



# NWS Houston, Texas January 2020 Regional Climate Summary

**Produced by Jimmy Fowler and Josh Lichter** 

... Very Warm Start to the New Decade...

2020 started out a lot like how 2019 ended: unseasonably warm. Most of the area saw temperatures five to six degrees above normal, which put this January in the top ten warmest Januarys on record. There were 15 temperature records set this month, with 8 of those happening all on January 15<sup>th</sup> when all four climate sites broke not only their daily high maximum temperatures, but also their daily high minimum temperatures. This month ended up just around normal precipitation wise, except for the coast which saw well above normal precipitation. This was mainly due to an intense band of rain that went over the coast on January 26<sup>th</sup>. This band produced 3.34 inches of rain in Galveston, which was not only the daily record rainfall for Galveston beating the old record of 2.24 inches set back in 1913, but also the 5th wettest January day on record. College Station was the only primary climate site that saw below normal precipitation for the month. Because of this rain, areas along the coast are no longer experience drought conditions. However, the rest of the area was not able to catch up from the previous few months of well below normal precipitation and continues to remain in either Moderate or Severe Drought.

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## January 2020 by the Numbers

Location (records started)	Average Temp	Ranking	Total Rainfall	Ranking
City of Houston, TX (1888)	57.9°F	14 <sup>th</sup> Warmest	3.84"	52 <sup>nd</sup> Wettest
Houston Hobby, TX (1930)	59.7°F	7 <sup>th</sup> Warmest	4.92"	22 <sup>nd</sup> Wettest
City of Galveston, TX (1871)	61.5°F	8 <sup>th</sup> Warmest	7.90"	10 <sup>th</sup> Wettest
City of College Station, TX (1882)	57.0°F	10 <sup>th</sup> Warmest	2.49"	68 <sup>th</sup> Wettest
Conroe, TX (1997)	54.2°F	8 <sup>th</sup> Warmest	3.33"	12 <sup>th</sup> Wettest
Huntsville, TX (1997)	55.0°F	6 <sup>th</sup> Warmest	3.76"	10 <sup>th</sup> Wettest
Sugar Land, TX (2000)	58.5°F	2 <sup>nd</sup> Warmest	3.80"	6 <sup>th</sup> Wettest
Palacios, TX (1943)	60.7°F	3 <sup>rd</sup> Warmest	5.80′′	7 <sup>th</sup> Wettest
Clover Field (Pearland), TX (1997)	59.6°F	2 <sup>nd</sup> Warmest	3.59"	10 <sup>th</sup> Wettest
David Wayne Hooks (Tomball), TX (1998)	56.1°F	6 <sup>th</sup> Warmest	3.11"	10 <sup>th</sup> Wettest
Angleton, TX (1998)	59.3°F	2 <sup>nd</sup> Warmest	5.93"	4 <sup>th</sup> Wettest
League City, TX (1990)	58.9°F	2 <sup>nd</sup> Warmest	6.08	10 <sup>th</sup> Wettest

## **Precipitation**

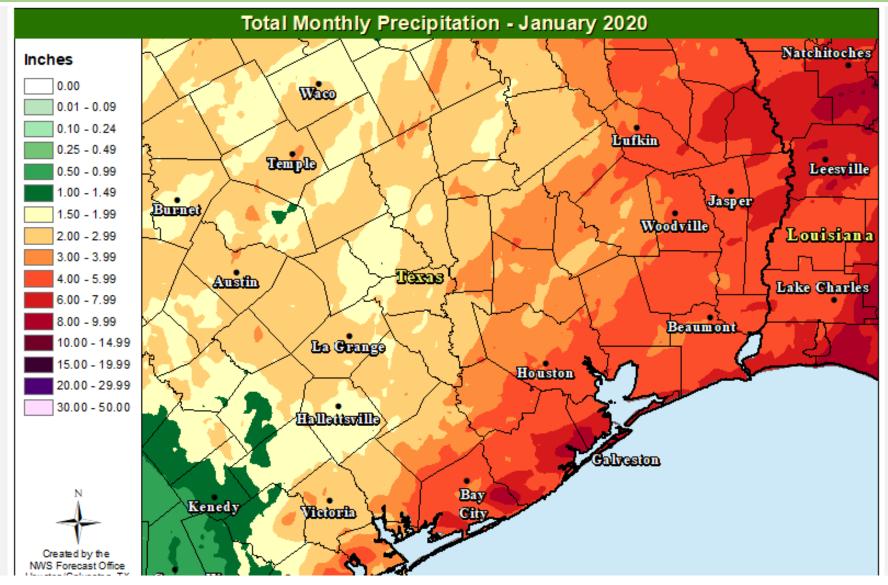
Overall, January saw near average to above average precipitation for the month with the bulk of the precipitation coming from frontal passages. The most impressive rainfall occurred on January 26<sup>th</sup> when an intense band of rain formed from Angleton out to Galveston as a front moved through. This band produced 3.34 inches of rain in Galveston, which was not only the daily record rainfall for Galveston beating the old record of 2.24 inches set back in 1913, but also the 5<sup>th</sup> wettest January day on record. College Station was the only primary climate site that saw below normal precipitation for the month.

