NOAA Climate Science and Services Monthly Climate Update

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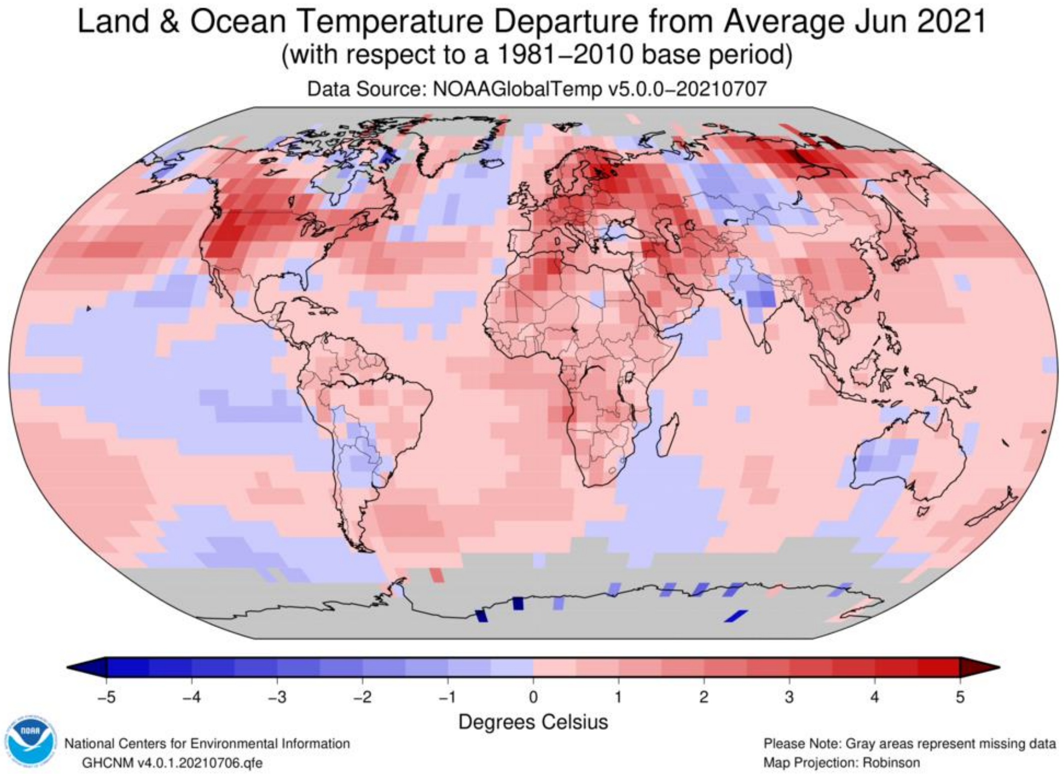
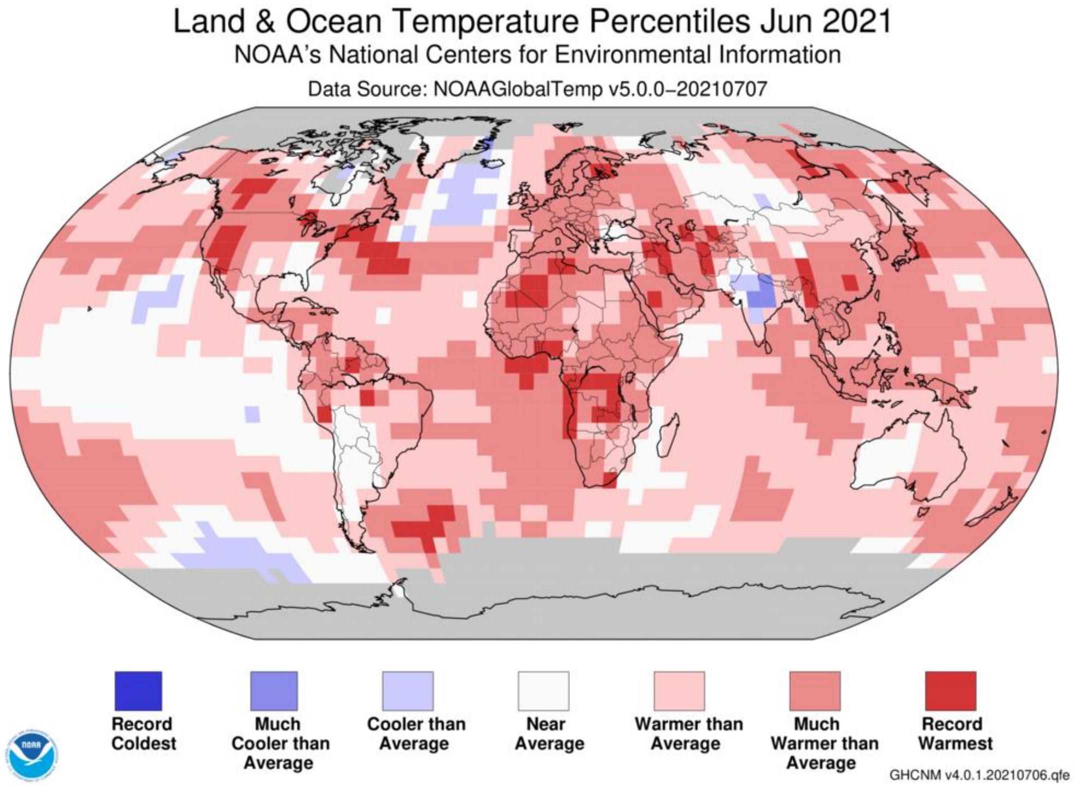
June 2021

Global Temperature

The global temperature record dates back to 1880 (142 years)





June 2021

- **Global Land & Ocean:** +0.88°C / +1.58°F; the 5th warmest June
- **Global Land:** +1.42°C / +2.56°F; warmest June
- **Global Ocean:** +0.68°C / +1.22°F; tied with 2014 as the 6th warmest June

