

NWS Houston, Texas November 2019 Regional Climate Summary

Produced by Jimmy Fowler

... Cool and Dry November. . .

Multiple cold fronts pushed through southeast Texas through the month of November creating a bit of a temperature rollercoaster. High temperatures climbed into the low to mid 80s ahead of a cold front passage, then would dip down into the low 30s or even upper 20s after the cold front. November ended up being near normal overall because of these drastic temperature swings. While these fronts brought cooler air with them, they generally lacked in the precipitation department. Almost the entire region, besides a few isolated spots west of Houston, ended up having a below normal month for precipitation. The region overall was about two to four inches below average. The winter outlook shows that southeast Texas will have better odds of a warmer and drier winter than normal with ENSO-Neutral conditions prevailing.



Photo taken by NWS
Meteorologist Tim Cady

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November 2019 by the Numbers

Location (records started)	Average Temp	Ranking	Total Rainfall	Ranking
City of Houston, TX (1888)	60.0°F	45 th Coolest	1.12"	14 th Driest
Houston Hobby, TX (1930)	61.1°F	37 th Coolest	2.14"	30 th Driest
City of Galveston, TX (1871)	62.7°F	56 th Coolest	2.61"	67 th Driest
City of College Station, TX (1882)	58.9°F	51 st Coolest	1.27"	27 th Driest
Conroe, TX (1997)	57.0°F	7 th Coolest	1.12"	2 nd Driest
Huntsville, TX (1997)	57.8°F	7 th Coolest	0.77"	3 rd Driest
Sugar Land, TX (2000)	60.6°F	6 th Coolest	1.61"	5 th Driest
Palacios, TX (1943)	61.6°F	26 th Coolest	1.11"	16 th Driest
Clover Field (Pearland), TX (1997)	60.6°F	7 th Coolest	2.31"	7 th Driest
David Wayne Hooks (Tomball), TX (1998)	58.3°F	6 th Coolest	2.06"	7 th Driest
Angleton, TX (1998)	60.6°F	6 th Coolest	1.78"	5 th Driest
League City, TX (1990)	60.0°F	10 th Coolest	3.92"	14 th Driest



Precipitation

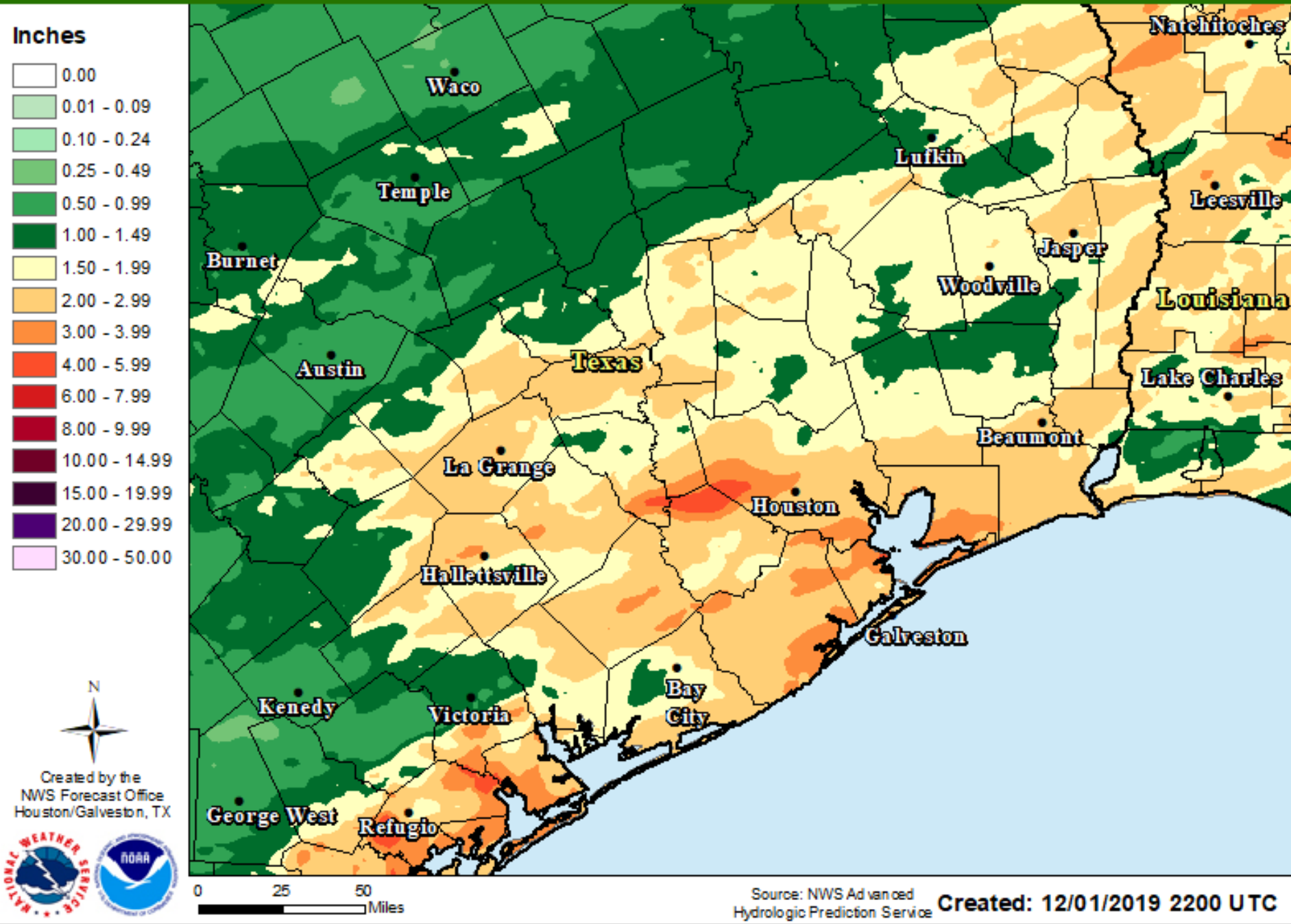
The primary source of precipitation this month was from cold fronts that pushed through Southeast Texas, however not much precipitation actually accompanied these fronts. Most places across the region had monthly total precipitation of one to three inches of rain, which is about two to four inches below normal. Despite the overall dry month, Houston-Hobby experienced a daily record rainfall on November 7th with 1.66 inches of rain falling.

