to be over 5 million dollars.

TNZ012>018-035>047-067>074-081>087-098 **Scott - Campbell - Claiborne - Hancock - Hawkins - Sullivan - Johnson - Morgan - Anderson - Union - Grainger - Hamblen - Northwest Cocke - Cocke/Smoky Mountains - Northwest Greene - Southeast Greene - Washington - Unicoi - Northwest Carter - Southeast Carter - Roane - Loudon - Knox - Jefferson - Northwest Blount - Blount/Smoky Mountains - North Sevier - Sevier/Smoky Mountains - Sequatchie - Bledsoe - Rhea - Meigs - McMinn - Northwest Monroe - Southeast Monroe - Marion**

17 0845EST 0 0 5M Flood
18 2000EST

Widespread flooding occurred across most of East Tennessee with the hardest hit counties in central East Tennessee including Bledsoe, Meigs, Roane, Rhea, Loudon, Blount, Knox, and Sevier Counties. Rainfall totals between five and eight inches were reported in 36 hours. Numerous major rivers flooded including the Clinch, Powell, Sequatchie, and Pigeon Rivers. Total damage estimates were calculated to be over 5 million dollars.

Bledsoe County 5 S Pikeville

29 2110CST 0 0 5K Thunderstorm Wind
Large tree limbs reported down on Highway 127.

Bradley County 15 E Cleveland

29 2300EST 0 0 10K Thunderstorm Wind
Numerous trees and power lines down across the eastern part of the county. Section of a roof blown off of a Rubbermaid plant in the northeast part of the county.

TENNESSEE, West

Shelby County Memphis

17 0150CST 0 0 1K Flash Flood
0330CST
Numerous roads were under water.

Madison County Jackson

17 0200CST 0 0 10K Flash Flood
0330CST
Several homes were flooded. Part of one road was washed away. Numerous roads were under water.

Fayette County Countywide

17 1600CST 0 0 10K Flash Flood
1830CST
One bridge was flooded. Several roads were closed due to flooding.

Decatur County Countywide

17 1730CST 0 0 5K Flash Flood
18 1200CST
Several roads were closed due to flooding.

Hardeman County Whiteville

17 1730CST 0 0 10K Flash Flood
2000CST
Twenty-five people had to be evacuated from a church that had up to 14 inches of water in it.

Henderson County Lexington

17 1730CST 0 0 10K Flash Flood
18 1200CST
Several bridges were washed out. Some roads were flooded.

Hardin County Walnut Grove

17 1800CST 0 0 10K Flash Flood
2100CST
Several roads were flooded.

Obion County Woodland Mills

29 1710CST 0 0 0.05K Hail (0.88)
1715CST

Dyer County Dyersburg

29 1818CST 0 0 0.01K Hail (0.75)
1825CST

Storm Data and Unusual Weather Phenomena

March 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, West</u>									
Weakley County									
Greenfield	29	1820CST 1825CST			0	0	0.10K		Hail (1.00)
Weakley County									
Greenfield	29	1820CST 1825CST			0	0	0.10K		Hail (1.00)
Tipton County									
Brighton to Munford	29	1859CST 1915CST			0	0	0.12K		Hail (1.00)
Tipton County									
Brighton	29	1945CST 2100CST			0	0	1K		Urban/Sml Stream Fld
A couple of roads had water over them.									
Shelby County									
Bartlett to Memphis	29	1955CST 2010CST			0	0	0.22K		Hail (1.00)
Fayette County									
Hickory Withe	29	2025CST 2030CST			0	0	0.01K		Hail (0.75)
Fayette County									
Moscow	29	2110CST 2115CST			0	0	0.10K		Hail (1.00)
Shelby County									
Millington	30	0125CST 0130CST			0	0	0.05K		Hail (0.88)
<u>TEXAS, Central</u>									
Irion County									
Barnhart	18	2111CST			0	0			Hail (1.00)
An isolated severe thunderstorm produced quarter size hail across western Irion County.									
Kimble County									
Junction	19	0400CST			0	0			Hail (1.00)
An isolated severe thunderstorm produced quarter size hail as it passed across Junction.									
Irion County									
Mertzon	19	1245CST			0	0			Hail (1.00)
Tom Green County									
10 SW San Angelo	19	1315CST			0	0			Hail (0.88)
Tom Green County									
3 SW San Angelo	19	1325CST			0	0			Hail (1.00)
Tom Green County									
7 SE San Angelo to 9 SE San Angelo	19	1331CST 1336CST	3	50	0	0	2K		Tornado (F1)
A tornado touched down on the extreme southeast side of San Angelo, producing minor damage as it tracked along a 3 mile long path. Several empty mobile homes were overturned and a handful of hunting blinds tossed around by the tornado.									
Tom Green County									
San Angelo	19	1335CST 1435CST			0	0	10K		Flash Flood
Heavy rainfall of 2 to 3 inches in less than an hour brought flash flooding to parts of San Angelo. Between 10 and 15 people were stranded in at least 7 vehicles, with the occupants rescued by emergency personnel. No injuries were reported.									
Tom Green County									
2 SW San Angelo	19	1335CST			0	0	16M		Hail (1.75)
Hail up to golf ball size pounded the southern half of San Angelo shortly after noon, creating drifts several feet deep in places. Around 3500 homes suffered light to moderate damage, along with around 4000 automobiles. Many trees were stripped of their leaves. Hail stayed on the ground for at least 8 hours in some places.									
Tom Green County									
2 SW San Angelo	19	1335CST			0	0	1.5K		Thunderstorm Wind
Strong winds shattered windows in at least one business, causing minor damage.									

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
TEXAS, Central									
Tom Green County 3 SW Veribest to 2 NE Veribest	19	1400CST 1410CST	4	50	0	0	10K		Tornado (F1)
A tornado traveled a 4 mile path across eastern Tom Green County, producing relatively minor damage. The tornado ripped part of a flat roof off of an outbuilding, threw several irrigation pipes a few hundred yards, and picked up and moved heavy steel pipes.									
Tom Green County 4 S San Angelo	19	1403CST			0	0	2K		Thunderstorm Wind
Strong winds downed 4 power poles south of San Angelo.									
Runnels County 5 S Ballinger	19	1413CST 1414CST	0.2	20	0	0			Tornado (F0)
A tornado briefly touched down in an open field south of the town of Ballinger.									
Sutton County Sonora	19	1440CST			0	0			Hail (0.75)
Menard County Ft Mckavett	19	1550CST			0	0			Hail (1.75)
Hail up to the size of golf balls was reported in Fort McKavett in western Menard County.									
Kimble County Junction	19	1600CST			0	0			Hail (1.00)
Mcculloch County 12 W Brady	19	1641CST			0	0			Hail (1.00)
Mcculloch County Voca	19	1655CST			0	0	1K		Thunderstorm Wind
A motorist reported that high winds blew his vehicle off of the road in southern McCulloch County.									
Mcculloch County Brady	19	1720CST 1830CST			0	0	2K		Flash Flood
Heavy rainfall of 2 to 3 inches flooded several streets in the town of Brady. At least one motorist had to be rescued from their vehicle when it became stranded in high water.									
San Saba County 4 N Richland Spgs	19	1745CST			0	0	2K		Thunderstorm Wind
Several trees were knocked down by high winds when a severe thunderstorm roared through San Saba County. A supercell thunderstorm produced 3 tornadoes as it moved from San Angelo northeast to near Ballinger. Although the tornadoes produced minor damages, hail up to the size of golf balls that fell during the storm pounded the southern half of San Angelo, producing over \$15 million in damage. Other storms produced quarter size hail and wind damage across parts of the Heartland and Northwest Hill Country.									
Nolan County Roscoe	29	1927CST			0	0			Hail (1.00)
Taylor County Tuscola	29	2205CST	0.2	20	0	0			Tornado (F0)
An Abilene TV station showed a brief tornado touchdown near the town of Tuscola. There were no injuries and no reported damage.									
Taylor County Tuscola	29	2210CST			0	0			Hail (0.75)
Taylor County View	29	2210CST			0	0			Hail (0.75)
Taylor County 2 E Potosi	29	2225CST			0	0	3K		Thunderstorm Wind
Strong thunderstorm winds ripped part of a roof off of a barn.									
Callahan County 12 S Baird	29	2230CST			0	0			Hail (1.75)
An NWS Cooperative observer reported hail up to the size of golf balls.									
Callahan County Eula	29	2234CST			0	0			Hail (1.75)
Scattered severe thunderstorm moved northeast across the Big Country during the evening hours of the 29th. One of the storms produced a brief tornado near the town of Tuscola in southern Taylor County. The tornado touched down in an open field and produced no damage. Other storms produced hail up to the size of golf balls south of Baird and near Eula in southern Callahan County.									

Storm Data and Unusual Weather Phenomena

March 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>TEXAS, Central</u>									
Runnels County									
7 SW Wilmeth to 4 SW Wilmeth	30	1306CST 1320CST	3	85	0	0	25K		Tornado (F1)
A tornado touched down along Ranch Road 384 in northeast Runnels County, striking and damaging a house. Part of the roof was torn off, allowing rainwater to enter the building.									
Runnels County									
12 W Winters	30	1325CST			0	0			Hail (1.00)
Runnels County									
4 NW Norton to 5 NW Norton	30	1345CST 1348CST	0.5	100	0	0			Tornado (F1)
A large tornado touched down in an open field northwest of Norton in northeast Runnels County. Little damage was reported.									
Runnels County									
Wingate	30	1402CST			0	0			Hail (0.75)
Taylor County									
2 S Lawn	30	1417CST	0.2	20	0	0			Tornado (F0)
Amateur radio personnel reported 2 brief tornado touchdowns simultaneously just south of lawn in southern Taylor County.									
Taylor County									
2 S Lawn	30	1417CST	0.2	20	0	0			Tornado (F0)
Amateur radio personnel reported 2 simultaneous brief tornado touchdowns just south of Lawn in southern Taylor County.									
Callahan County									
16 W Cross Plains to 14 NW Cross Plains	30	1440CST 1455CST	9	200	0	0			Tornado (F1)
Trained spotters reported a large tornado across southern Callahan County. Fortunately, although the tornado traveled along a nearly 9 mile long track, the tornado crossed open country and little in the way of damage was reported.									
Callahan County									
Cross Plains	30	1505CST			0	0			Hail (0.75)
Callahan County									
1 NW Cottonwood	30	1510CST	0.3	30	0	0			Tornado (F0)
Spotters reported a brief tornado touchdown in an open field just northwest of Cottonwood in extreme eastern Callahan County.									
Haskell County									
10 S Haskell	30	1530CST			0	0			Thunderstorm Wind (G59) ^M
Amateur radio personnel measured a wind gust of 68 mph across southern Haskell County.									
Shackelford County									
Albany	30	1644CST			0	0			Hail (1.00)
San Saba County									
2 S San Saba	30	1715CST			0	0			Hail (1.75)
An intense upper level low moving across West Central Texas spawned at least a half dozen tornadoes on the afternoon of the 30th. Although most touched down in open fields and produced little in the way of damage, one tornado did strike a house and cause moderate damage. Other storms produced up to golf ball size hail near San Saba and quarter size hail west of Winters in Runnels County and in Albany in Shackelford County.									
<u>TEXAS, Central Southeast</u>									
Burleson County									
Caldwell	19	2140CST			0	0	50K		Thunderstorm Wind
Sheriff reported heavy roof damage to the Caldwell Elementary and Intermediate schools located on CR 307, also two trailers and a barn were destroyed and trees blown down just north of Caldwell.									
Madison County									
North Zulch to Normangee	19	2300CST			0	0	10K		Thunderstorm Wind
Trees blown down in North Zulch and in Normangee, reported by Sheriff.									
Polk County									
2 NE Corrigan	25	2018CST			0	0	25K		Hail (1.50)
Quarter to half dollar sized Hail (1.00" to 1.50") was reported by Co-op Observer.									
Colorado County									
Columbus	30	1522CST			0	0	5K		Hail (0.75)
Austin County									
New Ulm	30	1531CST			0	0	5K		Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
TEXAS, Central Southeast									
Colorado County									
Eagle Lake	30	1600CST			0	0	25K		Thunderstorm Wind
									Sheriff reported roof damage and power lines down in Eagle Lake.
Austin County									
Sealy	30	1627CST			0	0	5K		Hail (0.75)
									Dime size hail on Interstate 10 at Chew Road near Sealy, reported by Sheriff.
Austin County									
Sealy	30	1627CST			0	0	8K		Thunderstorm Wind
									Power lines and trees down in Sealy.
Grimes County									
Anderson	30	1635CST			0	0	30K		Hail (1.00)
Houston County									
Crockett	30	1635CST			0	0	5K		Hail (0.75)
									Sheriff reported 3/4" hail and trees down.
Houston County									
Grapeland	30	1635CST			0	0			Thunderstorm Wind (G70) ^M
Waller County									
Brookshire	30	1638CST			0	0	5K		Hail (0.75)
Wharton County									
Hungerford	30	1724CST			0	0	3K		Thunderstorm Wind
									Sheriff reported a large tree limb, 12 to 16 inches in diameter, snapped during strong winds and had blocked the road at Lees Lane and FM 1161 in Hungerford.
Wharton County									
6 E Hungerford	30	1730CST	0.5	20	0	0			Tornado (F0)
									There was a brief Tornado touchdown in the El Lobo Subdivision, 6 miles east of Hungerford, near the county line. Emergency management reported the event.
Fort Bend County									
Beasley	30	1736CST	0.5	30	0	0	150K		Tornado (F0)
									A Tornado touchdown had severely damaged a home in Beasley, reported by Sheriff.
Wharton County									
.5 N Wharton	30	1740CST	0.5	50	0	0	50K		Tornado (F0)
									A Tornado touchdown damaged a trailer on Nelson Road and Texas Highway 102, reported by Emergency management.
Fort Bend County									
Rosenberg	30	1745CST			0	0	10K		Hail (1.00)
Jackson County									
Edna	30	1745CST			0	0	10K		Hail (1.00)
Fort Bend County									
4 NNE Richmond	30	1753CST			0	0	75K		Hail (1.00)
									Quarter sized hail occurred in the Pecan Grove Plantation subdivision, reported by a ham radio operator.
Jackson County									
Ganado	30	1754CST			0	0	20K		Hail (1.75)
Fort Bend County									
Clodine	30	1755CST			0	0	10K		Hail (1.00)
Fort Bend County									
3 NW Sugarland	30	1758CST			0	0	20K		Hail (1.75)
Harris County									
Alief	30	1800CST			0	0	10K		Hail (1.00)
Wharton County									
Hillje	30	1802CST			0	0	10K		Hail (1.00)
Wharton County									
Louise	30	1802CST			0	0	20K		Hail (1.75)
Wharton County									
1 SW El Campo	30	1810CST			0	0	50K		Hail (2.75)
									Emergency Management and Sheriff witnessed Baseball sized Hail at State Highway 59 and FM 1163, with one inch hail covering the ground.

