



NWS Houston, Texas January 2023 Regional Climate Summary

Produced by Jimmy Fowler

...Overall Warm Month with Isolated Very Heavy Rainfall...Tornado Outbreak on 1/24...

The exceptional warmth that ended 2022 stuck around through the majority of the start of 2023. Despite a cooler end to the month, overall January was four to six degrees above normal. Areas along the coast and across the northern third of the region saw below normal precipitation for the month, but a swath of heavy rainfall fell from Colorado County up through Polk County with over a foot of rainfall fell in parts of Harris County. This rainfall was able to eliminate the last remaining areas of drought in Southeast Texas. A total of 20 daily records were set across SE Texas with the majority of these being daily high maximin records.

A strong system moved through the area on the 24th that spawned five tornadoes across SE Texas with the strongest one being in Southeast Harris County. This tornado was rated an EF-3 tornado with highest estimate wind speed of 140mph as it passed through the northeast side of Deer Park near the Houston Ship Channel.

Table of Contents

Page Number	Page Title
1	Cover
2	Table of Contents
3	By the Numbers
4	Precipitation Summary
5	Precipitation Graph
6	Precipitation Imagery
7	Temperature Summary
8 – 9	Temperature Charts
10 – 14	Daily Record Reports
15	Drought Monitor
16	Next Month Outlook
17	ENSO Review
18	January 24 th Tornadoes
19	Climate Primary Site History



By the Numbers: January 2023



Location (records started)	Average Temp	Ranking	Total Rainfall	Ranking
City of Houston, TX (1888)	57.9°F	13 th Warmest	6.58"	12 th Wettest
Houston Hobby, TX (1930)	60.7°F	3 rd Warmest	3.98"	38 th Wettest
City of Galveston, TX (1871)	61.8°F	8 th Warmest	2.67"	62 nd Driest
City of College Station, TX (1882)	56.0°F	13 th Warmest	2.04"	52 nd Driest
Palacios, TX (1943)	59.7°F	7 th Warmest	1.97"	31 st Driest
Huntsville, TX (1997)	56.4°F	3 rd Warmest	3.27"	13 th Wettest
Sugar Land, TX (2000)	59.5°F	Warmest on Record	3.04"	12 th Wettest
Conroe, TX (1997)	54.5°F	7 th Warmest	8.13"	2 nd Wettest
Clover Field (Pearland), TX (1997)	60.7°F	2 nd Warmest	3.50"	13 th Wettest
David Wayne Hooks (Tomball), TX (1998)	57.4°F	3 rd Warmest	11.84"	Wettest on Record
Angleton, TX (1998)	60.1°F	2 nd Warmest	1.61"	6 th Driest
League City, TX (1990)	59.7°F	2 nd Warmest	4.66"	17 th Wettest



