



# NWS Houston, Texas October 2018 Regional Climate Summary

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## **... A Warm and Soggy October ...**

*Average temperatures for the month of October were above normal at all primary climate sites. Thirteen daily temperature records were broken in total, with one daily rainfall record also broken at the City of Galveston. Rainfall totals were nearly an inch to seven inches above normal at all climate sites. Additionally, both the City of Galveston and College Station ranked in the top three for the wettest two-month rainfall totals for September and October. This much-needed rainfall eliminated all drought conditions across Southeast Texas.*

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# Precipitation

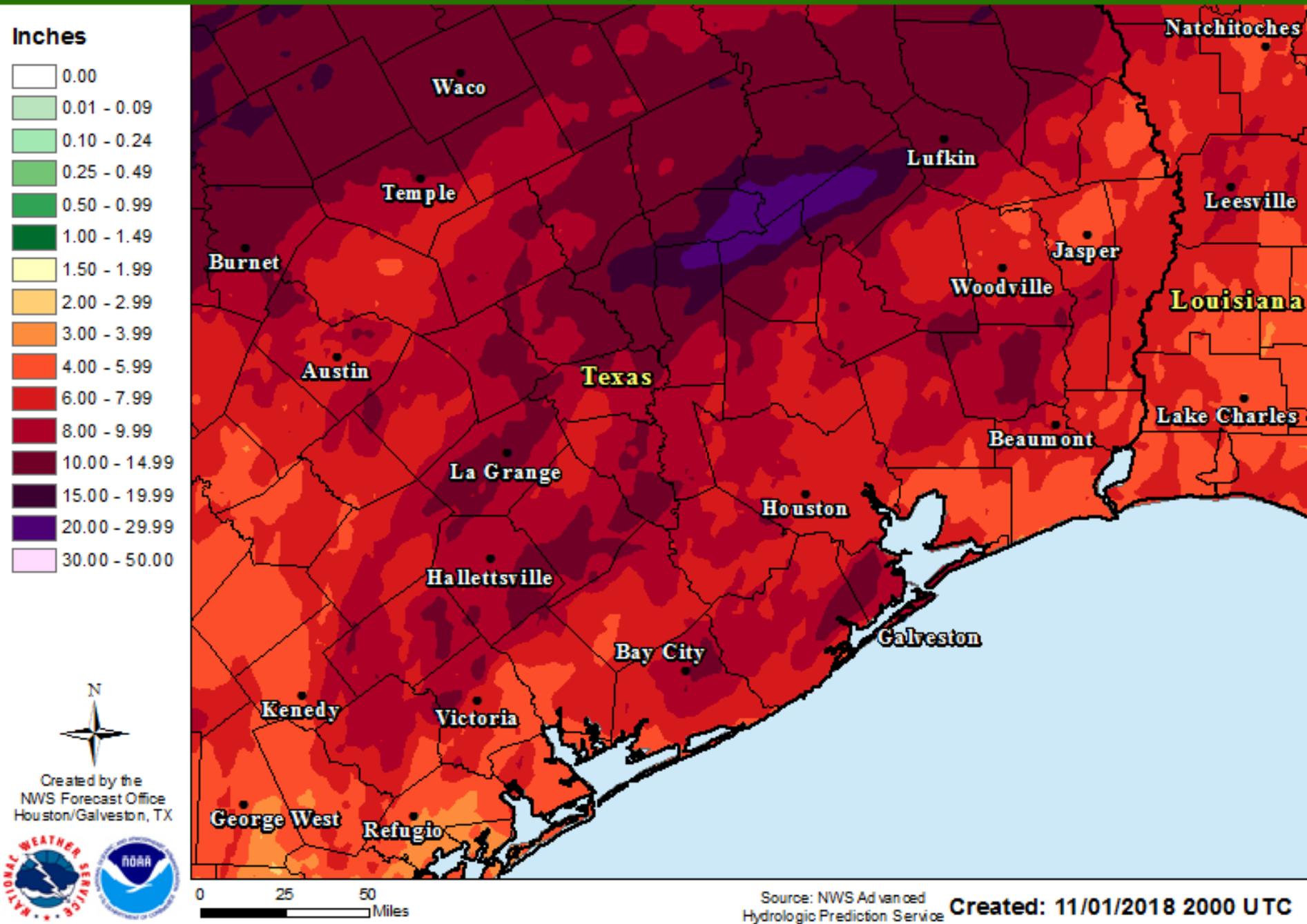
*In October across Southeast Texas, climate sites were mostly above normal, with departures ranging from a little under one inch to nearly seven inches above normal. This kept drought conditions away throughout October. Although the monthly rainfall totals for October did not rank in the top ten across any of the primary climate sites, the two-month total for September and October does rank in the top ten for both the City of College Station and the City of Galveston. When considering rainfall over the past two months (September 1<sup>st</sup> through October 31<sup>st</sup>), the City of Galveston ranks first for the all-time wettest with a value of 34.55 inches. This breaks the previous two month record of 34.05 inches, dating back to 1913. The City of College Station ranked third wettest over this two month period, finishing both September through October with a total of 22.51 inches. Additionally, severe weather on Halloween resulted in a few tornadoes across the region (more information on the following pages).*

Site	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)
Galveston (GLS)	10.23	+4.71	6	4.90 October 24th
Houston Hobby (HOU)	6.88	+0.89	6	2.60 October 31st
City of Houston (IAH)	7.02	+1.32	8	2.26 October 31st
College Station (CLL)	11.73	+6.82	9	2.72 October 15th



