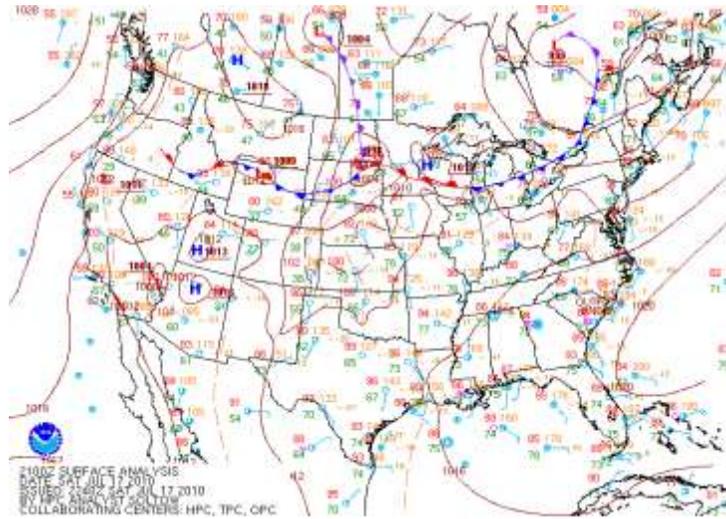


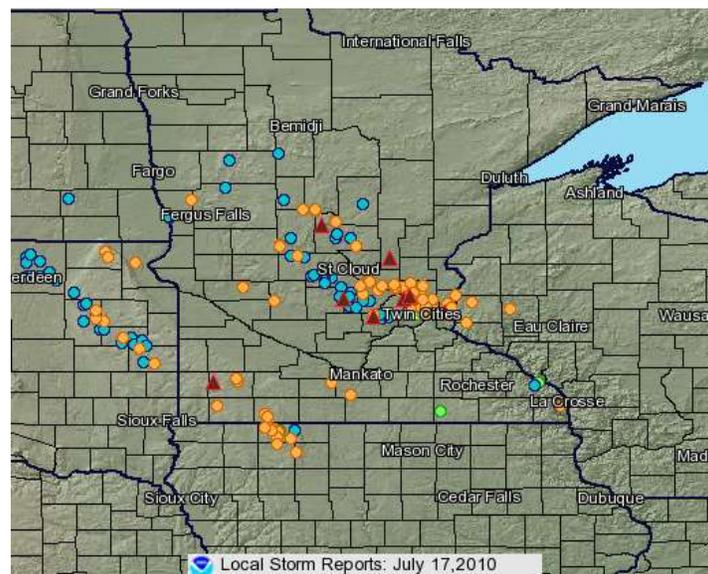
July 17th, 2010: Very Large Hail in Central Minnesota and Widespread Wind Damage Across the Twin Cities North Metro



July 17th Surface Weather Map: 4 pm

Low pressure deepened through the afternoon of the 17th as it approached Minnesota from the west. A warm front to its east pushed northward into Minnesota, ushering in a very unstable air mass with high dew points in the upper 60s to mid 70s and temperatures in the 90s. This triggered scattered thunderstorms by early afternoon, one of which produced massive hail in a swath from western Stearns County through northern Carver County. Numerous strong to severe thunderstorms developed by late afternoon and early evening, rushing southeast producing wind damage. There were a handful of tornado reports that the National Weather Service is checking into.

