



North Carolina Drought Management Advisory Council (NC DMAC) 2024 Annual Meeting

Barrett Smith

National Weather Service - Raleigh, NC



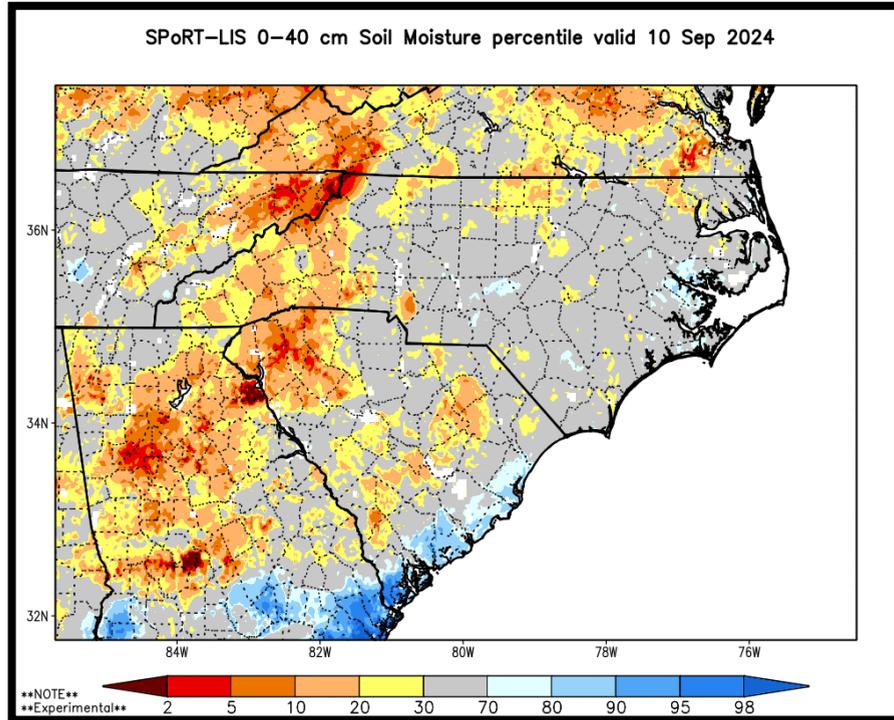


NASA SPoRTLIS Soil Moisture

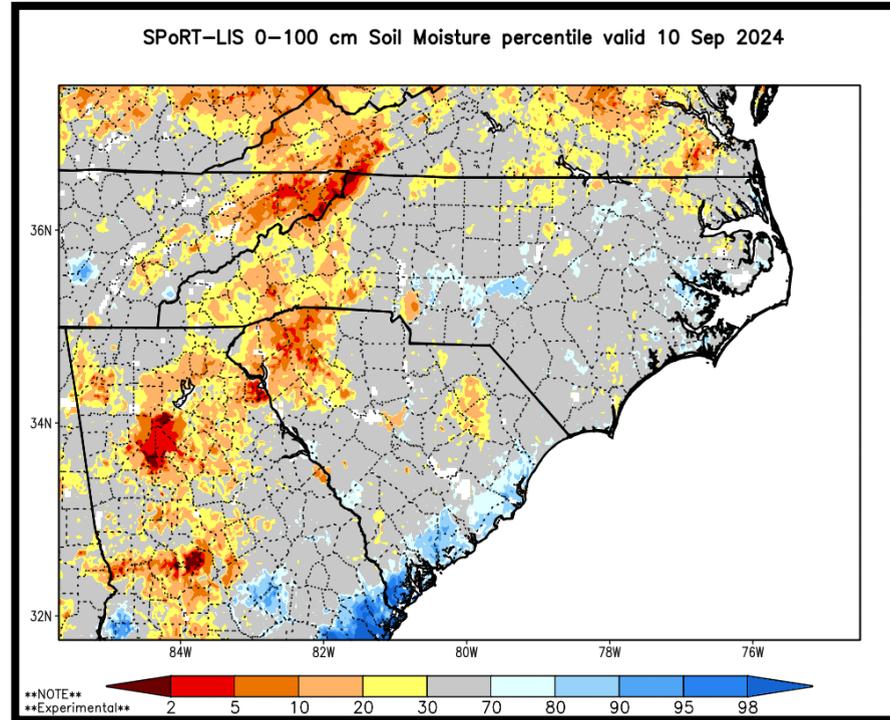
September 10, 2024
11:31 AM

Courtesy of NASA SPoRT

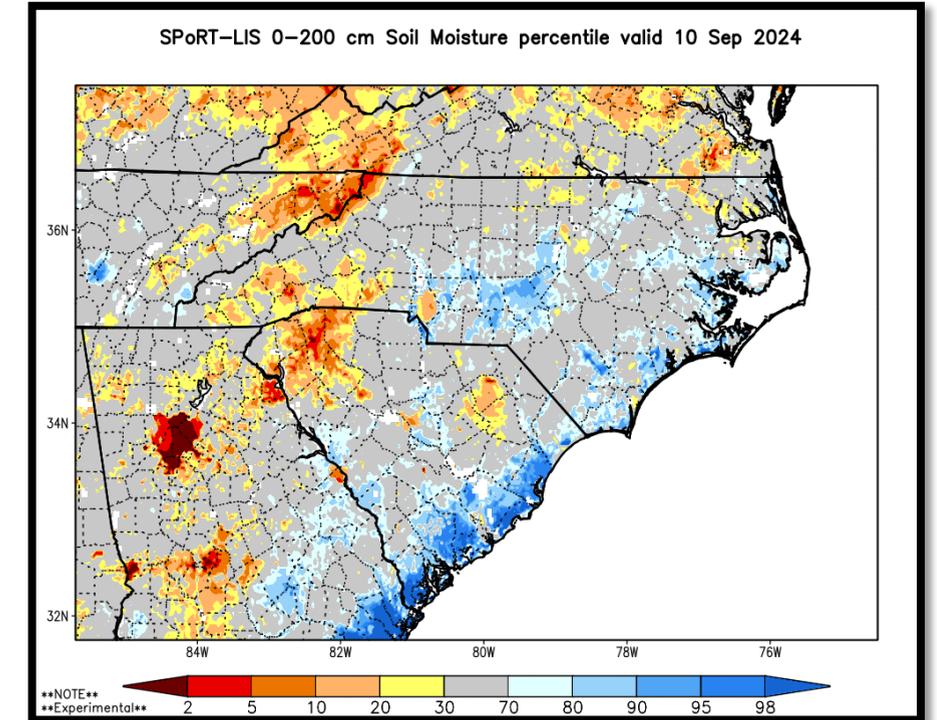
0-40cm Percentile



0-100cm Percentile



0-200cm Percentile



- Model based
- Uses time-varying input atmospheric analyses such as incoming radiation, wind, temperature, and precip, as well as soil / vegetation properties.
- Percentiles put wetness/dryness into historical context



