

# 2023 in Review

- ☐ **Rainfall Data**
- ☐ **Selected Cities Temp/Precip Data**
- ☐ **Drought Data**
- ☐ **El Paso Statistics**

# 2023 In Review

The year 2023 was quite a dichotomy in temperatures as the first portion of the year, at least through April, and even into June, were cooler than normal. For the January to April period, most reporting sites tallied average temperatures around 1 to 3 degrees below normal. Then as the El Niño pattern strengthened later toward summer, temperatures warmed dramatically above normal.

Record-setting heat dominated the weather headlines for the last half of the year. For many climate sites in southern New Mexico, the July through December period was the hottest year on record, and indeed, some places reported the warmest average temperature ever for the year. El Paso recorded a 12-month mean average temperature of 69.1 degrees, a new all-time record and 3 degrees above climate normals. A series of heat waves occurred in July through September, setting many monthly record highs as well.

After 3 consecutive years of La Niña patterns, 2023 featured a rapid swing back into El Niño, with the ONI swinging from -0.7 in January to +1.9 by November indicating the presence of a strong El Niño this winter. While El Niño's tend to trend wetter than normal for the region, 2023 was very dry during the transition especially during the summer months, worsening drought across southern New Mexico and west Texas. Most areas received only 40-60% of expected annual precipitation as deficiencies increased greatly during the drier than normal monsoon season.

