

NWS Houston, Texas

December 2023

Regional Climate Summary

Produced by Josh Lichter and Jimmy Fowler

...Slightly Above Normal Temperatures...Another Below Normal Month for Rainfall...

2023 ended rather quietly weather-wise after our record filled year. There was only one daily record set in our area this month, a daily rainfall record at Galveston on the 1st of the month. While there were no temperature records set this month, the month on average was about one to two degrees above normal temperature wise. There were a few cold fronts that passed through the area this month, but they didn't produce much rainfall for the area except along the coast. Because of this, drought conditions worsened north of Conroe, but improved along the coast through the month.

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By the Numbers: December 2023

Location (records started)	Average Temp	Ranking	Total Rainfall	Ranking
City of Houston, TX (1888)	57.3°F	31 st Warmest	2.57"	53 rd Driest
Houston Hobby, TX (1930)	59.2°F	11 th Warmest	2.71"	31 th Driest
City of Galveston, TX (1871)	60.8°F	16 th Warmest	1.93"	74 th Driest
City of College Station, TX (1882)	56.0°F	16 th Warmest	1.93"	40 th Driest
Palacios, TX (1943)	59.1°F	16 th Warmest	2.72"	39 th Wettest
Huntsville, TX (1997)	55.3°F	6 th Warmest	1.60"	8 th Driest
Sugar Land, TX (2000)	58.3°F	7 th Warmest	2.05"	9 th Driest
Conroe, TX (1997)	53.5°F	10 th Warmest	2.12"	7 th Driest
Clover Field (Pearland), TX (1997)	58.0°F	9 th Warmest	1.84"	5 th Driest
David Wayne Hooks (Tomball), TX (1998)	56.7°F	6 th Warmest	1.74"	8 th Driest
Angleton, TX (1998)	57.9°F	7 th Warmest	3.49"	12 th Wettest
League City, TX (1990)	57.4°F	8 th Warmest	3.02"	13 th Driest



