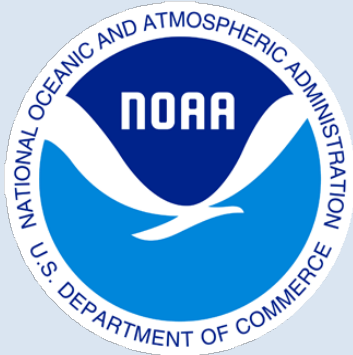


NOAA Climate Science & Services

Monthly Climate Update



Deke Arndt

Chief, Monitoring Section, NOAA National Centers for
Environmental Information

Steve Baxter

Meteorologist, NOAA Climate Prediction Center

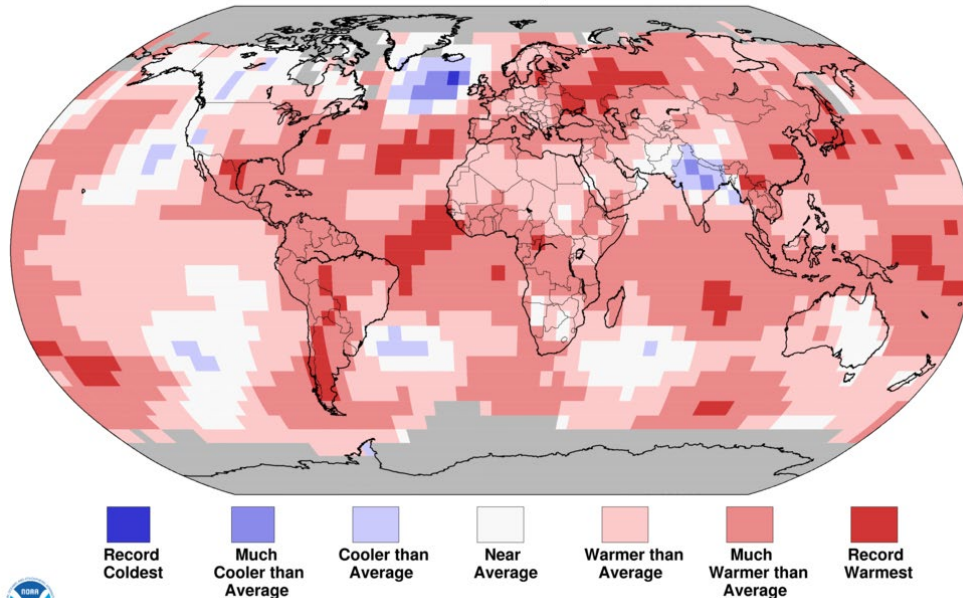
Global Temperature

The global temperature record dates back to 1880 (141 years)

Land & Ocean Temperature Percentiles Mar 2020

NOAA's National Centers for Environmental Information

Data Source: NOAAGlobalTemp v5.0.0-20200408



GHCNM v4.0.1.20200407.qfe

March 2020

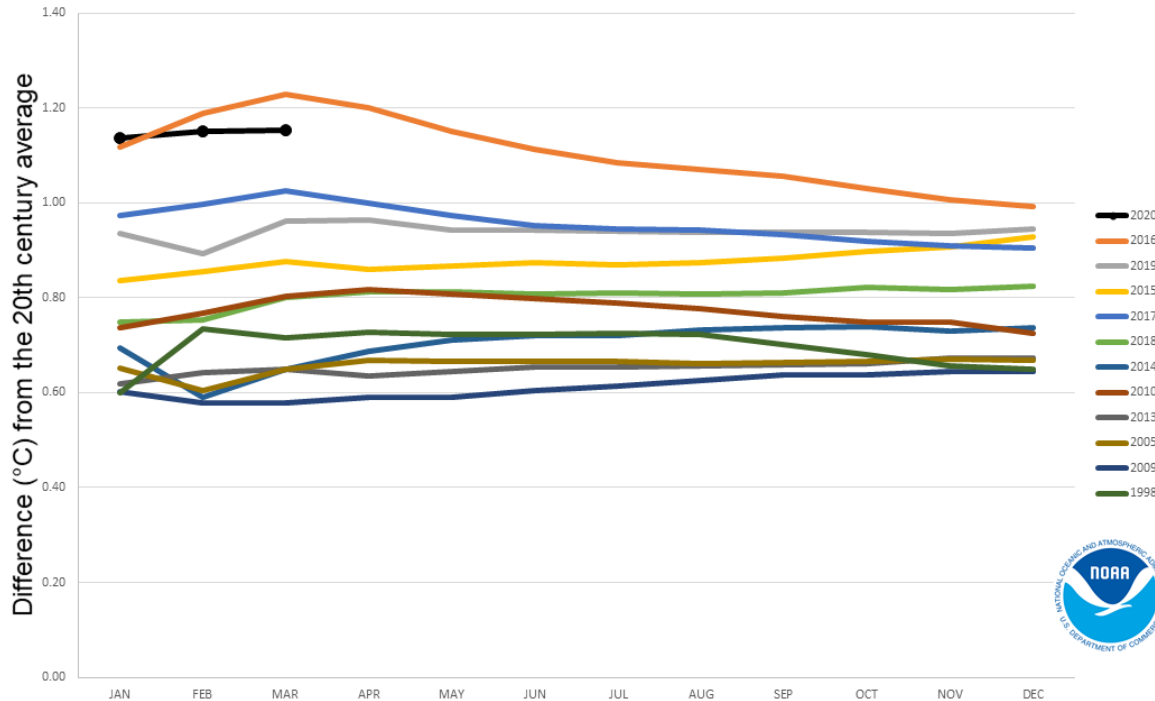
- **Global Land & Ocean:** +1.16°C / +2.09°F
- **Global Land:** +2.05°C / +3.69°F
- **Global Ocean:** +0.83°C / +1.49°F
- All of the above: 2nd warmest March on record, behind 2016.