Global Temperature

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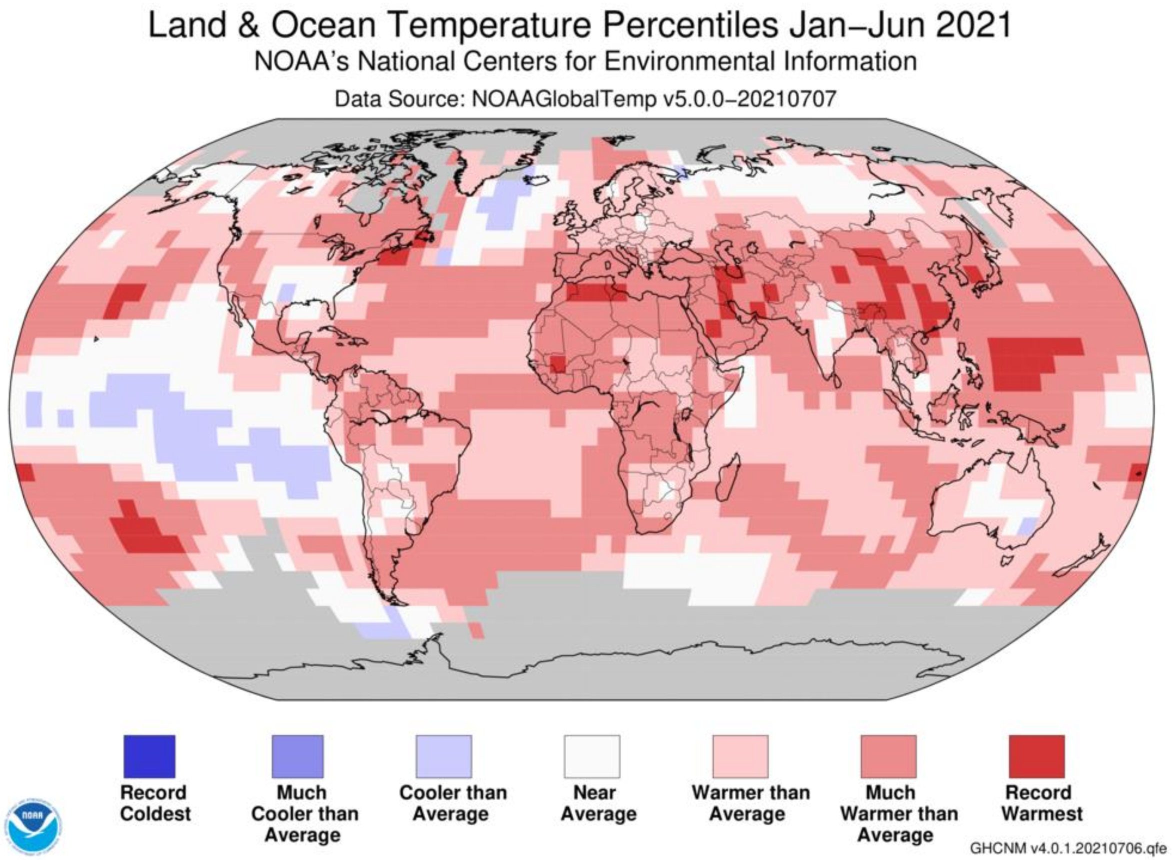
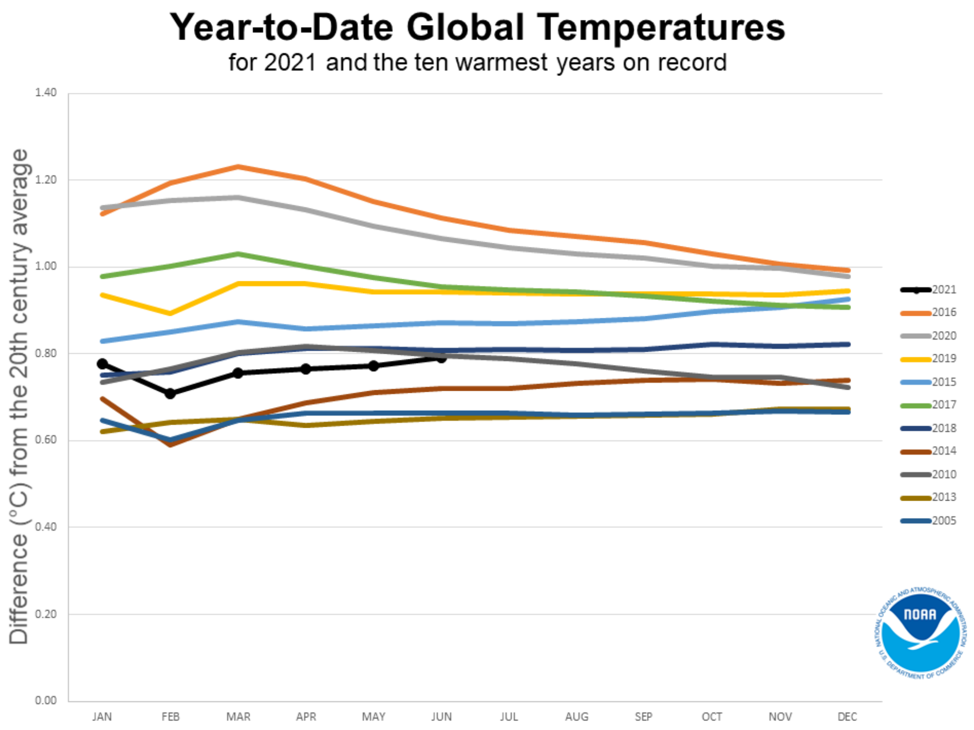




- **Global Land & Ocean:** +0.79°C / +1.42°F; 8th warmest January-June on record.

2021 Probability Ranking Outlook

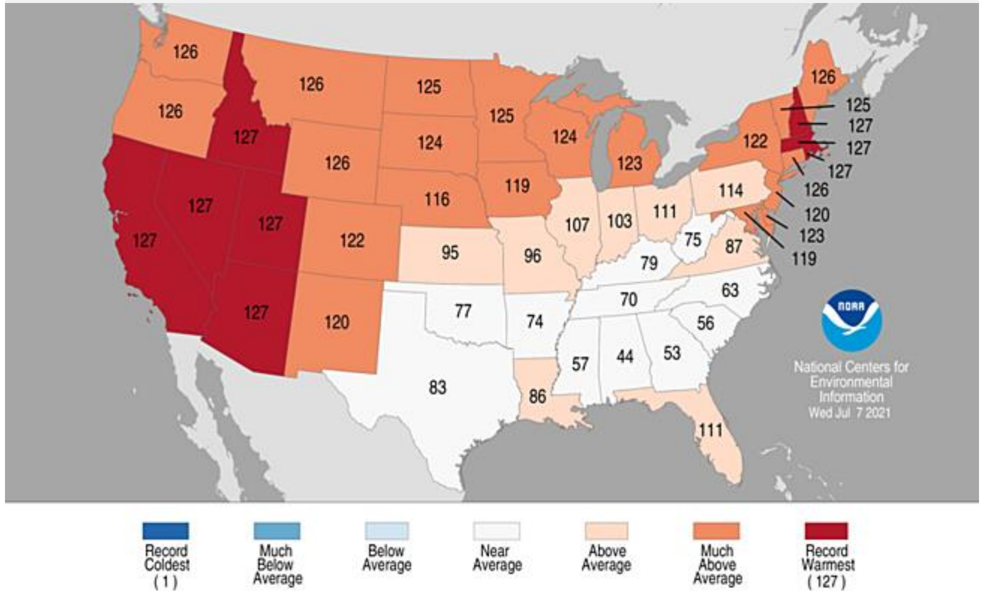
- <2% chance of a top 5 year
- Virtually certain that 2021 will be a top 10 year

Contiguous U.S. June 2021

Temperature: 72.6°F, +4.2°F, warmest June on record

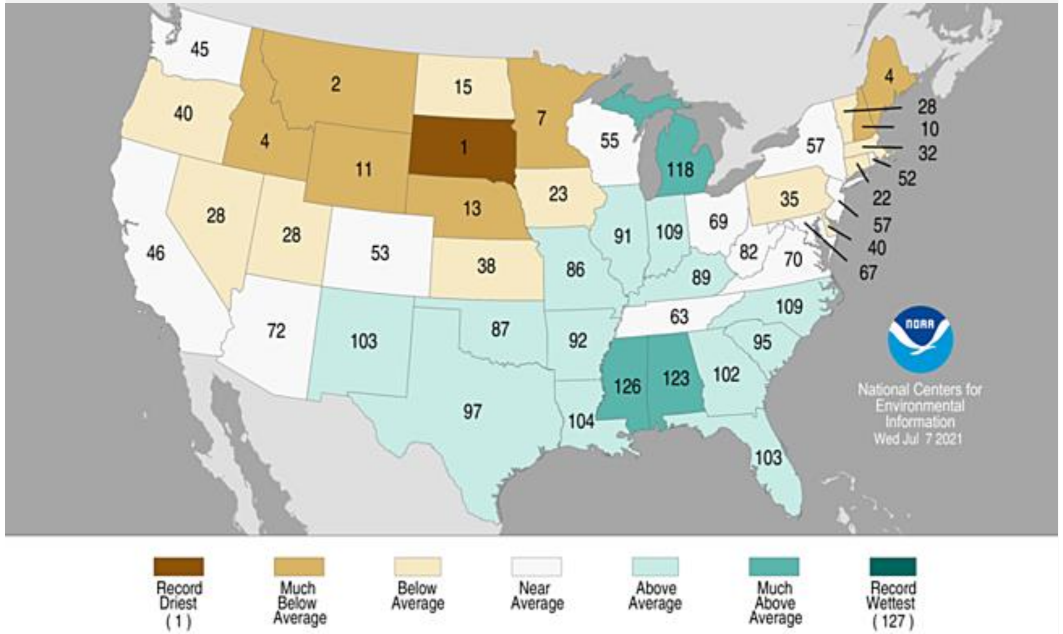
Precipitation: 2.93”, 0.00”, exactly average

Temperature Percentiles June 2021
Period: 1895-2021 (127 years)



