



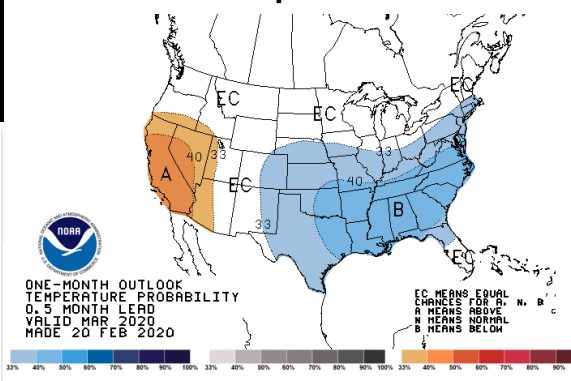
Important Messages:

- ✓ In late February, a pattern shift is expected. Ridging will develop over Alaska and western North America which will result in troughing across the eastern United States. This is partially due to the robust Madden Julian Oscillation in mid-February. This pattern is expected to linger into March which will result in enhanced chances of below-normal temperatures across much of Central Region.
- ✓ This trough will also cause drier-than-normal conditions from Missouri into the Great Lakes

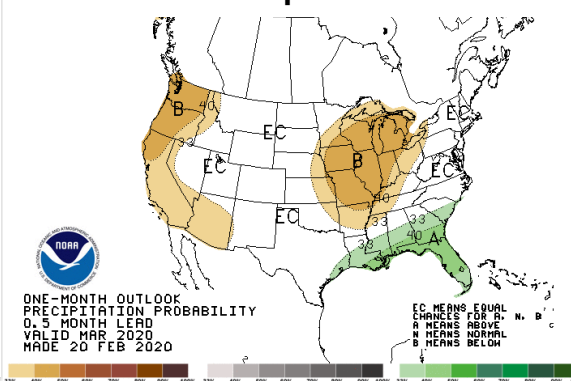
March 2020 Temperature & Precipitation Outlooks

- There are enhanced chances for colder-than-normal temperatures from eastern Colorado east into southern Indiana and Kentucky. Elsewhere in Central Region, there are equal chances of warmer-, near-, and colder-than-normal.
- For those in the Mid and Upper Mississippi & Ohio River valleys, there is some good news, because the forecast is for enhanced chances of drier-than-normal conditions from eastern Kansas and eastern Nebraska northeast into the Great Lakes. Elsewhere in Central Region, there are equal chances of drier-, near-normal precipitation.

One Month Temperature Outlook

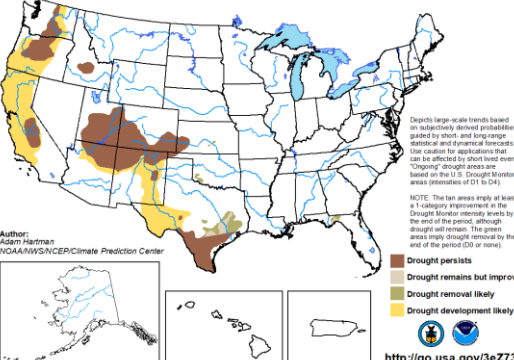


One Month Precipitation Outlook



Seasonal Drought Outlook

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for February 20 - May 31, 2020
Released February 20

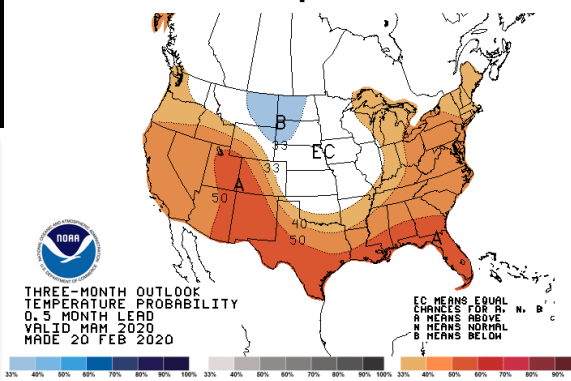


Drought is expected to persist across southern Colorado and southwest Kansas and not be a concern across the remainder of Central Region.

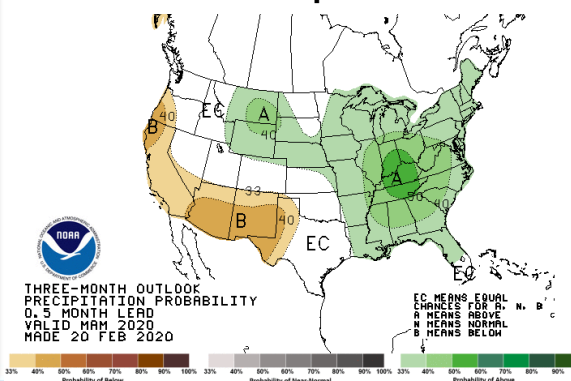
March through May 2020 Temperature & Precipitation Outlooks

- Odds have shifted to favor colder-than-normal conditions in the western Dakotas and northeast Wyoming.
- Meanwhile, the odds have shifted from equal chances to warmer-than-normal in the Great Lakes Region.
- Elsewhere in Central Region, there are equal chances of warmer-, near-, and colder-than-normal temperatures.
- The odds are tilted toward a wetter-than-normal meteorological spring across most of Central Region. The exceptions to this include: Colorado, central and western Kansas, eastern Dakotas and northwest Minnesota which have equal chances of drier-, near-, and wetter-than-normal conditions.