Site	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days		ly Precipitation date)
Galveston (GLS)	7.90	+3.70	6	3.34 Daily Record	26 <sup>th</sup>
Houston Hobby (HOU)	4.92	+1.05	6	1.40	22 <sup>nd</sup>
City of Houston (IAH)	3.84	+0.46	4	1.30	22 <sup>nd</sup>
College Station (CLL)	2.49	-0.75	1	0.88	10 <sup>th</sup>

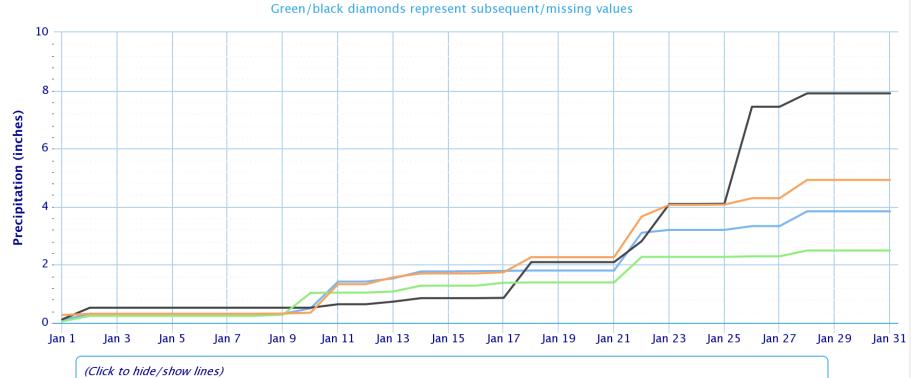




## **Precipitation** (Continued)



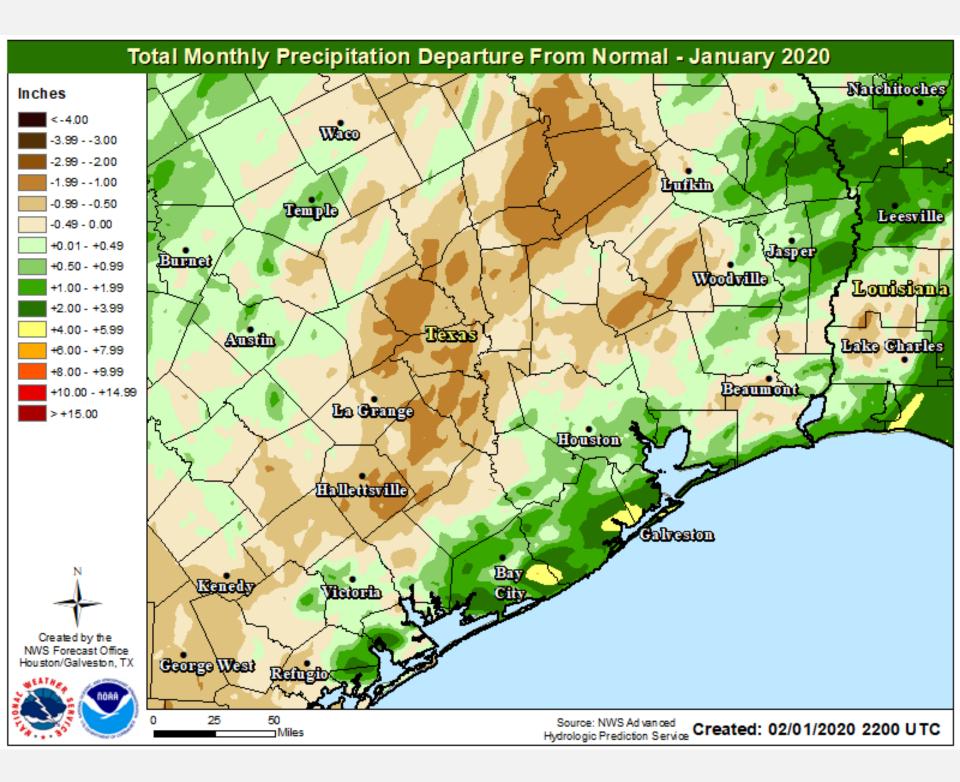
#### **Accumulated Precipitation**



(Click to hide/show lines)

