Late Spring and Summer Weather Outlook

Water Operations Committee Meeting
May 19, 2021
Past 30 Days Rainfall Accumulation

San Angelo

Austin

Houston

San Antonio

Victoria

Del Rio

Houston
Past 30 Days Rainfall Departure From Normal
Current Soil Moisture Anomaly
Only Mild Drought Across Basin

U.S. Drought Monitor
Texas

May 11, 2021
(Released Thursday, May 13, 2021)
Valid 8 a.m. EDT

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information, visit the Drought Monitor website at https://droughtmonitor.unl.edu/About.aspx

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Western Regional Climate Center

droughtmonitor.unl.edu
May 2021 – La Niña has Ended

Difference from average sea surface temperature observations
3 May to 9 May 2021

DATA: BOM 5% I
Climatology baseline: 1961 to 1990
© Commonwealth of Australia 2021, Australian Bureau of Meteorology
Weekly average: 9 May 2021
Created: 10/05/2021
Neutral Pacific Forecast Through Summer

Early–May 2021 CPC/IRI Official Probabilistic ENSO Forecasts

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

La Niña Forecast Probability
Neutral Forecast Probability
El Niño Forecast Probability
La Niña Climatology
Neutral Climatology
El Niño Climatology

Season

April May June
May June July
June July August
July August September
August September October
September October November
October November December
November December January
December January February

Probability (%)
Influences on Summer 2021 Pattern

- La Niña has ended
- Neutral Pacific through summer
- Rainfall forecast trending near normal
- Pacific and Atlantic oceans are both warmer than normal — this situation tends to direct hottest temperatures across central and western United States
- Gulf of Mexico is much warmer than normal
- Another very active tropical season forecast
European Centre for Medium-Range Weather Forecasts June-August Rainfall Anomaly
European Centre for Medium-Range Weather Forecasts Rainfall Anomaly thru July 2nd
ECMWF June-August Temperature Anomaly
Climate Forecast System Version 2
June-August Rainfall Anomaly
CFSv2 June-August Temperature Anomaly
National Weather Service Summer Outlook

Temperature

Precipitation
NWS Fall and Winter Rainfall Outlook
Summer 2021 Outlook

• Hot summer ahead; temperatures averaging 1.5-2 degrees warmer than normal
• Close to 40 triple-digit days
• Rainfall averaging above normal May and June
• Near normal rainfall July and August
• Another very active tropical weather season forecast
• Some evidence La Niña could return this fall
Outlook for 2021 Atlantic Hurricane Season
2020 Atlantic Hurricane Season

2020 Hurricane Season Tracks

As of Nov. 30

Depression  Storm  Hurricane  Cat 3+
Atlantic Waters Much Warmer Than Normal
## 2021 Forecast as of 8 April 2021

<table>
<thead>
<tr>
<th>Forecast Parameter</th>
<th>CSU Forecast</th>
<th>1981-2010* Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Named Storms (NS)</td>
<td>17</td>
<td>12.1</td>
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<tr>
<td>Named Storm Days (NSD)</td>
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<td>Hurricanes (H)</td>
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<td>Hurricane Days (HD)</td>
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<td>Major Hurricanes (MH)</td>
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<tr>
<td>Major Hurricane Days (MHD)</td>
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<td>6.2</td>
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<tr>
<td>Accumulated Cyclone Energy (ACE)</td>
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<td>106</td>
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<tr>
<td>Net Tropical Cyclone Activity (NTC)</td>
<td>160</td>
<td>116</td>
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</tbody>
</table>

*CSU will change its climatology from 1981-2010 to the new climatology that NOAA decides to use with its seasonal outlooks*