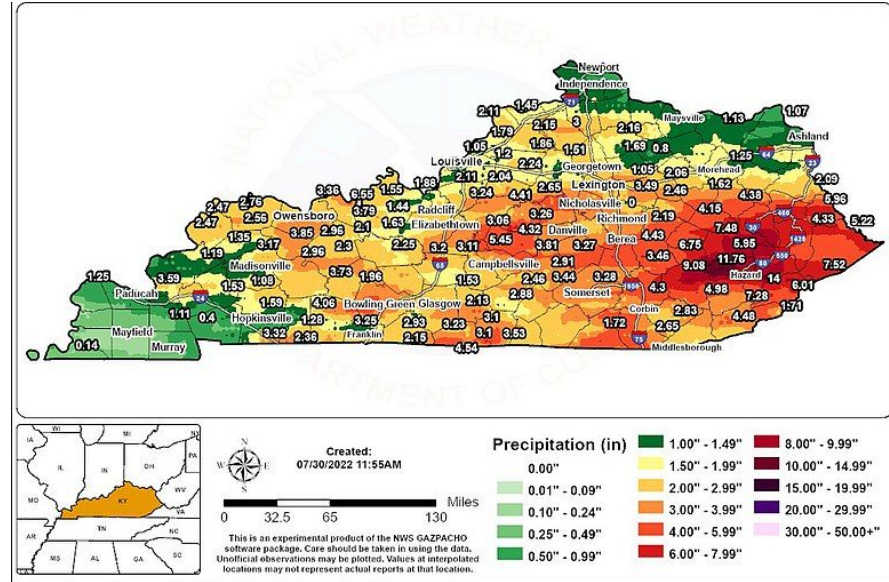


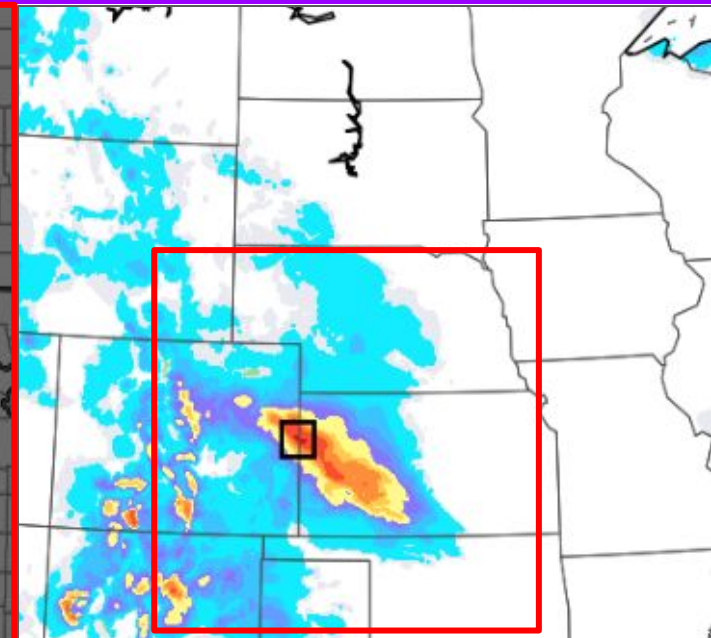
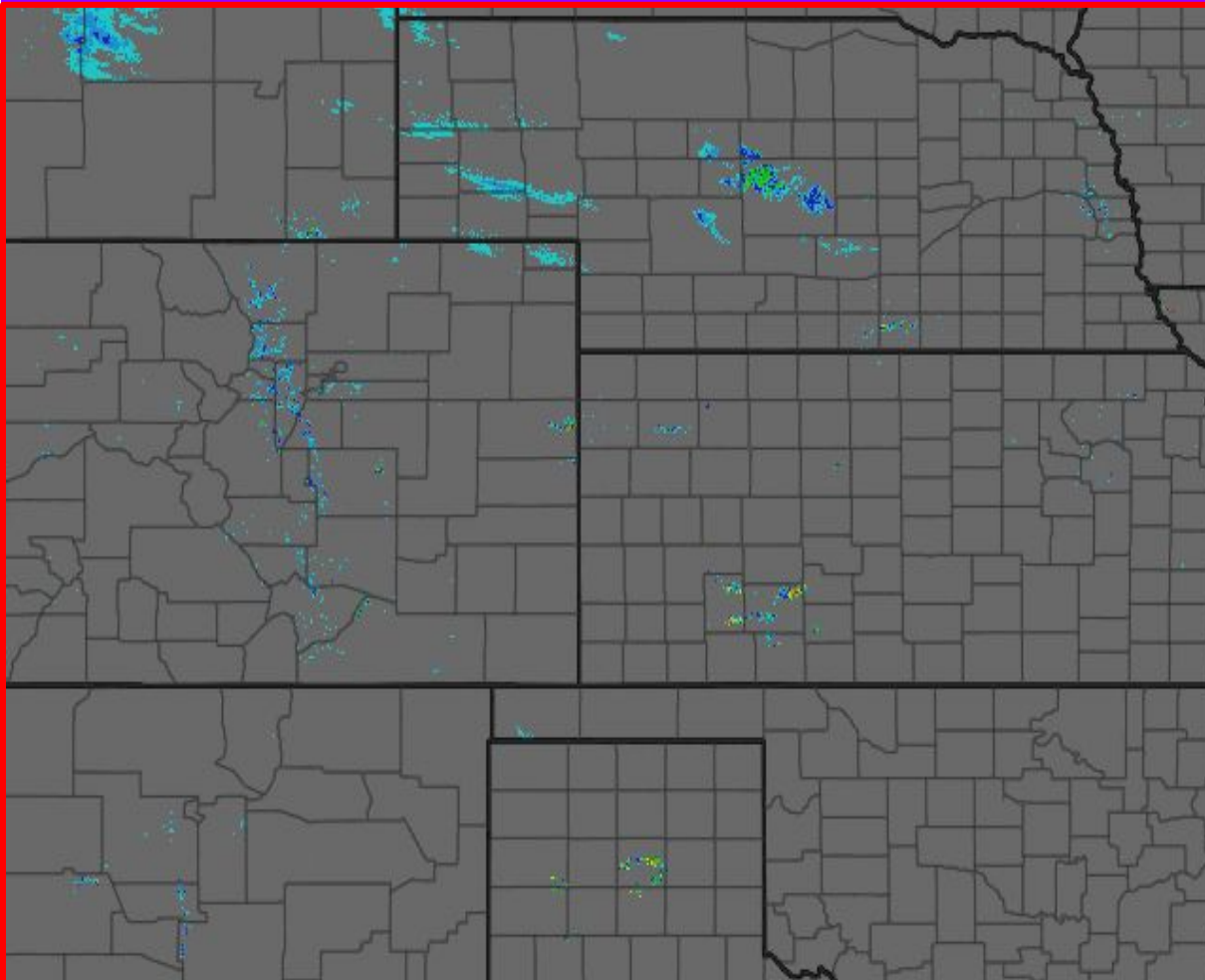
Meteorological