— Houston Area, TX (ThreadEx):Precip — Galveston Area, TX (ThreadEx):Precip — College Station Area, TX (ThreadEx):Precip — HOUSTON WILLIAM P HOBBY AP, TX:Precip

## **Precipitation** (Continued)







### **Temperatures**

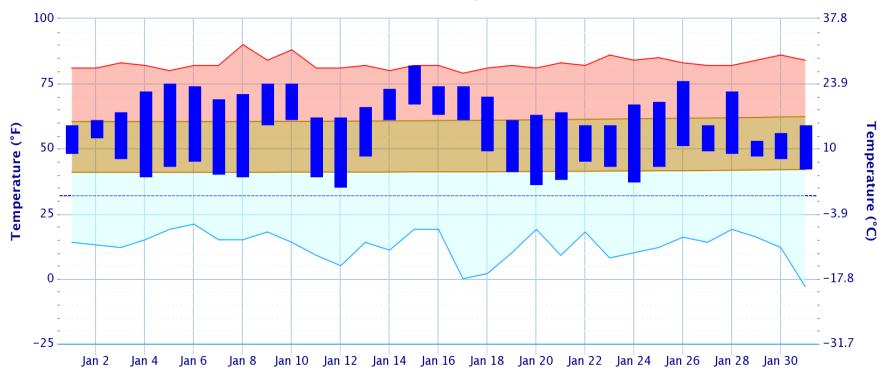
The first month of the year experienced well above normal temperatures with the climate sites seeing average temperatures five to six degrees above normal. The City of Houston ranked as the 14<sup>th</sup> warmest January on record, the City of College Station ranked as the 10<sup>th</sup>, the City of Galveston ranked as the 8<sup>th</sup>, and Houston-Hobby ranked as the 7<sup>th</sup>. There were a total of fifteen temperature records set this month, and eight of them were broken on January 15<sup>th</sup>. That day all four of the primary climate sites not only broke each of their daily high maximum temperature records, but also their daily high minimum temperature records. On January 10<sup>th</sup>, Houston-Hobby experienced a low temperature of 71°F. This not only set the warmest minimum temperature for the day at Houston-Hobby, it also tied the monthly record high minimum set on January 21, 1937. None of the primary climate sites experienced sub-freezing temperatures during the entire month.

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)	61.5	67.3	55.6	55.2	+6.3	76 on the 15 <sup>th</sup>	44 on the 12 <sup>th</sup>
Houston Hobby (HOU)	59.7	67.8	51.6	54.1	+5.6	85 on the 15 <sup>th</sup>	38 on the 12 <sup>th</sup>
City of Houston (IAH)	57.9	67.2	48.5	53.1	+4.8	81 on the 15 <sup>th</sup>	34 on the 12 <sup>th</sup>
College Station (CLL)	57.0	66.9	47.2	51.1	+5.9	82 on the 15 <sup>th</sup>	35 on the 12 <sup>th</sup>

## **Monthly Temperature Charts**

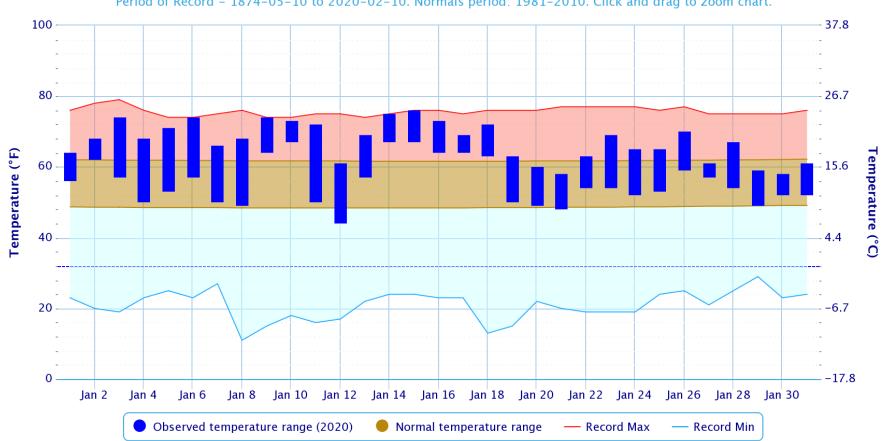
#### Daily Temperature Data - College Station Area, TX (ThreadEx)

Period of Record - Max temperature: 1888-10-01 to 2020-02-10; Min temperature: 1882-05-15 to 2020-02-10. Normals period: 1981-2010. Click and drag to zoom chart.