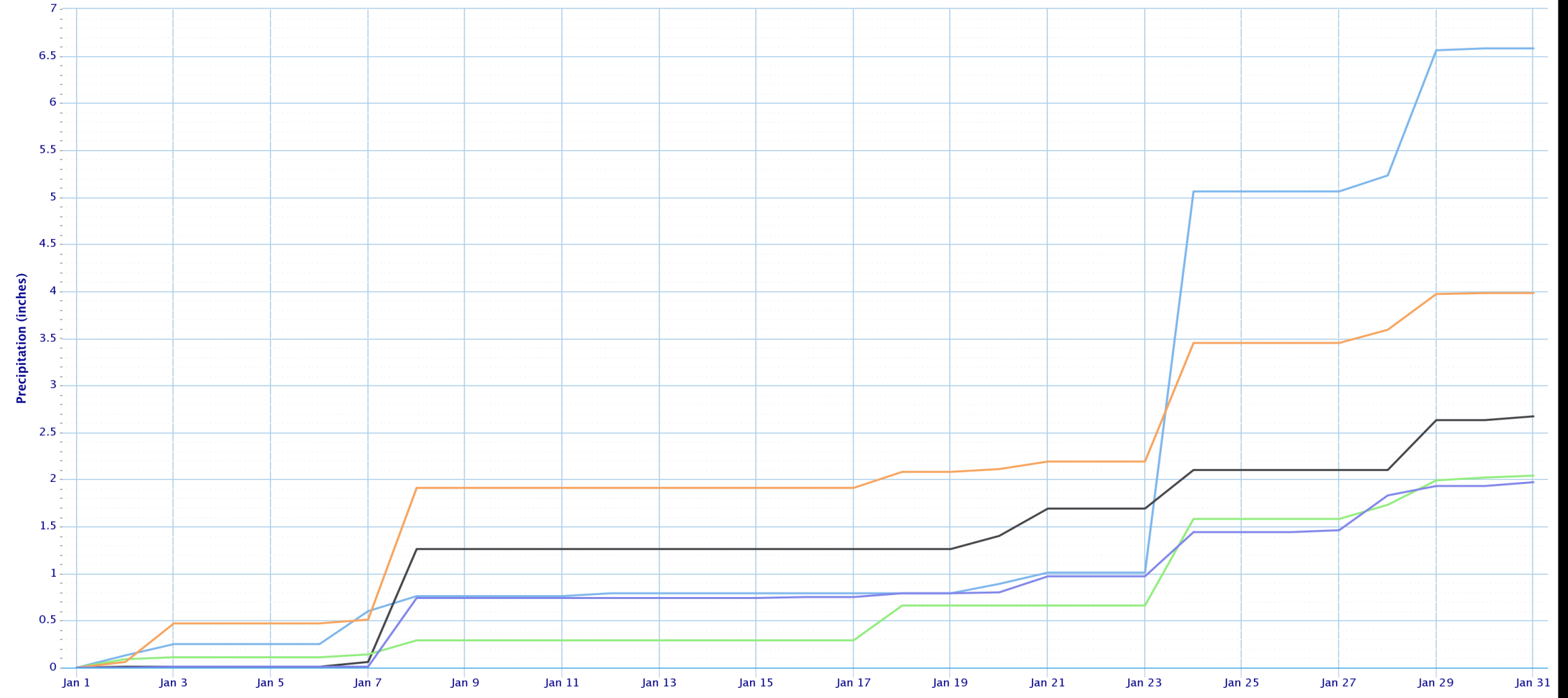
Precipitation

Location	Total Precipitation (in.)	Departure from Normal (in.)	Number of Thunder Days	Maximum Daily Precipitation (in./date)	
Galveston (GLS)	2.67	-1.63	5	1.20	8 th
Houston Hobby (HOU)	3.98	-0.11	6	1.40	8 th
City of Houston (IAH)	5.68	+2.82	5	4.05	24 th
College Station (CLL)	2.04	-1.39	7	0.92	24 th
Palacios (PSX)	1.97	-1.28	2	0.73	8 th

Precipitation Accumulation Graph

Accumulated Precipitation

Green/black diamonds represent subsequent/missing values



City of Houston

City of Galveston

City of College Station

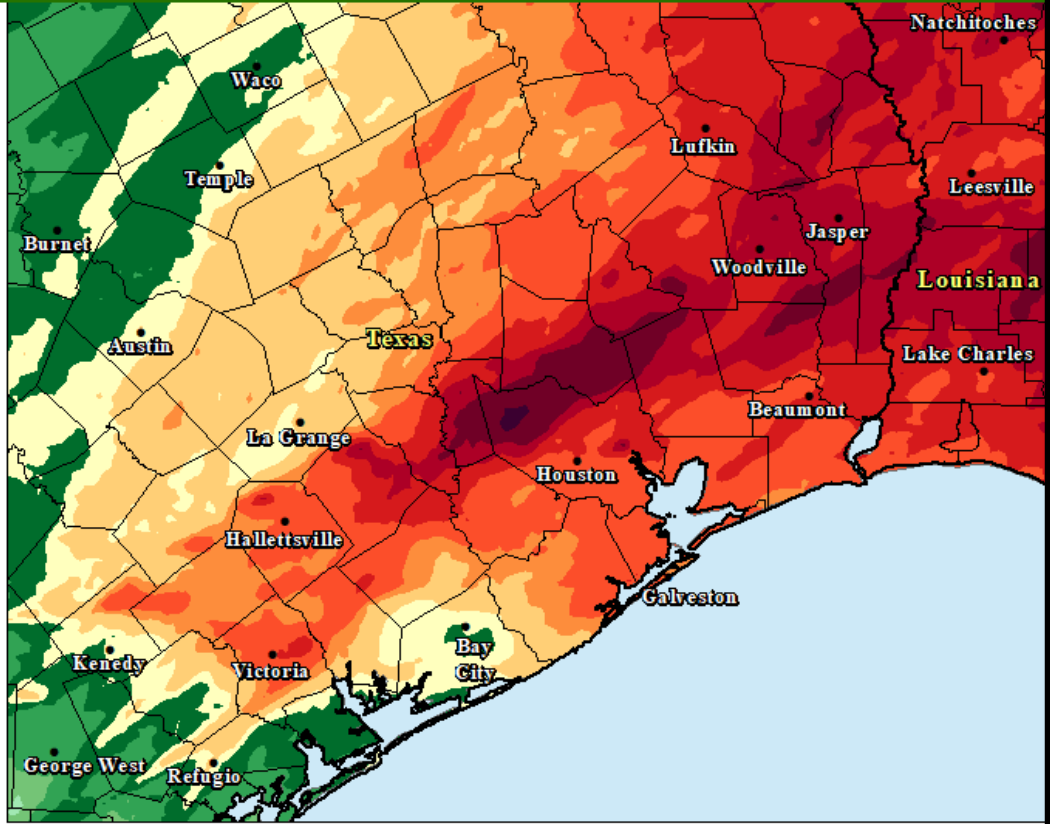
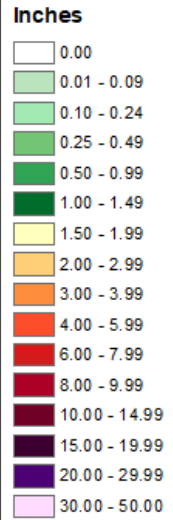
Houston-Hobby