Site	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)	
Galveston (GLS)	2.61	-1.90	1	1.09	7 th
Houston Hobby (HOU)	2.14	-2.18	1	1.66	7 th
City of Houston (IAH)	1.12	-3.22	1	0.83	7 th
College Station (CLL)	1.27	-1.95	1	0.62	14 th



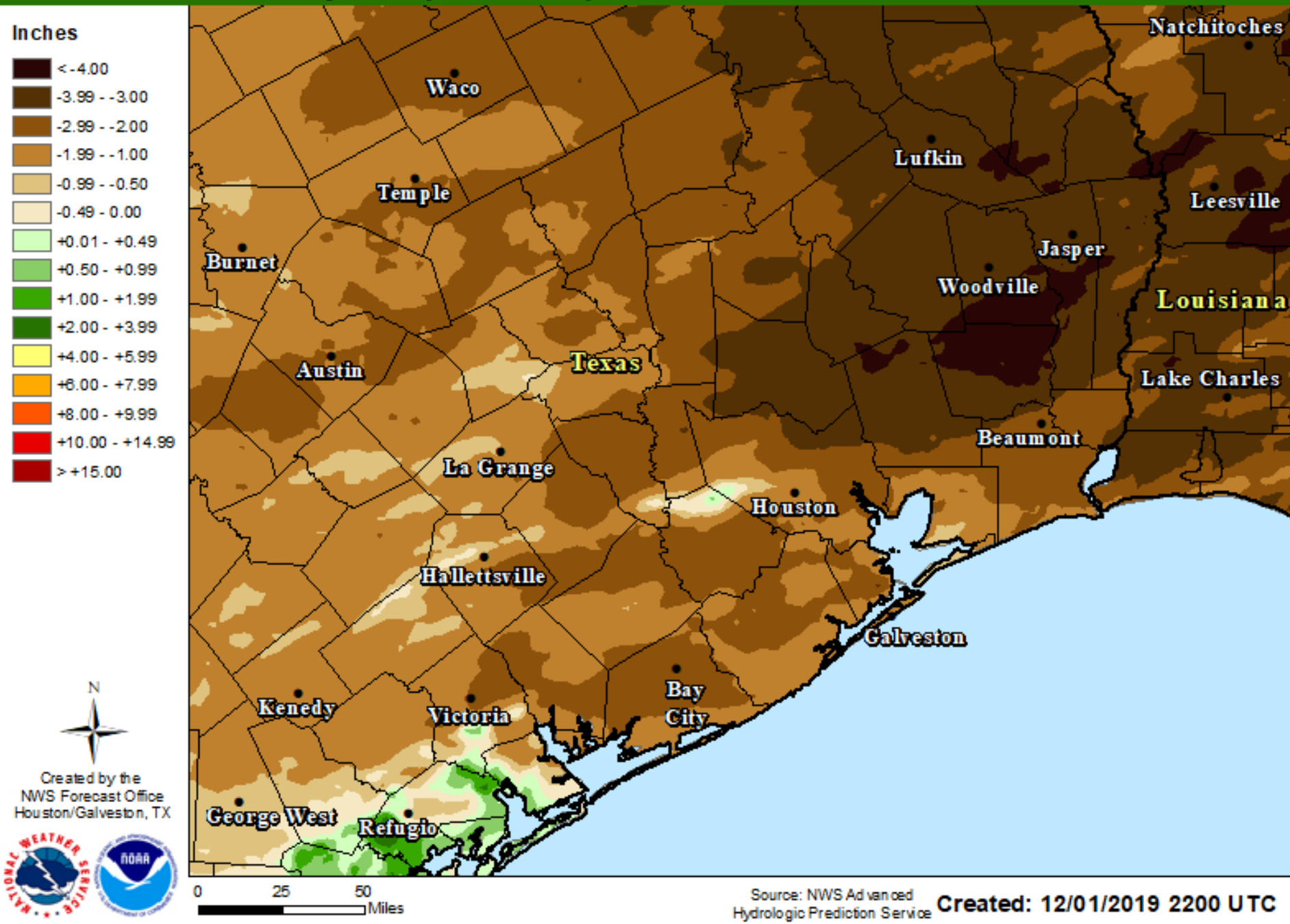
Precipitation (Continued)

Total Monthly Precipitation - November 2019



Precipitation (Continued)

Total Monthly Precipitation Departure From Normal - November 2019



Temperatures

Temperatures fluctuated throughout the month due to the many cold fronts that pushed through the region. Overall, the primary climate sites experienced a slightly cooler than normal November with the average temperature being about two degrees below average. The region saw its coolest temperatures after the cold front that passed through the region in the middle of the month with all primary climate sites, besides Galveston, dropping to or below freezing. Strong southwesterly flow ahead of a cold front towards the end of the month brought high temperatures back into the low to mid 80s across much of the region. A total of seven temperature records were achieved during the month of November at the primary climate sites. A list of these records can be found on page 10.

Site	Average Temp (F)	Average High Temp (F)	Average Low Temp (F)	Normal Average Temp (F)	Departure From Normal (F)	Maximum Temperature (F)	Minimum Temperature (F)
Galveston (GLS)	62.7	69.3	56.1	65.1	-2.4	79 on Nov. 7 th & 26 th	35 on Nov. 13 th
Houston Hobby (HOU)	61.1	70.6	51.7	63.2	-2.1	82 on Nov. 26 th	32 on Nov. 13 th
City of Houston (IAH)	60.0	70.5	49.5	62.3	-2.3	83 on Nov. 5 th	30 on Nov. 13 th
College Station (CLL)	58.9	70.8	46.9	60.8	-1.9	86 on Nov 30 th	28 on Nov. 13 th