January - March 2020

- **Global Land & Ocean:** +1.15°C / +2.07°F
- **Global Land:** +2.13°C / +3.83°F
- **Global Ocean:** +0.79°C / +1.42°F
- All of the above: 2nd warmest Jan-Mar on record, behind 2016.

Global Temperature Jan-March 2020

Year-to-Date Global Temperatures
for 2020 and the ten warmest years on record



- Virtually certain (>99.9%) 2020 will end among the 10 warmest years on record.
- Almost certain (99.9%) 2020 will end among the 5 warmest years on record
- 74.7% chance of warmest year on record



Contiguous U.S. March 2020

Temperature: 46.1°F, +4.6°F, 10th warmest Mar on record

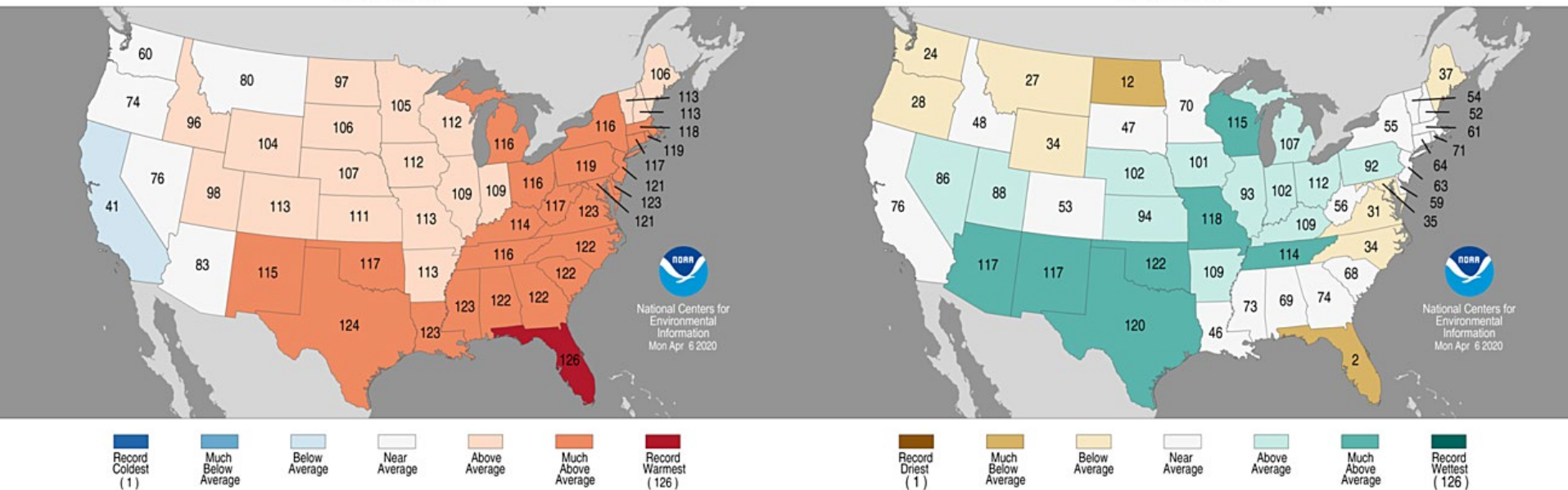
Precipitation: 2.83", +0.32", above average