Storm Data and Unusual Weather Phenomena

March 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

Polk County

7 NNE Corrigan to
9 NNE Corrigan

30 1850CST 2 75 0 0 20K Tornado (F0)

Sheriff reported a tornado path with trees down, in rural northern Polk county east of Highway 59, from FM 1987 to the county line, then crossing into Angelina county. Confirmed by Shreveport NWS during their survey.

Fort Bend County

Guy

30 1915CST 0.5 30 0 0 20K Tornado (F0)

A tornado touchdown occurred in Guy, 10 miles southwest of Rosenberg, relayed by Sheriff.

Brazoria County

10 W Rosharon

30 1925CST 0 0 10K Hail (1.00)

Quarter sized hail occurred at FM 762 and Meyer Field airport.

Fort Bend County

Fresno

30 1932CST 0 0 15K Hail (1.75)

Brazoria County

Pearland

30 1944CST 0 0 5K Hail (0.75)

Galveston County

Friendswood

30 1947CST 0 0 30K Hail (1.75)

Harris County

Friendswood

30 1949CST 0 0 10K Hail (1.00)

Polk County

Livingston

30 1954CST 0 0 5K Hail (0.75)

Sheriff reported 3/4 inch hail along eastern shore of Lake Livingston at Onalaska and Blanchard, and also in Livingston.

Harris County

5 SW (Efd)Ellington Afl

30 1955CST 0 0 10K Hail (1.00)

Amateur radio operator reported one inch Hail at Scarsdale and Beamer.

Galveston County

League City

30 2000CST 0 0 20K Thunderstorm Wind

A large tree was blown down by strong winds at East Walker and Eden.

Harris County

3 NE Nassau Bay

30 2000CST 0 0 5K Hail (0.75)

Hail of 3/4 inch was reported in EL Lago on the north side of Clear Lake.

Harris County

3 S La Porte to
2.6 SSE La Porte

30 2009CST 0.7 60 0 0 350K Tornado (F3)

This Tornado began its path in the Shoreacres subdivision, 3 miles south of La Porte, with a home on Greenleaf Road receiving structural and roof damage (F1), then moved northeast and partially demolished a Super Mart on Broadway (F3), then ripped through an apartment complex across the street causing major roof and window damage and knocking down trees (F2), collapsing a car garage and destroying at least one car. Just northeast of the apartments, a few homes had minor damage with fences and large trees down. On Carlisle Street, in the Bayside Terrace subdivision, a few homes had minor roof damage, yard trees down, and debris from the convenience store, while part of the roof off the Super Mart dropped onto a Truck parked at the north end of Carlisle next to Galveston Bay. No injuries were reported. A survey was conducted.

Galveston County

4 WSW League City

30 2146CST 0 0 10K Hail (0.88)

Nickel sized Hail occurred in the Countryside subdivision at FM 518 and Bay Area Boulevard.

Galveston County

League City

30 2156CST 0 0 30K Hail (2.00)

Two inch Hail occurred at the League City Police Department.

TEXAS, Extreme West

NONE REPORTED.

TEXAS, Mid - South

La Salle County

Cotulla

19 2115CST 2130CST 0 0 Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 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, Mid - South									
TXZ243									
			Nueces						
	30	0458CST			0	0			High Wind (G47) ^M
	Strong inflow toward severe thunderstorms across central and north Texas generated sustained winds of 45 mph at 459 am with a peak wind gust of 47 knots at 458 am.								
Goliad County									
			Fannin						
	30	1645CST			0	0			Funnel Cloud
	Sheriff office report of funnel cloud along Highway 59 moving toward Victoria county.								
TEXAS, North									
TXZ091>095-100>106-115>119-129>132-141									
	02	0215CST 1200CST	Montague - Cooke - Grayson - Fannin - Lamar - Young - Jack - Wise - Denton - Collin - Hunt - Delta - Stephens - Palo Pinto - Parker - Tarrant - Dallas - Eastland - Erath - Hood - Somervell - Comanche						
					0	0			Winter Storm
TXZ119-119									
			Dallas						
	02	1600CST			2	0			Extreme Cold
	03	1400CST							
	A 73 year old woman was found dead from hypothermia on her front porch on Saturday. M67OU, F73OU								
Palo Pinto County									
			5 NW Mineral Wells						
	19	0700CST 0800CST			0	0			Flash Flood
	A mudslide occurred at Turkey Creek crossing due to flash flooding on Turkey Creek.								
Tarrant County									
			Ft Worth						
	19	1225CST			0	0			Hail (0.75)
	Occurred at TCU.								
Johnson County									
			Joshua						
	19	1629CST			0	0			Heavy Rain
	County Road 917 had a bridge under water.								
Tarrant County									
			Haltom City						
	19	1630CST			0	0			Flash Flood
	At least 35 mobile homes in the Skyline Mobile Home Park had to be evacuated due to rising water in a nearby creek.								
Tarrant County									
			Ft Worth						
	19	1640CST 1900CST			0	0			Flash Flood
	30 high water rescues took place due to high water.								
Denton County									
			Countywide						
	19	1700CST 1740CST			0	0			Flash Flood
	Widespread flooding was reported around the county. Numerous roads and highways were closed due to high water.								
Tarrant County									
			Eules						
	19	1700CST			0	0			Flash Flood
	A 5th grade student was swept several hundred feet down a creek he tried to cross, then managed to get out of the water.								
Comanche County									
			De Leon						
	19	1707CST			0	0			Hail (0.88)
Mills County									
			Mullin						
	19	1800CST			0	0	5K		Thunderstorm Wind (G52)
	Trees were blown down by high winds.								
Mills County									
			Central Portion						
	19	1810CST			0	0	2K		Thunderstorm Wind
	A storage shed and a tin roof were destroyed by high winds.								
Grayson County									
			Van Alstyne						
	19	1830CST			0	0			Flash Flood
	The bridge at Eagle Point Crossing just west of Van Alstyne on FM 121 was washed out.								
Lampasas County									
			Lampasas						
	19	1833CST			0	0			Thunderstorm Wind (G60) ^M
	A wind gust to 69 miles an hour occurred at the Lampasas High School.								
Comanche County									
			Gustine						
	19	1835CST			0	0			Thunderstorm Wind (G52)

Storm Data and Unusual Weather Phenomena

March 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, North									
Hamilton County									
10 S Shive	19	1850CST			0	0	1K		Thunderstorm Wind
			Trees were blown down across Highway 84.						
Coryell County									
Copperas Cove	19	1855CST 1910CST			0	0			Hail (1.00)
Bell County									
Hood Afb	19	1858CST			0	0			Thunderstorm Wind (G89) ^M
Hood County									
South Portion	19	1900CST			0	0			Flash Flood
			Many roads flooded and closed.						
Coryell County									
Gatesville	19	1910CST			0	0	1K		Thunderstorm Wind
			Large trees were blown down by high winds.						
Hill County									
Whitney	19	1930CST			0	0	2K		Thunderstorm Wind
			Trees and power lines were blown down by high winds.						
Mclennan County									
Bellmead	19	1937CST			0	0			Hail (0.75)
Mclennan County									
Bellmead	19	1937CST			0	0			Thunderstorm Wind (G55) ^M
Mclennan County									
China Spg	19	1940CST			0	0	2K		Thunderstorm Wind
			A mobile home was unroofed by high winds.						
Dallas County									
Dallas	19	2000CST 2100CST			0	0			Flash Flood
			Several roads were closed due to high water.						
Hamilton County									
Hamilton	19	2000CST			0	0	1K		Thunderstorm Wind
			Trees were blown down by high winds.						
Johnson County									
Cleburne	19	2000CST			0	0			Flash Flood
			Two high water rescues occurred from cars stalled in high water. Neither incident was life threatening.						
Hill County									
Hillsboro	19	2010CST			0	0	2K		Thunderstorm Wind
			Trees were blown down onto houses.						
Fannin County									
Northeast Portion	19	2030CST 2230CST			0	0			Flash Flood
			High water was reported on FM 1396 and FM 100 in northeast Fannin County.						
Navarro County									
Corsicana	19	2030CST			0	0	1K		Thunderstorm Wind
			Trees were blown down in the city.						
Ellis County									
Maypearl	19	2034CST			0	0	200K		Lightning
			A lightning caused fire destroyed a home near Maypearl.						
Limestone County									
Kosse	19	2045CST			0	0	1K		Thunderstorm Wind
			Trees were blown down onto Highway 7.						
Henderson County									
Countywide	19	2140CST			0	0	50K		Thunderstorm Wind
			Trees were blown down across the county. A large oak tree was blown down onto a house collapsing the roof and damaging interior furniture.						
Lamar County									
Paris	19	2150CST 2250CST			0	0			Flash Flood
			At least 10 roads were closed due to high water.						

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
TEXAS, North									
Leon County									
Normangee	19	2305CST 2315CST			0	0	1K		Thunderstorm Wind
									Power lines were blown down between Normangee and Flynn.
Tarrant County									
Ft Worth	20	0600CST			1	0			Flash Flood
									A 60 year old man was found drowned the morning of the 20th, after he failed to report to work. His submerged truck was found in the west fork of the Trinity River in east Ft Worth. This probably occurred from flooding the previous night. M60VE
Palo Pinto County									
10 N Mineral Wells	29	2250CST			0	0			Hail (1.00)
Jack County									
Gibtown	29	2310CST			0	0			Hail (1.75)
Eastland County									
Cisco	29	2315CST 2317CST			0	0			Hail (1.00)
Wise County									
5 S Bridgeport	29	2327CST			0	0			Hail (1.50)
Eastland County									
Eastland	29	2340CST			0	0	2M		Hail (2.75)
									Widespread damage occurred across Eastland. The worst damage was in the east and south parts of town. Roof damage occurred to at least 150 homes. There were numerous reports of broken windows and damage to cars. Some locals claim this was the worse hailstorm in Eastland in 50 years.
Palo Pinto County									
1 SW Gordon	30	0000CST 0015CST			0	0			Hail (1.50)
Erath County									
Thurber	30	0030CST			0	0			Hail (1.00)
									Hail covered Interstate 20 stopping traffic.
Palo Pinto County									
15 S Mineral Wells	30	0038CST			0	0			Hail (1.75)
									Occurred 4 miles west of Lipan.
Parker County									
Dennis	30	0055CST			0	0			Hail (1.75)
Parker County									
6 S Weatherford	30	0127CST			0	0			Hail (1.75)
Parker County									
7 SE Weatherford	30	0133CST			0	0			Hail (1.75)
									Occurred at Anetta.
Parker County									
Aledo	30	0135CST 0148CST			0	0			Hail (3.00)
									Golfball to larger than baseball size hail was reported with a spotter reporting a broken windshield.
Tarrant County									
Ft Worth	30	0210CST			0	0			Hail (2.00)
									Occurred in the hospital district in southwest Ft Worth.
Tarrant County									
Ft Worth	30	0221CST 2210CST			0	0			Hail (1.00)
									Occurred in east Ft Worth.
Tarrant County									
Ft Worth	30	0224CST			0	0			Hail (0.75)
									Occurred at the Forecast Office in north Ft Worth.
Dallas County									
Dallas	30	0335CST			0	0			Flash Flood
									Three streets were closed in Dallas due to high water.
Dallas County									
Mesquite	30	0335CST			0	0			Flash Flood
									Streets were flooded in Mesquite.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
TEXAS, North									
Dallas County									
Mesquite	30	0407CST			0	0			Flash Flood
			Streets were flooded and cars were stalled.						
Ellis County									
2 NE Ovilla	30	0428CST			0	0	50K		Lightning
Milam County									
Buckholts	30	1152CST			0	0			Thunderstorm Wind (G52)
Falls County									
Marlin	30	1220CST			0	0	5K		Thunderstorm Wind
			A large barn was blown down and large trees were uprooted.						
Milam County									
Cameron	30	1220CST			0	0			Hail (0.75)
Milam County									
Cameron	30	1220CST			0	0			Thunderstorm Wind (G52)
Mclennan County									
Waco	30	1245CST			0	0			Thunderstorm Wind (G50)
			Large tree limbs were blown down.						
Falls County									
4 NE Reagan to 4.7 NE Reagan	30	1251CST 1253CST	0.7	75	0	0	1K		Tornado (F0)
			Damage was mostly to trees and a shed.						
Hill County									
7 SW Hillsboro	30	1255CST			0	0			Heavy Rain
			Water was 8 inches deep on highway 22.						
Falls County									
Reagan	30	1259CST			0	0			Hail (1.25)
Limestone County									
.5 SE Thornton to 2.4 SE Box Church	30	1321CST 1335CST	7	440	0	0	250K		Tornado (F2)
			This tornado first touched down just west of farm road 2749 about .5 mile southeast of Thornton. Two houses were damaged, one mobile home destroyed and a mobile home unroofed. The tornado moved northeast damaging a barn, then moved into the Davis Prairie community damaging several houses, some mobile homes, and numerous outbuildings. The tornado moved northeast and weakened before dissipating 2.4 miles south of the Box Church community.						
Limestone County									
2 W Personville to 1.5 N Personville	30	1355CST 1359CST	2.5	30	0	0	3K		Tornado (F0)
			A shed roof was blown off, the antenna was blown off a house, and numerous trees were blown down. The tornado moved northeast into rural Freestone County 1.5 miles north of Personville.						
Freestone County									
4.5 SW Teague to 3.5 S Teague	30	1359CST 1401CST	1	30	0	0	1K		Tornado (F0)
			This tornado is a continuation of the Personville tornado in Limestone county. It moved northeast into rural Freestone county for approximately one mile, downing some trees before dissipating.						
Freestone County									
Teague	30	1400CST			0	0			Thunderstorm Wind (G50)
			Cars were blown off roads by high winds.						
Comanche County									
Comanche	30	1451CST			0	0			Hail (1.75)
			Occurred on the east side of town.						
Robertson County									
Franklin	30	1458CST			0	0			Hail (0.88)
Leon County									
Centerville	30	1504CST			0	0	0.50K		Thunderstorm Wind
			A storage building was blown over by high winds.						
Comanche County									
4 S Comanche	30	1506CST			0	0			Hail (1.25)
Erath County									
2 SW Dublin	30	1517CST			0	0			Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
TEXAS, North									
Hamilton County									
Carlton	30	1526CST			0	0			Hail (1.00)
Leon County									
Marquez	30	1530CST			0	0			Thunderstorm Wind (G50)
Trees were blown down by high winds.									
Leon County									
Flo	30	1545CST			0	0			Thunderstorm Wind (G52)
Extensive tree damage near Flo.									
Leon County									
Jewett	30	1548CST			0	0			Thunderstorm Wind (G50)
Trees were blown down by high winds.									
Hamilton County									
.5 W Carlton to .5 NE Carlton	30	1552CST 1554CST	1.2	40	0	0	5K		Tornado (F0)
Minor damage was done to a dairy.									
Hunt County									
Quinlan	30	1555CST			0	0			Hail (0.75)
Eastland County									
4 N Rising Star to 5 N Rising Star	30	1559CST 1604CST	1	100	0	0	50K		Tornado (F1)
Three barns were destroyed.									
Hamilton County									
Hico	30	1604CST			0	0			Hail (2.00)
Hamilton County									
.5 SW Hico to 2 NE Hico	30	1605CST 1610CST	2.5	100	0	0	75K		Tornado (F0)
Most of the damage was to trees. One tree fell on a house. Approximately five metal roofs were partially peeled back. A few house roofs lost shingles. Minor damage was done to the high school, and minor damage was done to outbuildings, sheds, and trees for one half mile northeast of the high school before the tornado dissipated.									
Eastland County									
6 W Carbon to Carbon	30	1607CST			0	0			Hail (1.75)
Eastland County									
6 NW Rising Star to 6.1 NW Rising Star	30	1610CST 1611CST	0.1	30	0	0			Tornado (F0)
This was a brief touchdown with no apparent damage.									
Erath County									
3 E Dublin	30	1619CST			0	0			Hail (1.00)
Erath County									
2 S Chalk Mtn to 2.1 S Chalk Mtn	30	1620CST 1621CST	0.1	30	0	0			Tornado (F0)
This was a brief touchdown with no apparent damage.									
Anderson County									
Elkhart	30	1624CST			0	0			Hail (1.00)
Anderson County									
1 E Elkhart to 1.1 E Elkhart	30	1624CST	0.1	30	0	0			Tornado (F0)
This was a brief touchdown with no apparent damage.									
Bosque County									
Walnut Spgs	30	1639CST			0	0			Hail (1.00)
Hood County									
Acton	30	1735CST			0	0			Hail (0.88)
Hood County									
Cresson	30	1735CST			0	0			Hail (0.88)
Occurred just east of town.									
Johnson County									
Cleburne	30	1752CST			0	0			Hail (1.00)