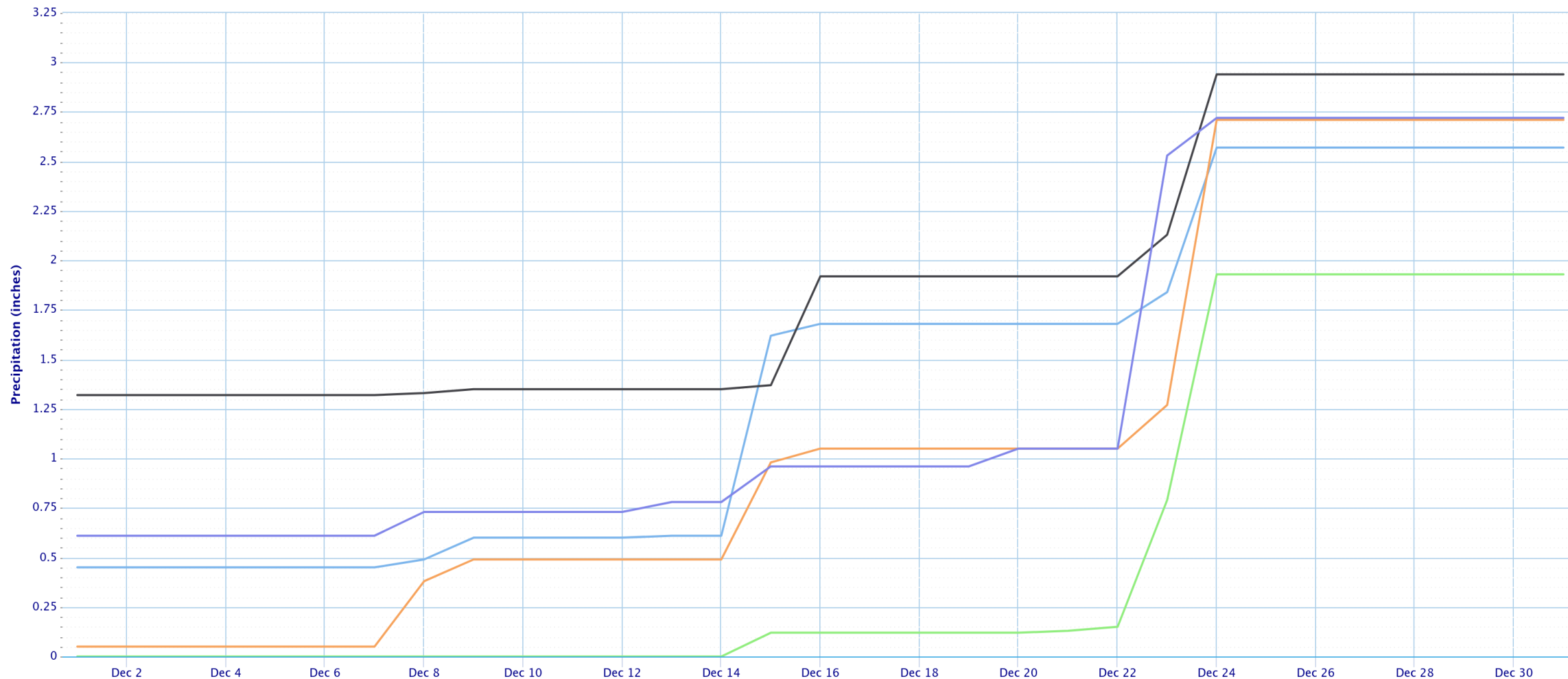
Precipitation

Location	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)	
Galveston (GLS)	2.94	-1.29	2	1.32	1 st
Houston Hobby (HOU)	2.71	-1.63	2	1.44	24 th
City of Houston (IAH)	2.57	-1.46	2	1.01	15 th
College Station (CLL)	1.93	-1.78	1	1.14	24 th
Palacios (PSX)	2.72	-0.26	2	1.48	23 rd

Precipitation Accumulation Graph

Accumulated Precipitation

Green/black diamonds represent subsequent/missing values



City of Houston

City of Galveston

City of College Station

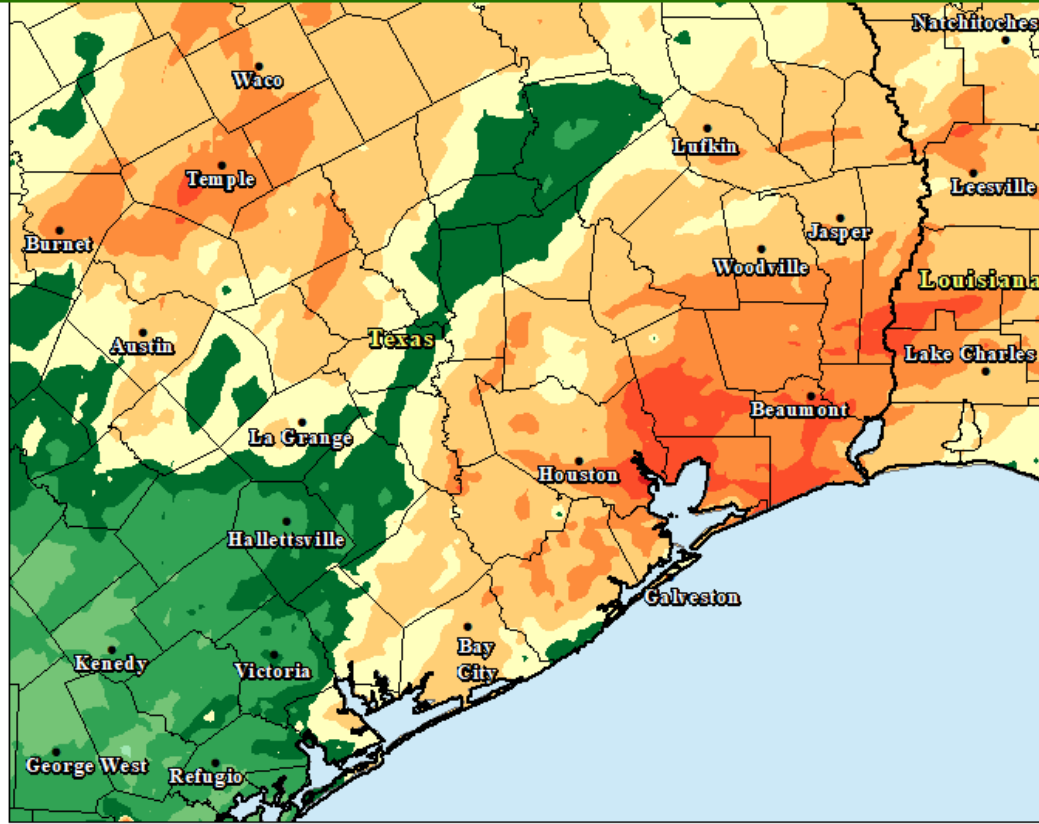
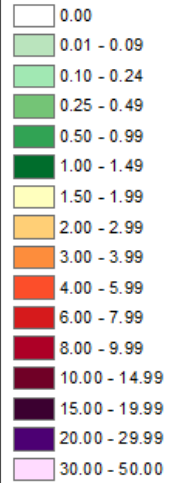
Houston-Hobby

