Massachusetts Drought Management Task Force Meeting NWS Update

National Weather Service

Thursday November 14th

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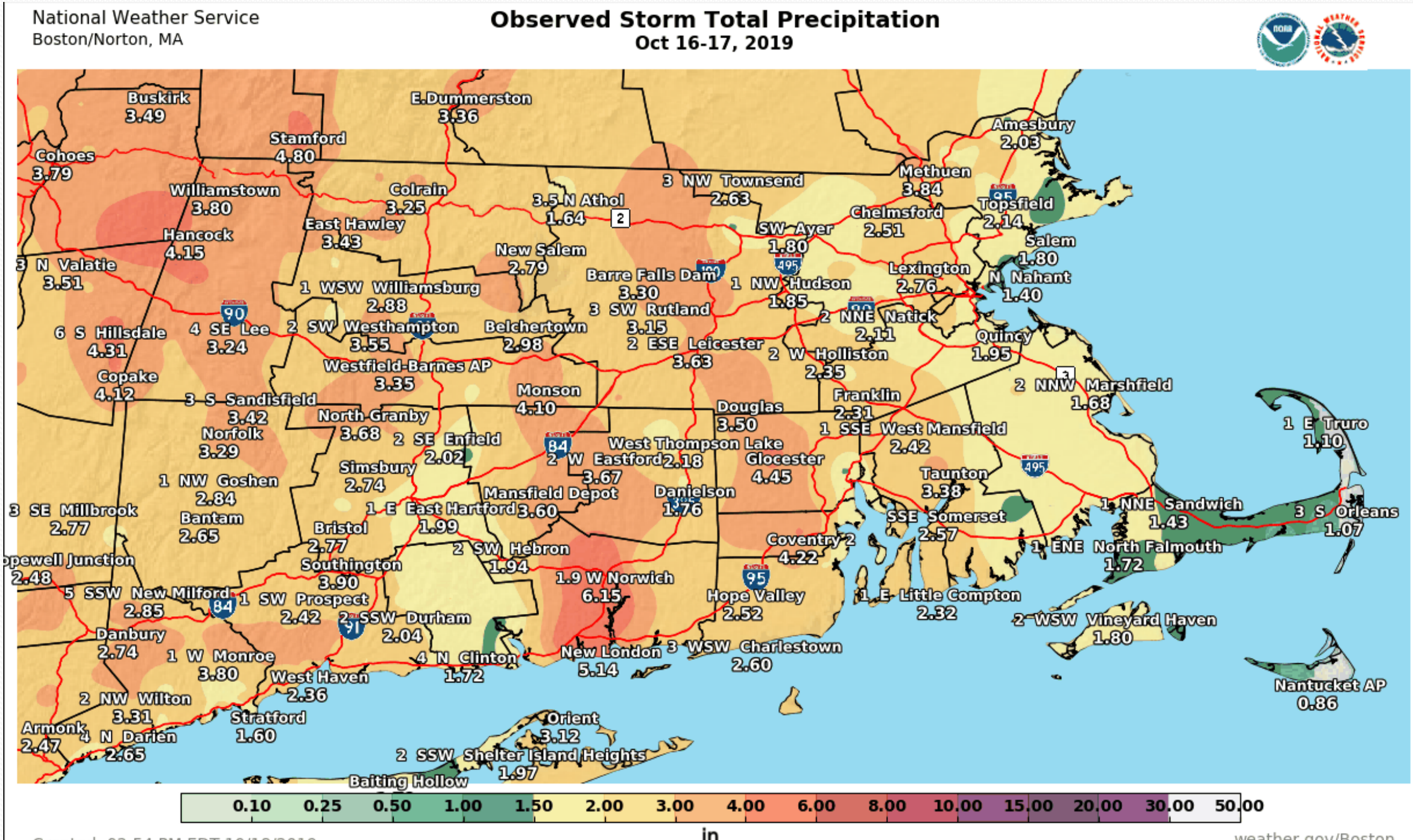
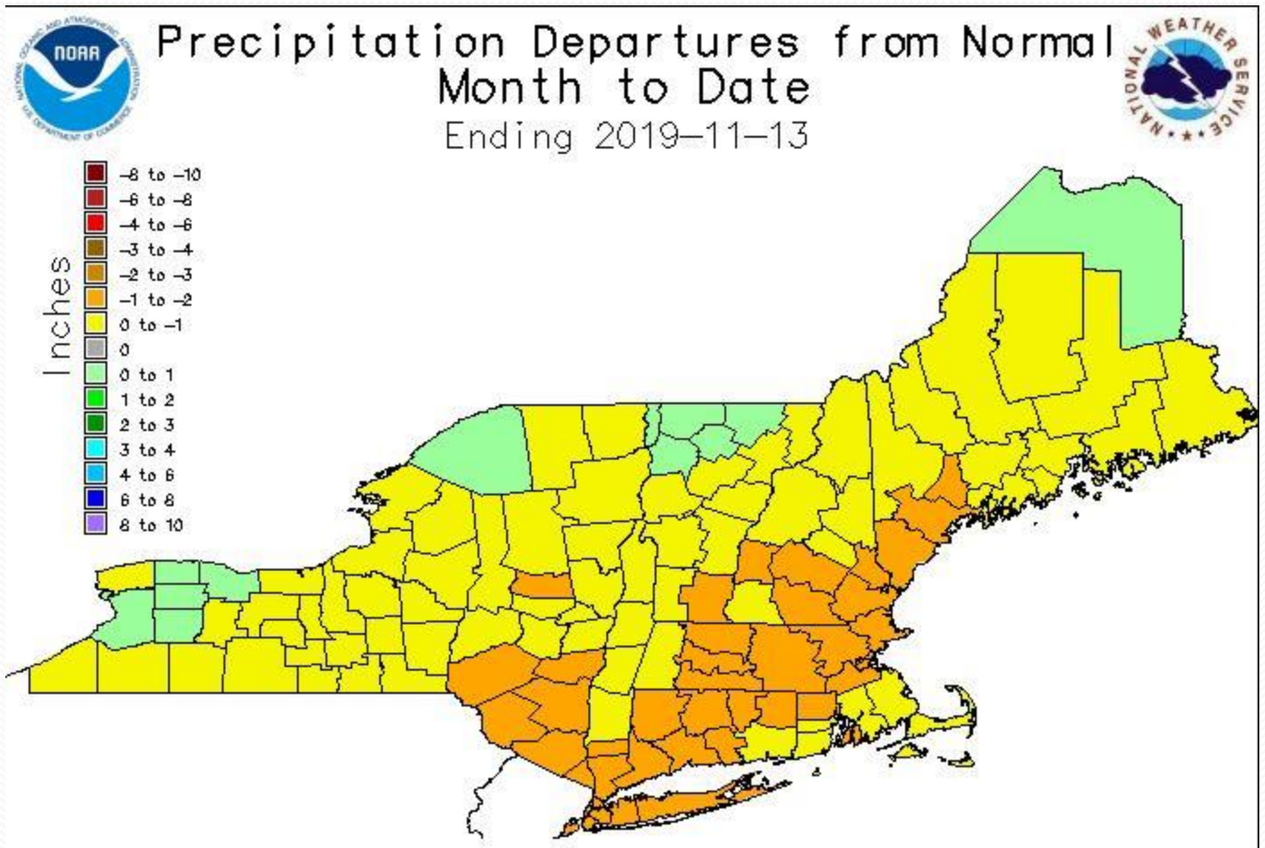
October Overview