Preliminary Storm Reports



PRELIMINARY LOCAL STORM REPORT...SUMMARY
 NATIONAL WEATHER SERVICE TWIN CITIES/CHANHASSEN MN
 513 AM CDT MON JUL 19 2010

..TIME...	...EVENT...	...CITY LOCATION...	...LAT.LON...
..DATE...MAG....	..COUNTY LOCATION..ST..	...SOURCE....
	..REMARKS..		
0202 PM	HAIL	5 W LONG PRAIRIE	45.98N 94.97W
07/17/2010	M1.75 INCH	TODD MN	FIRE DEPT/RESCUE
0203 PM	FUNNEL CLOUD	3 NW SAUK CENTRE	45.77N 95.00W
07/17/2010		STEARNS MN	TRAINED SPOTTER
0219 PM	HAIL	3 WNW LITTLE SAUK	45.88N 94.97W
07/17/2010	M1.75 INCH	TODD MN	TRAINED SPOTTER
HAIL LASTED OVER 10 MINS. ALSO NOTED TREES DOWN ALONG HWY 27 EAST OF LAKE OSAKIS.			
0222 PM	TSTM WND DMG	3 NE OSAKIS	45.90N 95.11W
07/17/2010		TODD MN	STORM CHASER
TREES DOWN			
0222 PM	TSTM WND DMG	2 E OSAKIS	45.87N 95.11W
07/17/2010		TODD MN	STORM CHASER
TREES DOWN EAST END OF LAKE OSAKIS HWY 27.			
0225 PM	HAIL	3 NE SAUK CENTRE	45.76N 94.91W
07/17/2010	M0.88 INCH	STEARNS MN	TRAINED SPOTTER
0233 PM	TSTM WND GST	4 E SAUK CENTRE	45.75N 94.88W
07/17/2010	M62.00 MPH	STEARNS MN	TRAINED SPOTTER
0233 PM	TSTM WND DMG	4 E SAUK CENTRE	45.75N 94.88W
07/17/2010		STEARNS MN	TRAINED SPOTTER
4 TO 5 INCH BRANCHES DOWN ON ROAD.			
0234 PM	HAIL	3 W ST ROSA	45.73N 94.78W
07/17/2010	M1.00 INCH	STEARNS MN	TRAINED SPOTTER
0235 PM	HAIL	1 W AVON	45.61N 94.47W
07/17/2010	E0.75 INCH	STEARNS MN	TRAINED SPOTTER
0236 PM	HAIL	2 N SAUK CENTRE	45.77N 94.96W
07/17/2010	M0.75 INCH	STEARNS MN	TRAINED SPOTTER
0237 PM	HAIL	3 W ST ROSA	45.73N 94.78W
07/17/2010	M1.75 INCH	STEARNS MN	TRAINED SPOTTER
0243 PM	HAIL	1 N SAUK CENTRE	45.75N 94.96W
07/17/2010	M1.00 INCH	STEARNS MN	TRAINED SPOTTER
0323 PM	HAIL	ST MARTIN	45.50N 94.66W
07/17/2010	M1.75 INCH	STEARNS MN	TRAINED SPOTTER
0327 PM	HAIL	ST MARTIN	45.50N 94.66W
07/17/2010	M1.75 INCH	STEARNS MN	TRAINED SPOTTER
0327 PM	HAIL	1 N RICHMOND	45.47N 94.52W
07/17/2010	M1.00 INCH	STEARNS MN	TRAINED SPOTTER
0330 PM	HAIL	2 SW ST MARTIN	45.48N 94.69W
07/17/2010	M1.75 INCH	STEARNS MN	TRAINED SPOTTER
0332 PM	HAIL	RICHMOND	45.45N 94.52W
07/17/2010	M2.75 INCH	STEARNS MN	TRAINED SPOTTER
0334 PM	HAIL	RICHMOND	45.45N 94.52W
07/17/2010	M2.75 INCH	STEARNS MN	TRAINED SPOTTER
0334 PM	HAIL	3 S FARMING	45.52N 94.56W
07/17/2010	M2.75 INCH	STEARNS MN	TRAINED SPOTTER

TIME ESTIMATED. WINDSHIELD BROKEN.

0334 PM	HAIL	3 S RICHMOND		45.41N 94.52W
07/17/2010	M1.75 INCH	STEARNS	MN	TRAINED SPOTTER
0337 PM	HAIL	COLD SPRING		45.46N 94.43W
07/17/2010	M4.25 INCH	STEARNS	MN	TRAINED SPOTTER

GROUND IS COVERED WITH MAINLY SMALLER PIECES OF HAIL.

0344 PM	HAIL	4 W ST NICHOLAS		45.38N 94.52W
07/17/2010	M2.50 INCH	STEARNS	MN	TRAINED SPOTTER
0352 PM	HAIL	1 N KIMBALL		45.33N 94.30W
07/17/2010	M1.75 INCH	STEARNS	MN	FIRE DEPT/RESCUE
0358 PM	FUNNEL CLOUD	1 N KINGSTON		45.21N 94.31W
07/17/2010		MEEKER	MN	TRAINED SPOTTER