Palacios



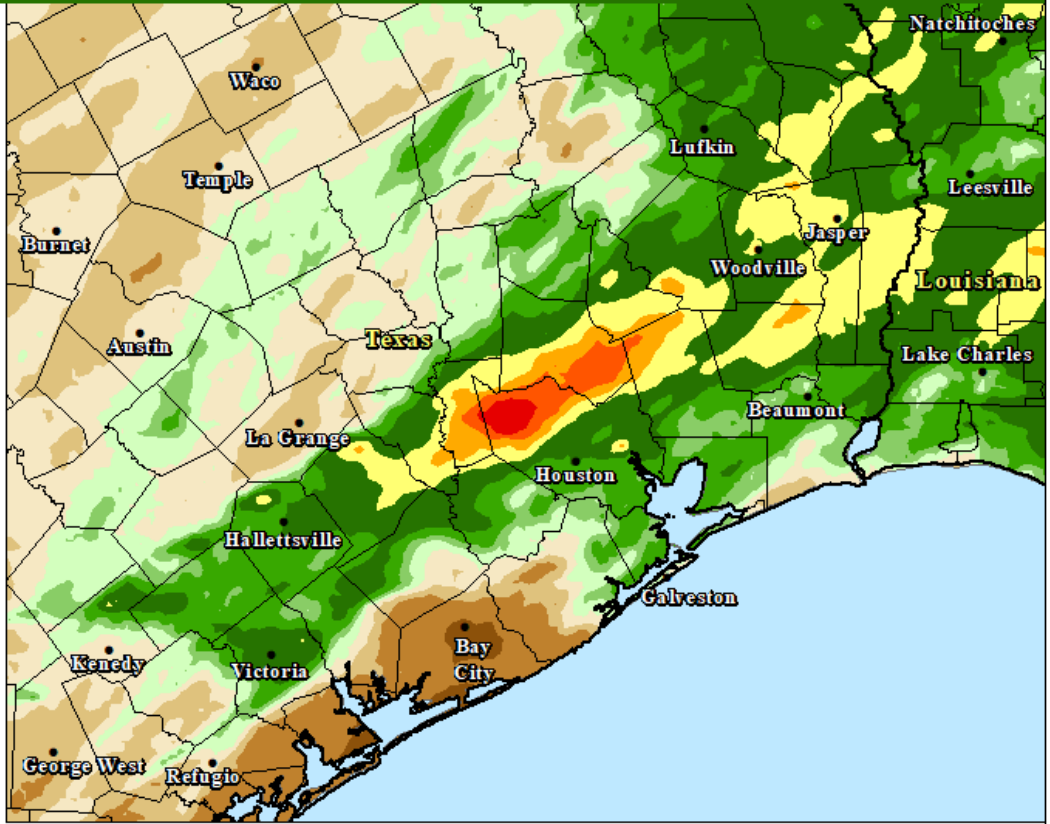
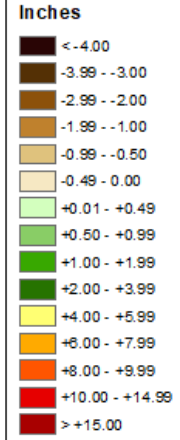
Precipitation Maps

Total Monthly Precipitation - January 2023



Source: NWS Advanced Hydrologic Prediction Service
 Created: 02/01/2023 2100 UTC

Total Monthly Precipitation Departure From Normal - January 2023



Source: NWS Advanced Hydrologic Prediction Service
 Created: 02/01/2023 2100 UTC



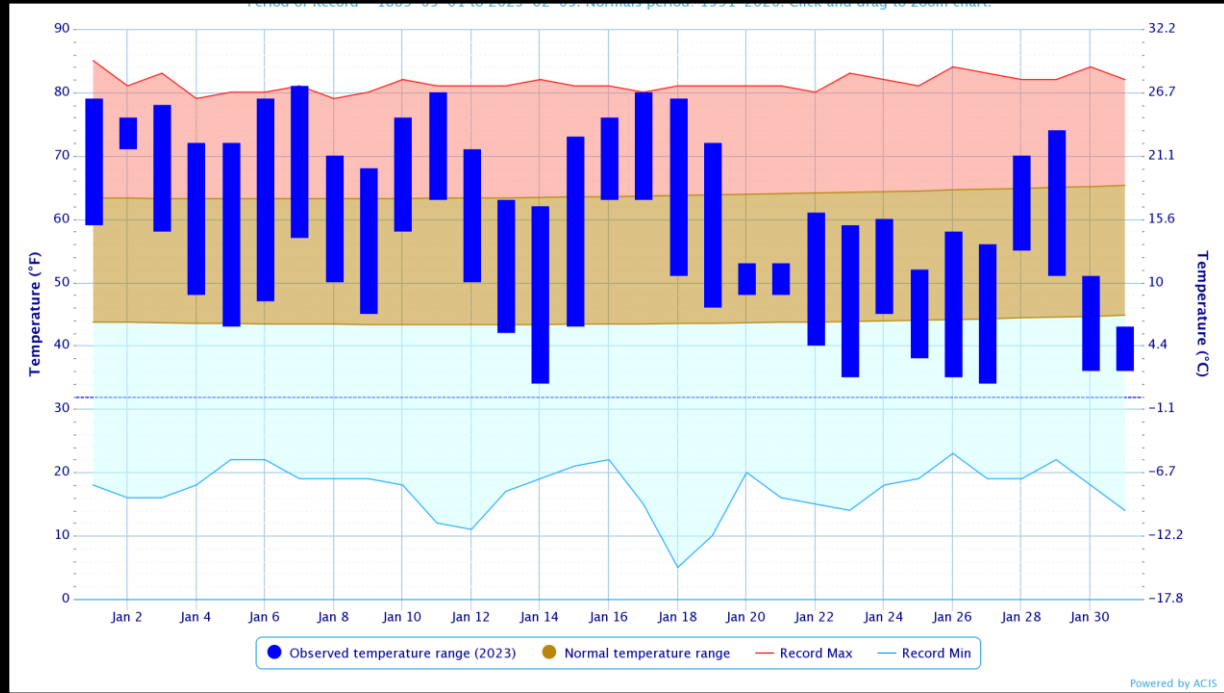
Temperature

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)	68.1	55.5	61.8	+5.8	77 on the 4 th	44 on the 26 th & 27 th
Houston Hobby (HOU)	69.7	51.7	60.7	+5.7	82 on the 1 st , 7 th & 11 th	37 on the 26 th
City of Houston (IAH)	67.6	48.1	57.9	+4.1	81 on the 7 th	34 on the 27 th
College Station (CLL)	66.0	46.1	56.0	+4.5	80 on the 11 th	32 on the 26 th & 27 th
Palacios (PSX)	69.1	50.3	59.7	+4.1	82 on the 3 rd	36 on the 23 rd & 26 th