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
Raleigh, NC



NASA SPoRTLIS Soil Moisture

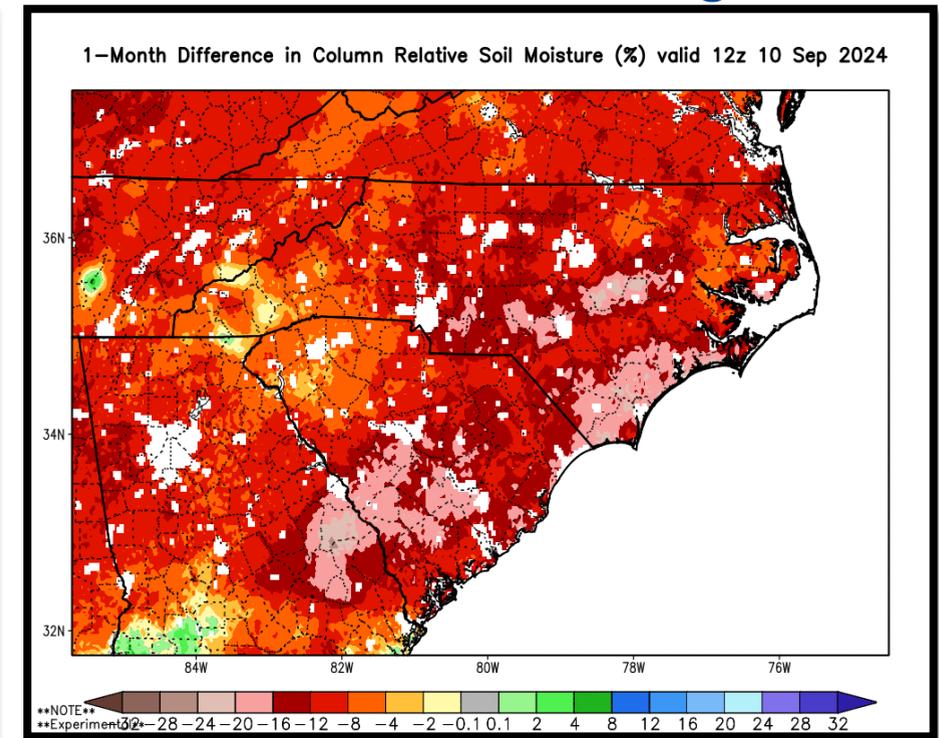
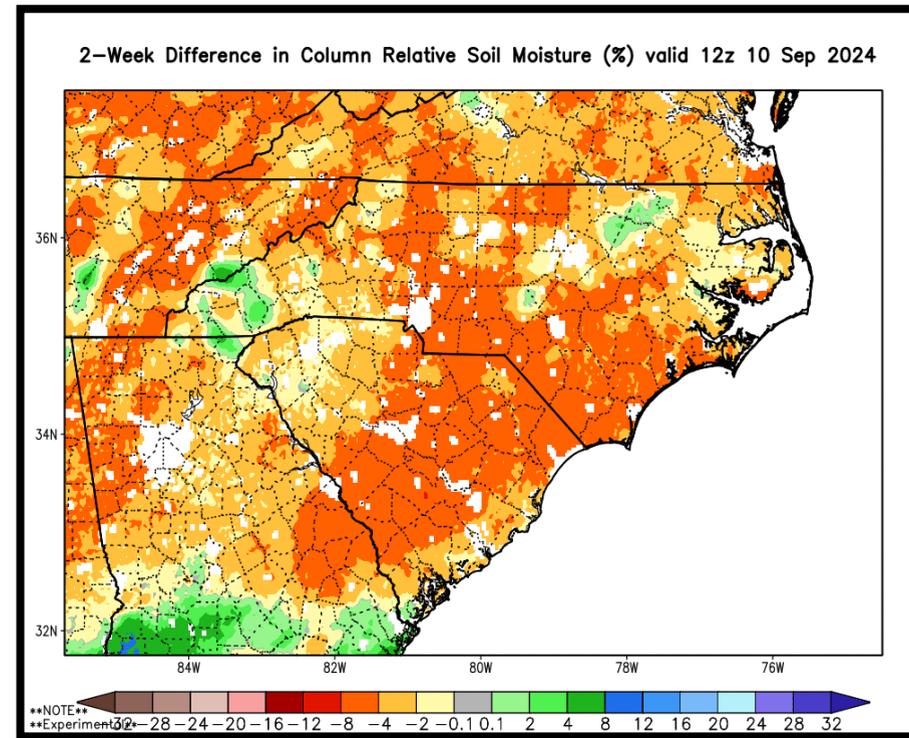
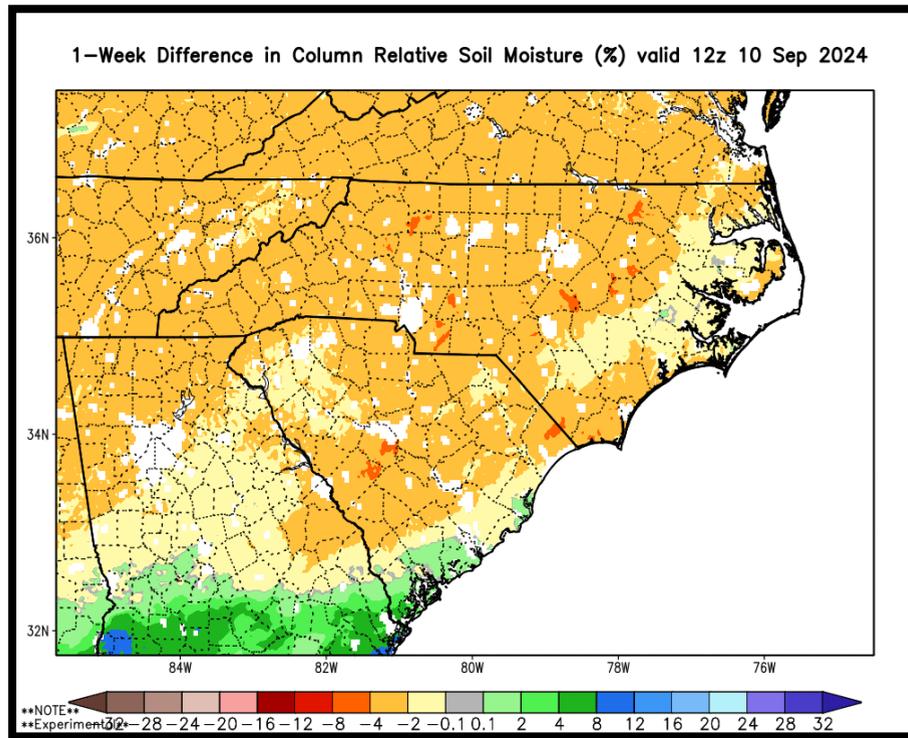
September 10, 2024
11:31 AM

Courtesy of NASA SPoRT

One Week RSM Change

Two Week RSM Change

One Month RSM Change



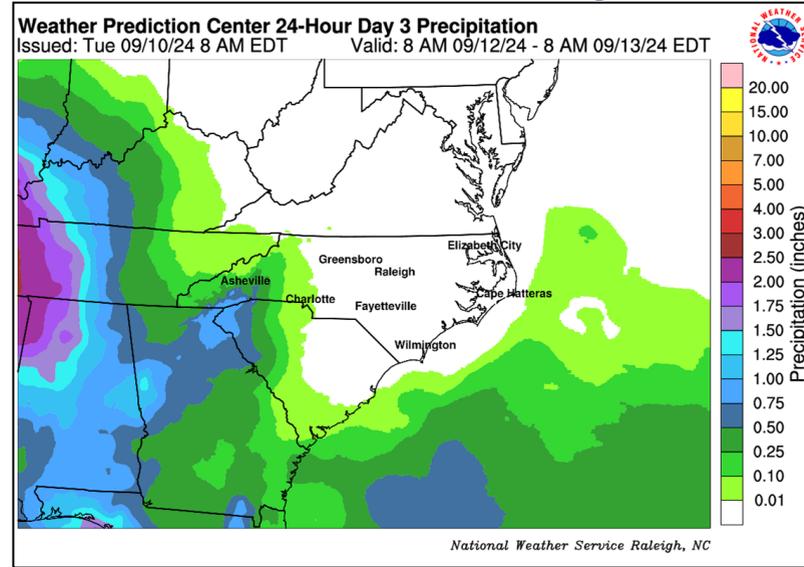


Precipitation Forecasts

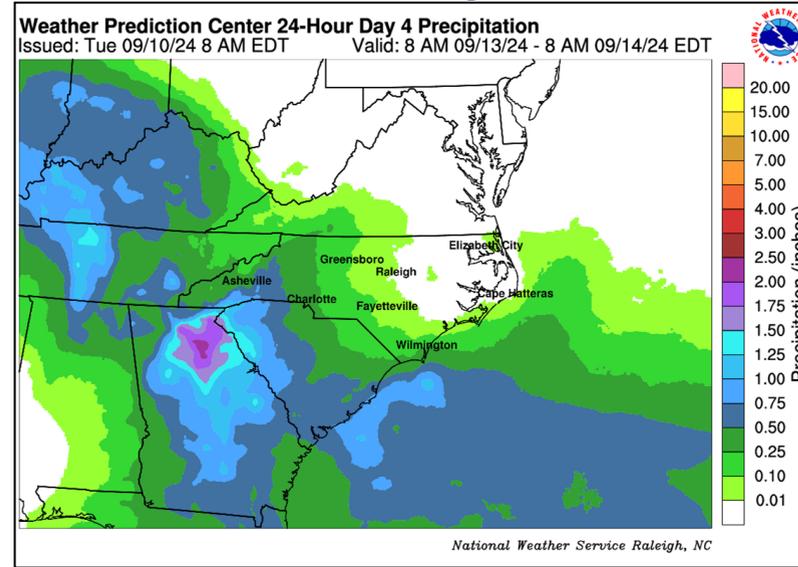
September 10, 2024
11:31 AM

Courtesy of the Weather Prediction Center (www.wpc.ncep.noaa.gov)

