

NWS Houston, Texas

October 2023

Regional Climate Summary

Produced by Jimmy Fowler

...Finally a break from the heat...Drastic drought improvements...

After months on end of extremely hot and dry conditions, October finally broke the streak. The start of the month was near to slightly above normal temperatures, but then the season's first strong cold front at the end of the month brought below normal temperatures. There were multiple days of scattered showers and thunderstorms producing locally heavy downpours. Most of the area generally saw three to six inches of rainfall, but there were isolated amounts as high as nine to ten inches. This led to drastic drought improvements across the area with no areas of Exceptional Drought (D4) reported by the end of the month with just some isolated spots with Extreme Drought (D3).

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By the Numbers: October 2023



Location (records started)	Average Temp	Ranking	Total Rainfall	Ranking
City of Houston, TX (1888)	72.2°F	46 th Warmest	4.07"	53 rd Wettest
Houston Hobby, TX (1930)	73.9°F	20 th Warmest	5.35"	29 th Wettest
City of Galveston, TX (1871)	74.8°F	38 th Warmest	2.74"	73 rd Driest
City of College Station, TX (1882)	74.2°F	8 th Warmest	3.72"	48 th Wettest
Palacios, TX (1943)	73.0°F	34 th Warmest	3.05"	40 th Driest
Huntsville, TX (1997)	70.6°F	7 th Warmest	9.05"	3 rd Wettest
Sugar Land, TX (2000)	73.2°F	8 th Warmest	3.15"	11 th Wettest
Conroe, TX (1997)	69.0°F	13 th Warmest	5.46"	10 th Wettest
Clover Field (Pearland), TX (1997)	72.9°F	14 th Warmest	3.09"	14 th Wettest
David Wayne Hooks (Tomball), TX (1998)	72.3°F	5 th Warmest	5.88"	10 th Wettest
Angleton, TX (1998)	71.5°F	15 th Warmest	9.27"	4 th Wettest
League City, TX (1990)	72.4°F	11 th Warmest	3.21"	13 th Driest



