

2014 Climate Stats through July 31

	Avg. Temp	Anomaly	Rank
DTW	45.2°	-3.7°	15 th coolest
FNT	43.4°	-3.3°	3 rd coolest
MBS	43.1°	-3.0°	14 th coolest

Climate normal period 1981–2010
DTW Climate record period 1874–2014

	Precip	Anomaly	Rank
DTW	21.10"	+1.67"	39 th wettest
FNT	23.17"	+5.79"	12 th wettest
MBS	17.42"	+0.21"	

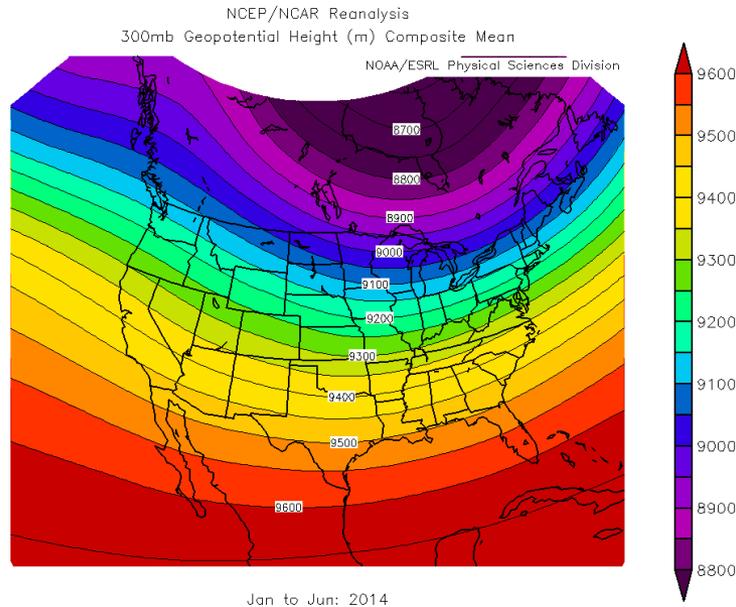
FNT Climate record period 1921–2014
MBS Climate record period 1898–2014

2014 has been in the top 20 coolest year-to-date through July across the southeastern Michigan climate sites. What's been behind this cool pattern, and where does it fit in a global sense? Read on for details.

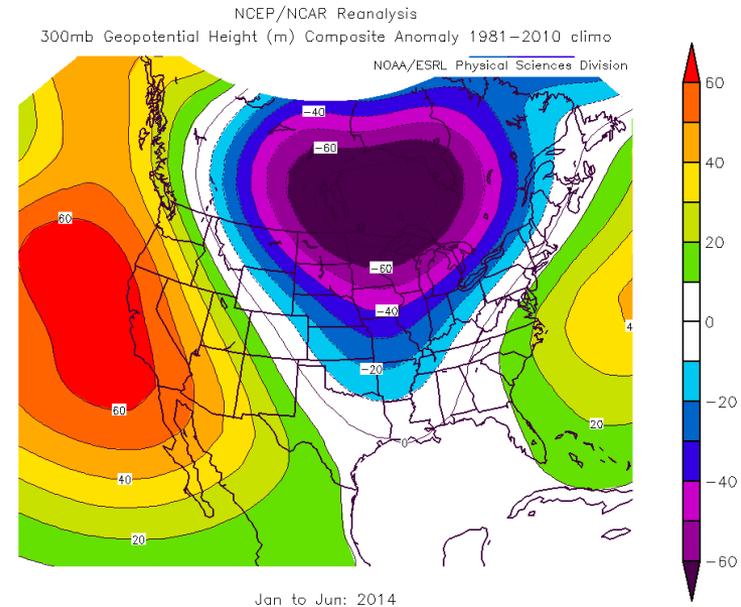


Upper Level Pattern Jan–Jun 2014

300 mb Heights—Mean



300 mb Heights—Anomaly

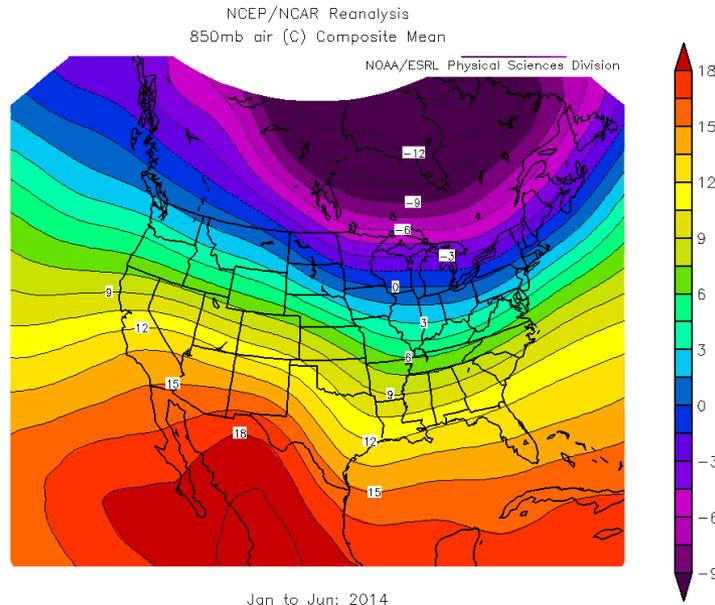


Our rather persistent cool pattern for the first half of 2014 can be attributed to an anomalously deep upper level trough affecting much of the north-central CONUS, flanked on each side by anomalously strong ridging.