NON ROTATING WALL CLOUD

0402 PM	HAIL	3 S RICHMOND		45.41N 94.52W
07/17/2010	M1.75 INCH	STEARNS	MN	TRAINED SPOTTER

TIME ESTIMATED

0405 PM	HAIL	8 S SOUTH HAVEN		45.18N 94.22W
07/17/2010	E2.75 INCH	WRIGHT	MN	TRAINED SPOTTER
0406 PM	HAIL	4 W ST NICHOLAS		45.38N 94.52W
07/17/2010	M2.50 INCH	STEARNS	MN	TRAINED SPOTTER

TIME ESTIMATED

0407 PM	HAIL	KINGSTON		45.20N 94.31W
07/17/2010	E1.00 INCH	MEEKER	MN	TRAINED SPOTTER
0413 PM	HAIL	2 WSW ANNANDALE		45.25N 94.16W
07/17/2010	M0.88 INCH	WRIGHT	MN	TRAINED SPOTTER
0414 PM	HAIL	2 WSW ANNANDALE		45.25N 94.16W
07/17/2010	E1.00 INCH	WRIGHT	MN	TRAINED SPOTTER
0416 PM	TORNADO	2 SE KINGSTON		45.18N 94.28W
07/17/2010		MEEKER	MN	TRAINED SPOTTER

MOVING SSE

0418 PM	HAIL	COKATO		45.08N 94.19W
07/17/2010	E1.75 INCH	WRIGHT	MN	LAW ENFORCEMENT
0426 PM	FUNNEL CLOUD	COKATO		45.08N 94.19W
07/17/2010		WRIGHT	MN	TRAINED SPOTTER

TIME ESTIMATED

0428 PM	HAIL	3 SW BUFFALO		45.15N 93.91W
07/17/2010	E1.00 INCH	WRIGHT	MN	TRAINED SPOTTER
0430 PM	HAIL	5 SW ANNANDALE		45.20N 94.18W
07/17/2010	M2.00 INCH	WRIGHT	MN	TRAINED SPOTTER
0433 PM	HAIL	HOWARD LAKE		45.06N 94.09W
07/17/2010	E1.00 INCH	WRIGHT	MN	TRAINED SPOTTER
0433 PM	HAIL	7 WSW BUFFALO		45.14N 94.00W
07/17/2010	E1.75 INCH	WRIGHT	MN	TRAINED SPOTTER
0500 PM	TSTM WND DMG	3 S DONNELLY		45.65N 96.01W
07/17/2010		STEVENS	MN	PUBLIC

LARGE TREES DOWN ON A FARM.

0501 PM	TORNADO	2 SW WATERTOWN		44.94N 93.87W
07/17/2010		CARVER	MN	FIRE DEPT/RESCUE

NEAR COUNTY ROAD 122.

0505 PM	HAIL	WATERTOWN		44.96N 93.85W
07/17/2010	E0.75 INCH	CARVER	MN	FIRE DEPT/RESCUE
0508 PM	HAIL	4 E WATERTOWN		44.97N 93.77W
07/17/2010	E1.75 INCH	CARVER	MN	TRAINED SPOTTER
0511 PM	HAIL	WATERTOWN		44.96N 93.85W
07/17/2010	E1.00 INCH	CARVER	MN	FIRE DEPT/RESCUE
0512 PM	HAIL	WATERTOWN		44.96N 93.85W
07/17/2010	E1.75 INCH	CARVER	MN	TRAINED SPOTTER
0512 PM	HAIL	WATERTOWN		44.96N 93.85W
07/17/2010	E1.00 INCH	CARVER	MN	TRAINED SPOTTER
0512 PM	HAIL	WATERTOWN		44.96N 93.85W
07/17/2010	M1.75 INCH	CARVER	MN	TRAINED SPOTTER

REPORTED IN NORTHERN PORTION OF TOWN.

0514 PM	HAIL	WATERTOWN		44.96N 93.85W
07/17/2010	E2.75 INCH	CARVER	MN	TRAINED SPOTTER
0518 PM	HAIL	MINNETRISTA		44.93N 93.71W
07/17/2010	E1.75 INCH	HENNEPIN	MN	LAW ENFORCEMENT
0521 PM	HAIL	ST BONIFACIUS		44.90N 93.75W
07/17/2010	E0.75 INCH	HENNEPIN	MN	TRAINED SPOTTER
0521 PM	HAIL	ST BONIFACIUS		44.90N 93.75W
07/17/2010	E2.75 INCH	HENNEPIN	MN	FIRE DEPT/RESCUE
0522 PM	HAIL	MOUND		44.93N 93.66W
07/17/2010	E2.00 INCH	HENNEPIN	MN	STORM CHASER
0524 PM	HAIL	MOUND		44.93N 93.66W
07/17/2010	E1.00 INCH	HENNEPIN	MN	TRAINED SPOTTER
0532 PM	HAIL	MOUND		44.93N 93.66W
07/17/2010	E1.75 INCH	HENNEPIN	MN	TRAINED SPOTTER
0535 PM	HAIL	STAPLES		46.36N 94.80W
07/17/2010	E2.75 INCH	TODD	MN	LAW ENFORCEMENT
0535 PM	TSTM WND DMG	STAPLES		46.36N 94.80W
07/17/2010		TODD	MN	LAW ENFORCEMENT