Palacios

Precipitation Maps

Total Monthly Precipitation - December 2023

Inches



Created by the
NWS Forecast Office
Houston/Galveston, TX

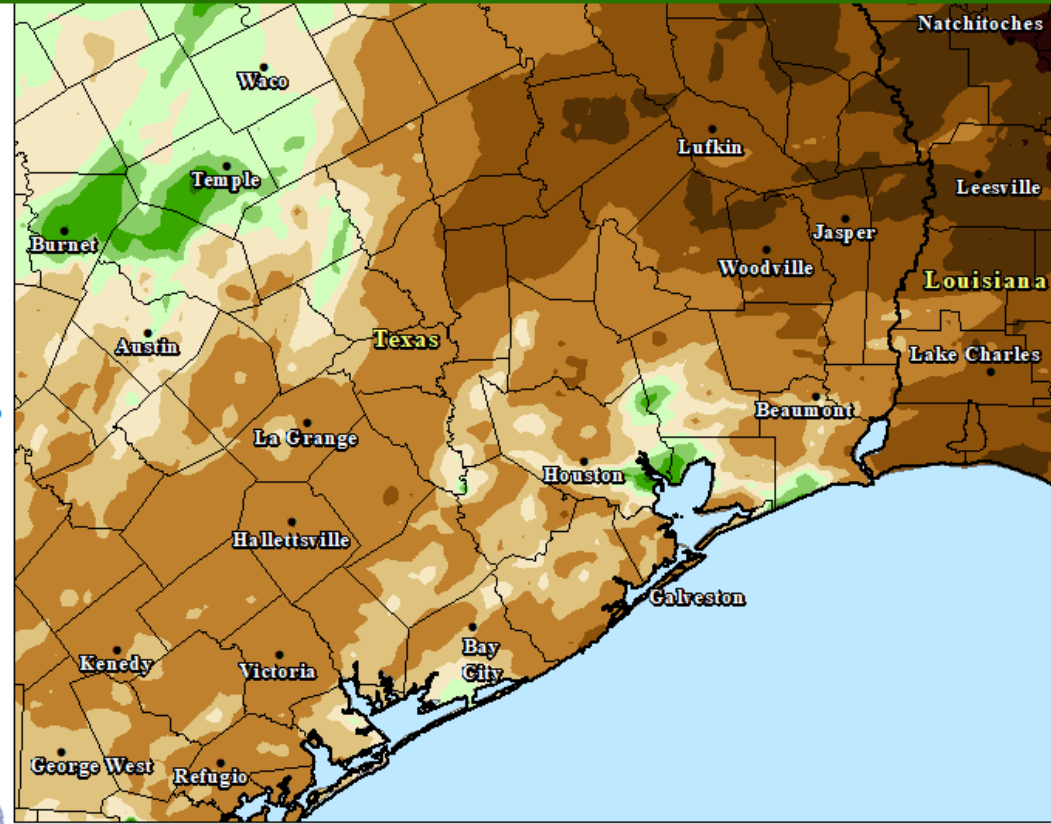
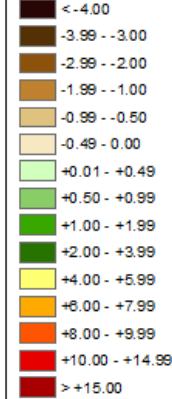