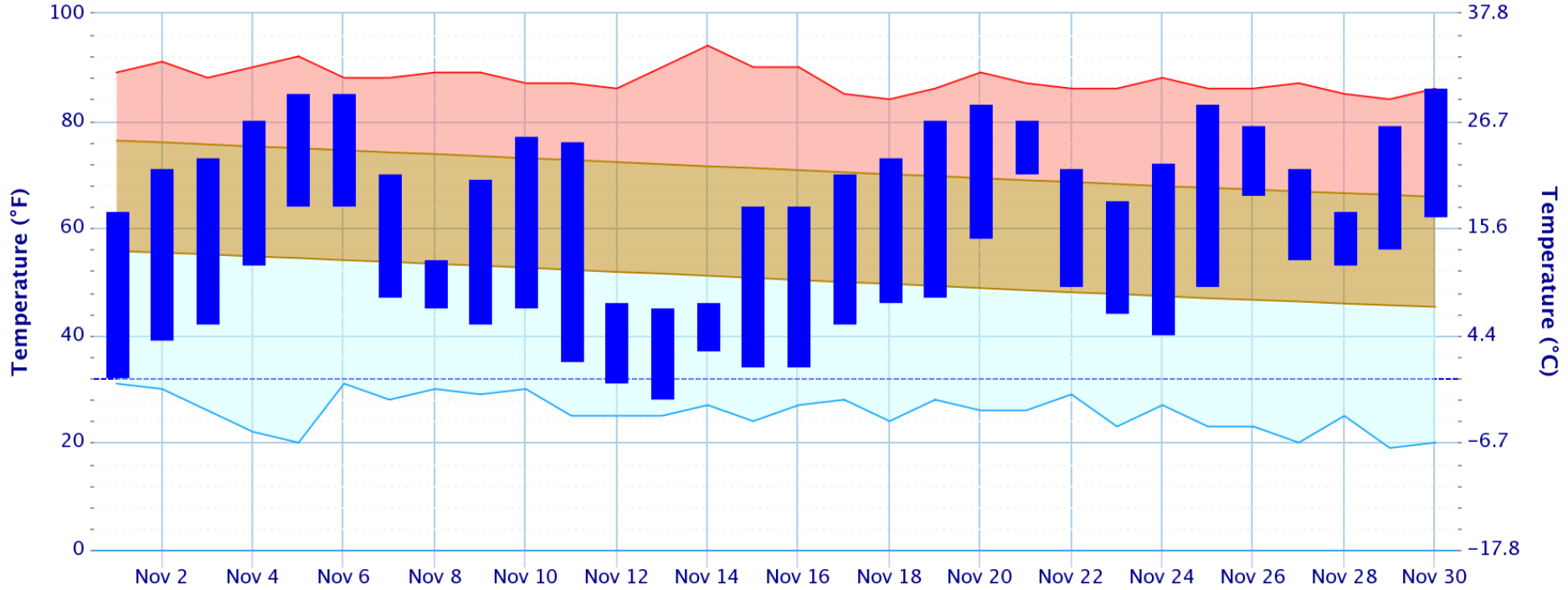


Monthly Temperature Charts

Daily Temperature Data – College Station Area, TX (ThreadEx)

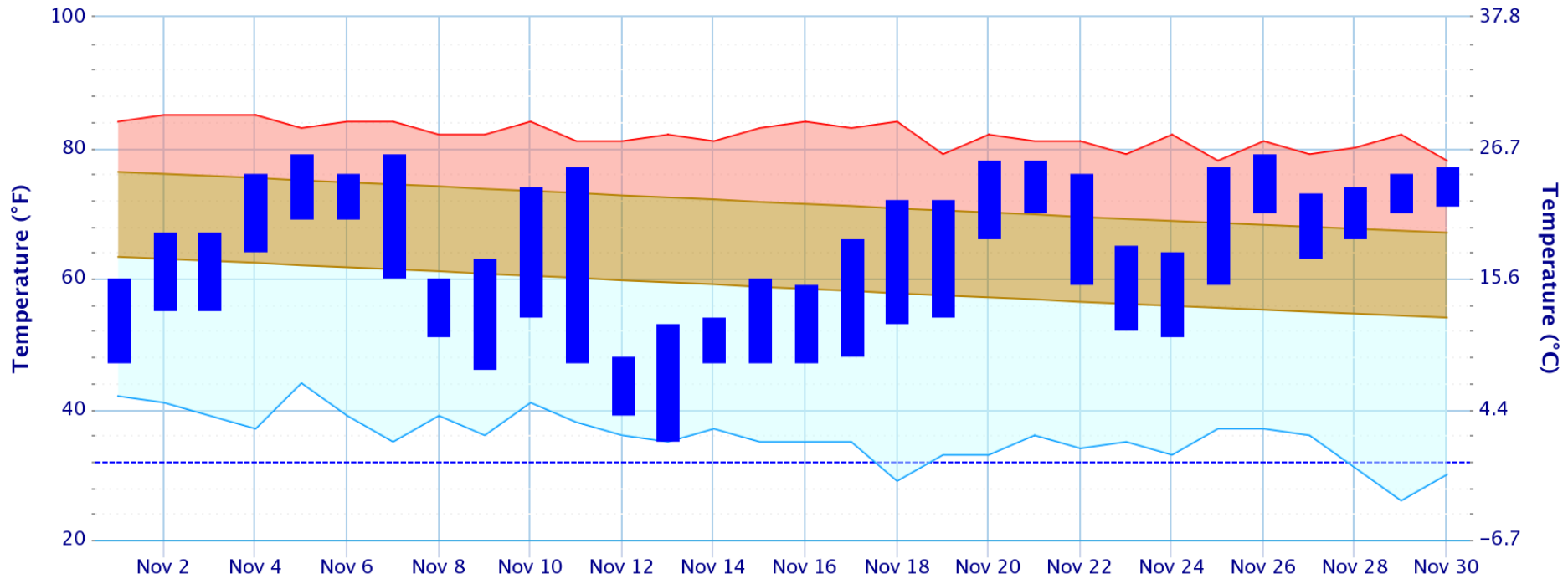
Period of Record – Max temperature: 1888-10-01 to 2019-12-10; Min temperature: 1882-05-15 to 2019-12-10. Normals period: 1981-2010.

Click and drag to zoom chart.



Daily Temperature Data – Galveston Area, TX (ThreadEx)

Period of Record – 1874-05-10 to 2019-12-10. Normals period: 1981-2010. Click and drag to zoom chart.



● Observed temperature range (2019) ● Normal temperature range — Record Max — Record Min