TREES DOWN

0535 PM	TSTM WND DMG	WATERTOWN		44.96N 93.85W
07/17/2010		CARVER	MN	EMERGENCY MNGR

STRIPPED CROPS AND DAMAGED SIDING

0538 PM	TSTM WND DMG	WATERTOWN		44.96N 93.85W
07/17/2010		CARVER	MN	LAW ENFORCEMENT

DAMAGE REPORTED OF ROOFS...CARS...TREES AND FIELDS

0540 PM	HAIL	N MOTLEY		46.34N 94.64W
07/17/2010	E1.00 INCH	MORRISON	MN	PUBLIC
0630 PM	HAIL	LITTLE FALLS		45.98N 94.36W
07/17/2010	E1.75 INCH	MORRISON	MN	LAW ENFORCEMENT
0630 PM	HAIL	5 N LITTLE FALLS		46.04N 94.35W
07/17/2010	E1.00 INCH	MORRISON	MN	TRAINED SPOTTER

HAIL LASTED FOR APPROX 5 MINUTES AND COVERED THE GROUND

0633 PM	TSTM WND GST	BENSON		45.32N 95.61W
07/17/2010	M58.00 MPH	SWIFT	MN	ASOS
0643 PM	HAIL	3 WNW GENOLA		45.98N 94.17W
07/17/2010	E1.00 INCH	MORRISON	MN	TRAINED SPOTTER

0656 PM	TSTM WND GST	2 S BUCKMAN		45.87N 94.09W
07/17/2010	M81.00 MPH	MORRISON	MN	STORM CHASER
	ALONG HWY 27			
0658 PM	TORNADO	1 S CUSHING		46.17N 94.56W
07/17/2010		MORRISON	MN	TRAINED SPOTTER
	ON GROUND			
0717 PM	TSTM WND DMG	PENNOCK		45.15N 95.18W
07/17/2010		KANDIYOHI	MN	TRAINED SPOTTER
	DOWNED POWER LINES			
0725 PM	TORNADO	3 E FORESTON		45.73N 93.65W
07/17/2010		MILLE LACS	MN	TRAINED SPOTTER
	ROPE TORNADO TOUCHED GROUND BRIEFLY THEN WENT BACK UP			
0746 PM	FUNNEL CLOUD	SARTELL		45.62N 94.21W
07/17/2010		STEARNS	MN	TRAINED SPOTTER
	MOVING INTO BENTON COUNTY			
0755 PM	TSTM WND GST	MAPLE LAKE		45.23N 94.00W
07/17/2010	M58.00 MPH	WRIGHT	MN	MESONET
0801 PM	TSTM WND DMG	3 NE HASTY		45.40N 93.94W
07/17/2010		SHERBURNE	MN	TRAINED SPOTTER
	TREES DOWN...DESTROYED FARM IRRIGATION SYSTEM.			
0802 PM	TSTM WND GST	MONTICELLO		45.30N 93.80W
07/17/2010	M76.00 MPH	WRIGHT	MN	TRAINED SPOTTER
0810 PM	TSTM WND DMG	ELK RIVER		45.33N 93.57W
07/17/2010		SHERBURNE	MN	TRAINED SPOTTER
	SHEDS... RIDES... TENTS DOWN AND BLOWN OVER AT SHERBURNE COUNTY FAIR			
0812 PM	TSTM WND DMG	2 NNW ELK RIVER		45.36N 93.58W
07/17/2010		SHERBURNE	MN	TRAINED SPOTTER
	2 FOOT DIAMETER TREES DOWN WITH HALF A DOZEN OTHER TREES DOWN IN ADDITION TO A FENCE DOWN			
0814 PM	TSTM WND DMG	BIG LAKE		45.34N 93.75W
07/17/2010		SHERBURNE	MN	TRAINED SPOTTER
	6 INCH TREES DOWN			
0815 PM	TSTM WND DMG	2 NW RAMSEY		45.28N 93.48W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	TIME ESTIMATED OF NUMEROUS 1 TO 2 FOOT DIAMETER HARDWOOD TREES DOWN ON GROUNDS OF NOWTHEN THRESHING SHOW. WIND ESTIMATED 70 MPH.			
0815 PM	TSTM WND DMG	5 S CLEARWATER		45.34N 94.04W
07/17/2010		WRIGHT	MN	TRAINED SPOTTER
	LARGE GROVE OF TREES DOWNED UP TO 2 FEET IN DIAMETER WITH MINOR DAMAGE TO HOUSE			
0815 PM	TSTM WND DMG	4 E ELK RIVER		45.33N 93.48W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	TREES DOWN			

