



NWS Houston, Texas February 2018 Regional Climate Summary

Produced by Nikki Hathaway and Josh Lichter

. . . Warm and Soggy February . . .

The month of February brought well above normal temperatures along with above normal rainfall totals across much of Southeast Texas. The coastal counties really felt the heat, with twenty-four of the twenty-eight days of February experiencing above normal temperatures for the City of Galveston. Based on the monthly average temperatures, this was the 7th warmest February for the City of Houston, the 3rd warmest February for Houston Hobby Airport, and the 2nd warmest February for the City of Galveston! The month of February was also fairly wet. The City of Houston recorded the most in terms of monthly rainfall out of the four primary climate sites, ringing in with a total of 5.73 inches. Therefore, this was the 12th wettest February on record for the City of Houston. The coastal counties did not see as much rainfall, resulting in a below normal monthly rainfall total for the City of Galveston.

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Precipitation

The month of February was rather wet, with most of the forecast area seeing anywhere from a half inch to 6 inches above normal. Rainfall totals were closer to normal and even below normal along the coast and also in the western zones from Matagorda and Jackson counties, north into Burleson and Brazos counties. This yielded in drought conditions across these regions throughout the month. Most of the rainfall was produced due to various frontal boundaries. Particularly, on February 10th, the combination of both an approaching cold front and a coastal trough resulted in rainfall amounts between 0.25 to 2.25 inches across SE TX. Similarly on February 21st, an approaching cold front and area of low pressure helped to produce showers and thunderstorms which brought 0.50 to 1.50 inches of rainfall, with values along the higher end of this range closer to the City of Houston.