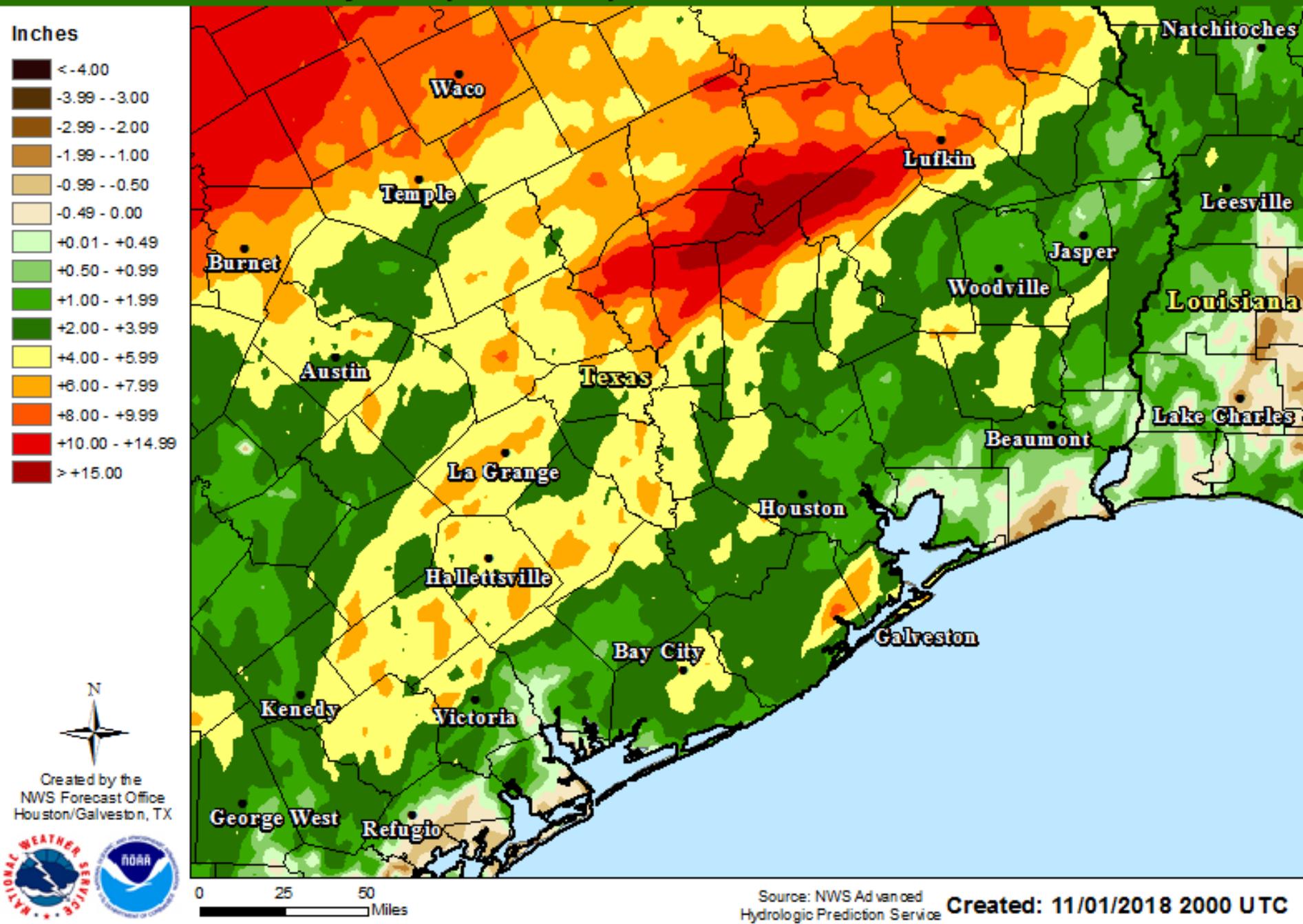
# Precipitation (Continued)

## Total Monthly Precipitation - October 2018



# Precipitation (Continued)

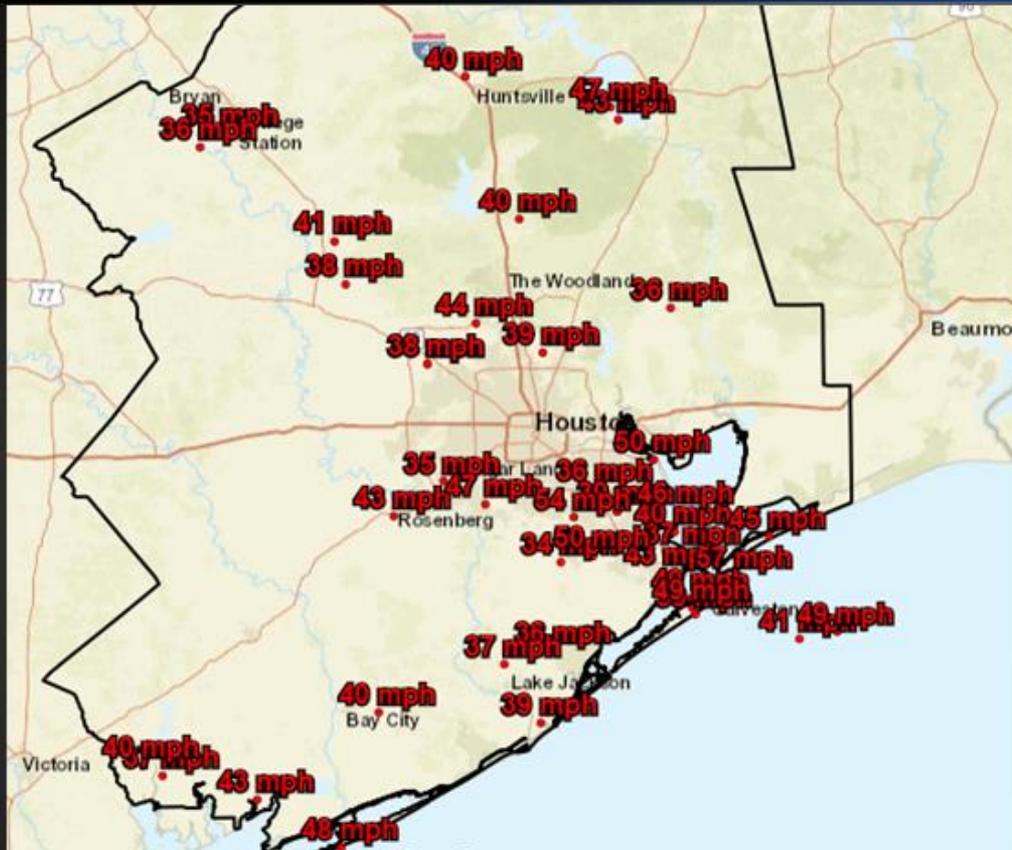
Total Monthly Precipitation Departure From Normal - October 2018



# Halloween Severe Weather

## Wind Gust Reports From Halloween Storms

Weather Forecast Office  
Houston/Galveston, TX  
Issued November 1, 2018 6:18 AM CT



Strong gusty winds accompanied the storms yesterday.