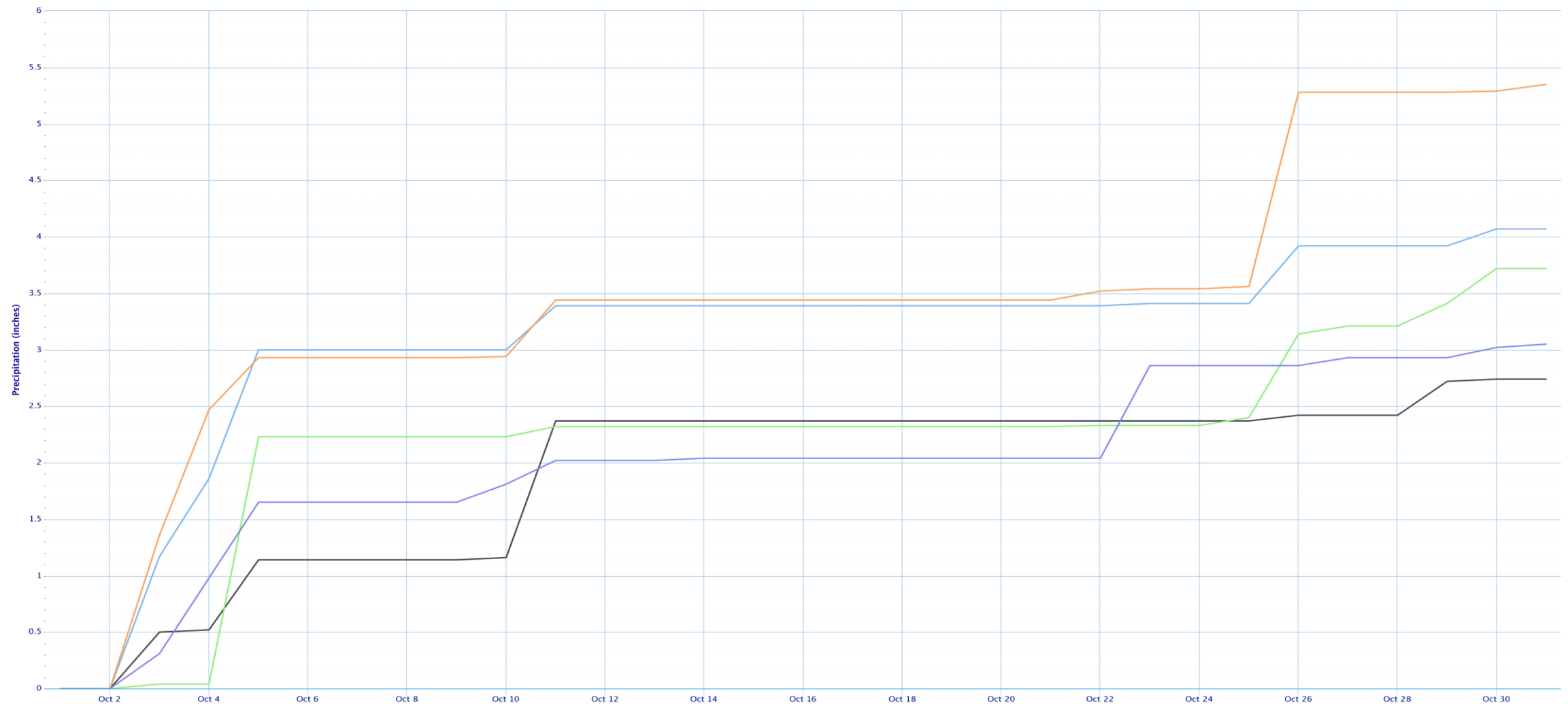
Precipitation

Location	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)	
Galveston (GLS)	2.47	-2.41	3	1.21	11 th
Houston Hobby (HOU)	5.35	-0.53	4	1.72	26 th
City of Houston (IAH)	4.07	-1.39	3	1.17	3 rd
College Station (CLL)	3.72	-1.21	2	2.19	5 th
Palacios (PSX)	3.05	-1.28	2	0.82	23 rd

Precipitation Accumulation Graph

Accumulated Precipitation

Green/black diamonds represent subsequent/missing values



City of Houston

City of Galveston

City of College Station

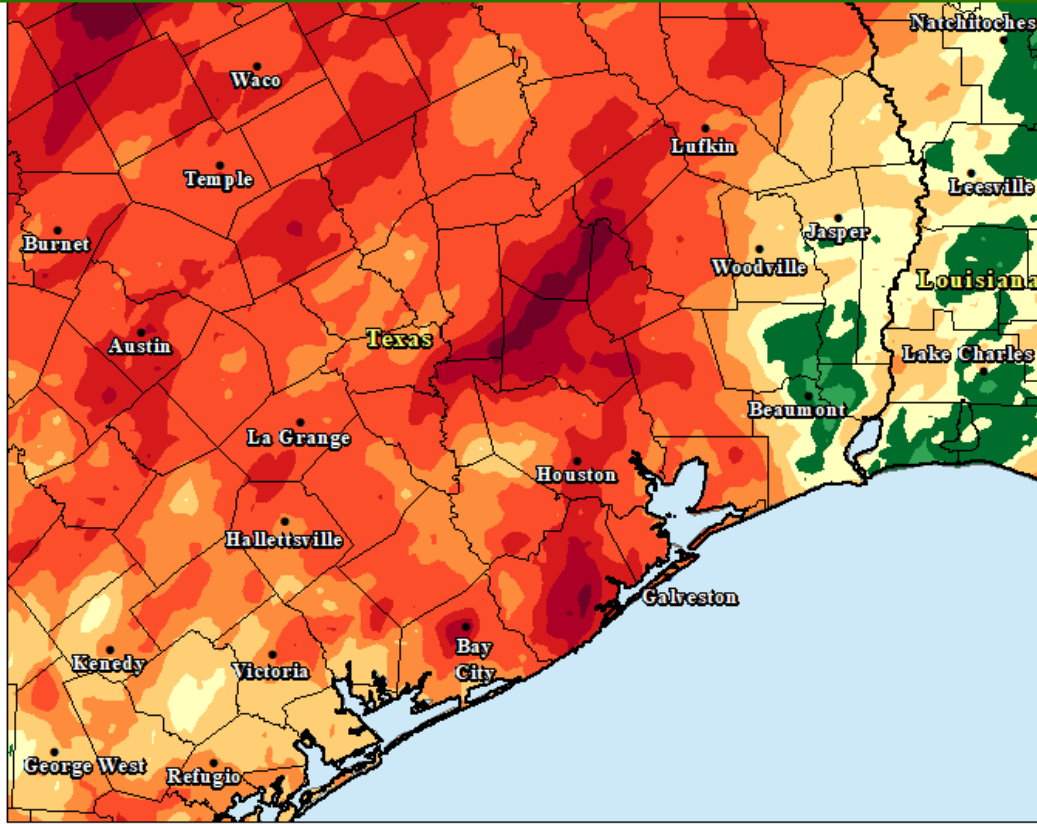
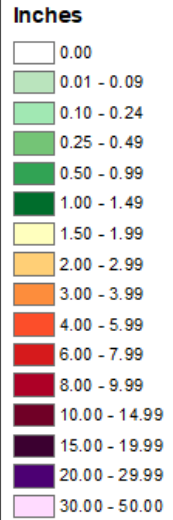
Houston-Hobby

