NWS Houston, Texas December 2020 Regional Climate Summary

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Produced by Jimmy Fowler

...December was warmer and wetter than normal...

Multiple cold fronts moved through the region during the month of December bringing periods of rain and a bit of a rollercoaster of temperatures. Generally around three to six inches of rain fell across the area through the month, but there were some localized higher totals such as at Houston-Hobby and Pearland which each got around eight inches total for the month (around four inches more than normal). Despite the wetter than normal conditions, the month ended on average around one to two degrees above normal. One of the reasons for this was due to very strong southwesterly flow out ahead of cold fronts inducing higher daytime max temperatures – into the 80s a few times, which is around 20 degrees above the normal high temperatures.

Photo Credit: Jimmy Fowler

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By the Numbers: December 2020

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Ranking
45 th Wettest

	Location (records started)	Average Temp	Ranking	Total Rainfall	Ranking
	City of Houston, TX (1888)	55.4°F	61 st Warmest	4.47"	45 th Wettest
	Houston Hobby, TX (1930)	57.6°F	22 nd Warmest	8.04"	5 th Wettest
	City of Galveston, TX (1871)	58.7°F	39 th Warmest	3.98"	53 rd Wettest
	City of College Station, TX (1882)	53.6°F	49 th Warmest	4.61"	36 th Wettest
	Conroe, TX (1997)	52.2°F	13 rd Warmest	4.03"	8 th Driest
	Huntsville, TX (1997)	53.9°F	8 th Warmest	7.58"	2 nd Wettest
	Sugar Land, TX (2000)	55.8°F	10 th Warmest	6.41"	3 rd Wettest
	Palacios, TX (1943)	56.4°F	42 nd Warmest	6.81"	7 th Wettest
	Clover Field (Pearland), TX (1997)	56.3°F	11 th Warmest	8.23"	2 nd Wettest
	David Wayne Hooks (Tomball), TX (1998)	53.8°F	13 th Warmest	5.09"	5 th Wettest
MINISTR	Angleton, TX (1998)	56.6°F	9 th Warmest	5.67"	3 rd Wettest
ATION 30.	League City, TX (1990)	56.8°F	8 th Warmest	6.53″	7 th Wettest



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Precipitation

Location	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)	
Galveston (GLS)	3.98	+0.46	4	1.23	19 th
Houston Hobby (HOU)	8.04	+4.03	4	2.65	13 th
City of Houston (IAH)	4.47	+0.73	6	1.03	2 nd
College Station (CLL)	4.61	+1.38	2	1.70	31 st

Multiple frontal systems moved across Southeast Texas in the month of December resulting in a wetter than normal month. This ranged from around a half an inch above normal in Galveston, to close to four inches. The two wettest days of the month occurred on the 13th and the 31st when Houston-Hobby set daily rainfall records for each of those dates. College Station saw its highest 1-day total on December 31st for the entire year on the last day.



Precipitation Accumulation Graph

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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)	65.3	52.2	58.7	57.3	+1.4	75 on the 30 th	40 on the 17 th
Houston Hobby (HOU)	67.9	47.4	57.6	55.6	+2.0	81 on the 23 rd	32 on the 1 st
City of Houston (IAH)	66.8	43.9	55.4	54.4	+1.0	84 on the 23 rd	30 on the 1 st
College Station (CLL)	65.6	41.6	53.6	52.2	+1.4	81 on the 9 th	29 on the 1 st & 17 th

Despite the precipitation and multiple cold fronts, the region still saw another warmer than normal month by around one to two degrees. Generally, the coldest day of the month was on the 1st where the Houston sites and College Station dipping down into freezing temperatures. Temperatures did climb into the low to mid 80s a few times this month, which is about 20 degrees above the normal high.

Temperature Charts





City of Houston



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Daily Record Reports

Site	Date	Record Type	New Record	Previous Record
City of Houston	December 23 rd	High Max Temperature	81° - T	81° in 2015
Houston-Hobby	December 13 th	Daily Max Rainfall	2.65″	1.91" in 2015
Houston-Hobby	December 31 st	Daily Max Rainfall	1.76″	1.30" in 1941
City of Galveston	December 30 th	High Max Temperature	75° - T	75° in 1971

There were 4 daily records set during the month of December.



Drought Monitor As of December 29th

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The northern third of the area remains in D1-Moderate Drought with some spots of D2-Severe Drought located in Central Grimes County, Southwestern Burleson County, and Western Washington County. The map to the right does not include any of the precipitation that fell at the very end of the month.



January Climatology & Outlook

Location	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	55.2	61.8	48.6
Houston Hobby	54.1	63.0	45.1
City of Houston	53.1	62.9	43.2
College Station	51.1	61.0	41.2

Temperature Outlook



UQH

Location	Normal Monthly Precipitation (in.)		
Galveston	4.20		
Houston Hobby	3.87		
City of Houston	3.38		
College Station	3.24		

Precipitation Outlook







Current ENSO Phase: La Niña

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

- La Niña conditions are present
- 95% chance of La Niña conditions continuing through March

Sea Surface Temperature Anomalies (°C) in the Tropical Pacific 1.5 El Niño Threshol SEA SURFACE TEMP ANOMALY (°C) La Niña Thresho -1.5 Dec '17 Dec'20 Sep'19 Dec'19



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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)

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.