The highest winds reported near the coast as the squall line passed through the area.

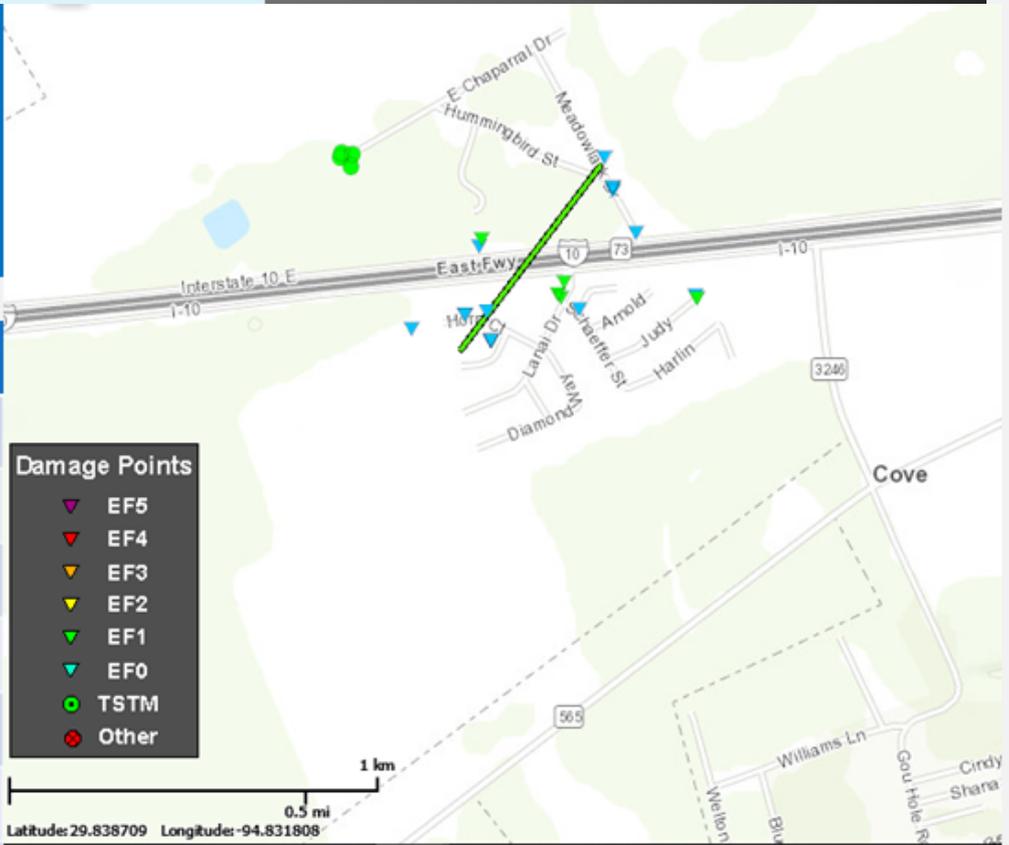
- Ship Channel Entrance: 57 mph
- Galveston: 49 mph
- Morgans Point: 50 mph
- Matagorda Beach: 48 mph



## Preliminary Damage Survey Results

### Chambers County - Cove TX Tornado

Date	10/31/2018
Time (Local)	9:57 PM CDT
EF Rating	EF-1
Est. Peak Winds	90 MPH
Path Length	0.38 miles
Max Width	100 yards
Injuries/Deaths	0/0



**Damage Points**

- ▽ EF5
- ▽ EF4
- ▽ EF3
- ▽ EF2
- ▽ EF1
- ▽ EF0
- TSTM
- ◇ Other

Latitude: 29.838709 Longitude: -94.831808



NWS Houston/Galveston  
ISSUED: 4:43 PM - Thursday, November 1, 2018



# Halloween Severe Weather (continued)

NATIONAL WEATHER SERVICE  
OCEANIC AND ATMOSPHERIC ADMINISTRATION

## Preliminary Damage Survey Results

### Brazoria County – Angleton, TX Tornado

Date	10/31/2018
Time (Local)	9:54 PM CDT
EF Rating	EF-0
Est. Peak Winds	80 MPH
Path Length	0.08 miles
Max Width	30 yards
Injuries/Deaths	0/0

#### Damage Points

- ▼ EF5
- ▼ EF4
- ▼ EF3
- ▼ EF2
- ▼ EF1
- ▼ EF0
- TSTM
- Other



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ISSUED: 2:12 PM - Friday, November 2, 2018