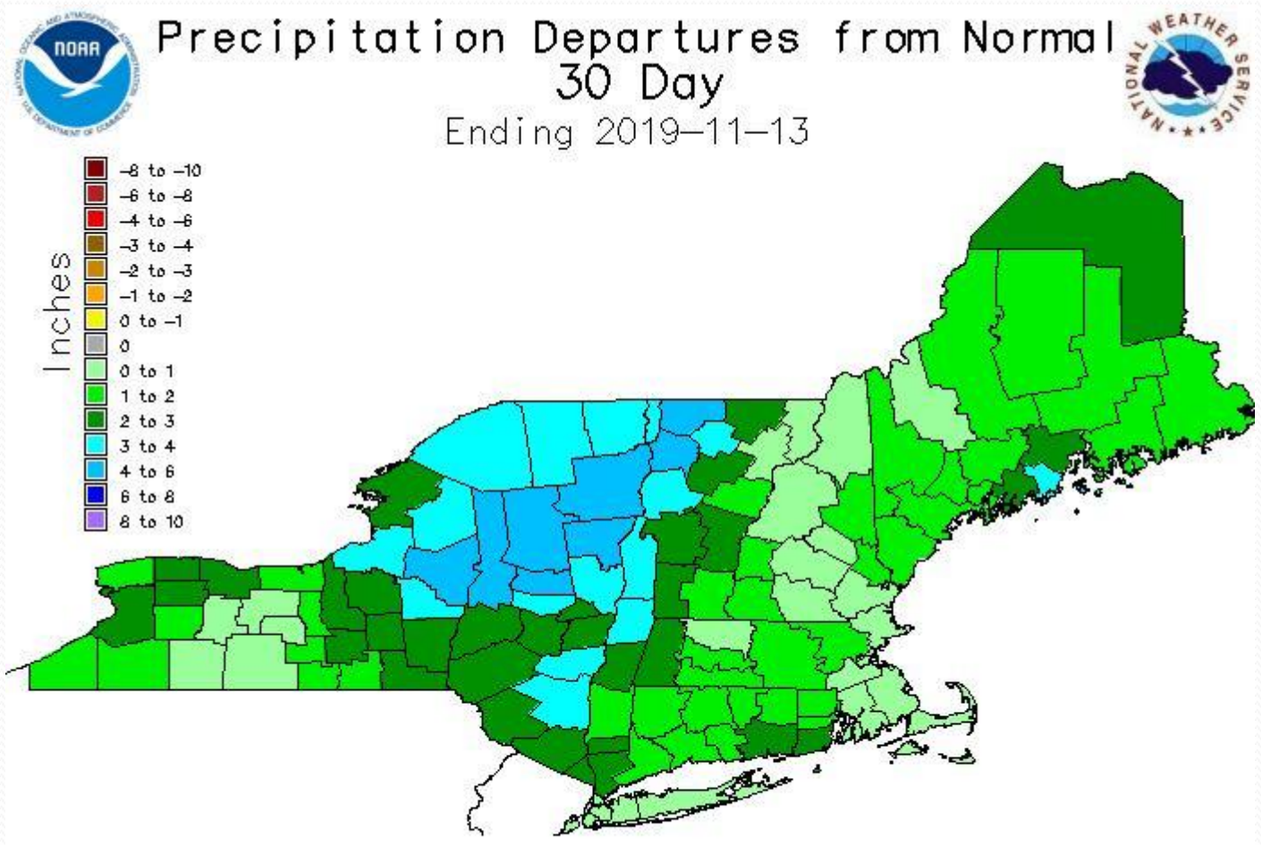
- Frequent Rain events
- Rec'd at least a trace of rain ~21 days out of 31
- Biggest rain event:
  - Oct 16th-17th
  - Intense low pressure system, damaging winds, soaking rainfall
  - 1.5" to 4" of rain for much of MA
  - 1" to 2" of rain along east coastal MA and the Cape/Islands
  - Temps- averaged 1 to 3 deg F above normal
- El Nino: Neutral

