# NWS Houston, Texas March 2021 Regional Climate Summary

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High pressure dominated the weather across Southeast Texas with only a few weak cold fronts moving through the region during March. This month was quite different than February in terms of temperatures – the average temperature for the month of March was around 10 to 15 degrees warmer than February (which skewed colder due to the mid-month extreme freeze). Continued dry conditions of around one to three inches below normal led to expanding and worsening drought conditions. Moderate Drought (D1) is being experienced in at least parts of every county in our region. Extreme Drought (D3) emerged in coastal Brazoria and Matagorda counties. Unfortunately, the drier than normal pattern is expected to persist through April and the rest of Spring.

> Photo Credit: Jimmy Fowler

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# By the Numbers: March 2021

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Location (records started)		Average Temp	Ranking	Total Rainfall	Ranking
City of Houston, TX (18	88)	64.4°F	38 <sup>th</sup> Warmest	1.38″	31 <sup>st</sup> Driest
Houston Hobby, TX (19	30)	66.3°F	17 <sup>th</sup> Warmest	1.51"	27 <sup>th</sup> Driest
City of Galveston, TX (1	871)	65.7°F	29 <sup>th</sup> Warmest	1.86"	69 <sup>th</sup> Driest
City of College Station,	TX (1882)	63.4°F	33 <sup>rd</sup> Warmest	1.73"	40 <sup>th</sup> Driest
Conroe, TX (1997)		61.4°F	12 <sup>th</sup> Warmest	1.59"	5 <sup>th</sup> Driest
Huntsville, TX (1997)		63.1°F	12 <sup>th</sup> Warmest	1.99"	5 <sup>th</sup> Driest
Sugar Land, TX (2000)		66.1°F	8 <sup>th</sup> Warmest	1.83"	7 <sup>th</sup> Driest
Palacios, TX (1943)		64.7°F	25 <sup>th</sup> Warmest	1.21"	31 <sup>st</sup> Driest
Clover Field (Pearland)	, TX (1997)	65.3°F	11 <sup>th</sup> Warmest	0.76"	7 <sup>th</sup> Driest
David Wayne Hooks (To	omball), TX (1998)	63.6°F	11 <sup>th</sup> Warmest	1.75"	8 <sup>th</sup> Driest
Angleton, TX (1998)		64.4°F	11 <sup>th</sup> Warmest	1.48"	7 <sup>th</sup> Driest
League City, TX (1990)		64.9°F	12 <sup>th</sup> Warmest	2.32"	15 <sup>th</sup> Driest



## Precipitation

Location	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)	
Galveston (GLS)	1.86	-1.30	2	1.11	23 <sup>rd</sup>
Houston Hobby (HOU)	1.51	-1.69	2	0.53	1 <sup>st</sup>
City of Houston (IAH)	1.38	-2.03	2	0.47	14 <sup>th</sup>
College Station (CLL)	1.73	-1.44	3	0.55	23 <sup>rd</sup>

March was another unseasonably dry month across the region with rainfall totals around one to three inches below normal. A few weak cold fronts made their way through the area generally bringing isolated light showers. Galveston had about 60% of the monthly total happen on one day (23<sup>rd</sup>). A thunderstorm did produce hail in Harris County on March 17<sup>th</sup> with one report of 1" hail.