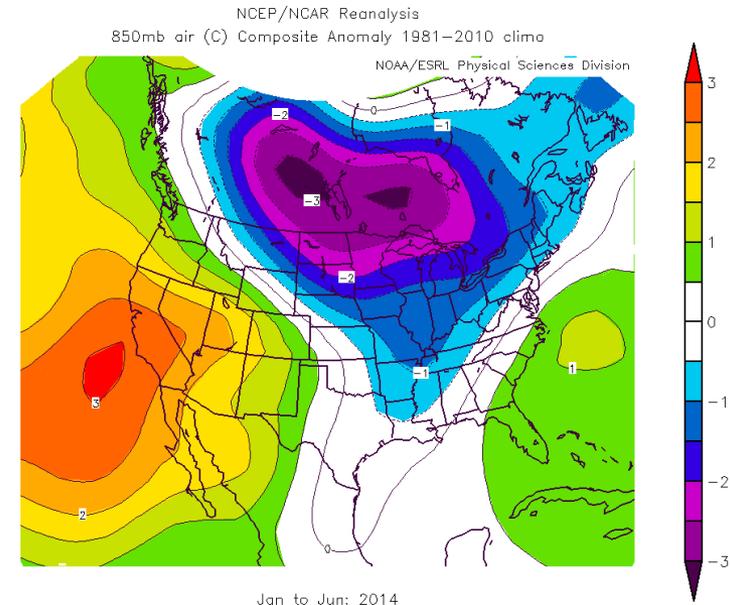


Low Level Temps Jan–Jun 2014

850 mb Temps–Mean



850 mb Temps–Anomaly



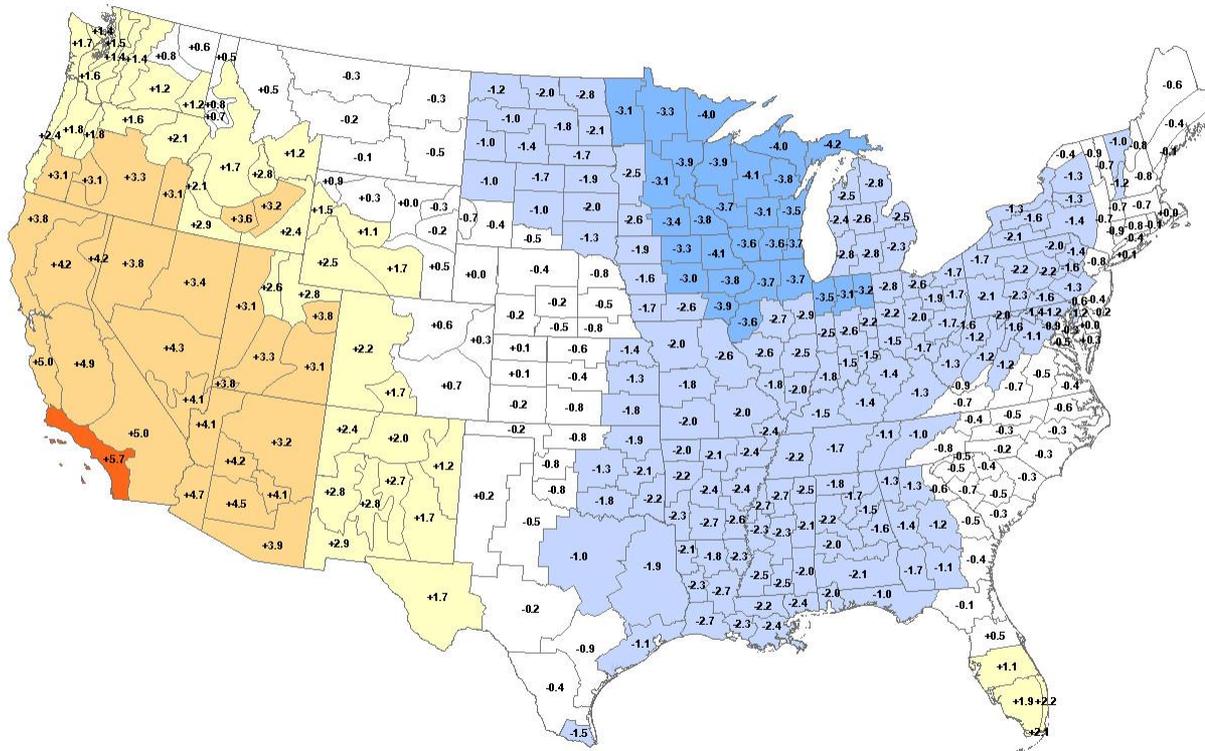
This upper air pattern has translated into anomalously cool air at lower levels of the atmosphere across much of the northern and central portions of the US, with anomalously warm air located over much of the western U.S.