Storm Data and Unusual Weather Phenomena

March 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>TEXAS, North</u>									
Tarrant County									
Crowley	30	1805CST			0	0			Hail (1.00)
			Occurred just west of town.						
Johnson County									
Burleson	30	1809CST			0	0			Hail (1.25)
Tarrant County									
Arlington	30	1815CST			0	0			Hail (0.75)
			Occurred on south side of town.						
Tarrant County									
Rendon	30	1824CST			0	0			Hail (0.88)
Tarrant County									
Mansfield	30	1832CST			0	0			Hail (1.00)
Tarrant County									
Dalworthington	30	1841CST			0	0			Hail (1.00)
Tarrant County									
Arlington	30	1852CST			0	0			Hail (0.88)
			Occurred on east side of town.						
<u>TEXAS, North Panhandle</u>									
TXZ001>003-006									
Dallam - Sherman - Hansford - Hartley									
	08	1330CST 1800CST			0	0			High Wind (G36)
			A deepening surface low pressure system moved east into southern Kansas by the early evening hours producing a very tight pressure gradient over the northern Texas panhandle. This resulted in sustained winds of thirty-six knots interpolated at Dalhart and thirty-five knot sustained winds interpolated at Stratford and Spearman.						
<u>TEXAS, Northeast</u>									
Angelina County									
Huntington	01	1300CST			0	0			Hail (0.88)
Angelina County									
2 W Lufkin	01	1326CST			0	0			Hail (0.88)
Harrison County									
2 S Gill	01	1507CST			0	0			Hail (1.75)
Smith County									
Tyler	12	0030CST			0	0			Hail (0.75)
Smith County									
Tyler	12	0033CST			0	0			Hail (0.75)
Franklin County									
Mt Vernon	19	0415CST			0	0	100K		Thunderstorm Wind (G70)
			Straight line winds did moderate to severe damage to the Huntington Tile Group Facility. Nearly 20,000 square feet of tin metal roofing was damaged including two large stacks which were blown over.						
Smith County									
Tyler	19	2215CST			0	0			Thunderstorm Wind (G55)
			Trees and power lines down.						
Smith County									
3 E Lindale	19	2240CST			0	0			Thunderstorm Wind (G55)
			Trees felled blocking FM16.						
Upshur County									
7 N Gilmer	19	2245CST			0	0			Thunderstorm Wind (G60)
			Numerous trees down across U.S. 271 near FM 593.						
Harrison County									
6 E Longview	19	2310CST			0	0			Thunderstorm Wind (G55)
			Several large trees down across Country Club Drive near Loop 281.						

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
TEXAS, Northeast									
Harrison County									
2 S Harleton	19	2310CST			0	0			Thunderstorm Wind (G60)
									Numerous trees down along State Highway 450 south of the Little Cypress Bayou bridge.
Red River County									
Detroit	19	2330CST			0	0			Flash Flood
									Highway 410 flooded and impassable.
Cass County									
Atlanta	25	0750CST			0	0	30K		Thunderstorm Wind (G100)
									Survey conducted by the National Weather Service determined damage across south and southeast Atlanta, TX to be consistent with downburst winds. Damage pattern was 5 miles long and started with a width of 3/4 miles wide ending with a width of 3.5 miles wide. Downburst stripped a McDonald sign, awning collapsed on a car. A tree uprooted a gas main otherwise numerous large pine trees were toppled by the roots.
Angelina County									
9 N Lufkin	25	2025CST			0	0			Hail (0.88)
Angelina County									
Pollok	25	2030CST			0	0			Hail (0.88)
Nacogdoches County									
2 S Nacogdoches	25	2038CST			0	0			Hail (1.00)
Shelby County									
Aiken	25	2110CST			0	0			Hail (1.00)
Shelby County									
15 W Center	25	2110CST			0	0	15K		Lightning
									Lightning struck a two story home. Two rooms were destroyed.
Cherokee County									
13 SW Rusk to 11 NE Rusk	30	1642CST 1726CST	22	150	0	0			Tornado (F1)
									Damage was confined to felled pine trees, broken tree tops and tree limbs. An old hay barn had its tin roof peeled. This tornado moved into Rusk County, TX.
Rusk County									
1.2 SE Reklaw to 7 W Mt Enterprise	30	1726CST 1748CST	11	100	0	0			Tornado (F1)
									Damage was confined to felled pine trees, broken tree tops and tree limbs. This tornado continued from Cherokee County, TX.
Smith County									
Tyler	30	1647CST			0	0			Hail (1.00)
Gregg County									
Longview	30	1650CST			0	0			Hail (1.00)
Cherokee County									
Rusk	30	1705CST			0	0			Hail (1.75)
Rusk County									
5 SW Henderson	30	1727CST			0	0			Hail (0.88)
									Fell at the junction of FM 1798 and FM 839 near McKnight.
Cherokee County									
8 SW Rusk	30	1746CST			0	0			Hail (1.75)
Marion County									
10 W Jefferson	30	1747CST			0	0			Hail (1.00)
Nacogdoches County									
Looneyville	30	1758CST			0	0			Hail (1.00)
Nacogdoches County									
Douglass	30	1800CST			0	0			Hail (1.00)

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
TEXAS, Northeast									
Nacogdoches County									
Cushing	30	1811CST			0	0			Hail (1.00)
Nacogdoches County									
4.8 NW Douglass to 4.9 N Douglass	30	1815CST 1824CST	3	50	0	0			Tornado (F0)
Damage was confined to a few felled pine trees, broken tree tops and tree limbs. This tornado remained in Nacogdoches County, TX.									
Panola County									
Beckville	30	1825CST			0	0			Thunderstorm Wind (G55)
Several large trees down along CR 257.									
Angelina County									
Diboll	30	1900CST			0	0			Hail (1.00)
Angelina County									
Lufkin	30	1902CST			0	0			Hail (0.75)
Angelina County									
4.8 SSE Diboll to 8 ENE Huntington	30	1905CST 1949CST	24.3	440	0	6	5M		Tornado (F3)
Numerous trees and power lines broken, snapped, and pulled out of the ground along the entire track. Several barns were severely damaged and numerous homes were with missing roofs while others suffered severe roof and structural damage. South of the Ora Community one house was totally blown off its foundation and destroyed. This tornado moved into Angelina County, TX from Polk County, TX and continued into Nacogdoches County, TX and San Augustine County, TX.									
Nacogdoches County									
4.8 S Etoile to 6.1 ESE Etoile	30	1949CST 2000CST	7.5	440	0	0	1.2M		Tornado (F2)
Numerous trees and power lines broken, snapped and pulled out of the ground along the track. Numerous homes and business were severely damaged or destroyed. This tornado moved into Nacogdoches County, TX from Polk County, TX and Angelina County, TX then continued northeast into San Augustine County, TX.									
San Augustine County									
16.2 SW San Augustine to 4.9 S San Augustine	30	2000CST 2031CST	15.2	220	0	0			Tornado (F2)
Numerous trees snapped and felled along the extreme western portion of the track. A few power lines were also toppled northeast of Townsend. This tornado moved into San Augustine County, TX from Nacogdoches County, TX, Angelina County, TX and Polk County, TX.									
Angelina County									
2 S Lufkin	30	1922CST			0	0			Hail (0.75)
Nacogdoches County									
2 N Nacogdoches	30	1925CST			0	0			Hail (1.00)
At junction of Hwy 59 and Hwy 259.									
Angelina County									
Huntington	30	1935CST			0	0			Hail (1.75)
Shelby County									
Huxley	30	2045CST			0	0			Hail (0.75)
Rusk County									
10 SW Henderson	31	0030CST			0	0			Hail (1.25)
Rusk County									
5 SE Henderson	31	0105CST			0	0			Hail (0.75)
Angelina County									
2 S Lufkin	31	0341CST			0	0			Hail (0.75)
San Augustine County									
1 S Macune	31	0420CST			0	0			Hail (1.75)
Along County Road 705.									

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
TEXAS, Northeast									
Sabine County									
6 N Hemphill	31	0500CST			0	0			Hail (0.88)
TEXAS, South									
TXZ248>255									
Zapata - Jim Hogg - Brooks - Kenedy - Starr - Hidalgo - Willacy - Cameron									
01		0000CST			0	0			Drought
31		2359CST							
Due to lack of rainfall and water shortages, moderate to severe drought conditions continue to persist over Deep South Texas. Rainfall during the month of March averaged a quarter of an inch or less, and year to date departures from normal have already exceeded 3 inches at some locations. Some irrigation districts have been placed on alert for possible water shortages. This continues to be a serious long term concern for Deep South Texas.									
TEXAS, South Central									
Val Verde County									
Pandale	19	1400CST 1410CST			0	0	0	0	Hail (1.25)
Val Verde County									
8 N Comstock	19	1520CST 1522CST	0.2	30	0	0	0	0	Tornado (F0)
This small and short-lived tornado was spotted by Val Verde County Sheriff's Deputies in open country north of Comstock. It caused no damage.									
Val Verde County									
4 NW Amistad Res East	19	1545CST 1547CST	0.2	30	0	0	0	0	Tornado (F0)
A second small and short-lived tornado was spotted by Val Verde County deputies near Lake Amistad in open country.									
Val Verde County									
16 N Del Rio	19	1610CST 1612CST	0.2	30	0	0	0	0	Tornado (F0)
A third, and final, small tornado was spotted by Val Verde County deputies north of Del Rio in open country.									
Val Verde County									
Laughlin Afb	19	1626CST 1630CST			0	0	0	0	Hail (1.25)
Kinney County									
4 SW Spofford	19	1604CST 1606CST	0.2	100	0	0	0	0	Tornado (F0)
A small and short-lived tornado was observed in southwest Kinney County by members of the Eagle Pass Fire Department.									
Kinney County									
Countywide	19	1720CST 1755CST			0	0	100K	0	Thunderstorm Wind
High winds estimated at 50 to 60 knots, caused widespread minor damage to buildings and vehicles across much of Kinney County.									
Maverick County									
5 NE Quemado	19	1800CST 1820CST			0	0	100K	0	Hail (1.75)
Large hail, propelled by winds of 35 to 40 knots, damaged roofs and knocked over trees in the Quemado area.									
Uvalde County									
Countywide	19	1825CST 1850CST			0	0	250K	100K	Thunderstorm Wind
Severe winds caused spotty damage, mainly in the eastern half of Uvalde County, where they knocked down trees, blew down a dozen power lines, and caused damage to roofs in the area. Damage was also reported to windows in the eastern part of the county.									
Uvalde County									
Uvalde to Sabinal	19	1830CST 1850CST			0	0	0	0	Hail (1.00)
Uvalde County									
Uvalde to Sabinal	19	1840CST 1900CST			0	0	250K	0	Hail (4.50)
Large hail, propelled by high winds, caused widespread damage to roofs and glass in the east part of the county.									