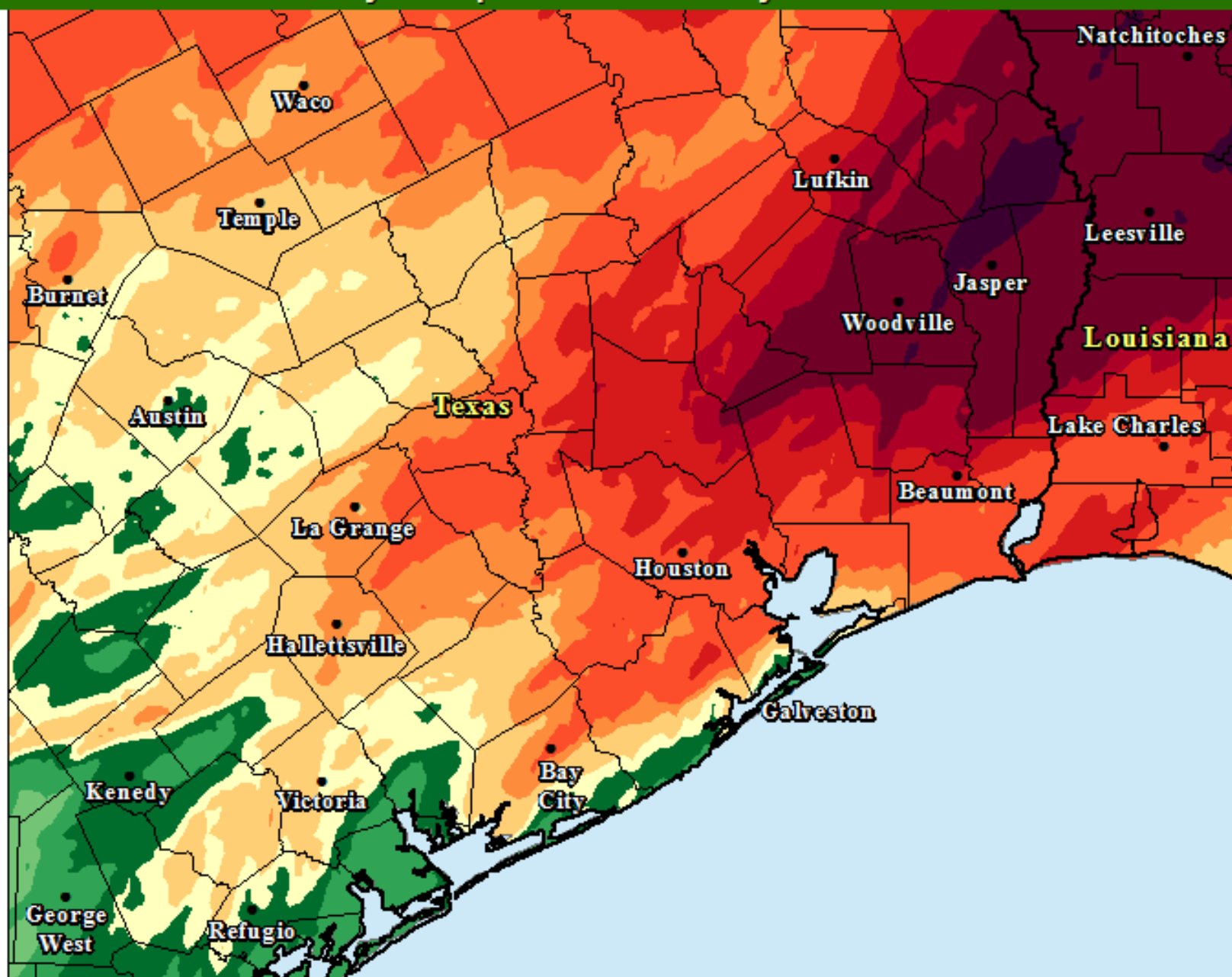
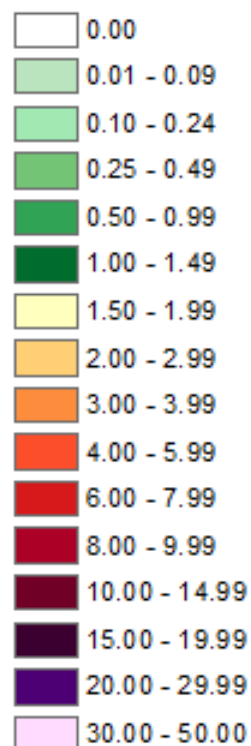
| Site | Total Precipitation (in.) | Departure from Normal (in.) | Number of Thunderstorm Days | Maximum Daily Precipitation (in./date) | |
|-----------------------|---------------------------|-----------------------------|-----------------------------|----------------------------------------|-----------|
| Galveston (GLS) | 0.84 | -1.73 | 3 | 0.20 | Feb. 21st |
| Houston Hobby (HOU) | 3.94 | +0.73 | 4 | 2.05 | Feb. 10th |
| City of Houston (IAH) | 5.73 | +2.53 | 6 | 1.62 | Feb. 10th |
| College Station (CLL) | 1.86 | -0.99 | 5 | 0.56 | Feb. 21st |



Precipitation (Continued)