Temperature Percentiles March 2020

Period: 1895-2020 (126 years)

Precipitation Percentiles March 2020

Period: 1895-2020 (126 years)



- Above-average temperatures (top third of record) roughly along Rockies and eastward.
- Much-above-average (top 10%) across the East and South
- FL had its warmest March on record
- CA cooler than average (bottom one-third)

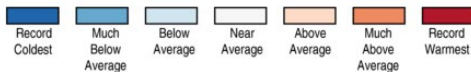
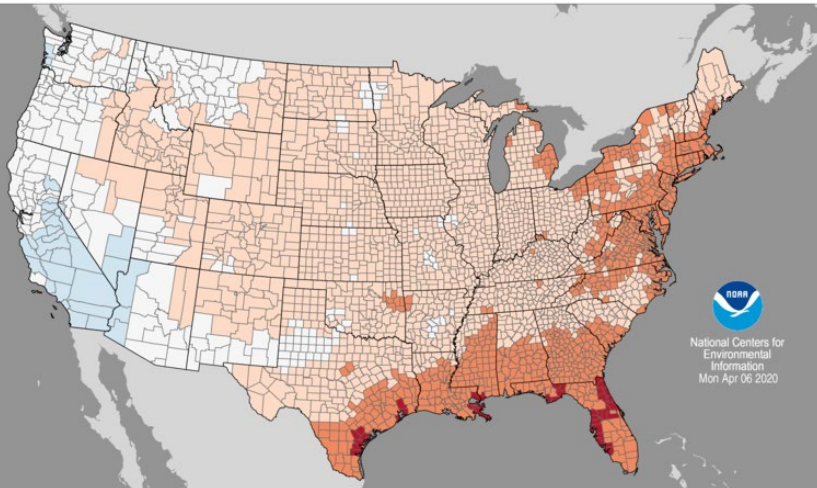
- Relatively wet from Four Corners to southern Plains into Midwest and Great Lakes regions.
- OK had its 5th wettest March; TX had its 7th wettest
- Dry in Northern Plains, Northwest, parts of the mid-Atlantic, and particularly dry for the FL peninsula.
- FL had its 2nd driest March

Contiguous U.S. March 2020

Maximum Temperature (T_{\max}): 56.8°F, +3.7°F, 18th warmest Mar on record
Minimum Temperature (T_{\min}): 35.4°F, +5.4°F, 5th warmest Mar on record

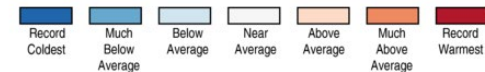
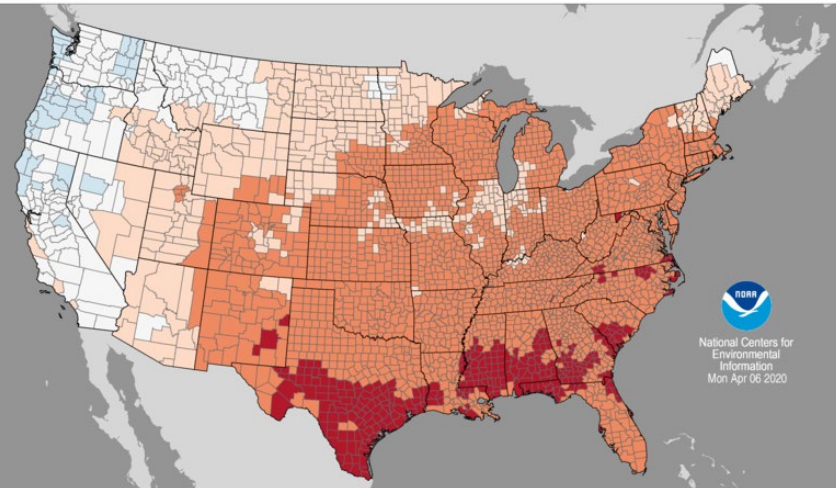
T_{\max} Percentiles March 2020
Period: 1895-2020 (126 years)

Period: 1895-2020



T_{\min} Percentiles March 2020
Period: 1895-2020 (126 years)