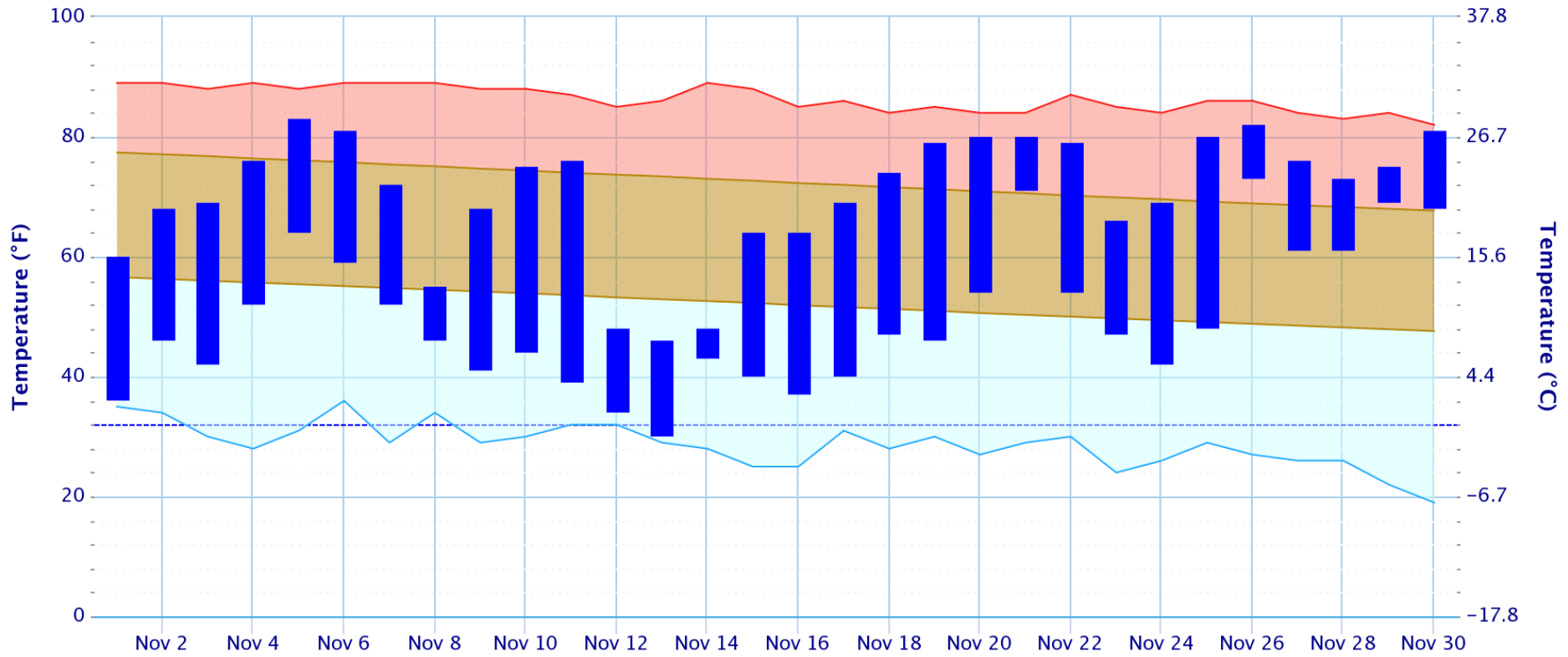
Powered by ACIS



Monthly Temperature Charts (continued)

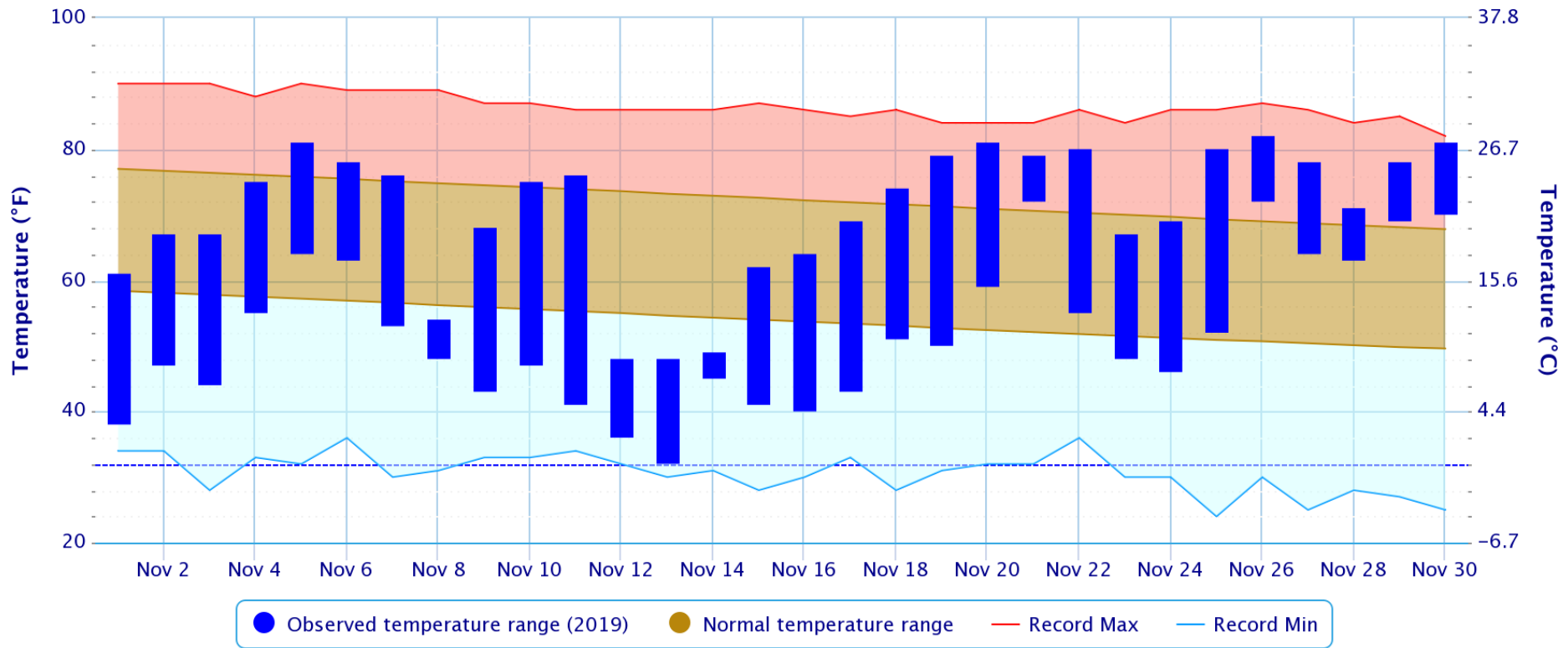
Daily Temperature Data – Houston Area, TX (ThreadEx)

Period of Record – 1889-05-01 to 2019-12-10. Normals period: 1981-2010. Click and drag to zoom chart.



Daily Temperature Data – HOUSTON WILLIAM P HOBBY AP, TX

Period of Record – 1930-08-01 to 2019-12-10. Normals period: 1981-2010. Click and drag to zoom chart.



November Daily Record Reports

A total of 8 daily records were set across the primary climate sites. T stands for tied.

Site	Date	Record Type	New Record	Previous Record
City of College Station	November 21 st	High Min Temperature	70°	67° in 2013
City of College Station	November 30 th	High Max Temperature	86°	83° in 1933
City of Houston	November 26 th	High Min Temperature	73° - T	73° in 1990
Houston Hobby	November 7 th	Max Daily Precipitation	1.66"	1.09" in 1957
Houston Hobby	November 12 th	Low Max Temperature	48°	50° in 1939
Houston Hobby	November 29 th	High Min Temperature	69° - T	69° in 1975
City of Galveston	November 13 th	Low Min Temperature	35° - T	35° in 1911
City of Galveston	November 30 th	High Min Temperature	71° - T	71° in 1998

High Max

Low Max

Precip

High Min

Low Min

Key

10



Drought Conditions

Drought conditions overall improved during the month of December with now only portions of Houston, Burleson, Washington, and Jackson counties experiencing D1-Moderate Drought conditions. However, still much of the western and northern portions of the region are seeing abnormally dry conditions.