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
TEXAS, South Central									
Uvalde County									
Sabinal	19	1850CST 1900CST			0	1	50K	0	Hail (4.00)
A boy who had been bow-hunting outdoors was hit by the large hail. He was knocked unconscious, but recovered shortly after being taken to a hospital.									
Uvalde County									
3 NW Sabinal to 4 N Sabinal	19	1850CST 1858CST	2	50	0	0	0	0	Tornado (F0)
A small and short-lived tornado was observed near Sabinal by a law enforcement officer. Reports of the tornado were also called in by the public. It struck approximately 3 miles northwest of Sabinal and tracked toward the east northeast before dissipating. The tornado did not cause any significant damage. It was rated F0 on the Fujita Scale.									
Zavala County									
Batesville to 15 E Batesville	19	1835CST 1900CST			0	0	50K	100K	Thunderstorm Wind
Trees were blown down and windows were broken in the northeast part of Zavala County from Batesville to the Uvalde and Frio County lines.									
Frio County									
Frio Town to Big Foot	19	1855CST 1900CST			0	0	0	50K	Thunderstorm Wind
Damage was spotty across the northern part of Frio County due to high winds. Trees were knocked over and large tree limbs were blown down.									
Frio County									
Pearsall	19	1930CST 1950CST			0	0	0	0	Hail (1.75)
Medina County									
Hondo to 8 E Castroville	19	1855CST 1915CST			0	15	200K	0	Thunderstorm Wind
Across Eastern Medina County, wind damage was widespread, with road signs blown down, trees knocked over, roofs damaged and large limbs were taken out of trees. All the damage was laid out in an west-southwest to east-northeast path. Over a dozen people were injured as glass, broken from house and vehicle windows, was propelled by the gusty winds.									
Medina County									
Hondo Arpt	19	1859CST 1905CST			0	0	0	0	Thunderstorm Wind (G69) ^M
Medina County									
Castroville to 6 SE Castroville	19	1905CST 1925CST			0	0	0	0	Hail (1.75)
Medina County									
Hondo	19	1905CST 1920CST			0	0	300K	100K	Hail (4.50)
Very large hail, up to softball size, was widespread across Hondo, damaging up to two-thirds of vehicle bodies and windows and breaking out building windows across the town.									
Medina County									
6 N Natalia	19	1910CST 1912CST	0.3	50	0	0	0	50K	Tornado (F1)
A small and short-lived tornado struck very near a house in the Natalia area. It destroyed a large oak tree that had been determined to be an historic location. Researchers had documented that this was the tree under which General Antonio Lopez de Santa Anna Perez de Lebron had camped when he and his troops rested on the banks of Chacon Creek during his march on the Alamo in March of 1836.									

Storm Data and Unusual Weather Phenomena

March 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									
Bexar County									
Countywide	19	1915CST 2000CST			0	10	2M	100K	Thunderstorm Wind
<p>High winds, causing spotty damage over the western third of Bexar County, and nearly continuous damage over the eastern two-thirds of the county, caused widespread destruction of trees and limbs. The high winds damaged roofs, propelled hail into homes and cars, and knocked over power poles. About ten persons were injured by the flying debris. The greatest devastation was in southwest Bexar County just northeast of the town of Lytle. Emergency management and Red Cross officials estimated 50 mobile homes and houses severely damaged or destroyed, with minor damage to another 100 mobile homes and houses. In addition to the widespread downburst damage, evidence was found of small and short-lived tornadoes. It was very difficult to separate the widespread downburst-wind damage from the tornado damage. The main clues were that the downburst damage was almost exclusively along a southwest to northeast path and showed a consistent and gradual gradient of damage levels from the worst of the damage to the least of the damage. The tornado damage indicated completely different direction of movement and very strong, pronounced gradients of damage. Often a structure would be completely destroyed, with structures to the right and left of it nearly untouched.</p>									
Bexar County									
San Antonio Intl Arp	19	1915CST 1920CST			0	0	0	0	Thunderstorm Wind (G70) ^M
Bexar County									
8.5 W Von Ormy to 8 W Von Ormy	19	1915CST 1917CST	0.5	20	0	0	500K	0	Tornado (F0)
<p>Tornado number one, an F0 on the Fujita Scale, formed near 715 pm at the intersection of Greenwood Road and Gridley Road. It moved toward the southeast for one mile, then dissipated. The path width was 20 yards. It damaged roofs and walls of mobile homes and houses, took large limbs off trees, and showed a great variation in direction in how it tossed the debris. It dissipated at 717 pm.</p>									
Bexar County									
8.5 W Von Ormy to 8 W Von Ormy	19	1917CST 1919CST	0.5	20	0	0	500K	0	Tornado (F0)
<p>Tornado number two, also an F0, formed near 717 pm at the intersection of Jarrett Road and Gridley Road. It also tracked toward the southeast, dissipating after one-half mile. Its path width was also estimated at 20 yards. It damaged roofs of mobile homes and houses, and damaged trees in the area. Debris was again tossed in several directions. This tornado dissipated at 719 pm.</p>									
Bexar County									
8.5 W Von Ormy to 8 W Von Ormy	19	1917CST 1919CST	0.5	20	0	0	500K	0	Tornado (F1)
<p>Tornado number three, an F1 on the Fujita Scale, also formed around 717 pm at the intersection of Ess Road and Jarrett Road. It moved toward the southeast, dissipating after one-half mile. Its path width was estimated at 20 yards. It destroyed a mobile home, damaged others and also damaged trees in the area. This tornado dissipated near 719 pm.</p>									
Bexar County									
8 W Von Ormy to 7.5 W Von Ormy	19	1919CST 1923CST	1	50	0	0	500K	0	Tornado (F1)
<p>Tornado number four, another F1, formed 1 mile east of the intersection of Ess road and Jarrett Road around 719 pm. It moved toward the southeast, dissipating after one mile. Its path width was estimated at 50 yards. It struck three mobile homes that had been tied end-to-end and severely damaged all three. It left them twisted into the shape of a letter 'U.' With no other structures in the area, the remainder of its damage was to trees.</p>									
Bexar County									
3 NW Somerset to 4.5 NW Somerset	19	1920CST 1926CST	1.5	50	0	30	2M	0	Tornado (F2)
<p>Tornado number five, strongest of the six and rated as a minimal F2 tornado on the Fujita Scale, formed about 3.5 miles southwest of the intersection of Loop 1604 and I35. It struck near 720 pm along near Silver Street and Bravo Street and moved toward the north for 1.5 miles. It apparently weakened periodically, producing a hit-and-miss damage path. It completely destroyed four mobile homes and damaged several others.</p>									
Bexar County									
4 ENE Somerset to 4 E Somerset	19	1925CST 1929CST	0.5	60	0	0	1M	0	Tornado (F1)
<p>Tornado number six, struck just east of Somerset on SH16, about one mile north of Loop 1604. It was rated F1 on the Fujita Scale, and tracked toward the southeast. It damaged a large barn and several outbuildings at a construction site as it moved approximately one-half mile. It was estimated at 60 yards wide.</p>									
Bexar County									
12 NW San Antonio	19	1930CST 1950CST			0	0	0	0	Hail (2.00)
Bexar County									
5 NW San Antonio	19	1935CST 1955CST			0	0	0	0	Hail (1.75)

Storm Data and Unusual Weather Phenomena

March 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									
Atascosa County									
Lytle	19	1950CST 2020CST			0	0	500K	100K	Thunderstorm Wind
Severe winds in the Lytle area damaged or destroyed three mobile homes, while blowing over trees, limbs, road signs, and damaging roofs in the area.									
Wilson County									
Countywide	19	2010CST 2030CST			0	0	200K	100K	Thunderstorm Wind
Severe winds, estimated at 60 to 70 knots, caused spotty damage across much of Wilson County. The worst of the damage was in the northern part of the county, where trees and tree limbs were blown down, roofs were damaged, and outbuildings were blown over.									
Guadalupe County									
Countywide	19	2030CST 2050CST			0	2	500K	100K	Thunderstorm Wind
High winds across the county caused widespread damage to homes, trees and outbuildings. Damage in the south part of the county was more spotty than over the north part. An anemometer at a school weather network in Seguin measured the wind gusts at 59 knots. Near Zorn, the high winds took sections of roofs off homes, and rolled and damaged several homes and mobile homes. One mobile home had been rolled over a truck and was completely destroyed. Close inspection of the damage revealed a divergent, fan-shaped path of damage with the strongest damage in the center portion where the mobile home was destroyed, and lesser damage on both sides. To the left, another mobile home was moved, but with only minor damage. To the right, a tractor was rolled for a short distance. This damage was clearly due to a downburst. One woman, on hearing the NWS warning, evacuated her mobile home and drove with her son to her mother's house nearby. When she returned, her mobile home had been destroyed. Both likely escaped severe injuries by getting to shelter. At this time the event began to assume the character of a derecho.									
Guadalupe County									
New Braunfels	19	2035CST 2040CST			0	0	0	0	Thunderstorm Wind (G59) ^M
Hays County									
Countywide	19	2035CST 2045CST			0	0	100K	100K	Thunderstorm Wind
The derecho continued across Hays County where winds estimated at 60 to 70 knots knocked over trees, brought down large limbs and damaged homes and vehicles. The worst damage was in the southeast part of the county, near the town of San Marcos, where several power lines were blown down.									
Hays County									
San Marcos Muni Arpt	19	2035CST 2040CST			0	0	0	0	Thunderstorm Wind (G50) ^M
Caldwell County									
Countywide	19	2045CST 2105CST			0	0	50K	100K	Thunderstorm Wind
Trees were blown down in an west-southwest to east-northeast direction by the derecho that had begun in eastern Bexar County and had consistently continued through Guadalupe County. Only very minor, spotty damage was reported to roofs of homes and windows of homes and cars.									
Bastrop County									
Countywide	19	2100CST 2125CST			0	0	100K	100K	Thunderstorm Wind
The widespread derecho continued to blow down trees in an west-southwest to east-northeast direction, continuing the damage sustained from eastern Bexar County through Guadalupe and Caldwell Counties. Only spotty damage was indicated to roofs of homes and windows of cars and homes.									
Lee County									
Countywide	19	2115CST 2140CST			0	0	200K	50K	Thunderstorm Wind
Widespread wind damage in the derecho was reported across Lee County by wind gusts estimated at 60 to 70 knots. The storms knocked over trees and power lines, damaged roofs and windows, and destroyed barns and outbuildings.									
Lee County									
Lexington	19	2120CST 2125CST			0	0	0	0	Thunderstorm Wind (G57) ^M
Gust to 57 knots reported by weather instruments at a school.									

Storm Data and Unusual Weather Phenomena

March 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

Dimmit County

15 NW Carrizo Spgs to 19 2125CST 0 0 0 50K Thunderstorm Wind
10 N Carrizo Spgs 2140CST

A second round of strong thunderstorms moved across northern Maverick County and into northwest Dimmit County, strengthening as they tracked east-southeastward. The storms produced high winds that caused spotty damage over the northwest part of Dimmit County, along SH83 just south of the Dimmit-Zavala County line. Numerous trees were knocked over, with limbs down across the area.

Bexar County

5 NW Helotes 31 0510CST 0 0 0 75K Thunderstorm Wind
0515CST

A very small and compact downburst struck northwest Bexar County, knocking over some 15 trees.

TEXAS, South Panhandle

NONE REPORTED.

TEXAS, Southeast

Jasper County

Jasper 25 2115CST 0 0 5K Thunderstorm Wind
Trees and power lines were blown down.

Jasper County

5 E Jasper 25 2200CST 0 0 5K Thunderstorm Wind
Large trees were blown down on power lines.

Newton County

6 N Burkeville 25 2215CST 0 0 5K Thunderstorm Wind
Trees were blown down on power lines.

Newton County

Bon Wier 25 2232CST 0 0 5K Thunderstorm Wind
Trees were blown down.

Hardin County

Batson 30 2025CST 0 0 Hail (0.75)

TEXAS, West

Ector County

Penwell 29 1740CST 0 0 0 0 Urban/Sml Stream Fld
Minor street flooding was reported in Penwell by a trained spotter.

Howard County

Forsan 29 1800CST 0 0 0 0 Hail (0.75)

Ector County

Penwell 29 1820CST 0 0 0 0 Hail (0.75)

Mitchell County

Colorado City 29 1858CST 0 0 0 0 Hail (0.75)

Midland County

1 E Spraberry 29 1900CST 0 0 0 0 Hail (0.88)

Glasscock County

14 W Garden City 29 1915CST 0 0 0 0 Hail (1.00)
1923CST

Local TV meteorologist reported hail covering Highway 158.

Glasscock County

Garden City 29 1930CST 0 0 0 0 Hail (0.75)

Howard County

5 SE Big Spring 29 1942CST 0 0 0 0 Hail (0.75)

Mitchell County

Colorado City 29 2045CST 0 0 0 0 Hail (0.75)

Upton County

Rankin 30 0130CST 0 0 0 0 Hail (0.75)

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
VERMONT, North and Central									
			morning of March 10th. In the town of Swanton, the wind was measured at 62 mph (54 knots). In addition, trees were reported blown down in the St Albans area.						
VTZ005			Chittenden						
	10	0130EST 0230EST			0	0	5K		High Wind
			A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the early morning of March 10th. Trees and power lines were reported blown down countywide, with numerous homes without power.						
VTZ009			Addison						
	10	0130EST 0230EST			0	0	30K		High Wind
			A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the early morning of March 10th. Trees were blown down in the Middlebury area with about 1000 people without power. At Middlebury Union High School, the wind was measured at 45 mph. In Ferrisburgh, a large tree (3 feet in diameter) was uprooted by the wind and fell on a house resulting in structural damage.						
VTZ003			Orleans						
	10	0200EST 0230EST			0	0	5K		High Wind
			A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the early morning of March 10th. Trees and Power lines were blown down across the county with power outages.						
VTZ008			Washington						
	10	0200EST 0300EST			0	0	5K		High Wind
			A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the early morning of March 10th. Trees were blown down in the Middlesex area. In addition, power was out in the towns of Warren, Waitsfield and Fayston.						
VTZ011			Rutland						
	10	0230EST 0345EST			0	0	5K		High Wind
			A storm system moved into southern Canada Saturday, March 9th. The associated strong cold front moved across the area during the early morning hours of March 10th. Strong winds were associated with this low pressure system and strong cold front during the early morning of March 10th. State Police reported trees blown down in several locations with power outages across the county.						
VTZ003>004-006>008-010-012			Orleans - Essex - Lamoille - Caledonia - Washington - Orange - Windsor						
	18	1000EST 1600EST			0	0	7K		Light Snow
			An area of low pressure moved from the Great Lakes region across New England during the day of March 18th. Light snow fell across the area with accumulations generally 3 to 6 inches of wet snow. The greatest accumulations were in the higher terrain. Several automobile accidents were reported due to the slippery roads.						
VTZ002-004-009			Franklin - Essex - Addison						
	20	1500EST 2200EST			0	0	15K		Light Snow
			A late season winter storm moved northeast from the Tennessee Valley early Wednesday, March 20th passing across southern New England Wednesday night. Snow spread across the area during the morning and became steadier during the afternoon into the early night hours. Accumulations of the wet snow were generally 3 to 6 inches with lesser amounts across the remainder of northwest Vermont.						
VTZ003-006>008-010>012			Orleans - Lamoille - Caledonia - Washington - Orange - Rutland - Windsor						
	20	1900EST 2200EST			0	0	110K		Winter Storm
			A late season winter storm moved northeast from the Tennessee Valley early Wednesday, March 20th passing across southern New England Wednesday night. Snow spread across the area during the morning and became steadier and heavier during the afternoon and first part of the night, before tapering off to flurries. Accumulations of the heavy wet snow ranged from 6 to 12 inches, with greater than 7 inches generally falling by about 6 PM on the 20th. Numerous accidents were reported, especially in the counties of						

Storm Data and Unusual Weather Phenomena

March 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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VERMONT, North and Central

Rutland, Washington, Orange and Orleans. Portions of I-89 were closed for a short time in Washington county. A few specific accumulations included: In Caledonia county, Groton had 12 inches while East Burke had 7.7 inches. In Orleans county, East Albany had 9 inches as well as Eden in Lamoille county. In East Wallingford (Rutland county) and Worcester (Washington county) received 8 inches. In Orange county, Brookfield reported 10 inches. In Windsor county, Springfield had 12 inches while Ludlow had 8 inches.

