

6-Month Climate Model Forecast Summary for Pennsylvania

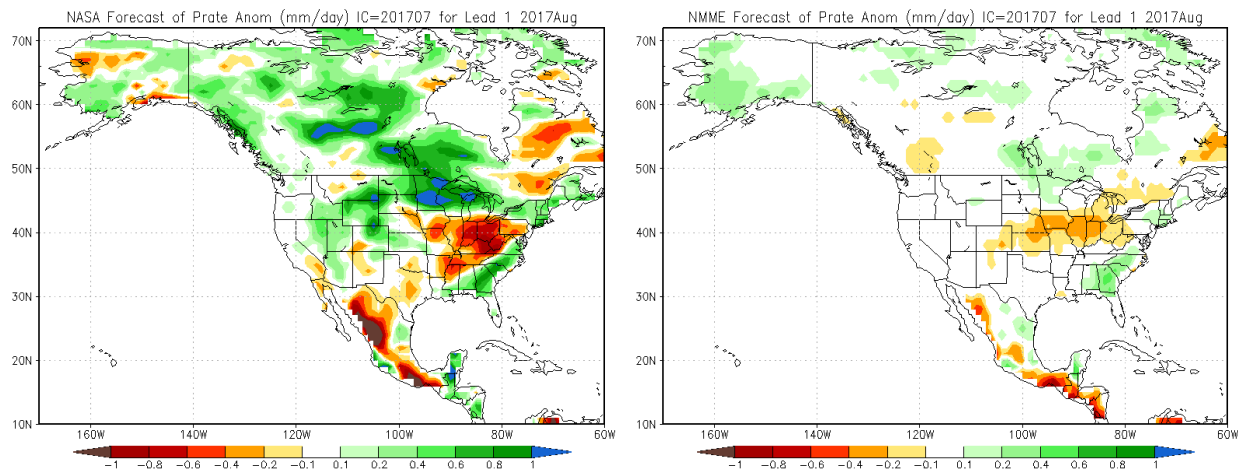
July 15, 2017

Climate models continue to improve and may have some skill in forecasting patterns of temperature and precipitation anomalies several months in advance. However, climate modeling is still a very inexact science. Lacking highly precise observations from the earth's environment (air, land and sea) and a full understanding of the scientific processes that affect the motions in the atmosphere, it is impossible to make precise seasonal-scale weather predictions with any accuracy. Please keep this in mind as you review this forecast.

The following forecast is produced based on analysis of monthly forecast products from the Climate Forecast System Version 2 (CFS) and the North American Multi-Model Ensemble (NMME). Links to forecasts are provided at the end of this document.

Discussion:

August continues to look like a near-normal month in both temperature and precipitation. However, the NASA GEOS5 has persistently forecast dryness in the Ohio River valley and westward, and the latest NMME also shows this trend which could mean western counties may be much drier compared to recent months as we head into



August. September looks a bit warmer and wetter than normal, but within a normal range. October temperatures are still forecast to be above normal, though not as strongly as before, and precipitation is still uncertain. November is trending warmer with precipitation trending drier in some models... so the precipitation forecast is now

uncertain. December temperatures still appear mild while December and January precipitation is forecast above normal. Here's the forecast summary:

Forecast:
Changes highlighted in yellow
Previous forecast in parentheses

<u>Month</u>	<u>Temperature</u>	<u>Precipitation</u>
August	N (N)	N (N)
September	N (N)	N (N)
October	A (A)	U (U)
November	N (N)	U (A)
December	A (A)	A (U)
January	U	A

BB = Much Below Normal
B = Below Normal
N = Near Normal
A = Above Normal
AA = Much Above Normal
U = Uncertain

The next forecast will be issued on August 1, 2017.

References:

CFS forecasts:

<http://www.cpc.ncep.noaa.gov/products/CFSv2/CFSv2seasonal.shtml>

CFS forecasts:

<http://www.cpc.ncep.noaa.gov/products/people/mchen/CFSv2FCST/monthly/>

NMME forecasts: <http://www.cpc.ncep.noaa.gov/products/NMME/monanom.shtml>

NMME forecasts:

<http://www.cpc.ncep.noaa.gov/products/NMME/verif/monindex.html>