0815 PM TSTM WND DMG MAPLE GROVE 45.11N 93.46W
07/17/2010 HENNEPIN MN TRAINED SPOTTER

ABOUT A HALF DOZEN TREES WITH SIX INCH PLUS BRANCHES DOWN
ALONG COUNTY RD 50. WIND ESTIMATED 60 MPH.

0820 PM TSTM WND GST MAPLE GROVE 45.11N 93.46W
07/17/2010 E50.00 MPH HENNEPIN MN LAW ENFORCEMENT

0820 PM FUNNEL CLOUD CHAMPLIN 45.17N 93.39W
07/17/2010 HENNEPIN MN TRAINED SPOTTER

ROTATING WALL CLOUD AT US 169 AND ELM CREEK ST.

0820 PM FUNNEL CLOUD DAYTON 45.19N 93.47W
07/17/2010 HENNEPIN MN TRAINED SPOTTER

OBSCURED BY TREE LINE

0825 PM TSTM WND DMG 5 WNW ROSEVILLE 45.26N 93.33W
07/17/2010 ANOKA MN TRAINED SPOTTER

MULTIPLE LARGE TREES DOWN... TIME ESTIMATED

0826 PM TSTM WND GST CRYSTAL 45.04N 93.36W
07/17/2010 M58.00 MPH HENNEPIN MN ASOS

0827 PM TORNADO ANOKA 45.21N 93.39W
07/17/2010 ANOKA MN PUBLIC

UNCONFIRMED

0829 PM TSTM WND DMG CRYSTAL 45.04N 93.36W
07/17/2010 HENNEPIN MN TRAINED SPOTTER

2 TO 3 INCH BRANCHES DOWN AT 42ND AND DOUGLAS

0830 PM TSTM WND DMG ARDEN HILLS 45.07N 93.17W
07/17/2010 RAMSEY MN TRAINED SPOTTER

3 LARGE TREES FELL ON HOUSE

0831 PM TSTM WND DMG ELK RIVER 45.33N 93.57W
07/17/2010 SHERBURNE MN TRAINED SPOTTER

10 INCH TREE LIMBS CAME DOWN ON POWER LINES KNOCKING OUT
POWER.

0832 PM TSTM WND DMG ST FRANCIS 45.38N 93.36W
07/17/2010 ANOKA MN TRAINED SPOTTER

4 INCH BRANCHES DOWN NORTH OF VIKING BLVD AND CLEANY RD

0833 PM TSTM WND DMG NEW BRIGHTON 45.07N 93.20W
07/17/2010 RAMSEY MN TRAINED SPOTTER

SOME LARGE LIMBS AND MANY SMALLER BRANCHES BLOWN DOWN.

0833 PM FLOOD 2 SSW ELK RIVER 45.31N 93.57W
07/17/2010 SHERBURNE MN TRAINED SPOTTER

STANDING WATER COVERING THE ROAD...PAST THE CURB LINE...
STALLED VEHICLES ON THE ROAD.