Palacios



Precipitation Maps

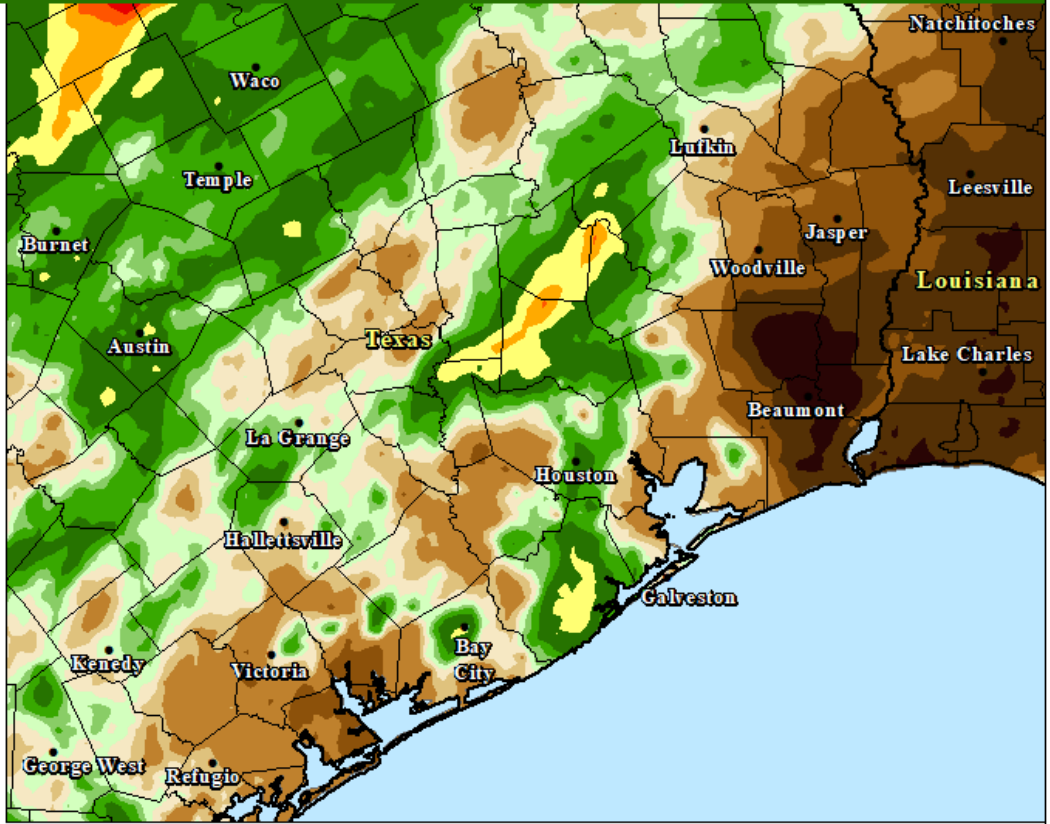
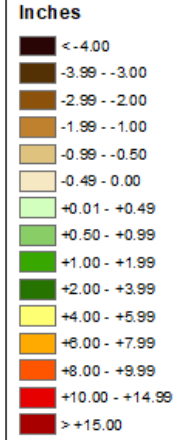
Total Monthly Precipitation - October 2023