Total Monthly Precipitation - February 2018

Inches



Created by the
NWS Forecast Office
Houston/Galveston, TX



0 25 50
Miles

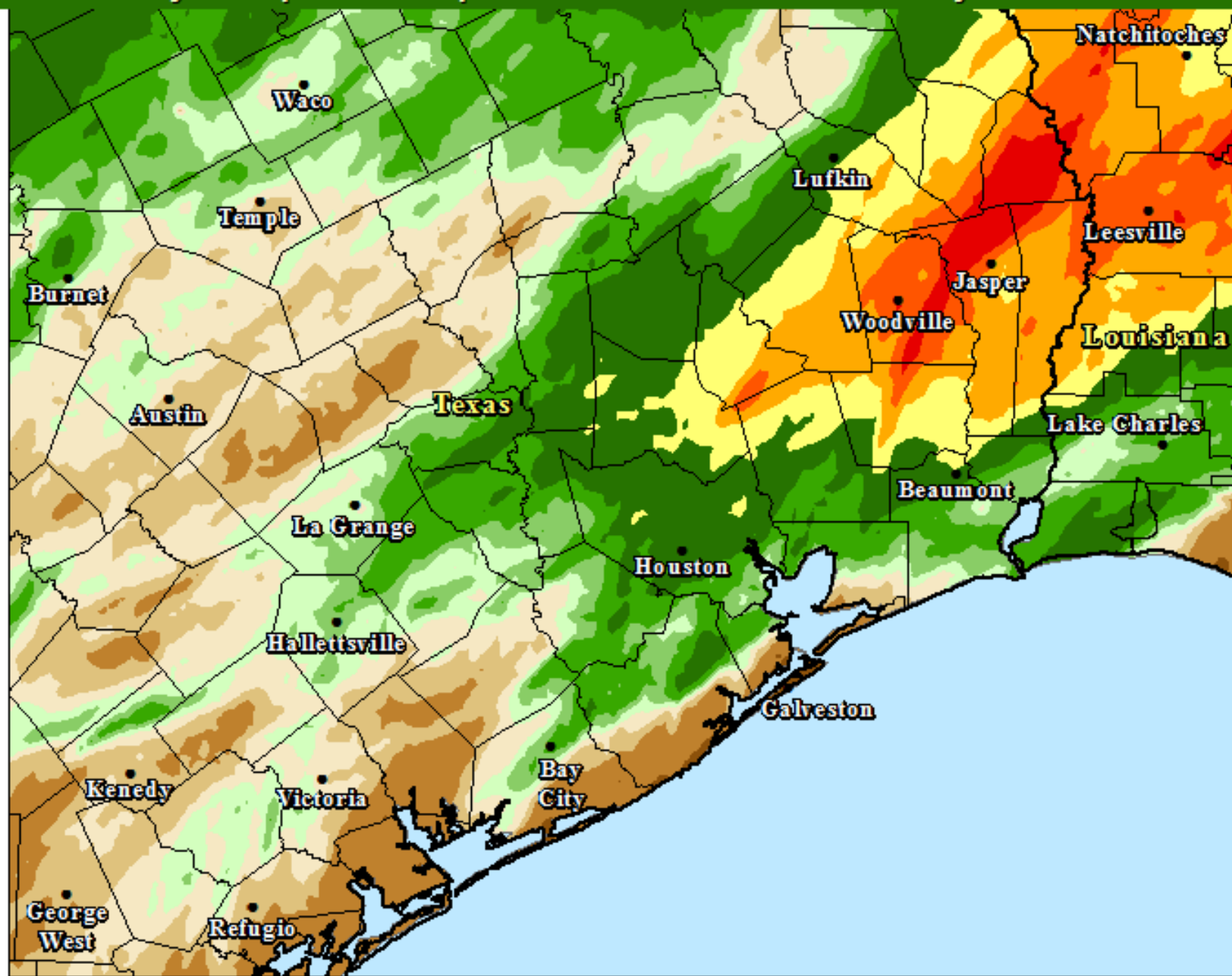
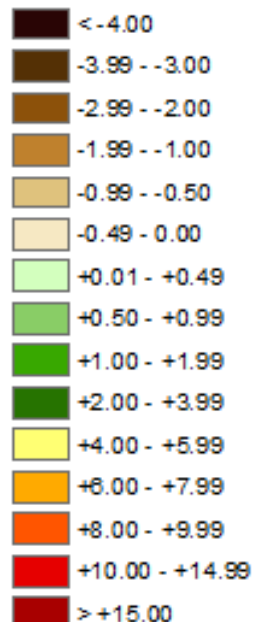
Source: NWS Advanced
Hydrologic Prediction Service

Created: 03/01/2018 2100 UTC

Precipitation (Continued)