Period: 1895-2020



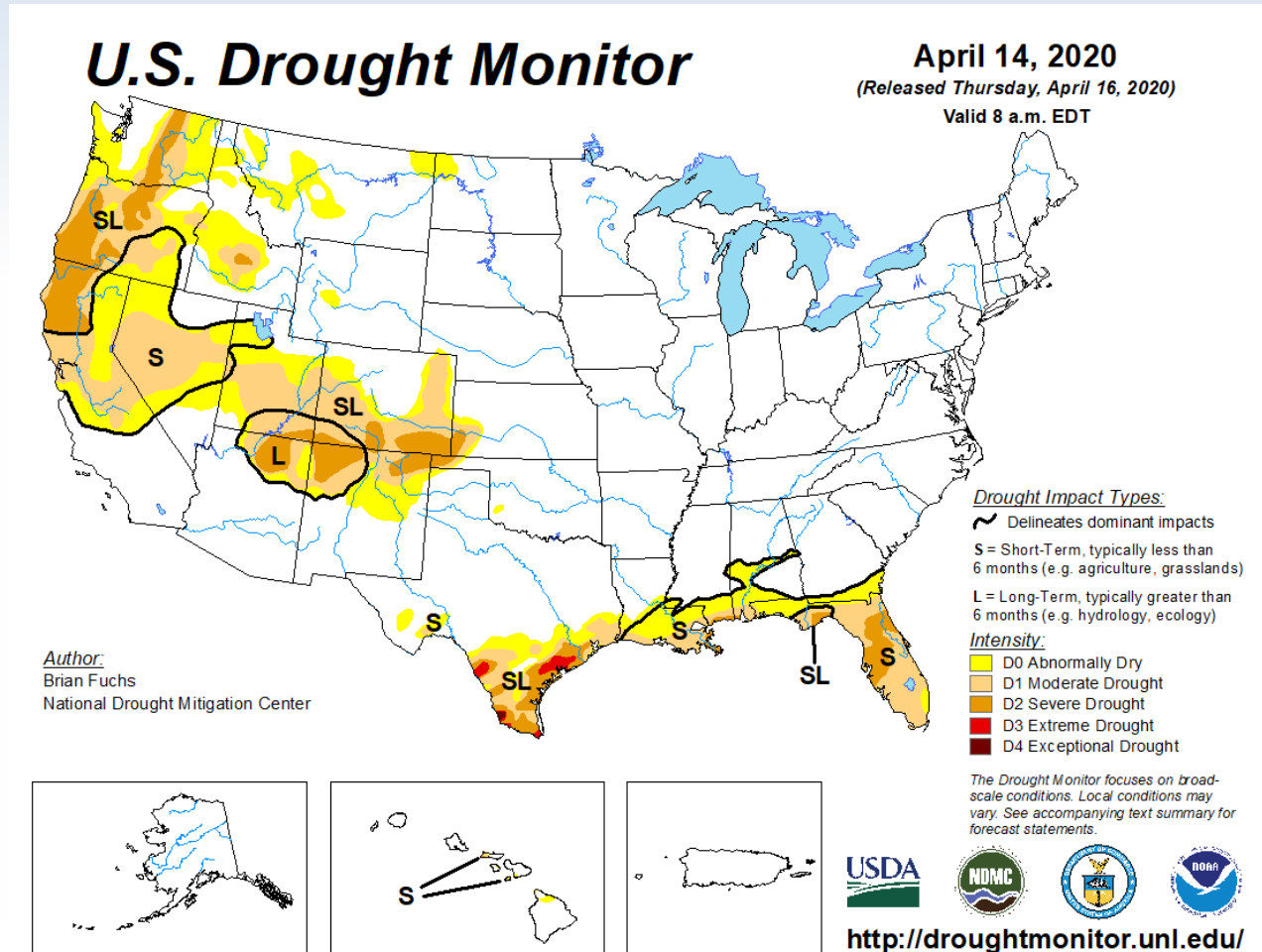
Current U.S. Drought

14.5% of Contiguous U.S. in Drought

(↑3 percentage points since early March)

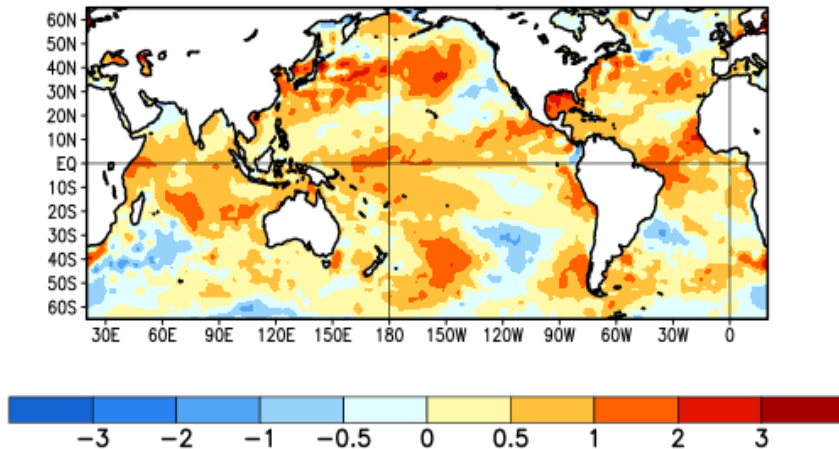
Since early March:

- Improvement:
South Texas, Southern California
- Intensification / Expansion:
Pacific Northwest, Gulf of Mexico coastal regions. Flash Drought in Florida
- Outside CONUS:
USAPI seeing dry down, Wotje (Marshall Islands) at D3



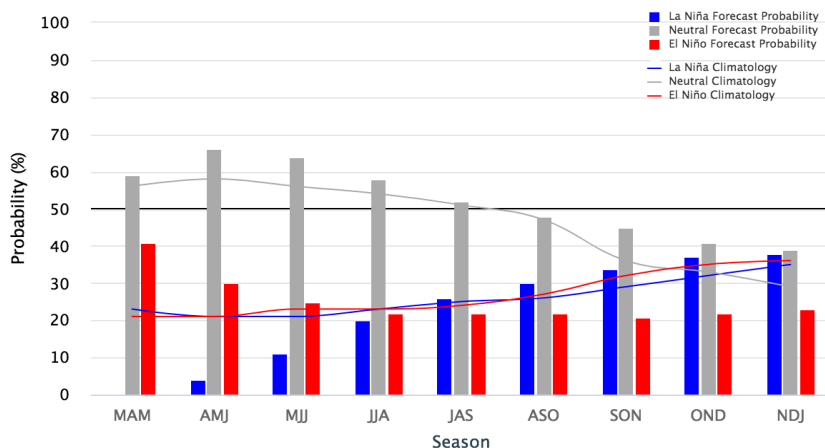
Sea Surface Temperatures & ENSO

Average SST Anomalies
15 MAR 2020 – 11 APR 2020



Early-April 2020 CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5 °C to 0.5 °C



Sea surface temperatures

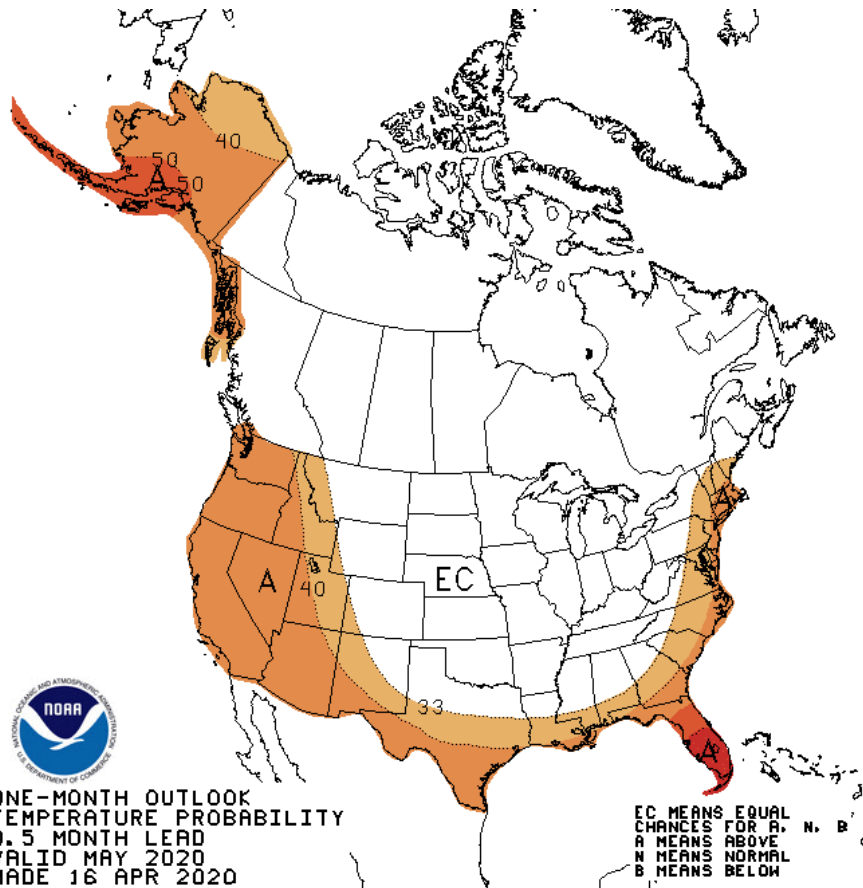
- Above normal SSTs in the eastern equatorial Pacific.
- Large area of positive SST anomalies extending across the North Pacific.
- SSTs in the Gulf of Mexico and along the Eastern Seaboard are above normal; along the West Coast SSTs are near normal.
- Below-normal SSTs persist in the North Atlantic, possibly related to decadal variability.