Created by the
NWS Forecast Office
Houston/Galveston, TX

Source: NWS Advanced Hydrologic Prediction Service
Created: 11/01/2023 2000 UTC

Total Monthly Precipitation Departure From Normal - October 2023



Created by the
NWS Forecast Office
Houston/Galveston, TX

Source: NWS Advanced Hydrologic Prediction Service
Created: 11/01/2023 2000 UTC

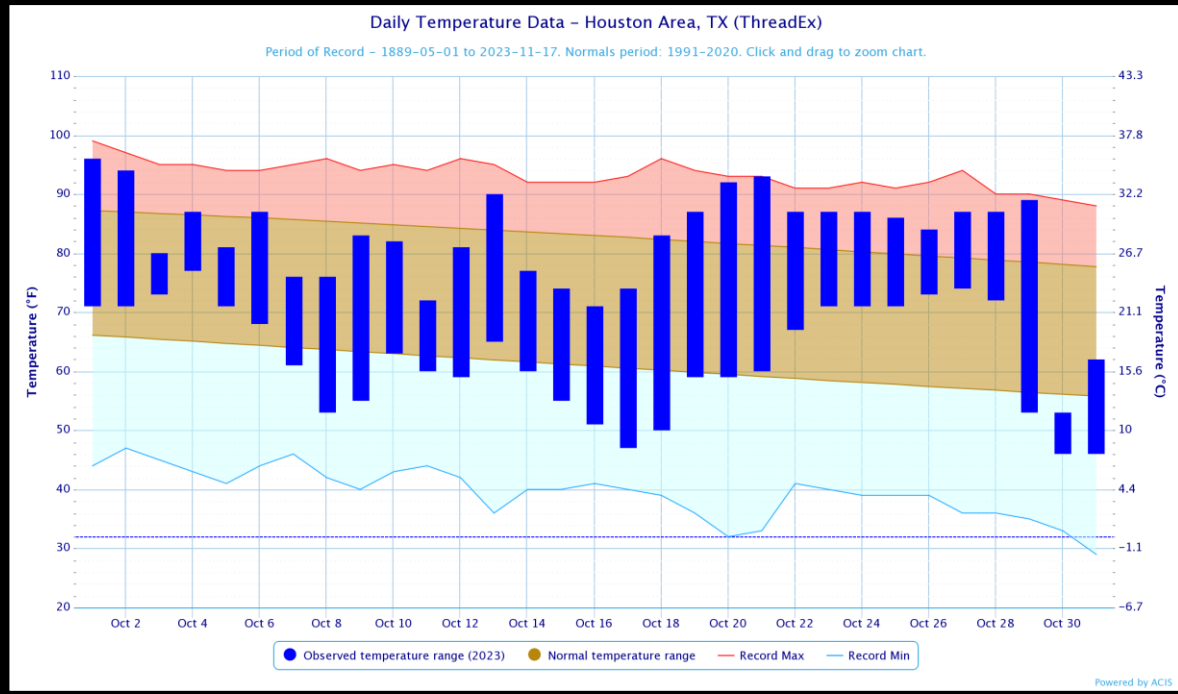


Temperature

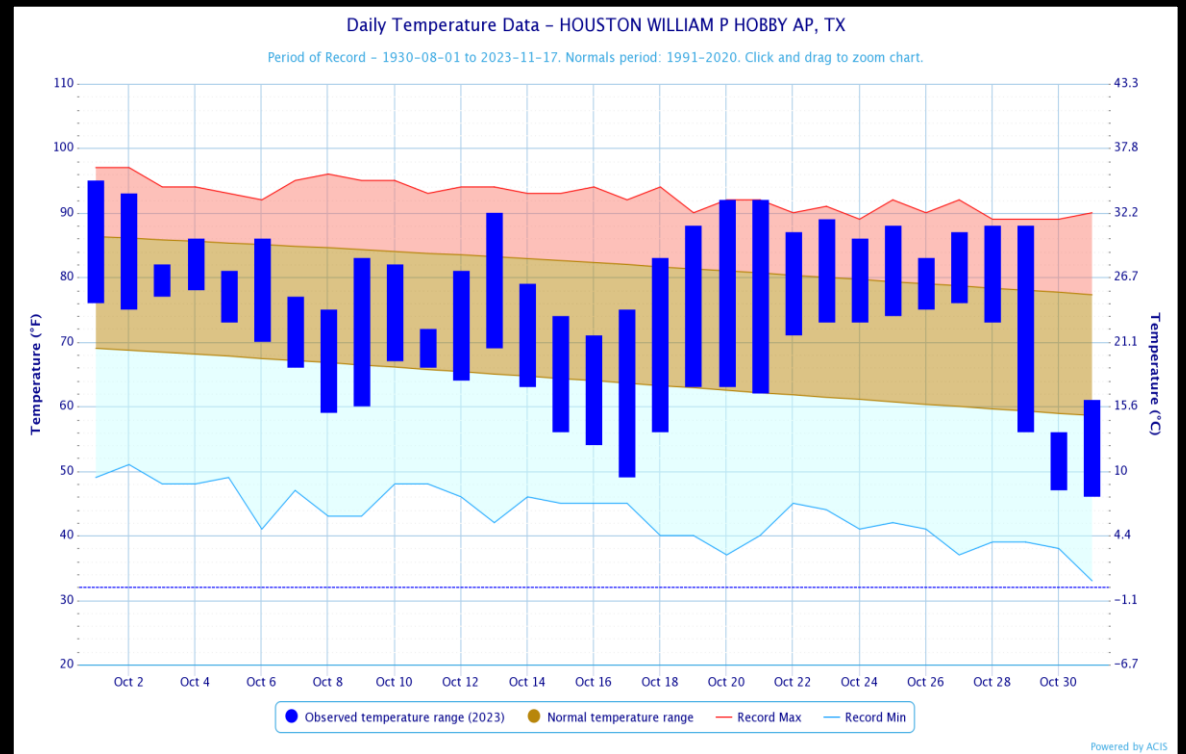
Location	Average High Temp (F)	Average Low Temp (F)	Average Temp (F)	Departure From Normal Average (F)	Maximum Temperature (F)	Minimum Temperature (F)
Galveston (GLS)	80.6	69.0	74.8	-0.5	90 on the 1 st & 2 nd	50 on the 31 st
Houston Hobby (HOU)	82.3	65.5	73.9	+0.9	95 on the 1 st	46 on the 31 st
City of Houston (IAH)	82.1	62.3	72.2	+0.4	96 on the 1 st	46 on the 30 th & 31 st
College Station (CLL)	84.8	63.5	74.2	+3.1	98 on the 1 st	43 on the 31 st
Palacios (PSX)	81.4	64.5	73.0	-0.9	93 on the 2 nd	41 on the 31 st