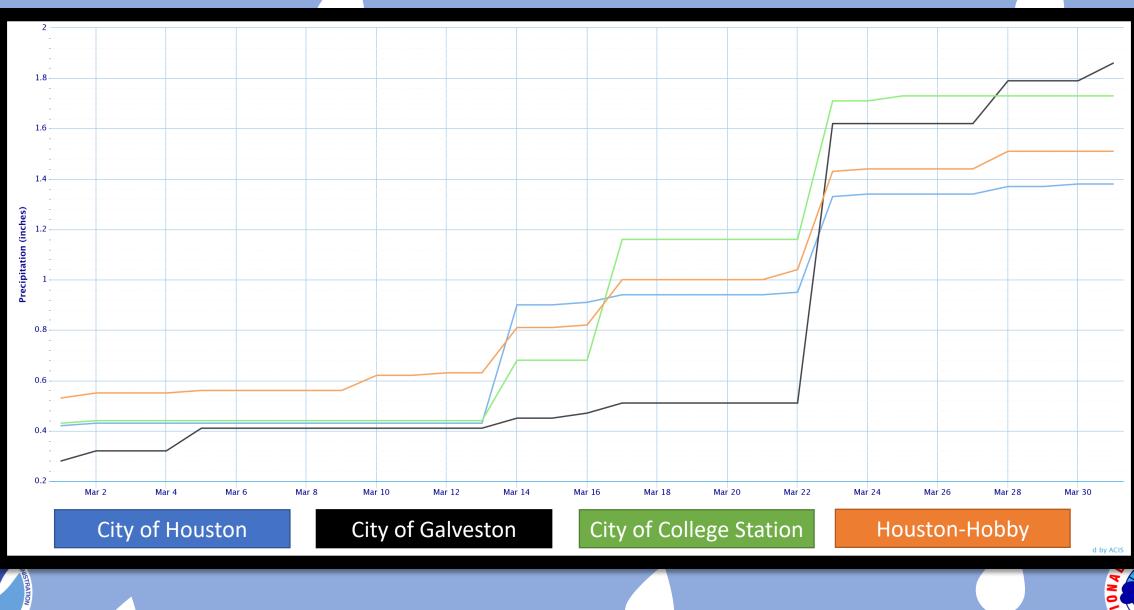


## **Precipitation Accumulation Graph**

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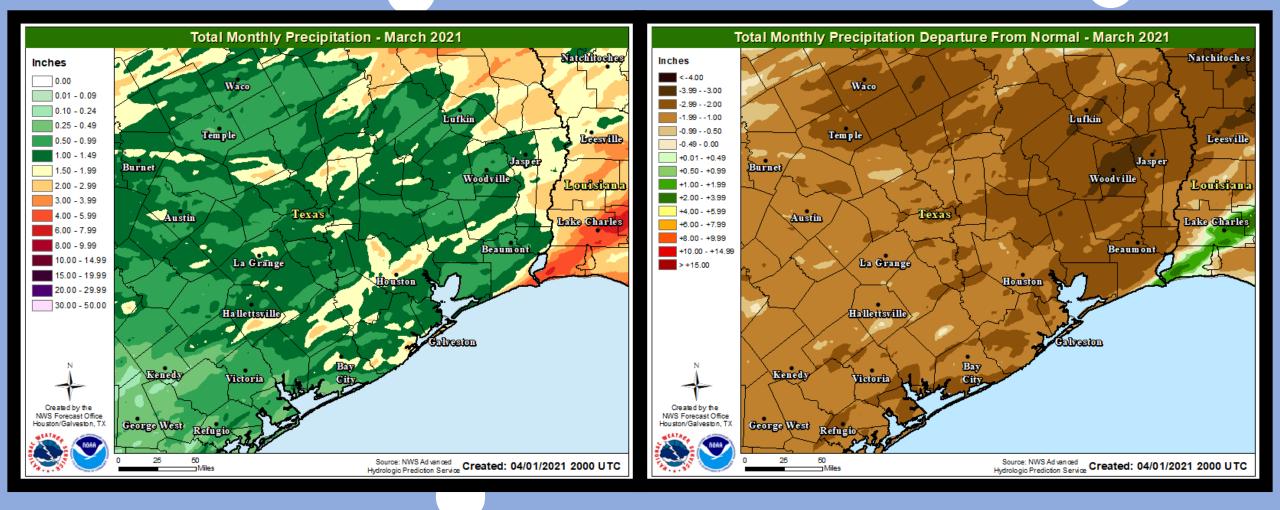
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## **Precipitation Maps**