Drought Monitor

Posted: December 3rd

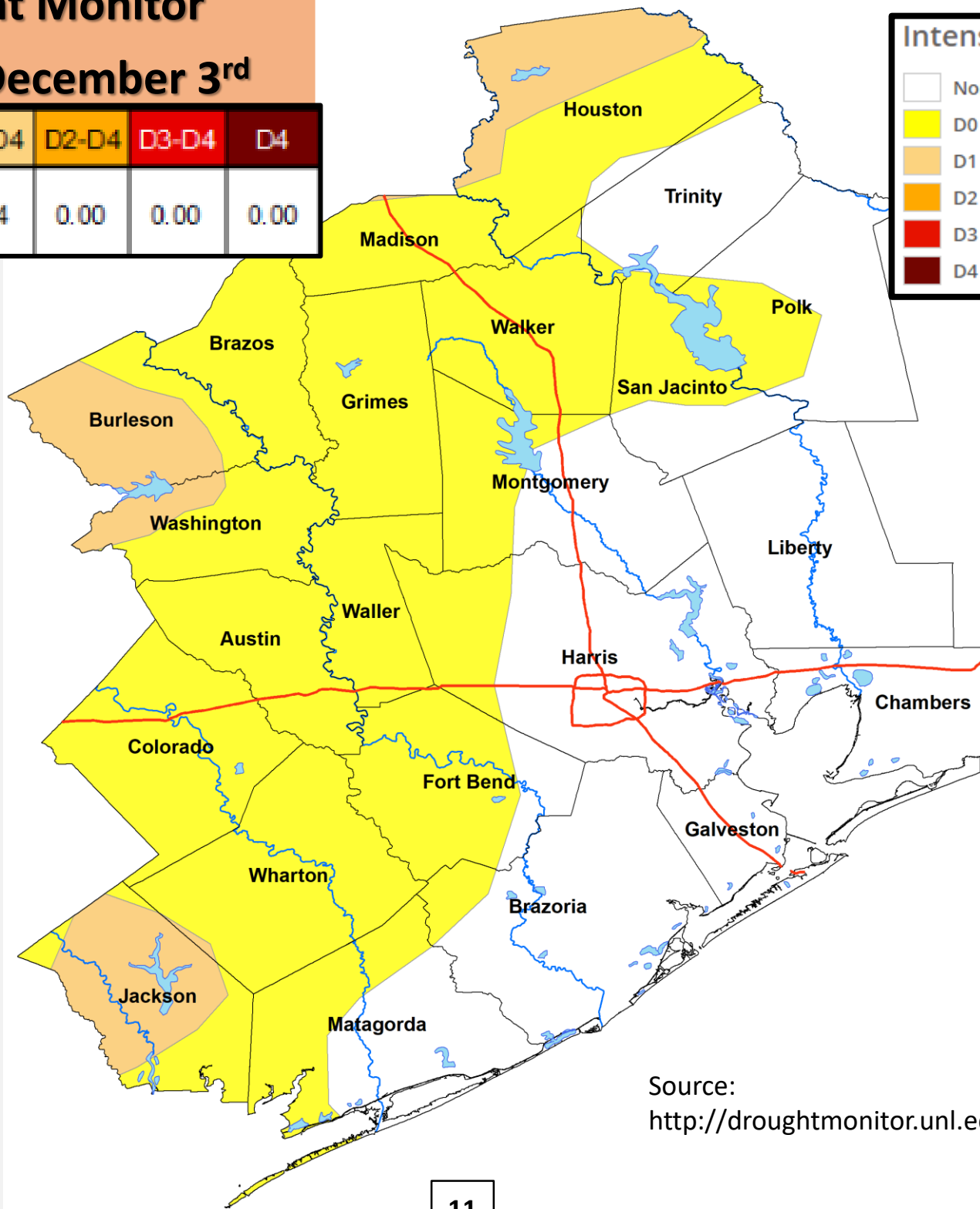
None	D0-D4	D1-D4	D2-D4	D3-D4	D4
40.19	59.81	8.54	0.00	0.00	0.00

Drought Conditions
(Percent Area)

0 12.5 25 50 75 100 Miles

Intensity:

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)



Source:
<http://droughtmonitor.unl.edu>



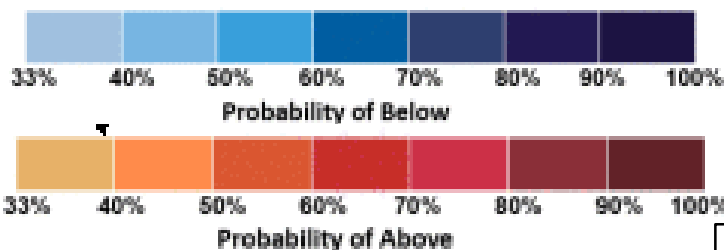
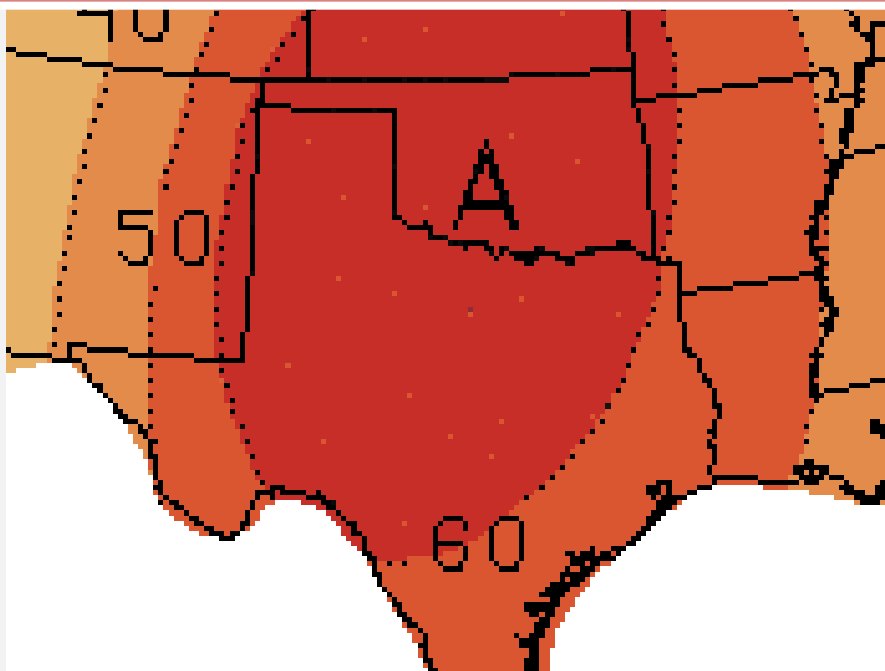
December Outlook

For December, the latest outlook from the Climate Prediction Center (CPC) calls for a 57% chance of above normal temperatures, 33% near normal temperatures, and a 10% chance for below normal temperatures across the area. The precipitation outlook calls for equal chances for a 39% chance of below normal precipitation, 33% chance of near normal precipitation, and a 28% chance of above normal precipitation across much of Southeast Texas.