Total Monthly Precipitation Departure From Normal - February 2018

Inches



Created by the
NWS Forecast Office
Houston/Galveston, TX



0 25 50
Miles

Source: NWS Advanced
Hydrologic Prediction Service

Created: 03/01/2018 2100 UTC

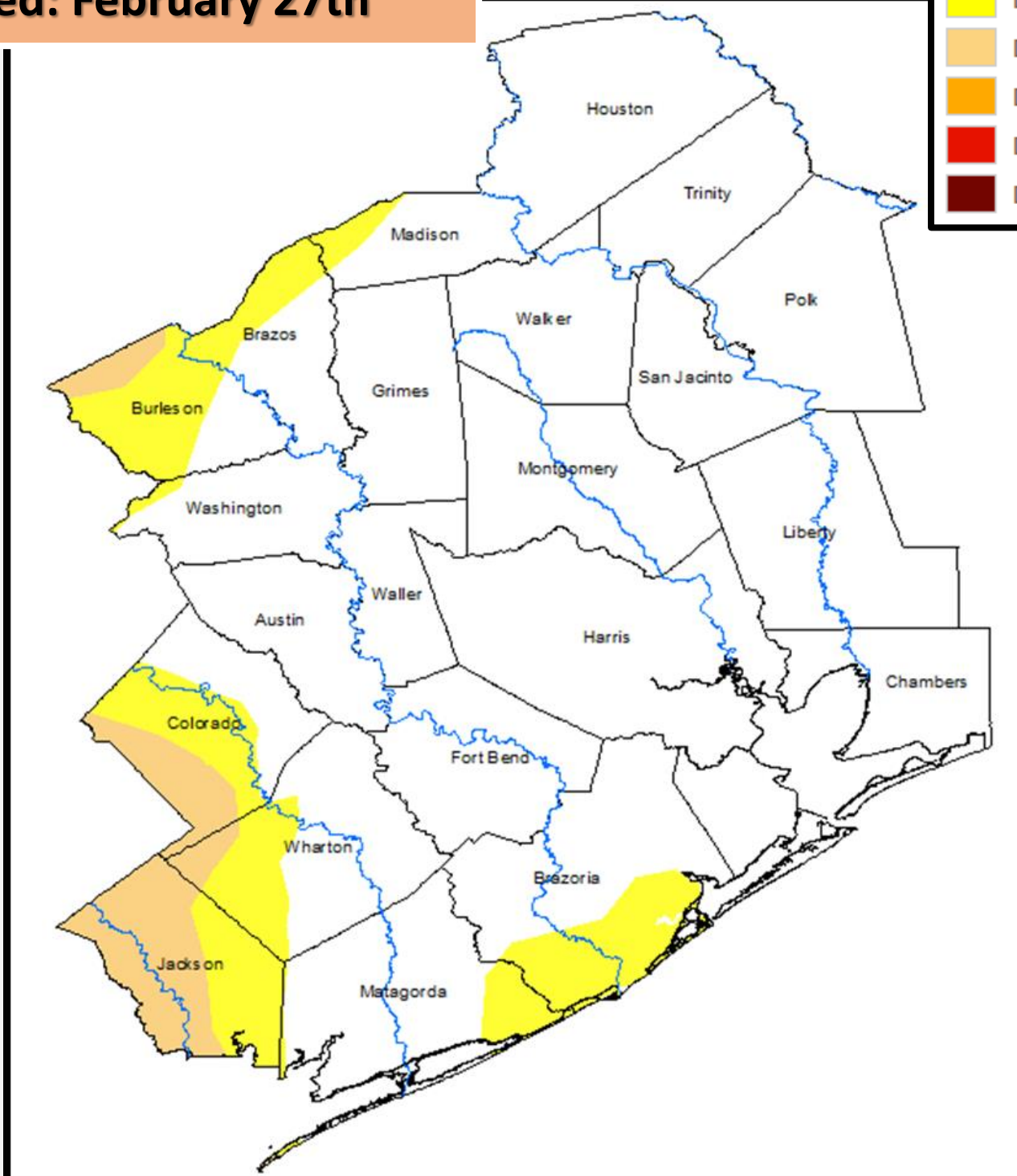
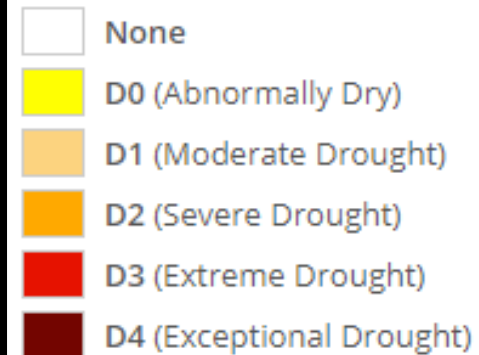
Drought Conditions

Abnormally dry to moderate drought conditions held tight along the coast and western reaches of the forecast area for most of the month of February. Little relief was felt due to the lack of rainfall over these portions of the forecast area.