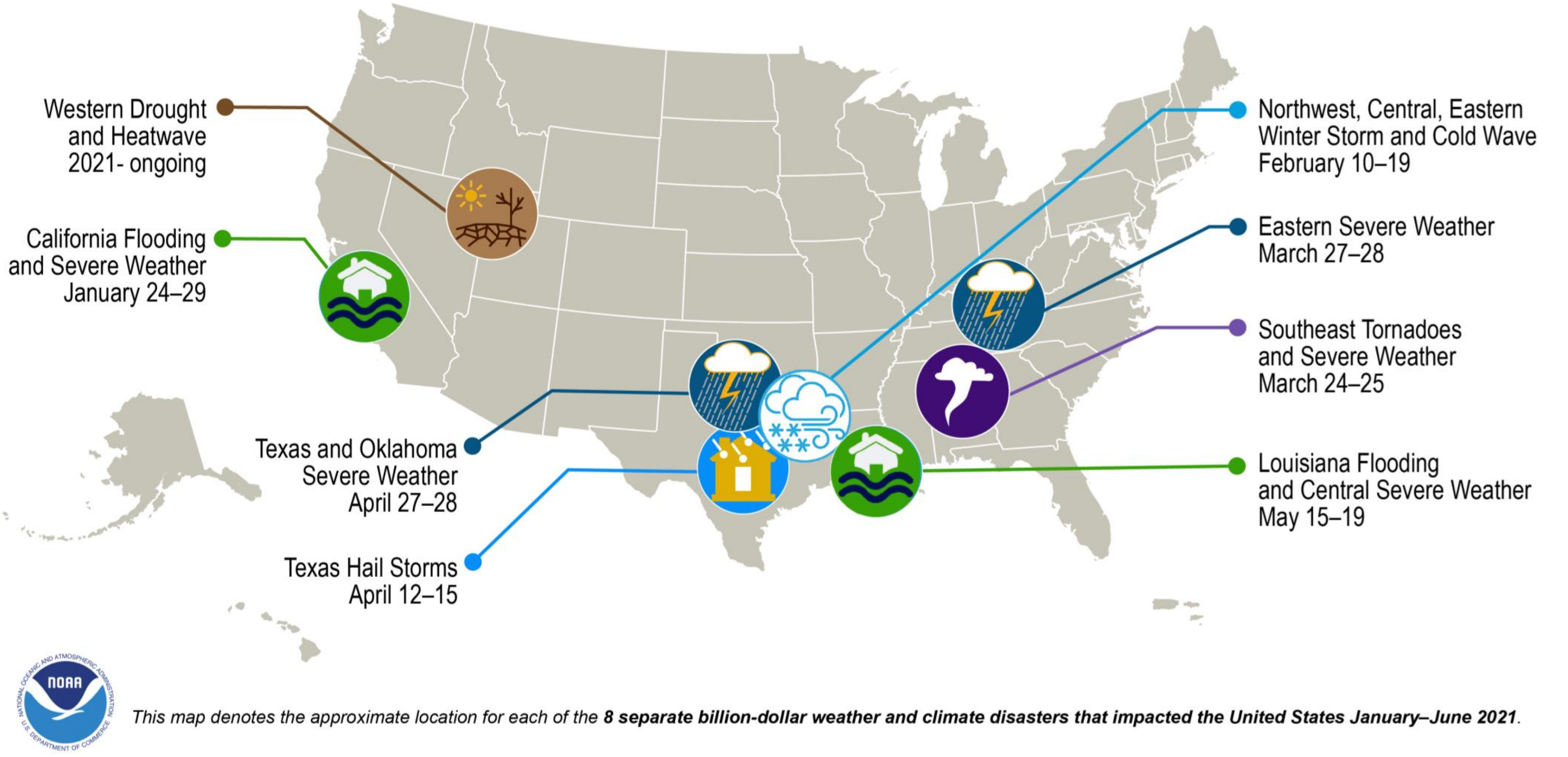
- Above-average temperatures across much of the nation. Record warm across the West and Northeast.
- About 15.2% of the contiguous U.S. had a record June – the largest June extent of record warm temperatures on record for the U.S.
- No state had a state-wide temperature that ranked below average.

Precipitation Percentiles June 2021
Period: 1895-2021 (127 years)



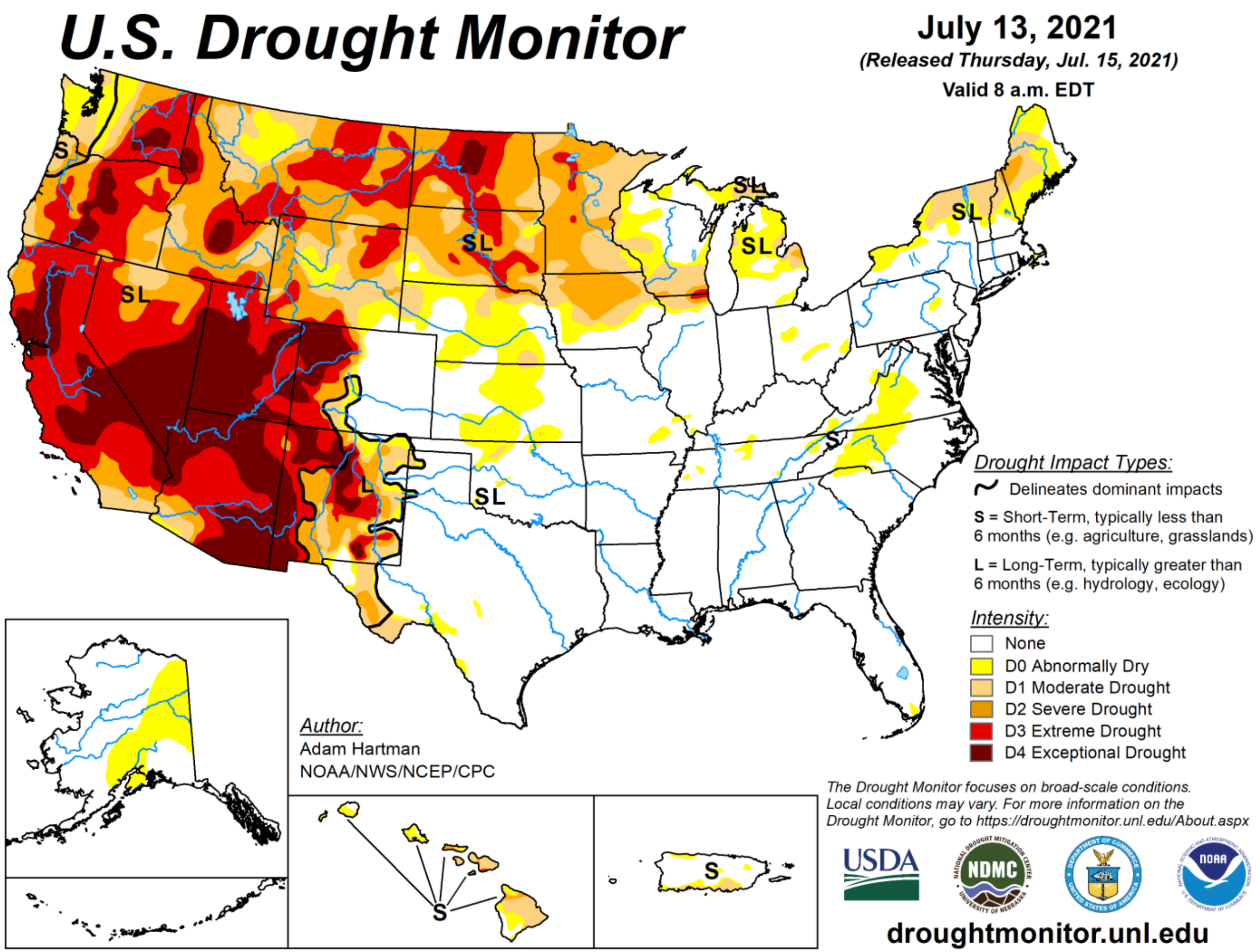
- Above-average precipitation across parts of the Deep South, Midwest, Great Lakes, Gulf Coast and Southeast.
- Drier-than-average conditions observed across the West, northern Rockies, northern and central Plains and the Northeast.