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

Period of Record - 1874-05-10 to 2020-02-10. Normals period: 1981-2010. Click and drag to zoom chart.

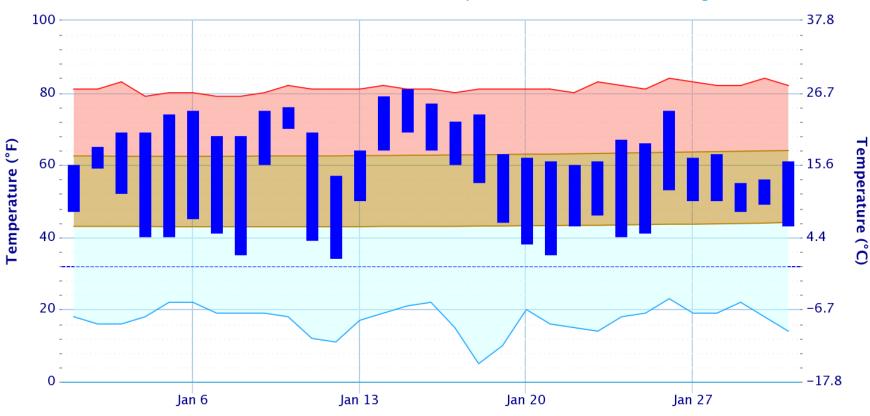




#### **Monthly Temperature Charts (continued)**

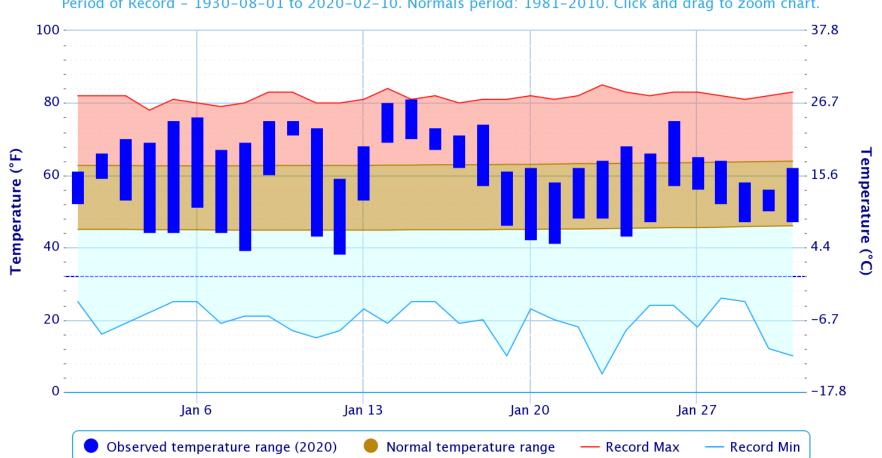
#### Daily Temperature Data - Houston Area, TX (ThreadEx)

Period of Record - 1889-05-01 to 2020-02-10. 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 2020-02-10. Normals period: 1981-2010. Click and drag to zoom chart.



#### **January Daily Record Reports**

A total of 16 daily records were set across the primary climate sites. T stands for tied.

Site	Date	Record Type	New Record	Previous Record
City of Houston	January 10 <sup>th</sup>	High Min Temperature	70°	66° in 1898
City of Houston	January 15 <sup>th</sup>	High Max Temperature	81°	79° in 1996
City of Houston	January 15 <sup>th</sup>	High Min Temperature	69°	67° in 1932
City of Galveston	January 6 <sup>th</sup>	High Max Temperature	74° - T	74° in 1880
City of Galveston	January 9 <sup>th</sup>	High Max Temperature	74° - T	74° in 1952
City of Galveston	January 14 <sup>th</sup>	High Max Temperature	75° - T	75° in 1887
City of Galveston	January 14 <sup>th</sup>	High Min Temperature	67°	65° in 2007
City of Galveston	January 15 <sup>th</sup>	High Max Temperature	76°	77° in 2017
City of Galveston	January 15 <sup>th</sup>	High Min Temperature	67°	66° in 1950
City of Galveston	January 26 <sup>th</sup>	Daily Max Precipitation	3.34"	2.24" in 1913