Most Recent Drought Map

Posted: February 27th

Intensity:



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



Temperatures

Temperatures flip-flopped from below normal in January to much above normal in February. Based on the monthly average temperatures, this was the 7th warmest February for the City of Houston, the 3rd warmest February for Houston Hobby Airport, and the 2nd warmest February for the City of Galveston! The heat brought a majority of the daily average temperatures well above normal by five to ten degrees at times! As a result, a total of nineteen temperature records were broken across the four primary climate sites, all being either record high max temperature or record high min temperature records.

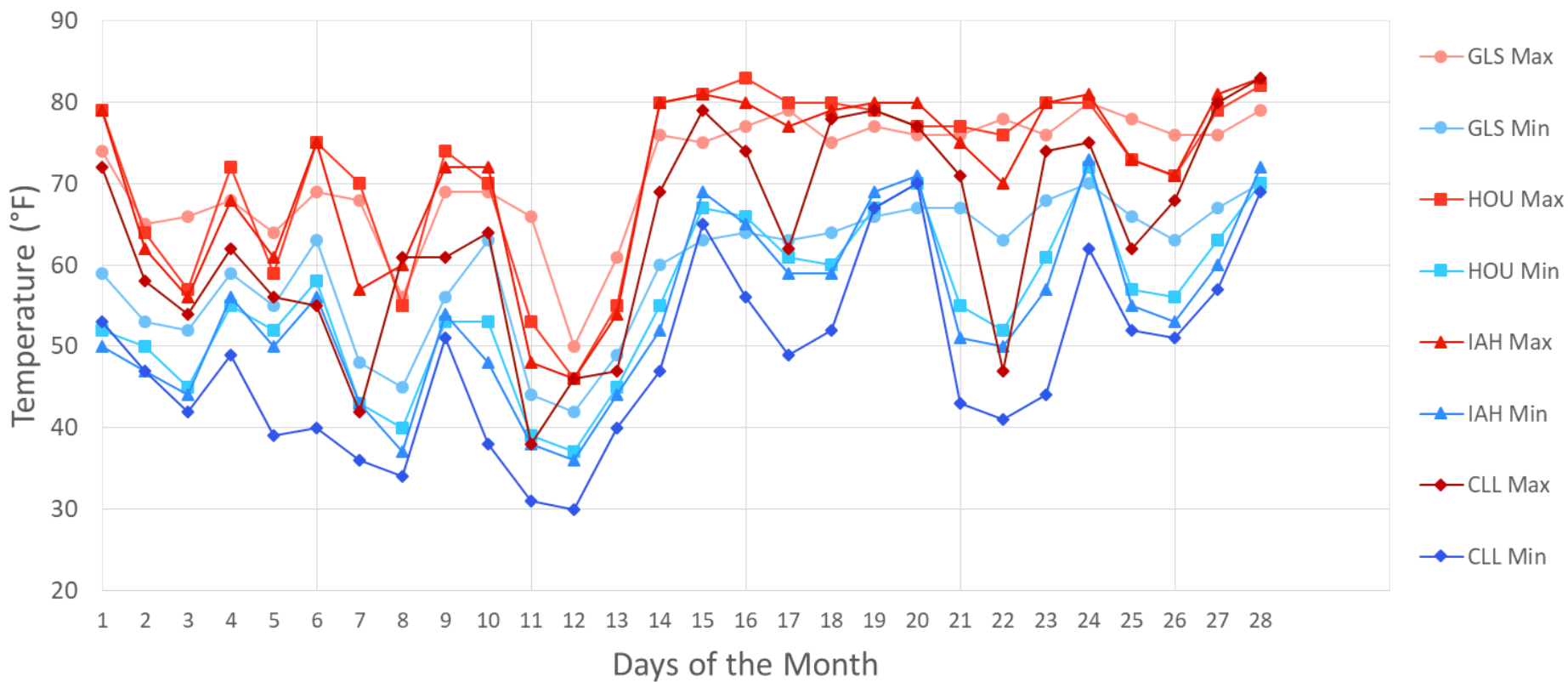
| Site | Average Temp (F) | Average High Temp (F) | Average Low Temp (F) | Normal Average Temp (F) | Departure From Normal (F) | Maximum Temperature (F) | Minimum Temperature (F) |
|-----------------------|------------------|-----------------------|----------------------|-------------------------|---------------------------|-------------------------|-------------------------|
| Galveston (GLS) | 65.5 | 71.4 | 59.6 | 57.6 | +7.9 | 80 on Feb. 24th | 42 on Feb. 12th |
| Houston Hobby (HOU) | 63.6 | 71.7 | 55.5 | 57.3 | +6.3 | 83 on Feb. 16th | 37 on Feb. 12th |
| City of Houston (IAH) | 62.5 | 70.8 | 54.2 | 56.4 | +6.1 | 83 on Feb. 28th | 36 on Feb. 12th |
| College Station (CLL) | 56.2 | 64.1 | 48.4 | 54.6 | +1.6 | 83 on Feb. 28th | 30 on Feb. 12th |