Temperature Charts

City of Houston

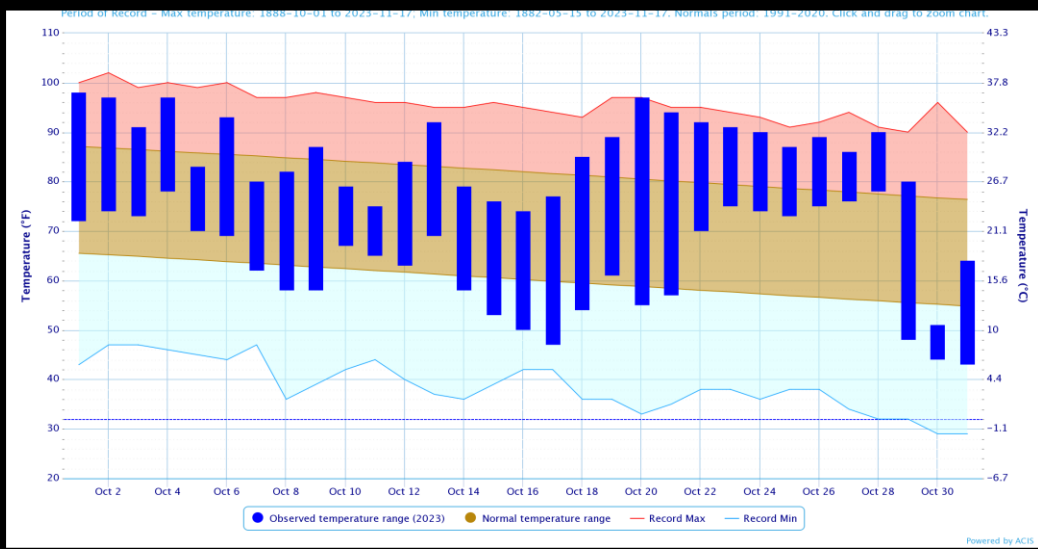


Houston-Hobby

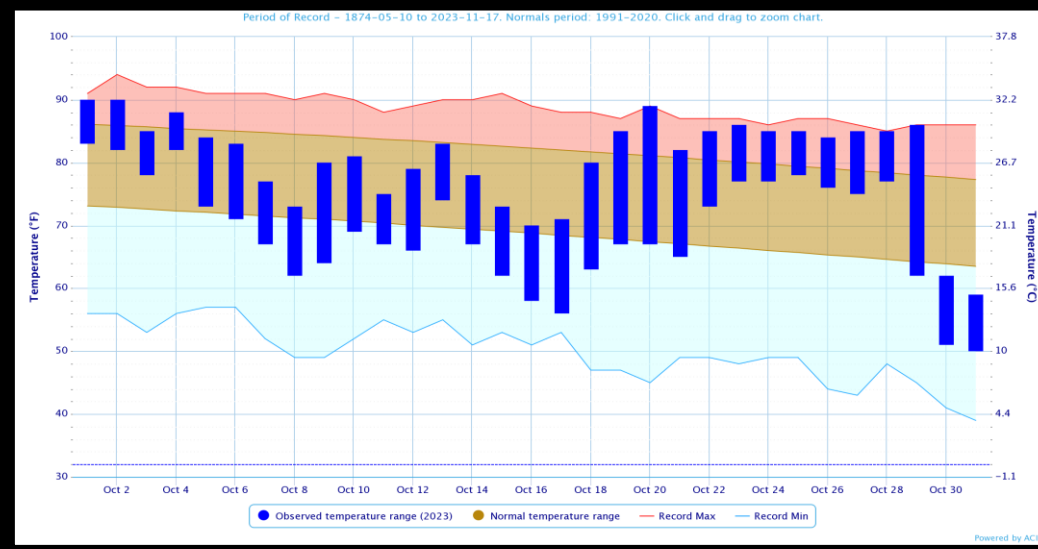


Temperature Charts

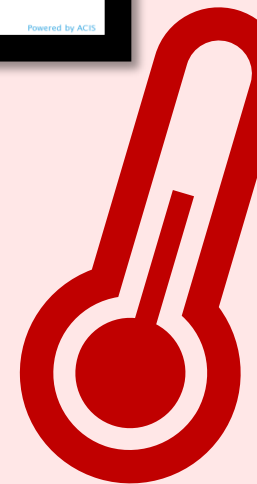
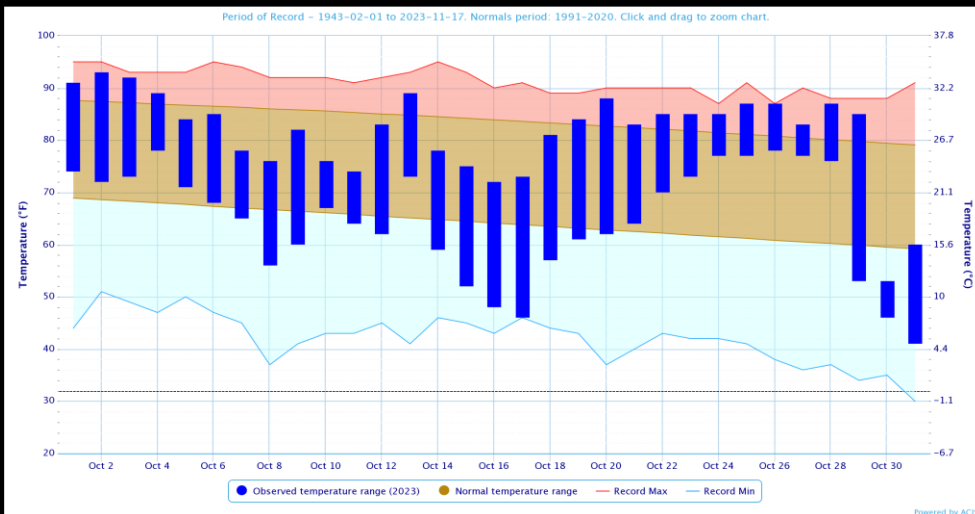
City of College Station



City of Galveston



Palacios



Daily Record Reports – City of College Station

Date	Record Type	New Record	Previous Record
4 th	High Minimum	82°F	76°F in 1998
20 th	High Maximum	97°F	94°F in 2019
23 rd	High Minimum	75°F – T	75°F in 1925
24 th	High Minimum	74°F – T	74°F in 1991
25 th	High Minimum	73°F – T	73°F in 2021
26 th	High Minimum	75°F – T	75°F in 1939
27 th	High Minimum	76°F – T	76°F in 1939
28 th	High Minimum	78°F	74°F in 1991

There were 8 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
21 st	High Maximum	93°F – T	93°F in 2004



There was 1 daily record 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
4 th	High Minimum	78°F	77°F in 1986
20 th	High Maximum	92°F – T	92°F in 2004
21 st	High Maximum	92°F	91°F in 1949
24 th	High Minimum	73°F – T	73°F in 1997
25 th	High Minimum	74°F – T	74°F in 2021
27 st	High Minimum	76°F	75°F in 1939

There were 6 daily records set at Houston-Hobby this month.



