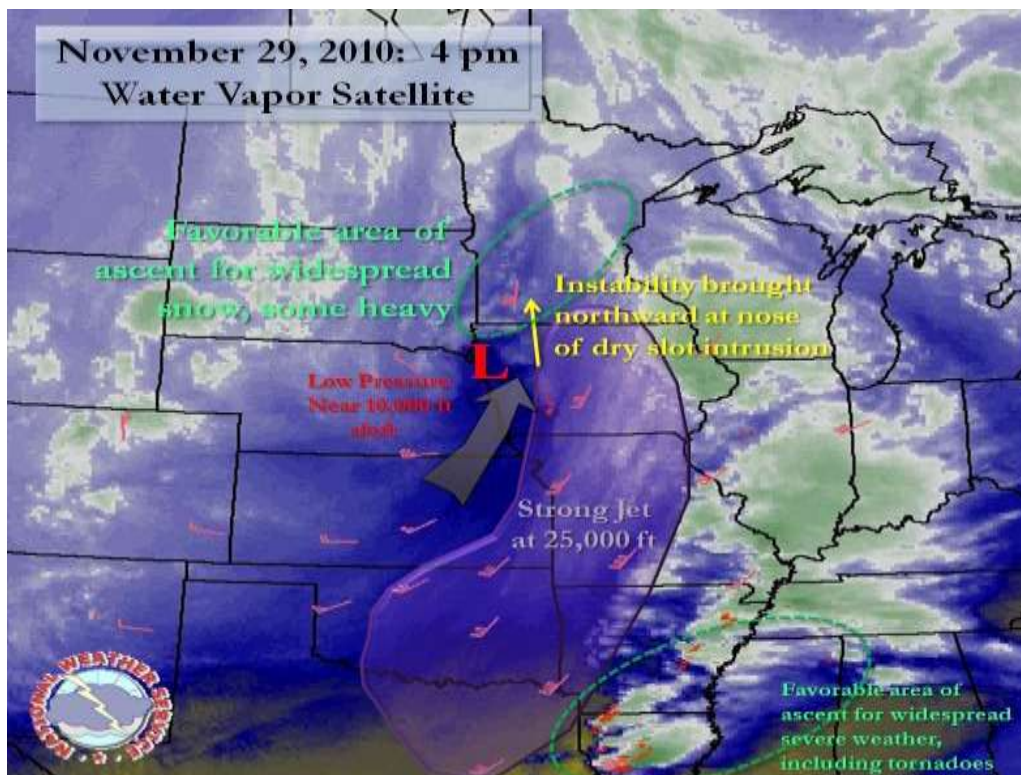


# Nov 29-30th, 2010 Winter Weather Event

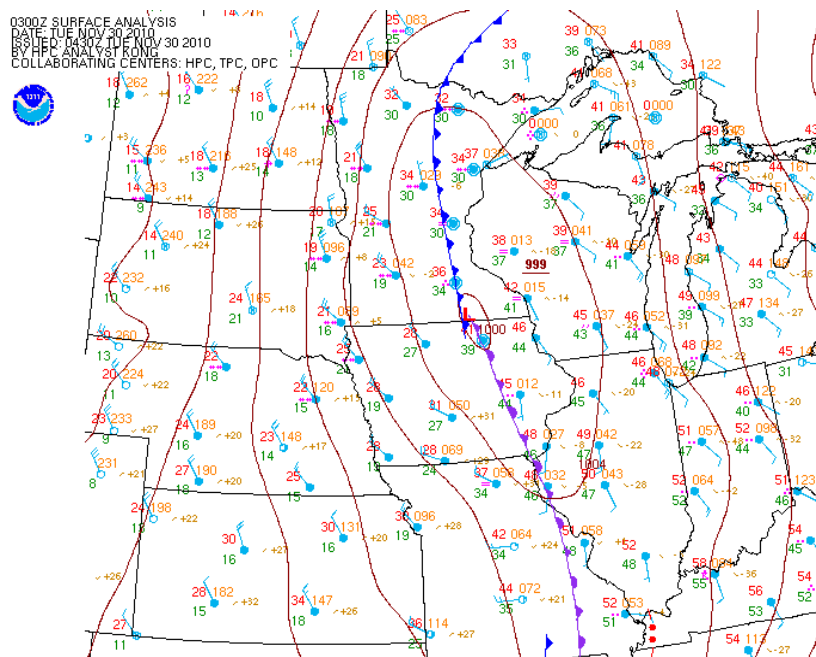
## Overview

November 2010 would end with one more winter storm for Minnesota. But for most of southern and eastern Minnesota, this event began once again as rain on the 29th with surface temperatures in the mid 30s to lower 40s. Colder air wrapped in from the west behind a surface cold front during the night as low pressure lifted northeast over the area, and that changed precipitation type to snow across the entire area. Rain changed to snow in the Twin Cities from 10 pm through 1 am. An area of particular focus for prolonged light to moderate snowfall and period of heavy snowfall was from the communities of Morgan and Comfrey northward towards Long Prairie. This area generally received 5 to 10 inches