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## Temperature

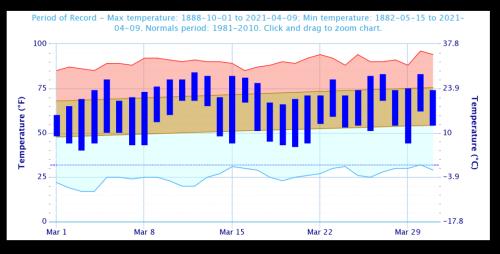
Location	Average High Temp (F)	Average Low Temp (F)	Average Temp (F)	Normal Average Temp (F)	Departure From Normal Average (F)	Maximum Temperature (F)	Minimum Temperature (F)
Galveston (GLS)	72.1	59.2	65.7	63.4	+2.3	82 on the 17 <sup>th</sup>	48 on the 3 <sup>rd</sup>
Houston Hobby (HOU)	76.2	56.5	66.3	63.3	+3.0	85 on the 27 <sup>th</sup>	44 on the 3 <sup>rd</sup>
City of Houston (IAH)	76.0	52.8	64.4	62.7	+1.7	86 on the 26 <sup>th</sup>	39 on the 7 <sup>th</sup>
College Station (CLL)	74.6	52.2	63.4	61.4	+2.0	84 on the 12 <sup>th</sup>	40 on the 3 <sup>rd</sup>

The lack of precipitation due to high pressure remaining over Southeast Texas led to a warmer than normal month across the region by about two to three degrees. This is quite a stark change from February – in fact, the average temperature in the month of March was generally around 10 to 25 degrees warmer than February.

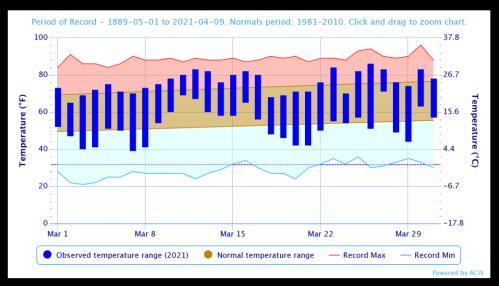


## **Temperature Charts**

#### **City of College Station**



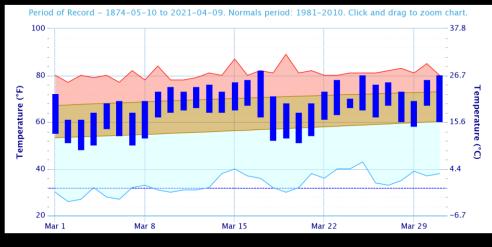
#### **City of Houston**



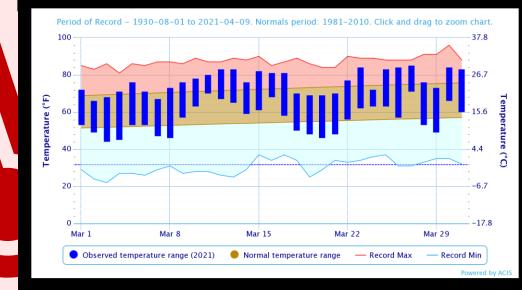
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#### **City of Galveston**



### Houston-Hobby



# **Daily Record Reports**

Site	Date	Record Type	New Record	Previous Record
City of Galveston	March 17 <sup>th</sup>	High Maximum Temp	82°	80° in 1878
City of Galveston	March 31 <sup>st</sup>	High Maximum Temp	80° - T	80° in 1941