Memories

Greg Carbin
NWS Weather Prediction Center, Chief of Forecast Operations
College Park, Maryland
@GCarbin

1 - 2022: Jan. 25, Sneak Attack Snow in Kansas

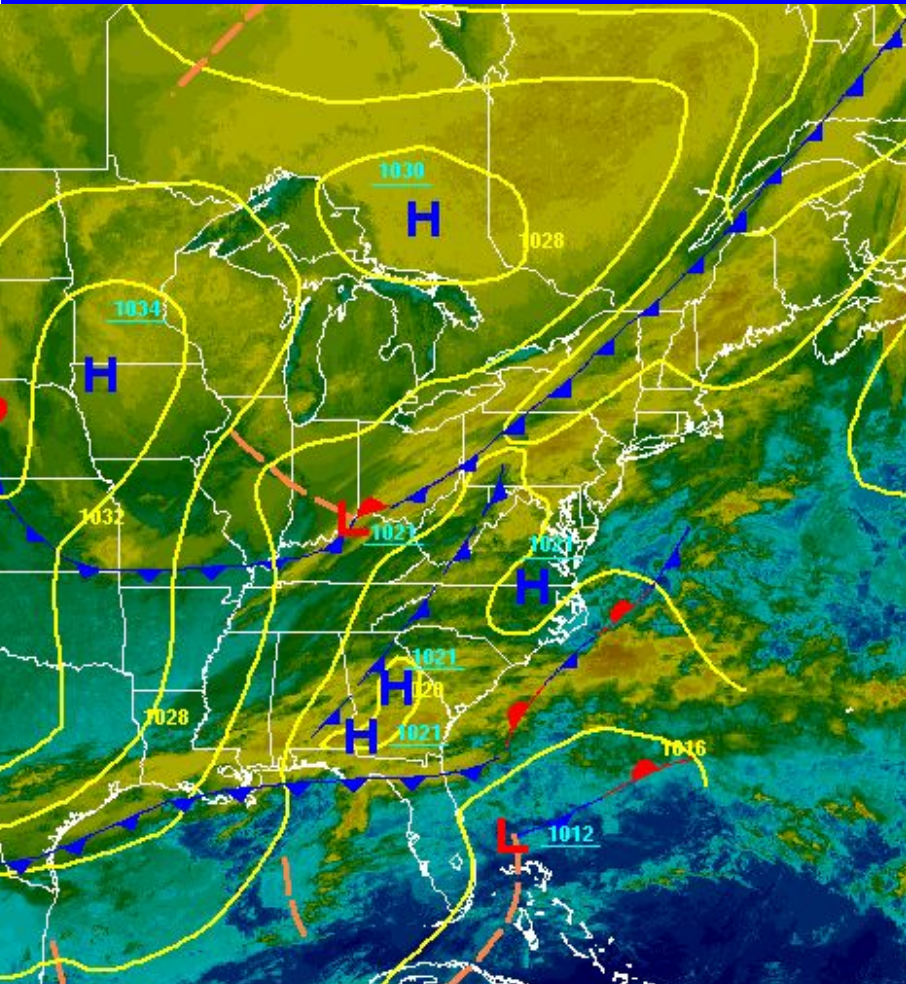


NEAR-RECORD SNOWFALL
KANSAS: JANUARY 25, 2022

24-HOUR SNOWFALL
27.0"
Near Weskan, KS

KANSAS STATE RECORD
30.0"
March of 2009 (Pratt, KS)

