



NWS Houston, Texas July 2022 Regional Climate Summary

Produced by Jimmy Fowler

...Warmest July on Record for Most of Area...Drought Worsens...

...Palacios (PSX) is now a Primary Climate Site...

The extreme heat we saw in June continued into July with most of the region experiencing the warmest July on record with average temperatures three to six degrees above normal. There were 70 Daily Temperature records during the month with the highest maximum June temperature seen at the City of Houston (105°F on the 10th) and the City of College Station (111°F on the 10th). Highest minimum June Temperatures were seen at the City of Galveston (86°F on multiple dates starting on the 19th) and the City of Houston (83°F on the 12th). One of the reasons for this extreme heat was because of a lack of rainfall with most of the area seeing around two to four inches below normal rainfall. An isolated strong thunderstorm did bring locally heavy rainfall to Galveston on the 14th that led to the city being around one inch above normal rainfall for the month. Drought conditions degraded across the region with most of the area in either Severe (D2), Extreme (D3), or Exceptional (D4) Drought.

Over the past few months we have been preparing to make the Palacios site a Primary Climate Site with the preparations being completed during July. This means that we will now issue climate products for the site including daily and monthly climate reports as well as record information. Going forward we are now also issuing seasonal and annual climate summaries for all of our Primary Climate Sites (IAH, HOU, CLL, GLS, & PSX).

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By the Numbers: July 2022

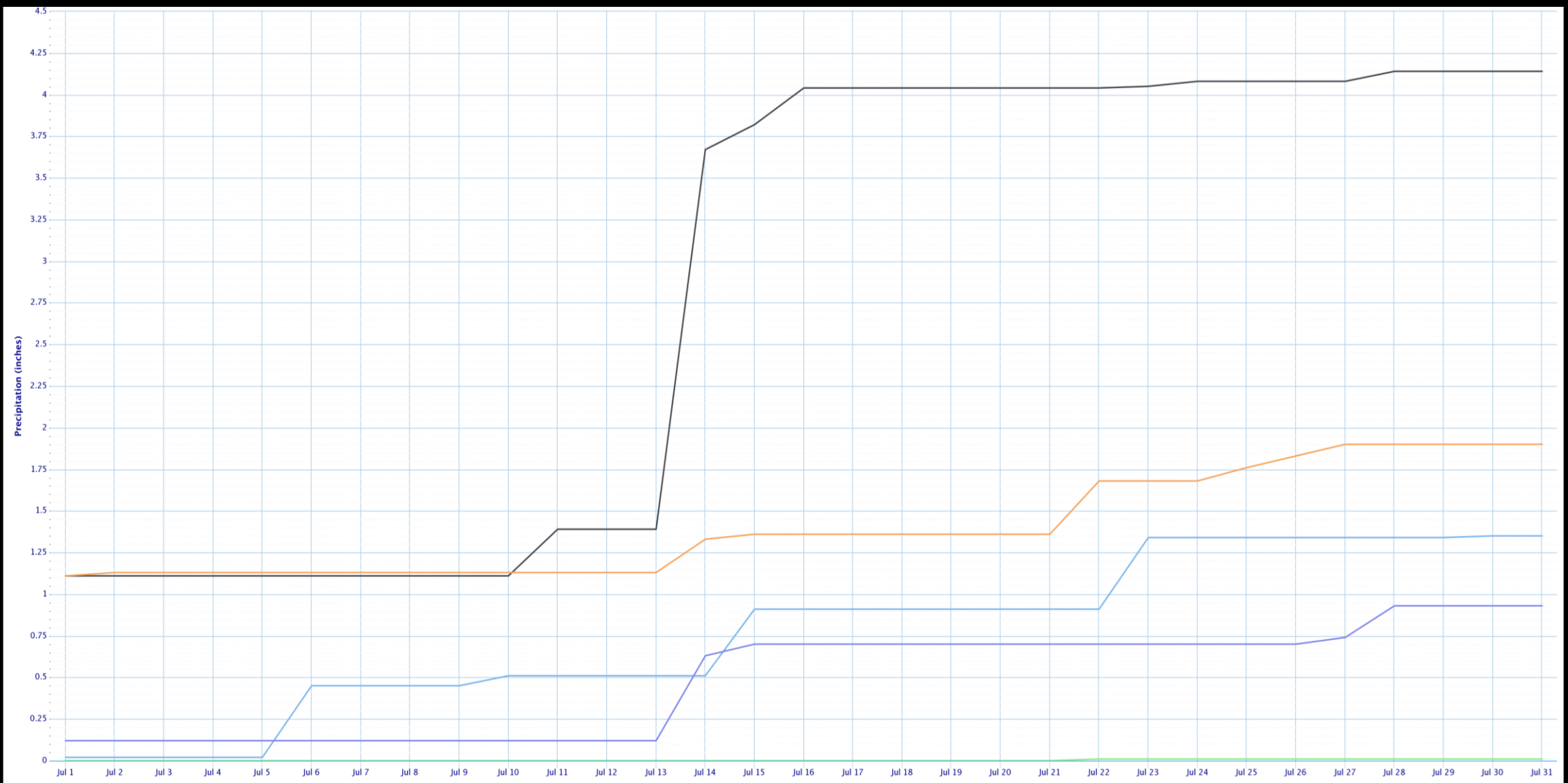
Location (records started)	Average Temp	Ranking	Total Rainfall	Ranking
City of Houston, TX (1888)	88.0°F	Warmest on Record	1.35"	17 th Driest
Houston Hobby, TX (1930)	88.1°F	Warmest on Record	1.90"	16 th Driest
City of Galveston, TX (1871)	88.6°F	Warmest on Record	4.14"	58 th Wettest
City of College Station, TX (1882)	90.9°F	Warmest on Record	0.01"	3 rd Driest
Palacios, TX (1943)	88.0°F	Warmest on Record	0.93"	20 th Driest
Huntsville, TX (1997)	91.0°F	Warmest on Record	0.39"	2 nd Driest
Sugar Land, TX (2000)	88.0°F	Warmest on Record	1.80"	6 th Driest
Conroe, TX (1997)	87.0°F	Warmest on Record	0.68"	3 rd Driest
Clover Field (Pearland), TX (1997)	86.8°F	2 nd Warmest	3.07"	10 th Driest
David Wayne Hooks (Tomball), TX (1998)	88.9°F	Warmest on Record	0.43"	3 rd Driest
Angleton, TX (1998)	85.7°F	2 nd Warmest	1.56"	5 th Driest
League City, TX (1990)	85.8°F	Warmest on Record	1.86"	7 th Driest