High Max

**Low Max** 

Precip

High Min

**Low Min** 



Key



#### **January Daily Record Reports**

A total of 16 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	January 15 <sup>th</sup>	High Max Temperature	82°	80° in 1950
City of College Station	January 15 <sup>th</sup>	High Min Temperature	67°	66° in 1907
Houston-Hobby	January 10 <sup>th</sup>	High Min Temperature	71°	65° in 2005
Houston-Hobby	January 14 <sup>th</sup>	High Min Temperature	69°	66° in 1932
Houston-Hobby	January 15 <sup>th</sup>	High Max Temperature	81°	79° in 1950
Houston-Hobby	January 15 <sup>th</sup>	High Min Temperature	70°	66° in 1950

High Max

**Low Max** 

**Precip** 

High Min

Low Min

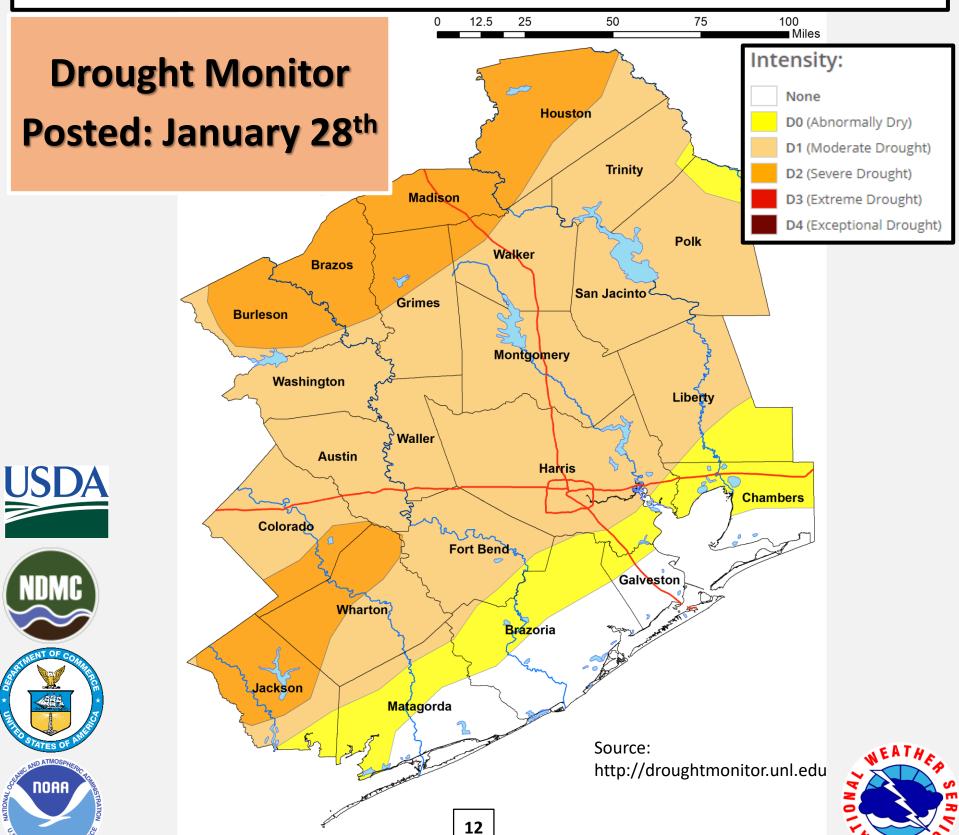


Key



#### **Drought Conditions**

While most of the area saw near normal precipitation totals for the month, it was not enough to improve the drought conditions expect for along the coast. In fact, the areas of Severe Drought (D2) expanded to include all of Madison County and for portions of Houston, Grimes, Brazos, Burleson, Colorado, Wharton, and Jackson counties.