U.S. 2021 Billion-Dollar Weather and Climate Disasters



During January-June 2021, there were eight billion-dollar weather and climate disasters identified. https://www.ncdc.noaa.gov/billions/

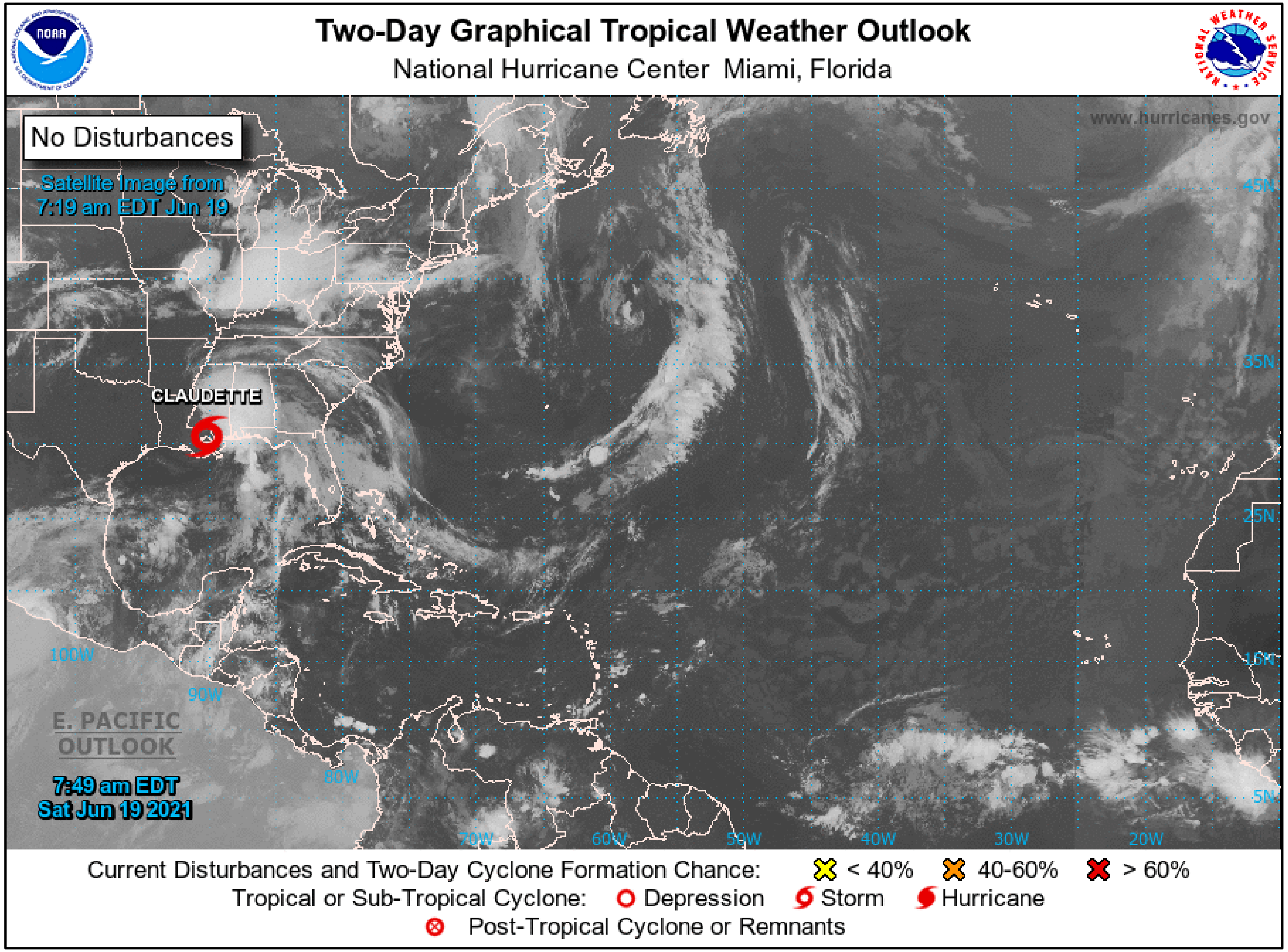
Current U.S. Drought



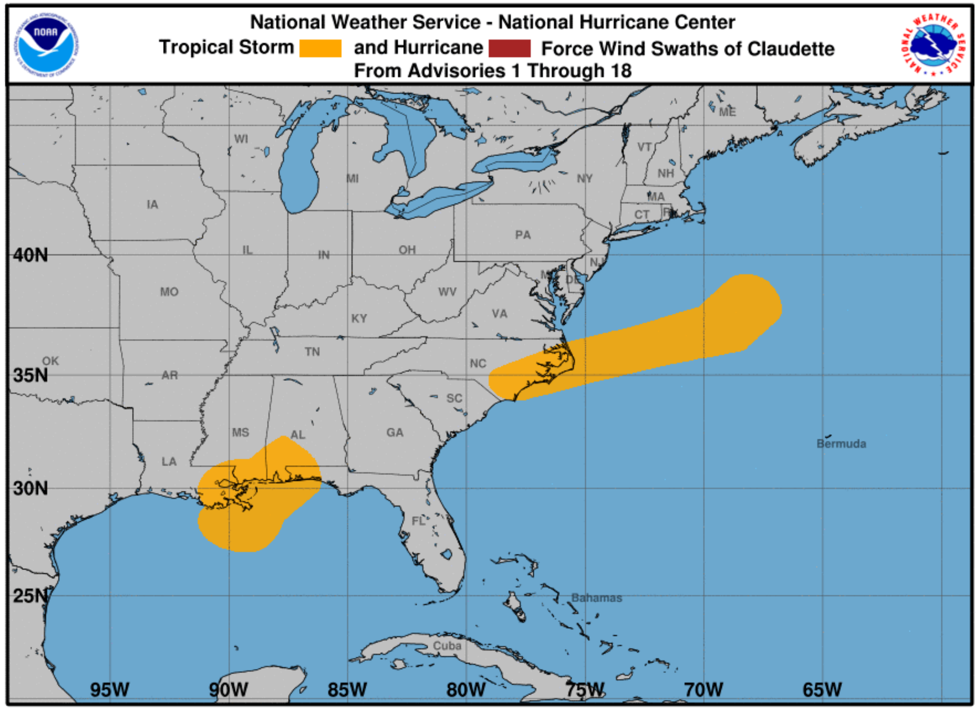
46% of Contiguous U.S. in Drought

Tropical Storm Claudette

- The National Hurricane Center began issuing advisories on Potential Tropical Cyclone Three on June 17th
- Was named by the National Hurricane Center on June 19th
- Formed after crossing the shoreline into Louisiana, but not the first Tropical Storm to form over land