ENSO forecast

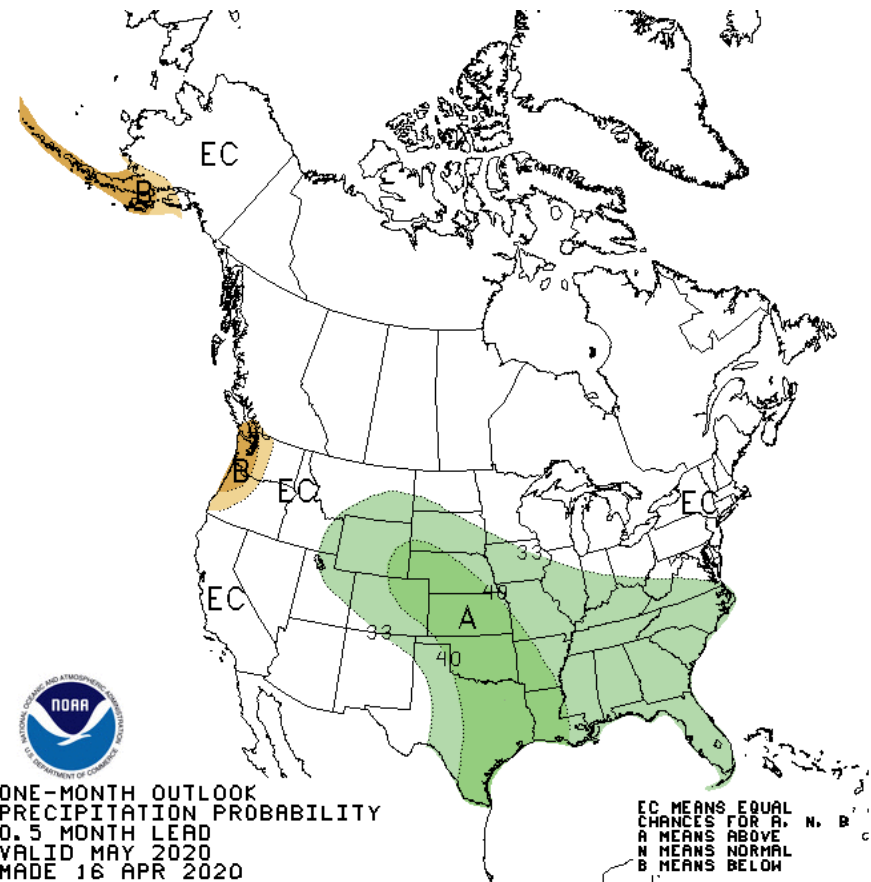
- ENSO neutral is likely to persist through summer 2020.
- The chances of La Niña increase to ~35-40% by late fall and early winter.
- El Niño is unlikely in 2020, but not impossible.

Monthly Forecast (May)