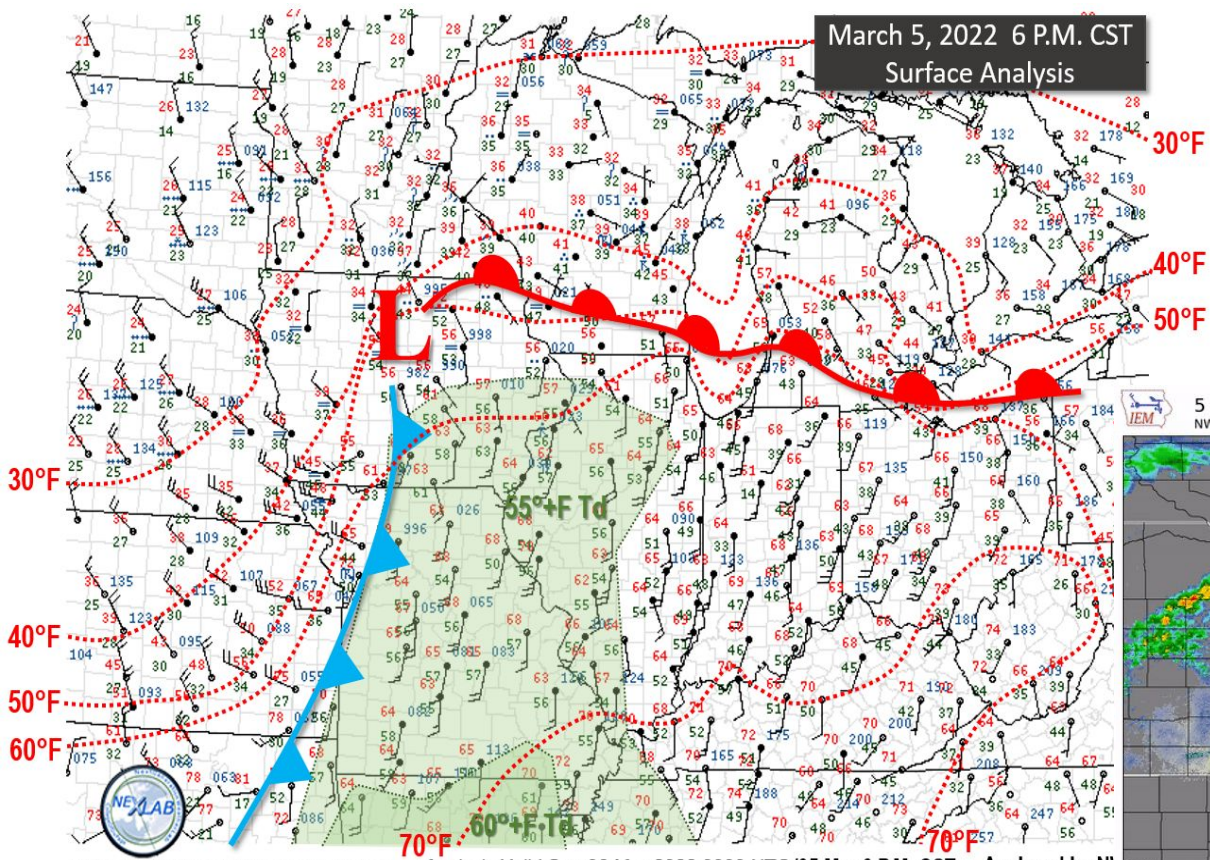
2 - 2022: The Jan. 28-30, 2022 Nor'easter



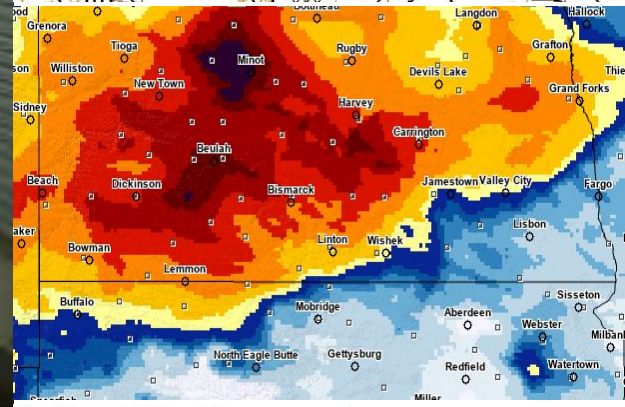
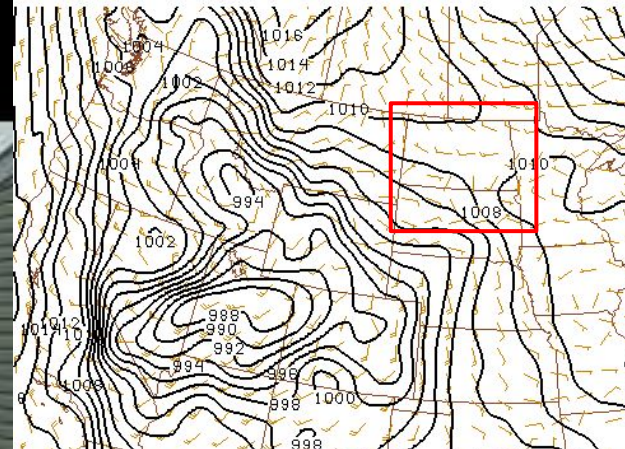
Boston got **23.6 inches of snow at Logan Airport**, making January 29, 2022 the snowiest single day ever recorded in the city. This is now the seventh biggest snowstorm of all time in Boston's recorded history. The record is still 27.6 inches set back in February 2003.

