

# Substantial Flooding, Large Hail, Isolated Tornadoes

May 12<sup>th</sup>-13<sup>th</sup>, 2002

#### **Overview**

FIRST TORNADO (EASTERN WASHINGTON COUNTY MO)

THE FIRST OF THREE TORNADOES BRIEFLY TOUCHED DOWN ABOUT 6 MILES SOUTHEAST OF POTOSI, MISSOURI IN EASTERN WASHINGTON COUNTY. SEVERAL TREES WERE DAMAGED BY THE TORNADO. THE TORNADO OCCURRED AT APPROXIMATELY 6:10 PM CDT. THE DAMAGE PATH WAS ABOUT 100 YARDS LONG AND 30 YARDS WIDE. DAMAGE WAS RATED FO ON THE FUJITA SCALE.

SECOND TORNADO (WESTERN AND CENTRAL ST. FRANCOIS COUNTY MO)

THE SECOND TORNADO INITIALLY TOUCHED DOWN JUST NORTH OF THE COMMUNITY OF FRANKCLAY ON HIGHWAY M IN WESTERN ST. FRANCOIS COUNTY AT APPROXIMATELY 6:18 PM CDT. A NUMBER OF TREES AND LARGE LIMBS WERE STRIPPED/DAMAGED BY THE TORNADO. THE TORNADO PATH OVER THIS AREA WAS APPROXIMATELY 30 YARDS AND DAMAGE WAS RATED FO. THE TORNADO MOVED EASTWARD ACROSS THE COMMUNITY OF DESLOGE MAINLY CAUSING TREE DAMAGE ALONG CHESTNUT STREET WEST OF HIGHWAY 8. THE TORNADO MOVED EAST OF HIGHWAY 8 ALONG AND SOUTH OF CHESTNUT STREET CAUSING SCATTERED TREE DAMAGE AND DESTROYING ONE UTILITY POLE NEAR ELM STREET AND THE MIDDLE SCHOOL. A FEW HOMES AND THE MIDDLE SCHOOL SUSTAINED MAINLY ROOF DAMAGE, ALTHOUGH ONE LARGE TREE FELL ONTO A HOUSE TRAILER. THE TORNADO PATH WAS APPROXIMATELY 40 YARDS AND RATED FO. THE TORNADO TURNED NORTHEAST ACROSS CHESTNUT STREET THEN MOVED OVER AN OPEN FIELD WEST OF STATE STREET. ONE HALF OF THE ROOF OF A LARGE MACHINE SHED WAS THROWN EAST OVER 200 YARDS. SEVERAL DOWNED TREES SHOWED THE CLASSIC CONVERGENT PATTERN NOTED. WITH TORNADIC DAMAGE IMMEDIATELY SOUTH OF THE MACHINE SHED AND A LARGE HOME. DAMAGE PATTERNS JUST NORTHEAST OF THE MACHINE SHED SUGGESTED A TOUCHDOWN OF A SECOND FUNNEL. BOTH FUNNELS APPEARED TO MERGE JUST WEST OF STATE STREET. SEVERAL LARGE TREES WERE SIGNIFICANTLY DAMAGED 80 YARDS EAST OF THE LARGE HOME AND MACHINE SHED. THREE HOMES ON THE WEST SIDE OF STATE STREET SUSTAINED MINOR ROOF AND SIDING DAMAGE. ONE TWO BY FOUR PIECE OF WOOD WAS DRIVEN INTO THE NORTH SIDE OF ONE HOME. A SMALL UTILITY SHED AND GARAGE BEHIND ONE OF THE HOMES WAS DESTROYED. PIECES OF MANGLED SHEET METAL FROM THE LARGE MACHINE SHED LANDED IN THE FRONT YARD OF TWO OF THE THREE HOMES. THE DAMAGE WAS APPROXIMATELY 100 YARDS WIDE OVER THIS AREA. THE TORNADO THEN HIT A VACANT TWO STORY BUILDING JUST EAST OF STATE STREET COMPLETELY UPLIFTING THE ROOF AND CAUSING CONSIDERABLE DAMAGE TO TWO SIDES OF THE BUILDING. THE TORNADIC DAMAGE PATH WAS LESS THAN 50 YARDS BUT THE DAMAGE WAS RATED F1 AT THIS LOCATION. THE TORNADO SKIPPED ACROSS HIGHWAY 67 AND HIT ANOTHER LARGE SHEET METAL BUILDING ON THE EAST SIDE OF THE HIGHWAY. THE NORTH SIDE OF THE ROOF OF A SECOND LARGE BUILDING WAS UPLIFTED AND DISPLACED SEVERAL TENS OF YARDS TO THE EAST. OVER 100 YARDS EAST OF THIS BUILDING ADDITIONALLY TREE DAMAGE WAS OBSERVED. THE WIDTH OF THE DAMAGE PATH OVER THIS AREA WAS LESS THAN 40 YARDS AND RATED FO. THE TOTAL LENGTH OF THE DAMAGE PATH OF THIS TORNADO WAS 7.0 MILES. DAMAGING DOWNBURST WINDS WERE DOCUMENTED ACROSS PARTS OF WESTERN AND CENTRAL STE. GENEVIEVE COUNTY MAINLY ALONG AND SOUTH OF COUNTY ROAD C AND NORTH OF HIGHWAY 32.