October 16-17 Storm Total Rainfall

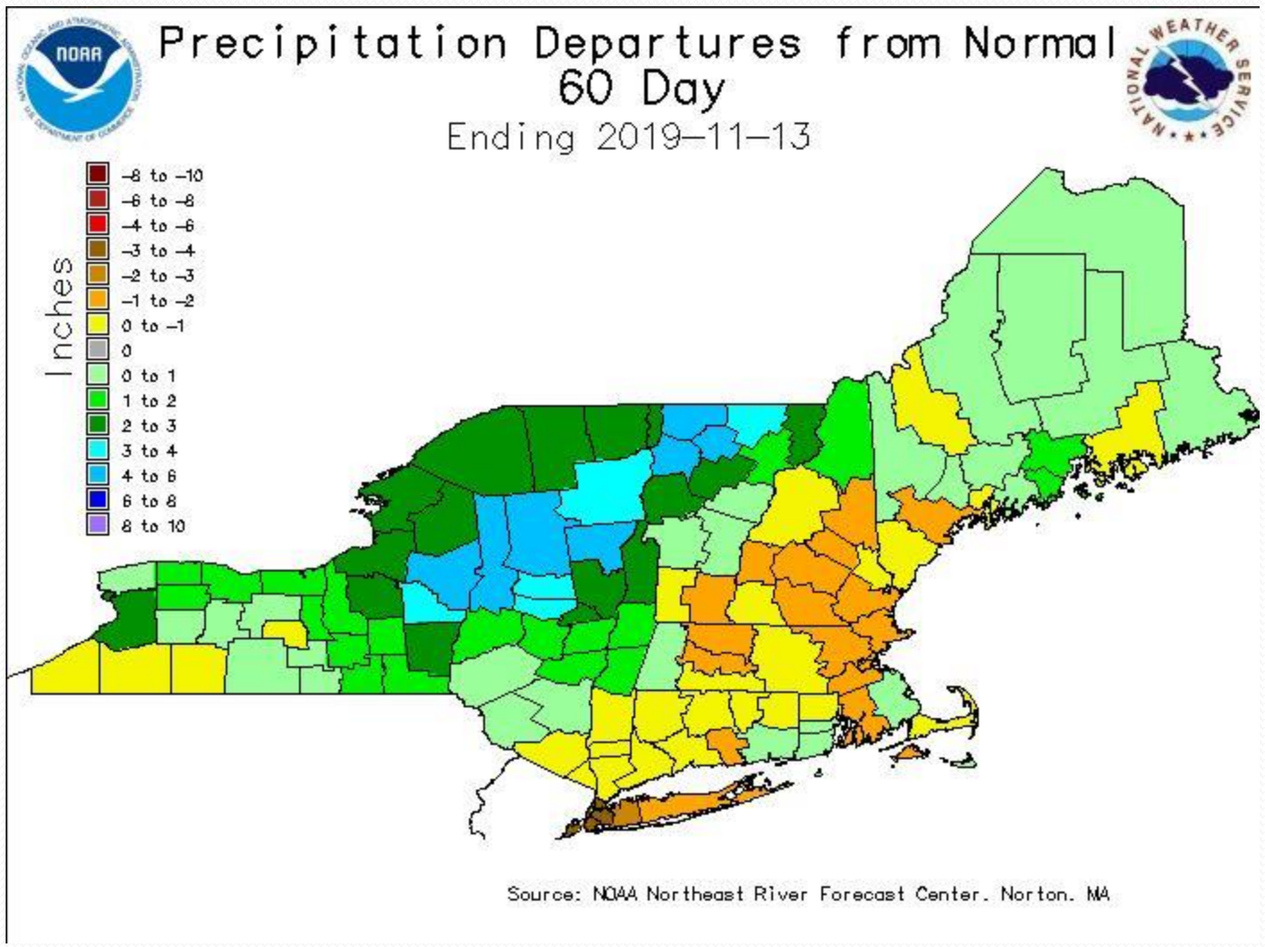


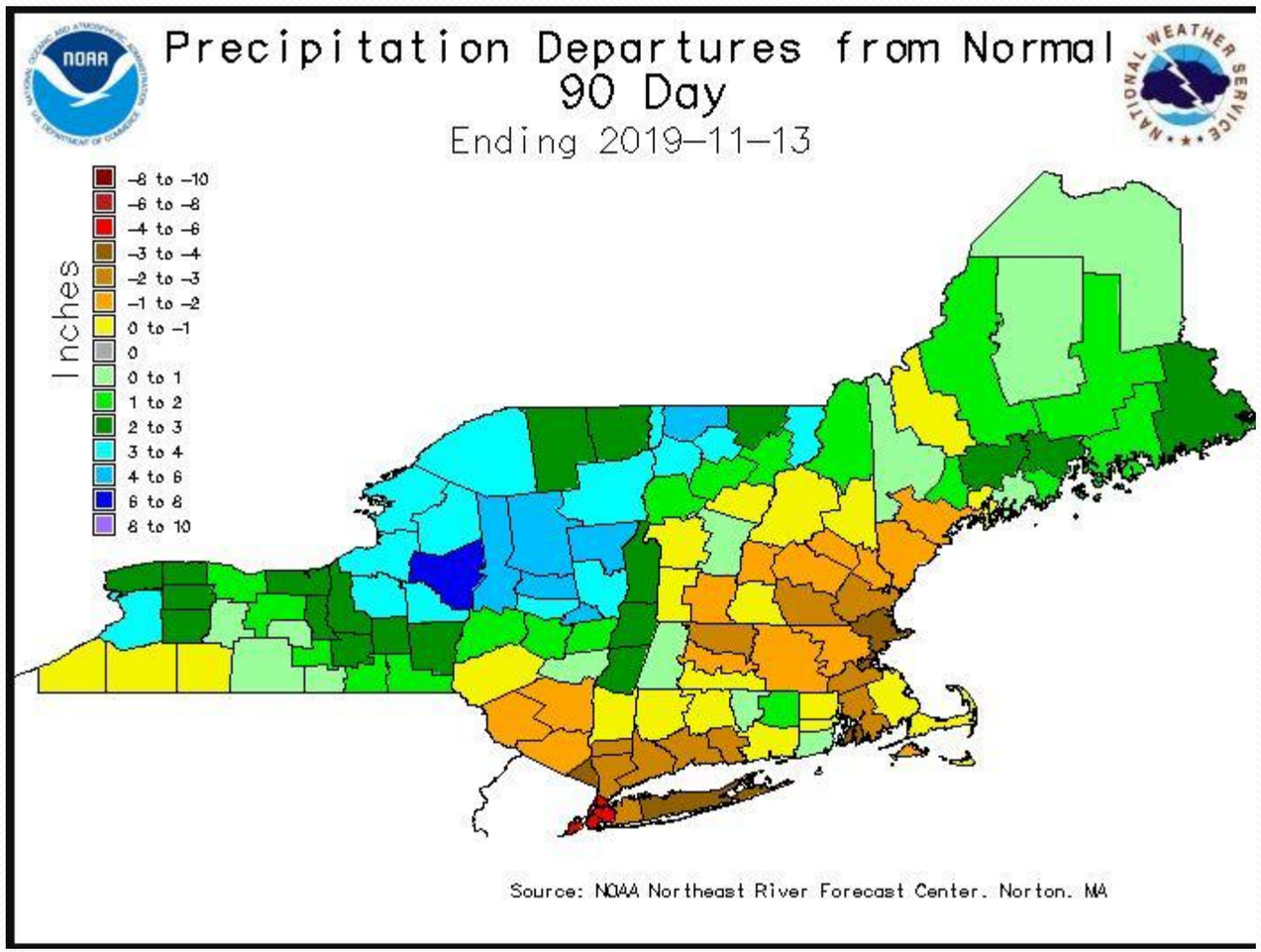
Precipitation Departures
Month to date and Last 30 Days





Precipitation Departures
Last 60 Days and Last 90 Days





November Month-to-Date Overview

- Rainfall/liquid equivalent MTD 0.5” to ~2”
- This ranges from near normal to 1.25” below normal
- Mainly quick hitting cold fronts
  - Light precipitation totals
  - Reinforcing shots of cold air
- Temps-average 3-5 degrees F below normal
- El Nino: Neutral