Observed Temperature Anomalies Jan-Jun 2014

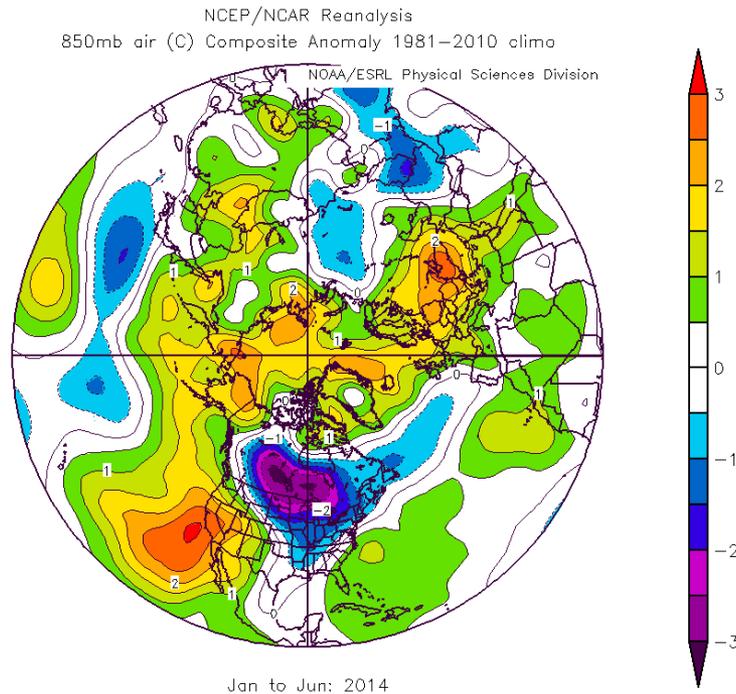
Here is a look at observed temperature anomalies broken down by climate division for the continental U.S. for the first half of 2014.

Divisional Average Temperature Anomalies
January 2014 - June 2014

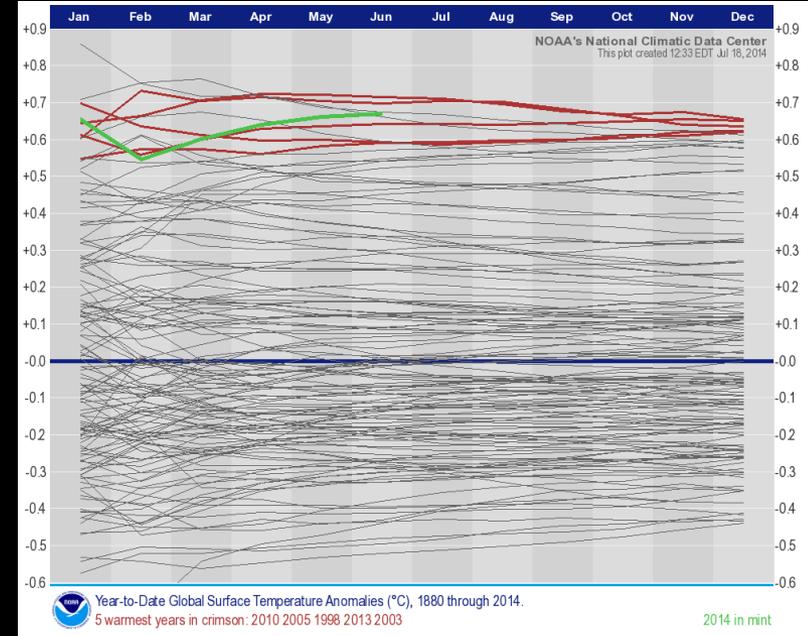


Global Low Level Temps Jan–Jun 2014

850 mb Temps–Anomaly



Global Temp Timeseries



In a hemispheric sense, the lower level temperature anomalies over southern Canada and the northern U.S. are the largest in the Northern Hemisphere. However, positive anomalies occupy a larger area of the Northern Hemisphere. In fact, despite our persistent cool pattern, 2014 is tied for the *3rd warmest* year to date globally since 1880.



Sources

NOAA ESRL PSD Map Room:

<http://www.esrl.noaa.gov/psd/cgi-bin/data/composites/printpage.pl>

NOAA NCDC Climate At A Glance:

<http://www.ncdc.noaa.gov/cag/time-series/global>



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