

April 1, 2017

Dear Precipitation Observer,

Each year, we reach out to our amazing volunteer citizen scientists with a summary of the previous year's weather, observation tips for the upcoming year, and a note of thanks.

**2016 Weather Summary:**

The winter of 2015-16 had about two weeks of "real" winter with cold enough temperatures to keep a snow pack in mid-January. This was followed by one of the biggest snowstorms of the season on February 2-3. Winter was brief and thunderstorms rumbled across the state on February 18th and 19th with 50s and 60s in Minnesota by the close of the month.

After a string of seven months of above normal statewide average temperatures, April fell just short of normal. It was a minor speed bump during the otherwise warm year. May was again above normal and planting across the state was completed early. 93% of the corn crop was planted statewide by May 15 according to the National Agricultural Statistics Service.

Any fears of drought were erased in a series of heavy rain events during the summer of 2016. These rains eroded away the moderate drought present in west central Minnesota. The largest rain event of 2016 was on July 11-12, which affected much of central Minnesota. Hardest hit was Kanabec and Pine County. It seemed that Waseca County was the epicenter of the rainy summer of 2016 and wound up with the state record precipitation total of 56.24 inches by the end of the year. There were 37 tornadoes for the year statewide, with one injury.

Reports of saturated fields across the state were common by the time autumn arrived. Luckily for growers, late autumn turned out to be balmy with November being especially forgiving with an average statewide temperature of twelve degrees above normal. The first two weeks of November were warm and dry and helped the progress of harvest. The first significant snowstorm and blizzard of the 2016-17 winter was on November 18<sup>th</sup>, with 25 inches near the town of Leader in Cass County and strong winds across the state.

2016 had one more surprise up its sleeve near the end of the year, and that was a Christmas Day rain and thunderstorm event. The soil had little frost in it at the close of the year, and much of the state had a soil moisture surplus that will still be there for spring 2017.

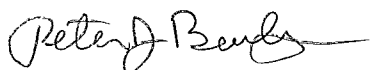
**Observation Tips:**

The 2016 listing of monthly precipitation totals for locations in your county should depict your measurements. If your data are missing, or if inaccurate values are shown for you, please let us know and we will correct the values in the data archive. Contact: [climate@umn.edu](mailto:climate@umn.edu) or 651-296-4214.

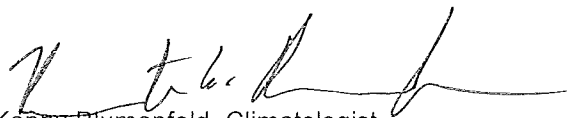
The enclosed **annual** observation form is for your personal records only. Please use the **monthly** forms to report data to the network administrator. You can also provide your data on-line. To learn how contact: [climate@umn.edu](mailto:climate@umn.edu). Your data, and data from all of our volunteers, can be viewed on the State Climatology Office Web site (<http://climate.umn.edu>).

***Thank you*** for contributing your data to the statewide precipitation archive. We appreciate your time and your hard work. The data you provide is critical to our understanding and appreciation of Minnesota's dynamic weather patterns.

Sincerely,

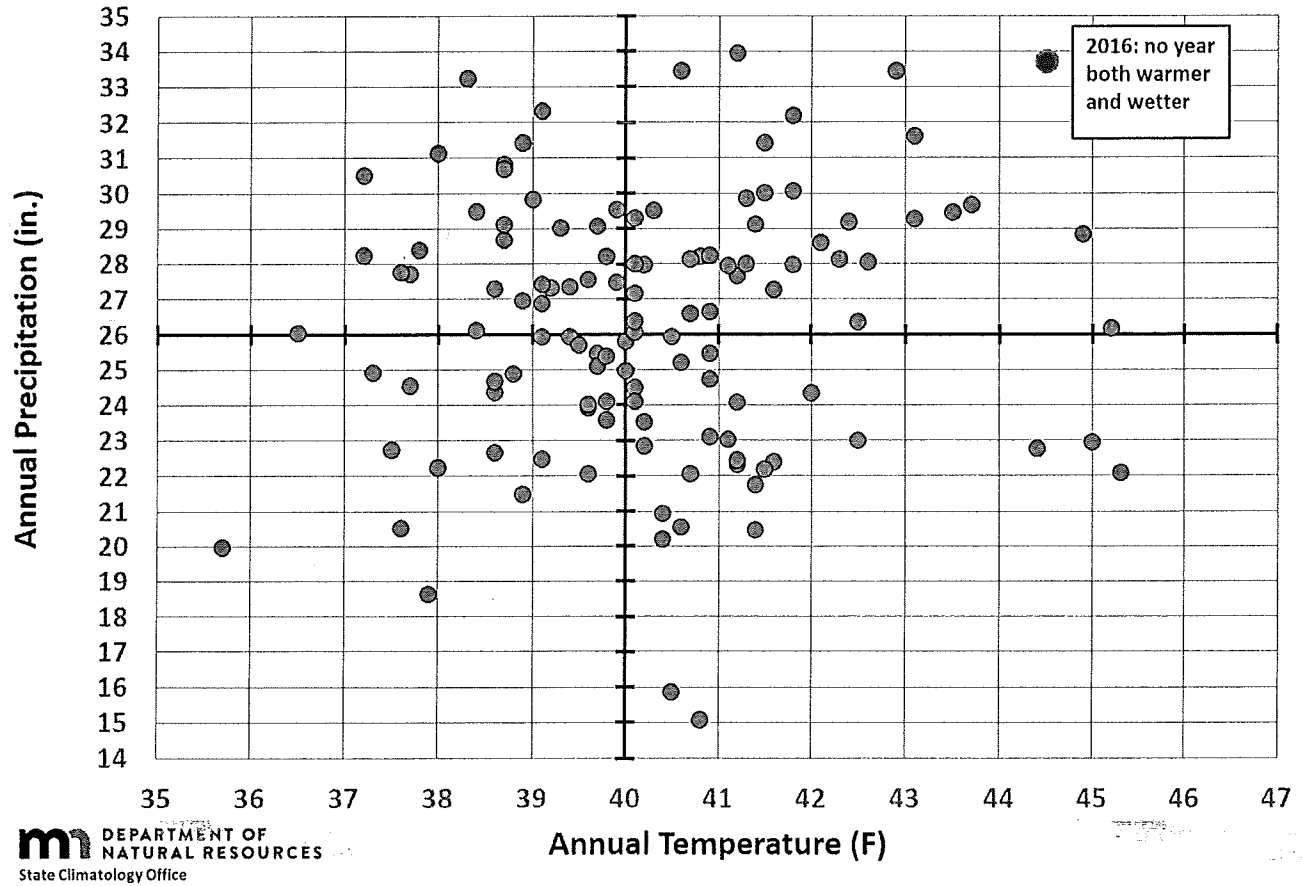


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## Minnesota Average Temperature and Precipitation



Above is a chart showing annual statewide combinations of average temperature and total precipitation. No year back to 1895 was both as warm and as wet as 2016.

## General Climate Summary

Highest Temp.	100 F, Madison, June 13
Lowest Temp.	-38 F, Embarrass, December 18
Most precip.	56.24 inches, Waseca
Most snow	121.6 inches, Isabella