of snow. Also behind the front came gusty winds, which undercut the strong forcing for snow. So some areas saw heavy snow coincident with strong winds, which led to temporary very low visibilities due to blowing snowfall.

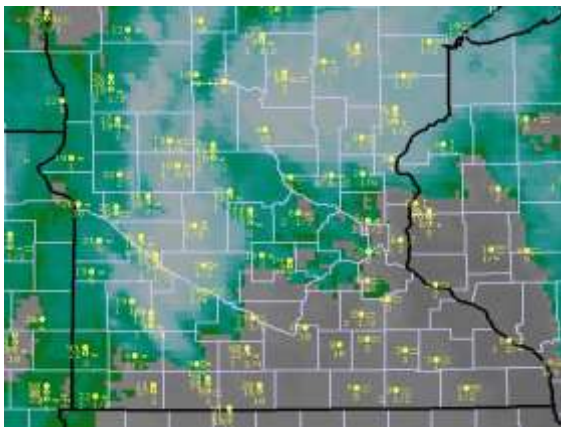


Nov 29th: Afternoon Water Vapor Image

When the low pressure entered southeast Minnesota in the late hours of the 29th and early morning hours of the 30th, snowfall rates increased from Redwood Falls north through Willmar and towards Long Prairie. That corridor can be seen in the infrared satellite image below, where observations are also plotted. The number below the circle indicates the visibility. The cloud top temperatures in the white are favorable for larger snowflakes leading to more accumulating snowfall. These were atop that corridor for several hours.