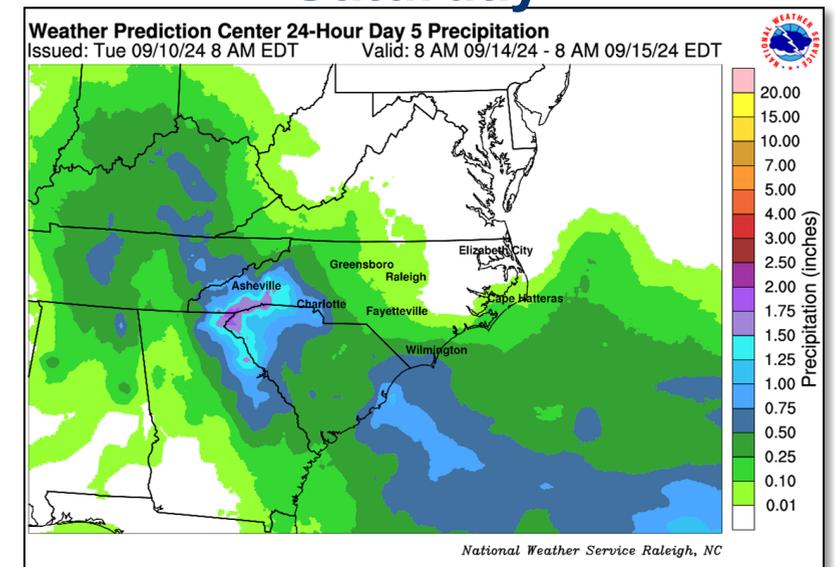
Thursday



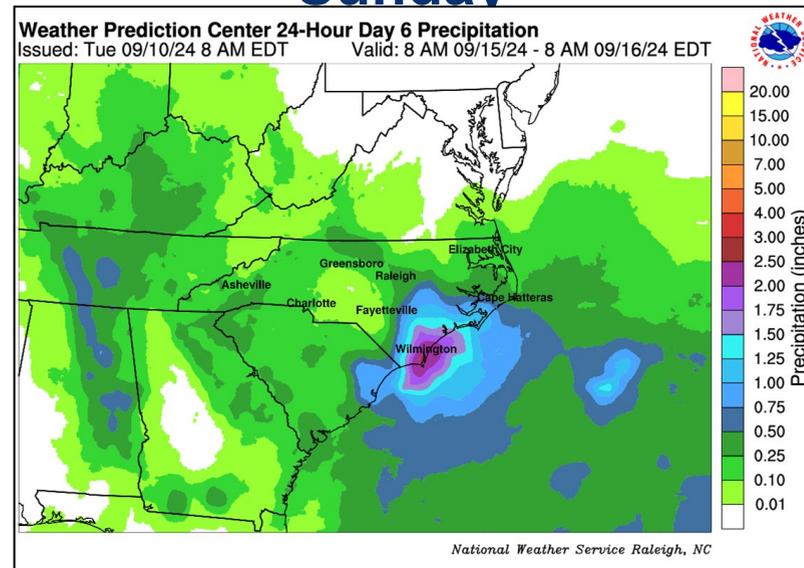
Friday



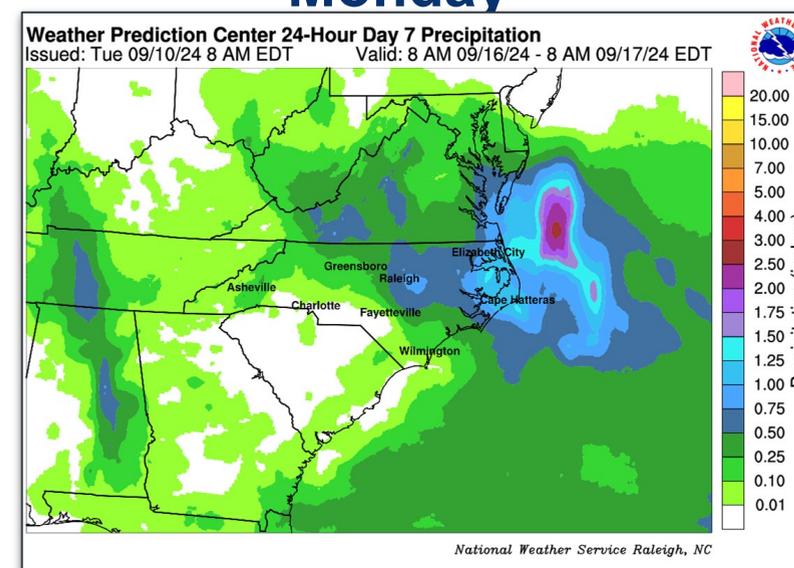
Saturday



Sunday



Monday



National Oceanic and Atmospheric Administration

U.S. Department of Commerce

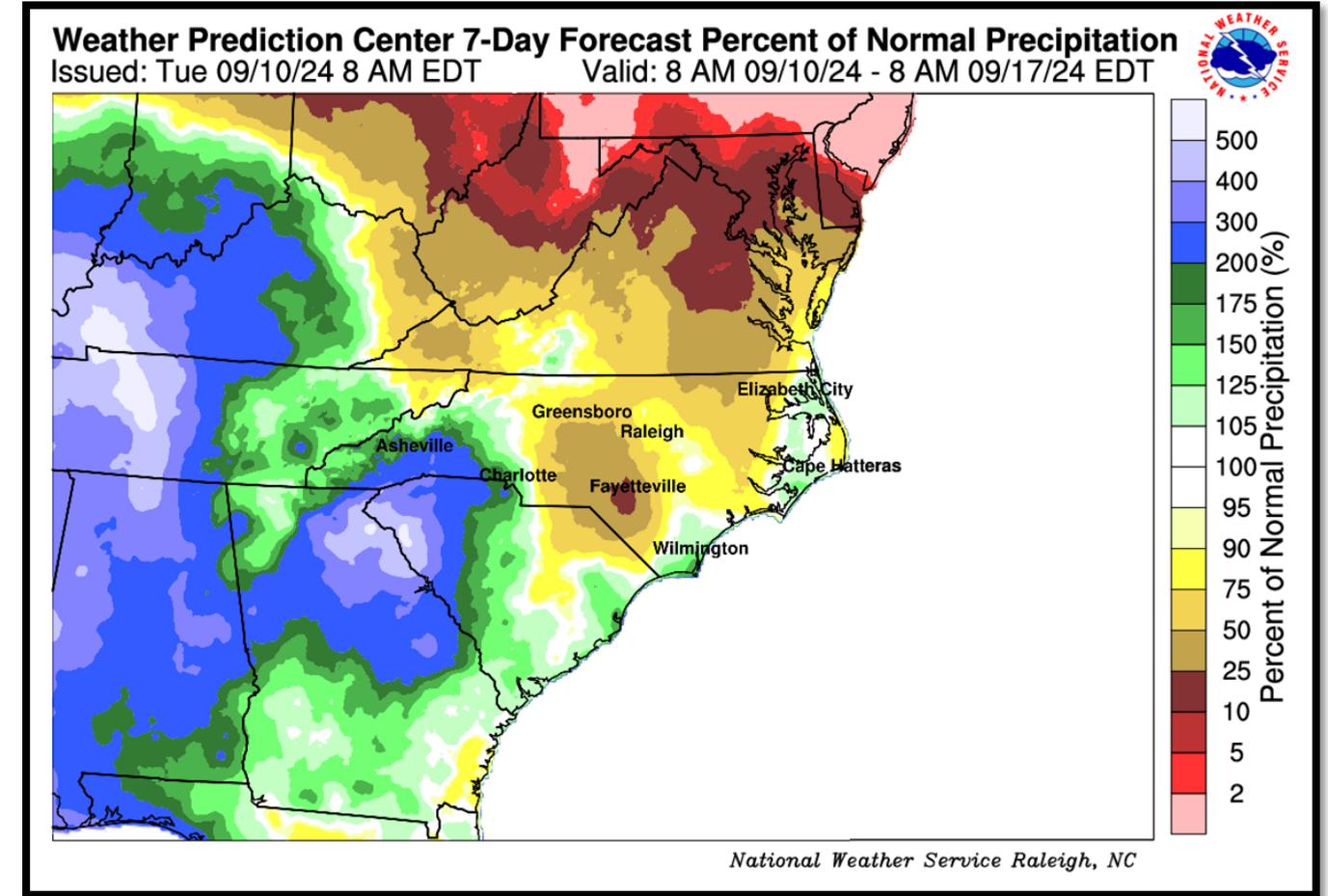
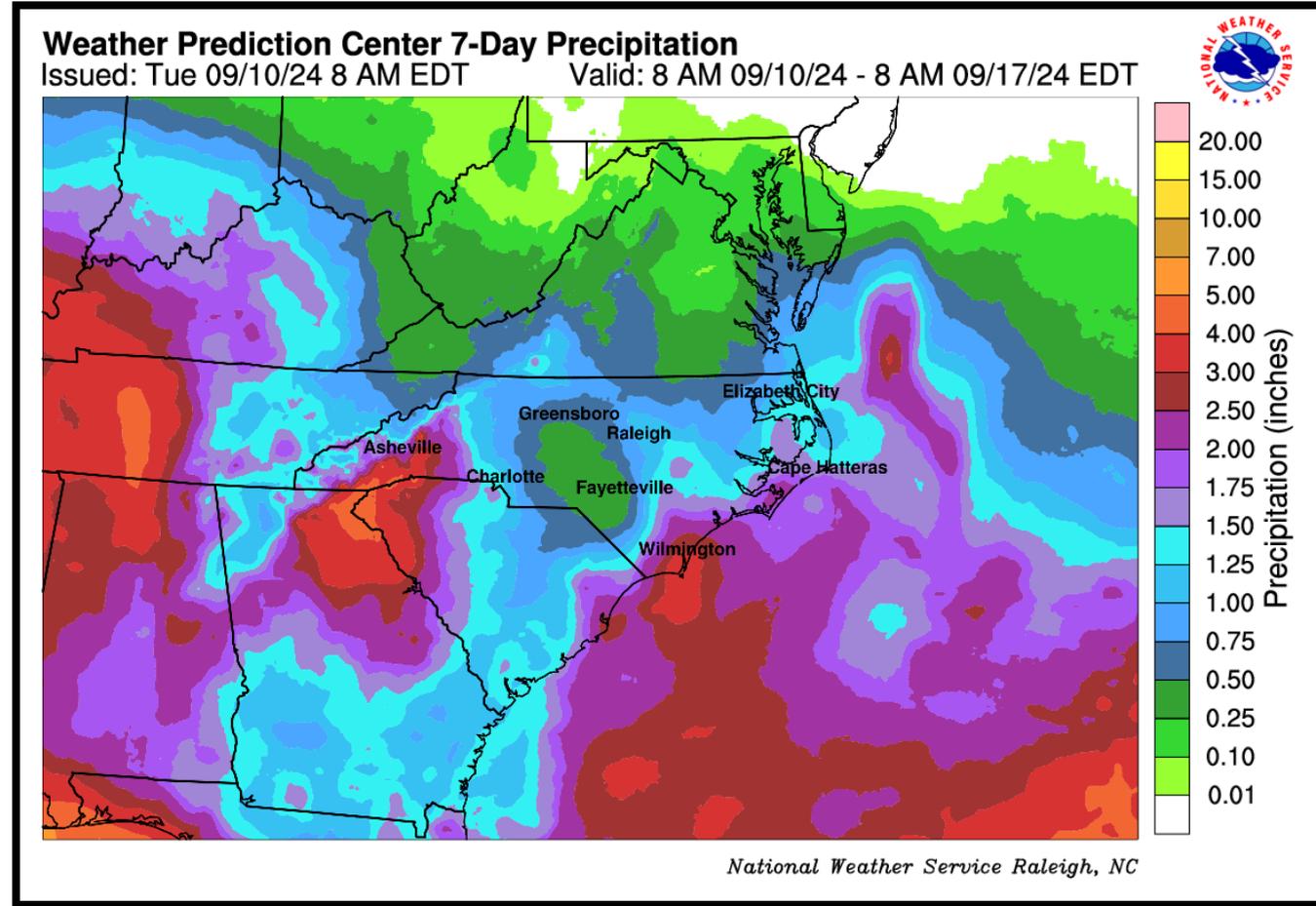
National Weather Service
Raleigh, NC



Seven-Day Total Precipitation Forecast

September 10, 2024
11:31 AM

Courtesy of the Weather Prediction Center (www.wpc.ncep.noaa.gov)



- Western NC favored for better rainfall over the next seven days, although much of the state is forecast to see below normal 7-date rainfall.