NATIONAL WEATHER SERVICE  
OCEANIC AND ATMOSPHERIC ADMINISTRATION

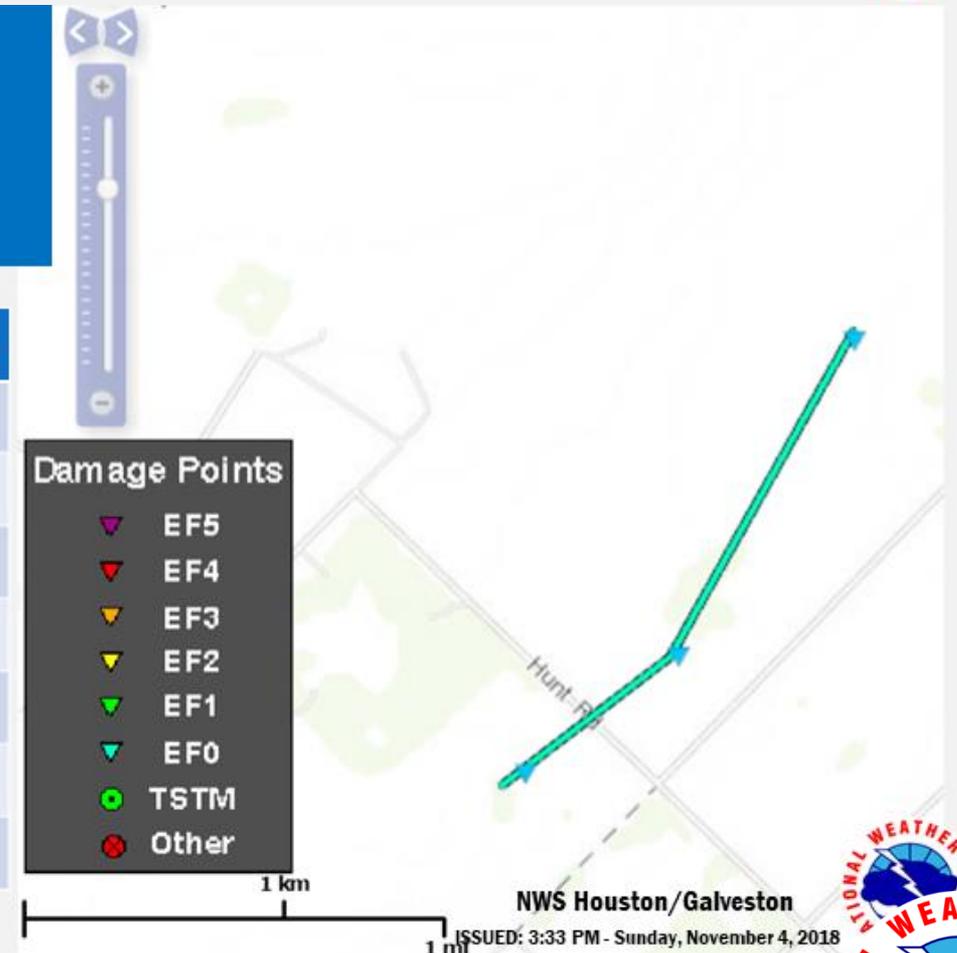
## Preliminary Damage Survey Results

### Colorado County – Eagle Lake, TX Tornado

Date	10/31/2018
Time (Local)	3:00 PM CDT
EF Rating	EF-0
Est. Peak Winds	80 MPH
Path Length	1.4 miles
Max Width	100 yards
Injuries/Deaths	0/0

#### Damage Points

- ▼ EF5
- ▼ EF4
- ▼ EF3
- ▼ EF2
- ▼ EF1
- ▼ EF0
- TSTM
- Other



NWS Houston/Galveston

ISSUED: 3:33 PM - Sunday, November 4, 2018



# Temperatures

*The first week of October was warm with temperatures 5 to 10 degrees F above normal. October brought the first strong cold front of the season with temperatures falling well-below normal during the end of the first and into the second week of the month. The trend of below normal temperatures continued through the third week with the passage of multiple weak cold fronts. The last week of the month was above normal as a few warm fronts pushed north from the Northwestern Gulf of Mexico across Southeast Texas. The average of the monthly temperatures was therefore only slightly above normal by 1 to 2 degrees F for all climate sites except the City of College Station, which ended the month with average temperatures nearly 1 degree F below normal.*

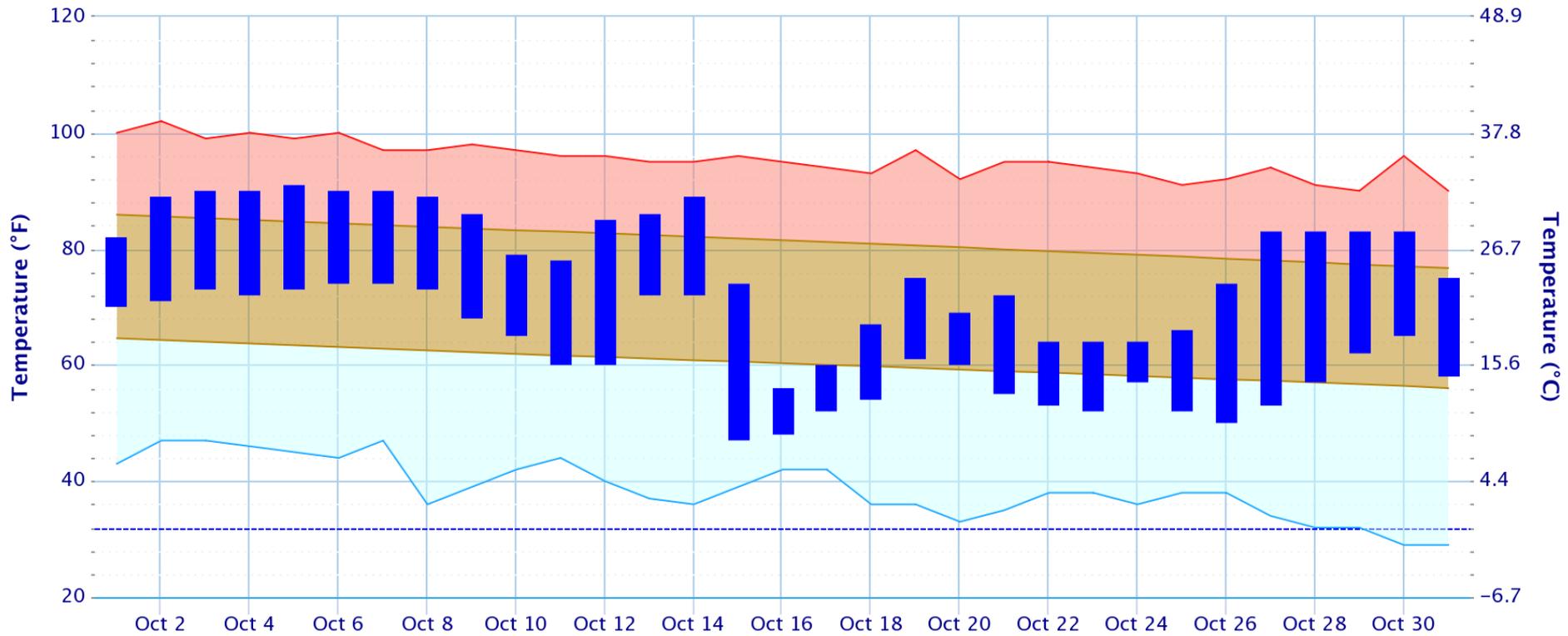
Site	Average Temp (F)	Average High Temp (F)	Average Low Temp (F)	Normal Average Temp (F)	Departure From Normal (F)	Maximum Temperature (F)	Minimum Temperature (F)
Galveston (GLS)	75.8	81.1	70.5	74.3	+1.5	89 on October 7th	58 on October 23rd
Houston Hobby (HOU)	73.4	81.2	65.6	72.1	+1.3	92 on October 6th	53 on October 26th
City of Houston (IAH)	72.3	80.5	64.0	71.5	+0.8	91 on October 14th and 6th	51 on October 22nd
College Station (CLL)	70.0	78.3	61.7	70.8	-0.8	91 on October 5th	47 on October 15th