Precipitation

Location	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)	
Galveston (GLS)	4.14	+0.73	3	2.28	14 th
Houston Hobby (HOU)	1.90	-2.69	14	1.11	1 st
City of Houston (IAH)	1.35	-2.42	12	0.43	6 th & 23 rd
College Station (CLL)	0.01	-1.97	3	0.01	22 nd
Palacios (PSX)	0.93	-2.74	3	0.51	14 th

Precipitation Accumulation Graph



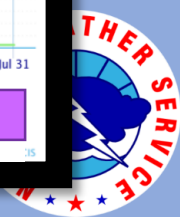
City of Houston

City of Galveston

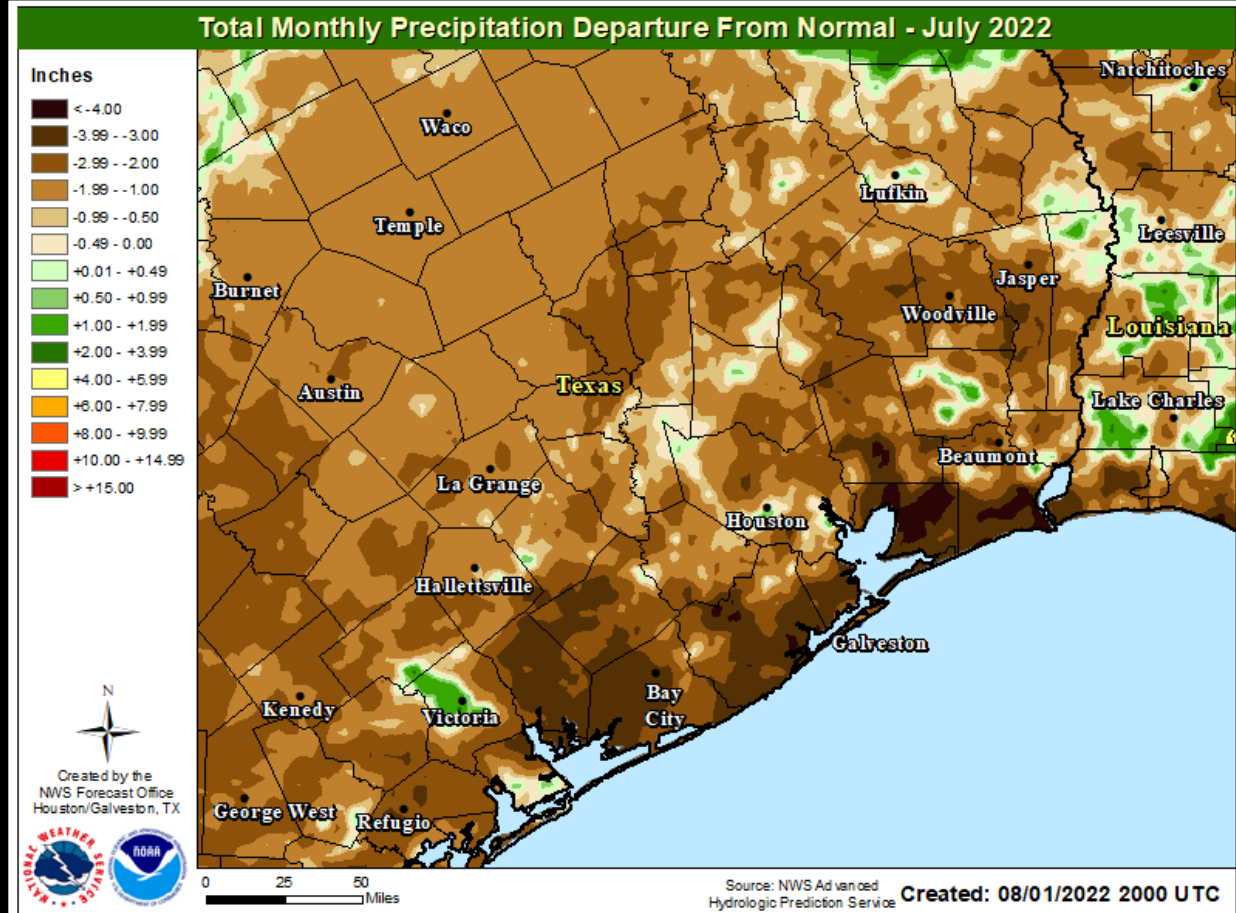
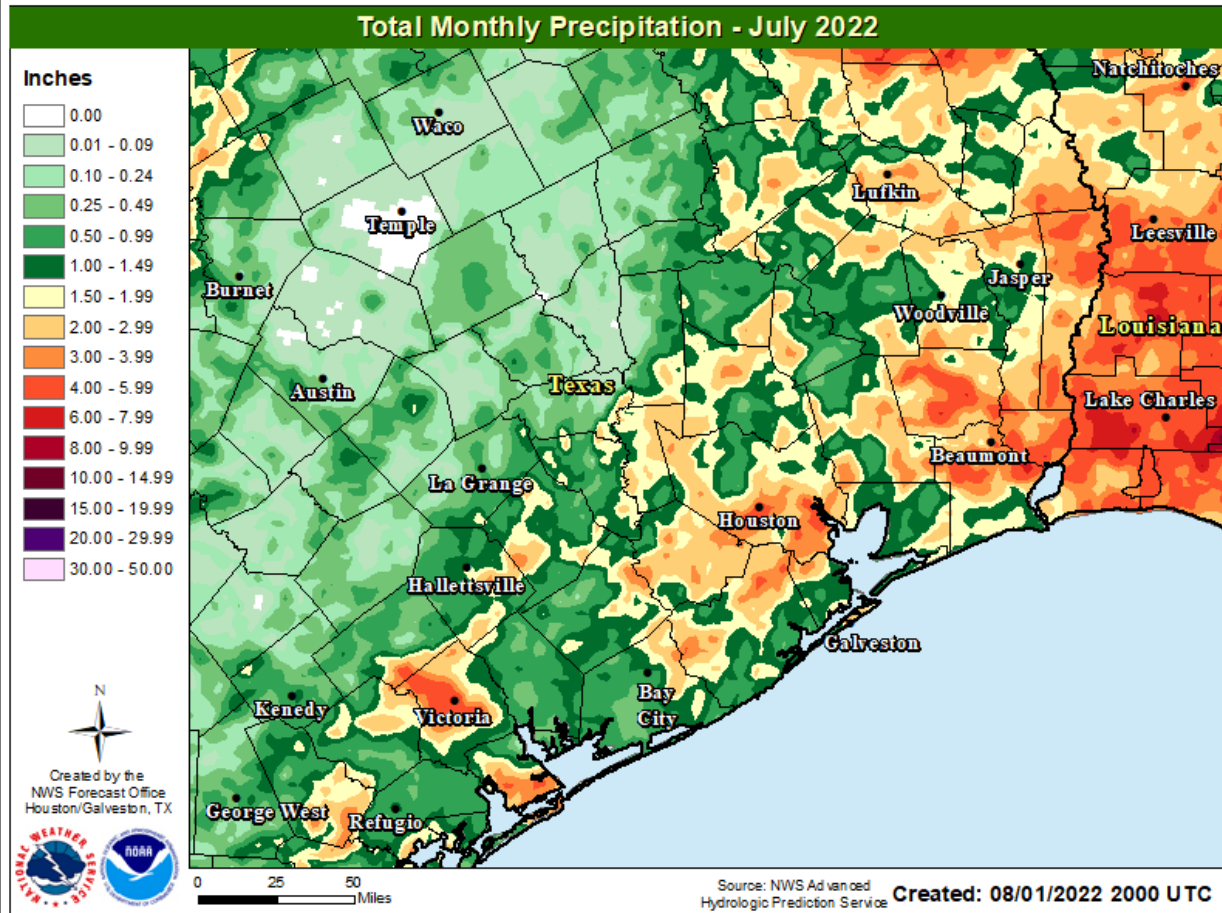
City of College Station