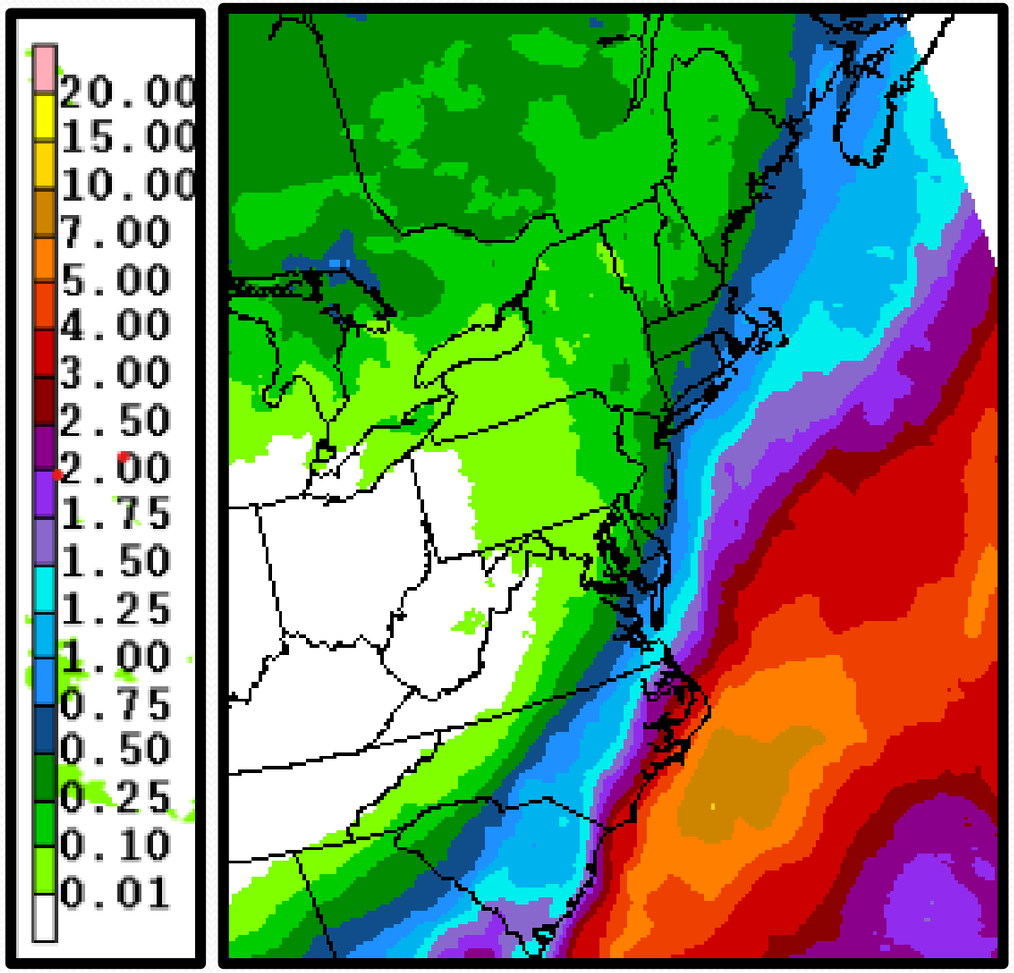
Forecast *thru 11/19*

Mainly dry thru Sat, chances for light precipitation

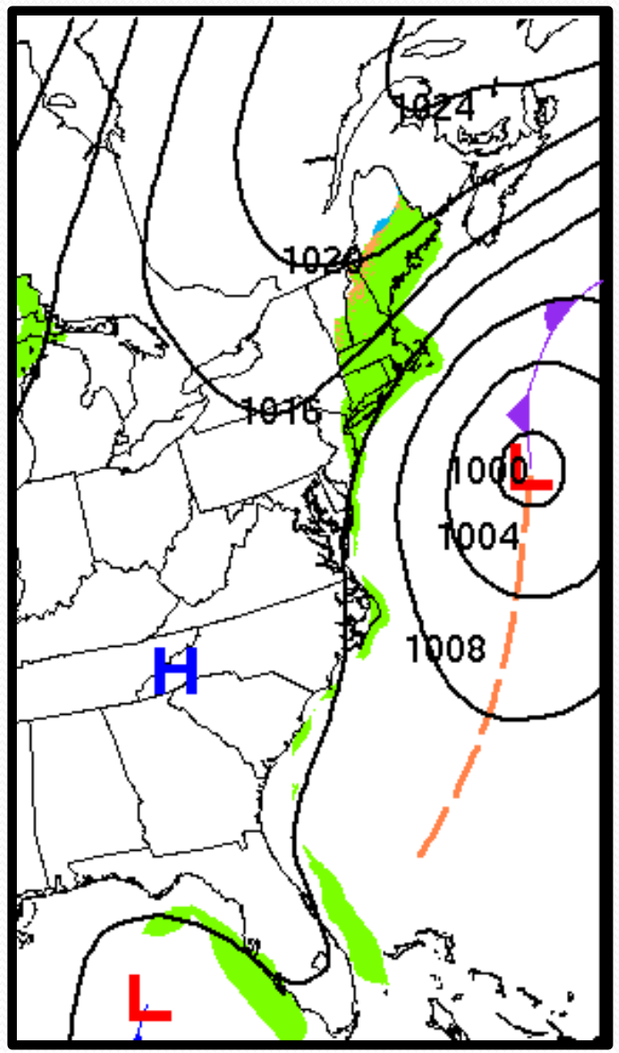
Better chances for rain:

Ocean storm Sunday/early next week

Rainfall forecast thru 7 am 11/20



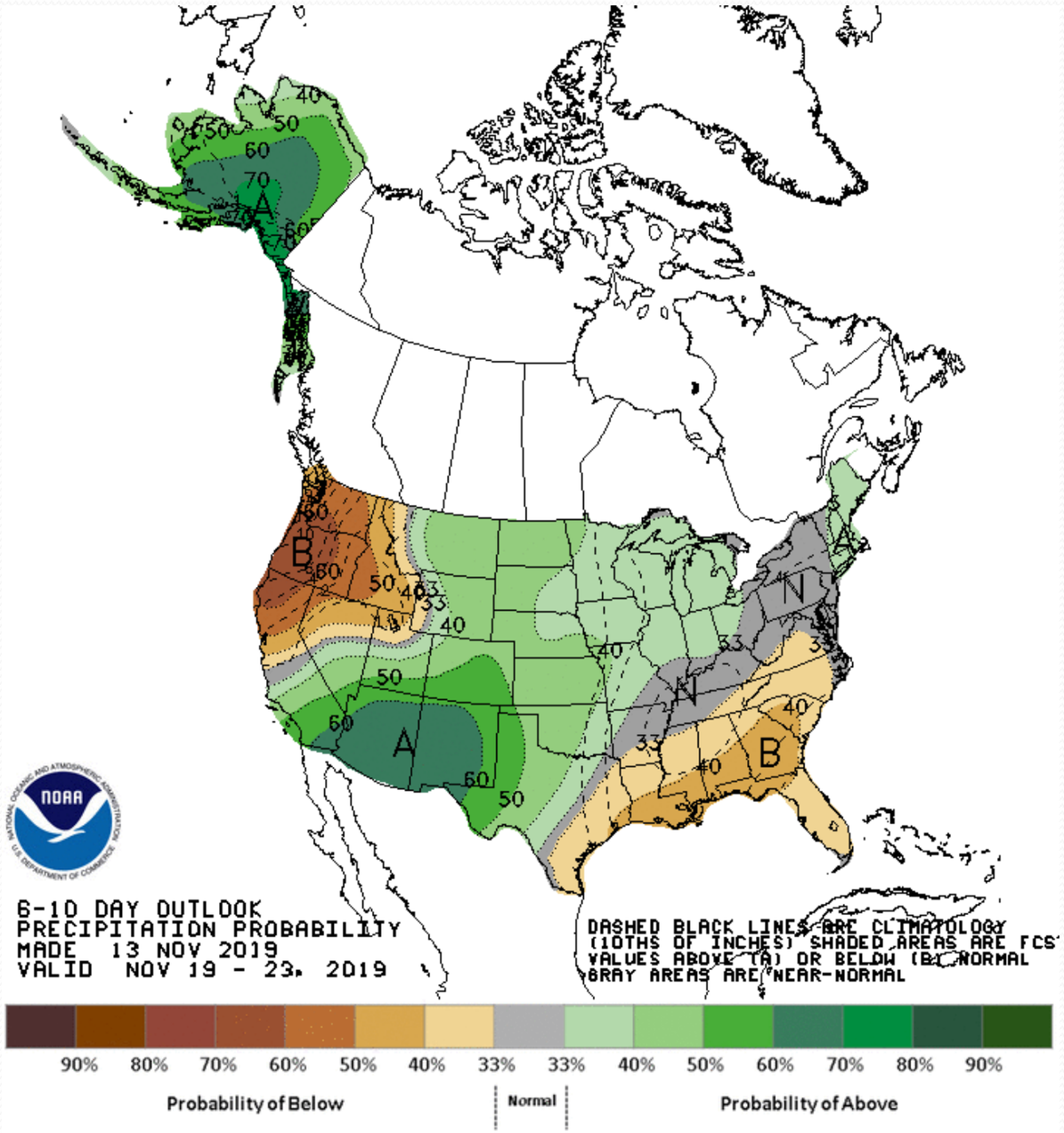
Forecast Weather Map for 7 am Mon 11/18

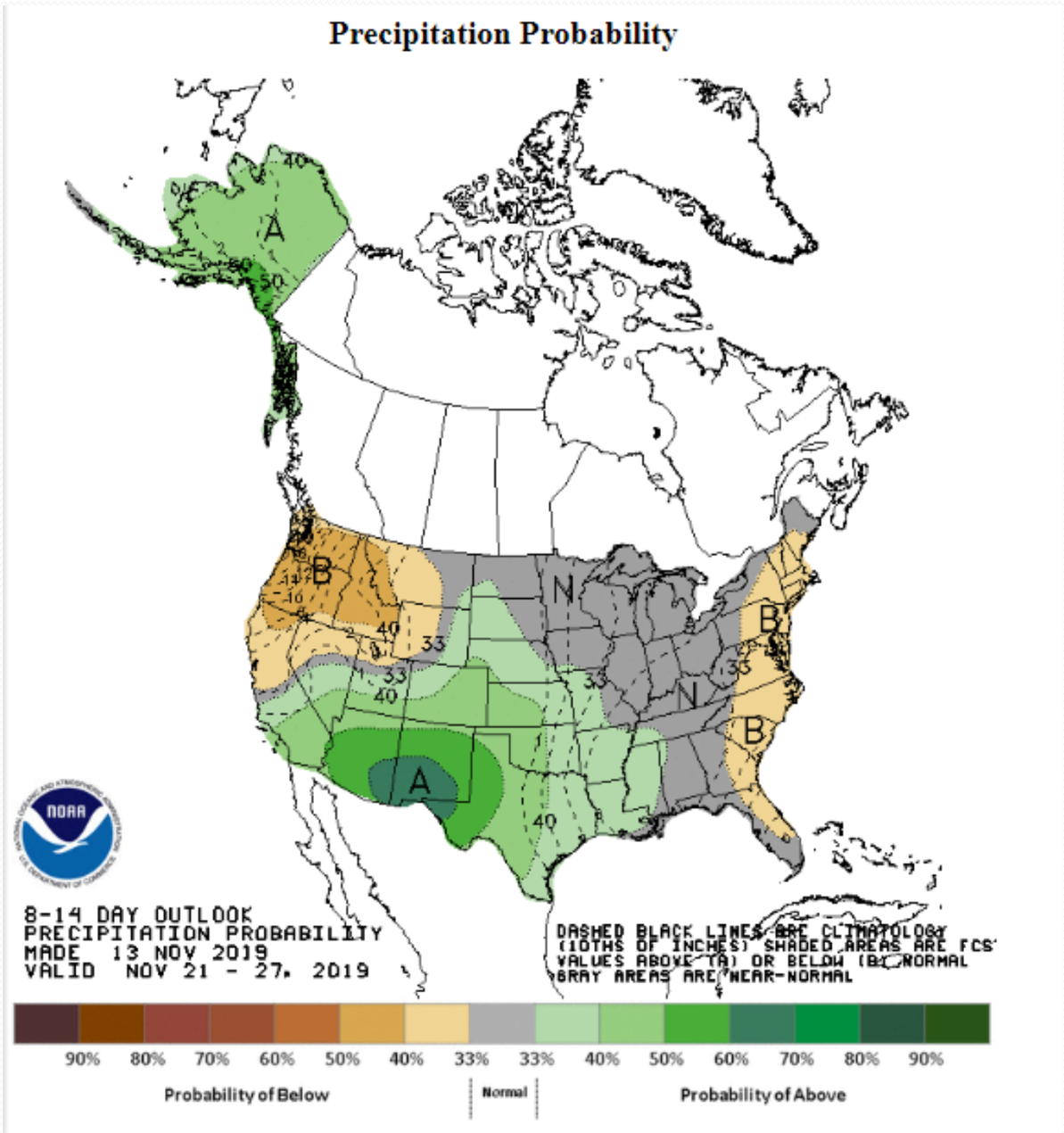


6 to 10 day

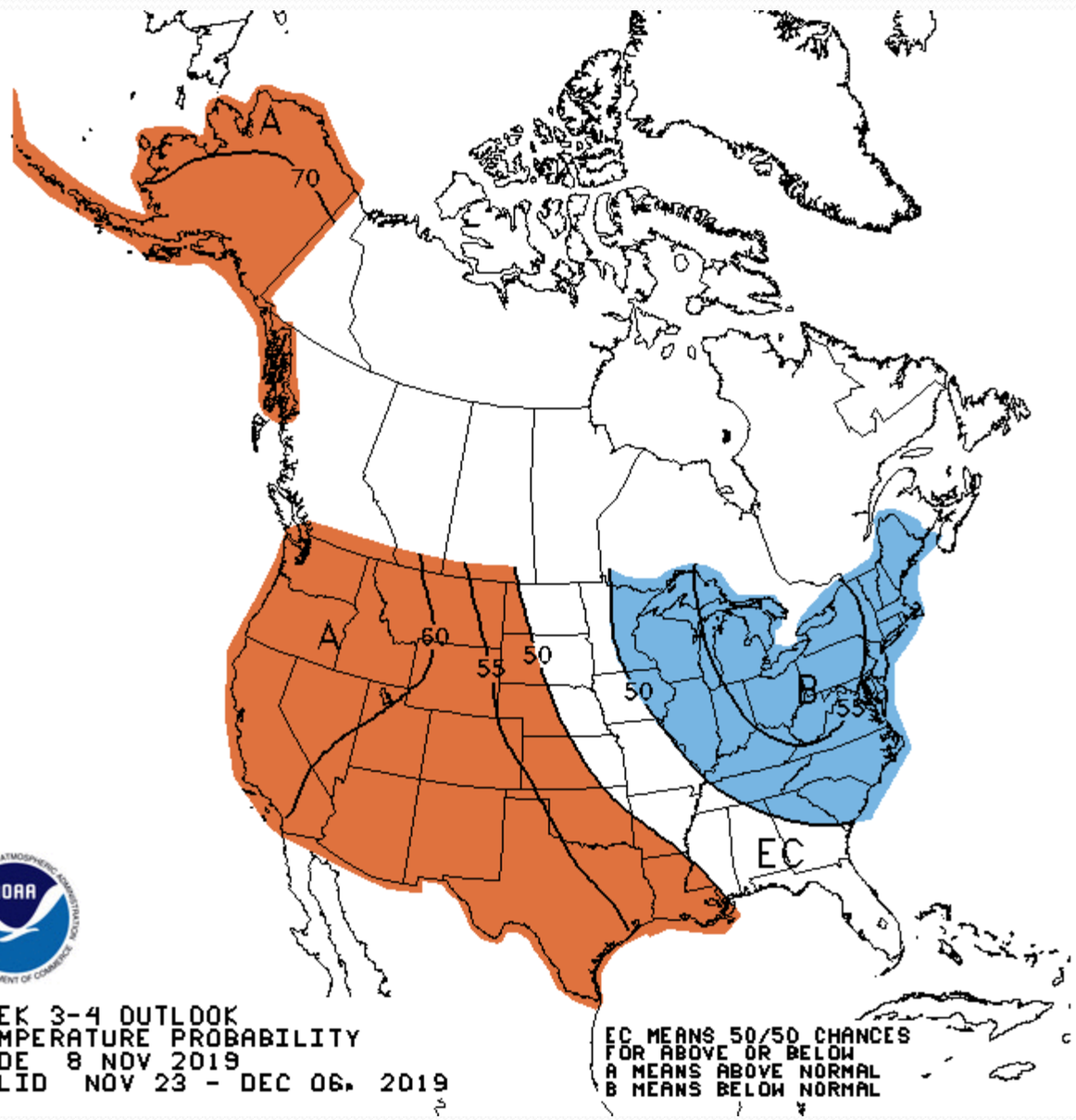
8 to 14 day

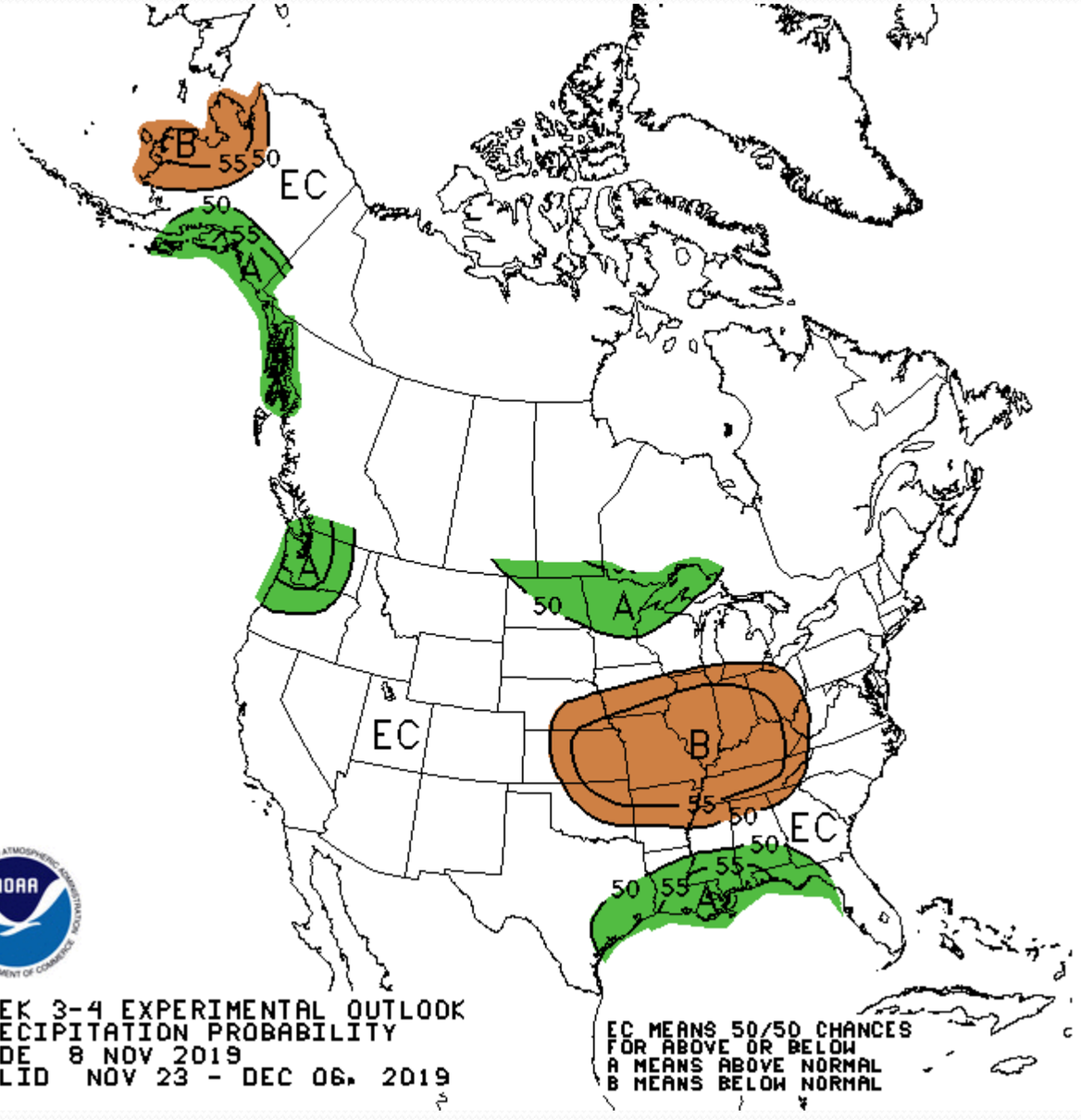
Precipitation



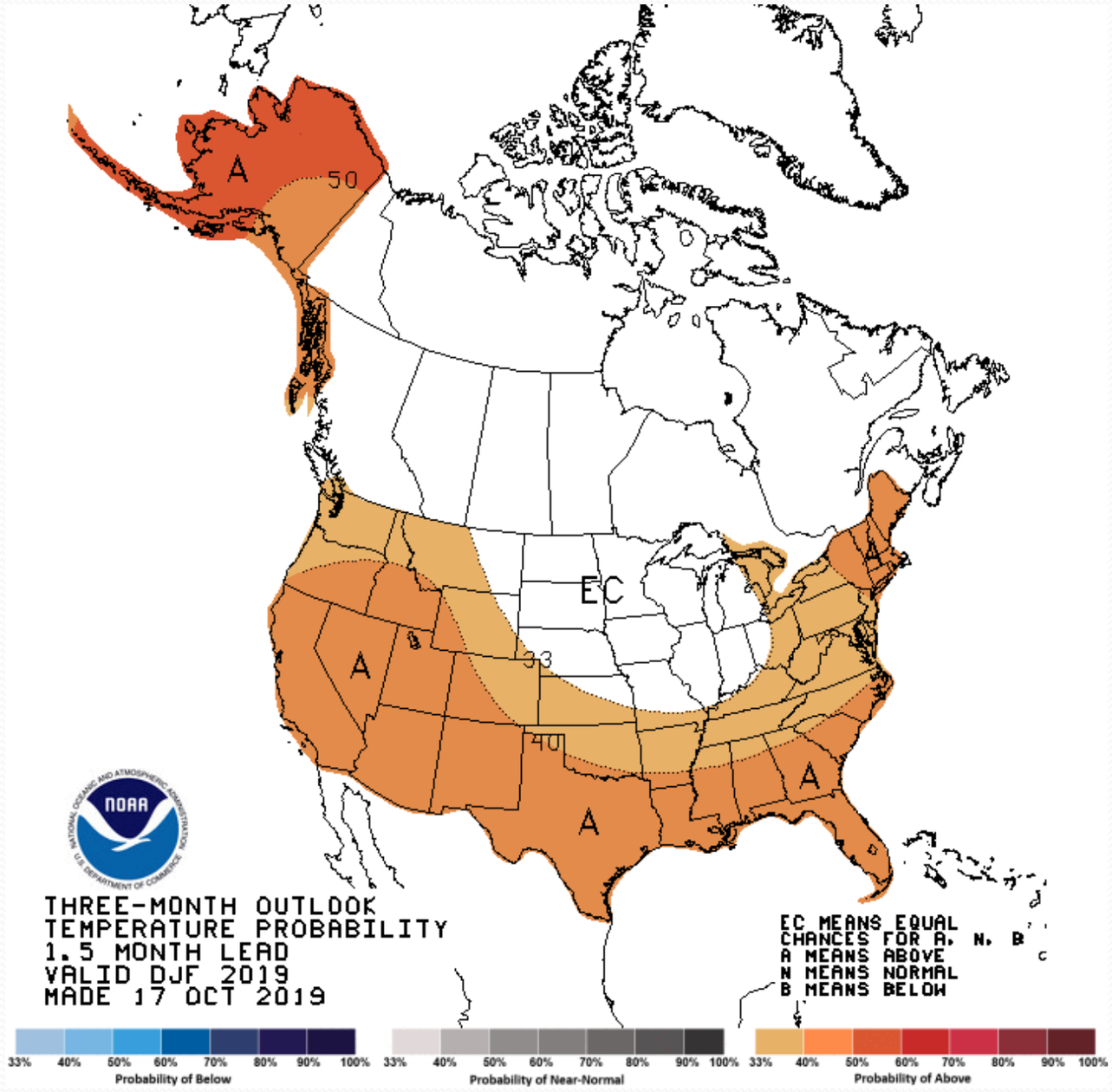