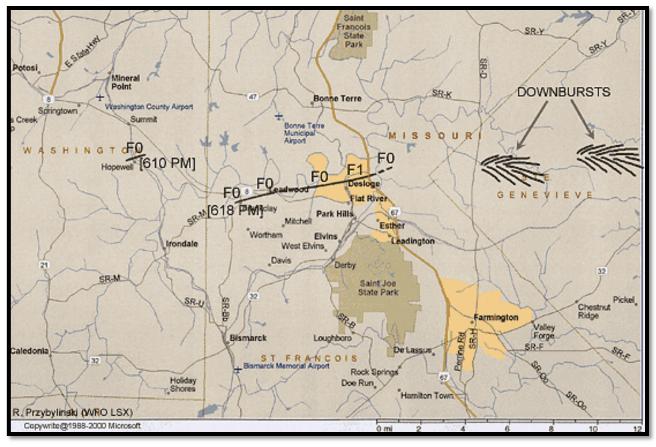
#### **Damage Surveys**

THIRD TORNADO (SOUTHWESTERN RANDOLPH COUNTY IL)

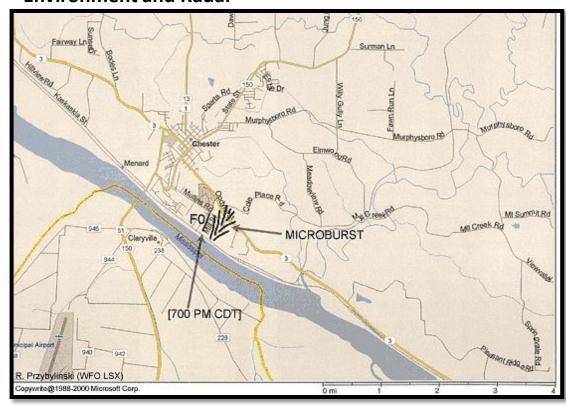
A THIRD BRIEF TORNADO TOUCHDOWN OCCURRED IN A SUBDIVISION OVER THE SOUTH SIDE OF CHESTER, ILLINOIS (SOUTH OF THE CITY PARK) IN SOUTHWEST RANDOLPH COUNTY. ONE HOME SUSTAINED ROOF DAMAGE WHILE A SECOND HOME EXPERIENCED MINOR STRIPPING DAMAGE. SEVERAL PINES WERE SNAPPED AT THE BASE WHILE A NUMBER OF LARGE WHITE OAK TREES WERE EITHER TORN OFF 15 FEET FROM THE BASE OF THE TREE OR TWISTED NEAR THE BASE OF THE TREE. A CONVERGENT DAMAGE PATTERN WAS OBSERVED OVER THIS AREA. THE LENGTH OF THE TORNADIC DAMAGE TRACK OVER THIS AREA WAS ROUGHLY 100 YARDS LONG AND 30 YARDS WIDE. THE DAMAGE WAS RATED FO. MINOR TREE DAMAGE WAS OBSERVED JUST SOUTH OF THE TORNADO TRACK ALONG AND WEST OF HIGHWAY 3.