Houston-Hobby

Palacios



Precipitation Maps

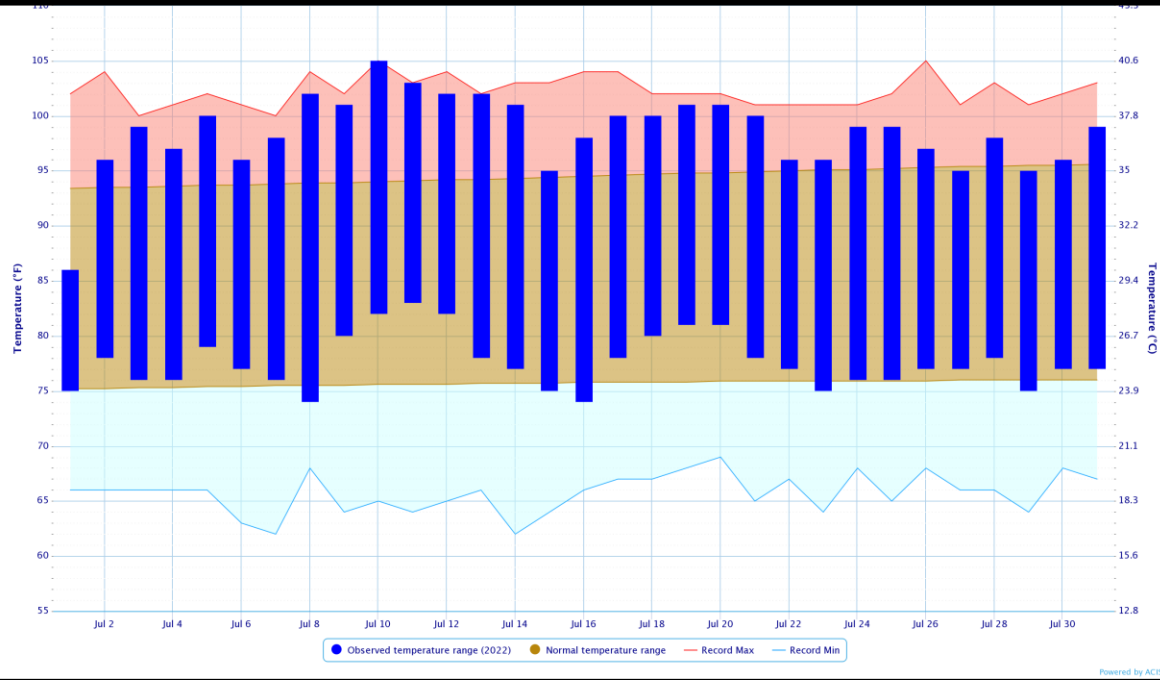


Temperature

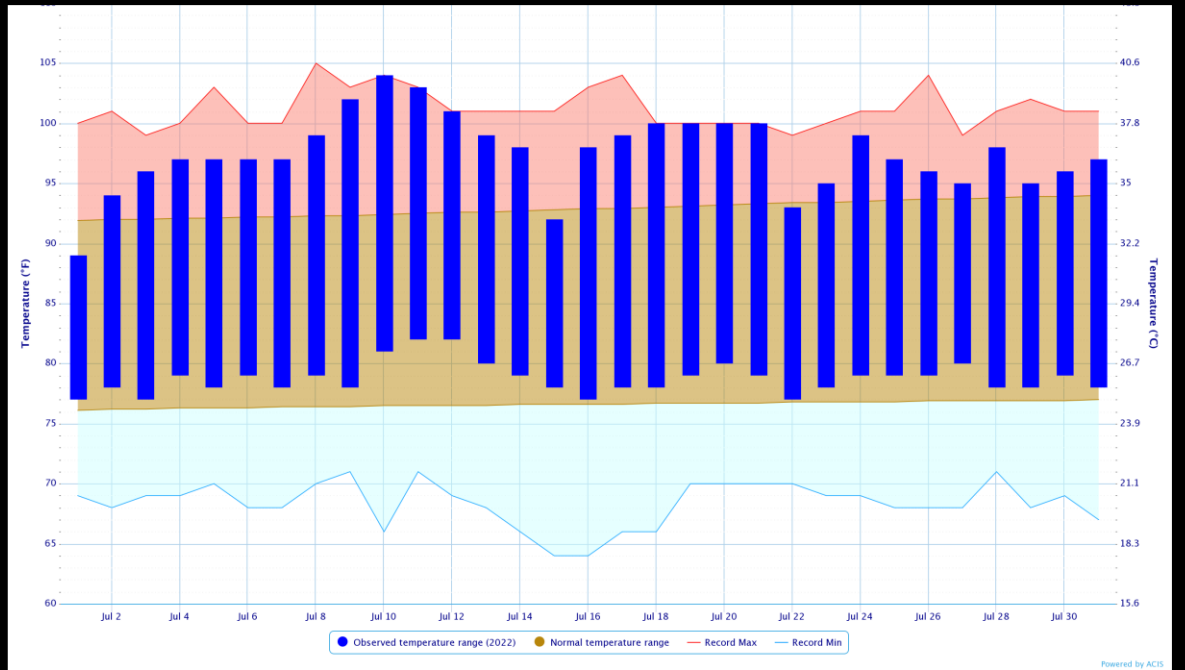
Location	Average High Temp (F)	Average Low Temp (F)	Average Temp (F)	Departure From Normal Average (F)	Maximum Temperature (F)	Minimum Temperature (F)
Galveston (GLS)	93.0	84.2	88.6	+3.1	96 on the 10 th	75 on the 14 th
Houston Hobby (HOU)	97.5	78.7	88.1	+3.3	104 on the 10 th	77 on the 3 rd , 16 th & 22 nd
City of Houston (IAH)	98.5	77.6	88.0	+2.9	105 on the 10 th	74 on the 8 th & 16 th
College Station (CLL)	103.4	78.5	90.9	+5.8	111 on the 10 th	76 on the 1 st , 15 th & 16 th
Palacios (PSX)	93.0	82.9	88.0	+2.6	96 on the 13 th	78 on the 1 st , 15 th & 28 th