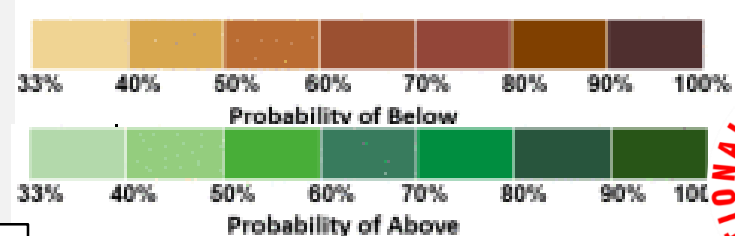
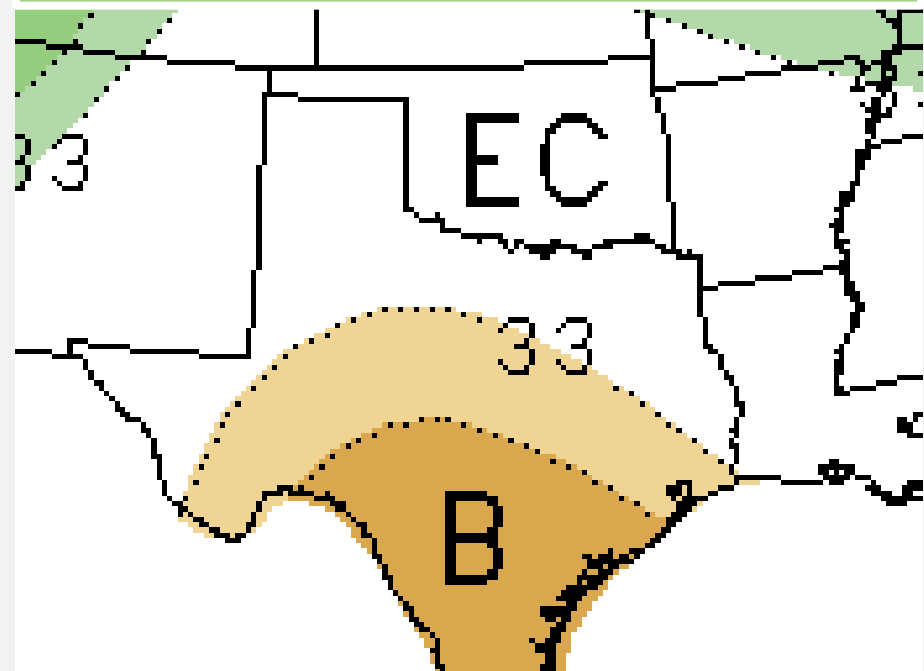
Site	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	57.3	63.9	50.7
Houston Hobby	55.6	64.5	46.7
City of Houston	54.4	64.3	44.6
College Station	52.2	62.3	42.2

Site	Normal Monthly Precipitation (in.)
Galveston (GLS)	3.52
Houston Hobby (HOU)	4.03
City of Houston (IAH)	3.88
College Station (CLL)	3.23

Temperature Outlook



Precipitation Outlook



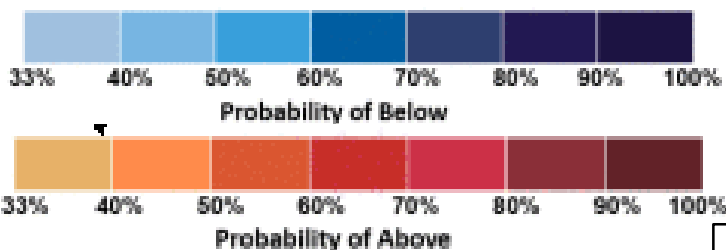
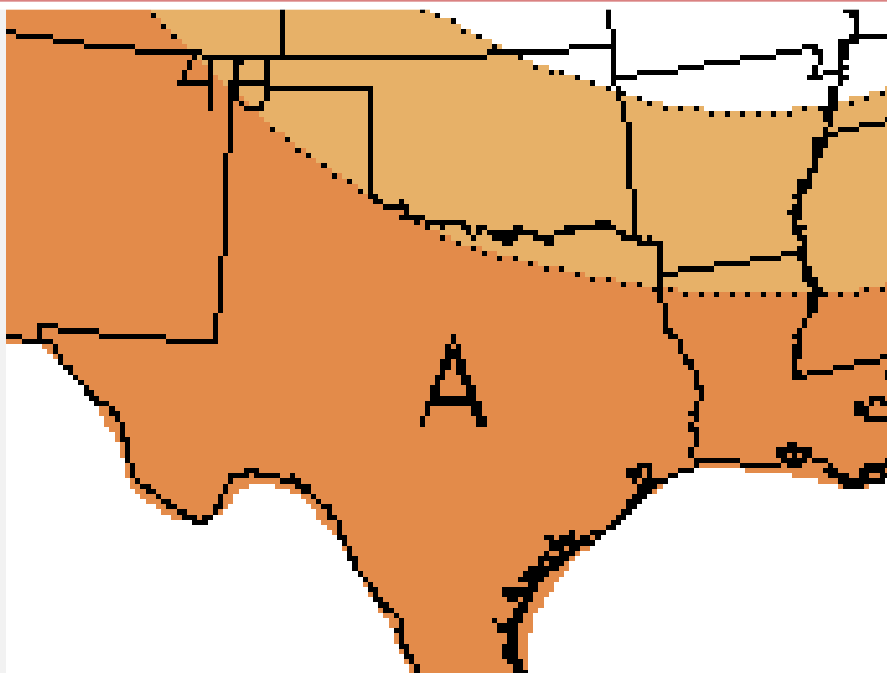
Winter Outlook

For the winter season, which spans December through February, the latest outlook from the Climate Prediction Center (CPC) calls for a 45% chance of above normal temperatures, 33% near normal temperatures, and a 22% chance for below normal temperatures across the area. The precipitation outlook calls for equal chances for a 40% chance of below normal precipitation, 33% chance of near normal precipitation, and a 27% chance of above normal precipitation across much of Southeast Texas.