0833 PM TSTM WND DMG BLAINE 45.17N 93.21W
07/17/2010 ANOKA MN TRAINED SPOTTER

18 TO 24 INCH TREES DOWN AT BLAINE CITY HALL RADISSON
ROAD

0836 PM 07/17/2010	FUNNEL CLOUD	ROSEVILLE RAMSEY	MN	45.02N 93.15W TRAINED SPOTTER
	ROTATING WALL CLOUD AT SNELLING AND LARPEN TEUR			
0836 PM 07/17/2010	FUNNEL CLOUD	HUGO WASHINGTON	MN	45.16N 92.96W TRAINED SPOTTER
	ROTATING WALL CLOUD ON I 35			
0838 PM 07/17/2010	TSTM WND DMG	1 S ELK RIVER SHERBURNE	MN	45.31N 93.57W TRAINED SPOTTER
	4 INCH TREE SEVERED IN HALF			
0838 PM 07/17/2010	TSTM WND DMG	3 NE MINNEAPOLIS RAMSEY	MN	44.99N 93.21W TRAINED SPOTTER
	TREE LIMBS SNAPPING			
0841 PM 07/17/2010	TSTM WND DMG	VADNAIS HEIGHTS RAMSEY	MN	45.06N 93.07W TRAINED SPOTTER
	8 INCH DIAMETER LIMBS DOWN			
0841 PM 07/17/2010	TSTM WND GST	1 NNE VADNAIS HEIGHTS RAMSEY	MN	45.07N 93.07W TRAINED SPOTTER
	M70.00 MPH			
0842 PM 07/17/2010	TSTM WND DMG	ANOKA ANOKA	MN	45.21N 93.39W TRAINED SPOTTER
	8 INCH TRESS SNAPPED ON VIKING BLVD			
0844 PM 07/17/2010	TSTM WND GST	MAPLEWOOD RAMSEY	MN	44.99N 93.02W TRAINED SPOTTER
	M63.60 MPH			
	WIND DAMAGE INCLUDES NUMEROUS 8 TO 12 INCH LARGE BRANCHES DOWN WITH POWER OUTAGES. SPOTTER HAS A WEATHER STATION.			
0845 PM 07/17/2010	TSTM WND DMG	1 N WHITE BEAR LAKE RAMSEY	MN	45.08N 93.01W TRAINED SPOTTER
	SEVERAL 6 TO 12 INCH DIAMETER TREES DOWN ALONG HWY 61 AND CITY WITHOUT POWER. TIME ESTIMATED			
0846 PM 07/17/2010	TSTM WND GST	ST PAUL RAMSEY	MN	44.95N 93.10W ASOS
	M63.00 MPH			
0848 PM 07/17/2010	FLASH FLOOD	SHOREVIEW RAMSEY	MN	45.08N 93.14W TRAINED SPOTTER
	8 INCH TREES IN POWER LINES AT JUNCT OF LEXINGTON AND JOHNS RD			
0848 PM 07/17/2010	TSTM WND DMG	5 N ROSEVILLE RAMSEY	MN	45.08N 93.14W TRAINED SPOTTER
	8 INCH TREES DOWN			
0848 PM 07/17/2010	TSTM WND DMG	BLAINE ANOKA	MN	45.17N 93.21W PUBLIC
	20 TO 24 INCH TREE DOWN AT 242 AND HWY 65			
0848 PM 07/17/2010	TSTM WND DMG	3 NW BECKER SHERBURNE	MN	45.40N 93.91W TRAINED SPOTTER
	13 TO 15 LARGE TREES UPROOTED			
0852 PM 07/17/2010	TSTM WND DMG	CHAMPLIN HENNEPIN	MN	45.17N 93.39W TRAINED SPOTTER