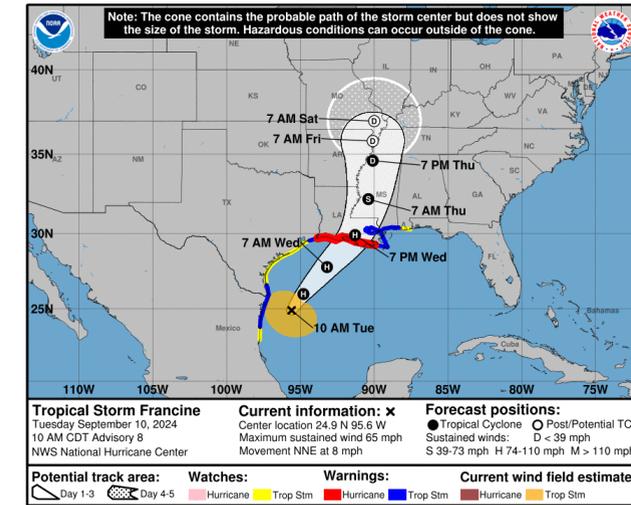
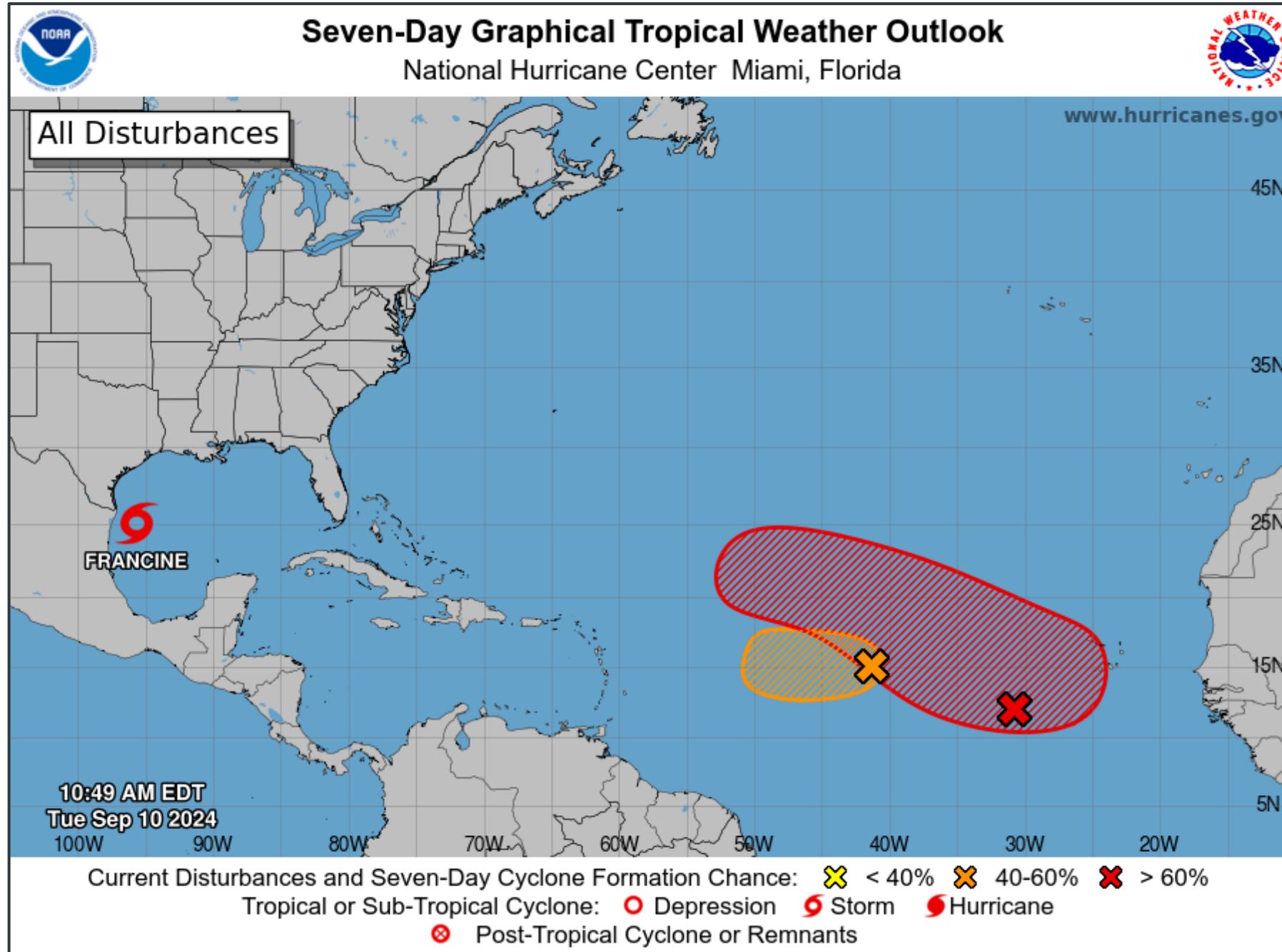




Tropical Weather Outlook

September 10, 2024
11:31 AM

<https://www.nhc.noaa.gov/>

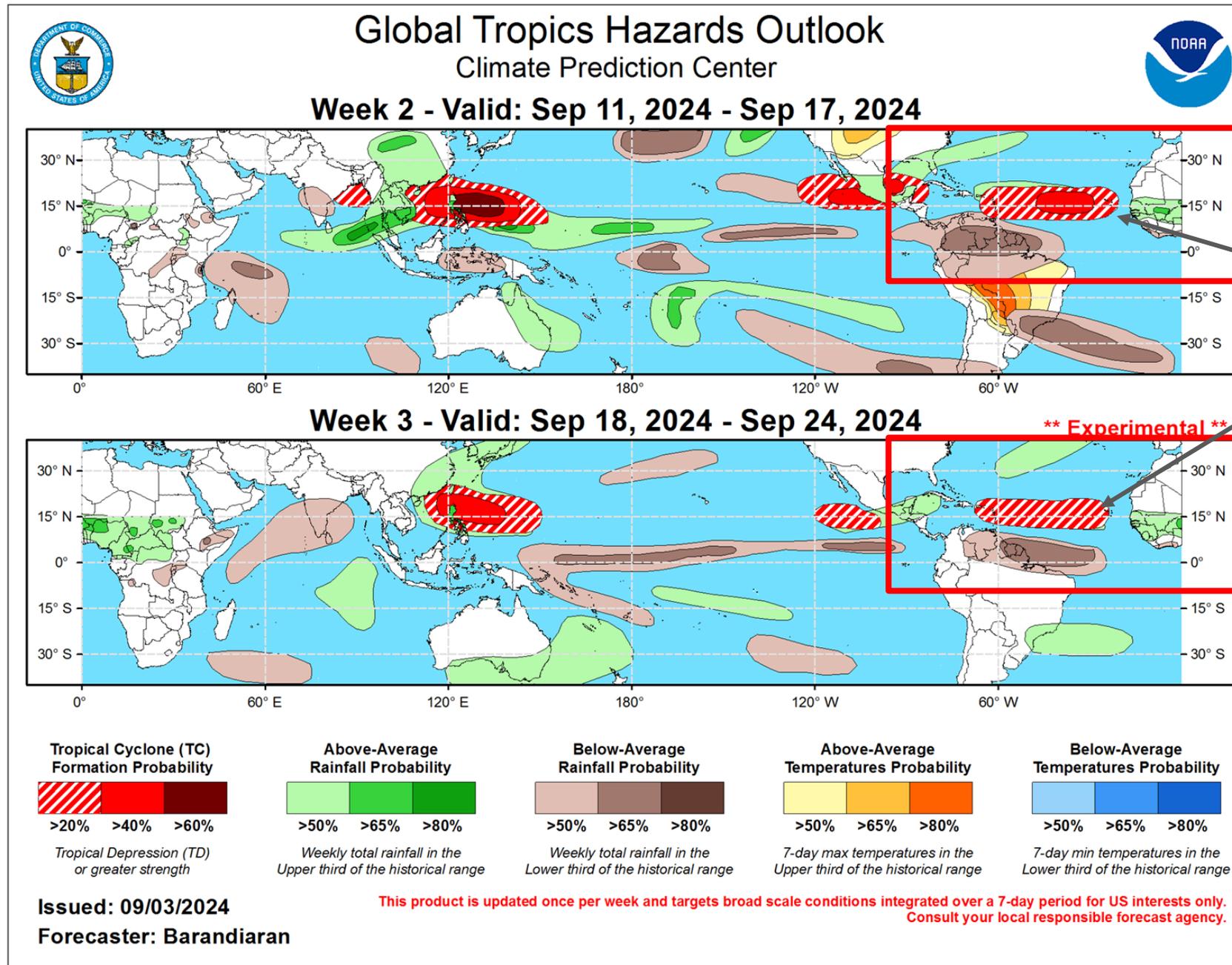




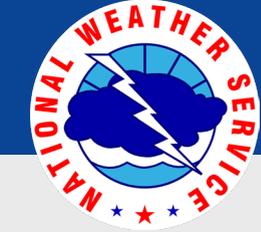
Global Tropics Hazards Outlook

September 10, 2024
11:31 AM

Courtesy of the Climate Prediction Center (www.cpc.ncep.noaa.gov)



Red hatched or solid areas indicate favored areas for tropical development in the next 2-3 weeks.