3 - 2022: The Deadliest Tornado Outbreak of the Year

Severe Thunderstorms and Tornadoes - March 5, 2022

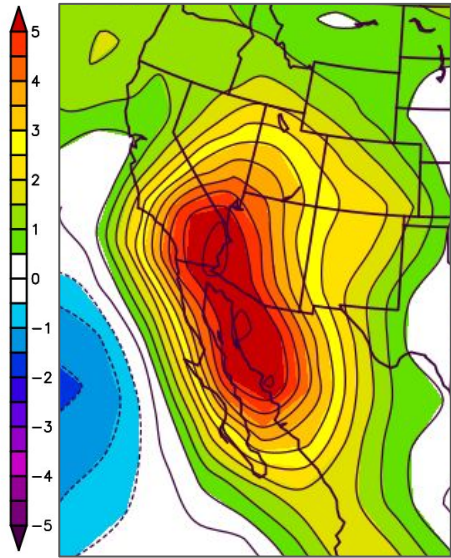


4 - 2022: Northern Rockies to Northern Plains Blizzard, Apr. 12-14

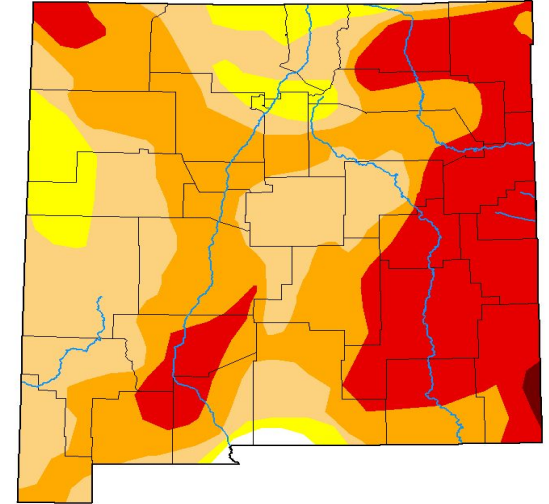
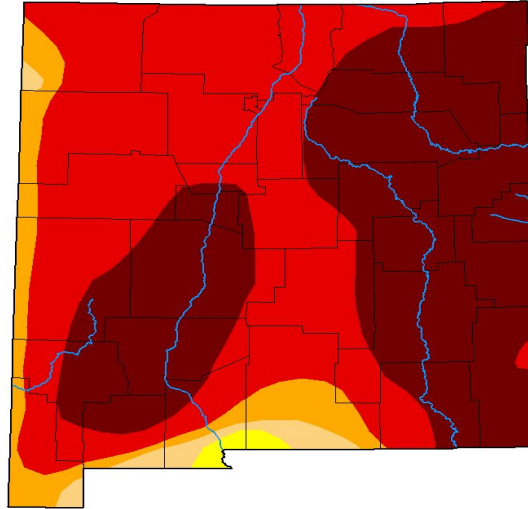


5 - 2022: The Monsoon Makes a Difference!

Heat, drought, and wildfires ramp up from April through May across the Southwest U.S. and then are subdued, especially across NM, by a remarkably persistent summer monsoon season.



NCEP/NCAR Reanalysis
May-Aug 2022 PW Anomaly (mm)
from
1991-2020 climatology

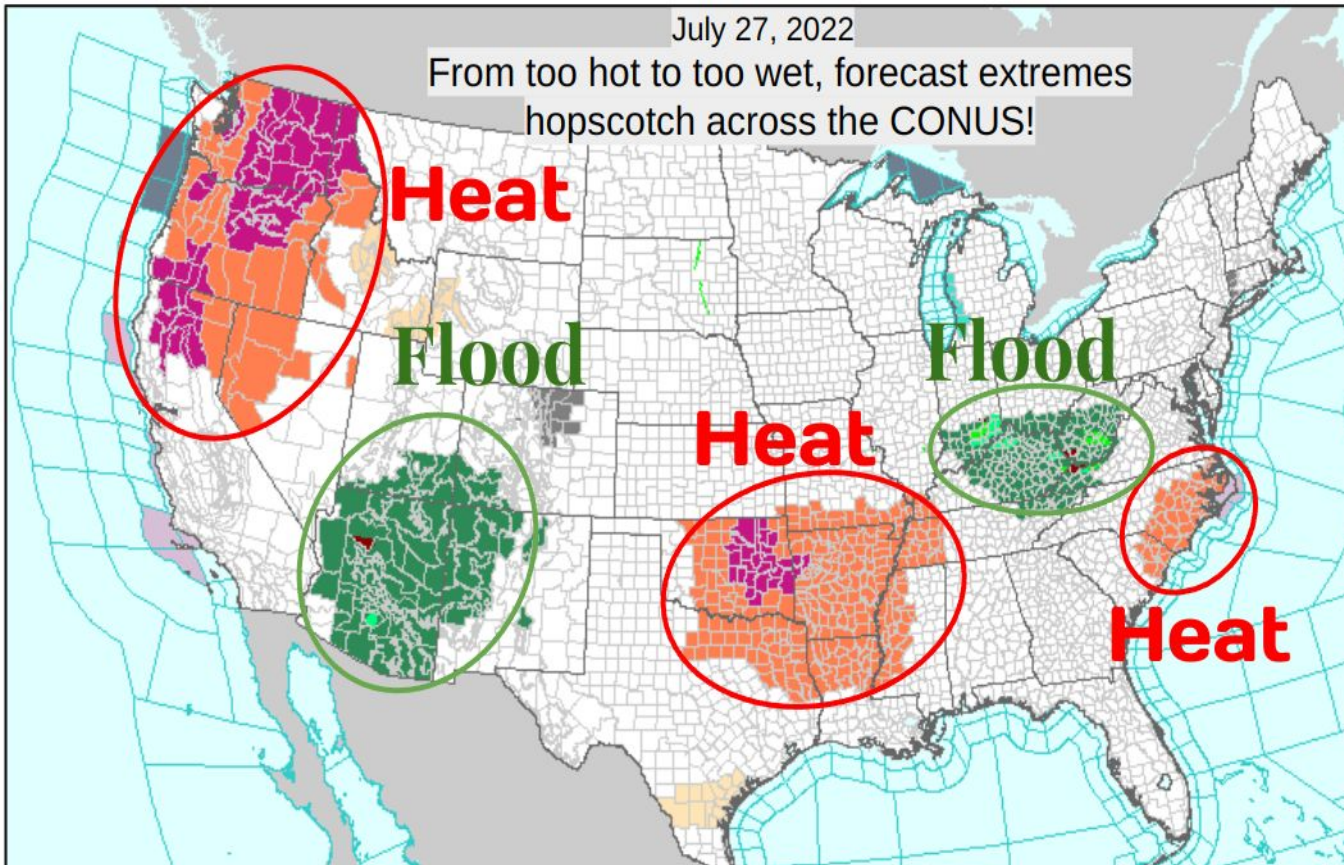


| Week | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 | DSCI |
|------------|------|--------|-------|--------|--------|--------|------|
| 2022-05-24 | 0.00 | 100.00 | 99.26 | 97.20 | 90.06 | 45.84 | 432 |
| 2022-08-16 | 0.60 | 99.40 | 91.52 | 62.11 | 28.25 | 0.33 | 282 |
| Change | 0.60 | -0.60 | -7.74 | -35.09 | -61.81 | -45.51 | -150 |

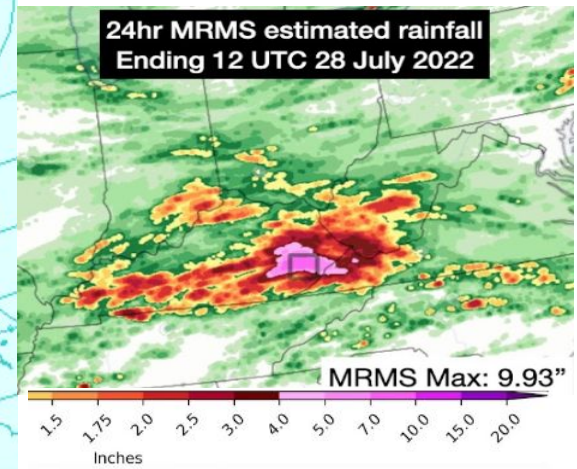
6 - 2022: HotWash Hopscotch (STL and Kentucky Deadly Floods)

July 27, 2022

From too hot to too wet, forecast extremes
hopscotch across the CONUS!