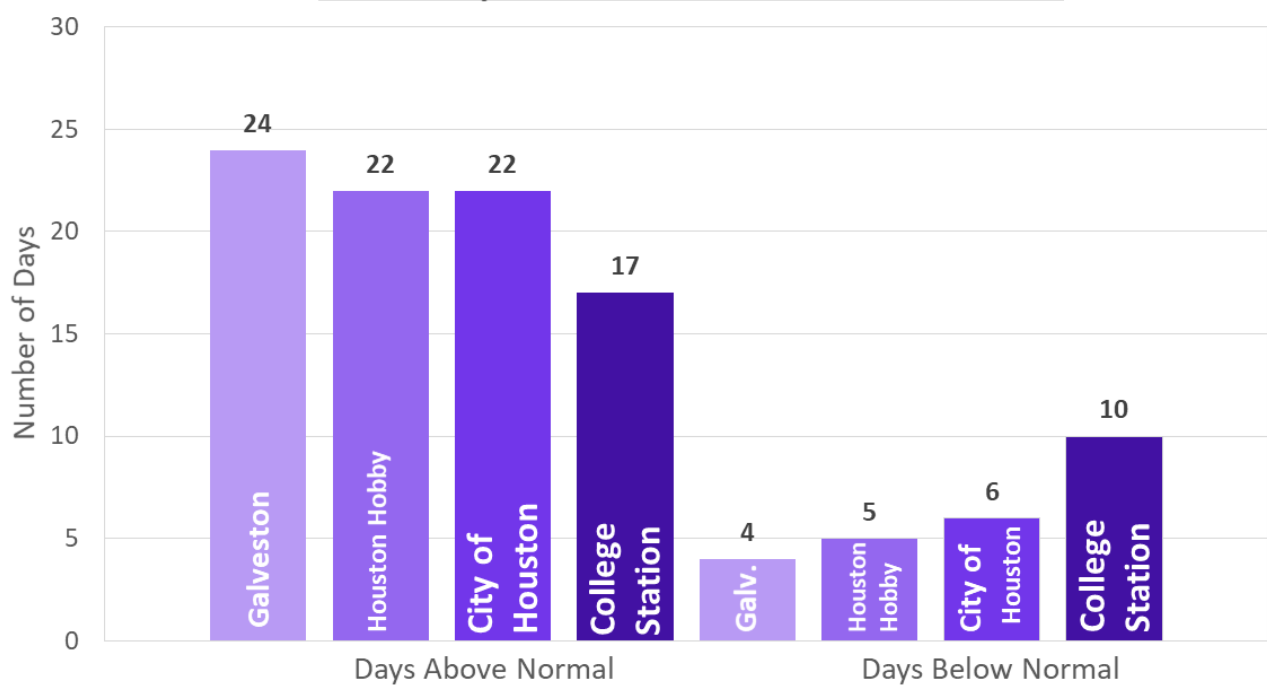
Temperatures (Continued)

Below is a line graph of temperature trends for the four primary climate sites, as well as a bar graph comparing above and below normal temperature days throughout the month of February.