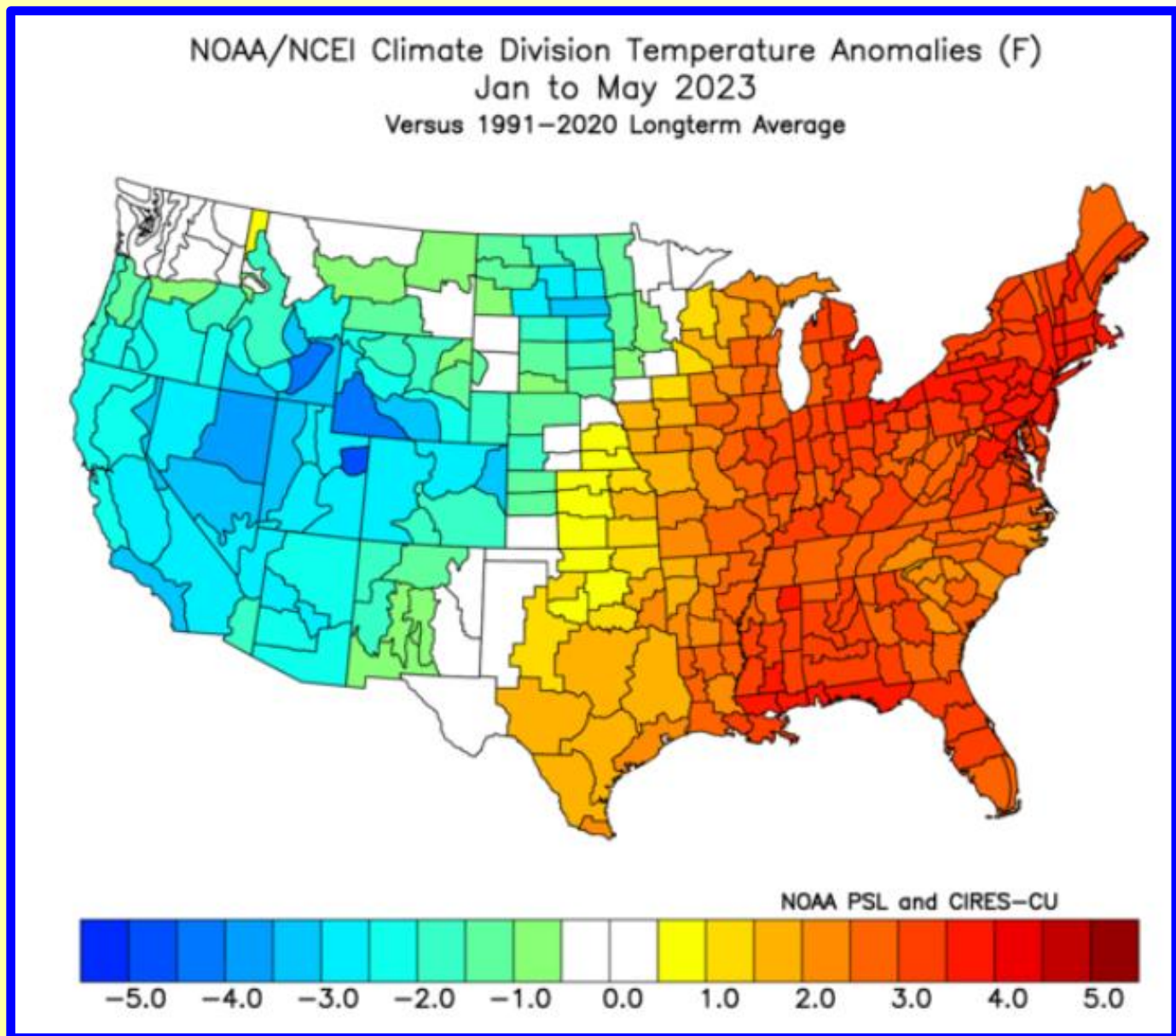
# **2023 In Review**

**Fire conditions were typical during the Spring after a completely dry April and periods of rainfall in March and May. The 2023 fire season lasted later than usual due to the lack of monsoon rainfall in June. No major wildfires occurred locally, but the most notable fire was the Tub Fire, burning 289 acres in July.**

**Despite the Monsoon season beginning on time (first week of July), consistent high pressure over the western U.S. weakened southeasterly flow and cut off moisture to the region for many weeks throughout