Temperature Charts

City of Houston

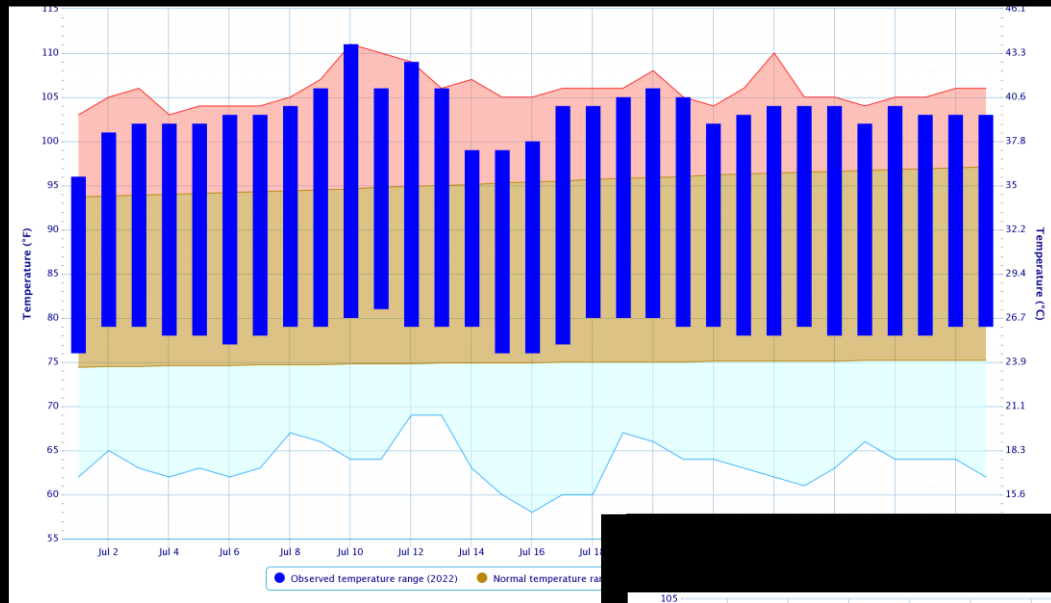


Houston-Hobby

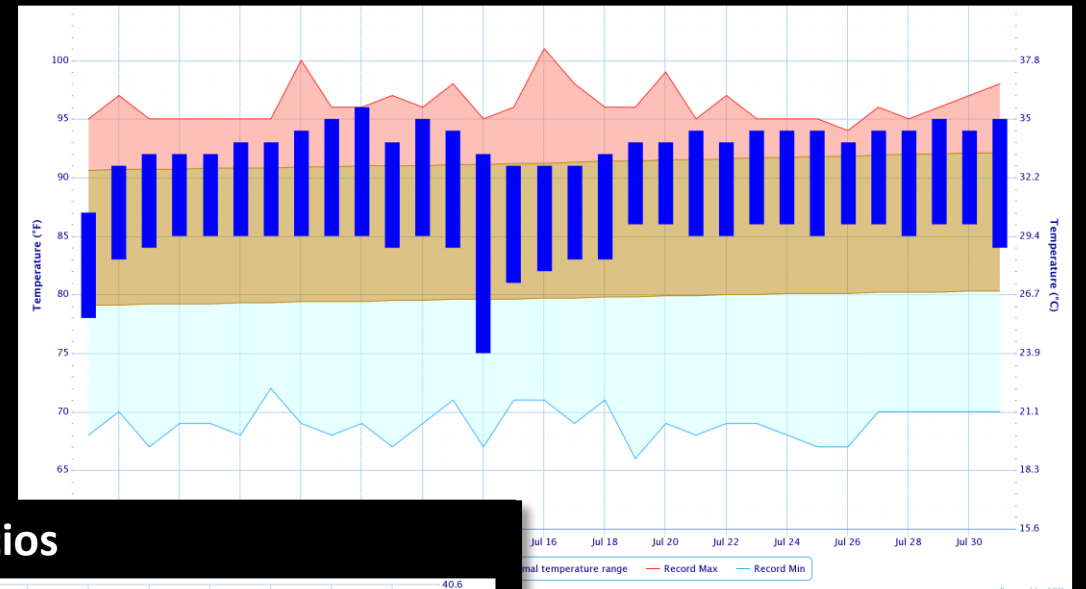


Temperature Charts

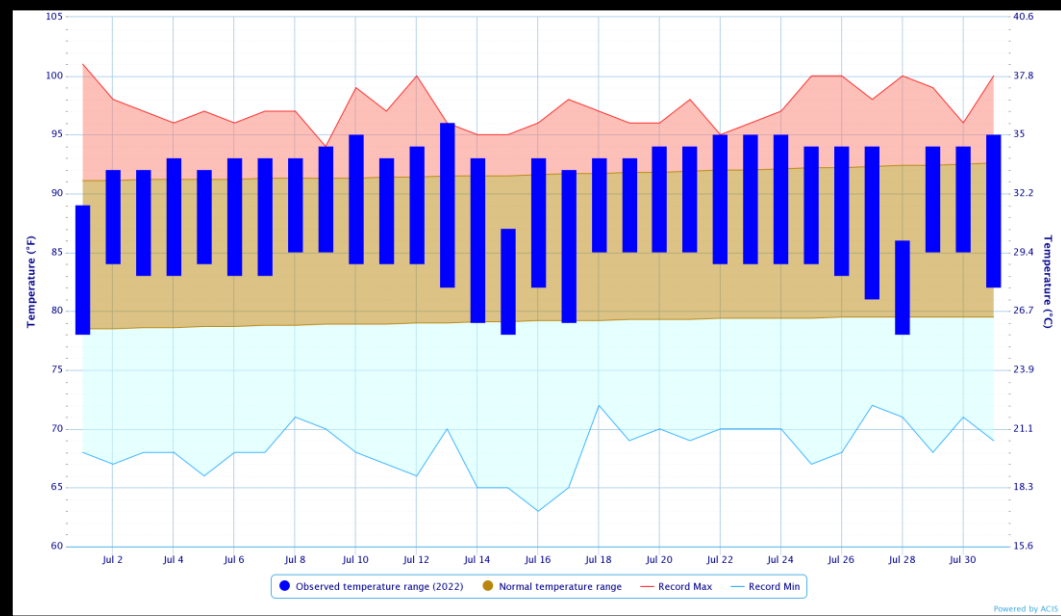
City of College Station



City of Galveston



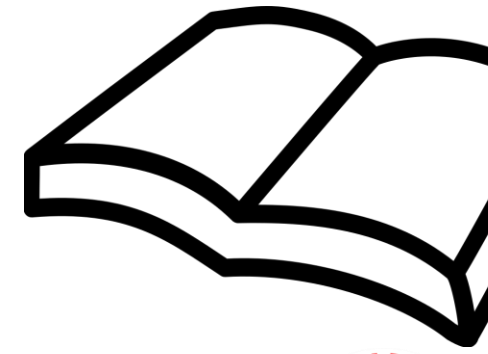
Palacios



Daily Record Reports – City of College Station

Date	Record Type	New Record	Previous Record
3 rd	High Minimum	79°	78° in 2017
10 th	High Minimum	80° - T	80° in 2009
10 th	High Maximum	111°	109° in 1917
12 th	High Maximum	109° - T	109° in 1954
13 th	High Maximum	106°	105° in 1901
18 th	High Minimum	80° - T	80° in 2011
20 th	High Minimum	80°	79° in 1890
21 st	High Maximum	105° - T	105° in 1913
21 st	High Minimum	79°	78° in 2009
25 th	High Minimum	79° - T	79° in 2011

Date	Record Type	New Record	Previous Record
31 st	High Minimum	79° - T	79° in 2015



Key

High Max

Low Max

Precip

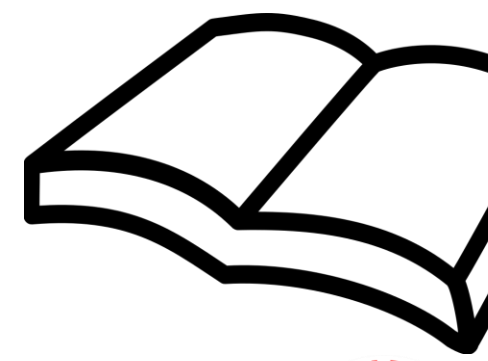
Snow

High Min

Low Min

Daily Record Reports – City of Houston

Date	Record Type	New Record	Previous Record