# Monthly Temperature Charts

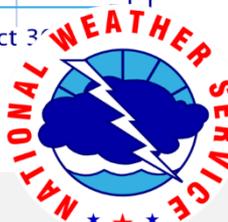
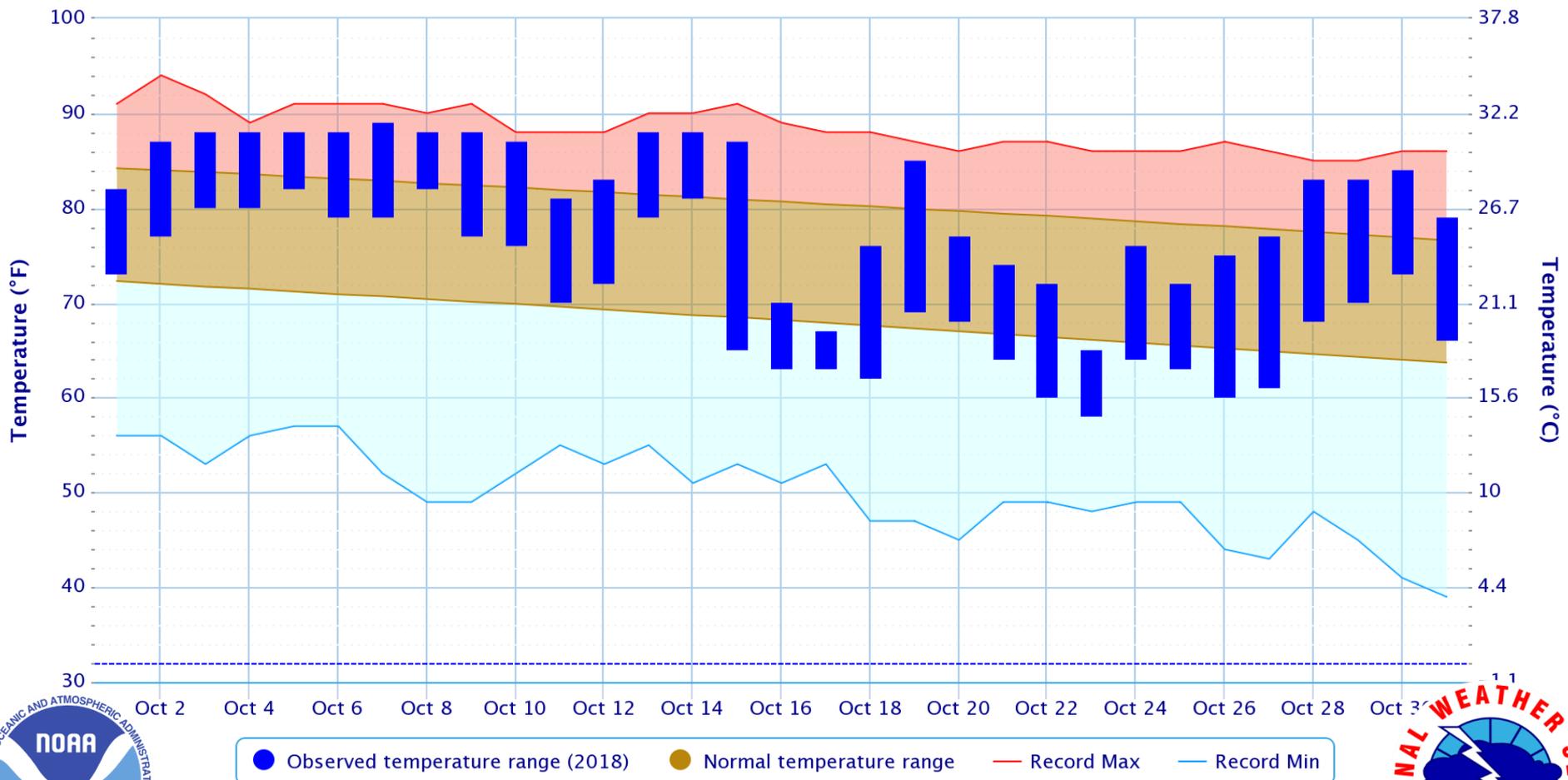
## Daily Temperature Data – College Station Area, TX (ThreadEx)

Period of Record – Max temperature: 1888-10-01 to 2018-11-01; Min temperature: 1882-05-15 to 2018-11-01. Normals period: 1981-2010. Click and drag to zoom chart.



