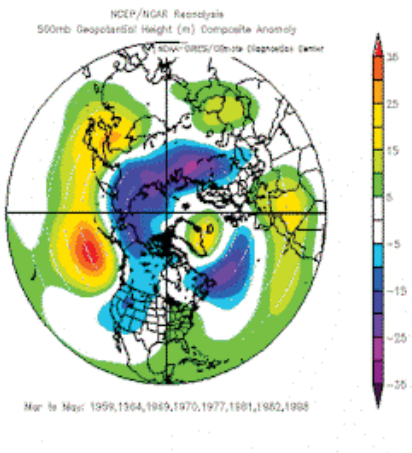
The Pennsylvania Observer

The Pennsylvania State Climatologist



September Climate Highlight:

By: Brad Stamm

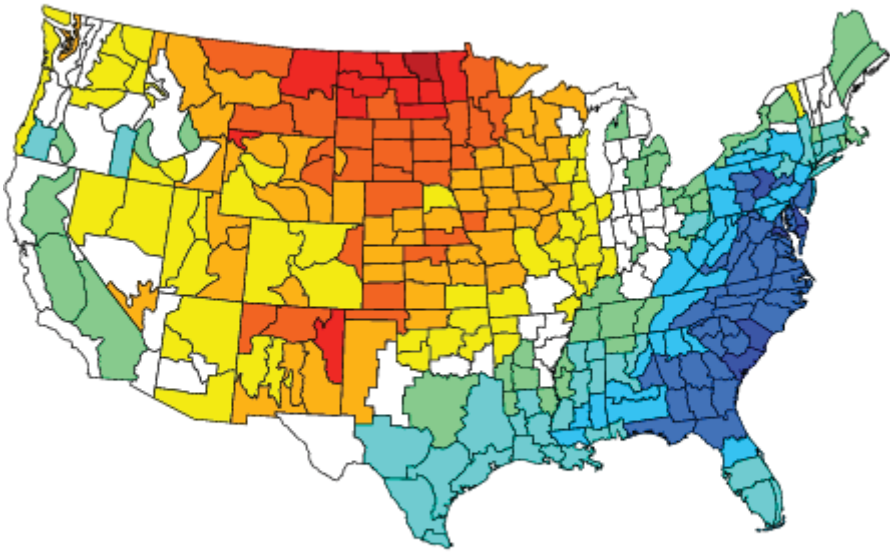
September, 2009 ranked as one of the warmest Septembers in Montana, coolest Septembers in North Carolina, and one of the driest Septembers in Wisconsin. These anomalies were used to find past years in which the same anomalies were present. By comparing the temperature and precipitation trends for October and November of these past years, we can estimate what we should expect for the October and November 2009 precipitation and temperature anomalies.

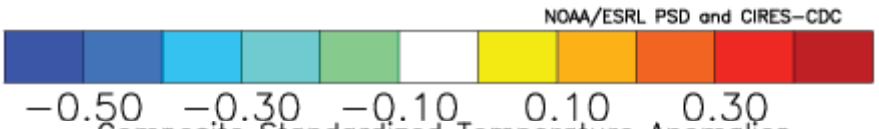
25 Warmest Septembers in Montana			25 Coolest Septembers in North Carolina			25 Driest Septembers in Wisconsin	
Year	Temp. (F)		Year	Temp. (F)		Year	Precip. (in.)
1998	62.3		1967	65.2		1952	0.78
1938	61.7		1918	66.1		1976	0.91
1990	60.9		1924	66.8		1979	1.08
1963	60.8		1917	67.3		1940	1.32
1940	60.6		1963	67.3		1953	1.38
1967	60.3		1984	67.4		1932	1.46
1922	60.2		1943	67.9		1956	1.55
1966	59.7		1976	67.9		1955	1.69
1979	59.5		1994	67.9		1918	1.7
2001	59.5		2001	67.9		1966	1.79
1994	59.2		1928	68		1948	1.8
1997	58.9		1981	68		1989	1.82
1952	58.3		2006	68.2		1974	1.85
1905	58.1		1914	68.3		1920	1.89
1948	57.9		1940	68.3		1943	1.97
1969	57.9		1982	68.3		1898	2.01
1897	57.8		1913	68.4		1950	2.01
1976	57.8		1937	68.4		1967	2.03
1906	57.7		1962	68.4		1995	2.09
1937	57.6		1916	68.5		1949	2.11
1981	57.5		1949	68.5		2004	2.16
1987	57.5		1956	68.5		1999	2.17
1899	57.3		1969	68.6		1908	2.25
1953	57.3		1974	68.8		1998	2.28
1935	57		1909	68.9		1897	2.29

Table 1: List of the 25 warmest Septembers in Montana, 25 coolest Septembers in North Carolina, and the 25 driest Septembers in Wisconsin. Years in which at least two of these anomalies have occurred are highlighted.