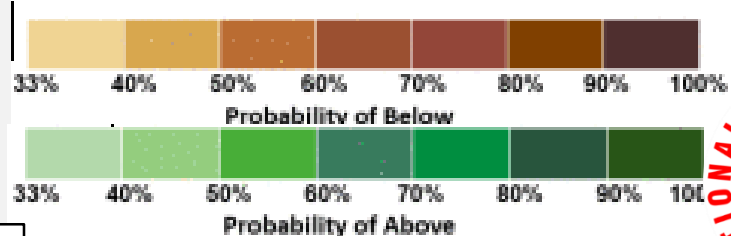
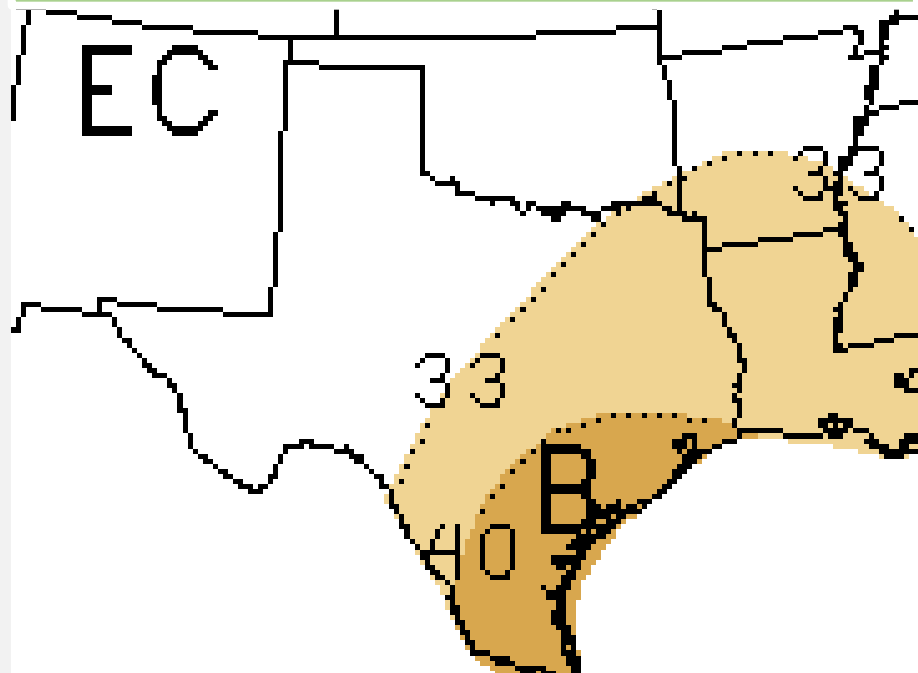
Site	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	56.7	63.3	50.1
Houston Hobby	55.6	64.5	46.8
City of Houston	54.6	64.5	44.8
College Station	52.6	62.7	42.6

Site	Normal Winter (DJF) Precipitation (in.)
Galveston (GLS)	10.29
Houston Hobby (HOU)	11.11
City of Houston (IAH)	10.32
College Station (CLL)	9.32

Temperature Outlook

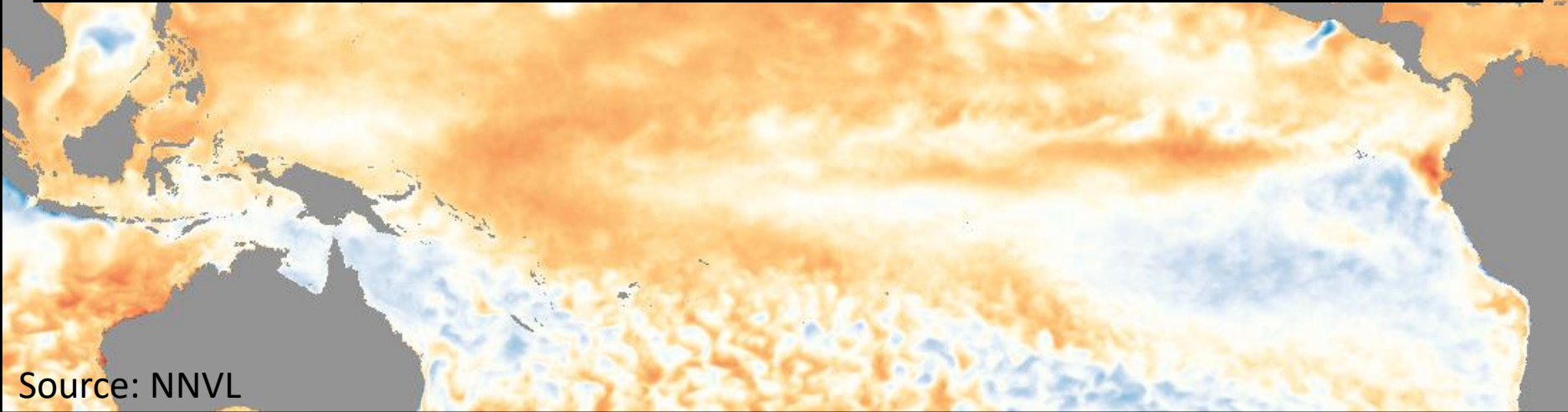


Precipitation Outlook



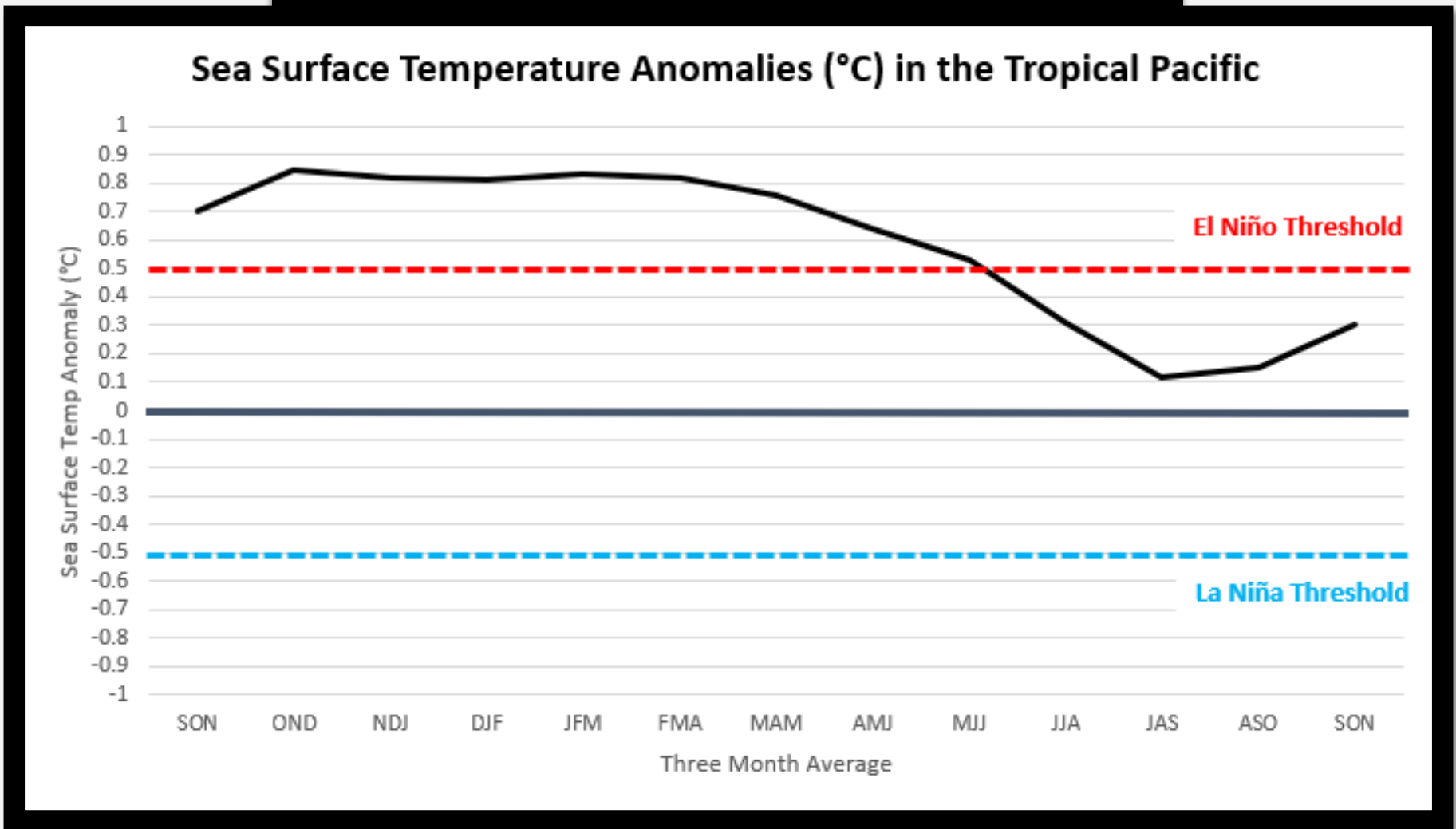
ENSO Observations

Sea Surface Temperature Anomalies across the Tropical Pacific Ocean during the month of September