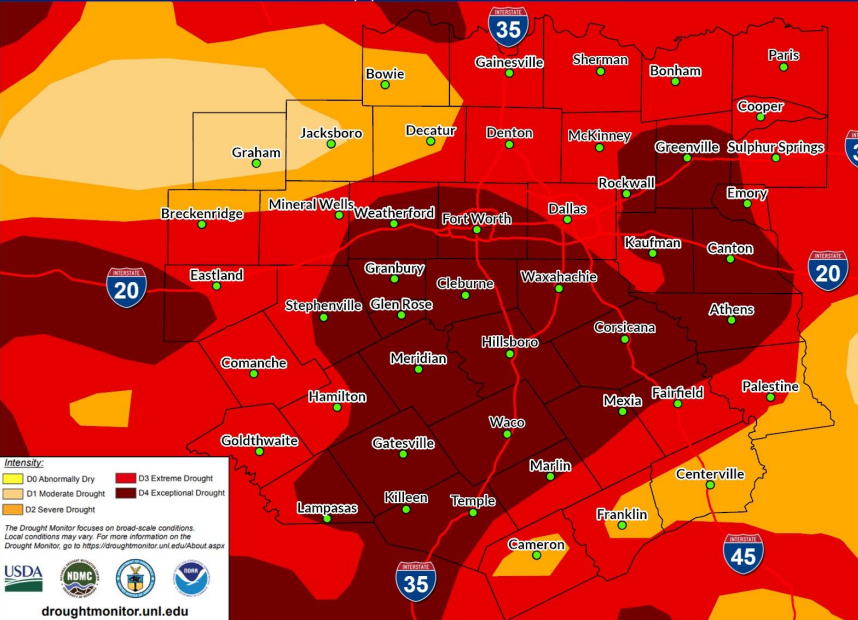
| | |
|------------------|--------|
| St. Peters, MO | 12.86" |
| Creve Coeur, MO | 11.44" |
| Flint Hill, MO | 11.03" |
| St. Ann, MO | 10.95" |
| St. Louis (KSTL) | 9.07" |



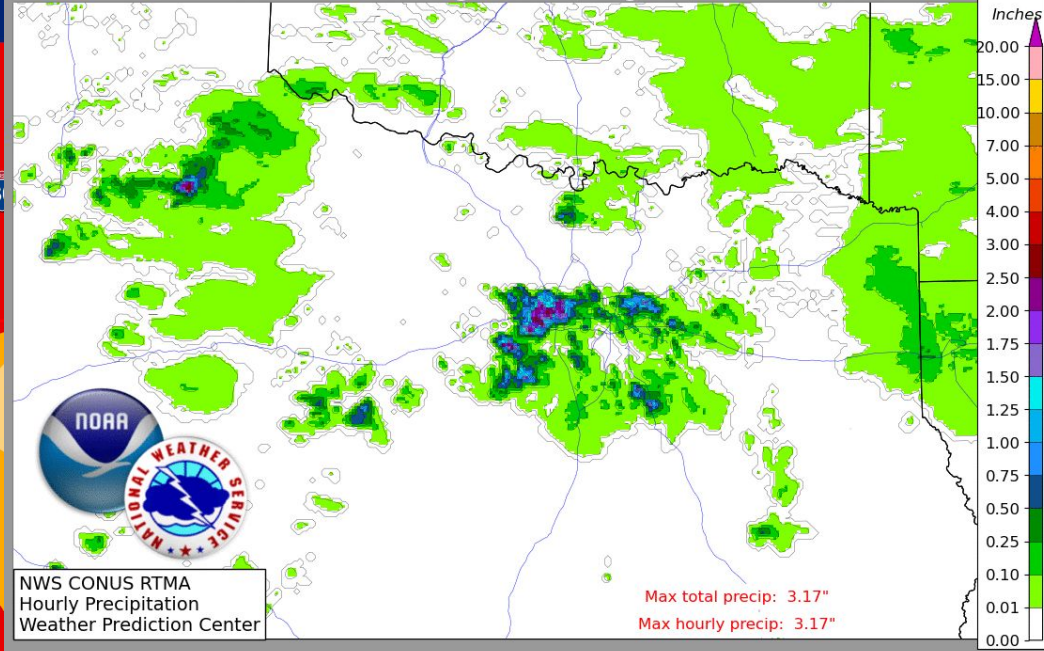
7 - 2022: Aug. 22, Drought to Deluge in Dallas