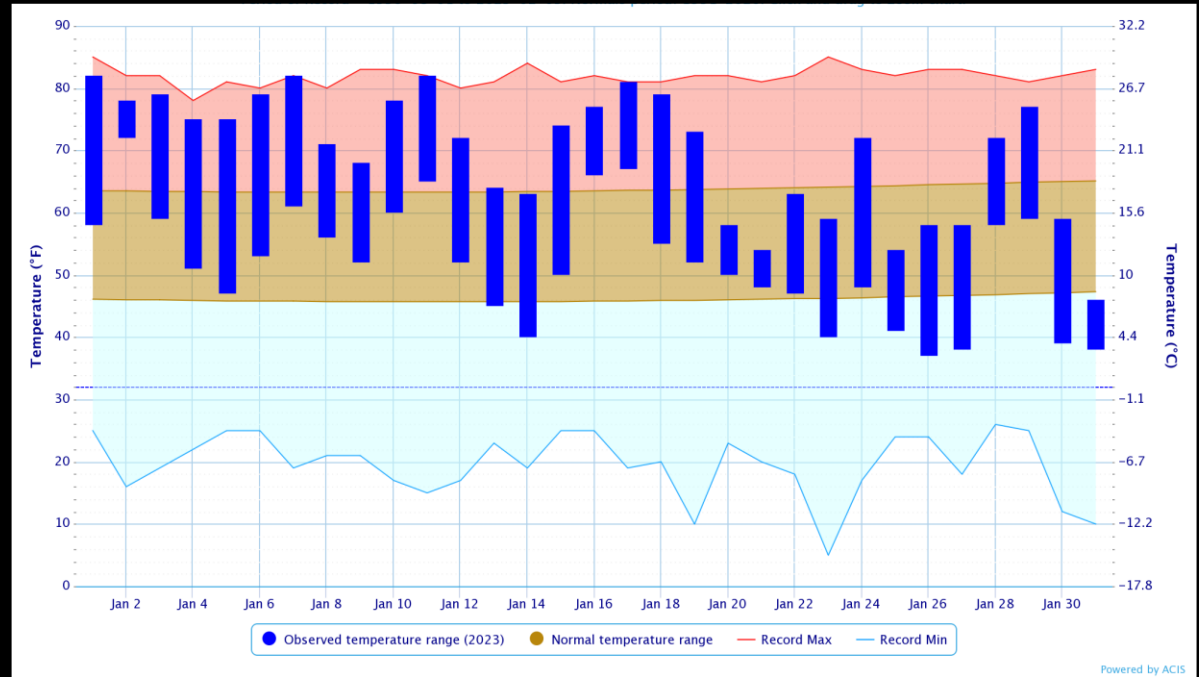


Temperature Charts

City of Houston

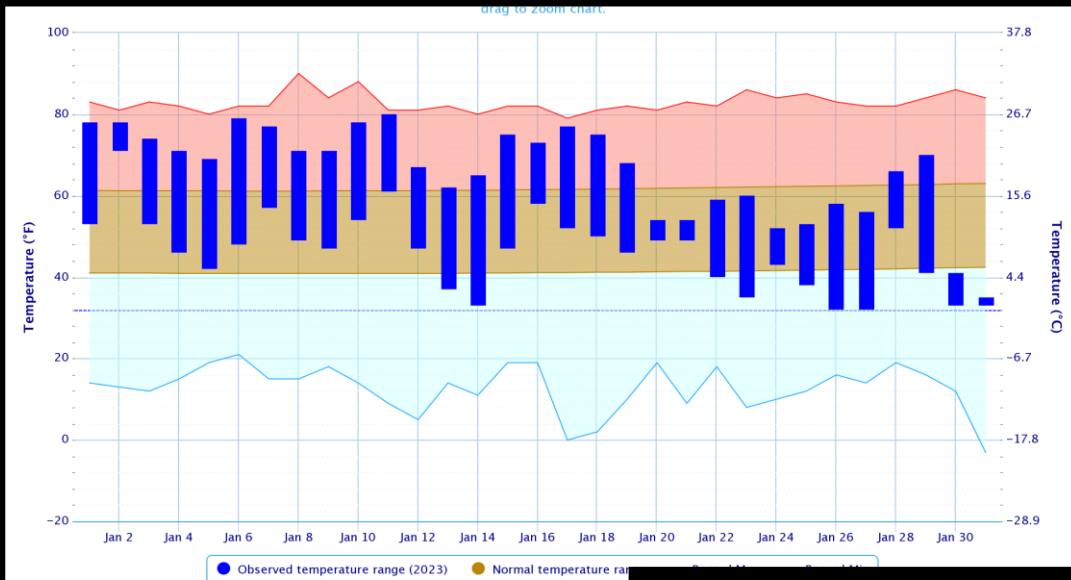


Houston-Hobby

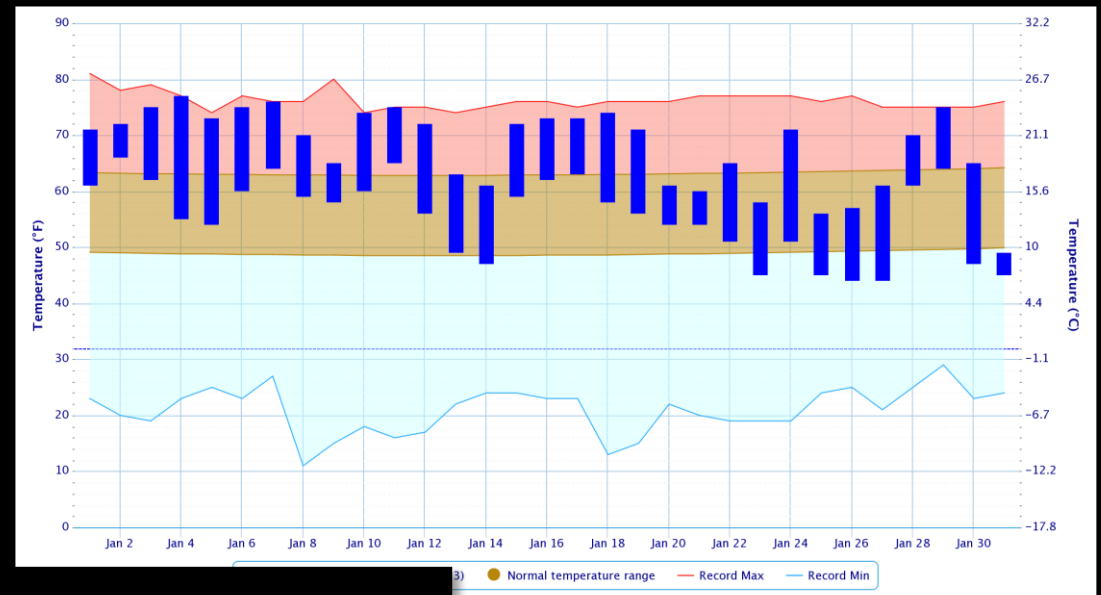


Temperature Charts

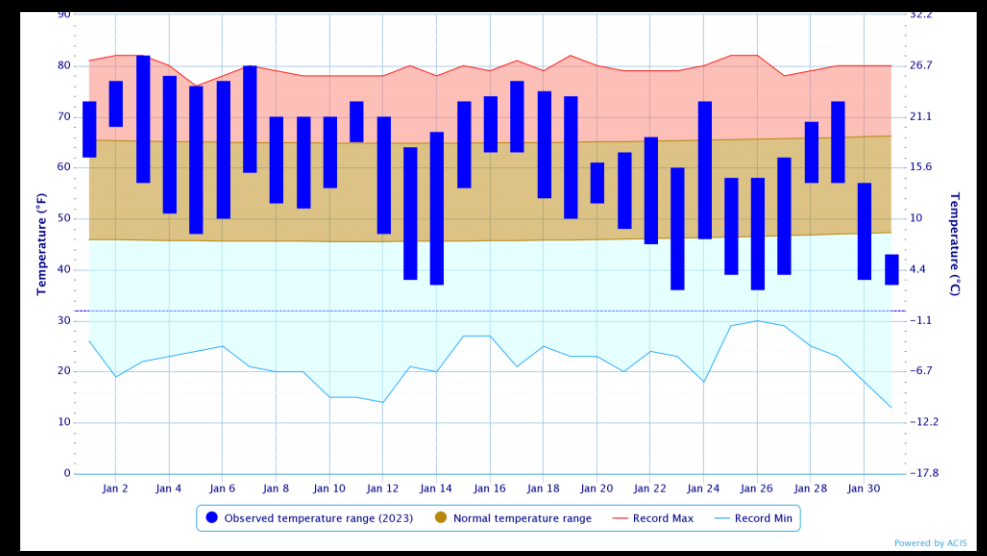
City of College Station



City of Galveston



Palacios



Daily Record Reports – City of College Station

Date	Record Type	New Record	Previous Record
2 nd	High Minimum	71°F	68°F in 2000

There was 1 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
2 nd	High Minimum	71°F	69°F in 2000
7 th	High Maximum	81°F	79°F in 2008
17 th	High Maximum	80°F – T	80°F in 1974
24 th	Daily Precip	4.05"	1.94" in 2011

There were 4 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
2 nd	High Minimum	72°F	68°F in 2000
7 th	High Maximum	82°F	79°F in 2008
8 th	Daily Precip	1.40"	1.00" in 2022
11 th	High Maximum	82°F	80°F in 2017
17 th	High Maximum	81°F	80°F in 1974

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 – City of Galveston