February Temperature Trends



Mean Departure from Normal Distribution



Monthly Record Temperature and Rainfall Data

There were a total of nineteen new records made throughout the month of February across SE TX primary climate sites.

| Site | Date | Record Type | New Record | Previous Record |
|-------------------|------|---------------|------------|-----------------|
| City of Galveston | 2/14 | High Max Temp | 76° | Tied in 1892 |
| City of Houston | 2/15 | High Min Temp | 69° | Tied in 1956 |
| Houston Hobby | 2/16 | High Max Temp | 83° | 81° in 2016 |
| City of Galveston | 2/16 | High Max Temp | 77° | Tied in 1982 |
| City of Galveston | 2/17 | High Max Temp | 79° | 75° in 1882 |
| City of Galveston | 2/19 | High Max Temp | 77° | 75° in 2017 |
| City of Houston | 2/19 | High Min Temp | 69° | Tied in 1956 |
| Houston Hobby | 2/20 | High Min Temp | 70° | 67° in 2005 |
| City of Galveston | 2/20 | High Max Temp | 76° | 75° in 2005 |
| City of Galveston | 2/20 | High Min Temp | 67° | Tied in 1890 |
| City of Houston | 2/20 | High Min Temp | 71° | 69° in 1892 |
| City of Galveston | 2/21 | High Min Temp | 67° | 65° in 2013 |
| City of Galveston | 2/22 | High Max Temp | 78° | 76° in 2017 |
| City of Galveston | 2/23 | High Min Temp | 68° | 66° in 2012 |
| City of Galveston | 2/24 | High Min Temp | 70° | 68° in 1890 |
| City of Galveston | 2/24 | High Max Temp | 80° | 76° in 2017 |
| Houston Hobby | 2/24 | High Min Temp | 72° | 70° in 2011 |
| City of Houston | 2/24 | High Min Temp | 73° | 67° in 2011 |
| City of Galveston | 2/28 | High Min Temp | 70° | Tied in 2017 |