U.S. Drought Monitor - NWS Ft. Worth Forecast Area

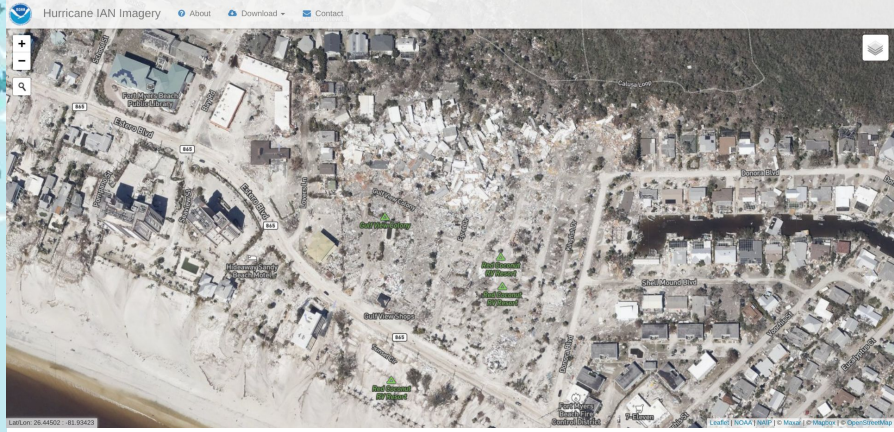
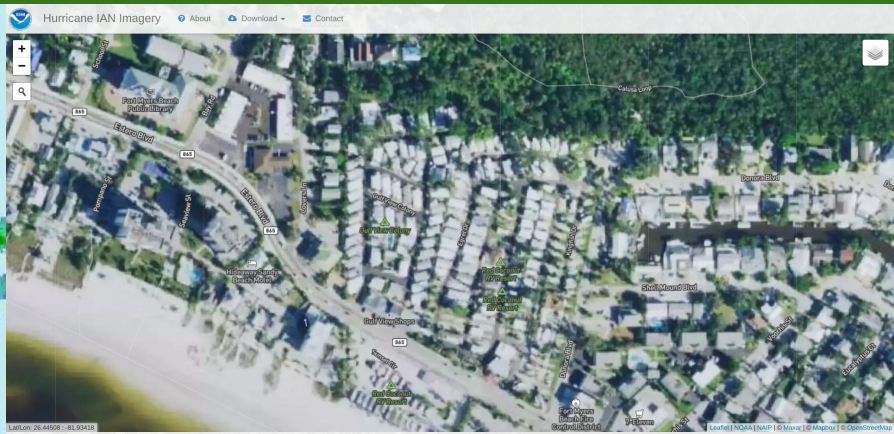
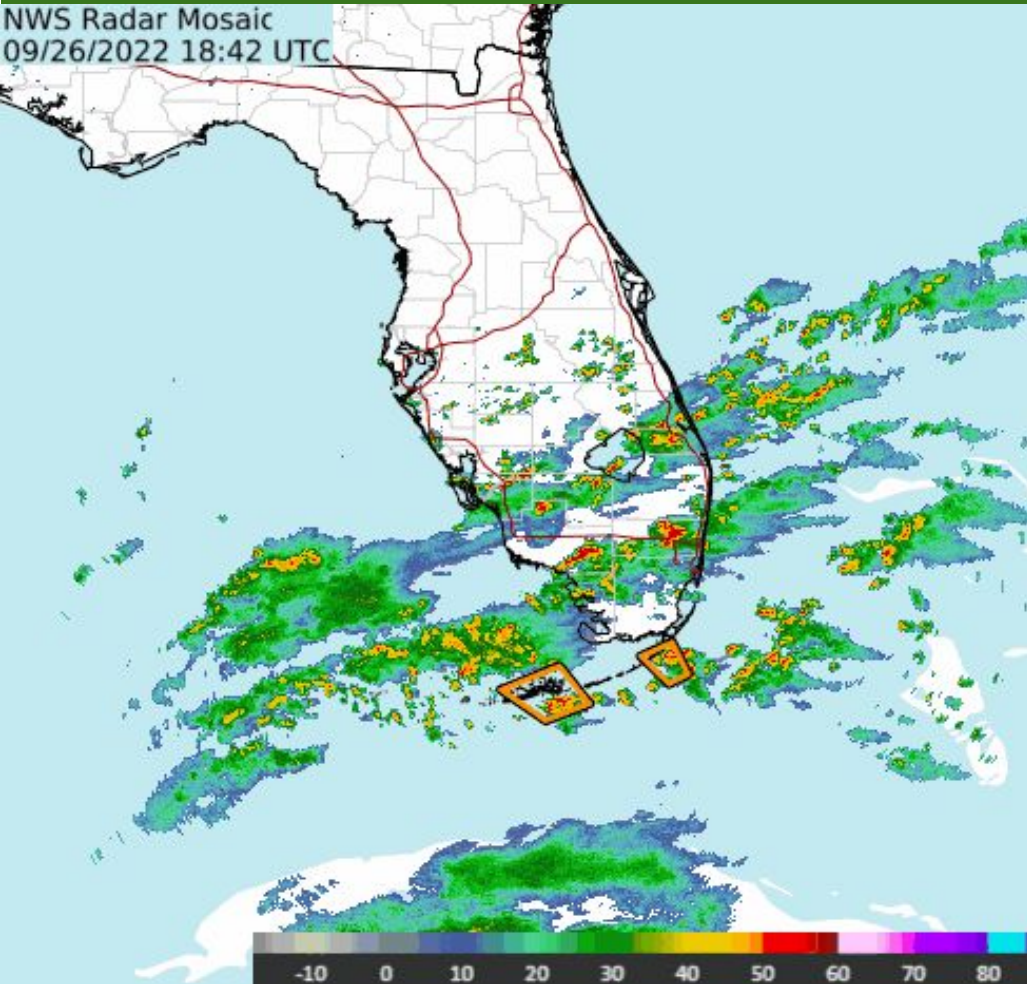
Released: Thursday, August 18, 2022
Valid 2 days prior to release date at 6 am Central