the summer months. Main headlines for the 2023 Monsoon was the well below normal precipitation. Seasonal precipitation totals ranging from 0.25-1.00" across much of the desert floor with 2.00-4.00" over the high terrain led to rainfall deficits of 1-2" compared to climate normals which is only 20-50% of expected monsoon rainfall.**

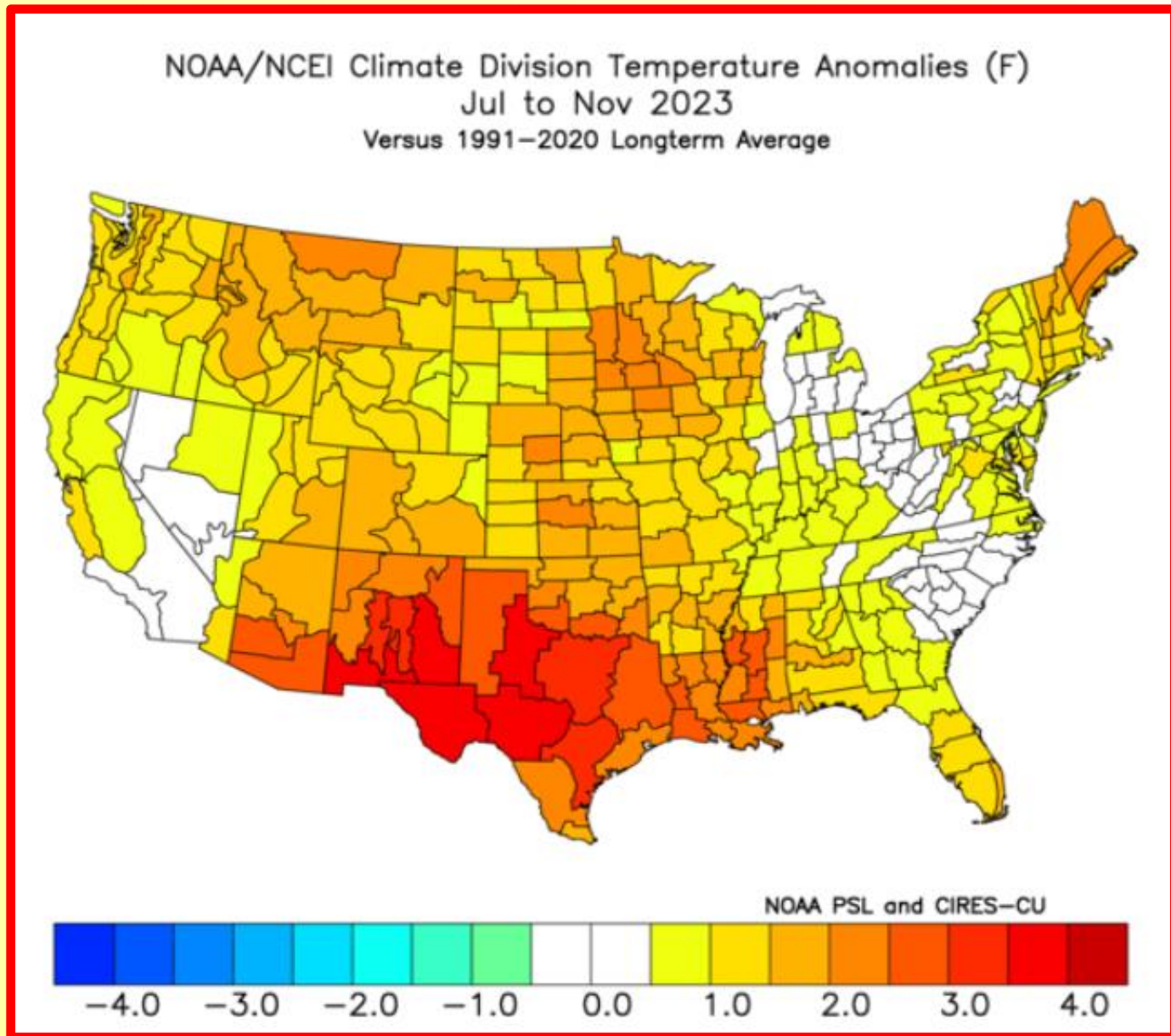
**Dry and warm weather continued into the Fall and Winter months, not quite breaking records but consistently lingering in the upper tier of heat statistics and running 50-75% below expected monthly precipitation.**