	8 INCH PINE TREE LIMB DOWN			
0852 PM	TSTM WND DMG	BLAINE		45.17N 93.21W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	5 INCH TREE LIMBS DOWN			
0852 PM	TSTM WND DMG	4 NNW STILLWATER		45.11N 92.87W
07/17/2010		WASHINGTON	MN	TRAINED SPOTTER
	SOME 2-3 INCH DIAMETER BRANCHES BROKEN OFF			
0852 PM	TSTM WND GST	4 NNW STILLWATER		45.11N 92.87W
07/17/2010	M60.00 MPH	WASHINGTON	MN	TRAINED SPOTTER
0857 PM	TORNADO	LAKE ELMO		45.00N 92.91W
07/17/2010		WASHINGTON	MN	LAW ENFORCEMENT
	ON THE GROUND			
0857 PM	TSTM WND DMG	LINO LAKES		45.16N 93.08W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	6 INCH DIAMETER BRANCHES DOWN			
0858 PM	TSTM WND DMG	1 N MARINE ON ST CROIX		45.21N 92.77W
07/17/2010		WASHINGTON	MN	TRAINED SPOTTER
	LARGE TREE FELL ON CAMPER IN WILLIAM O BRIEN ST PARK			
0858 PM	FLOOD	MINNEAPOLIS		44.96N 93.27W
07/17/2010		HENNEPIN	MN	TRAINED SPOTTER
	1 FOOT OF MOVING WATER AT 7TH ST SE AND 5TH AVE.			
0902 PM	TSTM WND DMG	ANOKA		45.21N 93.39W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	RAILROAD GATE CROSSING BROKEN ON MAIN STREET			
0903 PM	TSTM WND DMG	MOUNDS VIEW		45.11N 93.21W
07/17/2010		RAMSEY	MN	TRAINED SPOTTER
	10 INCH TREES DOWN			
0904 PM	TSTM WND DMG	ANDOVER		45.26N 93.33W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	12-16 INCH MAPLE TREES SNAPPED			
0915 PM	TSTM WND DMG	EAST BETHEL		45.34N 93.20W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	8 INCH TREE DOWN AND 12 INCH TREE SNAPPED			
0922 PM	TSTM WND DMG	2 WSW HAM LAKE		45.25N 93.23W
07/17/2010		ANOKA	MN	TRAINED SPOTTER
	7 INCH TREES DOWN			
0923 PM	TSTM WND DMG	STILLWATER		45.06N 92.82W
07/17/2010		WASHINGTON	MN	TRAINED SPOTTER
	6 INCH TREES DOWN AT FERRY FALLS AND BOOM TFD			
0928 PM	TSTM WND GST	NEW RICHMOND		45.12N 92.54W
07/17/2010	M63.00 MPH	ST. CROIX	WI	AWOS
0930 PM	TSTM WND DMG	BOYCEVILLE		45.04N 92.04W
07/17/2010		DUNN	WI	LAW ENFORCEMENT

	POWER LINE DOWN			
0937 PM	TSTM WND DMG	RIVER FALLS		44.86N 92.62W
07/17/2010		PIERCE	WI	TRAINED SPOTTER
	5 INCH TREE DOWN			
0941 PM	TSTM WND DMG	1 E CHAMPLIN		45.17N 93.37W
07/17/2010		HENNEPIN	MN	EMERGENCY MNGR
	16 INCH DIAMETER ELM TREE DOWN			
0945 PM	TSTM WND DMG	1 WSW NEW BRIGHTON		45.06N 93.22W
07/17/2010		RAMSEY	MN	TRAINED SPOTTER
	A FEW BRANCHES DOWN UP TO 6 INCHES IN DIAMETER			
1002 PM	TSTM WND GST	MADELIA		44.05N 94.42W
07/17/2010	M59.00 MPH	WATONWAN	MN	DEPT OF HIGHWAYS
	MNDOT STATION 45 ON US 60 MILE POST 86			
1010 PM	TSTM WND DMG	1 NW EAU CLAIRE		44.83N 91.51W
07/17/2010		EAU CLAIRE	WI	TRAINED SPOTTER
	ONE FOOT AND A HALF DIAMETER TREE SNAPPED NEAR BASE.			
1051 PM	NON-TSTM WND DMG	2 N WASECA		44.11N 93.50W
07/17/2010		WASECA	MN	EMERGENCY MNGR
	POWER LINES DOWN			
1055 PM	TSTM WND DMG	AMBOY		43.89N 94.16W
07/17/2010		BLUE EARTH	MN	LAW ENFORCEMENT
	TREE DOWN			
1057 PM	NON-TSTM WND DMG	WASECA		44.08N 93.50W
07/17/2010		WASECA	MN	EMERGENCY MNGR
	TREE DOWN			
1202 AM	HEAVY RAIN	7 S HILLMAN		45.91N 93.89W
07/18/2010	M3.02 INCH	MORRISON	MN	TRAINED SPOTTER
	2.01 INCHES FELL IN 30 MINUTES			

Radar

NWS Doppler Radar has many algorithms that can calculate various storm-based parameters to assist NWS warning forecasters in storm monitoring and forecasting. One of those is MESH, or Maximum Estimated Size of Hail. This is based on the thunderstorm's reflected power, or reflectivity, and the environmental temperature profile and correlating these through past research to give a hail size forecast. While the magnitude is rarely perfect, it can often give a reasonable idea of hail size. In addition, looking at this parameter over time and space can reveal where the heaviest hail damage may have occurred.