Tropical Storm Claudette

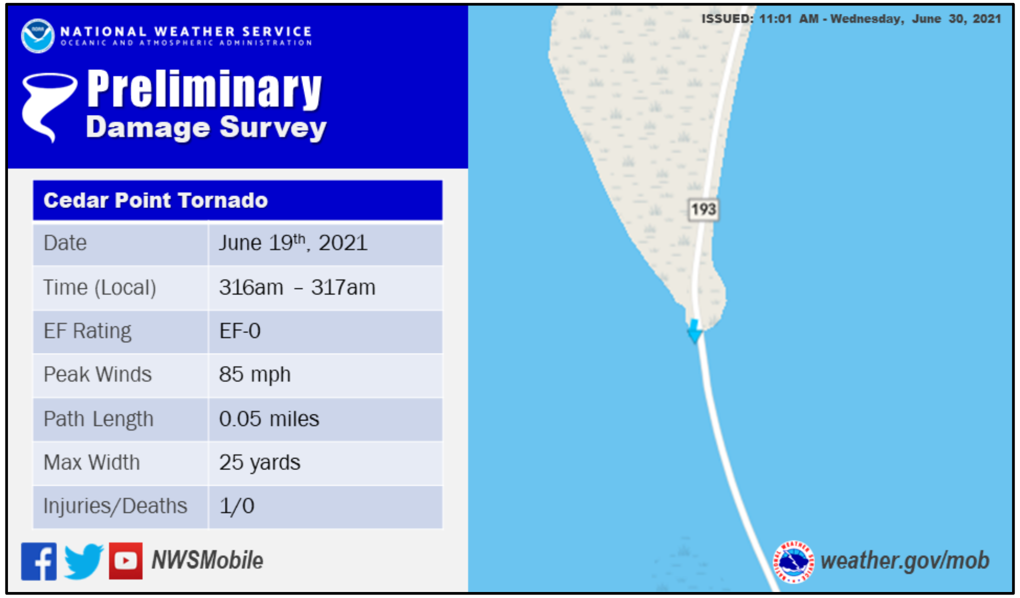


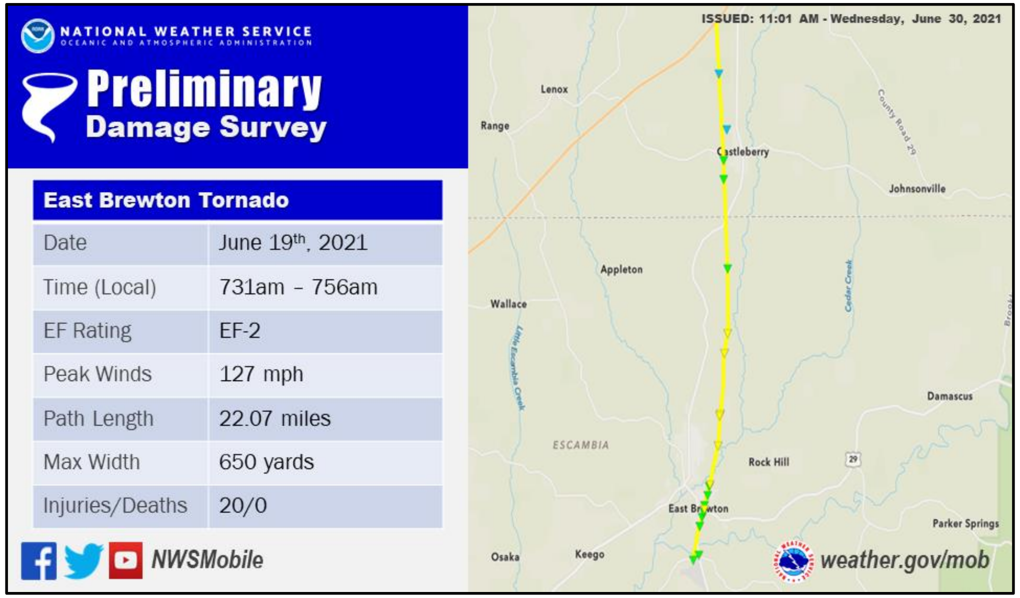
Storm Surge Along the Gulf

Location	Peak Inundation (ft, MHHW)	Time (Z)	Date
Bayou La Batre	3.67	1130	19-Jun
West Fowl River	2.99	1206	19-Jun
Coast Guard Sector, Mobile	2.96	1406	19-Jun
Mobile State Docks	2.71	1418	19-Jun
Chickasaw Creek	2.59	1606	19-Jun
Weeks Bay	2.54	1330	19-Jun
Dog River Bridge	2.39	1418	19-Jun
East Fowl River	2.27	1306	19-Jun

- Was downgraded to a depression, but restrengthened into a Tropical Storm over North Carolina on June 21st
- Wind gusts of 40 to 60 mph were reported along the Gulf Coast from Louisiana to Florida
- The highest wind gusts were from thunderstorms that developed east of the center of Claudette, with Pensacola International Airport reporting an 81-mph gust
- Produced storm surge of 1-4 feet including 4.43 feet above ground level at Waveland, MS

Tropical Storm Claudette





Claudette spawned a few tornadoes:

EF-2 tornado in Escambia County, AL

- Significant damage to the roof at W.S. Neal High School
- 20 injuries reported with this tornado

EF-0 tornado in Mobile County, AL

- Damage to Cedar Point Pier
- A 2x4 was launched through the window of a pickup truck causing the occupant to suffer minor injuries