#### **FINAL DISCUSSION**

THE TORNADOES WHICH CAUSED DAMAGE OVER PARTS OF EASTERN WASHINGTON AND ST. FRANCOIS COUNTIES IN MISSOURI AND FAR SOUTHWEST RANDOLPH COUNTY ILLINOIS ARE REFERRED TO AS 'NON-SUPERCELL TORNADOES' WHICH FORMED JUST NORTH OF THE APEX OF A BOW ECHO. A LOW-LEVEL OUTFLOW BOUNDARY FROM AN EARLIER STORM INTERSECTED THE BOW ECHO AND LIKELY ENHANCED THE POTENTIAL FOR TORNADIC ACTIVITY. THE TORNADO OVER ST. FRANCOIS COUNTY HAD A LONGER LIFESPAN COMPARED TO THE TORNADO OVER SHILOH, ILLINOIS ON APRIL 27, 2002.

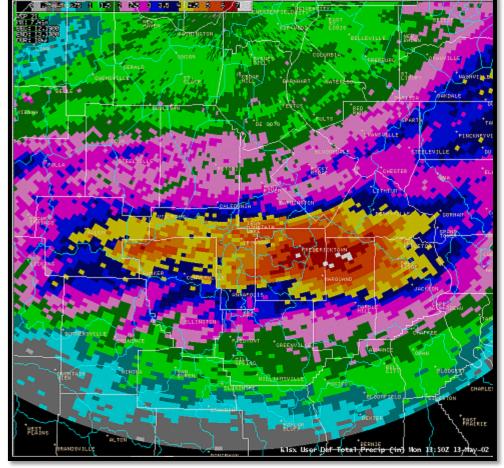


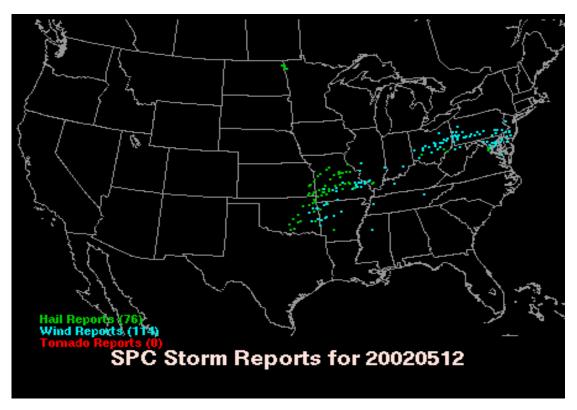
#### **Environment and Radar**



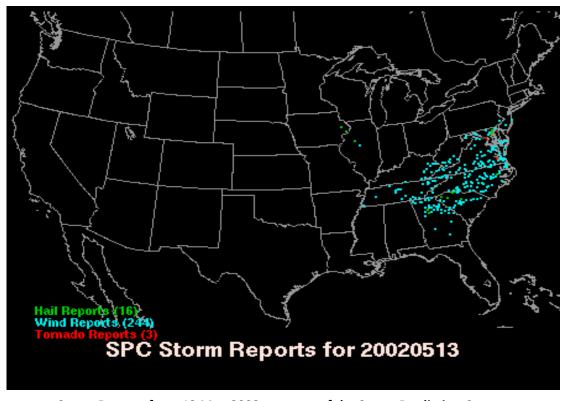
Damage Map for portions of Southwest Illinois

Radar-derived Precipitation Amounts





Storm Reports from 12 May 2002 courtesy of the Storm Prediction Center.



Storm Reports from 13 May 2002 courtesy of the Storm Prediction Center.