Date	Record Type	New Record	Previous Record
4 th	High Maximum	77°F	76°F in 2009
7 th	High Maximum	76°F	75°F in 2012
10 th	High Maximum	74°F – T	74°F in 2017
11 th	High Maximum	75°F – T	75°F in 2017
29 th	High Maximum	75°F – T	75°F in 2008

There were 5 daily records 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
3 rd	High Minimum	68°F – T	68°F in 2005
4 th	High Maximum	82°F	81°F in 2017
5 th	High Maximum	76°F – T	76°F in 1955
7 th	High Maximum	80°F	75°F in 2008
11 th	High Minimum	65°F – T	65°F in 1960

There were 5 daily records set at Palacios this month.



Key

High Max

Low Max

Precip

Snow

High Min

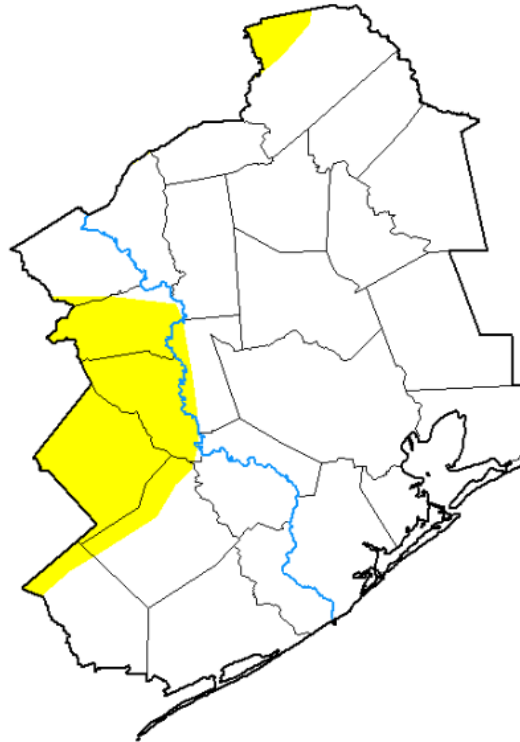
Low Min

Drought Monitor

As of January 31st

*Rainfall during January was able to make up even more of the deficit made last summer and fall with now **no areas in drought** across Southeast Texas. D0 – Abnormally Dry conditions are still being seen in parts of Houston, Austin, Washington, Colorado, Jackson, and Wharton counties.*