0 25 50
Miles

Source: NWS Advanced
Hydrologic Prediction Service Created: 01/01/2024 2100 UTC

Total Monthly Precipitation Departure From Normal - December 2023

Inches



Created by the
NWS Forecast Office
Houston/Galveston, TX



0 25 50
Miles

Source: NWS Advanced
Hydrologic Prediction Service Created: 01/01/2024 2100 UTC

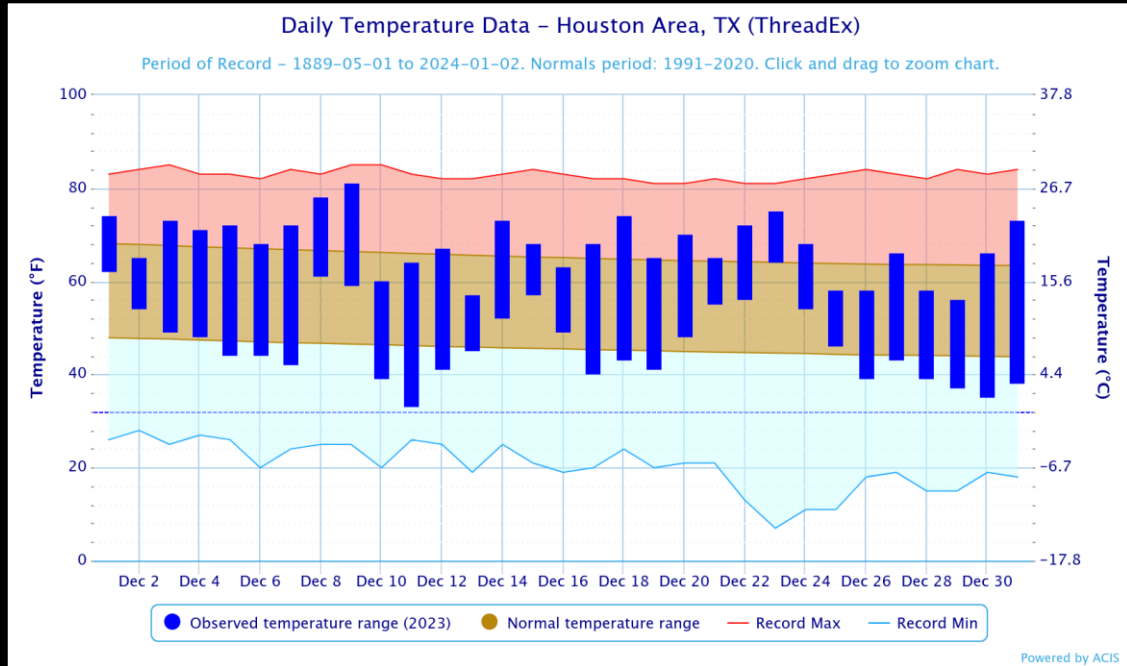
Temperature

Location	Average High Temp (F)	Average Low Temp (F)	Average Temp (F)	Departure From Normal Average (F)	Maximum Temperature (F)	Minimum Temperature (F)
Galveston (GLS)	66.5	55.1	60.8	+2.3	79 on the 9 th	44 on the 29 th & 30 th
Houston Hobby (HOU)	68.2	50.2	59.2	+2.3	82 on the 9 th	37 on the 11 th & 30 th
City of Houston (IAH)	67.7	47.0	57.3	+1.9	81 on the 9 th	33 on the 11 th
College Station (CLL)	67.2	44.8	56.0	+2.9	80 on the 9 th	30 on the 30 th
Palacios (PSX)	68.7	49.5	59.1	+1.1	78 on the 9 th	36 on the 11 th