High Max

Low Max

Precip

Snow

High Min

Low Min



Key

Daily Record Reports – City of Galveston

Date	Record Type	New Record	Previous Record
1 st	High Minimum	83°F – T	83°F in 2019
4 th	High Minimum	88°F	83°F in 1911
20 th	High Maximum	89°F	87°F in 2019
28 th	High Maximum	85°F – T	85°F in 2015
29 th	High Maximum	86°F	85°F in 2004

There were 5 daily records set at Houston-Hobby this month.



Key

High Max

Low Max

Precip

Snow

High Min

Low Min

Daily Record Reports – Palacios

Date	Record Type	New Record	Previous Record
17 th	Low Minimum	46°F – T	46°F in 2017
24 th	High Minimum	77°F – T	77°F in 2022
26 th	High Maximum	87°F – T	87°F in 2004
27 th	High Minimum	77°F – T	77°F in 2004
28 th	High Minimum	76°F	75°F in 1991

There were 5 daily records set at Palacios this month.



High Max

Low Max

Precip

Snow

High Min

Low Min

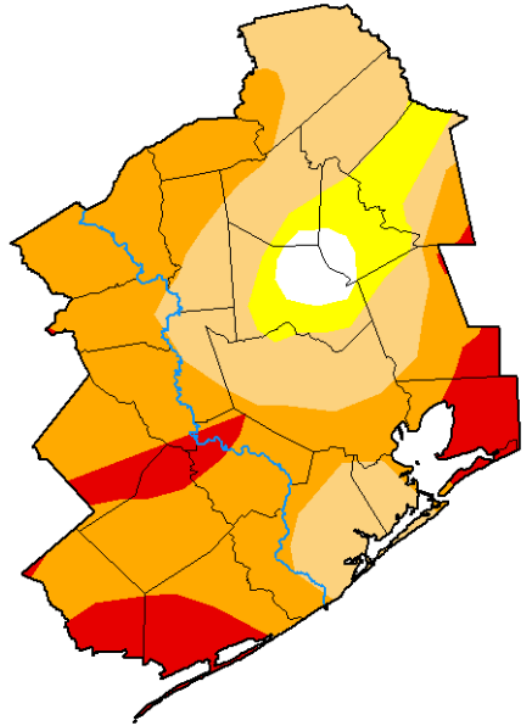


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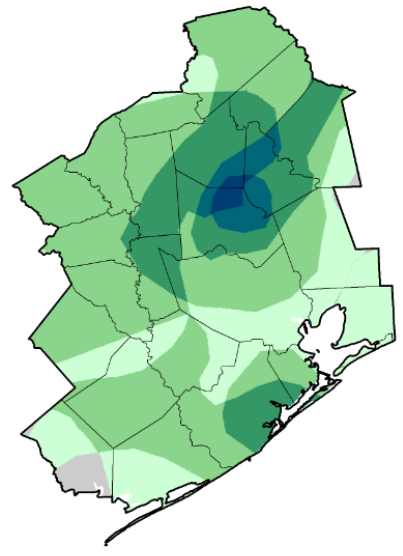
Drought Monitor

As of October 31st

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



October 31, 2023
compared to
October 3, 2023

droughtmonitor.unl.edu



- 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

Intensity:

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

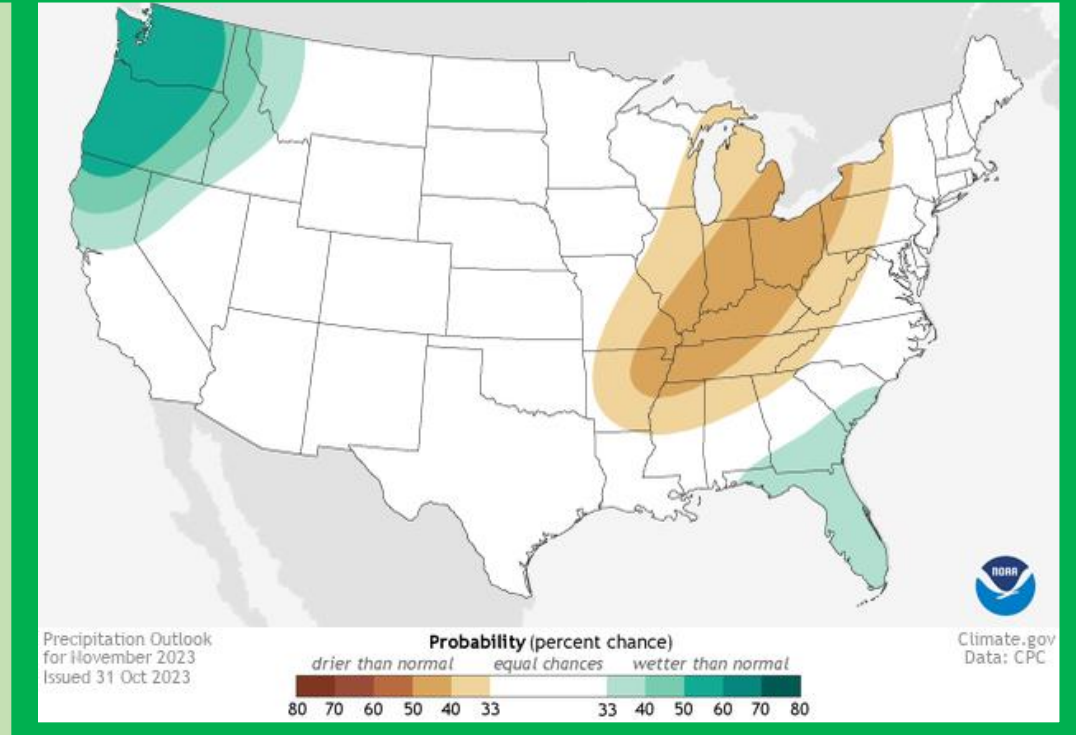
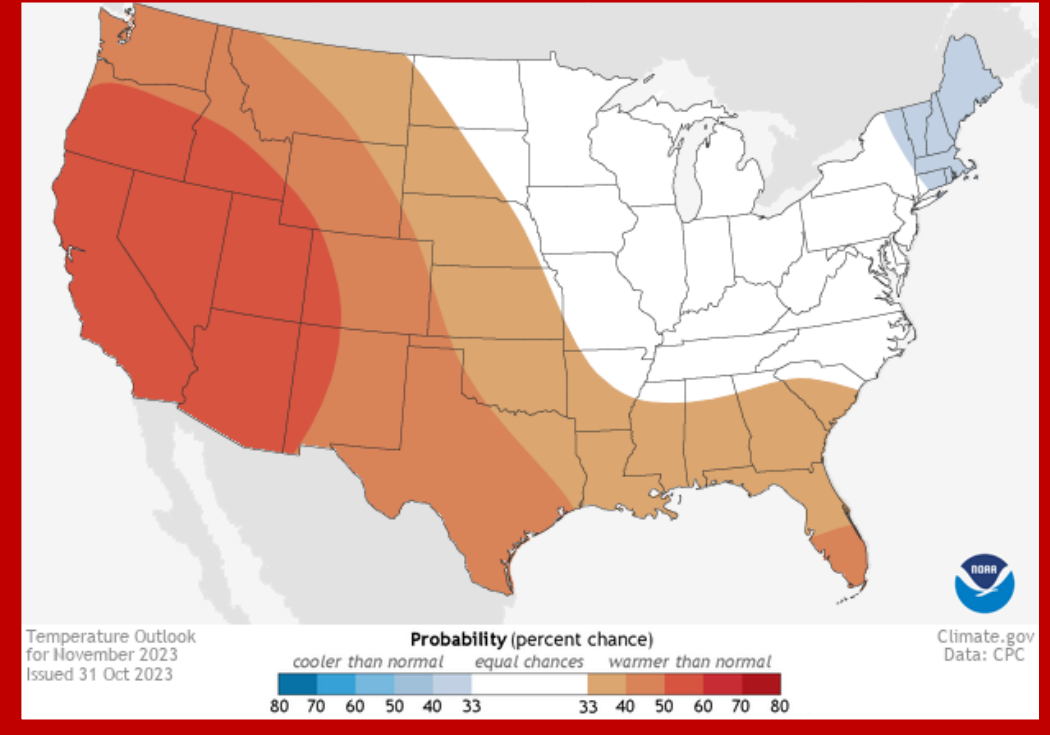
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



November Outlook

Location	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	65.5	72.4	58.7
Houston Hobby	63.3	72.6	54.0
City of Houston	62.0	72.6	51.5
College Station	60.4	71.1	49.8
Palacios	64.6	74.4	54.8