Nov 29th: 9 pm Surface Weather Map

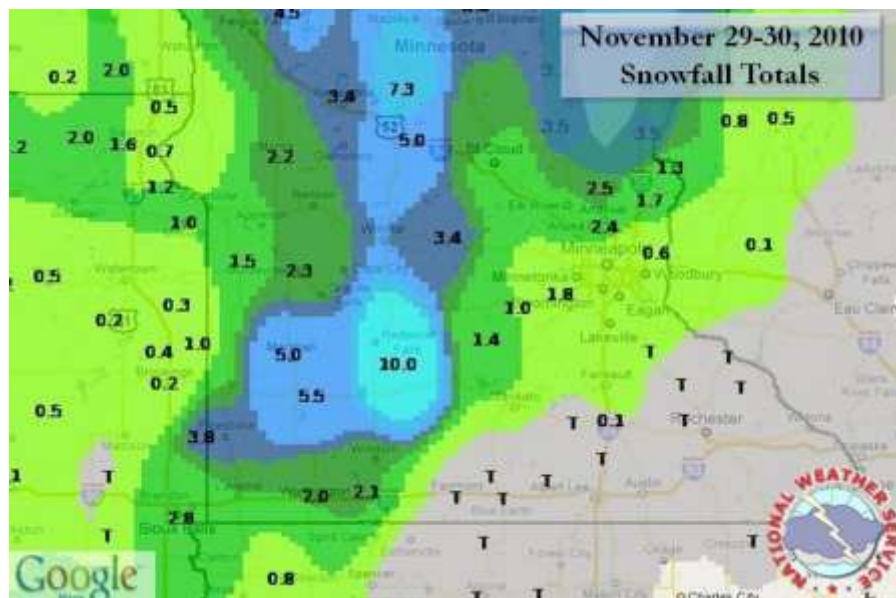


Nov 30th: 1 am Infrared Satellite Image

## Climate Facts

- After this event, the **November snowfall was 9.8 inches in the Twin Cities**, the highest since November of 2000 (also 9.8 inches).
- This event ensured **six measurable days with snowfall in November** in the Twin Cities, the most in a November since 2000 when there were eight.
- The 10" of snowfall in Redwood County was a sizeable amount that one may think has not occurred there in a while, but actually a higher amount was seen just eleven months ago in the Christmas Storm of Dec 24-26, 2009. (15" in nearby Springfield, MN).

## Snowfall Totals



## Text Listing Of Snowfall Amounts From the Local Area

PUBLIC INFORMATION STATEMENT  
NATIONAL WEATHER SERVICE TWIN CITIES/CHANHASSEN MN  
1010 AM CST WED DEC 01 2010

...NOVEMBER 29TH-30TH SNOWFALL AMOUNTS...

UPDATED TO INCLUDE STORM TOTAL SNOWFALL FOR COOPERATIVE AND  
COCORAHNS OBSERVERS.

### SNOW REPORTS LISTED BY AMOUNT

INCHES	LOCATION	ST	COUNTY	TIME
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10.00	MORGAN	MN	REDWOOD	0741 AM
8.70	LONG PRAIRIE	MN	TODD	0600 AM
8.20	REDWOOD FALLS	MN	REDWOOD	0500 AM
6.00	ISANTI	MN	ISANTI	0915 AM
6.00	BELGRADE	MN	STEARNS	0719 AM
5.80	CAMBRIDGE	MN	ISANTI	0658 PM
5.80	MURDOCK	MN	SWIFT	0953 AM
5.00	MELROSE	MN	STEARNS	0700 AM
5.00	NORTH BRANCH	MN	CHISAGO	0416 AM
5.00	5 NE WARMAN	MN	KANABEC	0400 AM
5.00	BROOTEN	MN	STEARNS	0200 AM
5.00	3 WSW PRINCETON	MN	SHERBURNE	0600 AM
4.90	WILLMAR	MN	KANDIYOH	0600 AM
4.80	1 ESE MILROY	MN	REDWOOD	0700 AM
4.50	9 NNE BIRD ISLAND	MN	RENVILLE	0630 AM
4.50	COMFREY	MN	BROWN	0808 PM
4.50	MILACA	MN	MILLE LACS	0730 AM