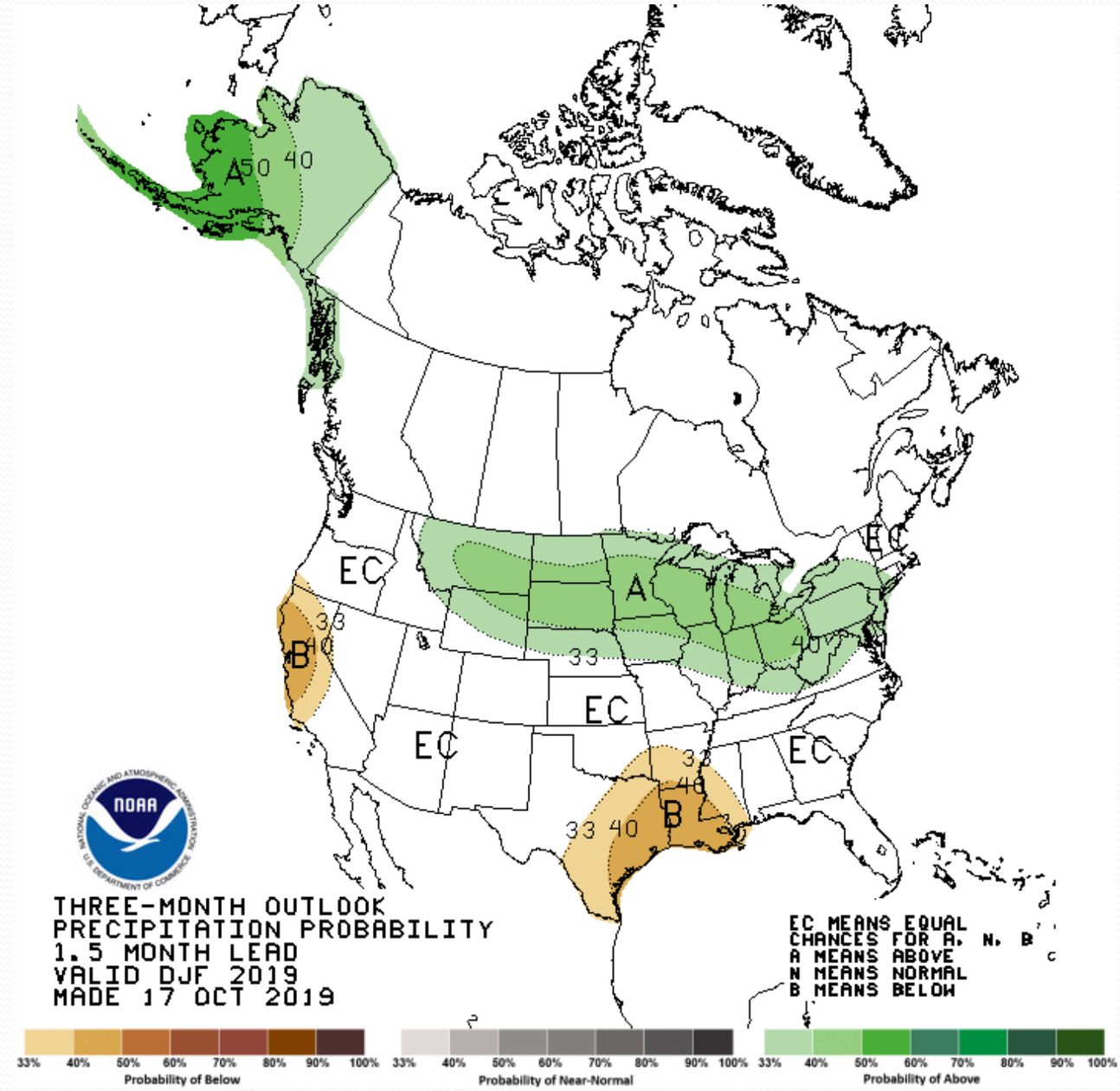
3-4 Week Outlook- Nov 23-Dec 6



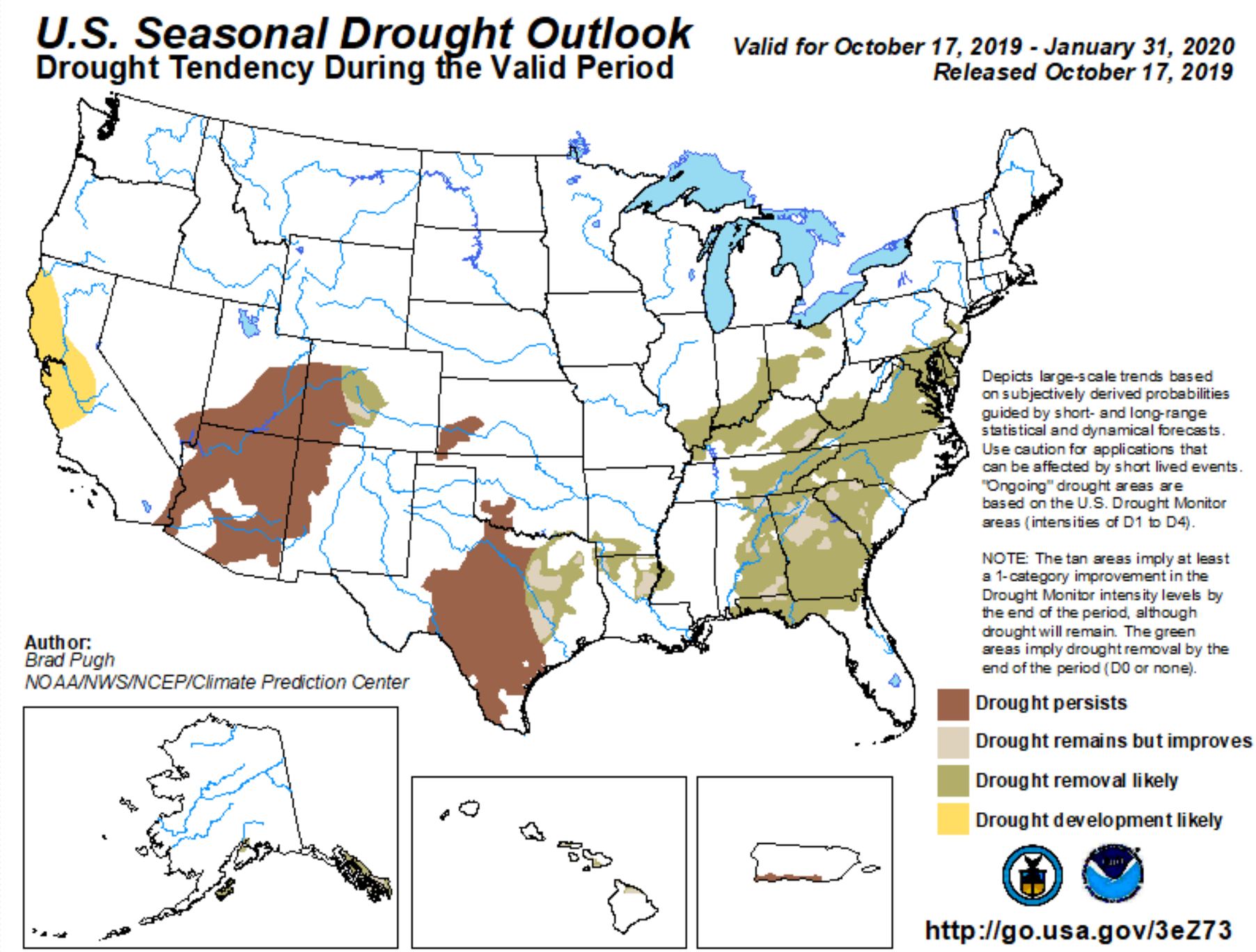


Outlook for Dec-Jan-Feb





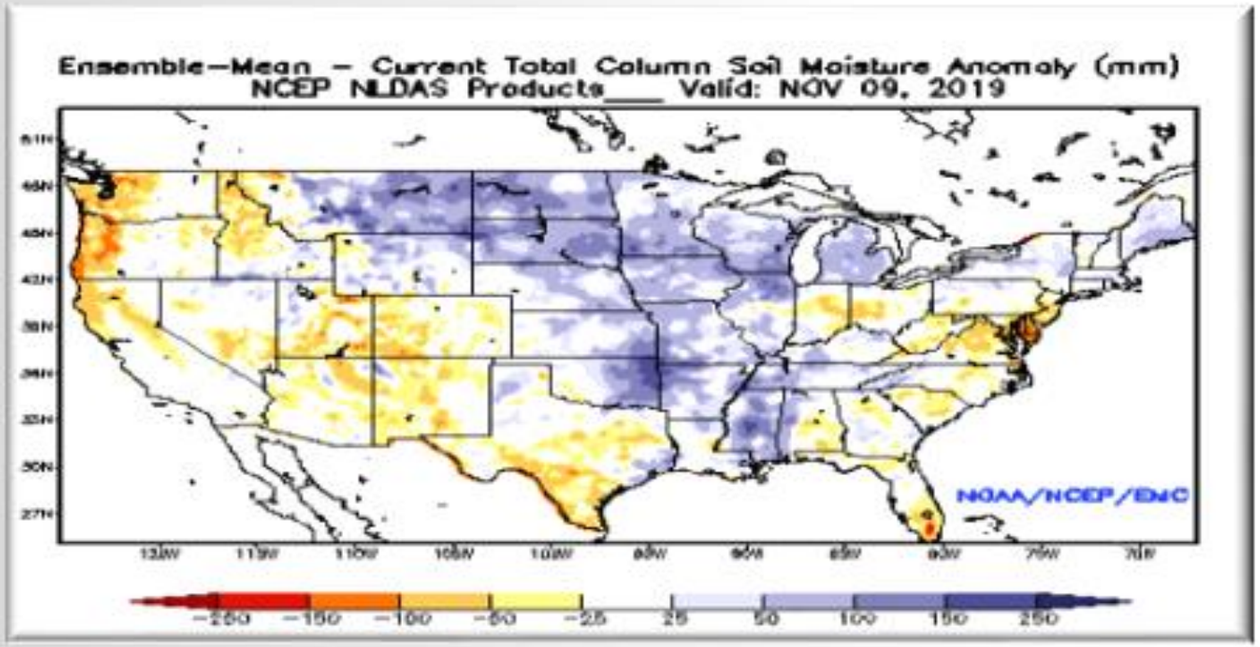
Drought outlook Thru 1/31/20

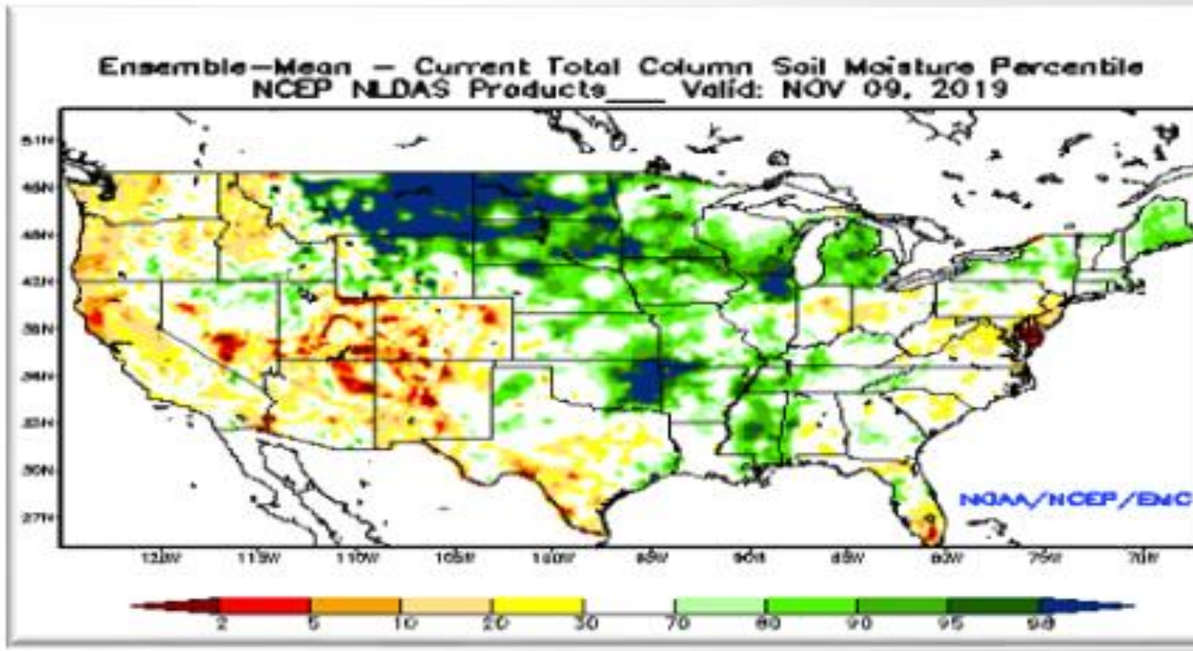


Soil Moisture Current Conditions

Departures and Percentiles