# Preliminary Storm Reports for May 12<sup>th</sup>:

TIME (CDT)	): LOCATION (COUNTY):	EVENT:	REMARKS:
0400 AM	(KNOX MO)	FLOODING	FIFTEEN HIGHWAYS CLOSED DUE TO FLOODING
0400 AM	(SHELBY MO)	FLOODING	NUMEROUS COUNTY ROADS FLOODED
0400 AM	NOVELTY MO (KNOX)	FLOODING	OBSERVER REPORTED 2.23 IN. OF RAINFALL
0400 AM	(LEWIS MO)	FLOODING	NUMEROUS COUNTY ROADS FLOODED
0500 AM	(MARION MO)	FLOODING	NUMEROUS COUNTY ROADS FLOODED
0600 AM	(WARREN MO)	FLOODING	NUMEROUS COUNTY ROADS FLOODED
0600 AM	(GREENE IL)	FLOODING	NUMEROUS COUNTY ROADS FLOODED
0600 AM	JERSEYVILLE IL (JERSEY)	FLOODING	STREET FLOODING. 2.25 INCHES OF RAIN
0630 AM	(MACOUPIN IL)	FLOODING	MEASURED 4.00 IN. OF RAINFALL OVERNIGHT
0700 AM	(LINCOLN MO)	FLOODING	NUMEROUS COUNTY ROADS FLOODED
0700 AM	GOLDEN IL (ADAMS)	FLOODING	3.03 INCHES OF RAINFALL
0140 PM	MILLERSBURG MO (CALLAWAY)	1.75 INCH HAIL	REPORTED BY COUNTY SHERIFF ALONG I-70
0150 PM	MILLERSBURG MO (CALLAWAY)	1.75 INCH HAIL	REPORTED IN MILLERSBURG AND ALONG I-70
0159 PM	KINGDOM CITY MO (CALLAWAY)	1.75 INCH HAIL	REPORTED RELAYED VIA EMS
0220 PM	(MONTGOMERY MO)	1.25 INCH HAIL	REPORTED BY SPOTTER
0240 PM	NEW LONDON MO (RALLS)	1.00 INCH HAIL	QUARTER SIZE HAIL COVERING THE GROUND
0243 PM	NEW LONDON MO (RALLS)	1.75 INCH HAIL	REPORTED BY SPOTTER
0250 PM	HAWK POINT MO (LINCOLN)	1.00 INCH HAIL	REPORTED BY RADIO STATION
0254 PM	NEW LONDON MO (RALLS)	1.75 INCH HAIL	QUARTER TO GOLF BALL SIZED HAIL

# Preliminary Storm Reports for May 12<sup>th</sup>:

TIME (CDT)	: LOCATION (COUNTY):	EVENT:	REMARKS:
0256 PM	HAWK POINT MO (LINCOLN)	1.00 INCH HAIL	QUARTER TO GOLF BALL SIZED HAIL
0300 PM	5N HANNIBAL MO (MARION)	FUNNEL CLOUD	PUBLIC REPORT OF TWO FUNNEL CLOUDS
0427 PM	GODFREY IL (MADISON)	WIND DAMAGE	POWER LINES DOWN
0427 PM	GODFREY IL (MADISON)	WIND DAMAGE	POWER LINES DOWN. REPORTED BY EMS.
0600 PM	(WASHINGTON MO)	WIND DAMAGE	TREES AND POWER LINES DOWN
0600 PM	POTOSI MO (WASHINGTON)	WIND DAMAGE	TREES AND POWER LINES DOWN
0610 PM	POTOSI MO (WASHINGTON)	WIND DAMAGE	LARGE TREE LIMBS DOWN
0615 PM	POTOSI MO (WASHINGTON)	WIND DAMAGE	NUMEROUS TREES DOWN. FUNNEL CLOUD
0615 PM	(ST FRANCOIS MO)	WIND DAMAGE	NUMEROUS TREES AND POWER LINES DOWN
0620 PM	(ST FRANCOIS MO)	WIND DAMAGE	NUMEROUS TREES AND TREES LIMBS DOWN
0620 PM	DESLOGE MO (ST FRANCOIS)	WIND DAMAGE	DAMAGE TO ROOF OF CHURCH
0625 PM	BISMARK MO (ST FRANCOIS)	FUNNEL CLOUD	REPORTED BY COUNTY SHERIFF
0625 PM	(ST FRANCOIS MO)	WIND DAMAGE	TREES DOWN AND HOME HAD ROOF BLOWN OFF
0642 PM	(STE GENEVIEVE MO)	WIND DAMAGE	TREES DOWN ACROSS SEVERAL ROADS
0642 PM	OATES MO (REYNOLDS)	1.00 INCH HAIL	REPORTED BY COUNTY SHERIFF
0700 PM	ELLIS GROVE IL (RANDOLPH)	WIND DAMAGE	NUMEROUS TREES UP TO 2 FT IN DIAMETER DOWN
0700 PM	KASKASKIA IL (RANDOLPH)	70 MPH GUST	REPORTED BY ISP
0703 PM	BLACK MO (REYNOLDS)	1.00 INCH HAIL	REPORTED BY COUNTY SHERIFF
0708 PM	2S CHESTER IL (RANDOLPH)	WIND DAMAGE	NUMEROUS TREES TWISTED AND SNAPPED OFF