10 th	High Maximum	105°	101° in 1998
10 th	High Minimum	82°	81° in 1958
11 th	High Maximum	103° - T	103° in 1980
11 th	High Minimum	83°	81° in 2020
12 th	High Minimum	82° - T	82° in 1988
13 th	High Maximum	102° - T	102° in 1980
18 th	High Minimum	80° - T	80° in 2015
19 th	High Minimum	81°	78° in 2009
20 th	High Minimum	81°	79° in 2011



Key

High Max

Low Max

Precip

Snow

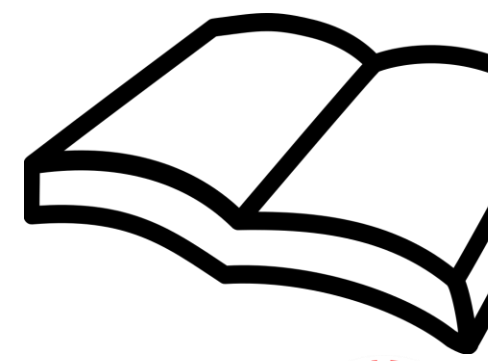
High Min

Low Min

Daily Record Reports – Houston-Hobby

Date	Record Type	New Record	Previous Record
10 th	High Minimum	81°	80° in 2020
10 th	High Maximum	104°	100° in 1964
11 th	High Minimum	82°	81° in 2016
11 th	High Maximum	103°	100° in 1998
12 th	High Maximum	101° - T	101° in 1954
14 th	High Minimum	79° - T	79° in 2020
18 th	High Maximum	100° - T	100° in 1980
19 th	High Maximum	100° - T	100° in 2000
20 th	High Minimum	80° - T	80° in 2017
20 th	High Maximum	100° - T	100° in 2000

Date	Record Type	New Record	Previous Record
21 st	High Maximum	100°	99° in 2000
26 th	High Minimum	79° - T	79° in 2021
27 th	High Minimum	80° - T	80° in 2011