4.20	7 NNW OGILVIE	MN	KANABEC	1023 AM
4.20	3 N ALEXANDRIA	MN	DOUGLAS	0700 AM
4.00	SPRINGFIELD	MN	BROWN	1043 AM
4.00	CARLOS	MN	DOUGLAS	1007 AM
4.00	EDEN VALLEY	MN	MEEKER	0933 AM
4.00	MAYNARD	MN	CHIPPEWA	0837 PM
4.00	8 W CLARA CITY	MN	CHIPPEWA	0837 PM
4.00	ST CROIX FALLS	WI	POLK	0700 AM
3.90	LITCHFIELD	MN	MEEKER	0800 AM
3.90	ONAMIA	MN	MILLE LACS	0800 AM
3.50	GLENWOOD	MN	POPE	0901 PM
3.50	3 NE RUSH CITY	MN	CHISAGO	0700 AM
3.50	ALBANY	MN	STEARNS	0439 AM
3.50	OSAKIS	MN	DOUGLAS	0822 PM
3.30	NEW ULM	MN	BROWN	0800 AM
3.00	ANDOVER	MN	ANOKA	0513 PM
2.90	MORRIS	MN	STEVENS	0800 AM
2.80	HUTCHINSON	MN	MCLEOD	0700 AM
2.80	RICE	MN	BENTON	0700 AM
2.70	7 S HILLMAN	MN	MORRISON	0730 AM
2.60	FOREST LAKE	MN	WASHINGTON	0700 AM
2.40	CHAMPLIN	MN	HENNEPIN	0345 PM
2.40	6 N COON RAPIDS	MN	ANOKA	0700 AM
2.30	MONTEVIDEO	MN	CHIPPEWA	0700 AM
2.20	ANOKA	MN	ANOKA	0953 AM
2.00	ELK RIVER	MN	SHERBURNE	0700 AM
1.80	WACONIA	MN	CARVER	0717 AM
1.80	CHASKA	MN	CARVER	0600 AM
1.80	1 ENE ARDEN HILLS	MN	RAMSEY	0700 AM
1.50	MADISON	MN	LAC QUI PARLE	0800 AM
1.50	GLENWOOD	MN	POPE	0808 PM
1.30	ST CLOUD AIRPORT	MN	STEARNS	1200 PM
1.20	CHANHASSEN NWS	MN	CARVER	0600 PM
1.20	CLAYTON	WI	POLK	1152 AM
1.20	PRIOR LAKE	MN	SCOTT	0650 AM
1.20	JORDAN	MN	SCOTT	0525 AM
1.20	LONG LAKE	MN	HENNEPIN	0700 AM
1.00	3 SE LAKE ELMO	MN	WASHINGTON	0800 AM
1.00	HAMBURG	MN	CARVER	0800 AM
1.00	EAST FARMINGTON	WI	POLK	0400 AM
1.00	MADISON	MN	LAC QUI PARLE	0837 PM
0.90	LAKEVILLE	MN	DAKOTA	1217 AM
0.60	INVER GROVE HEIGHTS	MN	DAKOTA	0700 AM
0.60	ROCKFORD	MN	HENNEPIN	0733 AM
0.50	MINNEAPOLIS ST PAUL APT	MN	HENNEPIN	0600 PM
0.50	CLEAR LAKE	WI	POLK	0530 PM
0.50	MANKATO	MN	BLUE EARTH	0132 PM
0.50	HASTINGS	MN	DAKOTA	0600 AM
0.40	WASECA	MN	WASECA	0800 AM
0.30	RICHFIELD	MN	HENNEPIN	0400 AM

## Maximum Wind Gusts

### PUBLIC INFORMATION STATEMENT

NATIONAL WEATHER SERVICE TWIN CITIES/CHANHASSEN MN

718 PM CST TUE NOV 30 2010

...HIGHEST WIND GUSTS ON NOVEMBER 30TH...

LOW PRESSURE MOVED NORTHEAST FROM CENTRAL IOWA ON THE NIGHT OF THE 29TH TO NORTH OF LAKE SUPERIOR BY THE AFTERNOON OF THE 30TH. THE PRESSURE GRADIENT IN THE WAKE OF THIS SYSTEM AND THE COLD AIR WRAPPING AROUND IT GENERATED GUSTY WINDS ACROSS THE REGION. BELOW ARE SOME OF THE HIGHEST WIND GUSTS ACROSS PRIMARILY WEST CENTRAL AND SOUTH CENTRAL MINNESOTA. THESE ARE LISTED BY SITE...WITH THE MAXIMUM GUST OBSERVED AND THE NEAREST TOP OF THE HOUR IN WHICH IT HAPPENED. NOTE THAT AT SOME OF THESE SITES HIGHER GUSTS MAY HAVE OCCURRED BETWEEN OBSERVATIONS.

LOCATION	MAXIMUM WIND GUST	HOURL
ALEXANDRIA	40 MPH	1 PM
APPLETON	43 MPH	2 PM
BENSON	44 MPH	9 AM
CANBY	43 MPH	1 PM
FAIRMONT	46 MPH	11 AM
GLENWOOD	43 MPH	12 PM
GRANITE FALLS	41 MPH	11 AM
LITCHFIELD	37 MPH	2 PM
MADISON	43 MPH	12 AM
MANKATO	39 MPH	2 PM
MONTEVIDEO	41 MPH	3 PM
MORRIS	46 MPH	10 AM
NEW ULM	46 MPH	12 PM
ORTONVILLE	47 MPH	11 AM
PAYNESVILLE	40 MPH	10 AM
REDWOOD FALLS	46 MPH	11 AM
ST JAMES	43 MPH	12 PM
TRACY	44 MPH	5 AM
WASECA	37 MPH	3 PM
WILLMAR	43 MPH	10 AM