



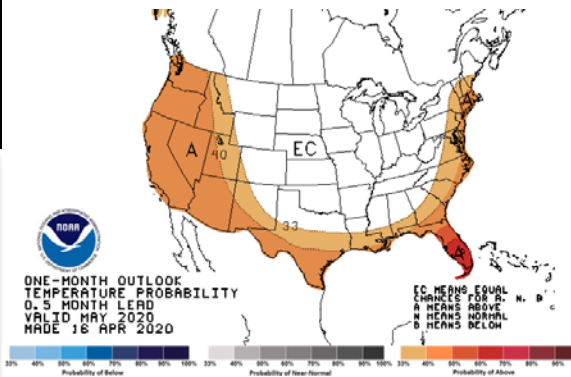
Important Messages: The Spring Barrier

In spring, computer forecast models have a more difficult time making accurate forecasts. One possibility for the existence of this “barrier,” or lull in forecast accuracy, may be because spring is a time of climatological transition when the winter ENSO signal begins to weaken or shift. The slowly changing temperatures in the tropical Pacific then have to be considered alongside rapidly changing patterns in the atmosphere, complicating the picture.

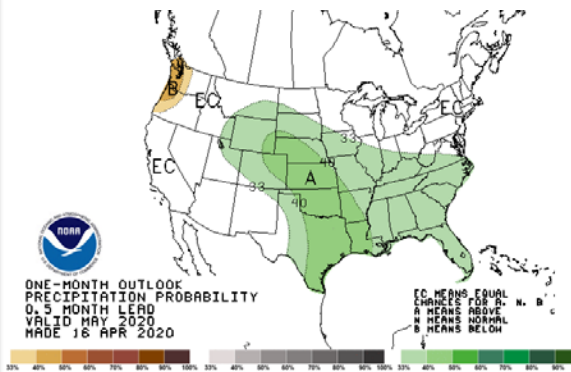
May 2020 Temperature & Precipitation Outlooks

- Central Region has equal chances of above normal, normal, or below normal temperatures in May. ENSO is not expected to play a role. A less amplified upper air pattern and disagreement among models, as well as increased soil moisture over the Plains and Midwest, contributed to the forecast.
- Chances lean toward wetter than normal conditions across much of Central Region with the exception of the Upper Mississippi Valley and the Great Lakes Region. The forecast models are in good agreement, but are tempered due to the convective nature of spring rains.

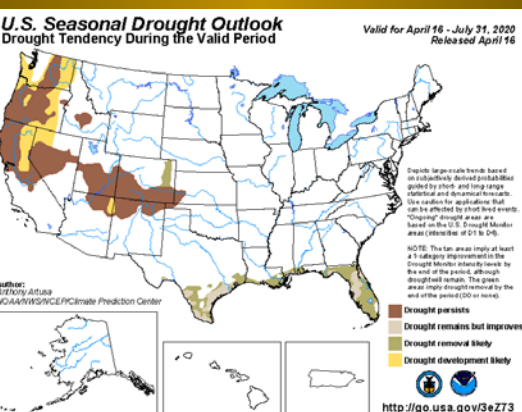
One Month Temperature Outlook



One Month Precipitation Outlook



Seasonal Drought Outlook

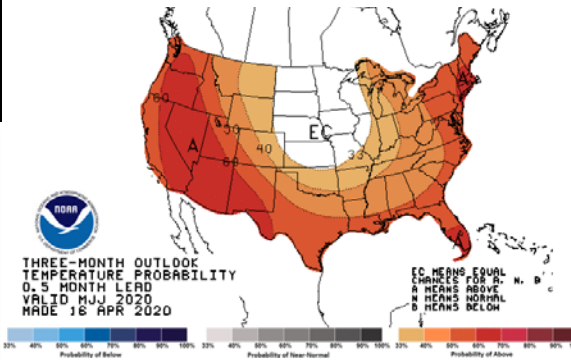


Development of drought across Central Region is unlikely. Severe drought is already in place across southern Colorado. Droughts tend to be tenacious features and there currently is not a strong signal in the forecast data to support removal of the drought over the next few months.

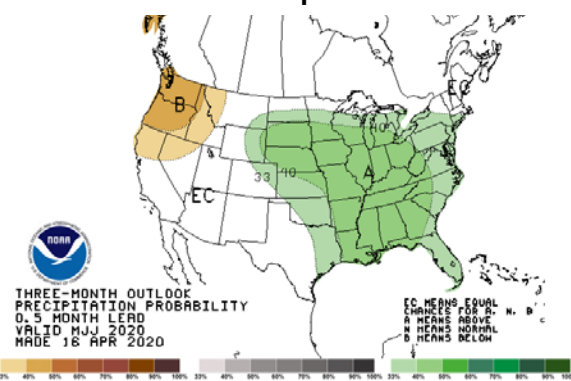
May through July Temperature & Precipitation Outlooks

- Chances lean toward warmer conditions in Wyoming and Colorado as well as from the Great Lakes southward through the Ohio Valley. Equal chances are depicted in the Plains and Midwest due in part to high soil moisture and also in line with a pattern resulting from colder sea surface temperatures in the central and eastern tropical Pacific.
- Most of Central Region will lean toward greater chances of wetter than normal conditions. Soil moisture, model diagnostics, the expectation of ENSO-neutral conditions through the summer, and recent climate trends all had an influence on this forecast.