Key

High Max

Low Max

Precip

Snow

High Min

Low Min

Daily Record Reports – City of Galveston

Date	Record Type	New Record	Previous Record	Date	Record Type	New Record	Previous Record
3 rd	High Minimum	84° - T	84° in 1983	12 th	High Minimum	85° - T	85° in 2019
4 th	High Minimum	85°	84° in 2019	13 th	High Minimum	84° - T	84° in 2011
5 th	High Minimum	85°	83° in 2019	19 th	High Minimum	86°	84° in 1981
6 th	High Minimum	85°	84° in 1994	20 th	High Minimum	86°	85° in 2005
7 th	High Minimum	85°	84° in 2020	21 st	High Minimum	85°	84° in 2019
8 th	High Minimum	85°	84° in 2020	22 nd	High Minimum	85° - T	85° in 1994
9 th	High Minimum	85° - T	85° in 1996	23 rd	High Minimum	86°	84° in 2011
10 th	High Maximum	96° - T	96° in 1931	24 th	High Minimum	86°	83° in 2021
10 th	High Minimum	85°	83° in 2021	25 th	High Minimum	85°	84° in 2012
11 th	High Minimum	84° - T	84° in 2011	26 th	High Minimum	86°	84° in 2011

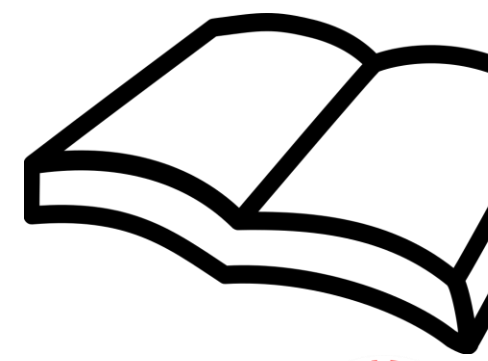


Key

High Max
Low Max
Precip
Snow
High Min
Low Min

Daily Record Reports – City of Galveston

Date	Record Type	New Record	Previous Record
27 th	High Minimum	86°	84° in 2011
28 th	High Minimum	85°	83° in 2016
29 th	High Minimum	86°	84° in 2019
30 th	High Minimum	86°	84° in 2009
31 st	High Minimum	84° - T	84° in 1996



Key

High Max

Low Max

Precip

Snow

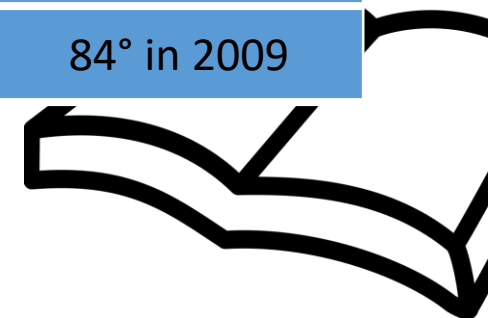
High Min

Low Min

Daily Record Reports – Palacios

Date	Record Type	New Record	Previous Record
2 nd	High Minimum	84°	83° in 2016
5 th	High Minimum	84° - T	84° in 2016
8 th	High Minimum	85° - T	85° in 2019
9 th	High Maximum	94° - T	94° in 1971
10 th	High Minimum	84°	83° in 2020
11 th	High Minimum	84° - T	84° in 2020
12 th	High Minimum	84° - T	84° in 2010
13 th	High Maximum	96° - T	96° in 2019
18 th	High Minimum	85°	84° in 2019
19 th	High Minimum	85° - T	85° in 2019

Date	Record Type	New Record	Previous Record
20 th	High Minimum	85°	84° in 2019
22 nd	High Minimum	84° - T	84° in 2011
22 nd	High Maximum	95° - T	95° in 2008
23 rd	High Minimum	84°	83° in 2021
24 th	High Minimum	84° - T	84° in 2016
25 th	High Minimum	84°	83° in 2012
29 th	High Minimum	85°	84° in 2019
30 th	High Minimum	85°	84° in 2009



