Assessing Weather and Climate Extremes: Local and Regional Tools

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SCIPP Tools: southernclimate.org
Data Tools

**Southern US Drought Tool**

This tool displays information on drought severity and the amount of precipitation needed to get out of drought. Users can view precipitation statistics (e.g., rainfall total, departure from normal, % of normal, and standard precipitation index) by climate division for any state in the SCIPP region. Users can also select an end date and the time period (30, 60, 90, 180, 365 days) for which they would like to view the statistics. Data are provided in table and map formats, and the normals are based on 1981-2010 averages. | Tutorial on YouTube

**Average Monthly Temperature and Precipitation Tool**

This tool displays information on how a particular year’s temperature or precipitation records compare to normal (i.e., 30-year average for the period 1981-2010). Users can view the information in a graph by climate division for any state in the United States. A mouse-over function allows the user to view monthly values. | Tutorial on YouTube

**Historical Climate Trends Tool**

This tool displays precipitation and temperature trends for the period of the instrumental record, 1895-Present. Users can view the long term average (horizontal line), 5-year moving average, and yearly average by climate division and season for any state in the lower 48 states. Data are provided via a graph and a mouse-over function allows the user to view yearly values. | Tutorial on YouTube

**Climograph Tool**

This tool displays daily temperature and rainfall values for a specified observation site and year. Data are available from 1990-Present. The data are displayed in a graph that compares the observations and the 1981-2010 normals (i.e., 30-year average). | Tutorial on YouTube

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**SURGEDAT Storm Surge Tools**

SURGEDAT archives historical storm surge data. In fact, SURGEDAT is the world’s most comprehensive storm surge database, with more than 560 global peak storm surges since 1880. More than 300 of these events occurred in the United States. The SURGEDAT website hosts three different storm surge tools: The Global Peak Surge Map, Historical Surge/ Hurricane Maps, and Interactive Surge Maps. Each tool is slightly different in the functionality and geographic area of coverage.

**Water Reservoir Data Visualization Tool**

This tool displays water data for reservoirs located in Texas, Oklahoma and Louisiana. Information provided includes a reservoir cross-section plot that highlights current elevation, dead-pool elevation, and conservation pool elevation, a summary of physical reservoir information, a time-series of reservoir levels, elevation-area-capacity curves for each reservoir, and precipitation data. Reservoir data sources include the Texas Water Development Board, USGS, and US Army Corps of Engineers.
Southern US Drought Tool

30-Day Precip For OK - Feb 18, 2017 through Mar 19, 2017

<table>
<thead>
<tr>
<th>Climate Division</th>
<th>Total Rainfall</th>
<th>DFN</th>
<th>% of Normal</th>
<th>Driest Rank</th>
<th>Driest on Record</th>
<th>Wettest on Record</th>
<th>SPI</th>
<th>Similar Season in Last 30 yrs (Score)</th>
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<tbody>
<tr>
<td>CD 1</td>
<td>0.12</td>
<td>-1.19</td>
<td>9</td>
<td>5/120</td>
<td>0.03(1910)</td>
<td>4.59(1922)</td>
<td>-1.76</td>
<td>D3 1996(8.67)</td>
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<td>37.6</td>
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<td>9.43(1993)</td>
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<td>27</td>
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<td>0.00(1904)</td>
<td>4.84(2004)</td>
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<td>0.11(1950)</td>
<td>8.88(1993)</td>
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<td>1987(8.69)</td>
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<td>26/122</td>
<td>0.31(1910)</td>
<td>12.40(1945)</td>
<td>-0.82</td>
<td>D0 1992(9.16)</td>
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<td>54.3</td>
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<td>0.00(1989)</td>
<td>6.30(1990)</td>
<td>-0.01</td>
<td>2001(9.16)</td>
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<td>38.1</td>
<td>28/124</td>
<td>0.08(1972)</td>
<td>10.93(1945)</td>
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<td>D0 2011(8.86)</td>
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<td>CD 9</td>
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<td>42.1</td>
<td>15/109</td>
<td>0.55(1902)</td>
<td>14.39(1945)</td>
<td>-1.12</td>
<td>D1 2010(8.60)</td>
</tr>
</tbody>
</table>

Percent of Normal

Map of United States

Summary of Drought Conditions

- D1: Dry
- D2: Moderately Dry
- D3: Severe Drought
- D4: Extreme Drought
- D5: Exceptional Drought

U.S. Data provided by National Oceanic and Atmospheric Administration (NOAA).
SCIPP Historical Climate Trends Tool

- **State**
- **Climate Division**
- **Season**
- **Variable**

**Season**
- Annual
- Seasonal Spring
- Seasonal Summer
- Seasonal Autumn
- Seasonal Winter
- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

**Variable**
- Temperature
- Precipitation
SCIPP Historical Climate Trends Tool
SCIPP Historical Climate Trends Tool

Climate Trends – State: OK, Season: Annual

Year


Precipitation (inches)

13.77 18.77 23.77 28.77 33.77 38.77 43.77 48.77 53.77 58.77
SCIPP Water Reservoir Data Visualization Tool
Reservoir Summary for: 2016-11-13
Percent Full: 93.00
Current Elevation (ft): 93.0
Dead Pool Elevation (ft): 55.5
Dead Pool Capacity (ac-ft): 359,522
Conservation Storage (ft): 239,073.7
Flood Pool Elevation (ft): 94
Flood Pool Capacity (ac-ft): 2,972,633

Reservoir Levels
Reservoir Levels For LK CORPUS CHRISTI NR MATHIS, TX (08210500)

Elevation vs. Capacity

Precipitation Data
Daily Precipitation data for 410145

Select Precipitation Station
ALICE INTL AP [410145]