VTZ011>012

Rutland - Windsor

26	1400EST								
	2359EST			0	0	30K			Mixed Precipitation

A late season storm system moved northeast from the Tennessee Valley on the morning of Tuesday, March 26th and passed across New England during the night of March 26th and early Wednesday morning, March 27th. Snow overspread the area during the afternoon of the 26th, then mixed with and changed to sleet and freezing rain during the evening. Travel conditions were hazardous with the wet snow and ice. Numerous accidents were reported, especially in Rutland county. In general, across the area, between 3 and 5 inches of snow and ice fell.

VTZ003>004-006>008

Orleans - Essex - Lamoille - Caledonia - Washington

26	1600EST								
	0330EST			0	0	70K			Winter Storm

A late season storm system moved northeast from the Tennessee Valley on the morning of Tuesday, March 26th and passed across New England during the night of March 26th and early Wednesday morning, March 27th. Snow overspread the area during the afternoon of the 26th, becoming steadier and heavier during the late afternoon and early night hours. The snow mixed with or changed to sleet and freezing rain late at night. Travel conditions were hazardous with the wet snow. Numerous accidents were reported, especially in Washington county. In general, across Caledonia and Washington counties, between 6 and 12 inches of snow fell. In the counties of Essex, Orleans and Lamoille generally 6 to 8 inches fell with some ice accumulation. A few specific accumulations included: In Caledonia county, Groton received 12 inches while West Burke had 10 inches. Eden (Lamoille county) and East Albany (Orleans county) both received 6 inches of snow with ice. In Washington county, Waitsfield had 10 inches.

VTZ001>002-005-009

Grand Isle - Franklin - Chittenden - Addison

26	1600EST								
	0200EST			0	0	60K			Winter Storm

A late season storm system moved northeast from the Tennessee Valley on the morning of Tuesday, March 26th and passed across New England during the night of March 26th and early Wednesday morning, March 27th. Snow overspread the area during the afternoon of the 26th, becoming steadier and heavier during the late afternoon and early night hours. The snow mixed with or changed to sleet and freezing rain during the night. Travel conditions were hazardous with the wet snow and mixed precipitation. Numerous accidents were reported. In general, between 7 and 10 inches of snow fell across the area before it changed to mixed precipitation. A few specific accumulations included: In Franklin county, St Albans and Sheldon Springs both received 7 inches while in Chittenden county, Colchester had 8.3 inches. The greatest amount fell in Addison county, with 12 inches reported in West Addison.

VTZ010

Orange

26	1600EST								
	0100EST			0	0	20K			Winter Storm

A late season storm system moved northeast from the Tennessee Valley on the morning of Tuesday, March 26th and passed across New England during the night of March 26th and early Wednesday morning, March 27th. Snow overspread the area during the afternoon of the 26th, becoming steadier and heavier during the mid afternoon into the early night hours. The snow mixed with then changed to sleet and freezing rain during the night. Travel conditions were hazardous with the wet snow and ice. In general, across the county between 5 and 7 inches of wet snow and ice fell.

VERMONT, South

VTZ014

Windham

10	0100EST								
	0300EST			0	0	30K			High Wind

The pressure gradient between deep low pressure over Ontario, and high pressure off the southeast coast, produced a strong southerly flow across southern Vermont on the evening of March 9. Then, a strong cold front moved across the region shortly after midnight, early on March 10th. A line of showers and embedded thunderstorms accompanied the front. Strong winds ahead of and along the front produced some damage across Windham County. Law enforcement personnel reported a large number of trees and power lines down throughout the county.

VTZ013>014

Bennington - Windham

20	1600EST								
	2000EST			0	0				Winter Storm

An area of low pressure developed in the Ohio Valley early on March 20th. The low then tracked east along the Mason-Dixon line during the day, and off the mid Atlantic coast by evening. Moisture from both the Gulf of Mexico and Atlantic ocean was drawn into the storm. The air was just cold enough for the precipitation to fall mostly in the form of snow across southern Vermont. This snowstorm, on the first day of astronomical spring, was elevation dependent, as a swath of 6 to 12 inches accumulated across the

Storm Data and Unusual Weather Phenomena

March 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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WASHINGTON, Northeast

the crest of the northern Washington Cascades. The avalanche sensor atop Mission Ridge (elevation 6740 feet) measured sustained winds in excess of 50 mph for over 24 hours. The peak wind gust of 106 mph was measured at 700 PM on the 19th. Valley locations did not experience high winds on this day.

WAZ036>037-042

Spokane Area - Northeast Mountains - East Slopes Northern Cascades

19	0600PST								
20	1800PST								Heavy Snow

A strong moisture-laden jet stream from the west-northwest in combination with a polar air mass arriving from Canada brought exceptionally heavy snow to parts of eastern Washington on this first day of spring. Heavy snowfall in the immediate Spokane area resulted when a stationary band of heavy snow developed over central Spokane County and remained in the same place for nearly 12 hours. Far northern and southern parts of Spokane County received one inch or less of snow. In the Cascades, this exceptionally heavy snow pounded the passes for two straight days, closing Stevens Pass to traffic from the afternoon of the 19th through the morning of the 20th due to the avalanche threat. The west-northwest trajectory of the jet stream was also conducive for pushing heavy snow past the crest and into the upper reaches of the major valleys. Snowfall totals with this storm include: Stevens Pass...36", Holden Village...24", 49 Degrees North Ski Area...22", Harts Pass SNOTEL...22", Lake Wenatchee...18", Plain...16", Stehekin...15", Blewett Pass...14", Mount Spokane Ski Area...12", Mission Ridge Ski Area...11+", NWS Spokane...7.7", Bodie Mountain...5", Spokane International Airport...4.5", Boundary Dam...4", Davenport...3.2", and Northport...3". The snowfall total of 4.5" at the Spokane International Airport is the heaviest snow to fall so late in the season.

WAZ042

East Slopes Northern Cascades

26	2000PST								
27	0100PST								High Wind (G79) ^M

Jet stream winds over the Northwest pushed a cold front across the Cascades late on the evening of March 26, bringing high winds. The avalanche sensor atop Mission Ridge (elevation 6740 feet) measured sustained winds in excess of 50 mph through this entire time period, and the peak gust was 91 mph. The strong wind mixed into some valley locations with some power lines in Brisky Canyon (west of Cashmere) getting blown down. This caused a power outage to 239 utility customers starting at 1156 PM.

WASHINGTON, Northwest

WAZ002>008-010>011-016

Western Whatcom - Northern Casade Foothills - Central Casade Foothills - Northwest Interior - Everett And Vicinity - Seattle Metropolitan Area - Tacoma Area - Hood Canal/Kitsap Peninsula - Southwest Interior - Central Coast

07	2000PST								
08	0400PST								Heavy Snow

Snow showers fell over most of western Washington, creating large traffic jams and closing some highways. Up to 5 inches of "thundersnow" fell over interstate 405, causing many people to abandon their vehicles, the ensuing traffic jam closed the highway for several hours. Parts of I-90 and I-5 were also closed. Along the coast up to 6 inches of snow fell, while other inland areas from Lewis to Whatcom county got about 2 inches.

Grays Harbor County

Ocean Shrs

12	1000PST								
	2000PST								Storm Surge

25 foot seas combined with high tides cause minor coastal flooding near the north jetty of Grays Harbor

WAZ001>005-009-013-017>018

San Juan - Western Whatcom - Northern Casade Foothills - Central Casade Foothills - Northwest Interior - Admiralty Inlet Area - Eastern Strait Of Juan De Fuca - West Slopes Northern Cascades And Passes - West Slopes Central Cascades And Passes

19	1100PST								
20	1100PST								Heavy Snow

Heavy snow fell over parts of western Washington, closing mountain passes, schools, and airports. In the Bellingham area up to 9 inches of snow caused the airport to close and forced western university to cancel classes. In and near the mountains up to 30 inches of snow fell in 24 hours closing both Stevens and Snoqualmie passes for a day, as well as parts of other highways into the foothills. Up to 6 inches of snow fell in other areas such as the Port Angeles and Anacortes areas.

WAZ004-014>015

Central Casade Foothills - Western Strait Of Juan De Fuca - North Coast

20	1900PST								
21	0700PST								High Wind (G50) ^M

Strong easterly wind gusting to 58 mph was recorded in North Bend, Clallam Bay and Tatoosh Island.

WASHINGTON, Southeast

WAZ025

East Slopes Southern Cascades

18	1200PST								
	2120PST								Heavy Snow

11.5 inches new snow 7 miles northwest of Easton and 12 inches at Cle Elum in Kittitas County.

Storm Data and Unusual Weather Phenomena

March 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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WASHINGTON, Southeast

WAZ025	East Slopes Southern Cascades				0	0			Avalanche
	18	1815PST							

Two men caught in avalanche 10 miles west of Easton in Lost Lake area of Kittitas County.

WASHINGTON, Southwest

WAZ019-021>022	West Slopes Southern Cascades And Passes - South Coast - Lower Columbia				0	0			Heavy Snow
	07	0100PST							
	08	1800PST							

A late season winter storm blanketed Southwest Washington with snow. Along the Coast 6 inches fell in South Bend and 2 inches at Long Beach. Kelso had 1 to 2 inches. In the Gorge 4 inches was reported at Stevenson.

WAZ023-039	West Columbia River Gorge - Vancouver Area				0	0			Heavy Snow
	15	0300PST							
	17	1200PST							

Snow blanketed Southwest Washington with 3 inches at Stevenson, 4 inches on Livingston Mountain, 3 inches at Brush Prairie, 2 inches at Salmon Creek, Camas, and Vancouver, and 1 inch at Washougal.

WEST VIRGINIA, East

WVZ048>052-054>055	Grant - Mineral - Hampshire - Morgan - Berkeley - Pendleton - Hardy				0	0	20K		Strong Wind
	09	2100EST							
	10	1300EST							

A strong cold front which crossed the region late on the 9th was accompanied by gusty northwest winds up to 55 MPH at ground level. Some locations reported downed trees and power lines in addition to some structural damage due to the high wind. Measured wind gusts included 49 MPH at Petersburg and 48 MPH at Martinsburg. In Mineral County, a wind sensor on the top of a 75 foot tower in Keyser recorded a wind gust of 69 MPH at 10:30 PM on the 9th and 62 MPH at 4 AM on the 10th. In the northern Mineral County community of Ridgeley, the high wind caused moderate structural damage. The slanted roof of a two story apartment building which was replaced during the summer of 2001 was partially ripped off around 12:20 PM on the 10th. Roof debris damaged at least two homes, a pool, and a car before coming to rest on Second Street. Debris also spilled onto apartment building balconies and blocked doorways, trapping two families. County officials also reported numerous power outages and downed trees blocking roads.

Pendleton County Northwest Portion	10	1800EST			0	0	10K		Wild/Forest Fire
	18	1200EST							

Drought conditions resulted in very dry brush and woodlands. This allowed a fire which was started by human activity near Seneca Rocks on March 10th to spread rapidly. It burned 87 acres of mainly private land before being brought under control on the 15th. A small portion of Seneca Rocks National Recreation Area was scorched by the fire. Officials reported \$10,000 damage to hiking trails in the park. The fire was finally extinguished on March 18th.

WVZ048>055	Grant - Mineral - Hampshire - Morgan - Berkeley - Jefferson - Pendleton - Hardy				0	0			Strong Wind
	21	1700EST							
	22	0400EST							

A strong arctic cold front pushed through the region during the evening of the 21st. This front ushered in strong northwest winds that gusted as high as 55 MPH. The highest winds occurred between 6 PM and 11 PM, but gusty conditions continued through 4 AM on the 22nd. Minor structural damage was reported in isolated locations, in addition to downed trees and power lines. A wind gust of 41 MPH was recorded at the airport near Martinsburg.

WEST VIRGINIA, North

Brooke County Countywide	09	1845EST 1900EST			0	0	10K		Thunderstorm Wind
Hancock County Countywide	09	1845EST 1900EST			0	0	10K		Thunderstorm Wind
Marshall County Countywide	09	1845EST 1900EST			0	0	100K		Thunderstorm Wind

Thunderstorm winds blew the roofs from two Moundsville businesses.