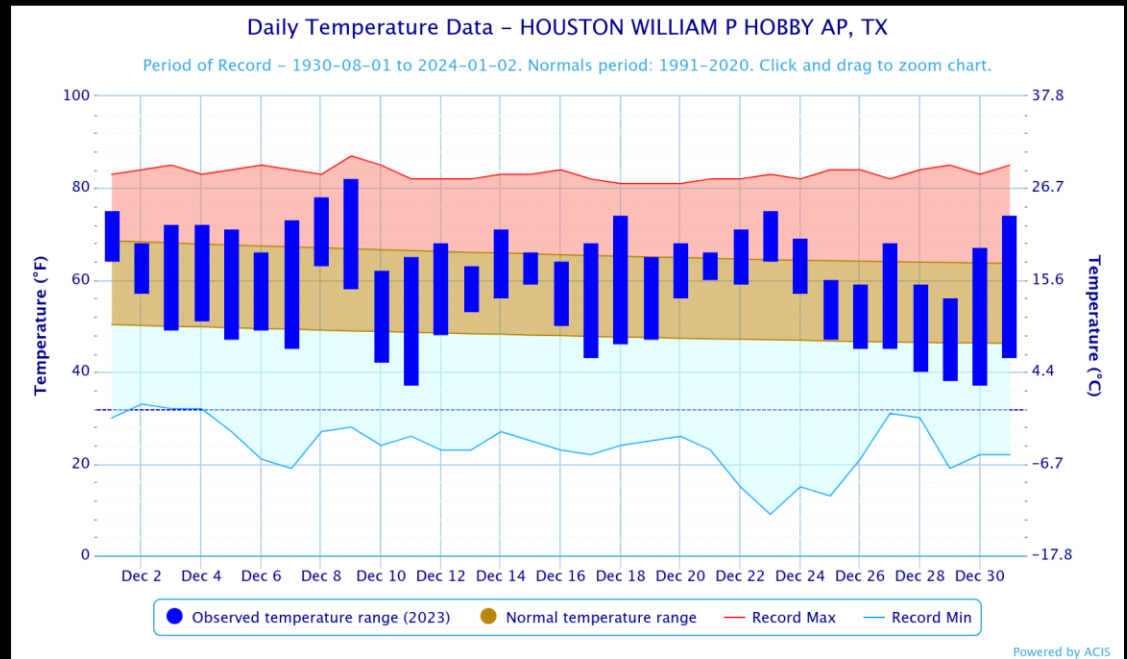
Temperature Charts

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City of Houston



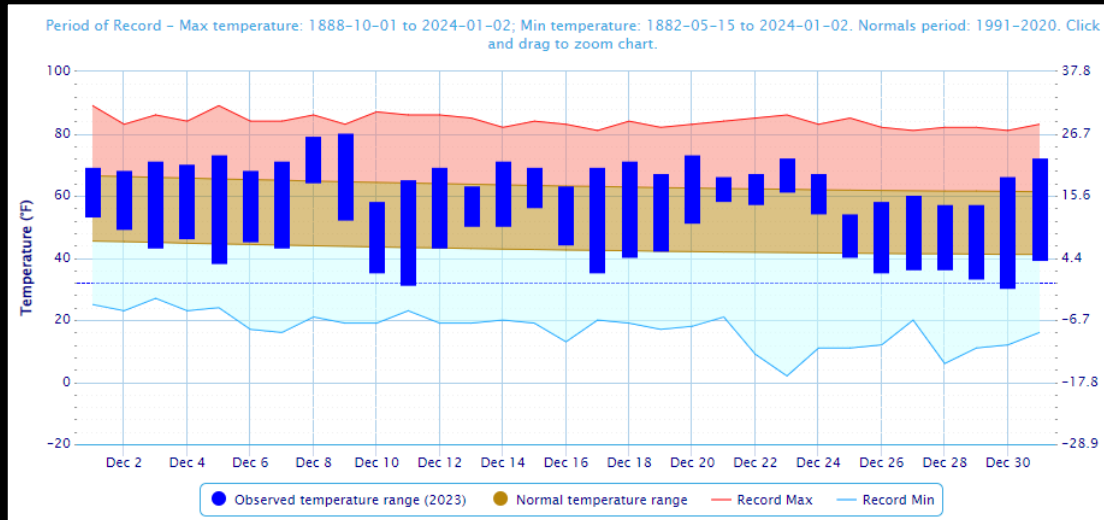
Houston-Hobby



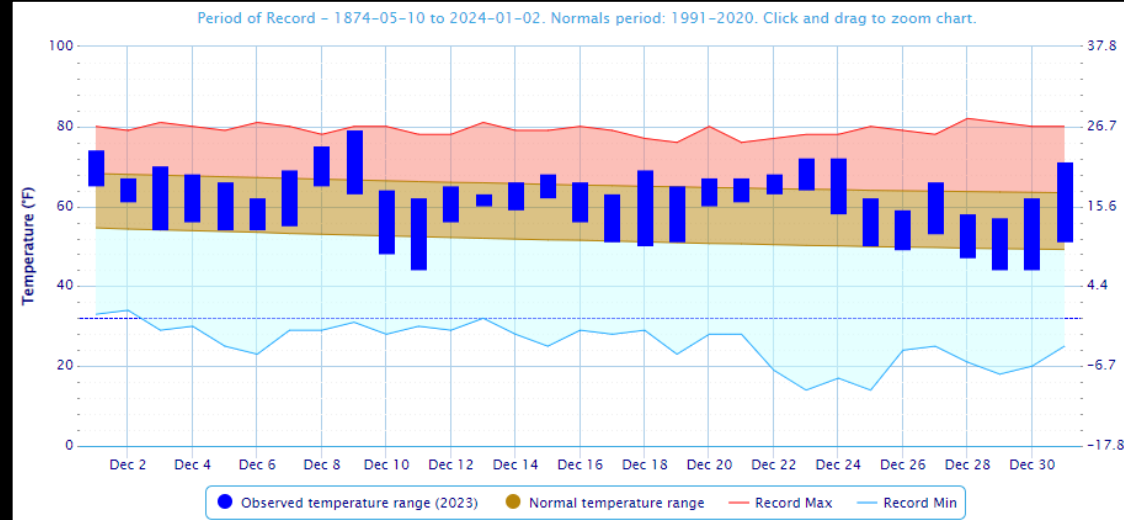
Temperature Charts

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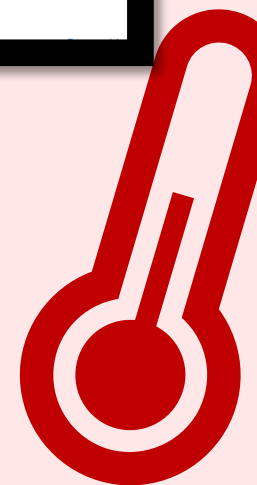
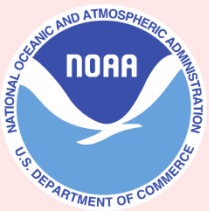
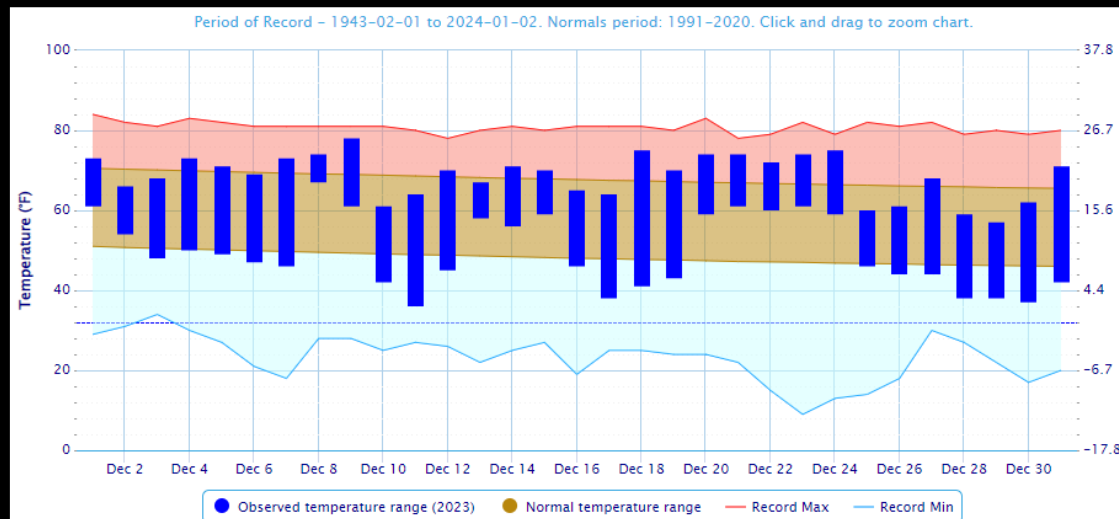
City of College Station



