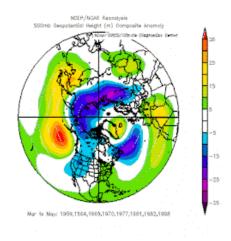
The Pennsylvania Observer

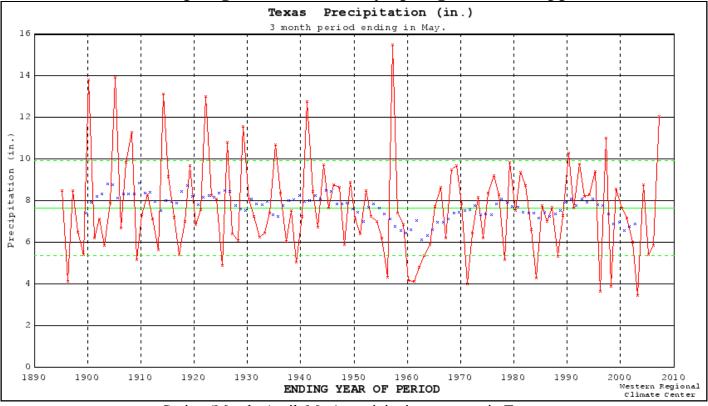
The Pennsylvania State Climatologist



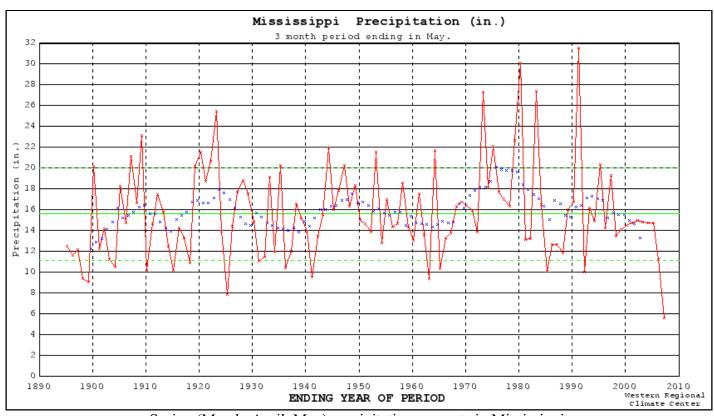


July Climate Highlight: This month we have put together two climate highlights for you. The first one will feature wet springs in Texas vs. dry springs in Mississippi while the second one will discuss this year's cool trend in Texas along with the warm trend in Montana.

Wet Springs in Texas VS Dry Springs in Mississippi



Spring (March, April, May) precipitation amounts in Texas.



Spring (March, April, May) precipitation amounts in Mississippi.

Analog years: 1914, 1915, 1926, 1941, 1981, 1982, 1992

JULY & AUGUST

Composite Standardized Precipitation Anomalies
Jul to Aug 1914,1915,1926,1941,1981,1982,1992
Versus 1895—2000 Longterm Average

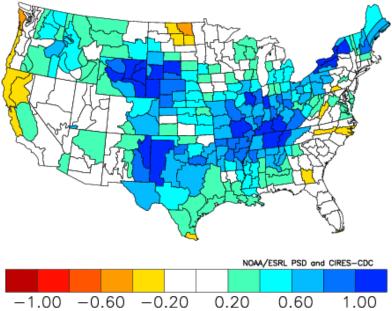


Figure 5 – Composite standardized precipitation anomalies for the continental U.S. for July & August using the seven analog years.

Composite Standardized Temperature Anomalies Jul to Aug 1914,1915,1926,1941,1981,1982,1992 Versus 1895—2000 Longterm Average

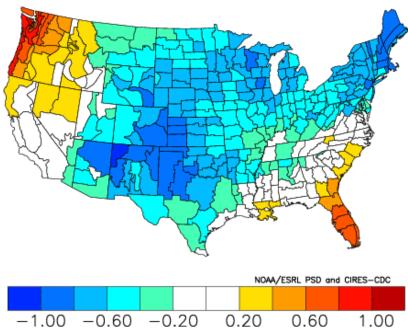
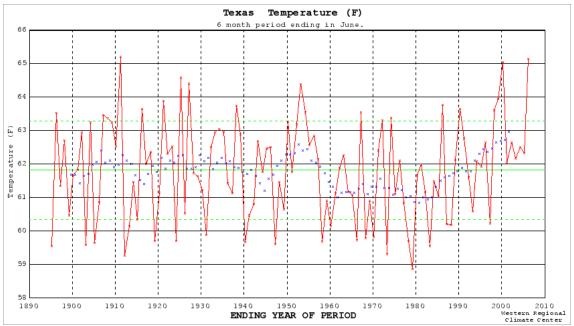


