

June 11, 2008: Multiple Brief Tornado Touchdowns and Ample Rainfall in Southern Minnesota

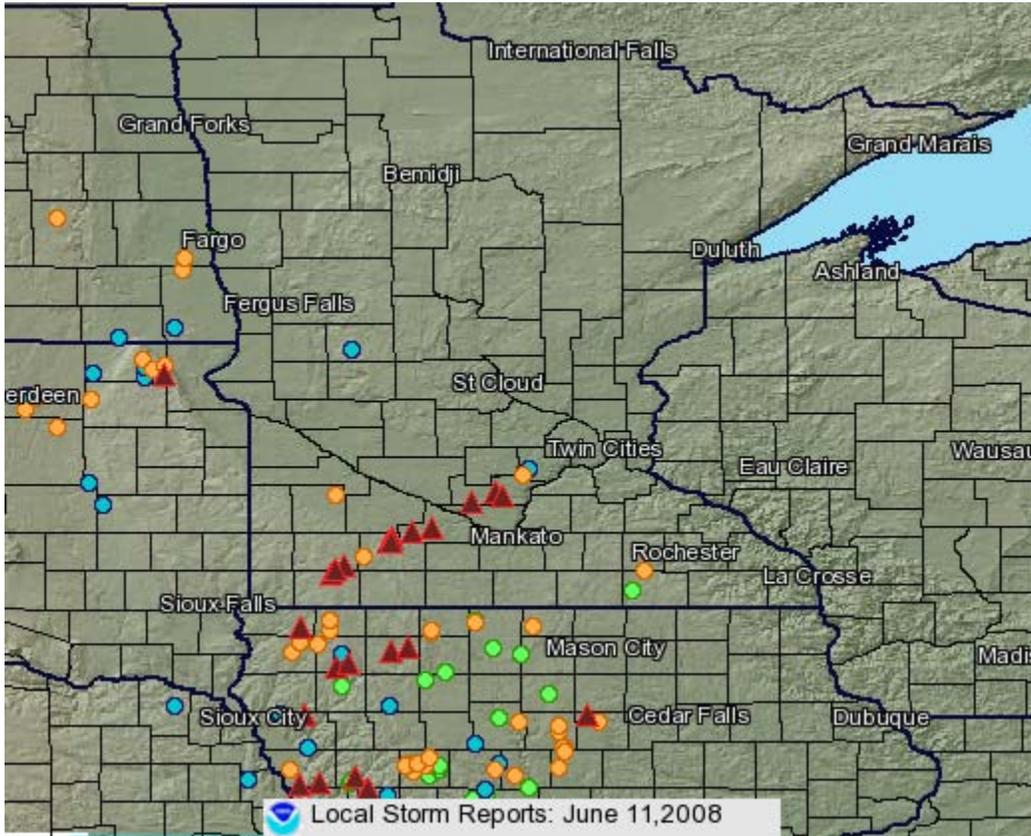
Event Synopsis

The active weather since Memorial Day weekend continued in the Midwest on June 11th, bringing multiple tornadoes to Minnesota and Iowa along with more flooding for the Hawkeye State and southeast Minnesota. Another atypical closed upper low for June moved slowly out of the upper U.S. Rockies during the day, with strong winds in the lower to mid levels of the atmosphere ahead of it. This brought quick changes in temperature and especially moisture to southern Minnesota during the afternoon. Thin patches and even breaks in residual clouds from the morning allowed the sun to temporarily heat the ground and surface air in the lower atmosphere, yielding just enough instability for thunderstorms to develop in far southwest Minnesota into far western Iowa around 4 pm. These evolved northeast, exhibiting supercell characteristics for times throughout their life cycle. Brief tornadoes spawned by these storms were reported by Skywarn storm spotters in southwest Minnesota between 5 and 7 pm. After 7 pm they evolved into the NWS Chanhassen County Warning Area, with multiple tornado touchdowns reported in Brown County and Sibley County. Damage reports received by the NWS thus far have been fairly minor.

The storms did not produce much hail, which is rare for supercell/tornadic thunderstorms. Strong southerly winds within a large portion of the atmosphere had been present from the night before and lasted through the day on the 11th. This warmed the atmosphere substantially above the ground. Thus, the atmospheric layers that meteorologists look for concerning hail growth were extremely high and only reached temporarily by Wednesday's thunderstorms.

The warm atmosphere was not all for the better, as the warmer air mass had the ability to hold more water. Thunderstorms thus were able to efficiently produce heavy rain. Some of these even trained over the same locations, particularly in Freeborn County where Doppler Radar estimated over five inches of rain fell Wednesday Night south and east of Albert Lea.