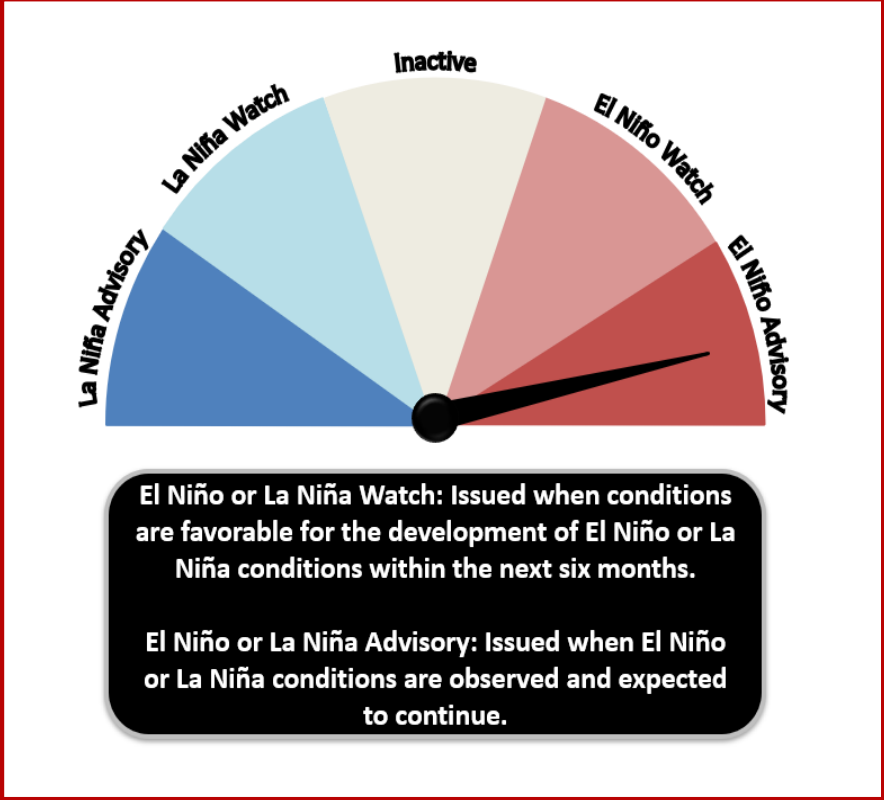
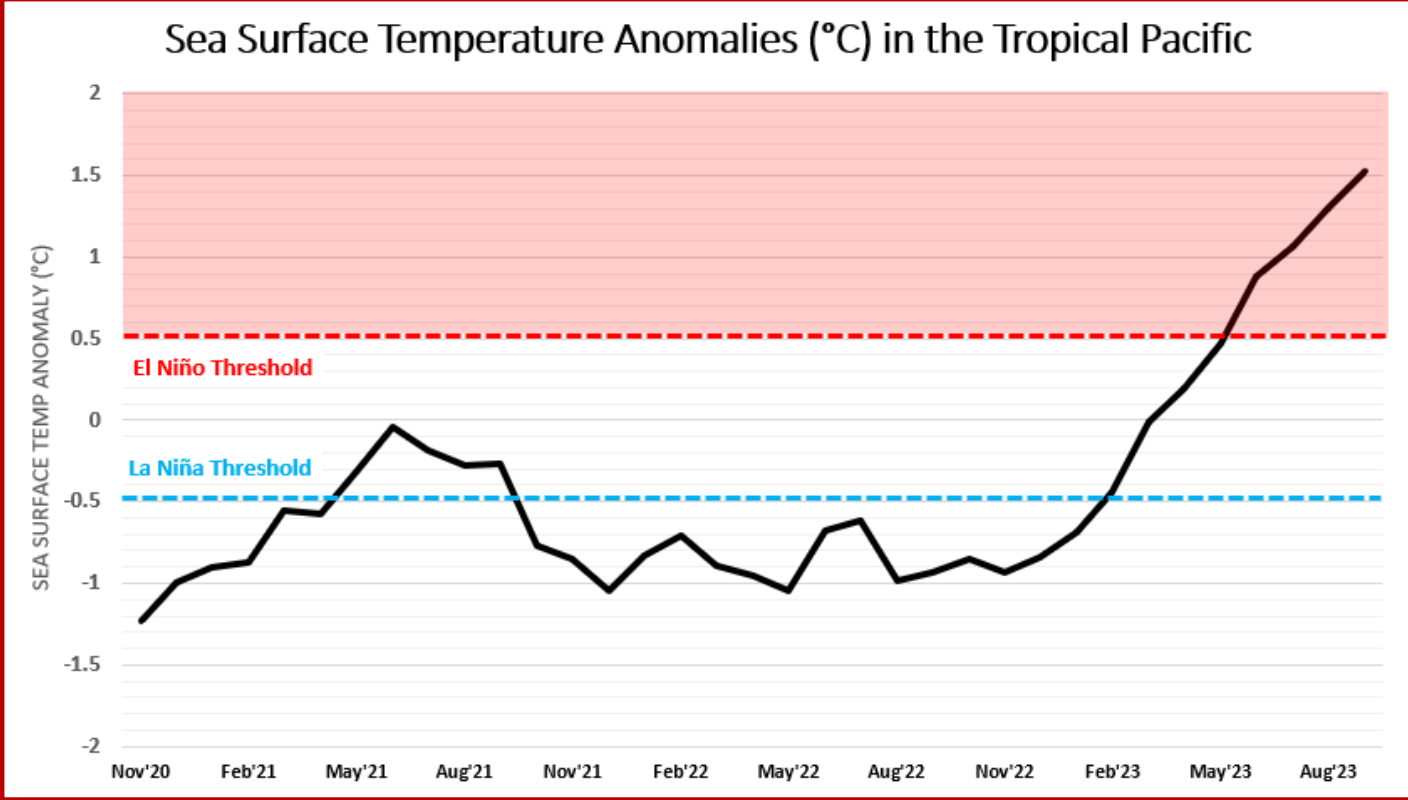
Location	Normal Monthly Precipitation (in.)
Galveston	4.28
Houston Hobby	3.90
City of Houston	3.87
College Station	3.31
Palacios	3.39



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 Spring.



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).

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.