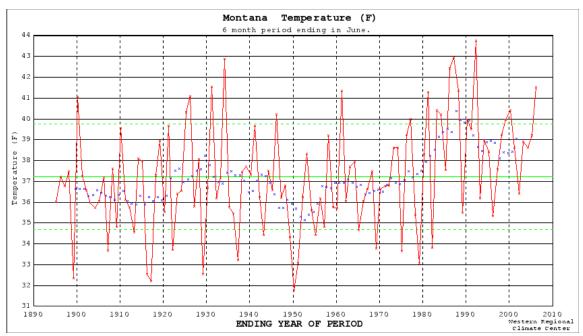
Figure 1 – Composite standardized temperature anomalies for the continental U.S. for July & August using the seven analog years.

As shown by the composite anomalies above, years that Texas has a wet spring and Mississippi has dry spring the U.S. sees a predominant cool, moist pattern in July. This is quite evident in the Great Plains and Mid-West. In contrast, the Gulf Coast and Southeast tend to see an average amount of precipitation but warmer than average temperatures. During August the cool, moist pattern weakens in the West but strengthens throughout the remaining continental U.S., excluding Florida which usually sees below average precipitation. This strengthening is best seen in the Tennessee and Mississippi Valleys where July was dry and warm but August is cool and moist. In Pennsylvania expect cooler and moister than average conditions throughout the state for July and August.

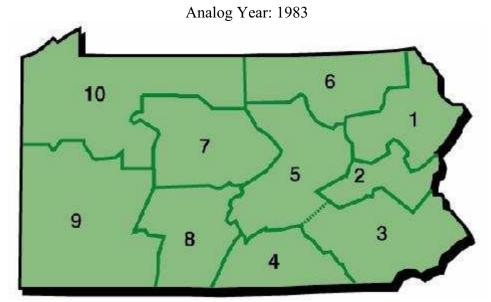
Coolest January through June in Texas VS Warmest January through June in Montana



Six month (January through June) average temperature in Texas.



Six month (January through June) average temperature in Montana.



Pennsylvania Climate Divisions

When comparing the 15 coolest six month period from January through June in Texas with the warmest in Montana, only one year is present in each data set: 1983. Taking this year and looking at precipitation and temperature departures for July and August we can conclude that divisions 5, 7, and 9 all reacted similarly. Division 3 was a little different. It is evident that temperature 5, 7, and 9 was warmer than average for January, February, and March. It became cooler than average for the next three months, April, May, and June. In Division 3 this pattern was true except for June which was slightly warmer than usual. With respect to precipitation the 4 divisions all were below average for January and above for April and May. February, March, and June varied in the divisions. Divisions 5, 7, and 9 all saw below average amounts of precipitation for February but 3 saw slightly more than average.

Using 1983's climate pattern of a 6-month cool period in Texas and warm period in Montana, Climate Divisions 3, 5, 7, and 9 should expect to experience dry and warm conditions in both July and August. According to patterns, July may be very dry and slightly warmer and August may be slightly dry but very warm.

1983 Division 3 Departures

	Precipitation (in.)	Temperature (°F)
Jan	-0.72	1.97
Feb	0.48	0.04
Mar	2.02	1.11
Apr	4.89	-1.96
May	0.97	-2.11
Jun	-0.66	0.13
Jul	-3.45	0.96
Aug	-1.33	2.27

1983 Division 5 Departures

	Precipitation (in.)	Temperature (°F)
Jan	-1.24	2.24
Feb	-0.69	1.79
Mar	0.15	2.22
Apr	3.41	-2.33
May	1.04	-3.53
Jun	2.10	-0.68
Jul	-1.82	0.28
Aug	-0.15	1.21

1983 Division 7 Departures

	Precipitation (in.)	Temperature (°F)
Jan	-1.35	2.54
Feb	-1.01	3.40
Mar	0.11	2.83
Apr	1.81	-2.05
May	1.25	-2.87
Jun	0.65	-0.25
Jul	-1.68	0.63
Aug	-0.57	2.37

1983 Division 9 Departures

	Precipitation (in.)	Temperature (°F)
Jan	-1.52	2.05
Feb	-1.13	1.81
Mar	-0.10	1.12
Apr	1.63	-2.74
May	1.72	-3.56
Jun	-0.09	-0.31
Jul	-0.81	-0.01
Aug	-1.03	1.90