U.S. Drought Monitor
Houston/Galveston, TX WFO
via <https://droughtmonitor.unl.edu/>



Intensity:

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

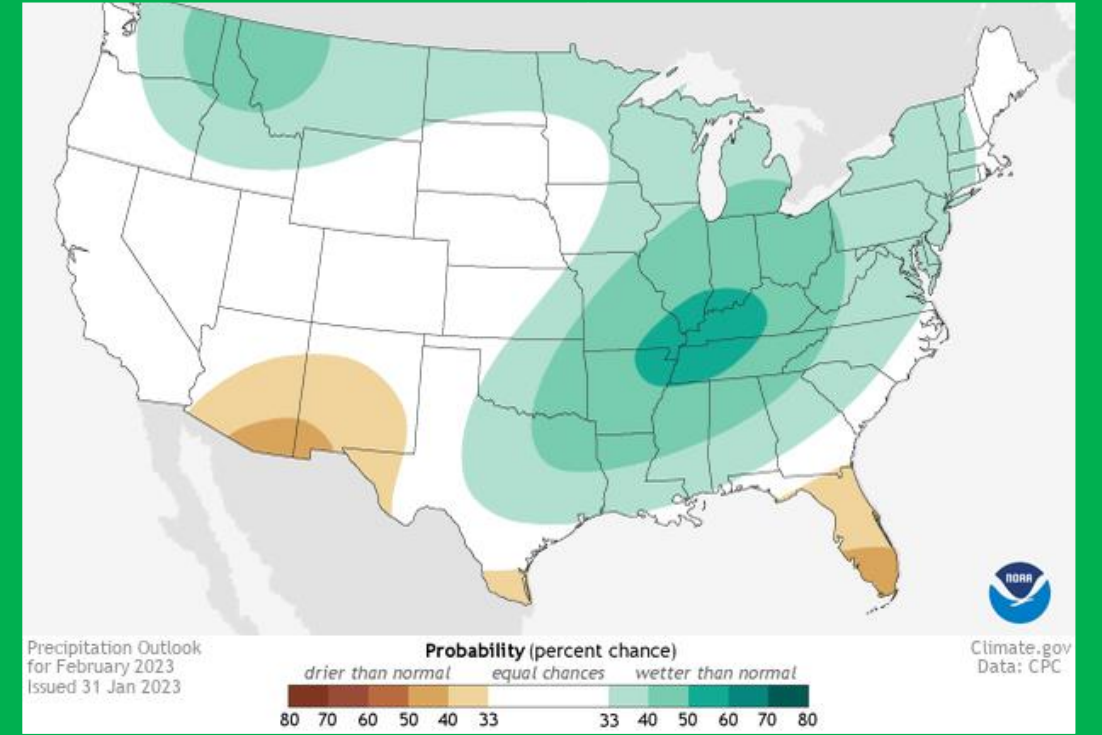
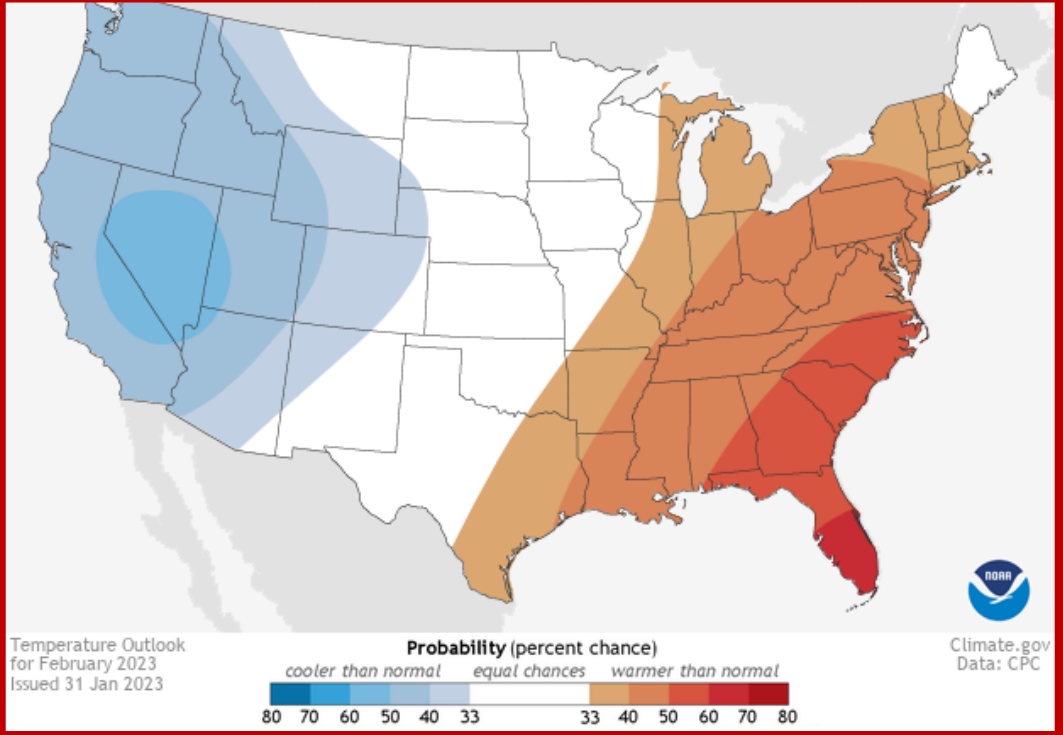
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