Three Month Temperature Outlook



Three Month Precipitation Outlook

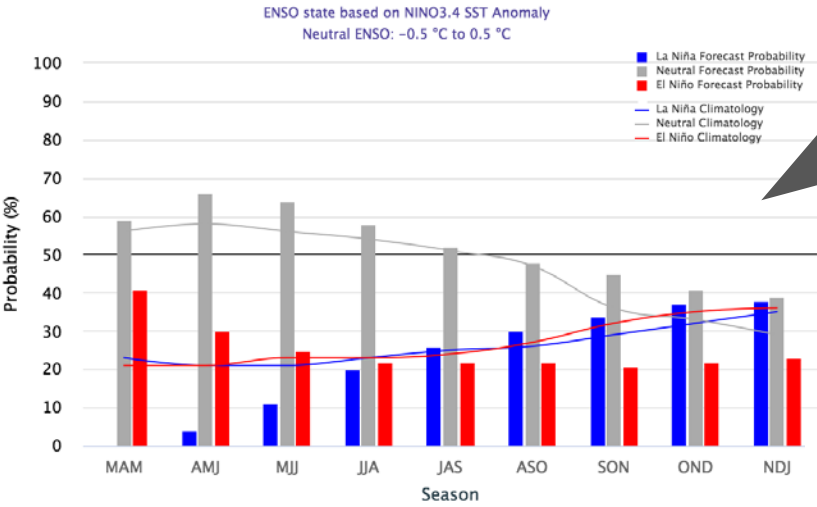




ENSO Status: *ENSO NEUTRAL*

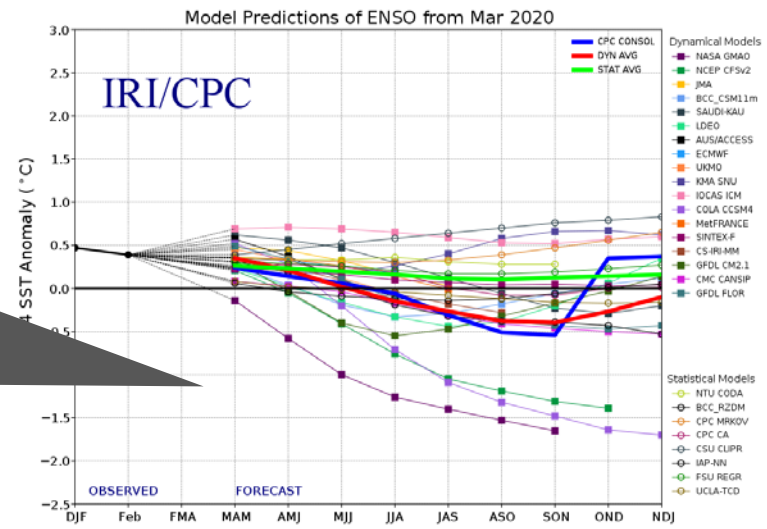
IRI/CPC Probabilistic ENSO Forecast/Plumes

Early-April 2020 CPC/IRI Official Probabilistic ENSO Forecasts



There is a large spread among forecast data regarding the ENSO forecast, but in general the probabilities appear to be leaning away from El Niño as we approach fall and winter, and more toward cold neutral or a weak La Niña. This month's forecast is very consistent with the forecast from March.

One reason for the large spread among the forecast models, as can easily be seen here, is that we are starting from a low amplitude ENSO-neutral state. Also, this is the time of year that the "spring barrier" makes forecasting especially challenging.



Useful Links/Info:

- News from [Climate.gov](https://www.climate.gov)
- [Latest ENSO Blog](#) from Climate.gov
- [Sea Surface Temperatures](#) from the Climate Prediction Center
- [Latest ENSO Discussion](#) from the Climate Prediction Center
- [Drought Information](#) from the US Drought Monitor
- [Interactive GIS Mapping](#) from NCEI (Anomalies/Rankings)
- [Local Climate Analysis Tool \(LCAT\)](#) – Account registration required
- [NWS Forecast Maps](#) from Western Region

Other Teleconnection Effects

- The Madden-Julian Oscillation is not expected to have a significant teleconnection effect on Northern Hemisphere weather patterns in the near future. This in addition to a weak ENSO signal will result in weak teleconnections from the tropical Pacific.