Key

High Max

Low Max

Precip

Snow

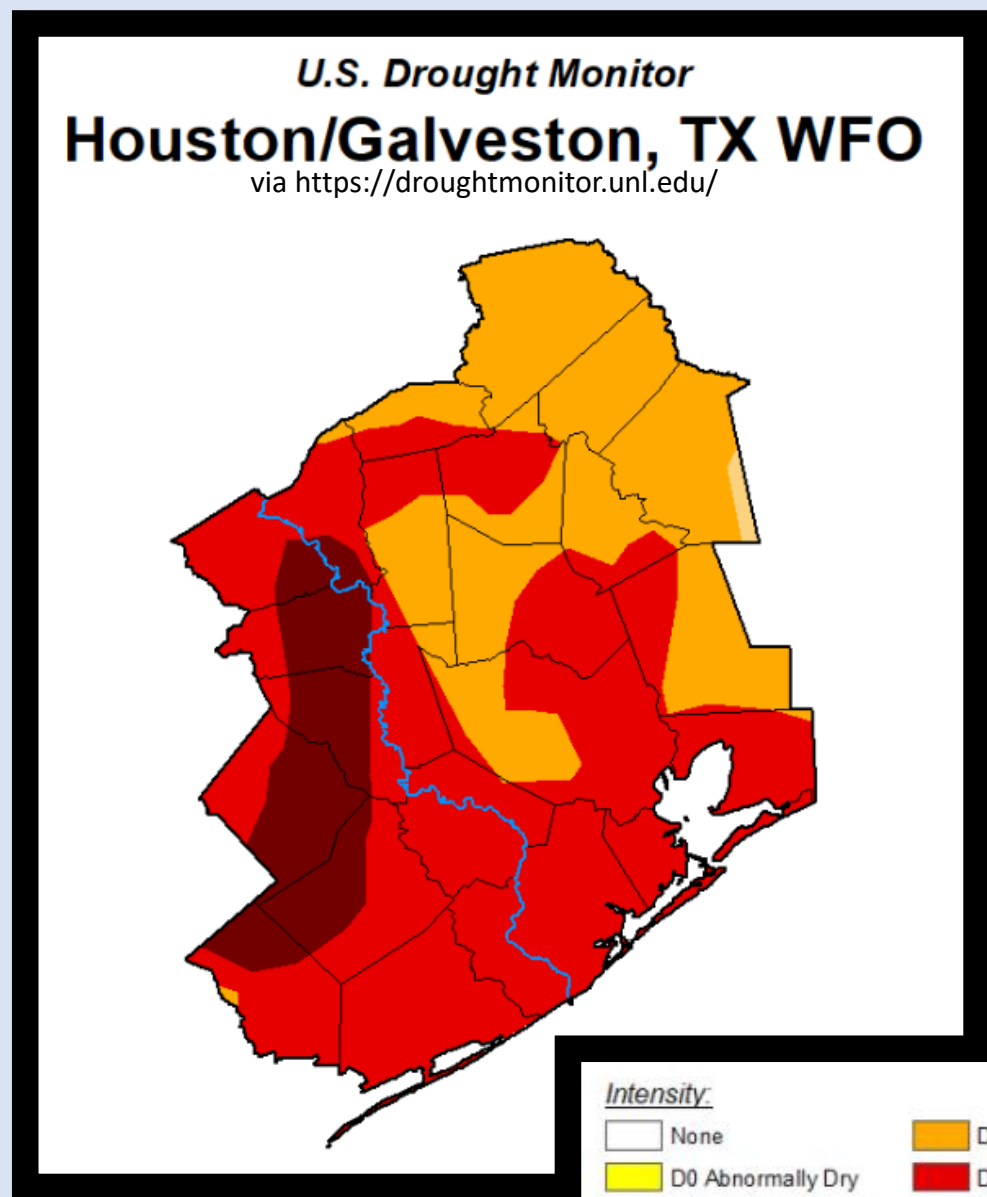
High Min

Low Min

Drought Monitor

As of August 2nd

Drought continued to worsen across the region due to the abnormally high temperatures combined with a lack of rainfall. Exceptional Drought (D4) was expanded into portions of Brazos, Burleson, Washington, Auston, Colorado, Wharton, and Jackson counties. Extreme (D3) to Severe Drought (D2) continues across the rest of the region.



Intensity:

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

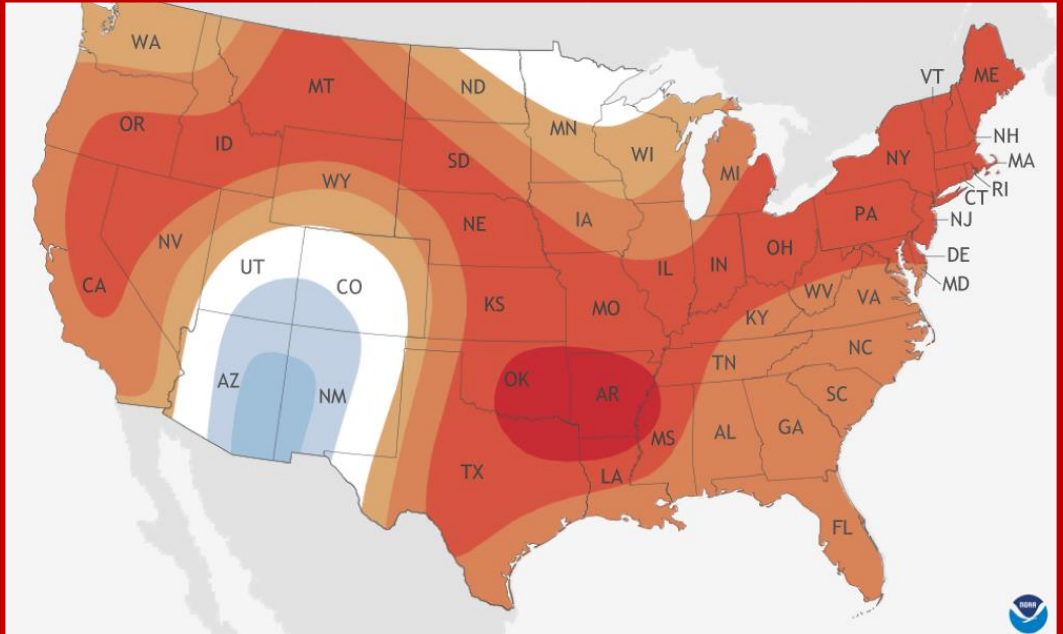
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



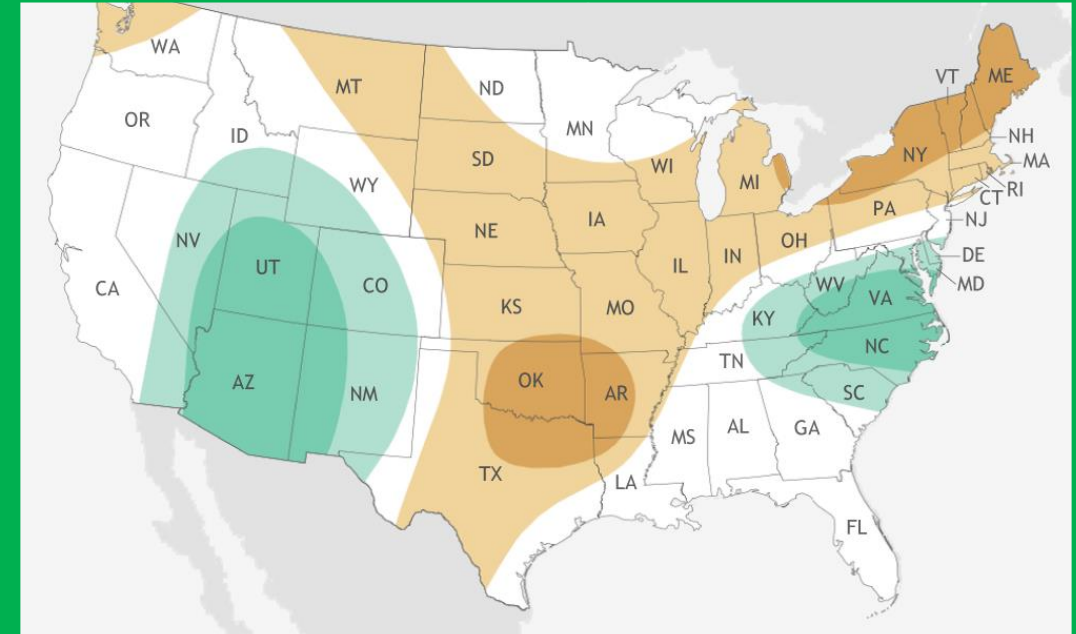
August Outlook

Location	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	85.9	92.0	79.8
Houston Hobby	85.1	93.5	76.7
City of Houston	85.2	94.9	75.4
College Station	85.7	96.6	74.7
Palacios	85.6	92.8	78.5

Location	Normal Monthly Precipitation (in.)
Galveston	4.71
Houston Hobby	5.44
City of Houston	4.84
College Station	3.10
Palacios	3.91