February Outlook

Location	Average Temp(°F)	Normal High (°F)	Normal Low (°F)
Galveston	59.3	66.4	52.3
Houston Hobby	58.8	67.6	50.1
City of Houston	53.8	67.8	47.6
College Station	55.3	65.5	45.1
Palacios	59.3	68.3	50.2

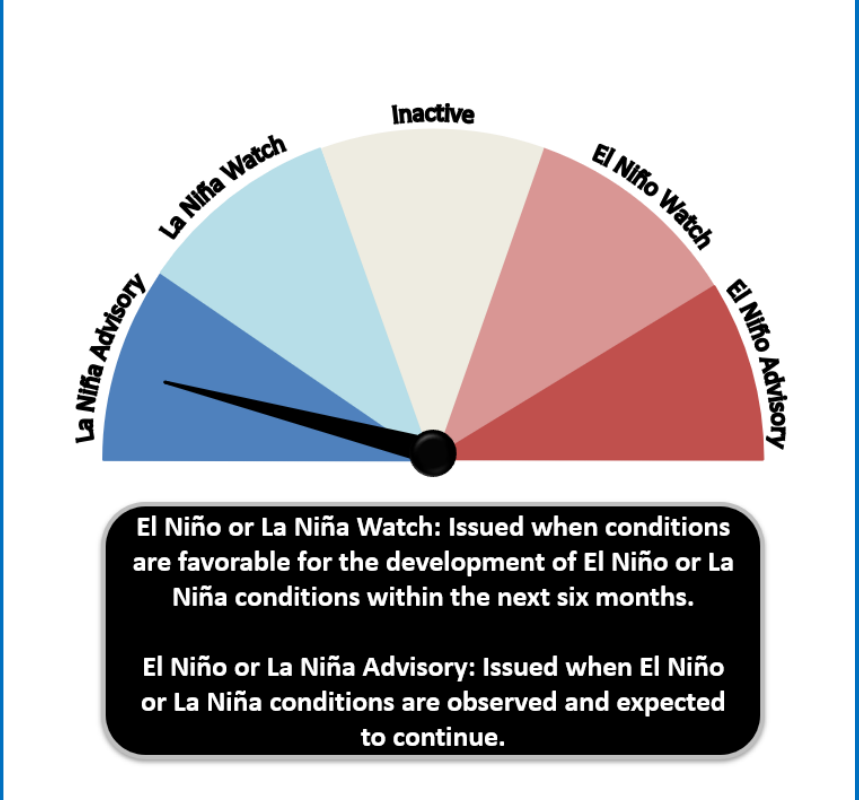
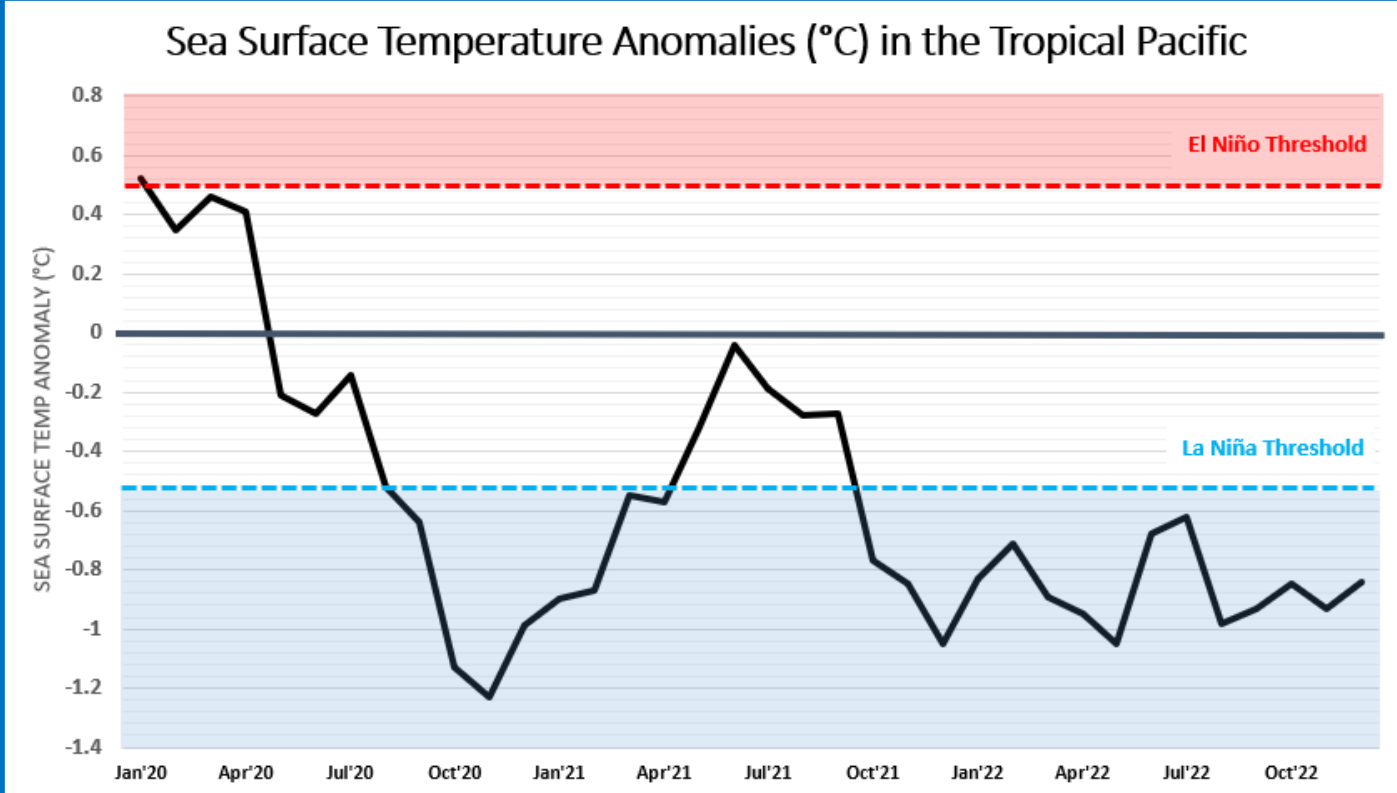
Location	Normal Monthly Precipitation (in.)
Galveston	2.14
Houston Hobby	2.85
City of Houston	2.97
College Station	2.90
Palacios	1.89