1 hour ending 03 UTC, Aug. 22, 2022

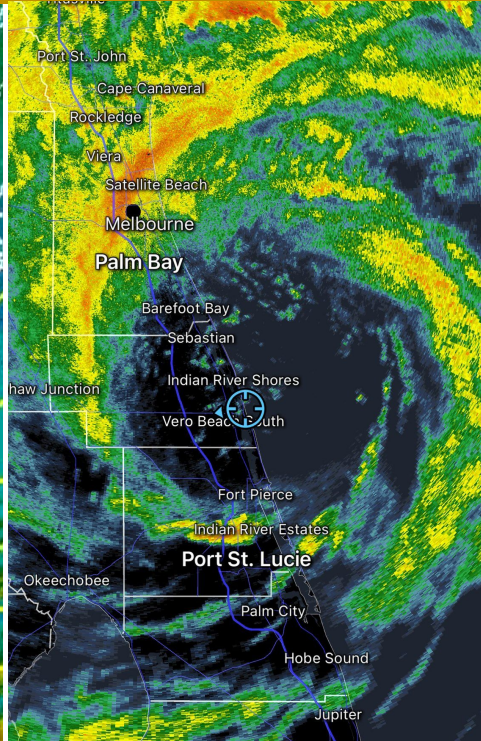
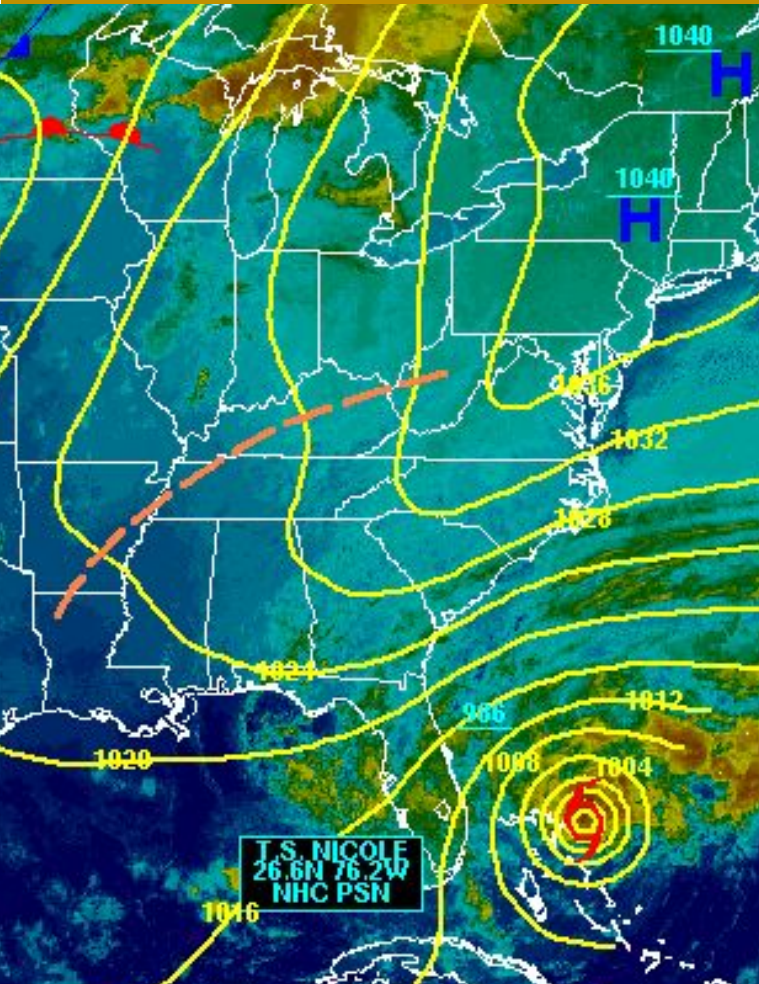


8 - 2022: Hurricane Ian Slams Southwest Florida, Sep. 27-29



114 deaths in Florida, billions \$ of property damage, Incredible rainfall rates and long-term river flooding.

9 - 2022: Nov. 10-11, Hurricane Nicole & Seasonal Forecast Review



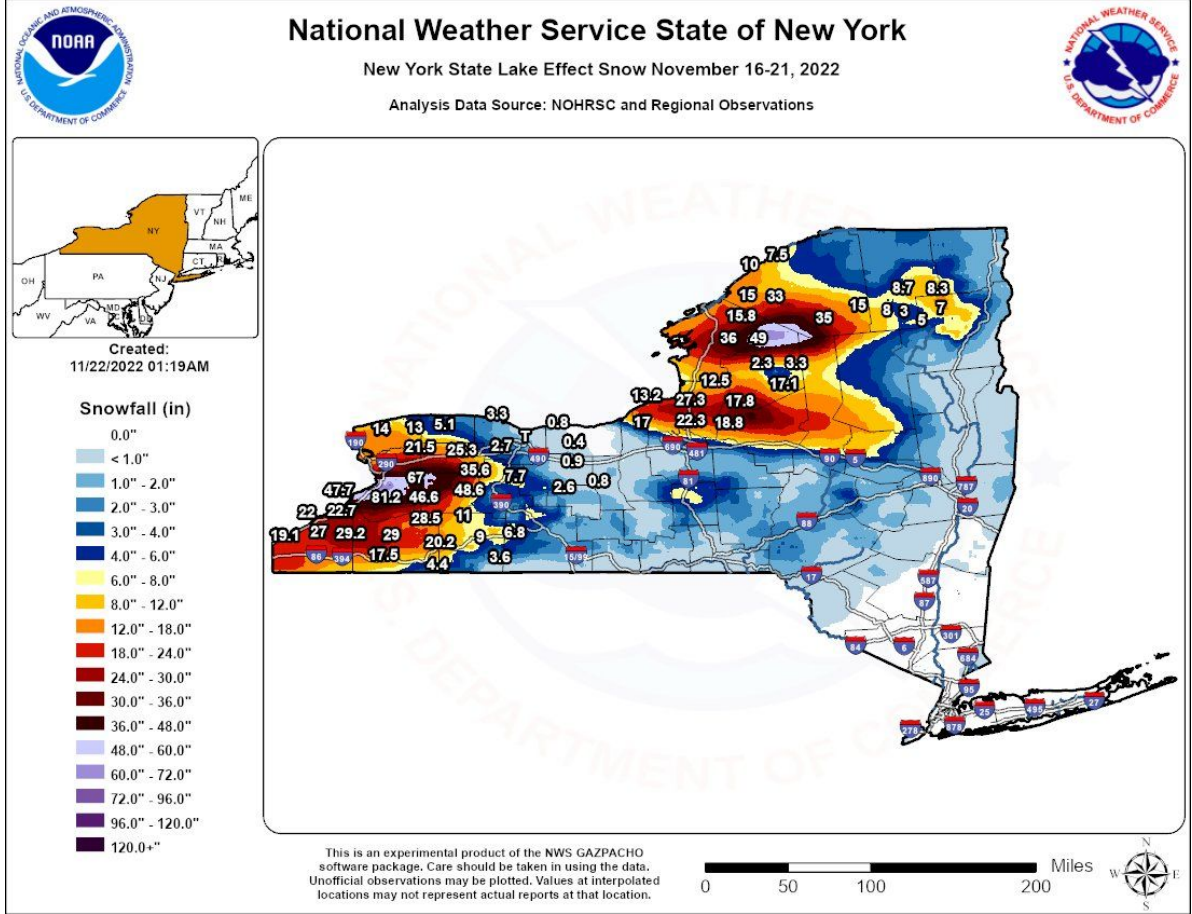
Predictions of tropical activity in the 2022 season