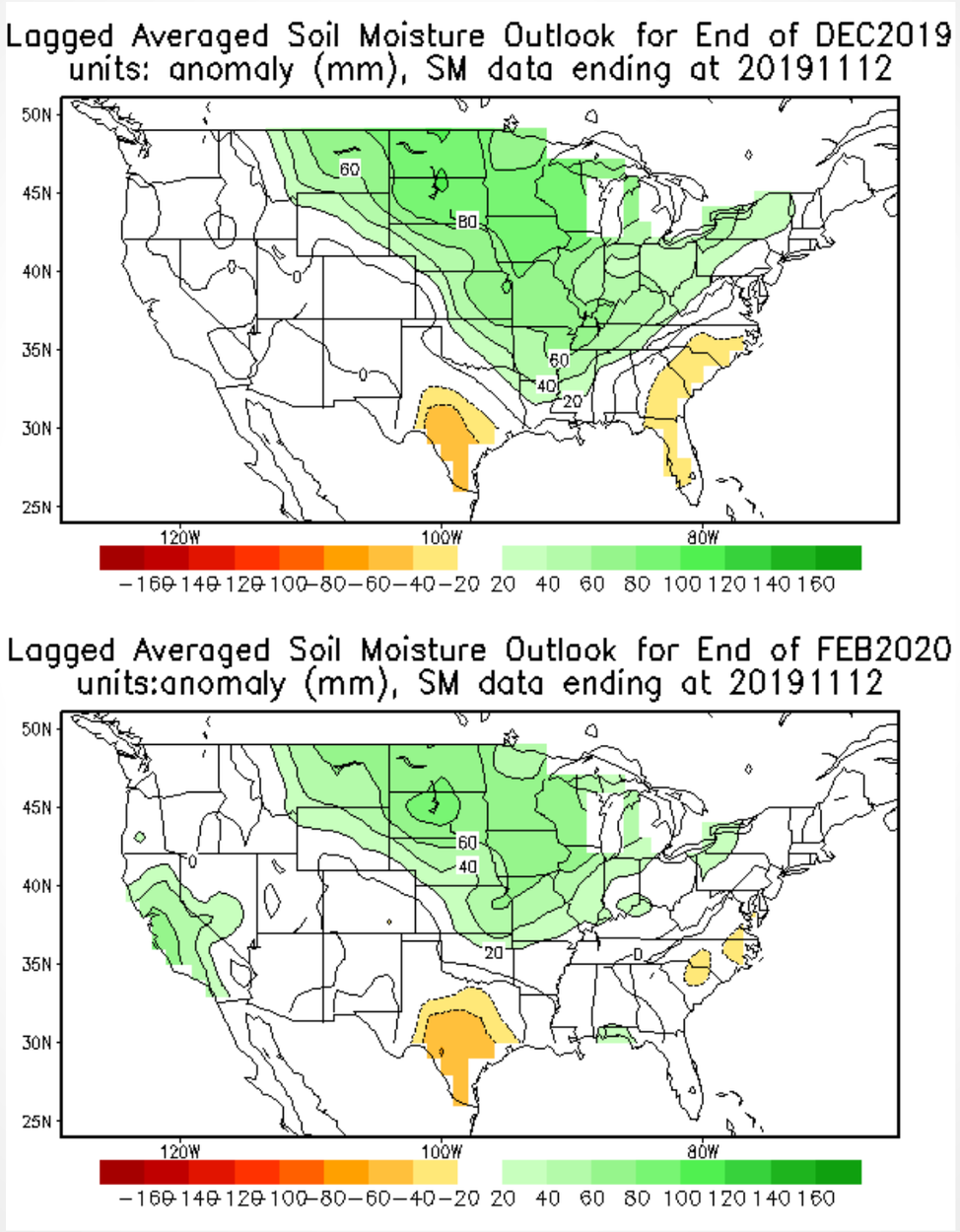
The NLDAS experimental drought monitor is derived from near real-time soil moisture output from both the NASA MOSAIC and NCEP Noah land surface models. The anomalies and percentiles are based on a 28 year climatology (1980 - 2007). Two separate climatology files are used; one for the calculation of anomalies, and one for the calculation of percentiles. The anomaly climatology file contains 1 soil moisture value per day (daily average over 28 years) for each gridbox. The percentil climatology file contains 140 soil moisture values per day (5 for each year) for each gridbox.





Soil Moisture Forecasts

CPC-NCEP



Current and 7-day USGS Streamflow