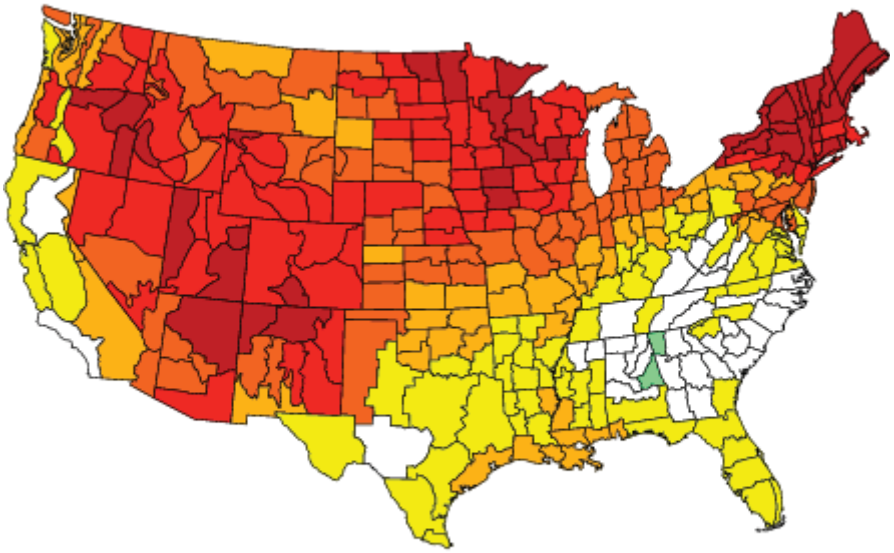
These years were then used to create images of the expected anomalies during the months of October and November.

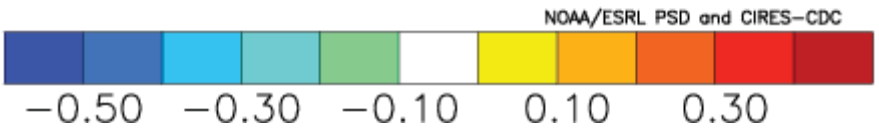
Composite Standardized Temperature Anomalies
Versus 1895–2000 Longterm Average
Oct 1998,1963,1940,1967,1966,2001,1994,1948,1969,1897
1976,1937,1981,1953



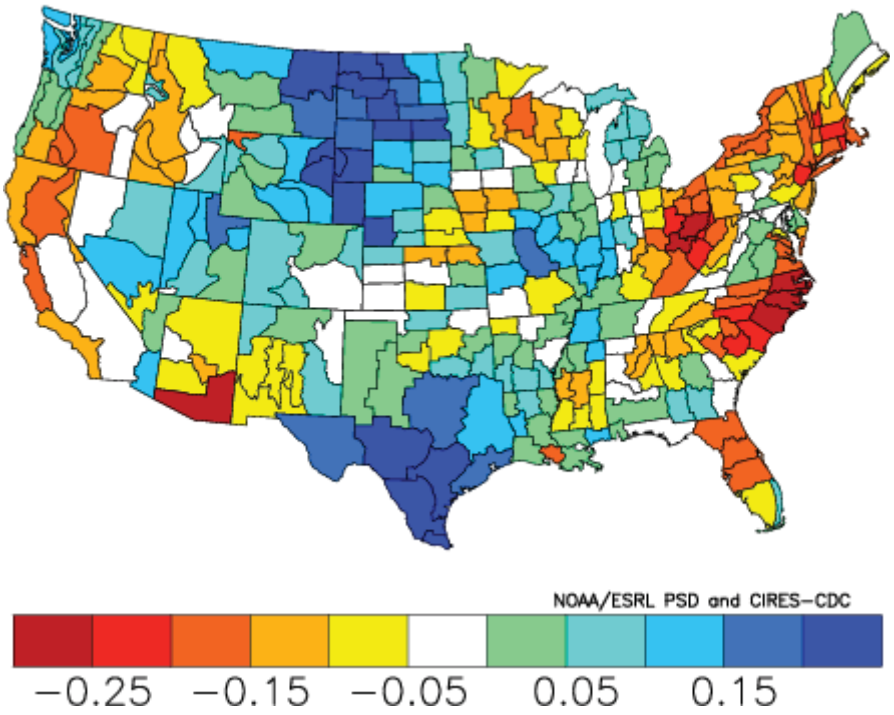


Composite Standardized Temperature Anomalies
Versus 1895–2000 Longterm Average
Nov 1998,1963,1940,1967,1966,2001,1994,1948,1969,1897
1976,1937,1981,1953





Composite Standardized Precipitation Anomalies
Versus 1895–2000 Longterm Average
Oct 1998,1963,1940,1967,1966,2001,1994,1948,1969,1897
1976,1937,1981,1953



Composite Standardized Precipitation Anomalies
Versus 1895–2000 Longterm Average
Nov 1998,1963,1940,1967,1966,2001,1994,1948,1969,1897
1976,1937,1981,1953