## Daily Temperature Data – Galveston Area, TX (ThreadEx)

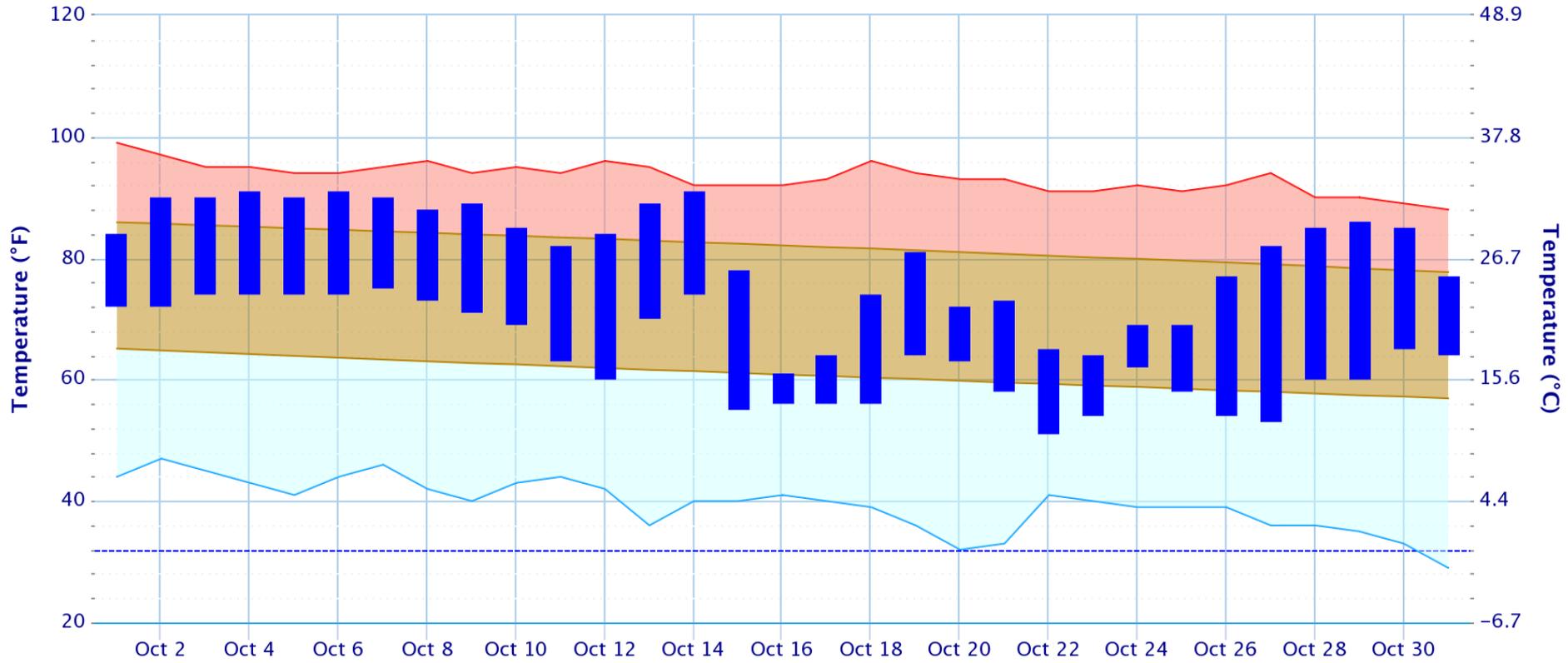
Period of Record – 1874-05-10 to 2018-11-04. Normals period: 1981-2010. Click and drag to zoom chart.



# Monthly Temperature Charts (continued)

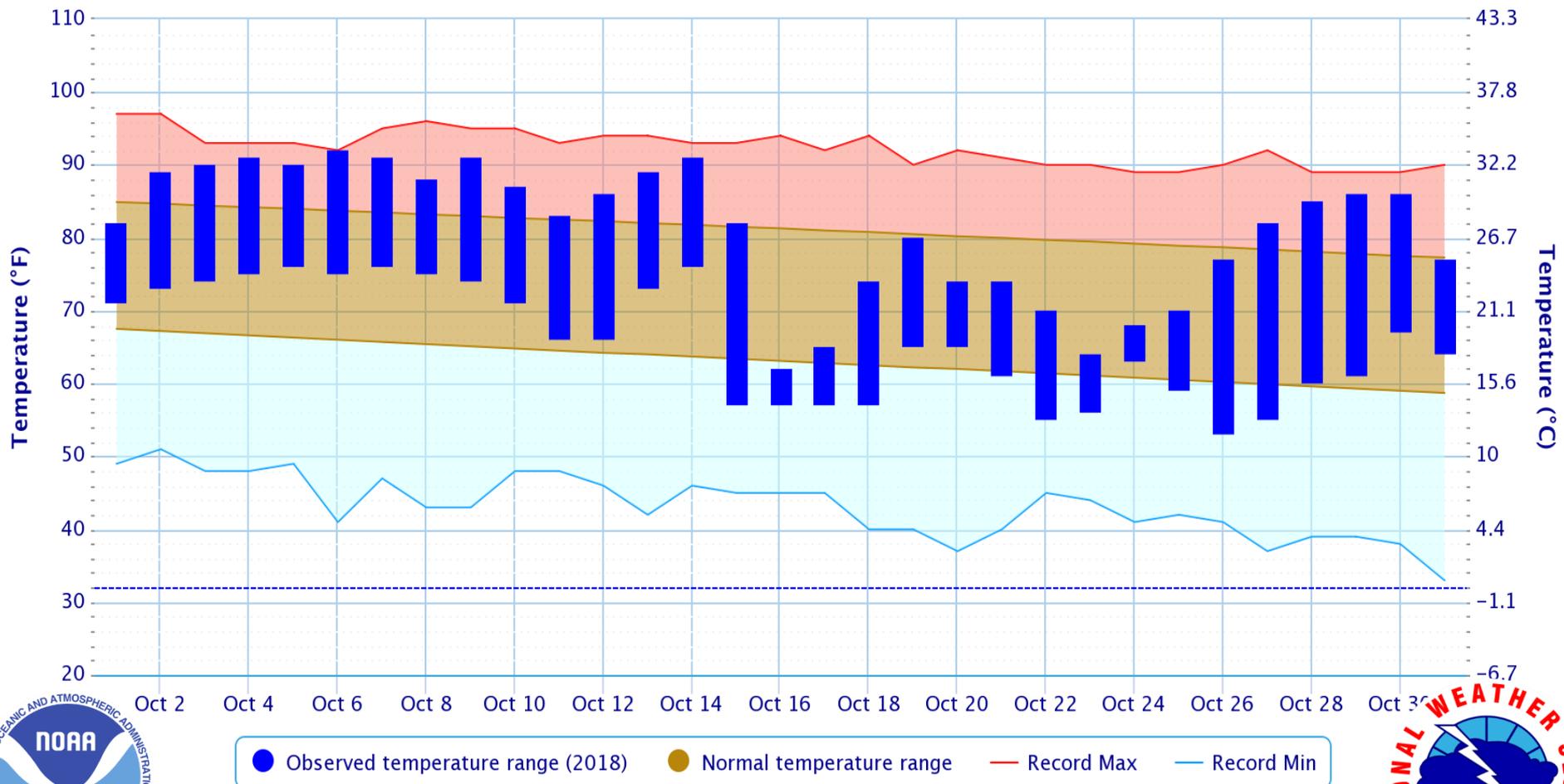
## Daily Temperature Data – Houston Area, TX (ThreadEx)