Ohio County Countywide	09	1845EST 1900EST			0	0	10K		Thunderstorm Wind
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Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
WEST VIRGINIA, North									
WVZ001>004-012-021>023-041									
Hancock - Brooke - Ohio - Marshall - Wetzel - Marion - Monongalia - Preston - Tucker									
	09	1900EST			0	0	90K		High Wind
	10	0200EST							
Wetzel County									
Countywide	09	1920EST 1935EST			0	0	10K		Thunderstorm Wind
Marion County									
Countywide	09	1945EST 2000EST			0	0	10K		Thunderstorm Wind
Monongalia County									
Countywide	09	1945EST 2000EST			0	0	10K		Thunderstorm Wind
Preston County									
Countywide	09	2015EST 2030EST			0	0	10K		Thunderstorm Wind
Tucker County									
Countywide	09	2030EST 2045EST			0	0	10K		Thunderstorm Wind
<p>A deepening area of low pressure moving eastward across the northern Great Lakes swept a strong cold front across northern West Virginia during the late afternoon/early evening hours of the 9th. This intensifying low produced a large area of strong low-level winds, both ahead of and behind the cold front. Winds of between 70 - 80 MPH were present just a few thousand feet off the surface across the area by the mid-afternoon hours. As showers formed during the day, these strong winds were occasionally brought down to the surface. To further complicate matters, by the late afternoon hours enough instability was present to produce a line of severe thunderstorms along the main cold front as it entered northern West Virginia. This combination of strong gradient winds and severe thunderstorm winds produced widespread damage across the area, mostly in the form of downed trees and power lines. These high winds continued after the cold frontal passage, downing trees and power lines, until the early morning hours of the 10th. At that time, the surface low moved off into Quebec and the strong gradient winds finally diminished.</p>									
Tucker County									
Parsons	20	0930EST 1400EST			0	0	5K		Flood
<p>Several small streams in the Parsons area overflowed their banks, producing minor flooding on SR 219, just south of Parsons. A few other county roads in the area also experienced minor flooding.</p>									
WVZ023-041									
Preston - Tucker									
	20	1047EST 2300EST			0	0	10K		Flood
<p>The Cheat River at Rowlesburg crested at 6 PM at 19.0 feet (flood stage 16.0 feet).</p>									
Marion County									
Mannington	20	1400EST 1530EST			0	0	5K		Flood
<p>Several small streams and creeks overflowed their banks in the Mannington area. Heavy rains of 1.00 to 2.50 inches across the Monongahela River basin in northern West Virginia produced minor flooding on the Cheat and Monongahela Rivers, along with some small stream flooding.</p>									
WVZ023-041									
Preston - Tucker									
	22	0400EST 0900EST			0	0			Winter Storm
<p>A late-season storm spread between 3 and 7 inches of snow across Preston and Tucker Counties. The highest snowfall totals were generally confined to the ridges above 2500 feet.</p>									
WVZ012									
Wetzel									
	26	1350EST 1530EST			0	0	5K		Flood
<p>Another 1.0 to 1.5 inches of rain over relatively saturated ground produced small stream flooding across portions of Wetzel County on the 26th. Portions of SR 20 were flooded in the Jacksonburg area. Minor flooding was also reported near Hundred.</p>									

WEST VIRGINIA, Southeast

NONE REPORTED.

Storm Data and Unusual Weather Phenomena

March 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

WVZ005>006

Wayne - Cabell

01 0000EST

0 0

Monthly Precipitation

31 2300EST

Total monthly precipitation was 7 to 9 inches across Cabell and northern Wayne Counties. The 8.88 inches at the Tri State Airport was their wettest March on record. The community of Wayne had 8.27 inches for the month. Normal March precipitation is 3.5 to 4 inches.

WVZ035>037-046

Raleigh - Fayette - Nicholas - Pocahontas

02 0700EST

0 0

Snow

1200EST

One to 3 inches of snow accumulated on a southeast wind flow, as a storm lifted northeast into the lower Ohio Valley.

**WVZ005>011-
013>017-019>020-
026>028-030>032-
036>040**

Wayne - Cabell - Mason - Jackson - Wood - Pleasants - Tyler - Lincoln - Putnam - Kanawha - Roane - Wirt - Ritchie - Doddridge - Boone - Clay - Braxton - Lewis - Harrison - Taylor - Fayette - Nicholas - Webster - Upshur - Barbour

09 1720EST

0 0

75K

High Wind (G61) ^M

1955EST

A strong cold front rapidly transversed West Virginia during this Saturday evening. Wind gusts of 45 to 70 mph were associated with a narrow band of showers. Wood County Airport measured a gust to 70 mph at 1812E. The Tri State Airport near Huntington measured a 62 mph gust at 1730E. The Charleston National Weather Service office measured a gust to 51 mph at 1833E. In the wake of the front, winds remained gusty, as temperatures fell quickly from the 60s into the 40s.

A roof to a small church in Huntington was blown off. A sign was blown through a store window in Ravenswood. Numerous trees and power lines were affected in the western counties. Damage became more isolated from the Charleston vicinity and the Interstate 79 corridor on east, into the mountainous counties.

**WVZ005>008-
014>018-028>029-
039>040**

Wayne - Cabell - Mason - Jackson - Putnam - Kanawha - Roane - Wirt - Calhoun - Braxton - Gilmer - Upshur - Barbour

20 0330EST

0 1

480K

Flood

21 0100EST

A band of heavy rain, about 30 miles wide, stretched from the Huntington vicinity on northeast, toward Spencer, Burnsville, and Buckhannon. The rain fell in about a 30 hour period from the predawn hours of the 19th to after dawn on the 20th. However, the heaviest rain occurred during a 6 hour period, early on the 20th. Rain totals of 4 to 5 inches fell over the urban area around Kenova, Ceredo, and Huntington. The Huntington Tri State Airport measured 4.8 inches. The cooperative observer in the city of Huntington had 3.6 inches of rain. Further east, Pea Ridge had 2.9 inches of rain. The lock and dam along the Ohio River at Hogsett measured 3.3 inches. Southside of Mason County had 2.75 inches of rain. Spencer saw 2.6 inches of rain. Rains of 1.75 to 2.5 inches were more common in central West Virginia.

Fourpole Creek flooded the Enslow Park section of Huntington. Water surrounded homes and flooded outbuildings, basements, and garages. Only a couple of homes had water in their living area.

In Wayne County, seven homes were flooded along Krauts Creek. A woman and her daughter were rescued from Krauts Creek, when their car was swept into the creek.

In Roane County, homes were flooded in the Alvord and Bell section of Spencer by Spring Creek. About 25 to 30 homes had basements, garages, and outbuildings flooded. Six homes had up to 6 inches of water in their living area. One injury was reported from Roane county, resulting in hospitalization.

Along the border region of Jackson, Roane, and Kanawha Counties, the Pocatalico River drainage flooded roads, surrounded homes, and flowed into some basements and outbuildings. This included such small tributaries as Allen Fork, Haines Creek, and Pocatalico Creek near Sissonville. However, water levels in this vicinity, crested much lower than the floods of March, 1997 and June, 1998.

In Putnam County, Little Hurricane Creek flooded roads near Winfield. One van, with its occupant, got stuck in these waters. Cow Creek flooded roads, fields, and some outbuildings.

River flooding occurred later on the 20th along the upper Little Kanawha River, affecting a few homes and businesses. At Glenville, the Little Kanawha River crested near 27 feet around 2300E on the 20th. Flood stage is 23 feet. Grantsville saw a crest just over its 36 foot flood stage. The Tygart Valley River saw minor overflow late on the 20th, affecting roads not dwellings. Philippi saw a crest near 20 feet, while Belington had 15.8 feet.

All total, the West Virginia Office of Emergency Services reported 6 dwellings with major damage and 64 homes with minor damage

Storm Data and Unusual Weather Phenomena

March 2002

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

WEST VIRGINIA, West

from this episode. On the order of 10 private bridges were damaged. No federal recovery involvement was expected.

WISCONSIN, Extreme Southwest

NONE REPORTED.

WISCONSIN, Northeast

WIZ013-020>022-030>031-035>040-045-048>050 **Marinette - Menominee - Oconto - Door - Marathon - Shawano - Wood - Portage - Waupaca - Outagamie - Brown - Kewaunee - Waushara - Winnebago - Calumet - Manitowoc**

02	0200CST	0	0	Winter Storm
03	0200CST			

A strong low pressure system intensified as it moved from Texas, across lower Michigan, to Ontario. Snowfall totals were mostly in the eight to twelve inch range across east central Wisconsin and the lakeshore counties. Wind gusts with the storm were in the 30 to 35 mph range across most of the area and in the 40 to 45 mph range near Lake Michigan. The strong gusts combined with the snow in the lakeshore counties to create near white out conditions. Some of the highest snowfall totals included 13.0 inches 4 miles east of Sister Bay (Door), 11.5 inches at Bailey's Harbor (Door co.), 11.0 inches at Oshkosh (Winnebago co.) and 10.0 inches at Kiel (Manitowoc co.).

WIZ005-010>012-018>019 **Vilas - Oneida - Forest - Florence - Lincoln - Langlade**

07	2200CST	0	0	Winter Storm
08	0600CST			

WIZ013-020>021-030>031-035>036 **Marinette - Menominee - Oconto - Marathon - Shawano - Wood - Portage**

07	2200CST	0	0	Ice Storm
08	0600CST			

Warm and moist air that moved into Wisconsin ahead of a low pressure system over the central plains spread snow over north central Wisconsin and freezing rain over central and northeast Wisconsin. Snowfall totals were highest in Vilas county with 10.4 inches at Winchester, 9.3 inches 4 miles southwest of Presque Isle and 9.0 inches at Presque Isle. The freezing rain caused tree limbs and power lines to fall, knocking out power to around 3,300 customers, mainly around Marinette (Marinette co.).

WIZ005-010>013-018>019-021 **Vilas - Oneida - Forest - Florence - Marinette - Lincoln - Langlade - Oconto**

08	1800CST	0	0	Winter Storm
09	0600CST			

Warm air ahead of a strong low pressure system that moved into Wisconsin during the night brought freezing rain to north central Wisconsin. This resulted in significant ice accumulations before the precipitation changed to rain overnight. The icing caused power lines to fall and as many as 10,000 customers lost electricity due to the downed lines.

WIZ005-010>013-018>022-030>031-035>040-045-048>050 **Vilas - Oneida - Forest - Florence - Marinette - Lincoln - Langlade - Menominee - Oconto - Door - Marathon - Shawano - Wood - Portage - Waupaca - Outagamie - Brown - Kewaunee - Waushara - Winnebago - Calumet - Manitowoc**

09	1400CST	0	0	Strong Wind
10	0200CST			

WIZ038 **Outagamie**

09	1600CST	0	0	High Wind (G54) ^M
	1900CST			

Strong winds developed across northeast Wisconsin in the wake of a departing low pressure system. Wind gusts over 40 mph were common during the afternoon and evening of the 9th into the early morning hours of the 10th. The winds downed tree limbs and power poles causing numerous power outages.

Gusts to 62 mph were recorded at Hortonville (Outagamie co.) and Darboy (Outagamie co.). Appleton (Outagamie co.) recorded gusts to 60 mph. Other strong gusts included 54 mph at Green Bay (Brown co.), 53 mph at Marshfield (Wood co.), 51 mph at Rhinelander (Oneida co.), Wausau (Marathon co.) and Wisconsin Rapids (Wood co.) and 50 mph at Stevens Point (Portage co.).

WIZ005-010>012 **Vilas - Oneida - Forest - Florence**

14	1600CST	0	0	Winter Storm
15	0600CST			

A low pressure system moved through Wisconsin to Lake Michigan dropping heavy snow and some mixed precipitation over northern Wisconsin. The highest snowfall totals included 15.1 inches at Mincoqua (Oneida co.), 10.2 inches at Presque Isle (Vilas co.), 9.3 inches at Eagle River (Vilas co.) and 9.1 inches at Phelps (Vilas co.).

Storm Data and Unusual Weather Phenomena

March 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, Northwest

WIZ001	Douglas	07 1500CST			0	0			Heavy Snow
		08 0900CST							
WIZ002>004-009	Bayfield - Ashland - Iron - Price	08 2100CST			0	0			Winter Storm
		09 1600CST							

The storm started out as freezing rain which continued for most of the night with accumulations of 1/8" to 1/2" of glaze. By early morning the freezing rain changed to snow. Snow accumulations ranged from 6 to 14 inches. The Bayfield area had 9 inches of snow while Cornucopia had 14 inches.

WIZ004	Iron	20 0700CST			0	0			Heavy Snow
		21 0200CST							

Lake effect snow dropped 6 inches of snow at Gurney and 8 inches at Hurley.

WISCONSIN, Southeast

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	02 0000CST			0	0			Heavy Snow
		2200CST							

Heavy snow, ranging from 7 to 11 inches in depth, fell over south-central and southeast Wisconsin. Most of the inclement weather occurred on March 2nd, although preceding light snow started at about 1900CST on March 1st, and some residual blowing and drifting snow persisted until about 0600CST on March 3rd. This was the only widespread heavy snow event of the 2001-02 winter season to affect southern Wisconsin. Accumulating snows during this event came in two waves...one during the overnight hours ending about 0700CST on March 2nd, and the other one lasting from about 1200CST to 2100CST on March 2nd. In between the two waves, some mixed precipitation, consisting of snow, sleet, and freezing rain, was observed southeast of a line from Janesville (Rock Co.) to Port Washington (Ozaukee Co.). In general, surface winds initially were out of the northeast at 10 to 20 mph, but backed to the northwest at 15 to 25 mph (occasional gusts to 30 to 35 mph) during the last half of this heavy snow event. Surface temperatures were generally in the 20s, but readings briefly rose to the lower 30s over the counties of Milwaukee, Racine, Kenosha, and Walworth in between the snow waves. Near-blizzard conditions were noted west of Madison in the counties of Sauk, Iowa, and Lafayette during the 2nd half of the heavy snow event due to the winds and falling snow, with visibilities occasionally reduced to 1/4 to 1/2 mile. Numerous indoor and outdoor activities across south-central and southeast were cancelled, and many airplane flights were delayed or cancelled. Based on newspaper accounts, at least 300 to 400 vehicle accidents occurred. Towing service owners were quoted as saying "People are running into poles, curbs, and each other." At least a dozen people needed hospital treatment due to injuries sustained in vehicle accidents (indirectly-related to this heavy snow event).

Specifically, Milwaukee Mitchell Field (Milwaukee Co.) measured 11.0 of snow for the entire event, with 9.4 inches falling on March 2nd (a new daily record snowfall amount for March 2nd). Elsewhere, notable amounts include: Elkhorn (Walworth Co.) - 11 inches, Fond du Lac (Fond du Lac Co.) - 10.5 inches, Sauk City (Sauk Co.) - 10 inches, Richfield (Washington Co.) - 9.6 inches, Sun Prairie (Dane Co.) - 9.5 inches, Argyle (Lafayette Co.) - 9.5 inches, Eagle (Waukesha Co.) - 9.2 inches, and 9 inches at Milton (Rock Co.), Palmyra (Jefferson Co.), Twin Lakes (Kenosha Co.), Westfield (Marquette Co.), Juneau (Dodge Co.), and Fredonia (Ozaukee Co.). Snowdrifts were reported to be 2 to 3 feet deep, especially in exposed, rural areas. Synoptically, the responsible low pressure moved from central Oklahoma to extreme southeast Wisconsin and then on to lower Michigan. In the wake of this heavy snow event, clear skies and light winds combined with the fresh snow cover to allow temperatures to drop below zero over much of south-central and southeast Wisconsin (for the 1st time since February 2001) during the overnight hours of March 3rd into March 4, 2002.