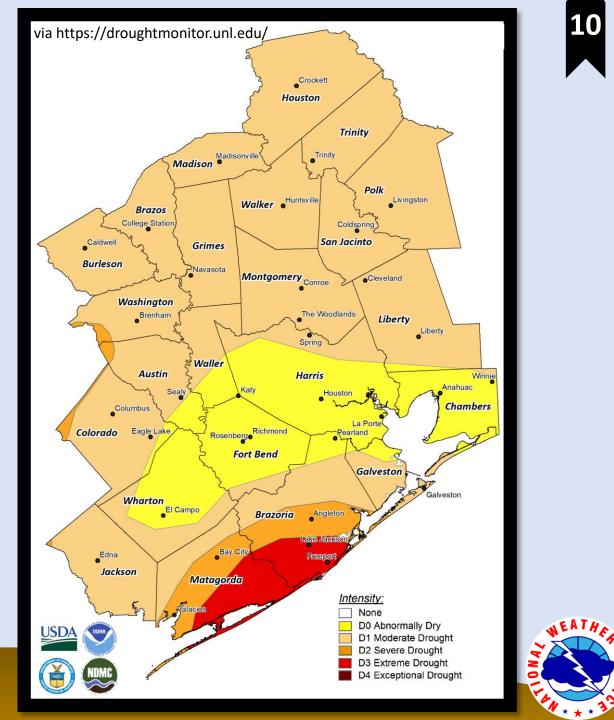




## Drought Monitor As of April 2<sup>nd</sup>

Drought conditions steadily degraded across the region through the month of March across the area due to the continued stretch of drier than normal conditions. Moderate Drought (D1) is being experienced in at least parts of every county in our region and Severe Drought (D2) is being experienced in extreme western Washington, Austin, and Colorado counties. The driest conditions across the region are located along coastal Matagorda and Brazoria counties where Extreme Drought (D3) is being seen.

Because Extreme Drought is being experienced in parts of the area, Drought Information Statements are being released every Monday.



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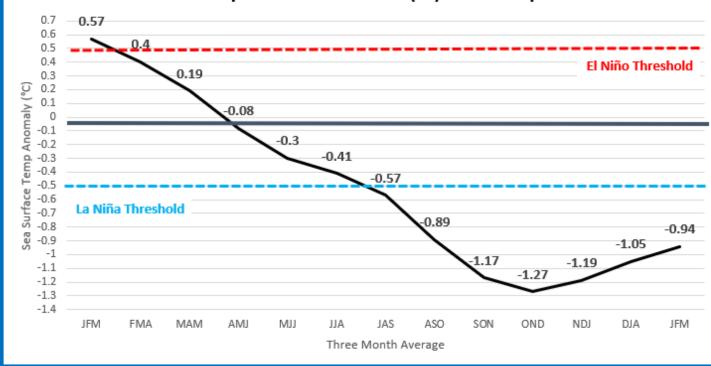


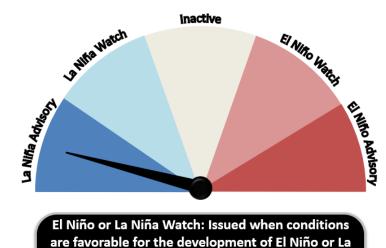
### **Current ENSO Phase: La Niña**

## The Climate Prediction Center's ENSO Forecast: La Niña Advisory

- La Niña conditions are present
- 80% chance of ENSO-Neutral conditions forming during May July

Sea Surface Temperature Anomalies (°C) in the Tropical Pacific





Niña conditions within the next six months.

El Niño or La Niña Advisory: Issued when El Niño or La Niña conditions are observed and expected to continue.

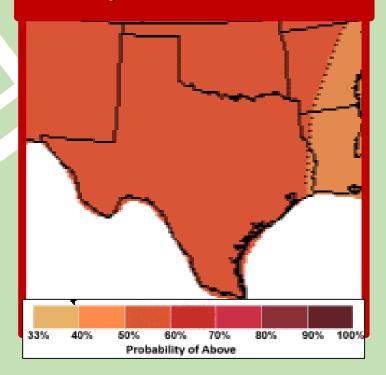
## **April Outlook**

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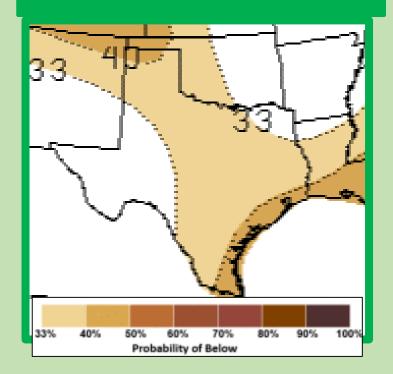
Location	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	70.1	75.9	64.4
Houston Hobby	69.8	78.8	60.9
City of Houston	69.5	79.6	59.4
College Station	68.5	78.9	58.1

### **Temperature Outlook**



Location	Normal Monthly Precipitation (in.)
Galveston	3.05
Houston Hobby	3.25
City of Houston	3.31
College Station	2.66

### **Precipitation Outlook**





# **Climate Primary Site History**



### Galveston (GLS)

## **College Station (CLL)**

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).

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.

### 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.

### Houston Hobby (HOU)

Records are based upon observations beginning in August 1931.