# Average temperature anomalies for Jan-May 2023

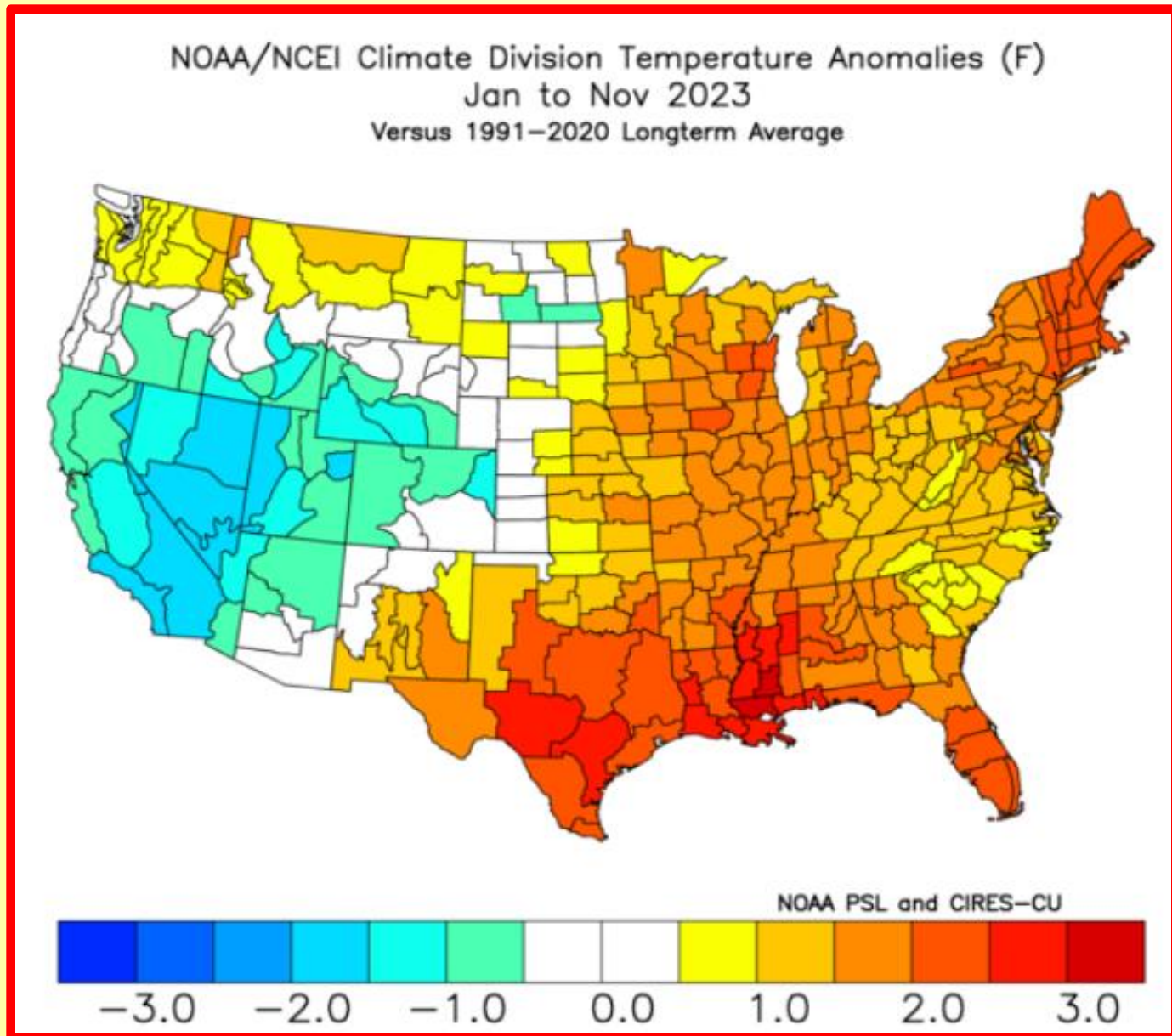




# Average temperature anomalies for Jul-Nov 2023