City of Galveston



Palacios



Daily Record Reports – City of College Station

Date	Record Type	New Record	Previous Record
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There were no daily records set this month.

There were no daily records set at College Station this month.



Key



High Max

Low Max

Precip

Snow

High Min

Low Min



Daily Record Reports – City of Houston

Date	Record Type	New Record	Previous Record
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There were no daily records set this month.

There were no daily records set at Houston this month.



Key



High Max

Low Max

Precip

Snow

High Min

Low Min



Daily Record Reports – Houston-Hobby

Date	Record Type	New Record	Previous Record
------	-------------	------------	-----------------

There were no daily records set this month.



High Max

Low Max

Precip

Key

Snow

High Min

Low Min



Daily Record Reports – City of Galveston

Date	Record Type	New Record	Previous Record
1 st	Daily Precip	1.32"	1.29" in 2009

There was 1
daily record
set at
Galveston this
month.



Key



High Max

Low Max

Precip

Snow

High Min

Low Min



Daily Record Reports – Palacios

Date	Record Type	New Record	Previous Record
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There were no daily records set this month.

There were no daily records set at Palacios this month.



High Max

Low Max

Precip

Key

Snow

High Min

Low Min



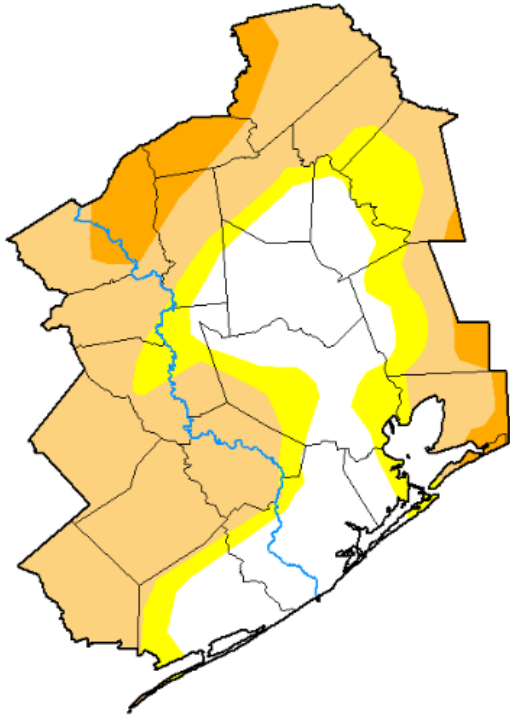
Drought Monitor

As of November 28th

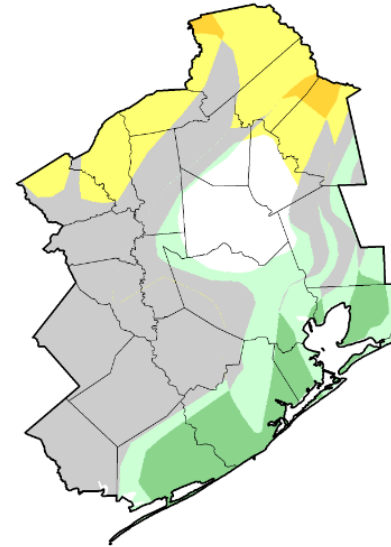
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U.S. Drought Monitor Houston/Galveston, TX WFO

via <https://droughtmonitor.unl.edu/>



U.S. Drought Monitor Class Change - Houston/Galveston, TX WFO 4 Week



- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

December 26, 2023
compared to
November 28, 2023

droughtmonitor.unl.edu

Intensity:

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

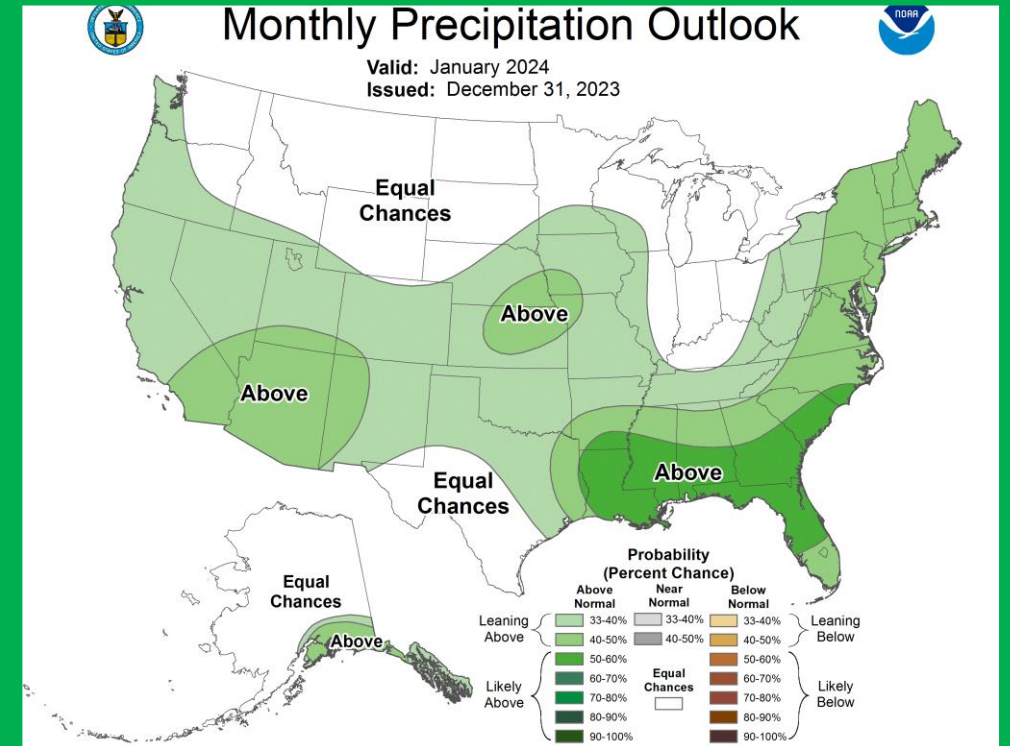
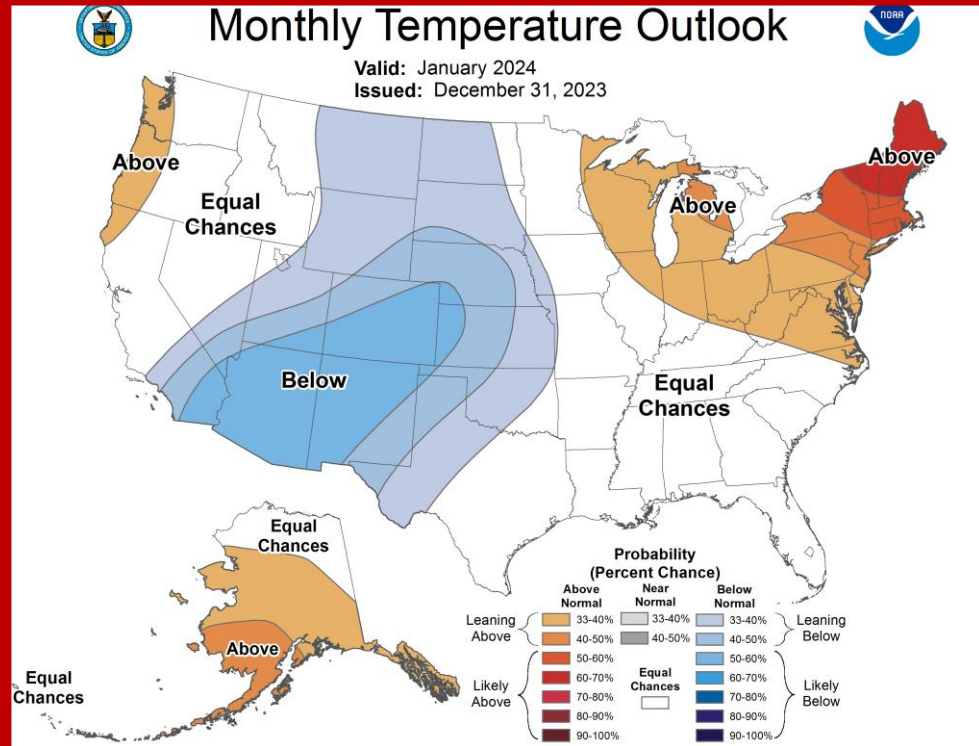
The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. For more information on the
Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