Storm Reports



PRELIMINARY LOCAL STORM REPORT...SUMMARY
 NATIONAL WEATHER SERVICE TWIN CITIES/CHANHASSEN MN
 434 AM CDT THU JUN 12 2008

..TIME...	...EVENT...	...CITY LOCATION...	...LAT.LON...
..DATE...MAG....	..COUNTY LOCATION..ST..	...SOURCE....
..REMARKS..			
0728 PM 06/11/2008	TORNADO	2 S SPRINGFIELD BROWN MN	44.21N 94.98W TRAINED SPOTTER
	TORNADO REPORTED JUST SOUTH OF SPRINGFIELD ON GROUND		
0732 PM 06/11/2008	TORNADO	5 SW SLEEPY EYE BROWN MN	44.25N 94.80W TRAINED SPOTTER
	TORNADO REPORTED ON GROUND NEAR SLEEPY EYE		
0800 PM 06/11/2008	HAIL M1.00 INCH	3 N HOLMES DOUGLAS MN	45.88N 95.54W LAW ENFORCEMENT
0839 PM 06/11/2008	TORNADO	5 SW WINTHROP SIBLEY MN	44.49N 94.44W LAW ENFORCEMENT

2 TOUCHDOWNS AT HWY 8 AND CR 53

0849 PM HAIL NORWOOD/YOUNG AMERICA 44.78N 93.92W
06/11/2008 M0.88 INCH CARVER MN LAW ENFORCEMENT

0906 PM TORNADO 3 E GAYLORD 44.55N 94.16W
06/11/2008 SIBLEY MN NWS EMPLOYEE

JUST N OF HWY 5.

0908 PM TORNADO 2 N GAYLORD 44.58N 94.22W
06/11/2008 SIBLEY MN TRAINED SPOTTER

0926 PM TSTM WND DMG HAMBURG 44.73N 93.96W
06/11/2008 CARVER MN TRAINED SPOTTER

6 INCH DIAMETER BRANCHES DOWN.

1115 PM TSTM WND DMG EMMONS 43.51N 93.48W
06/11/2008 FREEBORN MN PUBLIC

ROOF DAMAGE TO BARN

1204 AM FLASH FLOOD 3 SSE ALBERT LEA 43.62N 93.35W
06/12/2008 FREEBORN MN AMATEUR RADIO

WATER OVER HWY 65.

1215 AM FLASH FLOOD 5 E HAYWARD 43.66N 93.15W
06/12/2008 FREEBORN MN PUBLIC

WATER COVERING I-90.

Rainfall Amounts

MAX/MIN TEMPERATURE AND PRECIPITATION TABLE FOR
 CENTRAL AND SOUTH CENTRAL MINNESOTA AND WEST CENTRAL WISCONSIN
 NATIONAL WEATHER SERVICE TWIN CITIES/CHANHASSEN MN
 1031 AM CDT THU JUN 12 2008