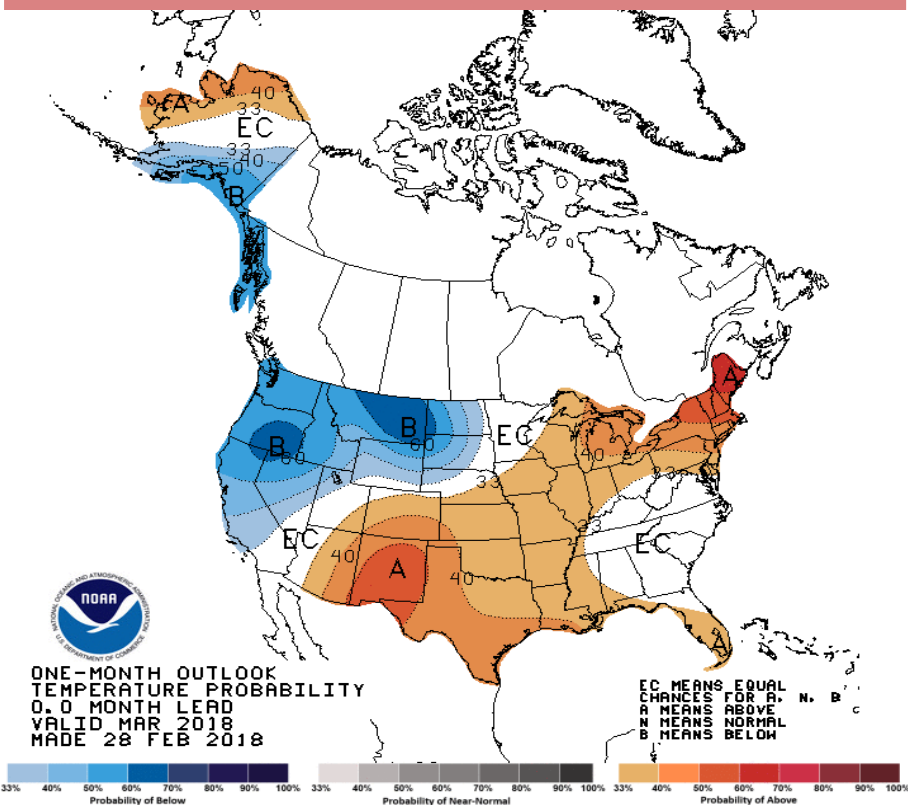
March Outlook

The latest outlook from the Climate Prediction Center (CPC) calls for an increased likelihood of above normal temperatures and normal to slightly above normal precipitation for the month of March.

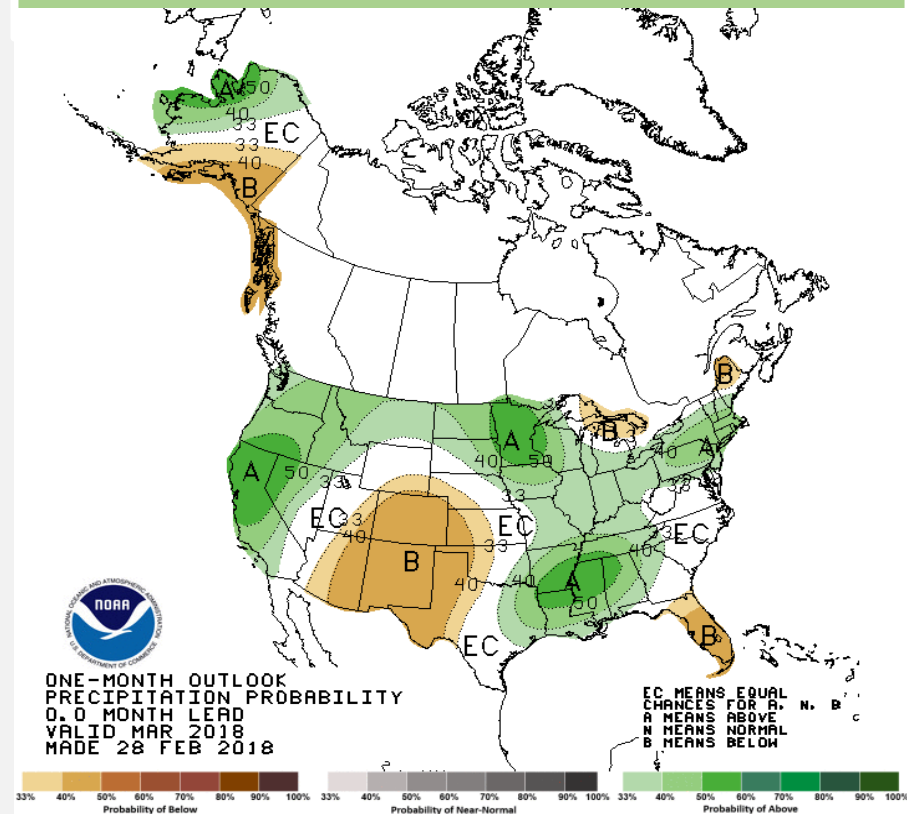
| Site | Average Temp(°F) | Normal High (°F) | Normal Low (°F) |
|-----------------|------------------|------------------|-----------------|
| Galveston | 63.4 | 70.2 | 56.6 |
| Houston Hobby | 63.3 | 72.4 | 54.3 |
| City of Houston | 62.7 | 73.0 | 52.5 |
| College Station | 61.4 | 71.7 | 51.0 |

| Site | Normal Monthly Precipitation (in.) |
|-----------------------|------------------------------------|
| Galveston (GLS) | 3.16 |
| Houston Hobby (HOU) | 3.20 |
| City of Houston (IAH) | 3.41 |
| College Station (CLL) | 3.17 |

Upcoming Temperature Outlook



Upcoming Precipitation Outlook



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 Sante 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.