# Preliminary Storm Reports for May 12<sup>th</sup>:

TIME (CDT):	LOCATION (COUNTY):	EVENT:	REMARKS:
0220 PM	(MONTGOMERY MO)	FLOODING	MINOR STREET FLOODING
0307 PM	GODFREY IL (MADISON)	FLOODING	MINOR STREET FLOODING
0322 PM	(ST CHARLES MO)	FLOODING	MINOR STREET FLOODING
0359 PM	GODFREY IL (MADISON)	FLOODING	THIGH DEEP WATER IN LOCATIONS
0425 PM	(ST CHARLES MO)	FLOODING	FLOODING AT THE ROTARY PARK
0427 PM	GODFREY IL (MADISON)	FLOODING	STREET FLOODING
0427 PM	(ST CHARLES MO)	FLOODING	MINOR STREET FLOODING
0427 PM	(ST CHARLES MO)	FLOODING	MINOR STREET FLOODING
0435 PM	GODFREY IL (MADISON)	WIND DAMAGE	LARGE TREE DOWNED
0640 PM	(STE GENEVIEVE MO)	WIND DAMAGE	NUMEROUS TREES AND POWER LINES DOWNED
0650 PM	BELLEVIEW MO (IRON)	WIND DAMAGE	TREES DOWNED
0710 PM	IRONTON MO (IRON)	WIND DAMAGE	TREES DOWNED THROUGHOUT COUNTY
0730 PM	(MADISON MO)	WIND DAMAGE	NUMEROUS TREES DOWNED
0820 PM	IRONTON MO (IRON)	FLOODING	STREET FLOODING
0820 PM	PILOT KNOB MO (IRON)	FLOODING	ROUTE V FLOODED
0821 PM	(MADISON MO)	FLOODING	MINOR STREET FLOODING
0824 PM	BLACK MO (REYNOLDS)	FLOODING	ROUTE 49 WATER COVERED IN SPOTS
0920 PM	IRONTON MO (IRON)	FLOODING	NUMEROUS CARS WASHED OFF ROADS
0930 PM	LESTERVILLE MO (REYNOLDS)	FLOODING	NUMEROUS ROADS CLOSED
0945 PM	CHESTER IL (RANDOLPH)	FLOODING	STREET FLOODING
0950 PM	(MADISON MO)	FLOODING	SEVERAL WATER RESCUES IN PROGRESS
1015 PM	STEELVILLE MO (CRAWFORD)	FLOODING	SEVERAL CITY STREETS CLOSED DUE TO FLOODING
1020 PM	(ST FRANCOIS MO)	FLOODING	NUMEROUS COUNTY ROADS FLOODED

### **Preliminary Storm Reports for May 12th:**

TIME (CDT)	: LOCATION (COUNTY):	EVENT:	REMARKS:
1028 PM	(STE GENEVIEVE MO)	FLOODING	CREEKS AND STREAMS FLOODED/OUT OF BANKS
1034 PM	PACIFIC MO (FRANKLIN)	FLOODING	SEVERAL ROADS CLOSED
1037 PM	(GASCONADE MO)	FLOODING	ROUTE N CLOSED SOUTH OF MORRISON
1037 PM	(GASCONADE MO)	FLOODING	ROUTE D FLOODED
1045 PM	(MONROE IL)	FLOODING	SOME COUNTY ROADS UNDER WATER
1048 PM	(MONTGOMERY MO)	FLOODING	ROUTE K WATER COVERED
1050 PM	MASCOUTAH IL (ST. CLAIR)	FLOODING	SEVERAL COUNTY ROADS FLOODED
1053 PM	TROY MO (LINCOLN)	FLOODING	SEVERAL ROADS FLOODED AND CLOSED
1053 PM	CHESTERFIELD MO (ST LOUIS)	FLOODING	CREEKS AND STREAMS OVER ROADS
1053 PM	WILDWOOD MO (ST LOUIS)	FLOODING	NUMBER OF STREAMS AND CREEKS FLOODED
1055 PM	WOOD RIVER IL (MADISON)	FLOODING	CREEK FLOODED ONTO BIRCH ROAD NEAR RT 143
1100 PM	SALEM IL (MARION)	FLOODING	COUNTY ROADS WATER COVERED BUT NOT CLOSED
1100 PM	VANDALIA IL (FAYETTE)	FLOODING	SEVERAL COUNTY ROADS WERE FLOODED
1100 PM	HILLSBORO IL (MONTGOMERY)	FLOODING	A NUMBER OF COUNTY ROADS CLOSED
1100 PM	CHLORIDE MO (IRON)	FLOODING	MOTOR HOME WAS DESTROYED. WATER RESCUE
1102 PM	LESTERVILLE MO (REYNOLDS)	FLOODING	EXTENSIVE FLOODING. SEVERAL WATER RESCUES
1105 PM	CARLINVILLE IL (MACOUPIN)	FLOODING	NUMEROUS COUNTY ROADS FLOODED
1105 PM	CARROLLTON IL (GREENE)	FLOODING	NUMEROUS COUNTY ROADS FLOODED AND CLOSED
1130 PM	1W IRONTON MO (IRON)	FLOODING	*** 1 FATALITY ***
1145 PM	(WARREN MO)	FLOODING	SIX INCHES OF WATER ON HWY 94