Three Month Temperature Outlook



Three Month Precipitation Outlook

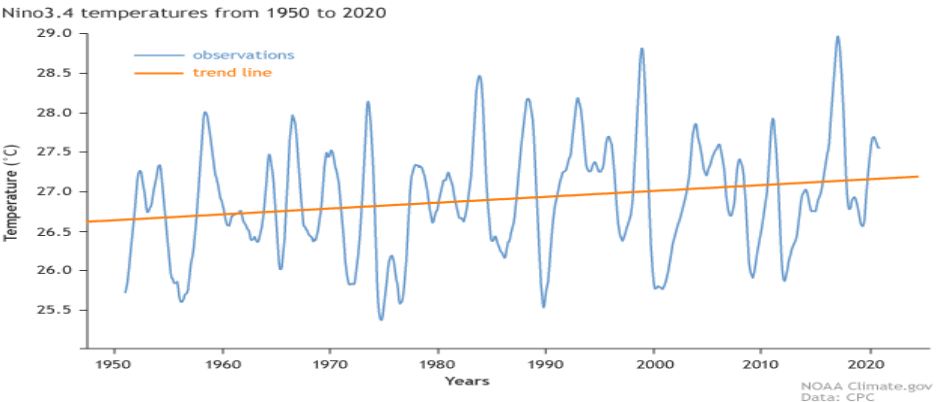




Inputs into the Outlooks

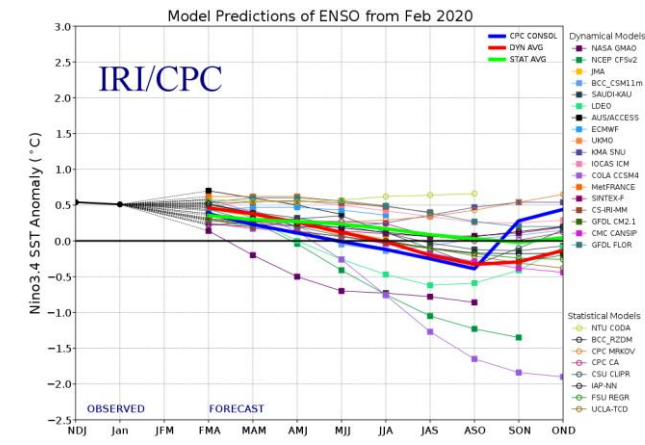
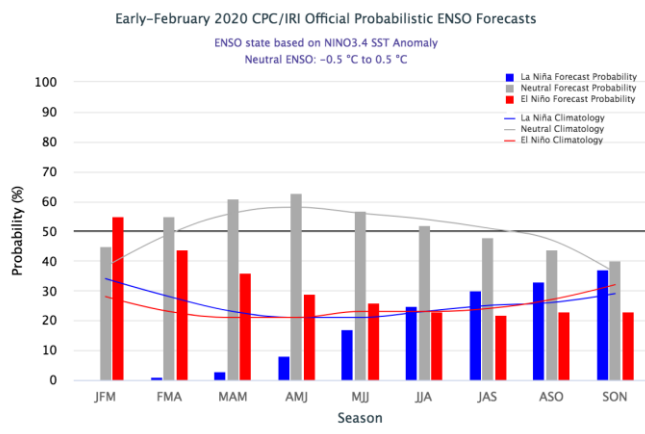
ENSO Status: March-May - Neutral

ENSO Science: How to deal with a warming ocean?



- The average temperature of the Niño 3.4 region has increased by more than 0.5°C since 1950.
- Due to this, the base period for the CPC Niño indices and ONI are updated every 5 years. This helps remove the trend in real-time and reduces larger “jumps” that are evident when the 30-year base period is upgraded every 10-years.
- Instead of calculating a base period on the most recent 30-year period for the entire historical record, CPC calculates a 30-base period that is centered and fixed in the historical record.
- Fixing the base period means that the historical ENSO episodes will not change every time the recent base period is updated. Data is currently fixed from 1950-2005.
- Centering the base period means that the departures are reflecting the climatology at that time and minimizes trend-induced biases.
- Every 5 years, the un-centered base period periods (right now, for anomalies after 2006 will lose 5 years from the beginning of the record and gain 5 years at the end.
- **Next update will occur in early 2021** (1950-2010 data will become fixed).
- For more information: <https://tinyurl.com/y7u2cdhe>

IRI/CPC Probabilistic ENSO Forecast/Plumes



- ENSO-neutral conditions are favored during the Northern Hemisphere spring 2020 (~60% chance) continuing through summer 2020 (~50% chance).

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 (MJO) emerged in early February over the Maritime Continent, and propagated toward the western Pacific, where it stalled due to interactions with an equatorial Rossby wave.
- This MJO signal is expected to continue to weaken during the remainder of February