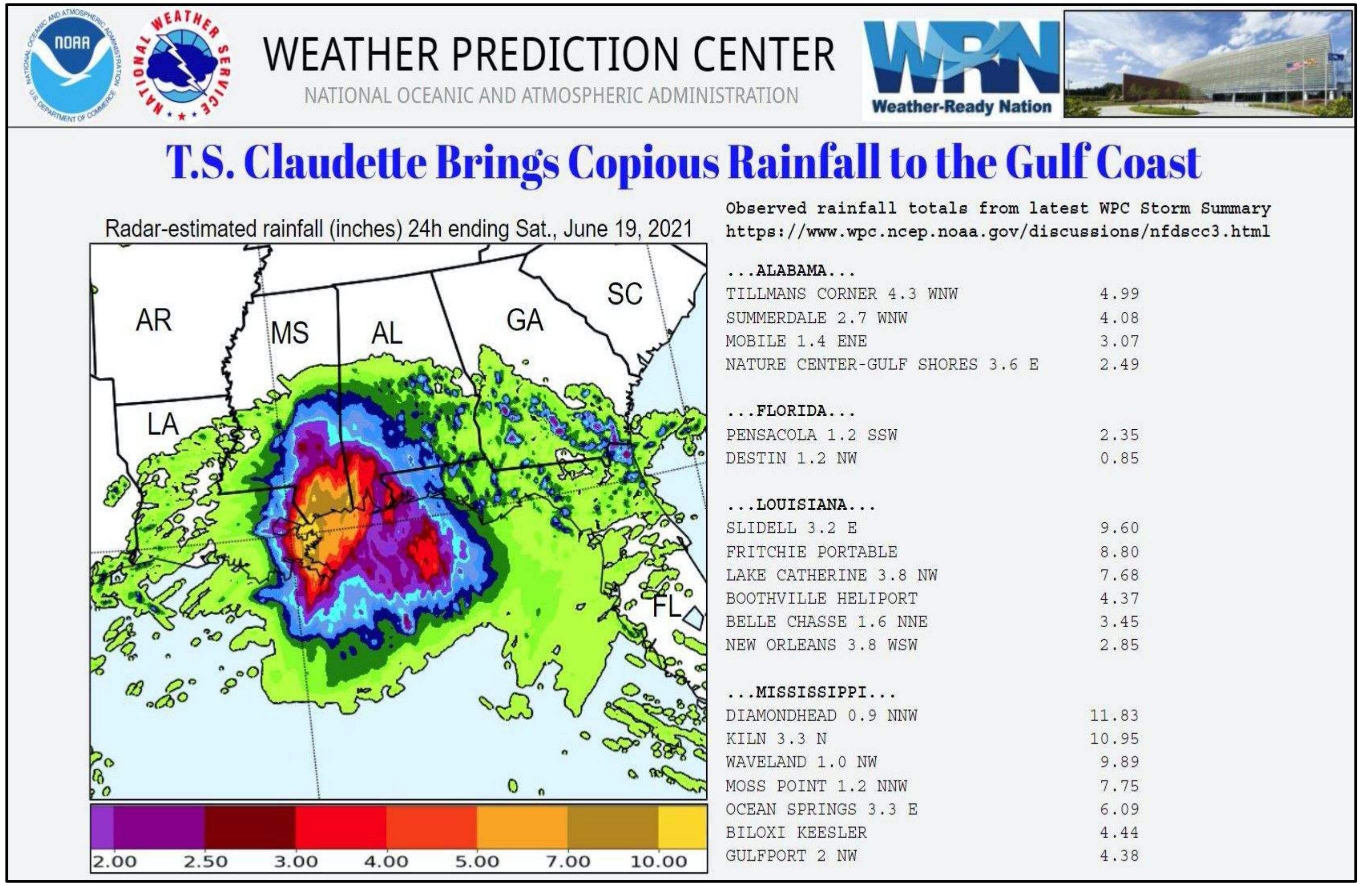
Tropical Storm Claudette

Tropical Storm Claudette produced heavy rainfall across the Southeast

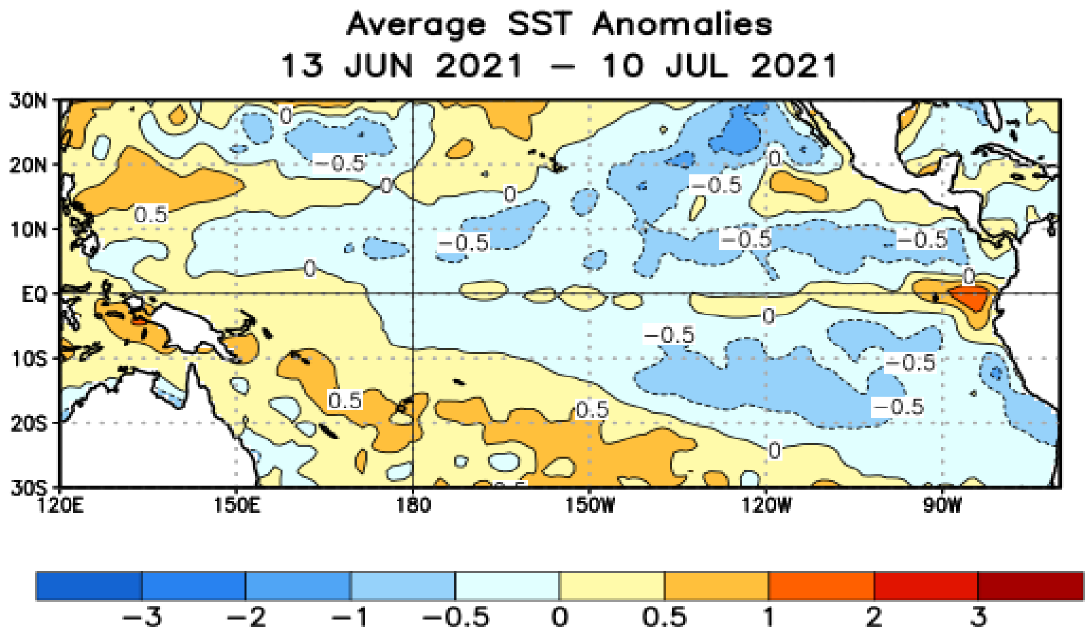
Almost 10 inches of rainfall fell in Slidell, LA causing localized flooding and prompting many water rescues

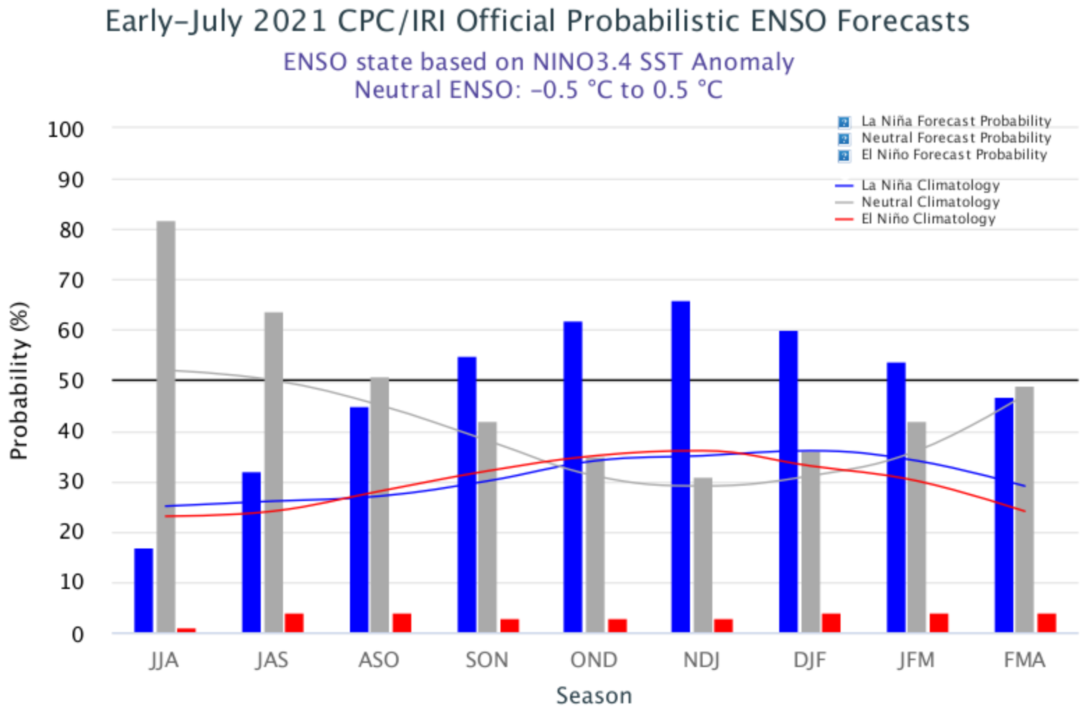
A total of **14 fatalities** were reported in association with Claudette:

- 10 from car accidents due to a 17-vehicle crash caused by hydroplaning
- 2 from fallen trees
- 2 from flooding



Sea Surface Temperatures and ENSO



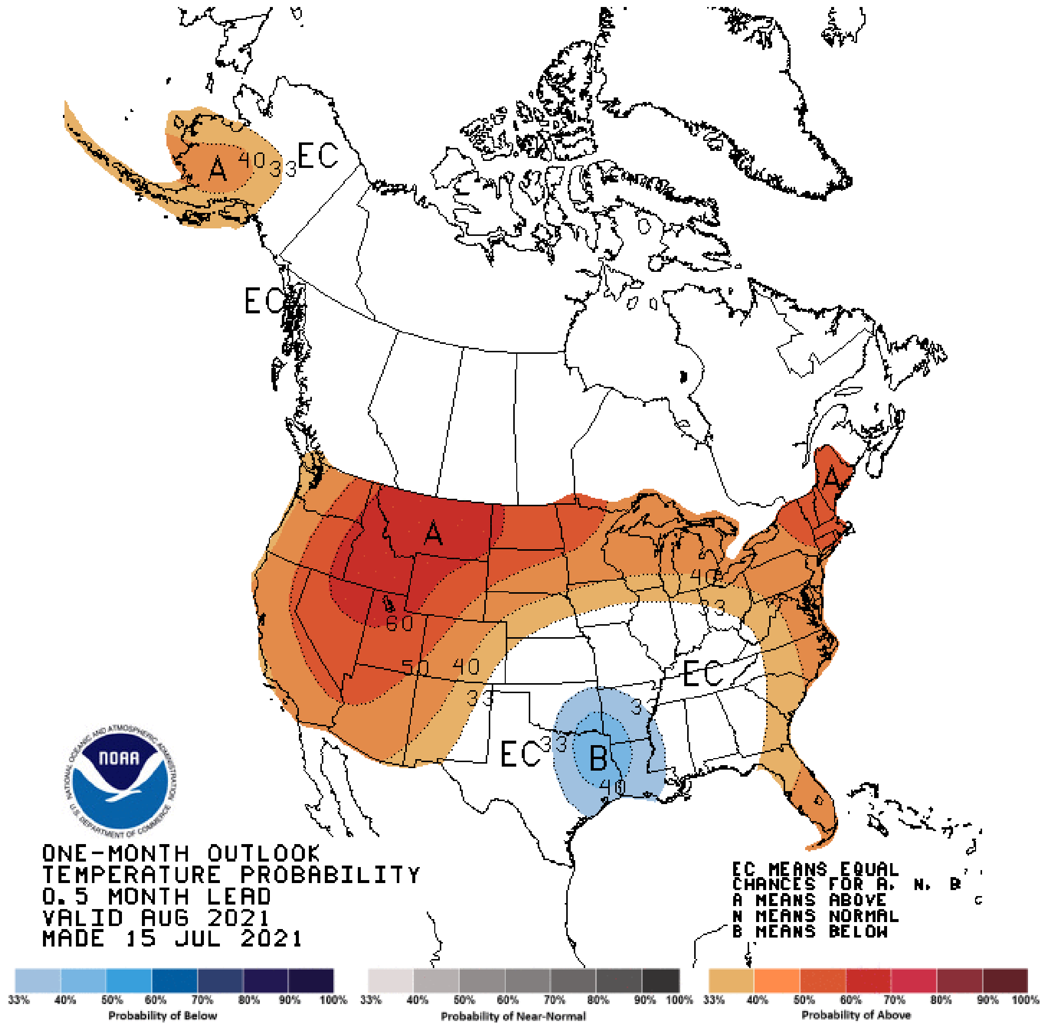


- Sea surface temperatures
  - Near average sea surface temperatures across most of the central and eastern Pacific Ocean.
  - Ocean and atmosphere observations indicate ENSO neutral conditions.
  - Easterly trade winds are normal.
  - Precipitation is less than normal over the central Pacific, similar to La Niña.