| Source | Date | Named storms | Hurricanes | Major hurricanes | Ref |
|---|-----------------------------|-------------------|------------|------------------|----------|
| | <i>Average (1991–2020)</i> | 14.4 | 7.2 | 3.2 | [8] |
| | <i>Record high activity</i> | 30 | 15 | 7† | [9] |
| | <i>Record low activity</i> | 4 | 2† | 0† | [9] |
|  | CSU | December 9, 2021 | 13–16 | 6–8 | 2–3 [10] |
| | TSR | December 10, 2021 | 18 | 8 | 3 [11] |
|  | TSR | April 6, 2022 | 18 | 8 | 4 [12] |
| | CSU | April 7, 2022 | 19 | 9 | 4 [13] |
| | TWC | April 14, 2022 | 20 | 8 | 4 [14] |
|  | UA | April 14, 2022 | 14 | 7 | 3 [15] |
| | NCSU | April 20, 2022 | 17–21 | 7–9 | 3–5 [16] |
| | PSU | May 9, 2022 | 11-19 | N/A | N/A [17] |
| | UKMO* | May 23, 2022 | 18 | 9 | 4 [18] |
|  | NOAA | May 24, 2022 | 14–21 | 6–10 | 3–6 [19] |
| | TSR | May 31, 2022 | 18 | 8 | 4 [20] |
| | CSU | June 2, 2022 | 20 | 10 | 5 [21] |
| | TWC | June 17, 2022 | 21 | 9 | 4 [22] |
| | UA | June 20, 2022 | 15 | 7 | 3 [23] |
| | TSR | July 5, 2022 | 18 | 9 | 4 [24] |
| | CSU | July 7, 2022 | 20 | 10 | 5 [25] |
| | UKMO | August 2, 2022 | 16 | 6 | 4 [26] |
| | NOAA | August 4, 2022 | 14–20 | 6–10 | 3–5 [27] |
| | CSU | August 4, 2022 | 18 | 8 | 4 [27] |
| | TWC | August 18, 2022 | 17 | 7 | 3 [28] |
| | Actual activity | | 14 | 8 | 2 |

* June–November only

† Most recent of several such occurrences. (See all)

10 - 2022: Lake Effect for the Record Books, Nov. 16-20



- Event Totals**
- Hamburg 81.2 inches
 - Orchard Park 80 inches
 - Blasdell 76 inches
 - Elma 67 inches

2022 Meteorological Memories

CoCoRaHS WxTalk Webinar Series **2022**

Meteorological

Memories

Greg Carbin
NWS Weather Prediction Center, Chief of Forecast Operations
College Park, Maryland
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2022

Meteorological

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27.0°
30.0°

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Record set 24.6 inches of snow at Logan Airport, making January 24, 2022 the snowiest single day ever recorded in the city. This is also the seventh largest amount of snow in Boston's recorded history. The record is still 27.4 inches set back in February 2022.

3 - 2022: The Deadliest Tornado Outbreak of the Year

Severe Thunderstorms and Tornadoes - March 5, 2022

March 5, 2022 at 4 PM CDT
Tornado Outbreak

4 - 2022: Northern Rockies to Northern Plains Blizzard, Apr. 12-14

Historic Spring Snowstorm
April 12th - 14th 2022

1981-2020 climatology

| | |
|------------------|------------------------|
| 100 to 12 inches | 24 to 30 inches |
| 30 to 36 inches | 36 to 42 inches |
| 42 to 48 inches | Greater than 48 inches |

5 - 2022: The Monsoon Makes a Difference!

Heat, drought, and wildfires ramp up from April through May across the Southwest U.S. and then are subdued, especially across NM, by a remarkably persistent summer monsoon season.

| Heat | Drought | Wildfire | Monsoon |
|------------------|------------------------|-----------------|-----------------|
| 100 to 12 inches | 24 to 30 inches | 30 to 36 inches | 36 to 42 inches |
| 42 to 48 inches | Greater than 48 inches | | |

6 - 2022: HotWash Hopscoth (STL and Kentucky Deadly Floods)

July 21, 2022
From too hot to too wet, forecast extremes "hopscoth" across the CONUS!

WEATHER PREDICTION CENTER

| | |
|------------------|--------|
| St. Peters, MO | 12.85" |
| Chesapeake, MD | 11.44" |
| Prineville, OR | 11.03" |
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U.S. Design Meteorologist, NWS Ft. Worth Forecast Area

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114 deaths in Florida, billions of property damage, incredible rainfall rates and long-term river flooding.

9 - 2022: Nov. 10-11, Hurricane Nicole & Seasonal Forecast Review

| Month | Actual | Forecast |
|-------|--------|----------|
| Jan | 1.2 | 1.2 |
| Feb | 1.5 | 1.5 |
| Mar | 1.8 | 1.8 |
| Apr | 2.1 | 2.1 |
| May | 2.4 | 2.4 |
| Jun | 2.7 | 2.7 |
| Jul | 3.0 | 3.0 |
| Aug | 3.3 | 3.3 |
| Sep | 3.6 | 3.6 |
| Oct | 3.9 | 3.9 |
| Nov | 4.2 | 4.2 |
| Dec | 4.5 | 4.5 |

10 - 2022: Lake Effect for the Record Books, Nov. 16-20

Event Totals

- Windsong: 47.2 inches
- Chesapeake Park: 42 inches
- Shelburne: 38 inches
- Shaw: 47 inches