May Average Temperature Probability

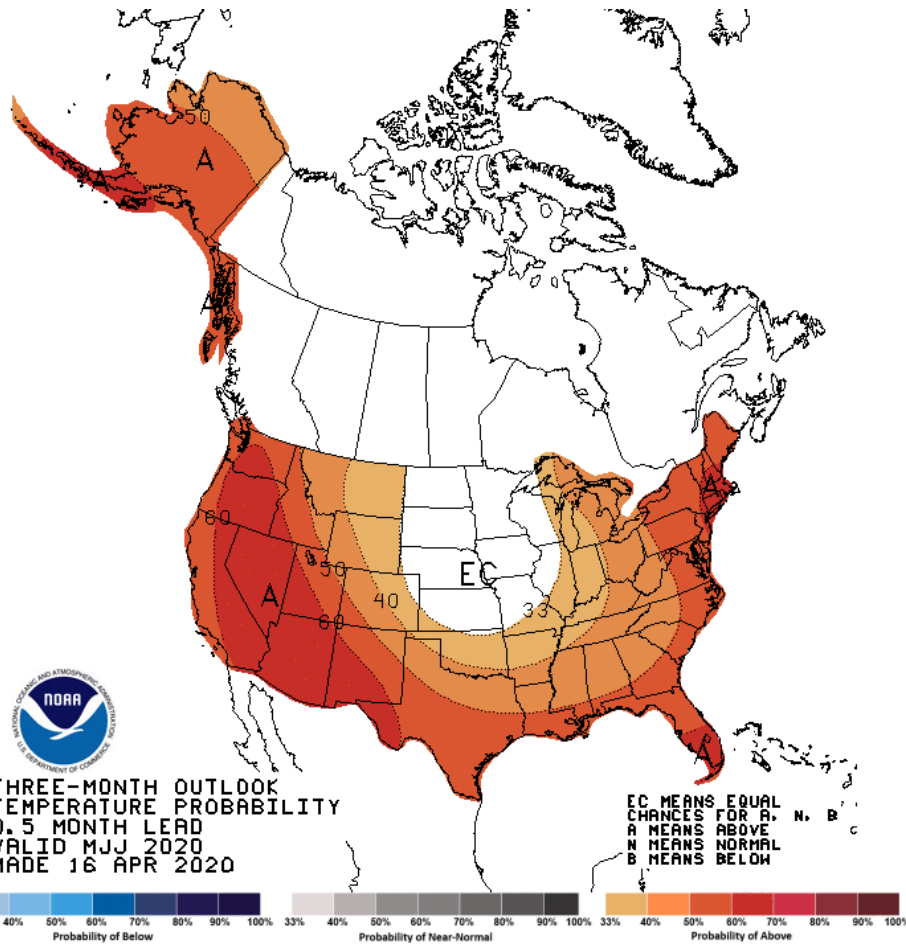


May Total Precipitation Probability

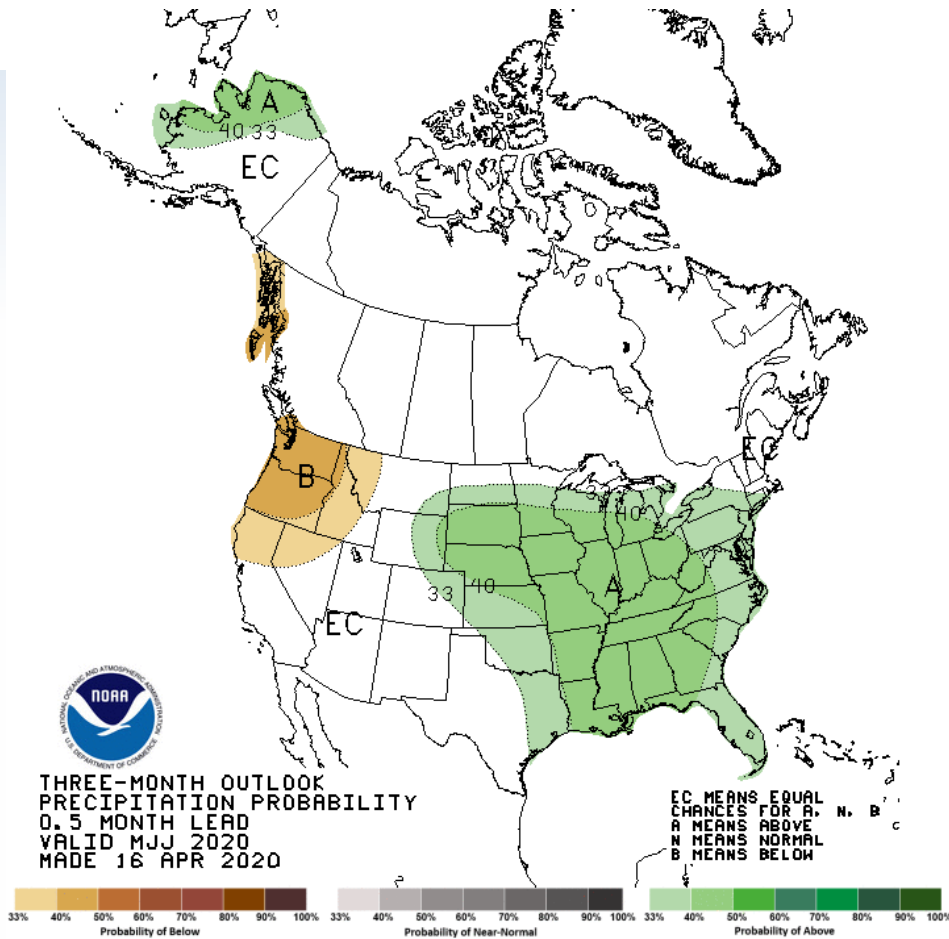


Seasonal Forecast (May-Jun.-Jul.)