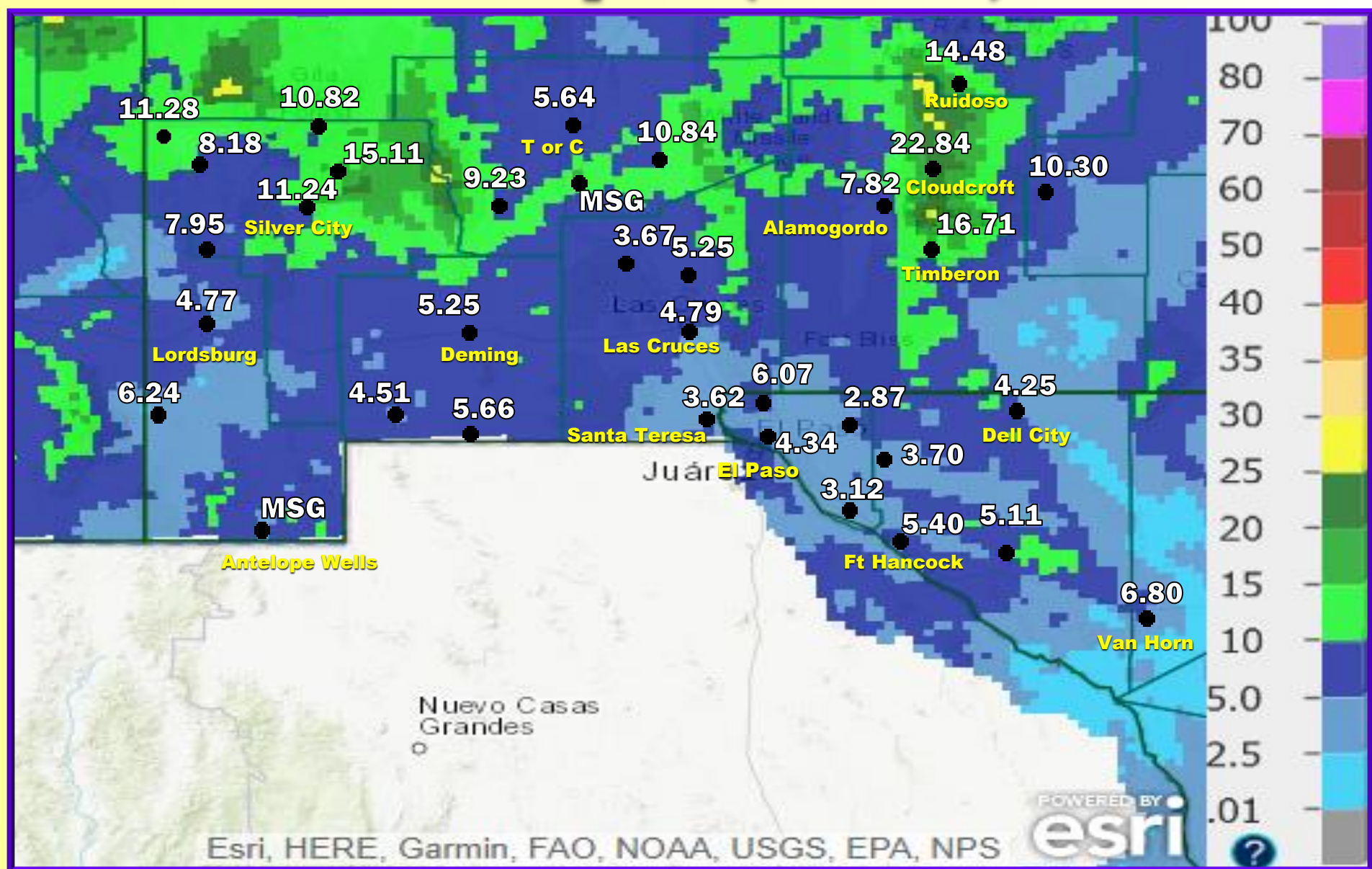


# Average temperature anomalies for Jan-Nov 2023

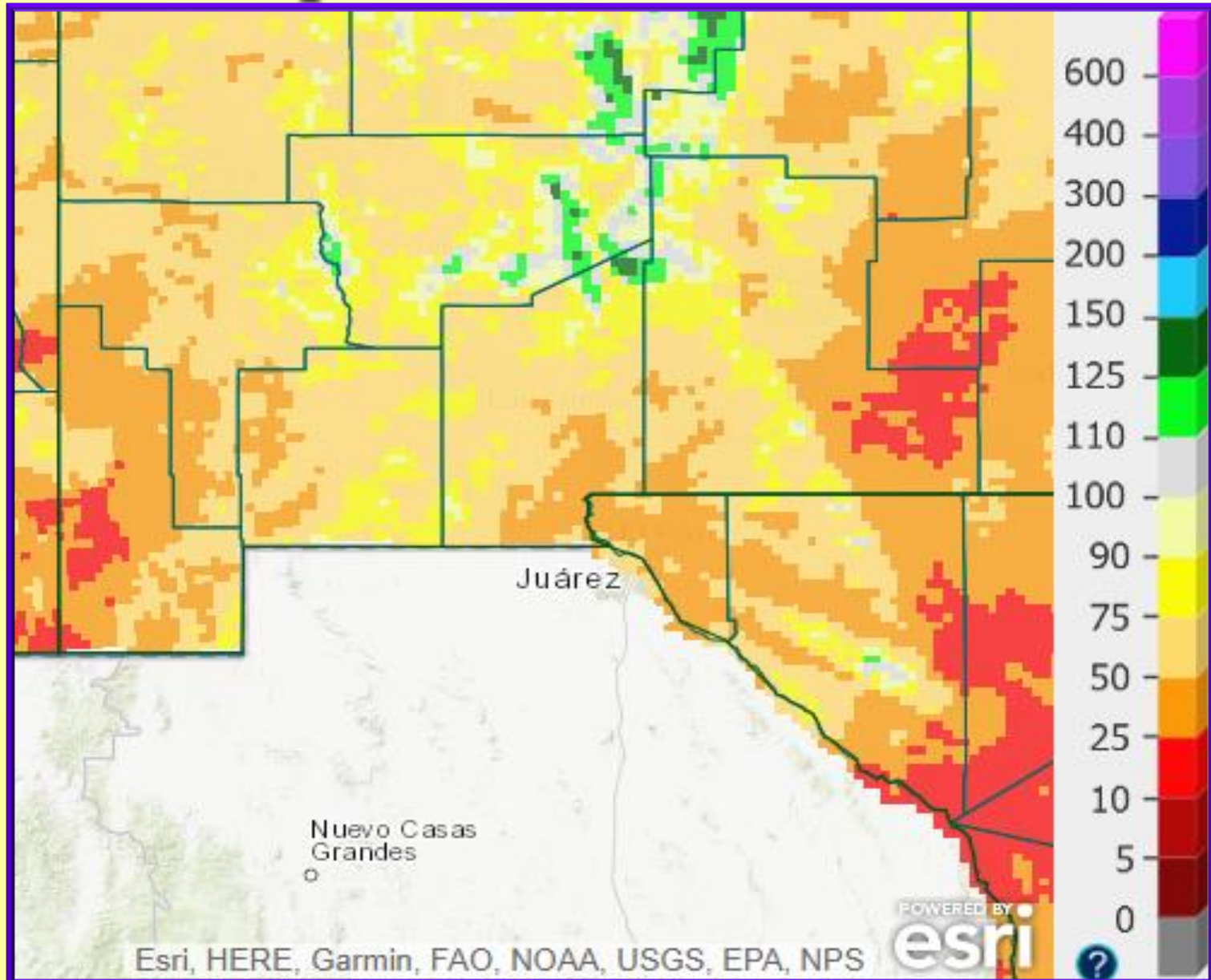