January Outlook

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Location	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	56.0	63.2	48.9
Houston Hobby	55.0	63.8	46.1
City of Houston	53.8	63.8	43.7
College Station	51.5	61.7	41.3
Palacios	55.6	65.2	46.0

Location	Normal Monthly Precipitation (in.)
Galveston	4.30
Houston Hobby	4.09
City of Houston	3.76
College Station	3.43
Palacios	3.25

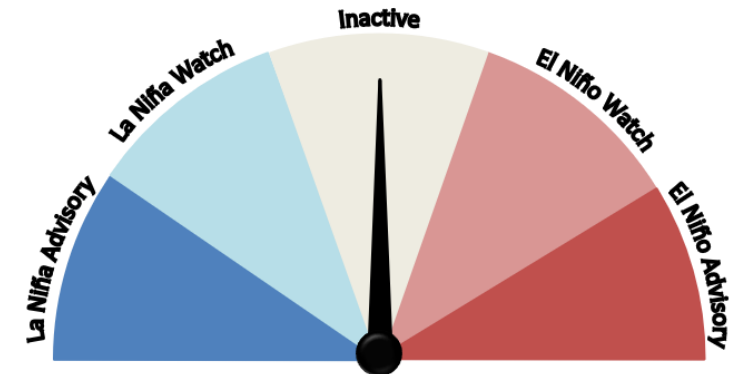
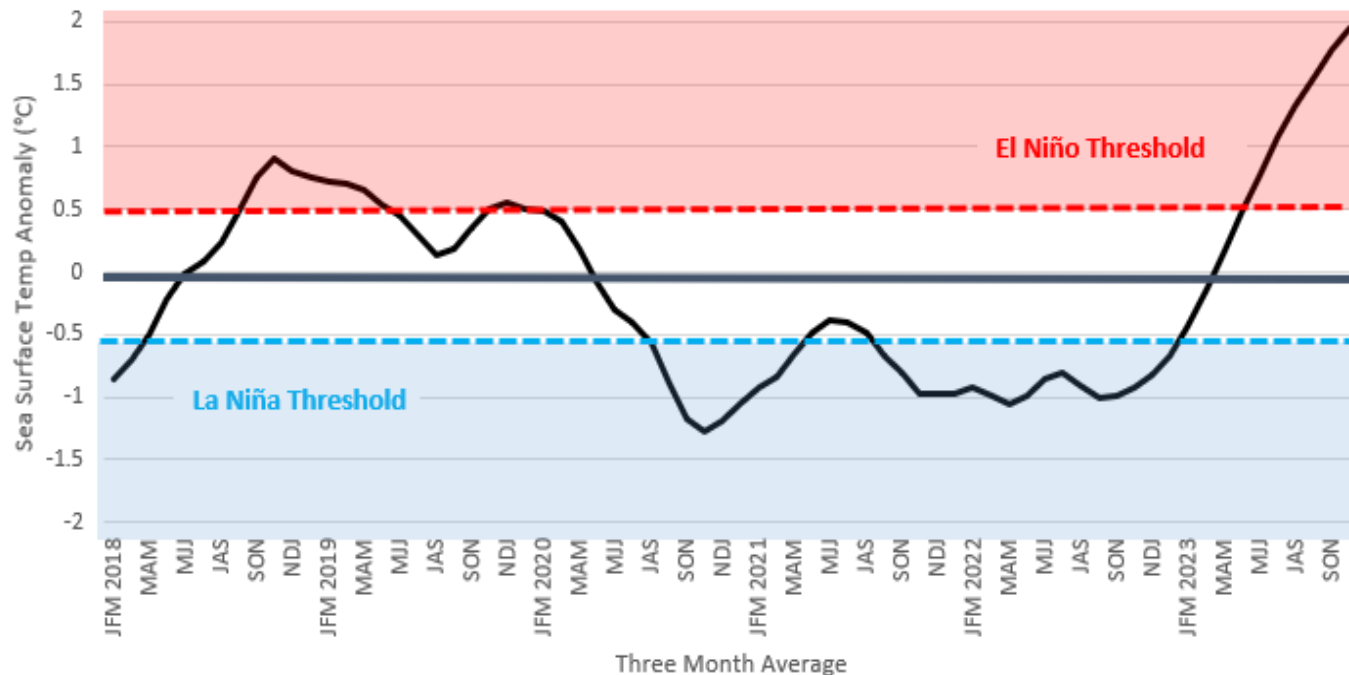


Current ENSO Phase: El Niño

The Climate Prediction Center's ENSO Forecast: El Niño Advisory

- El Niño conditions are present and are expected to continue through the winter.
- There is a 60% chance that it will transition to ENSO-neutral during the late Spring to early Summer time period.

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



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

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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).

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.

Houston Hobby (HOU)

Records are based upon observations beginning in August 1931.

Palacios (PSX)

Records are based upon observations beginning in February 1943.