Extended Outlooks

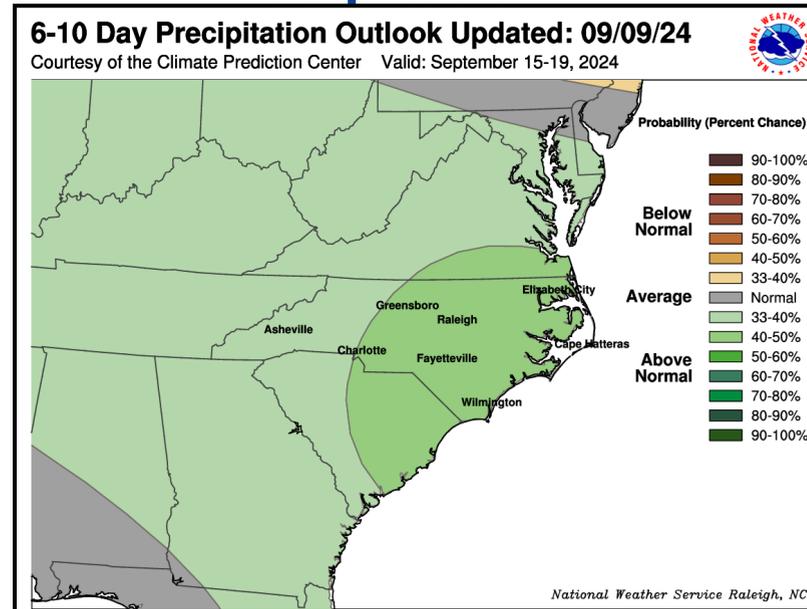
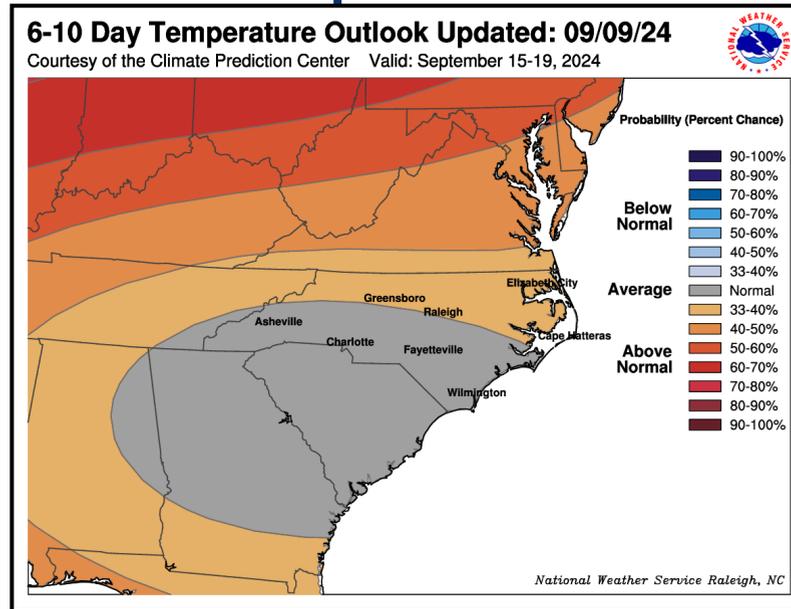
September 10, 2024
11:31 AM

Courtesy of the Climate Prediction Center (www.cpc.ncep.noaa.gov)

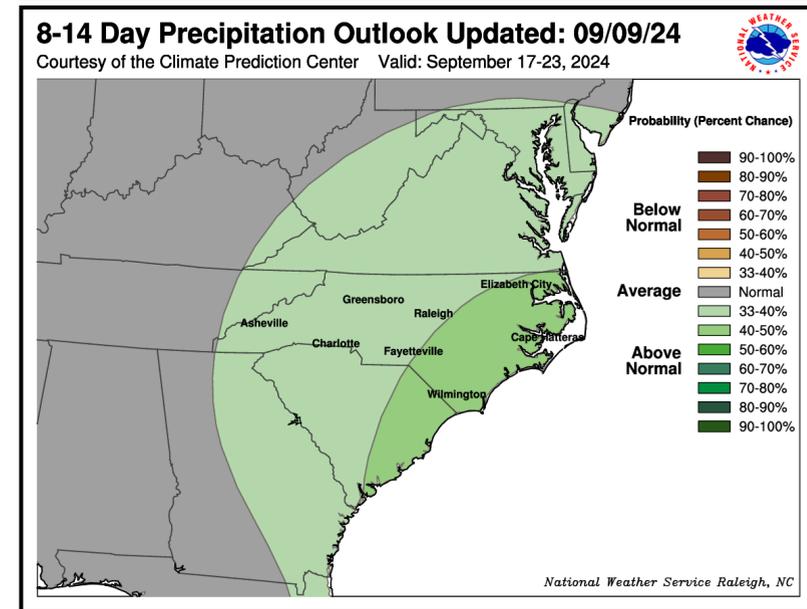
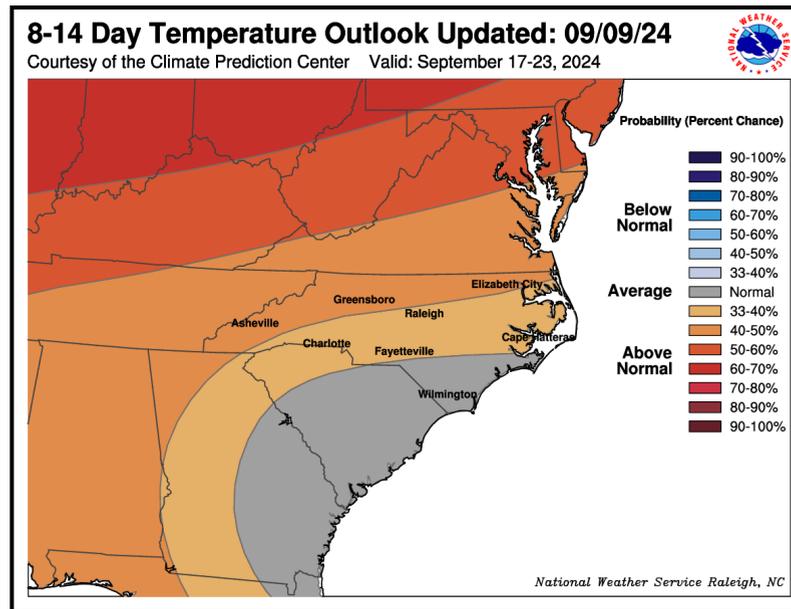
Temperature

Precipitation

6-10 Day



8-14 Day



- Extended outlooks provide probabilities of above or below normal temperature and rainfall
- Here, above normal rainfall is favored across eastern NC