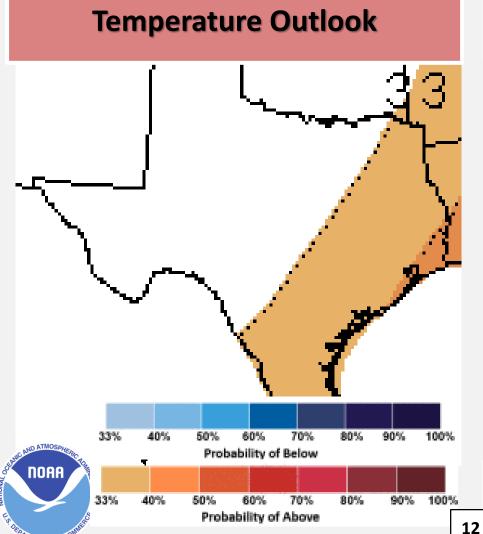


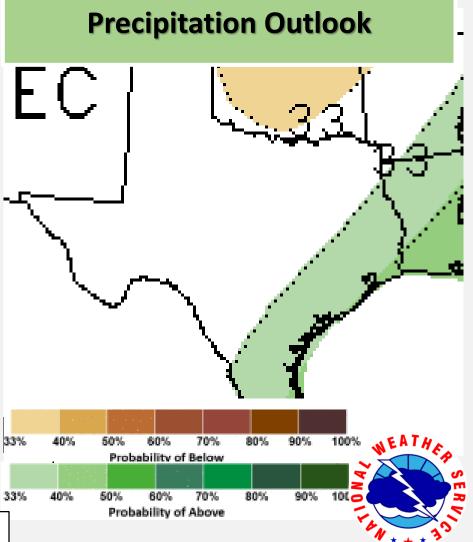
## **February Outlook**

For February, the latest outlook from the Climate Prediction Center (CPC) calls for a 40% chance of above normal temperatures, a 33% chance of near normal temperatures, and a 27% chance for below normal temperatures across our area. The precipitation outlook calls for a 38% chance of above normal precipitation, a 33% chance of near normal precipitation, and a 29% chance for below normal precipitation across our area.

Site	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	54.5	64.3	50.9
Houston Hobby	60.2	67.5	52.9
City of Houston	59.7	67.7	51.7
College Station	55.7	63.4	48.0

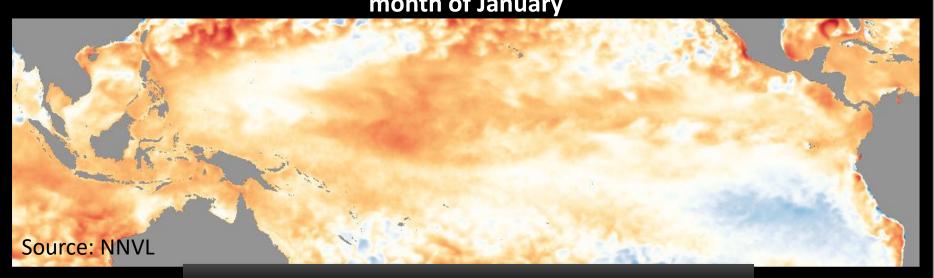
Site	Normal Monthly Precipitation (in.)
Galveston (GLS)	2.57
Houston Hobby (HOU)	3.21
City of Houston (IAH)	3.20
College Station (CLL)	2.85





#### **ENSO Observations**

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



#### **Current ENSO Phase: Neutral**

Sea Surface Temperature Anomalies (°C) in the Tropical Pacific 1.5 1 SEA SURFACE TEMP ANOMALY (°C) El Niño Threshold La Niña Threshold Apr '18 Jan'20 Jan '17 Oct '17 Jan '18 Jul '18 Jul '19 Oct'19 Apr '17 Jul '17 Oct '18 Jan '19 Apr '19

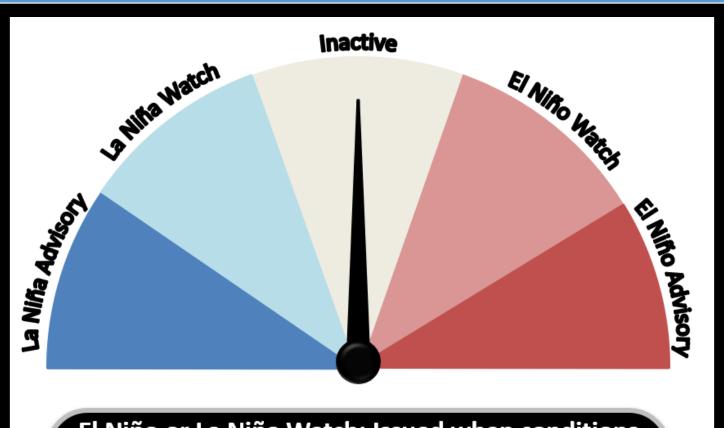




#### **ENSO Forecast**

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

- There is a 60% chance of ENSO-Neutral conditions continuing through the spring
- There is a 50% chance of ENSO-Neutral conditions continuing through the summer



El Niño or La Niña Watch: Issued when conditions are favorable for the development of El Niño or La 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.



## **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)**