Temperature Outlook for August 2022
Issued 31 Jul 2022
Probability (percent chance)
cooler than normal equal chances warmer than normal
80 70 60 50 40 33 33 40 50 60 70 80
NOAA Climate.gov Data: CPC



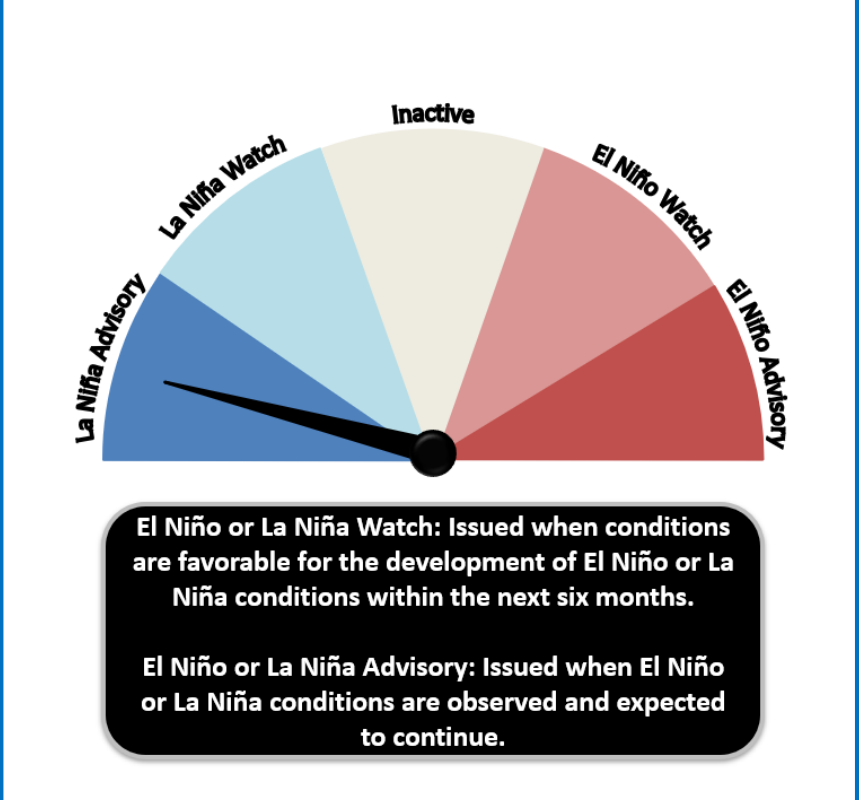
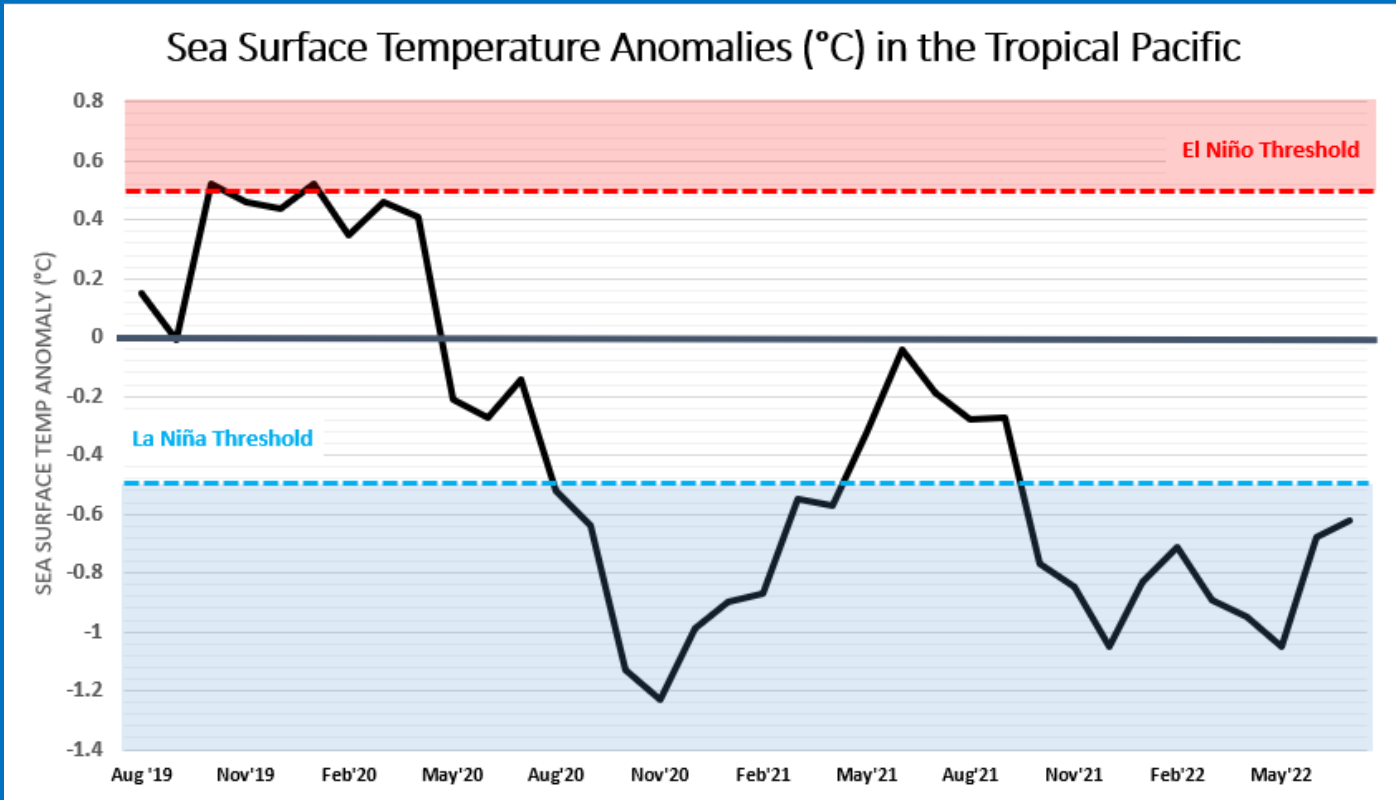
Precipitation Outlook for August 2022
Issued 31 Jul 2022
Probability (percent chance)
drier than normal equal chances wetter than normal
80 70 60 50 40 33 33 40 50 60 70 80
NOAA Climate.gov Data: CPC



Current ENSO Phase: **La Niña**

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

- La Niña conditions are expected to continue through the Winter.



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.