VALUES REPRESENT YESTERDAYS HIGHS...LOW OVER THE LAST 12 HOURS
 AND PRECIPITATION OVER THE LAST 24 HOURS ENDING AT 6AM

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.BR MSP 0612 C DH00/TX/DH06/TAIRZP/PP
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:          STATION          MAX    MIN    24-HR
:          NAME            TEMP   TEMP   PCPN
AXN : ALEXANDRIA MN ARPT   : 62 / 49 / 1.41
EAU : EAU CLAIRE WI ARPT  : 70 / 58 / 1.04
STC : ST CLOUD MN ARPT   : 65 / 56 / 1.36
MIC : CRYSTAL MN ARPT    : 69 / 61 / 1.74
MSP : MINNEAPOLIS MN ARPT : 70 / 60 / 0.97
STP : ST PAUL MN ARPT    : 70 / 63 / 1.32
FCM : EDEN PRAIRIE MN ARPT : 70 / 60 / 1.62
RWF : REDWOOD FALLS MN ARPT : 69 / 57 / 1.00
.END
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:          COOPERATIVE OBSERVER REPORTS
:VALUES ARE FOR THE PREVIOUS 24 HOURS ENDING BETWEEN 6 AM AND
:          8 AM LOCAL TIME UNLESS OTHERWISE NOTED
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:          STATION          MAX    MIN    24-HR
:          NAME            TEMP   TEMP   PCPN
:MINNESOTA
ALBM5 : ALBERT LEA        : 76 / 58 / 2.02 /
BWNM5 : BROWNTON WWTP     : M / M / 1.10 /
BUFM5 : BUFFALO           : 66 / 54 / 1.92 /
CLSM5 : CARLOS (ALEXANDRIA AREA) : M / M / 1.50 /
MPXM5 : CHANHASSEN MN WFO : 70 / 58 / 1.73 /
CHNM5 : CHANHASSEN 2SW    : M / M / 1.70 /
DANM5 : DANUBE 2N        : M / M / 0.89 /
DSL5M : DASSEL           : 67 / 55 / 1.39 /
FIRM5 : FAIRMONT         : 77 / 58 / 1.02 /
FBTM5 : FARIBAULT        : 74 / 57 / 1.00 /
FORM5 : FOREST LAKE      : 67 / 54 / 1.24 /
FDYM5 : FRIDLEY          : M / M / 1.66 /
GLDM5 : GAYLORD          : 70 / 57 / 2.02 /
HAMM5 : HAMBURG          : M / M / 2.74 /
HSTM5 : HASTINGS L/D 2    : M / M / 1.12 /
JORM5 : JORDAN 2E        : 72 / 53 / 1.18 /
LSTM5 : LESTER PRAIRIE   : M / M / 2.14 /
LCHM5 : LITCHFIELD       : 66 / 55 / 2.35 /
LFLM5 : LITTLE FALLS     : M / M / 1.40 /
LNGM5 : LONG PRAIRIE     : 62 / 49 / 1.11 /
MADM5 : MADISON          : M / M / 1.81 /
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MWDM5	:	MAPLEWOOD	:	M	/	M	/	1.03	/
MLRM5	:	MELROSE	:	64	/	50	/	1.49	/
MLCM5	:	MILACA	:	63	/	48	/	2.49	/
LSAM5	:	MINNEAPOLIS LOWER ST ANT	:	M	/	M	/	0.95	/
MGMM5	:	MONTGOMERY	:	M	/	M	/	0.75	/
MRAM5	:	MORA	:	M	/	M	/	2.84	/
MGNM5	:	MORGAN	:	M	/	M	/	0.44	/
MRRM5	:	MORRIS	:	60	/	49	/	1.78	/
NEWM5	:	NEW LONDON	:	64	/	52	/	0.46	/
ONMM5	:	ONAMIA	:	M	/	M	/	1.54	/
RDWM5	:	RED WING L/D 3	:	72	/	58	/	1.40	/
REWM5	:	REDWOOD FALLS	:	M	/	M	/	1.31	/
RCEM5	:	RICE	:	65	/	49	/	1.48	/
RFDM5	:	ROCKFORD	:	M	/	M	/	2.00	/
SCOM5	:	ST CLOUD SCSU	:	M	/	M	/	1.40	/
SNTM5	:	ST PAUL 3SW	:	68	/	58	/	1.17	/
SHRM5	:	SHERBURN	:	M	/	M	/	0.34	/
STIM5	:	STILLWATER 2SW	:	67	/	56	/	1.56	/
SWRM5	:	STILLWATER	:	M	/	M	/	1.43	/
VESM5	:	VESTA	:	M	/	M	/	1.18	/
VCTM5	:	VICTORIA	:	M	/	M	/	2.82	/
WACM5	:	WACONIA	:	M	/	M	/	3.05	/
WASM5	:	WASECA	:	74	/	58	/	1.24	/
WTTM5	:	WATERTOWN	:	M	/	M	/	2.70	/
WLDM5	:	WILD RIVER STATE PARK	:	66	/	54	/	1.11	/
WLLM5	:	WILLMAR	:	66	/	53	/	1.10	/
WNNM5	:	WINNEBAGO	:	76	/	58	/	0.75	/
ZBRM5	:	ZUMBROTA	:	74	/	60	/	2.53	/
:WISCONSIN									
AGSW3	:	AUGUSTA RANGER STATION	:	66	/	58	/	1.03	/
BMRW3	:	BLOOMER WI	:	66	/	57	/	1.43	/
BALW3	:	BALDWIN WI	:	M	/	M	/	1.67	/
BGFW3	:	BIG FALLS HYDRO WI	:	63	/	53	/	1.15	/
CHPW3	:	CHIPPEWA FALLS	:	M	/	M	/	1.03	/
CBLW3	:	CUMBERLAND WI	:	69	/	52	/	2.26	/
DRDW3	:	DURAND	:	72	/	60	/	1.50	/
ELRW3	:	EAU CLAIRE 3SW	:	68	/	59	/	0.96	/
HAMW3	:	HAMMOND	:	M	/	M	/	1.34	/
JIMW3	:	JIM FALLS WI	:	65	/	54	/	1.11	/
LDSW3	:	LADYSMITH 3W	:	61	/	52	/	1.90	/
ROBW3	:	ROBERTS	:	M	/	M	/	1.07	/
STAW3	:	STANLEY WI	:	65	/	56	/	0.92	/

TEMPERATURE DATA REPRESENT THE HIGHEST AND LOWEST TEMPERATURES REPORTED ON A STATIONS OBSERVATIONS TRANSMITTED THREE TIMES AN HOUR AND MAY NOT NECESSARILY BE THE HIGHEST OR LOWEST TEMPERATURE THAT OCCURRED AT THE SITE. THE PRECIPITATION VALUE AT THESE SITES IS AN ESTIMATE BASED ON THE P-GROUP IN THE OBSERVATION. SNOWFALL AND SNOW DEPTH ARE REPORTED WHEN CURRENT DATA IS AVAILABLE.