# Precipitation Reports for May 13<sup>TH</sup>:

STATION ID	STATION NAME	24 HOUR AMOUNT
STL	ST. LOUIS	2.51
COU	COLUMBIA	1.60
JEF	JEFFERSON CITY	1.57
SUS	CHESTERFIELD	2.25
SET	ST CHARLES	2.83
FAM	FARMINGTON	2.66
UIN	QUINCY	0.02
CPS	CAHOKIA	1.24
PPQ	PITTSFIELD	0.79
SAR	SPARTA	1.67
SLO		
SLO	SALEM	1.22
CENTRAL MISSOURI		
CALM7	CALIFORNIA	0.93
UMCM7	CALIFORNIA	0.89
FREM7	COLUMBIA U OF M	0.90
FTNM7	FREEDOM	1.64
JWPM7	FULTON USEFFERSON CITY	1.74
RIFM7	JEFFERSON CITY	0.92
CMSM7	RICH FOUNTAIN 3E	1.50
	CHAMOIS	
EAST CENTRAL MISSOURI		
ARNM7	ARNOLD 1N	1.33
EBYM7	ELSBERRY 1S	1.78
FARM7	FARMINGTON	2.90
FESM7	FESTUS	1.54
HRNM7	HERMANN	2.08
PCFM7	PACIFIC 3S	1.36
PTSM7	POTOSI 5SW	2.10
RSEM7	ROSEBUD	1.75
UNNM7	UNION	1.49
WHGM7	WASHINGTON	1.76
WEST CENTRAL ILLINOIS		
	GRIGGSVILLE	0.32
GGGI2	PAYSON	0.06
PAYI2	PERRY 6NW	0.07
PEYI2	PITTSFIELD	0.90
PTTI2	QUINCY	0.02
UIN	QUINCY L/D 21	0.52
QLDI2	RIPLEY	0.10
RIPI2	IVII LL I	

### Precipitation Reports for May 13<sup>TH</sup>:

#### CENTRAL ILLINOIS...

BTWI2	BROWNSTOWN 4SW	2.66
KNMI2	KIMMUNDY	2.74
PTKI2	PATOKA	3.22
LCFI2	LITCHFIELD	3.24
RAMI2	RAMSEY	3.04
SLOI2	SALEM IL	1.77
VNDI2	VANDALIA	2.95
VINDIZ		
SOUTHWEST ILLINOIS		
300THWEST ILLINOIS		1.91
ADDIO	ALBERS	1.70
ABRI2	CARLYLE	1.84
CAYI2	CENTRALIA	3.70
CNTI2	CHESTER	3.23
CHSI2	EDWARDSVILLE 2W	1.40
EDWI2	GREENFIELD	3.30
GNFI2	GREENVILLE 2NE	0.81
GRVI2	HILLSBORO	3.44
HLBI2	IUKA 12SW	2.40
IUKI2	JERSEYVILLE 2SW	1.80
JVLI2		
MTOI2	MOUNT OLIVE 1E	2.83
MEDI2	MEDORA	1.72
NSHI2	NASHVILLE 4NE	2.10
REDI2	RED BUD	1.95
STEI2	SIU EDWARDSVILLE	2.52
WHLI2	WHITE HALL 1E	0.78
SOUTHEAST MISSOURI		
		3.01
ELLM7	ELLINGTON	5.50
FRDM7	FREDERICKTOWN	5.67
FRZM7	FREDERICKTOWN 1W	4.57
ROZM7	ROSELLE	3.61
SAZM7	SACO	2.90
SGNM7	STE GENEVIEVE	2.56
SEEM7	STEELVILLE 2N	
SLLM7	SULLIVAN 3SE	1.80
VBRM7	VIBURNAM	2.90