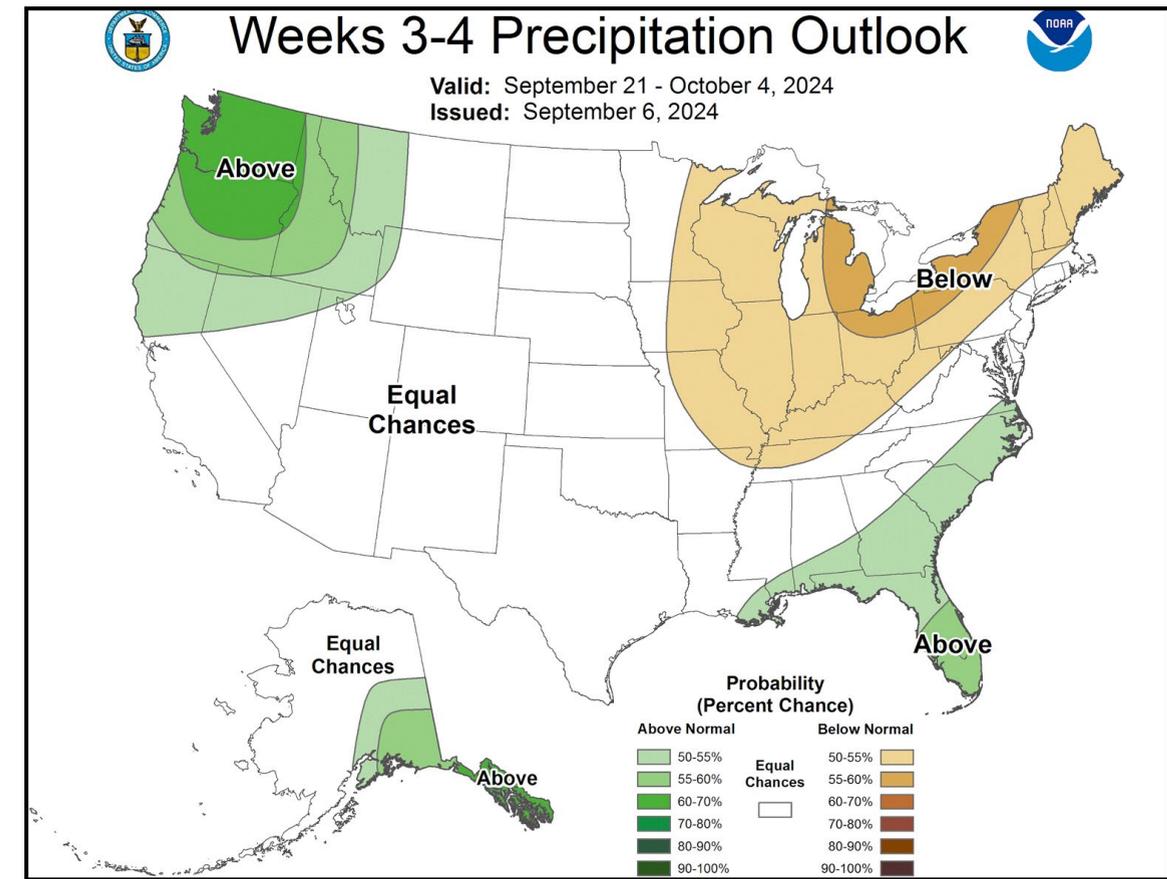
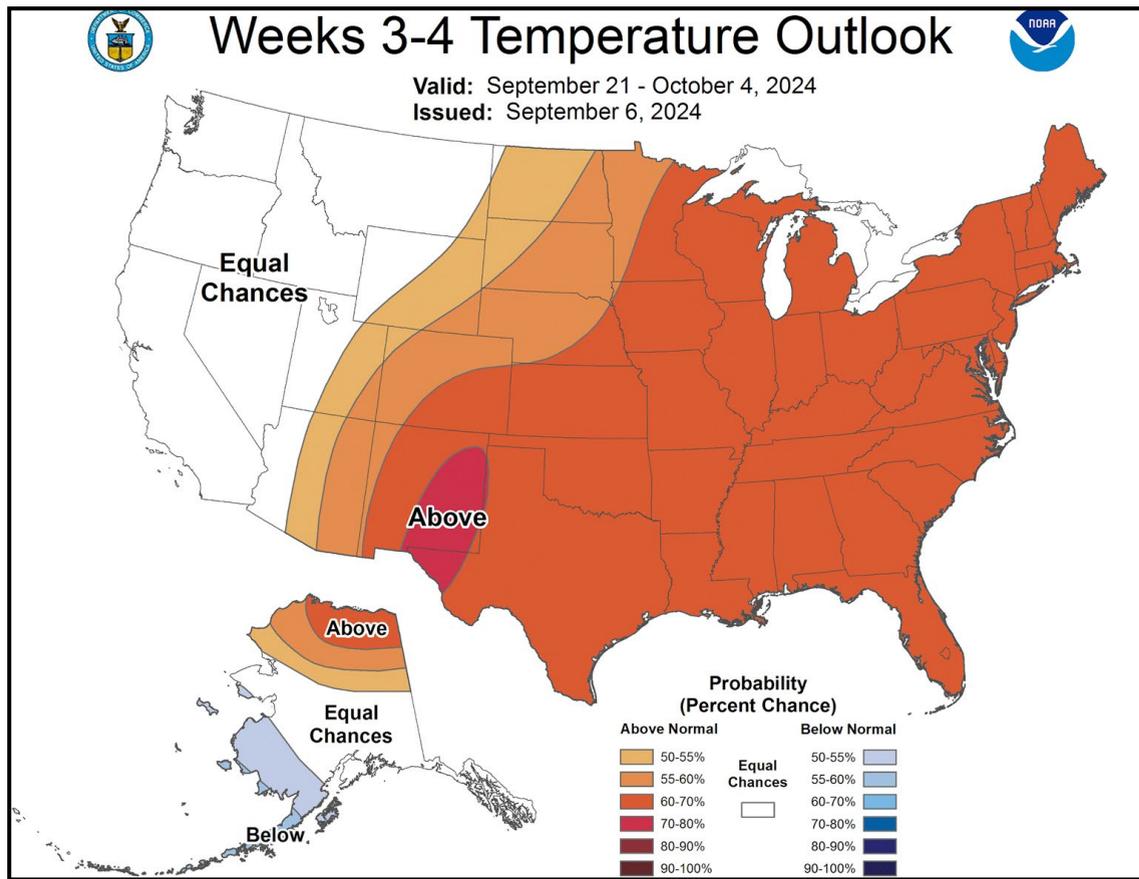
Extended (3-4 Week) Outlooks

September 10, 2024
11:31 AM

Courtesy of the Climate Prediction Center (www.cpc.ncep.noaa.gov)

Temperature

Precipitation





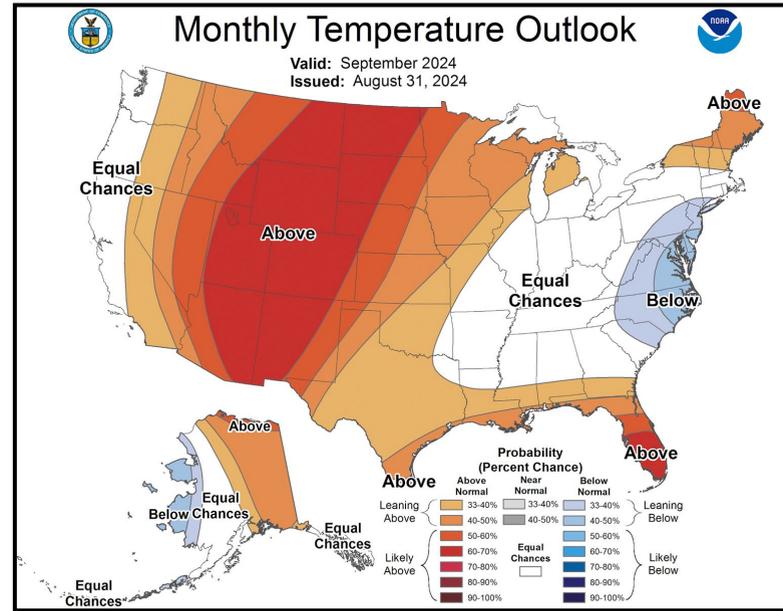
Seasonal Outlooks

September 10, 2024
11:31 AM

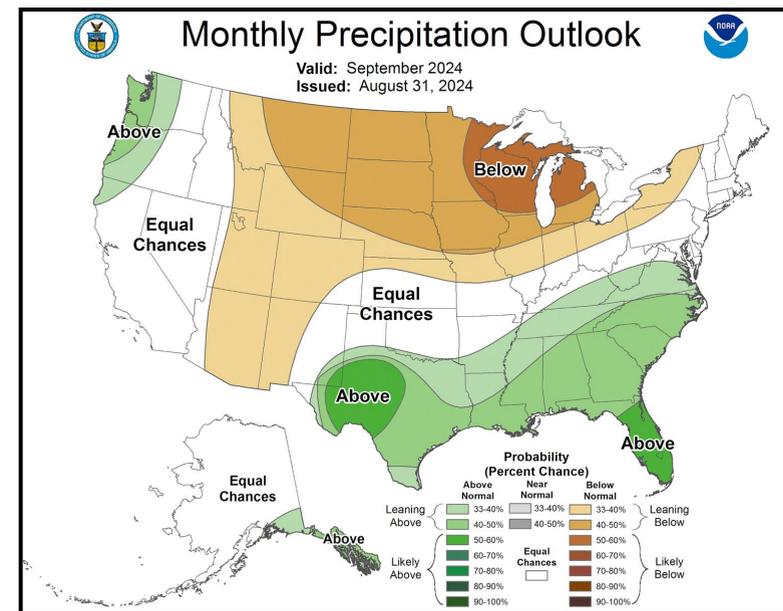
Courtesy of the Climate Prediction Center (www.cpc.ncep.noaa.gov)