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.
- A transition from La Niña to ENSO-neutral is anticipated during the February-April 2023 season



January 24th Tornado Outbreak

On January 24th a system moved through SE Texas and produced five tornadoes:

- EF-0 near Eagle Lake
- EF-0 near Needsville
- EF-0 near Pearland
- EF-2 near Cove
- EF-3 in SE Harris County

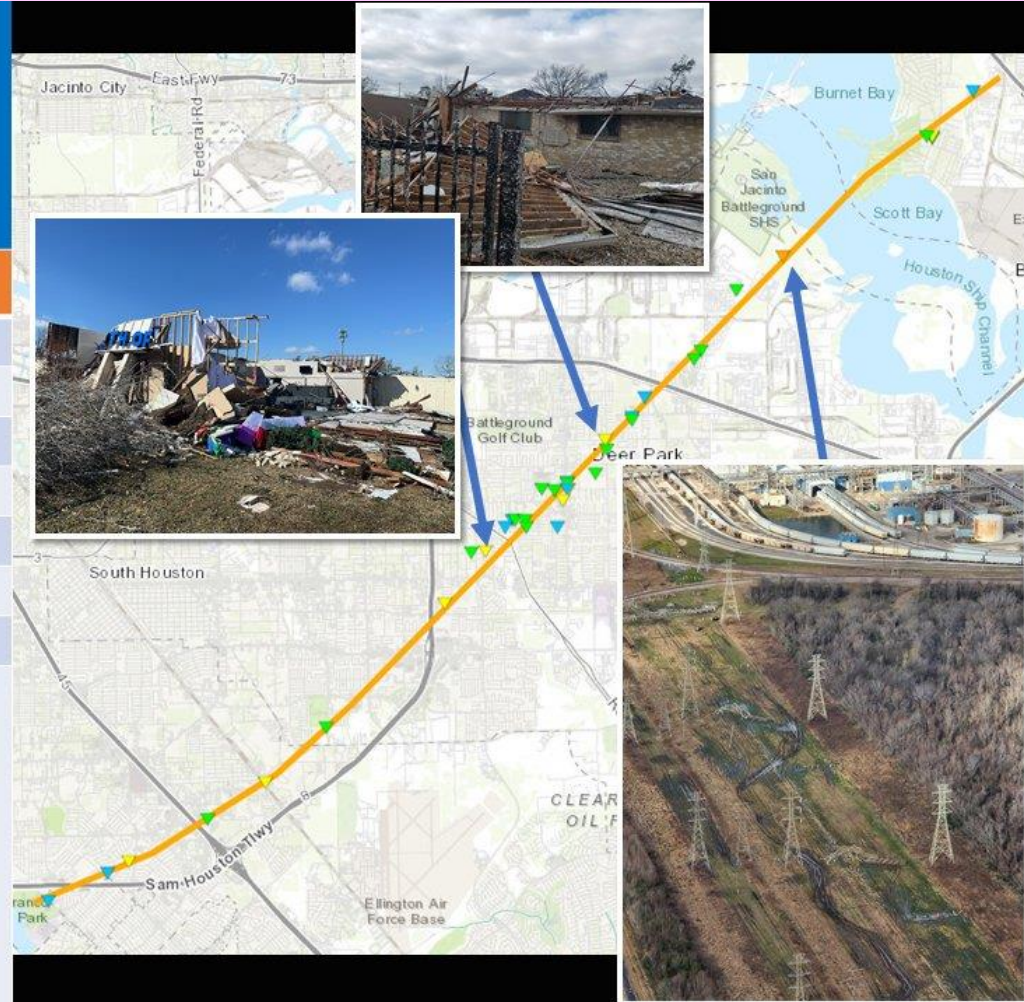
NATIONAL WEATHER SERVICE
OCEANIC AND ATMOSPHERIC ADMINISTRATION
Houston/Galveston, TX

Preliminary Storm Information

Southeast Harris Tornado

Date	01/24/2023
Time (Local)	2:15 PM - 2:50 PM CST
EF Rating	EF3
Est. Peak Winds	140 MPH
Path Length	18.8 Miles
Max Width	1,000 Yards
Injuries/Deaths	Some Minor Injuries/No Deaths

Tornado touched down east of El Franco Lee Park near the Sam Houston Tollway with a near-continuous path of damage extended east-northeast across portions of Southeast Houston, Pasadena, Deer Park and Baytown. Most of the damage was rated EF-0 and EF-1, but there were some spots with EF-2 damage. There were three high tension electrical towers flattened suggesting EF-3 damage northeast of Deer Park near the Houston Ship Channel. Damage became less intense north of Baytown with spotty damage as far north as TX-330 Spur.



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.