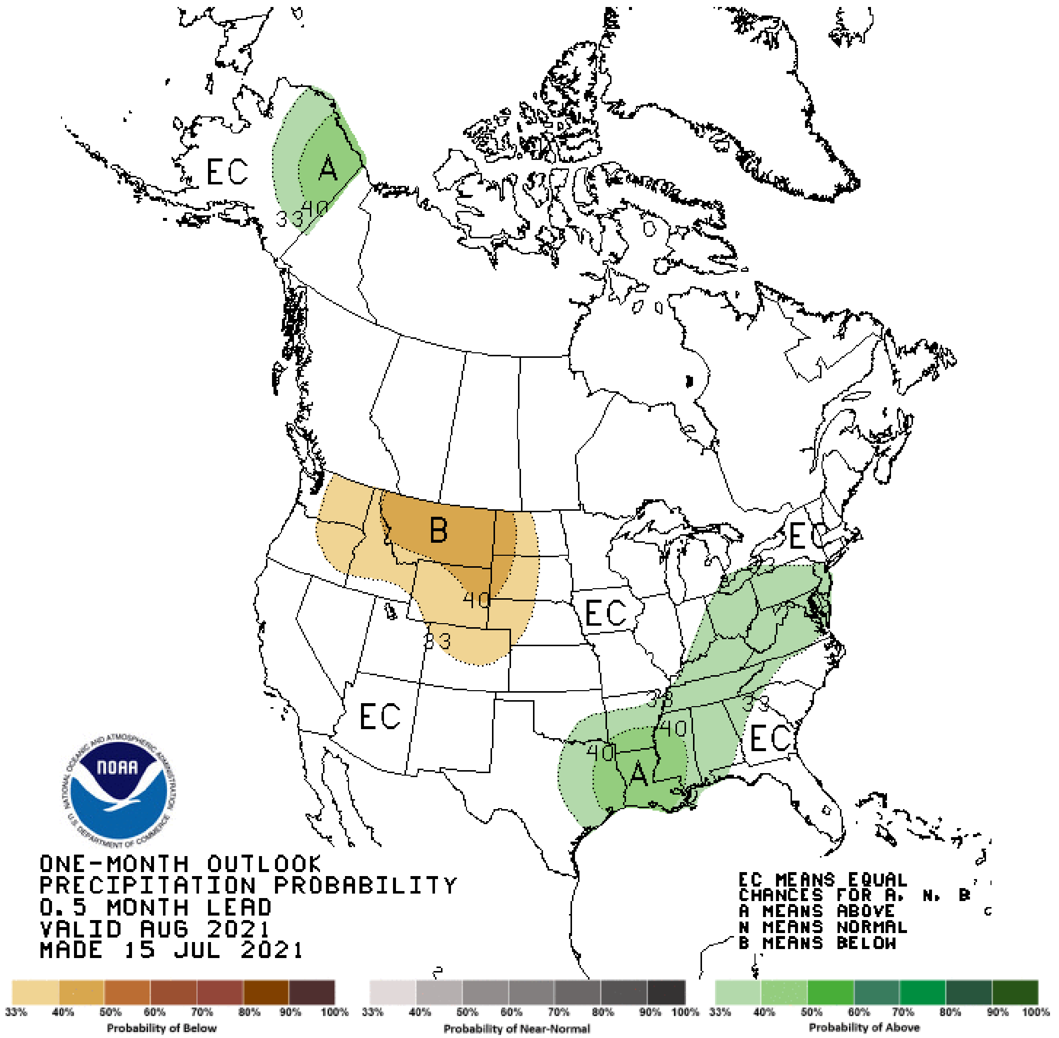
- ENSO forecast
  - ENSO neutral conditions likely through summer.
  - A second year of La Niña is likely to develop before winter, with greater than a 60 percent chance.

Monthly Forecast (August)