Washington County

Jackson	08 1751CST				0	0	5K		Lightning
									Lightning hit a home's satellite dish and sent a current into the home, resulting in damage to a computer system and all major appliances and household wiring.

Rock County

Janesville	09 0122CST				0	0	30K		Lightning
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Rock County

3.5 E Emerald Grove	09 0125CST				0	0			Thunderstorm Wind (G52)
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Walworth County

2 NE La Grange	09 0138CST				0	0			Hail (0.75)
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Washington County

2 N Colgate	09 0200CST				0	0	25K		Lightning
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Scattered severe thunderstorms affected parts of Rock and Walworth counties. The fast-moving storms generated damaging winds estimated to at least 52 knots (60 mph) in eastern Rock County, resulting in toppled large trees. Large hail was noted in northern Walworth County. A lightning strike ignited a fire that severely burned a home's garage in Janesville. North of Colgate (Washington

Storm Data and Unusual Weather Phenomena

March 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

Co.) a lightning strike caused extensive damage to appliances and electrical service in at least 3 homes.

WIZ051>052-065-069>070-072

Fond Du Lac - Sheboygan - Waukesha - Rock - Walworth - Kenosha

09	1000CST 2359CST				0	0	73K		High Wind
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High winds raked part of south-central and southeast Wisconsin for about 14 hours with gusts of 50 to 56 knots (58 to 64 mph). The area from the Town of Taycheedah (Fond du Lac Co.) to Greenbush (Sheboygan Co.) reported toppled trees and power lines. In the city of Janesville (Rock Co.) a powerful gust toppled a restaurant sign onto power lines, resulting in a loss of electricity for 1 hour. In the city of Delevan, the powerful winds pushed a tree onto power pole and nearby garage. In the city of Kenosha, the high winds knocked bricks from a church bell tower, causing police to close off the local area. Measured peak wind gusts from trained spotters were 56 knots (64 mph) three miles south of the city of Waukesha (Waukesha Co.), and 50 knots (58 mph) in the Town of Taycheedah. Other notable peak gusts were: 49 knots (56 mph) at the Sheboygan Airport (Sheboygan Co.) and Kenosha Airport (Kenosha Co.) , 48 knots (55 mph) in Lake Geneva (Walworth Co.), 47 knots (54 mph) at a location 2 miles southwest of the city of Fond du Lac (Fond du Lac Co.), and 46 knots (53 mph) at the Brodhead Airport (Green Co.). Most other locations in south-central and southeast Wisconsin experienced peak gusts in the 35 to 45 knot range (40 to 52 mph). Interestingly, the peak wind gusts (generally from the west) tended to occur with some of the more intense scattered snow showers, indicating that atmospheric mixing of higher-momentum air down to the surface was taking place in/near the snow showers. Temperatures were in the 25 to 30 degree range during the afternoon hours of the 9th. There were scattered reports of some trees pushed over from several of the counties surrounding the named counties in this high wind event. Altogether, about 2500 customers in south-central and southeast Wisconsin lost electrical power due to toppled power lines. Synoptically, a low pressure over eastern Colorado on March 8th moved to southeastern Kansas and deepened to 992 millibars (29.29 inches), and then tracked to Lake Superior by mid-day on the 9th with a central pressure of 988 millibars (29.18 inches). High winds were observed over northern Iowa and much of Minnesota as well.

WISCONSIN, Southwest

WIZ034-041>044-053>055-061

Jackson - La Crosse - Monroe - Juneau - Adams - Vernon - Crawford - Richland - Grant

01	1500CST				0	0			Winter Storm
02	1600CST								

A winter storm produced 6 to 10 inches of snow across southwest and central Wisconsin. Strong north winds of 15 to 25 mph accompanied the snow, causing blowing and drifting.

WIZ017

Taylor

08	2000CST 2345CST				0	0			Winter Storm
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Freezing rain produced a 1/2 to 3/4 of an inch thick glaze of ice on roads and sidewalks. This caused hazardous driving and walking conditions.

WISCONSIN, West

WIZ014>016-023>028

Polk - Barron - Rusk - St. Croix - Pierce - Dunn - Pepin - Chippewa - Eau Claire

08	1800CST				0	0			Winter Storm
09	1600CST								

A winter storm that intensified over Eastern Kansas during the evening hours on the 8th, tracked northeast across central Iowa by midnight, and then moved into West Central Wisconsin by the late morning hours on the 9th. Freezing rain fell in a band from South Central Minnesota to West Central Wisconsin, depositing one quarter of an inch to three quarters of an inch of ice across this region.

WIZ014>016-023>028

Polk - Barron - Rusk - St. Croix - Pierce - Dunn - Pepin - Chippewa - Eau Claire

14	0800CST				0	0			Winter Storm
15	0400CST								

An area of surface low pressure moved from the Oklahoma Panhandle during the early morning hours on Thursday the 14th, to northeastern Kansas by noon, and then proceeded to the Milwaukee, Wisconsin area by the early morning hours on Friday the 15th. Heavy snow fell across a wide swath of West Central Wisconsin. Some snowfall reports of note include: Luck - 16.0 inches; Cumberland - 10.0 inches; Chetek - 9.0 inches; Weyerhaeuser, Ellsworth and Big Falls all with 8.0 inches; Hudson - 6.0 inches.

WYOMING, Central and West

WYZ004

Cody Foothills

12	2000MST				0	0			Heavy Snow
13	0400MST								

A cold front dropped south into the Big Horn Basin, while moist Pacific air moved east across the area. Bands of heavier snow dropped 6 to 8 inches of snow from around Cody north to the Montana border. Clark reported the heaviest snowfall with 8 inches. The brief heavy snow caused road closures north of Cody and suspended operations at the Yellowstone Regional Airport for over 4 hours.

Storm Data and Unusual Weather Phenomena

March 2002

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops		
<u>WYOMING, Central and West</u>										
WYZ015-028			Natrona - East Johnson							
		13 0200MST			0	0			Heavy Snow	
		14 1600MST								
		A strong cold front moved quickly south through the eastern plains of Wyoming. Upslope flow behind the front was responsible for 6 to 12 inches of snowfall in Buffalo and Casper. Snowfall of one foot or more was reported on Casper Mountain south of the city of Casper.								
WYZ012			Lander Foothills							
		13 1200MST			0	0			Heavy Snow	
		14 1200MST								
		Cold frontal passage and northeasterly upslope flow brought 5 to 7 inches of snow to Lander.								
<u>WYOMING, Extreme Southwest</u>										
		NONE REPORTED.								
<u>WYOMING, North Central</u>										
WYZ098			Northeast Bighorn Mountains							
		14 1530MST			0	0			Heavy Snow	
		18 inches of new snow in Big Horn Mountains								
WYZ099			Sheridan Foothills							
		14 1530MST			0	0			Heavy Snow	
		13 inches of new snow in Story								
<u>WYOMING, Northeast</u>										
WYZ054>055-057>058			Northern Campbell - South Campbell - Wyoming Black Hills - Weston							
		13 1000MST			0	0	0		Winter Storm	
		14 1345MST								
		A potent synoptic storm system intensified as it moved out of the Rockies and across the Northern Plains. This storm spread heavy snow over much of Northeastern Wyoming as it slowly moved east. Snow began late morning on the 13th and persisted through the afternoon of the 14th. Most areas of Northeastern Wyoming received 6 to 8 inches of snow during this time. The heaviest snowfall occurred over Weston County where 10 inches of snow was reported near Rochelle. Gusty northwest winds accompanied the snow and caused reduced visibilities and minor drifting of snow.								
WYZ054>055-058			Northern Campbell - South Campbell - Weston							
		27 1442MST			0	0	0		High Wind (G52) ^M	
		1551MST								
		Winds increased quickly behind a cold front moving through the area. Winds were sustained around 35 to 45 mph with gusts to around 60 mph.								
<u>WYOMING, Southeast</u>										
WYZ062>063-067			North Carbon - Snowy Range - Platte							
		11 1600MST			0	0			High Wind (G69) ^M	
		12 1530MST								
		Strong winds were recorded over the mountains of southeastern Wyoming into the nearby high plains. Winds of 40 to 55 mph were common. Gusts as high as 79 mph were recorded on Interstate 80 near Arlington, WY, while gusts to 71 mph blew across Interstate 25 near Chugwater, WY.								
WYZ059>062			Converse - Niobrara - Southwest Carbon - North Carbon							
		13 0430MST			0	0	10K		Winter Storm	
		14 1500MST								
		Heavy snow fell across a swath of southeast Wyoming from near Rawlins to Lusk. Lusk was buried under 24 to 26 inches of snow, which caused a drive-in canopy to collapse. Douglas, WY reported around 18 inches of snowfall while Rawlins and Shirley Basin recorded 12 to 15 inches. Many roads in the area were closed for over 24 hours.								
WYZ062>063-067			North Carbon - Snowy Range - Platte							
		19 2030MST			0	0			High Wind (G68) ^M	
		20 1400MST								
		Strong winds raked much of southeast Wyoming, especially over and near the mountains. Gusts as high as 78 mph were recorded on Interstate 80 near Arlington, WY, while gusts to 68 mph were recorded on Interstate 25 near Chugwater, WY.								

Storm Data and Unusual Weather Phenomena

January 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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Additions/Corrections

KENTUCKY, Northern

Robertson County

Countywide	24	0340EST 0410EST			0	0			Flash Flood
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Swift moving water covered several main roads throughout the county. Creeks were rising quickly, and local law enforcement had at least one evacuation.

Owen County

Monterey	24	0528EST 0610EST			0	0			Flash Flood
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Several roads were flooded with swift moving water in and around town.

Lewis County

4 NW Vanceburg	24	0600EST 0715EST			0	0			Flash Flood
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Quicks Run Road was closed by high water.

Mason County

Countywide	24	0615EST 0730EST			0	0			Flash Flood
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Several roads were closed due to high water across the county. There was also a mudslide near Minerva.

OHIO, Southwest

Brown County

2 E Ripley	24	0600EST 0655EST			0	0			Flash Flood
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Numerous roads were closed across the county due to high water. Eagle Creek went out of its banks in the southeast portion of the county.

Adams County

Locust Grove	24	0619EST 0655EST			0	0			Flash Flood
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State Routes 41 and 73 were impassable, and Route 247 was under water.

Scioto County

Portsmouth	24	0623EST 0655EST			0	0			Flash Flood
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Several roads were closed due to high water across the southern part of the county. Flooding occurred at the intersection of Crabtree Road and US Route 23.

Reference Notes:

Fatality Location Abbreviations:

BF	Ball Field	MH	Mobile Home
BO	Boating	OT	Other
BU	Business	OU	Outside/Open Areas
CA	Camping	PH	Permanent Home
EQ	Heavy Equipment/Construction	SC	School
GF	Golfing	TE	Telephone
IW	In Water	UT	Under Tree
LS	Long Span Roof	VE	Vehicle

List of Acronyms:

WCM	- Warning Coordination Meteorologist
NWS	- National Weather Service
NOAA	- National Oceanic and Atmospheric Administration
DST	- Daylight Savings Time
LST	- Local Standard Time
LDT	- Local Daylight Time

Other Notes:

When listing wind speed values under “Character of Storm”, ex. High Wind (G81), the “G” indicates a “Gust” which is a peak 5-second averaged wind speed in Knots (kts). 1 kt. = 1.152 mph.

When listing hail size under “Character of Storm”, ex. Hail (2.25), the hail size is given in inches and hundredths of inches.

When listing property and crop damage, the figures indicated are the best guess made by the NWS from the available sources of information at the time of the printing.

The Saffir-Simpson Scale

Category One Hurricane:

Winds 74-95 mph (64-82 kt or 119-153 kph). Storm surge generally 4-5 ft above normal. No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Some damage to poorly constructed signs. Also, some coastal road flooding and minor pier damage.

Category Two Hurricane:

Winds 96-110 mph (83-95 kt or 154-177 kph). Storm surge generally 6-8 feet above normal. Some roofing material, door, and window damage of buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly constructed signs, and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of the hurricane center. Small craft in unprotected anchorages break moorings.

Category Three Hurricane:

Winds 111-130 mph (96-113 kt or 178-209 kph). Storm surge generally 9-12 ft above normal. Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Damage to shrubbery and trees with foliage blown off trees and large trees blown down. Mobile homes and poorly constructed signs are destroyed. Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Flooding near the coast destroys smaller structures with larger structures damaged by battering of floating debris. Terrain continuously lower than 5 ft above mean sea level may be flooded inland 8 miles (13 km) or more. Evacuation of low-lying residences with several blocks of the shoreline may be required.

Category Four Hurricane:

Winds 131-155 mph (114-135 kt or 210-249 kph). Storm surge generally 13-18 ft above normal. More extensive curtainwall failures with some complete roof structure failures on small residences. Shrubs, trees, and all signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows. Low-lying escape routes may be cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of structures near the shore. Terrain lower than 10 ft above sea level may be flooded requiring massive evacuation of residential areas as far inland as 6 miles (10 km).

Category Five Hurricane:

Winds greater than 155 mph (135 kt or 249 kph). Storm surge generally greater than 18 ft above normal. Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. All shrubs, trees, and signs blown down. Complete destruction of mobile homes. Severe and extensive window and door damage. Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of all structures located less than 15 ft above sea level and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5-10 miles (8-16 km) of the shoreline may be required.

The Fujita Scale

F-Scale	Intensity	Wind Speed (mph)	Typical Damage
F0	Gale Tornado	40 - 72	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages sign boards.
F1	Moderate	73 - 112	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
F2	Significant	113 - 157	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
F3	Severe	158 - 206	Roof and some walls torn off well constructed houses; trains overturned; most trees in fores uprooted
F4	Devastating	207 - 260	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.
F5	Incredible	261 - 318	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-inforced concrete structures badly damaged.
F6	Inconceivable	319 - 379	These winds are very unlikely. The small area of damage they might produce would probably not be recognizable along with the mess produced by F4 and F5 wind that would surround the F6 winds.