Period of Record – 1889-05-01 to 2018-11-01. 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 2018-11-01. Normals period: 1981-2010. Click and drag to zoom chart.



● Observed temperature range (2018)    ● Normal temperature range    — Record Max    — Record Min

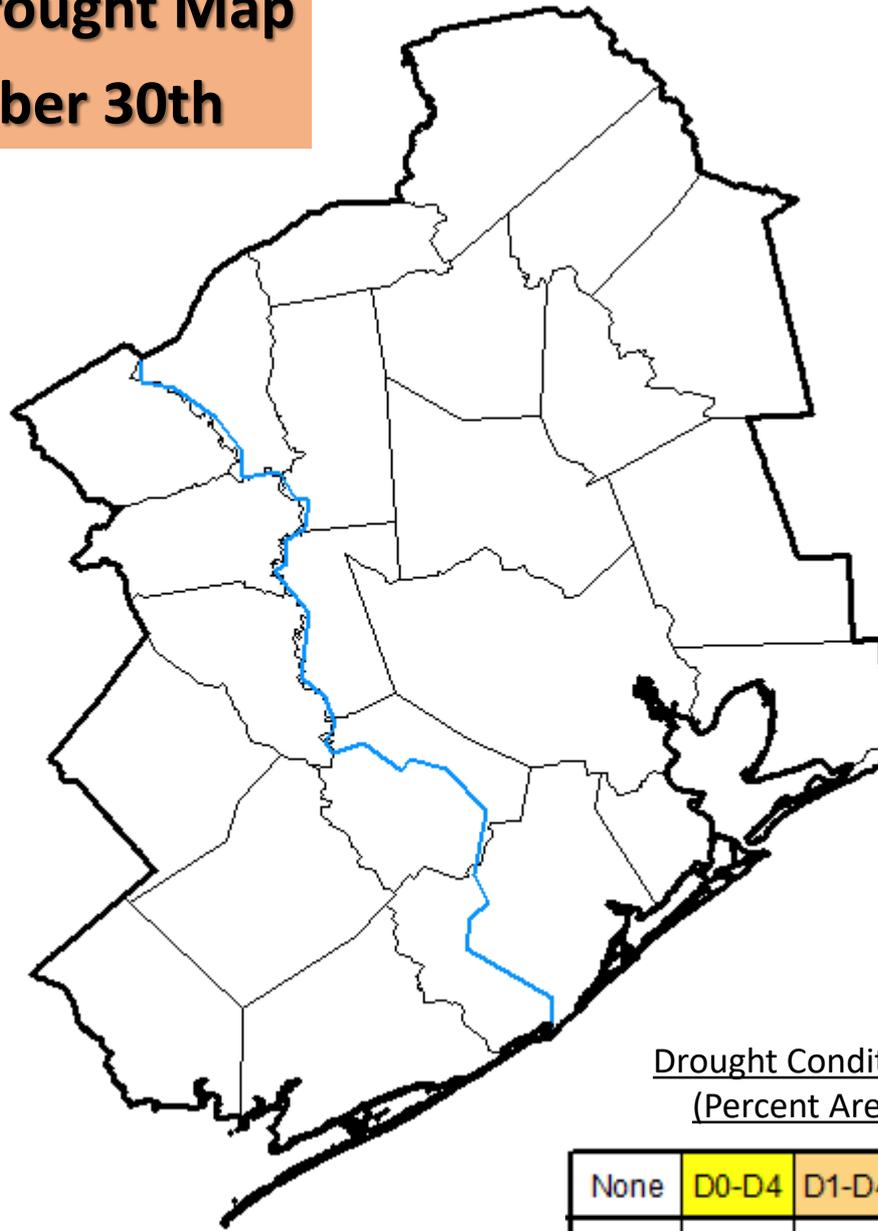


# Drought Conditions

The month of October ended with no locations in drought. Ample rainfall throughout the month saturated soils and kept drought conditions away from the area.

## Most Recent Drought Map

Posted: October 30th



### Intensity:

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

Drought Conditions  
(Percent Area)

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

None	D0-D4	D1-D4	D2-D4	D3-D4	D4
100.00	0.00	0.00	0.00	0.00	0.00



# October Daily Record Reports

*A total of 13 daily records were set across the four primary climate sites.*

Site	Date	Record Type	New Record	Previous Record
City of Galveston	Oct 5 <sup>th</sup>	High Min Temp	82	Tied in 1986
City of Galveston	Oct 8 <sup>th</sup>	High Min Temp	82	Tied in 1990
City of Galveston	Oct 13 <sup>th</sup>	High Min Temp	79	Tied in 1962
City of Galveston	Oct 14 <sup>th</sup>	High Min Temp	81	Tied in 1981
City of Galveston	Oct 24 <sup>th</sup>	Daily Max Rainfall	4.9	4.17 in 1883
City of Houston	Oct 16 <sup>th</sup>	Low Max Temp	61	66 in 1903
City of Houston	Oct 17 <sup>th</sup>	Low Max Temp	64	67 in 1919
Houston Hobby	Oct 6 <sup>th</sup>	High Max Temp	92	Tied in 2009
Houston Hobby	Oct 14 <sup>th</sup>	High Min Temp	76	Tied in 2009
Houston Hobby	Oct 16 <sup>th</sup>	Low Max Temp	62	69 in 1943
Houston Hobby	Oct 17 <sup>th</sup>	Low Max Temp	65	68 in 1976
City of College Station	Oct 16 <sup>th</sup>	Low Max Temp	56	61 in 1912
City of College Station	Oct 17 <sup>th</sup>	Low Max Temp	60	65 in 1970