August Average Temperature Probability

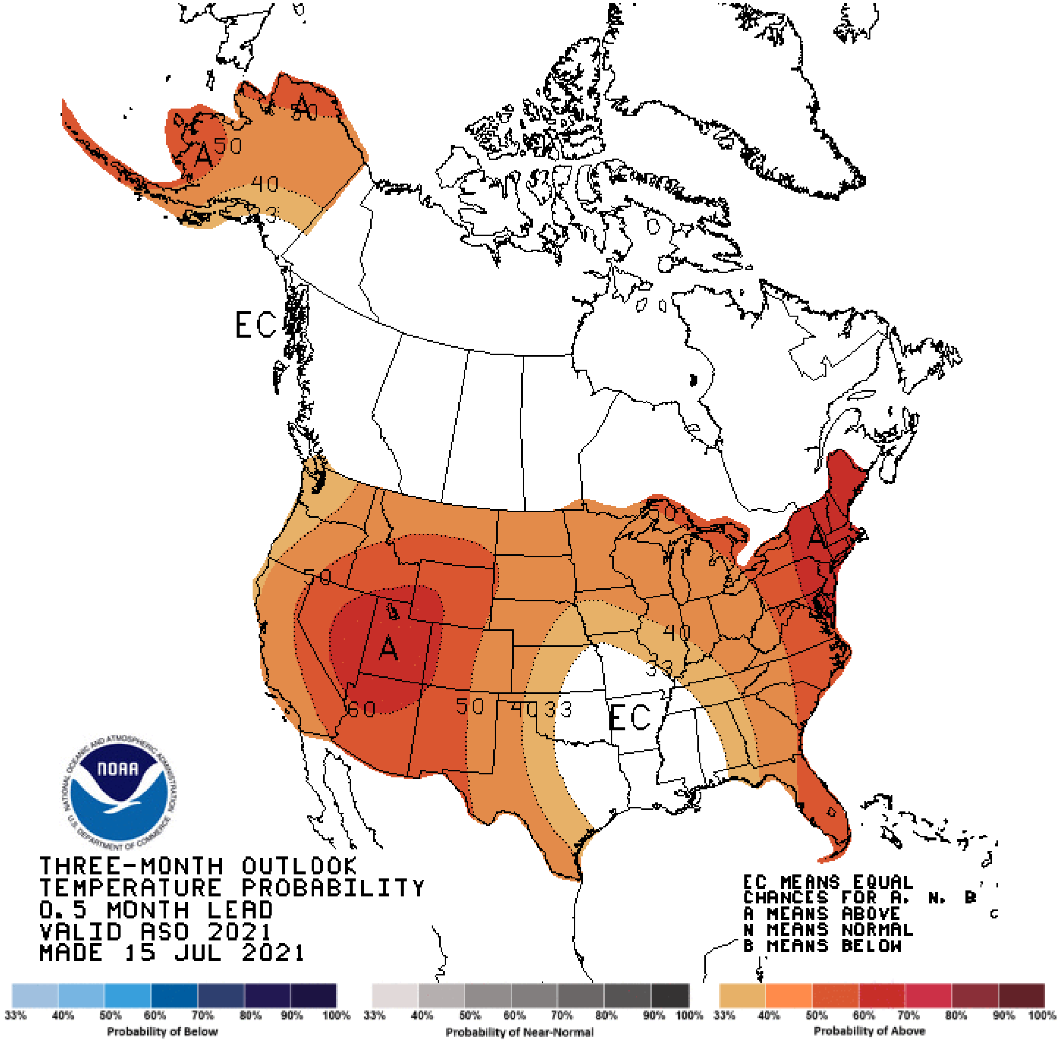


August Total Precipitation Probability

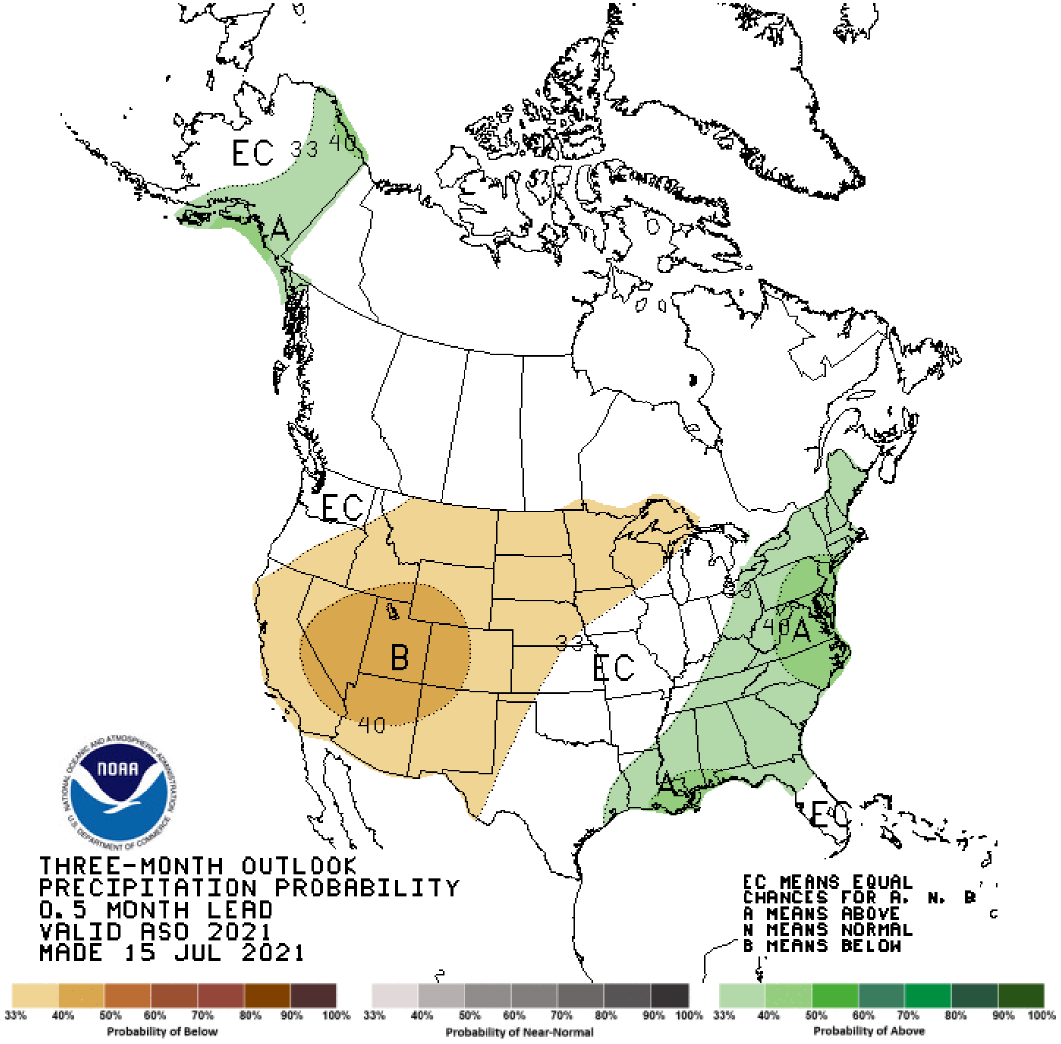


Three-month Forecast (Aug, Sep, Oct)

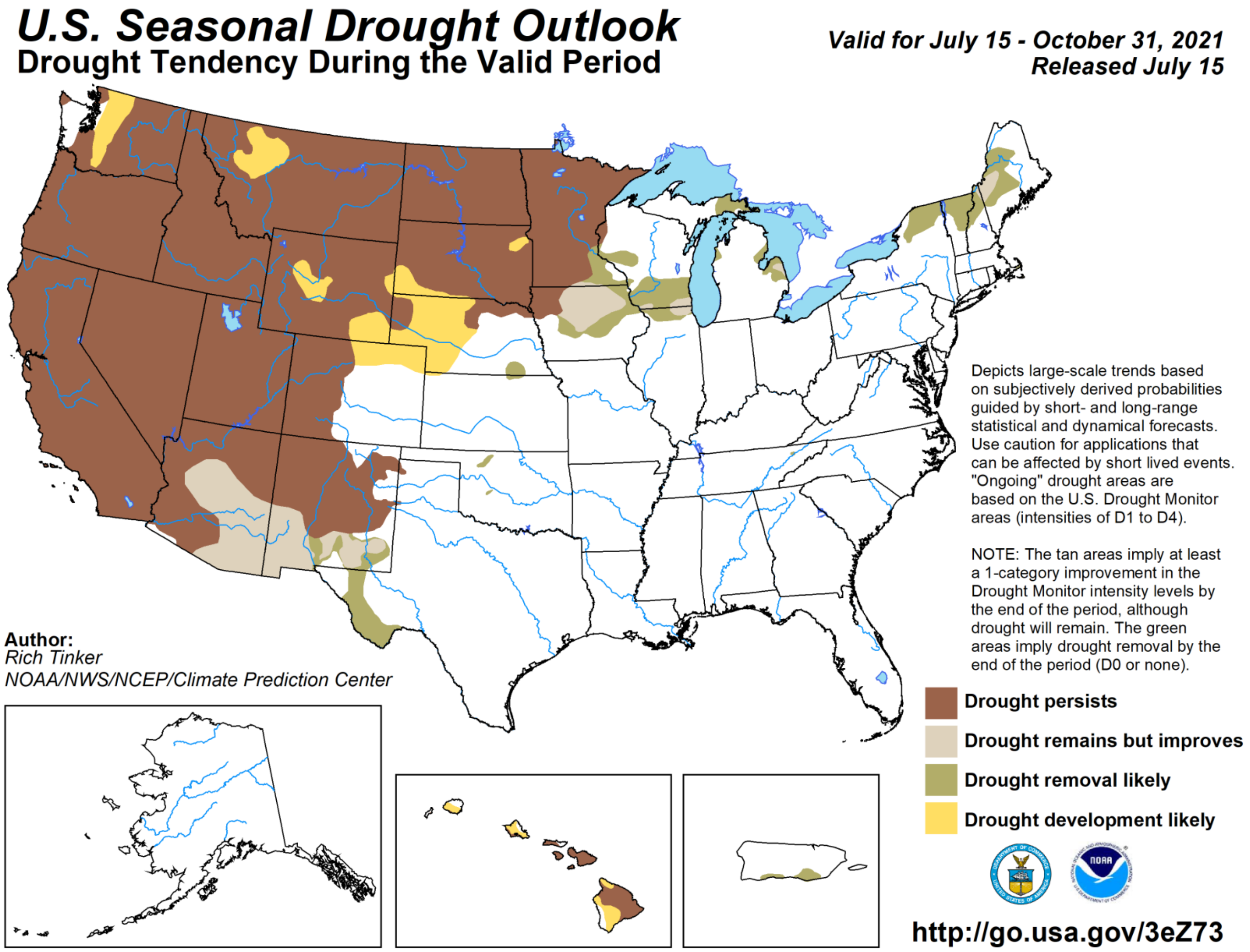
Aug-Sep-Oct Average Temperature Probability



Aug-Sep-Oct Total Precipitation Probability



U.S. Drought Outlook



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

Great Basin Coordination Center: https://gacc.nifc.gov/gbcc/

U.S. Drought Monitor: www.drought.gov

Climate Portal: www.climate.gov

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