Source: NNVL

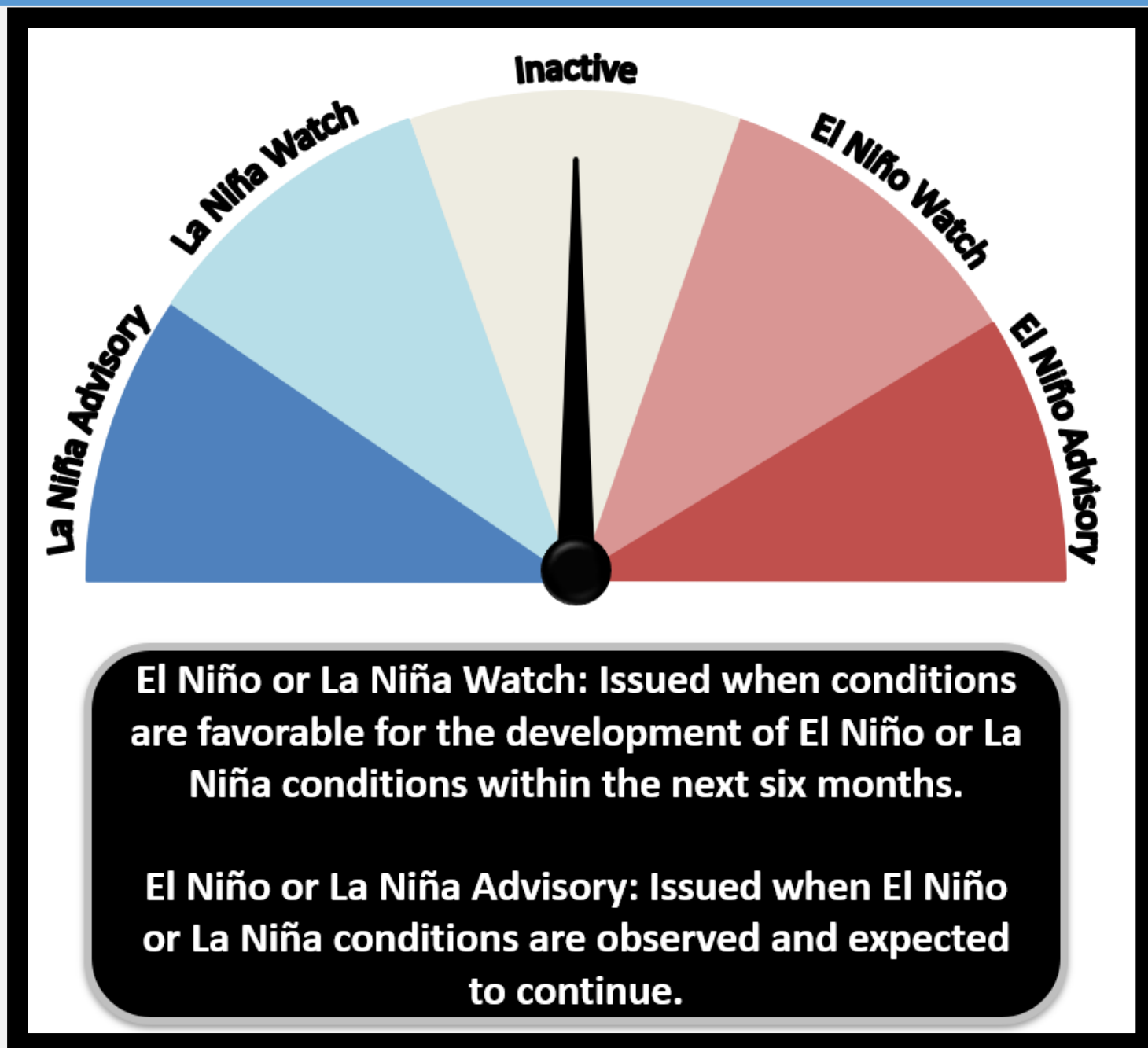
Current ENSO Phase: Neutral



ENSO Forecast

The Climate Prediction Center's ENSO Forecast: ENSO-Neutral Continues

- There is a 70% chance of ENSO-Neutral conditions continuing through the winter
- There is a 65% chance of ENSO-Neutral conditions continuing through the spring



Climate Primary Site History

Galveston (GLS)

Records for Galveston are from observations at the following locations: 67-69 Strand (April 1, 1871 - Aug 31, 1874); 23rd and the Strand (Sep 1, 1874 - July 29, 1878), 1.75 miles WSW of the previous location; the Custom House at Bath Street and the Strand (July 30, 1878 - May 8, 1882); Colorado and Santa Fe Railroad Building at 25th and the Strand (May 9, 1882 - March 14, 1883); back to the Custom House which later became the Cotton Exchange Building (March 15, 1883 - June 24, 1898), about a 1/3 of a mile E of the previous Custom House location; The Levy Building at 2223 Market Street (June 25, 1898 - Nov 26, 1900); the Trust Building at Tremont and Post Office Streets (Nov 27, 1900 - June 24, 1946), one-quarter mile south of the Levy Building; the U.S. Post Office Building at 601 Rosenberg (June 25, 1946 - 1994); Scholes Field (January 1995 to present).

Houston Hobby (HOU)

Records are based upon observations beginning in August 1931.

City of Houston (IAH)

Records for the City of Houston are from observations at the following locations: Cotton Station from July 1881 through September 1909, Stewart Building at Preston and Fannin from September 1909 through February 1926, Shell Building at Texas and Fannin from March 1926 through August 1938, Federal Building at Franklin and Fannin from August 1938 through May 1969, Intercontinental Airport from June 1969 to the present .

College Station (CLL)

Records from 1893 through July 1951 are based on observations taken at the Texas Agriculture Experiment COOP Station main farm located 6 miles southwest of College Station. Records from August 1951 through the present are based on observations taken at Easterwood Field. Normal temperatures are calculated from 1981 to 2000 period.