One Month

Temperature

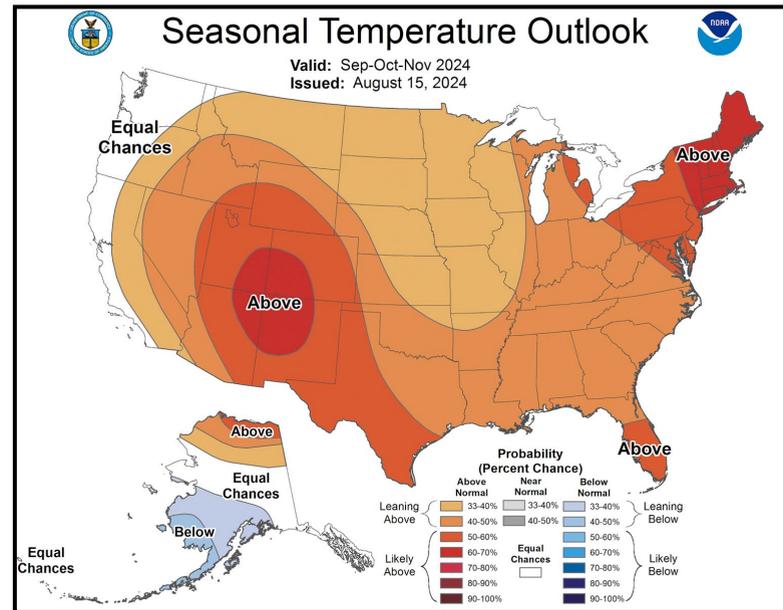


Precipitation

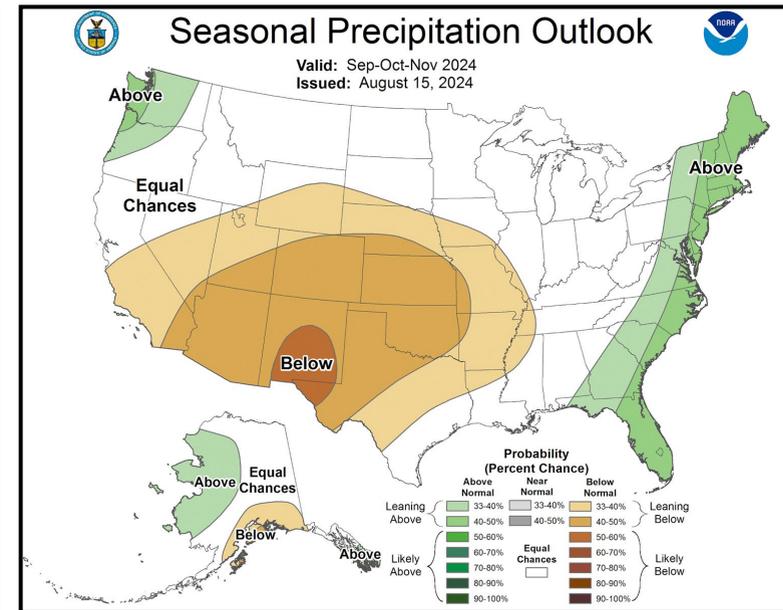


Three Months

Seasonal Temperature Outlook



Seasonal Precipitation Outlook





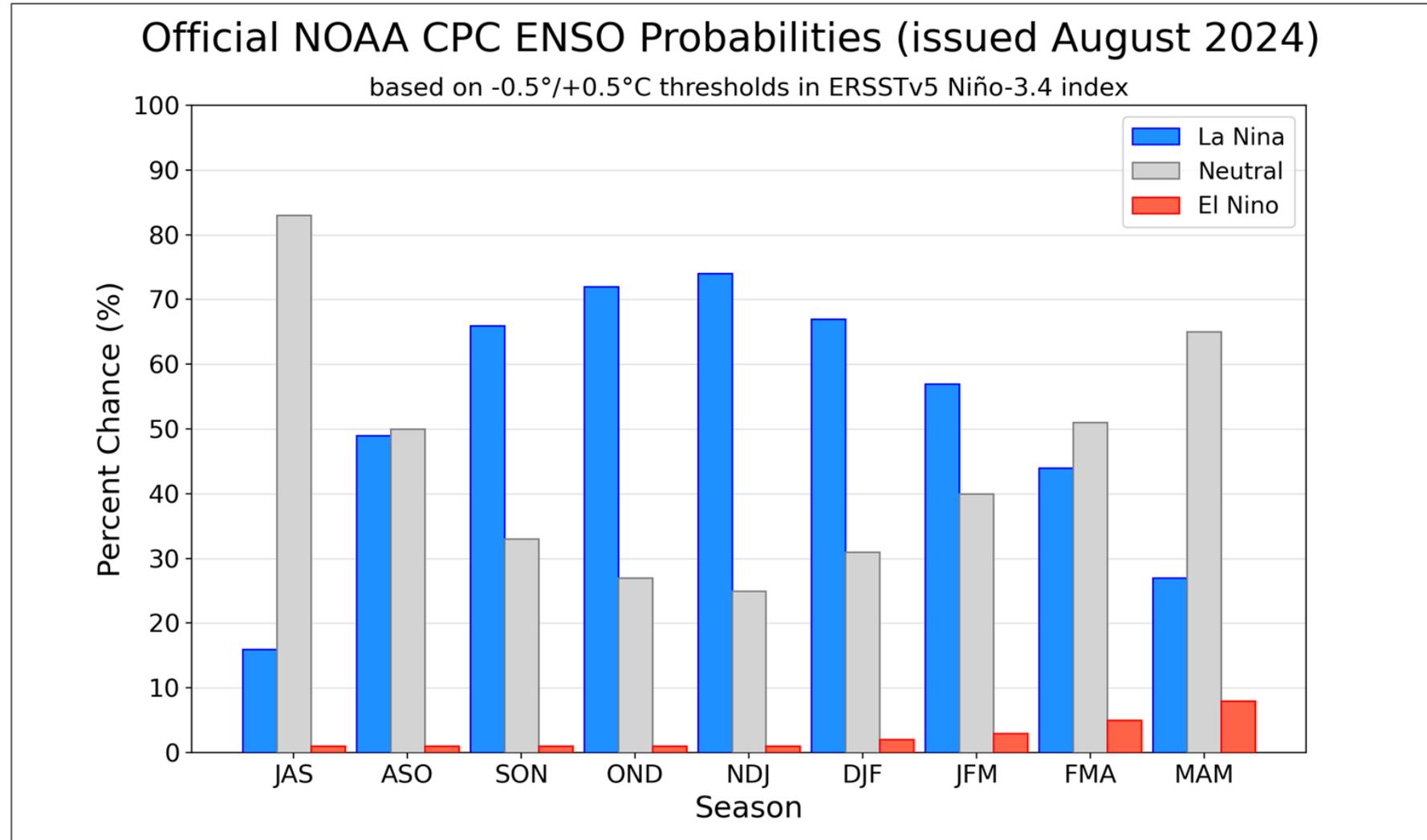
ENSO Forecast

September 10, 2024
11:31 AM

Courtesy of the Climate Prediction Center (www.cpc.ncep.noaa.gov)

ENSO Alert System Status: **La Niña Watch**

Synopsis: ENSO-neutral is expected to continue for the next several months, with La Niña favored to emerge during September-November (66% chance) and persist through the Northern Hemisphere winter 2024-25 (74% chance during November-January).





ENSO Forecast

Courtesy of NOAA's climate.gov

September 10, 2024
11:31 AM