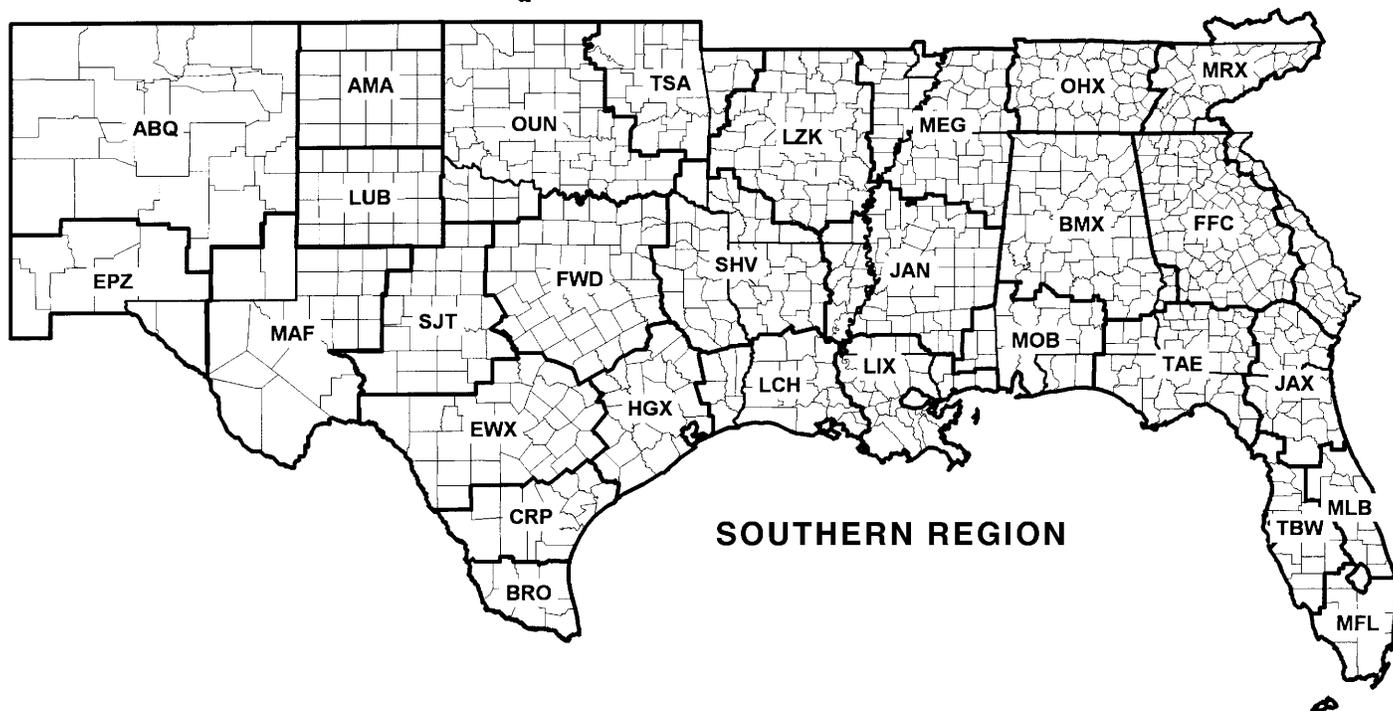


* From the Journal of Atmospheric Science, August 1981, p. 1517-1519

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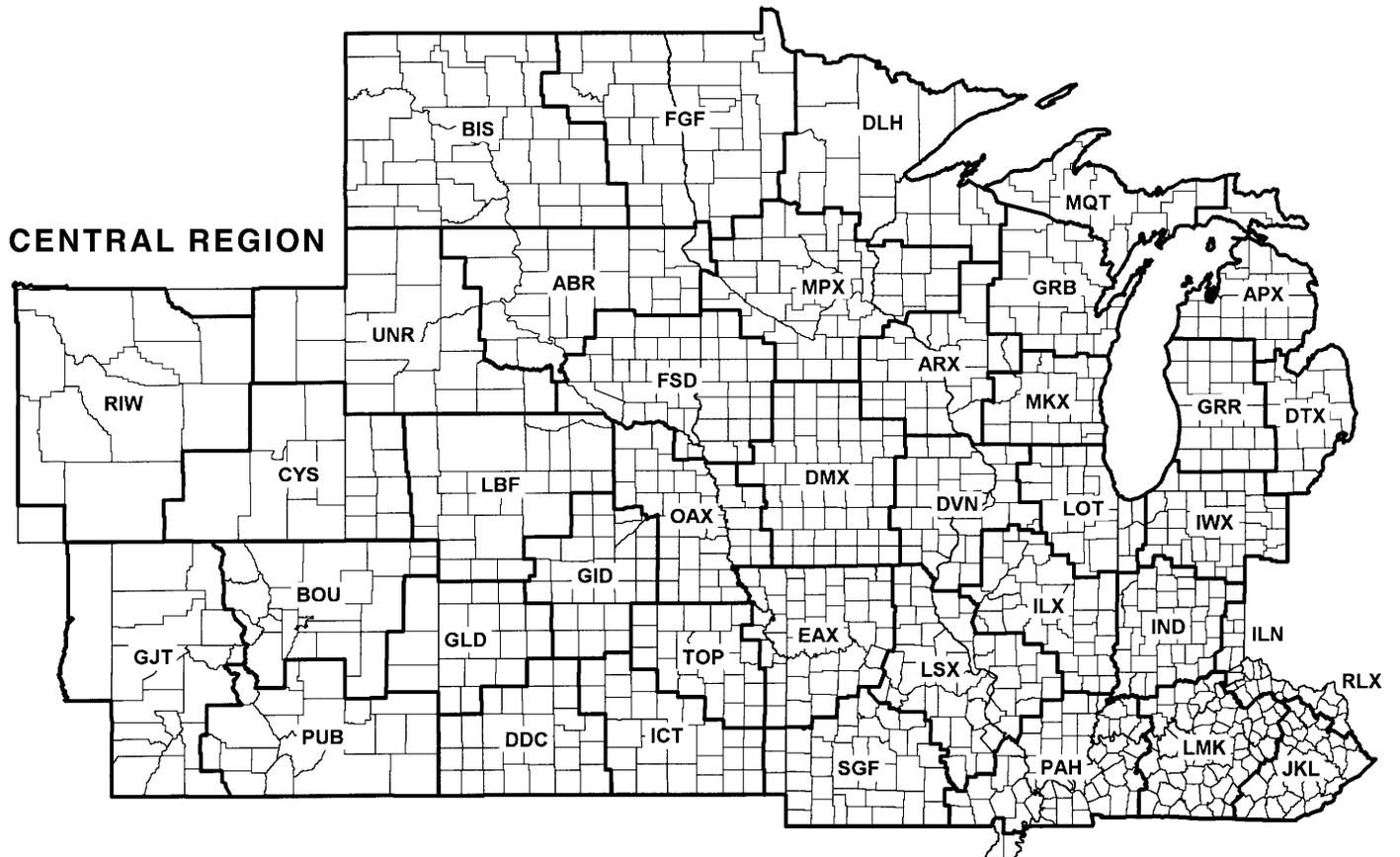
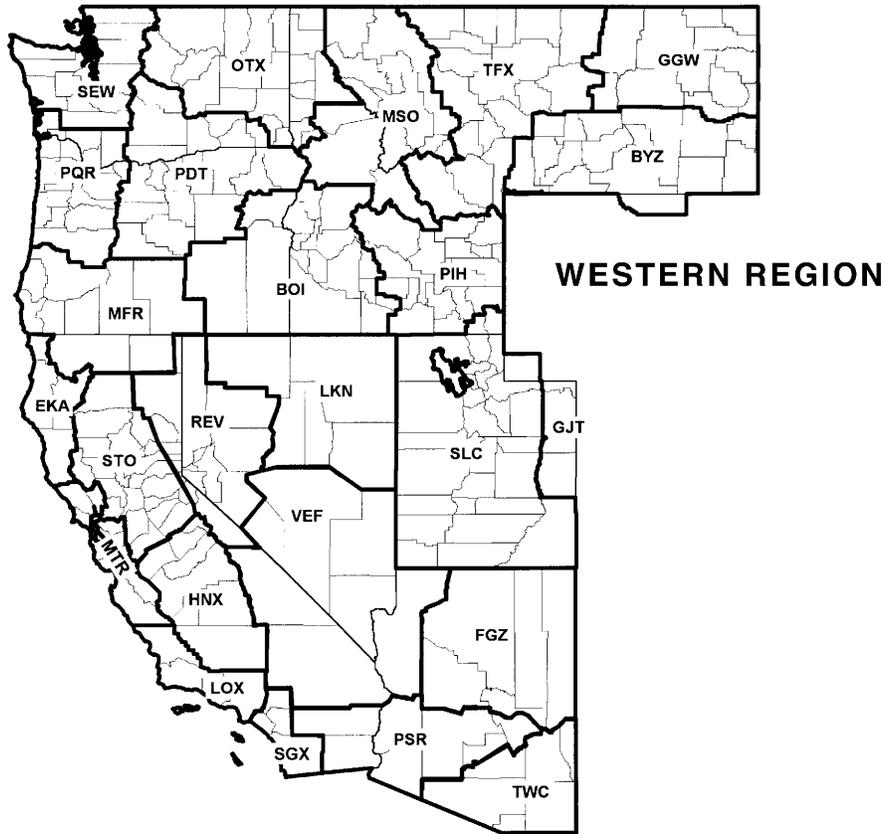


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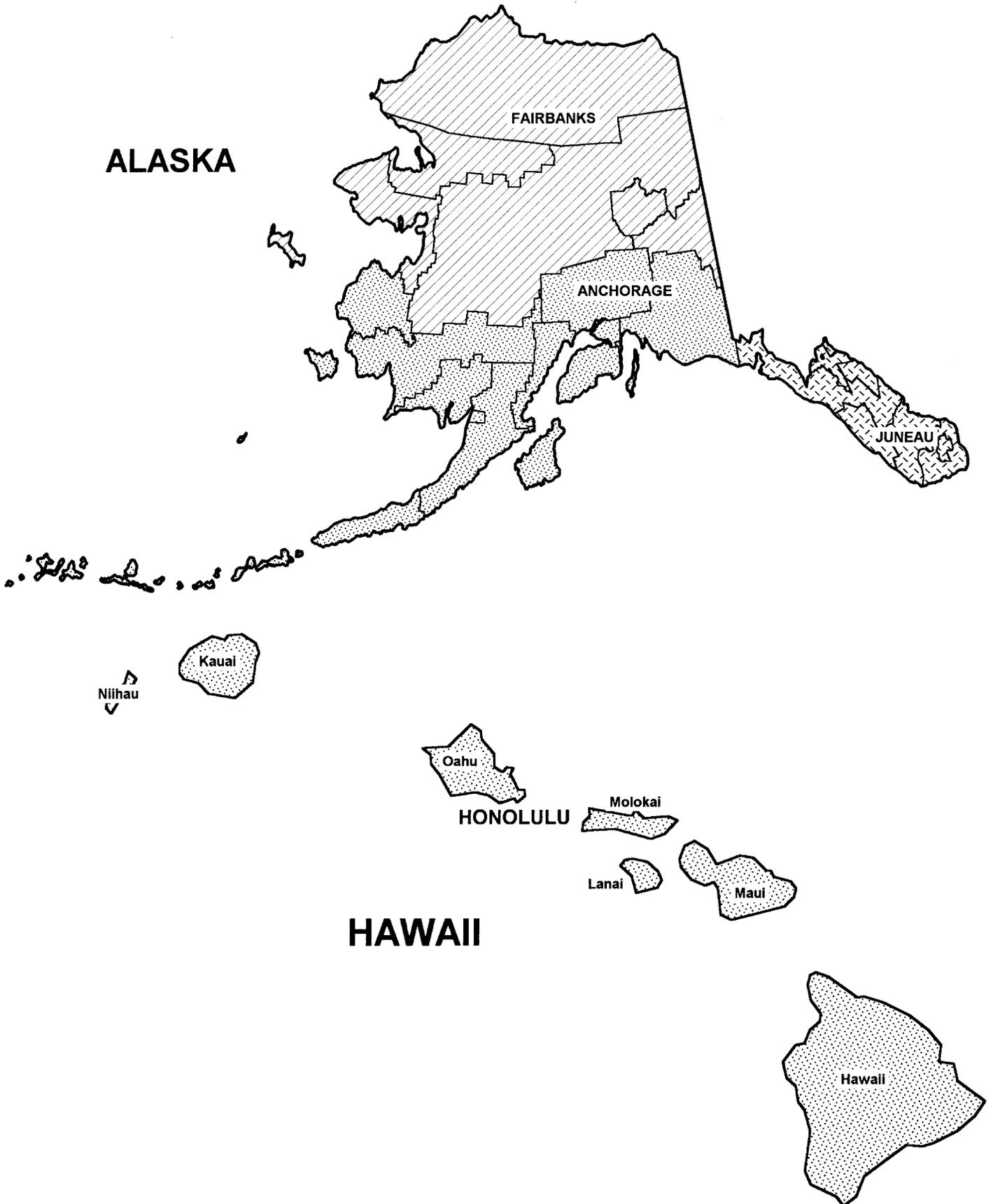


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MODERNIZED COUNTY WARNING AREAS



These and other publications are available from the National Climatic Data Center

Hourly Precipitation Data

This publication contains hourly precipitation amounts obtained from recording rain gages located at National Weather Service, Federal Aviation Administration, and cooperative observer stations. Published data are displayed in inches and tenths or inches and hundredths at local standard time. **HPD** includes maximum precipitation for nine (9) time periods from 15 minutes to 24 hours, for selected stations.

Climatological Data

Monthly editions contain station daily maximum and minimum temperatures and precipitation. Some stations provide daily snowfall, snow depth, evaporation, and soil temperature data. Each edition also contains monthly summaries for heating and cooling degree days (65 degree F base). The July issue contains a recap of monthly heating degree days and snow data for the preceding July through June.

The Annual issue contains monthly and annual averages of temperature, precipitation, temperature extremes, freeze data, soil temperatures, evaporation, and a recap of monthly cooling degree days.

Storm Data

Monthly issues contain a chronological listing, by states, of occurrences of storms and unusual weather phenomena. Reports contain information on storm paths, deaths, injuries, and property damage. An "Outstanding storms of the month" section highlights severe weather events with photographs, illustrations, and narratives. The December issue includes annual tornado, lightning, flash flood, and tropical cyclone summaries.

Monthly Climatic Data for the World

This publication contains monthly means for temperature, pressure, precipitation, vapor pressure, and sunshine for approximately 2,000 surface data collection stations worldwide and monthly mean upper air temperatures, dew point depressions, and wind velocities for approximately 500 observing sites.

Local Climatological Data

LCD publications summarize temperature, relative humidity, precipitation, cloudiness, wind speed and direction observations for several hundred cities in the U.S. and its territories. Each monthly publication also contains the 3 hourly weather observations for that month and an hourly summary of precipitation. Annual **LCD** publications contain a summary of the past calendar year as well as historical averages and extremes.

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