May-Jun-Jul Average Temperature Probability



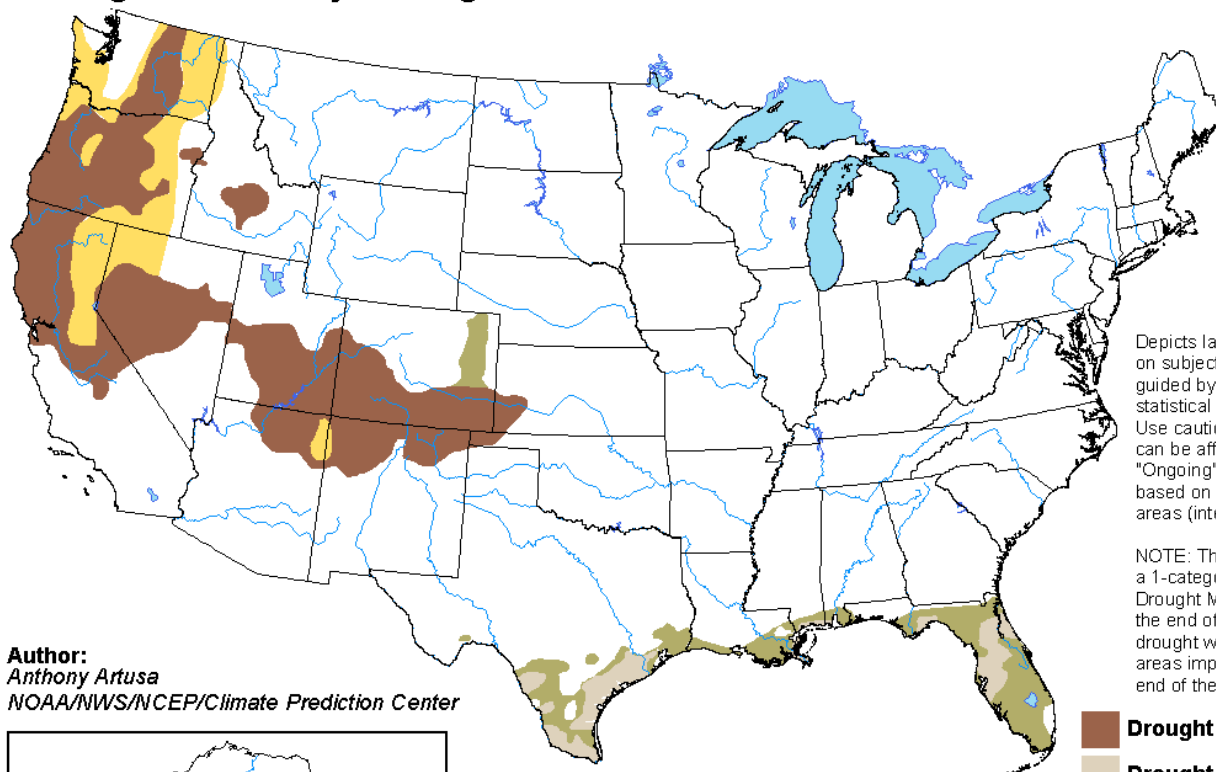
May-Jun-Jul Total Precipitation Probability



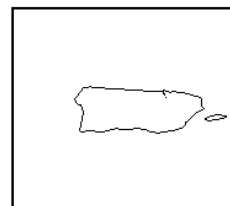
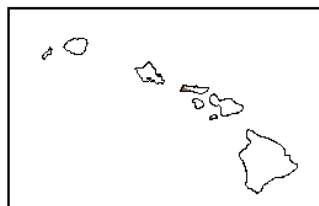
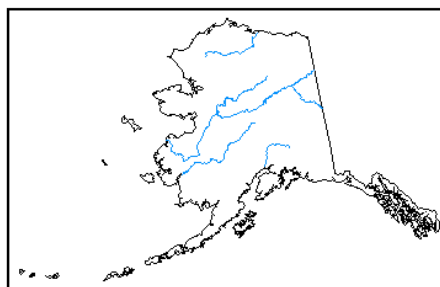
U.S. Drought Outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for April 16 - July 31, 2020
Released April 16



Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center



- Drought persists**
- Drought remains but improves**
- Drought removal likely**
- Drought development likely**



<http://go.usa.gov/3eZ73>

For More Information



TODAY'S PRESENTATION:

- <http://www.ncdc.noaa.gov/sotc/briefings>

NOAA's National Centers for Environmental Information:

www.ncdc.noaa.gov

- Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- Dates for upcoming reports: <http://www.ncdc.noaa.gov/monitoring-references/dyk/monthly-releases>

NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov

U.S. Drought Monitor: <http://drought.gov>

Climate Portal: www.climate.gov

NOAA Media Contacts: john.jones-bateman@noaa.gov, 301-713-9604 (NOAA/NESDIS PAO)