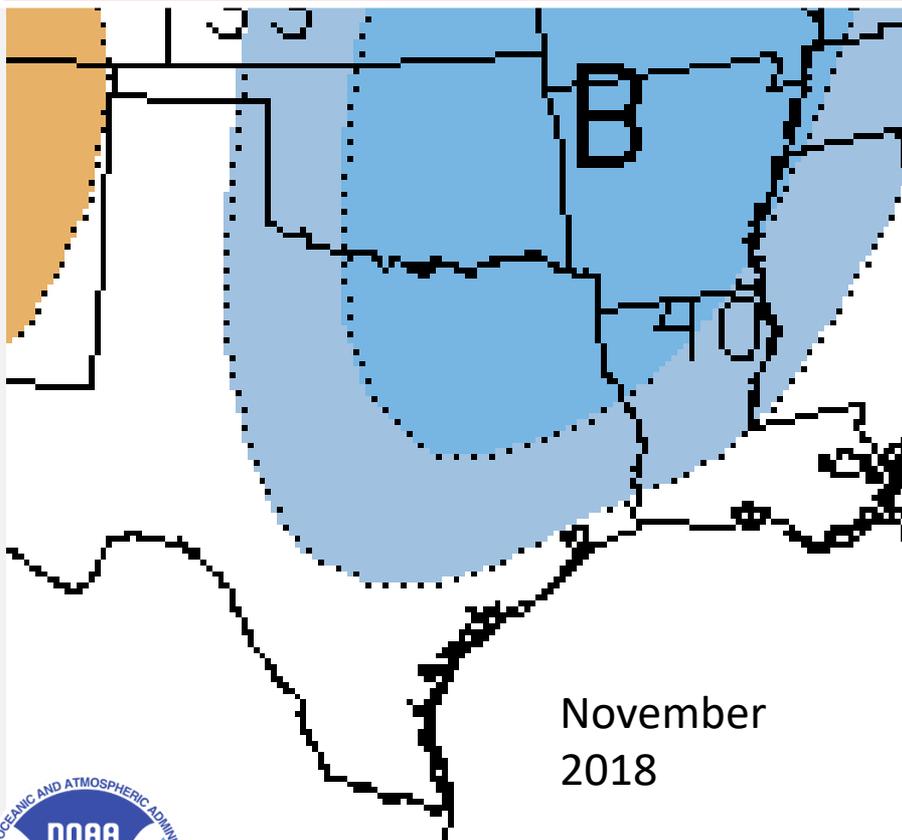
# November Outlook

For November, the latest outlook from the Climate Prediction Center (CPC) calls for a 33.3-40% chance of above normal temperatures, a 33.3% chance of near normal temperatures and a 26.7% chance of below normal temperatures across Southeast Texas. The precipitation outlook has a 40% probability of above normal rainfall, a 33.3% chance of near normal rainfall and a 26.7% chance of below normal rainfall.

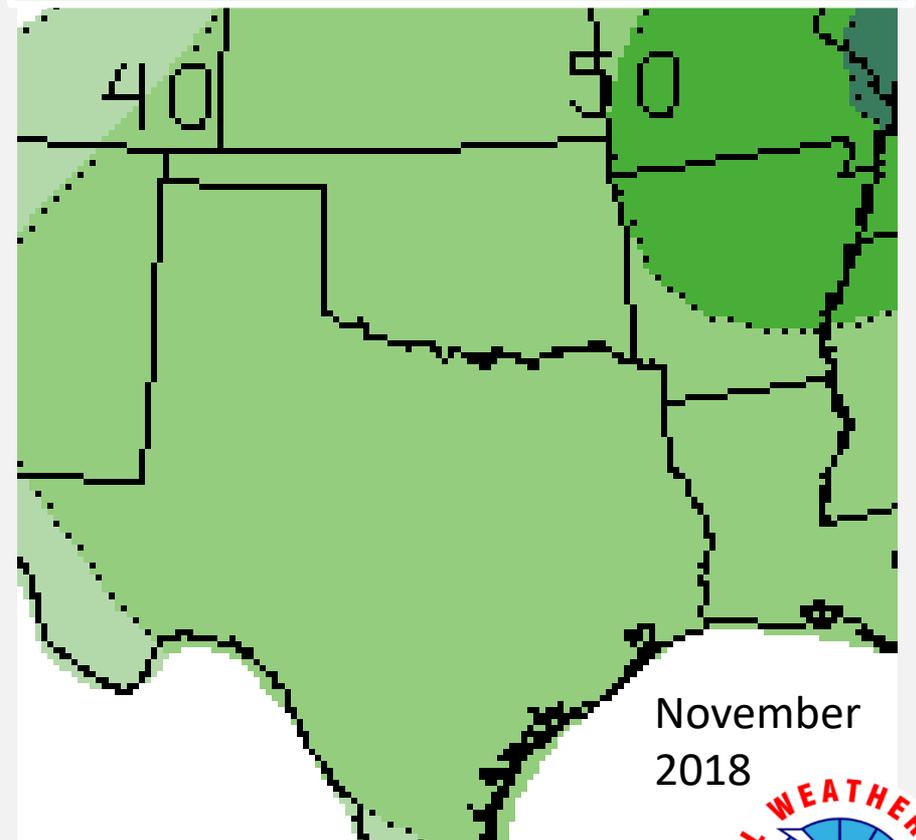
Site	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	65.1	71.6	58.6
Houston Hobby	63.2	72.4	53.9
City of Houston	62.3	72.5	52.1
College Station	60.8	71.0	50.5

Site	Normal Monthly Precipitation (in.)
Galveston (GLS)	4.51
Houston Hobby (HOU)	4.32
City of Houston (IAH)	4.34
College Station (CLL)	3.22

## Temperature Outlook



## 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.*