# 2023 radar rainfall estimate with surface rainfall reports (in inches)

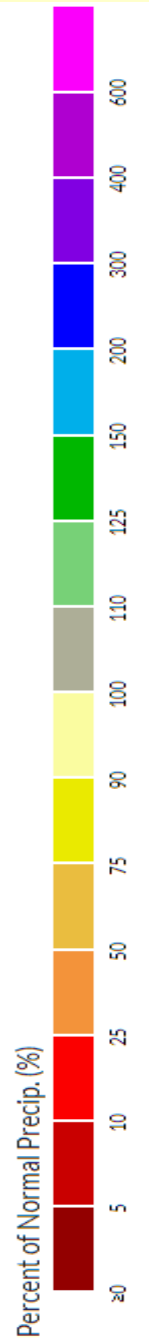
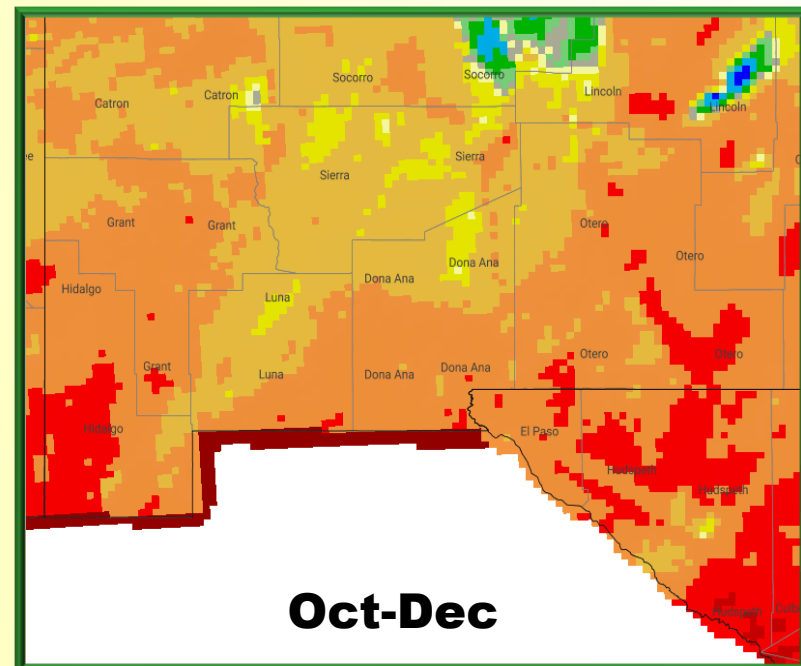
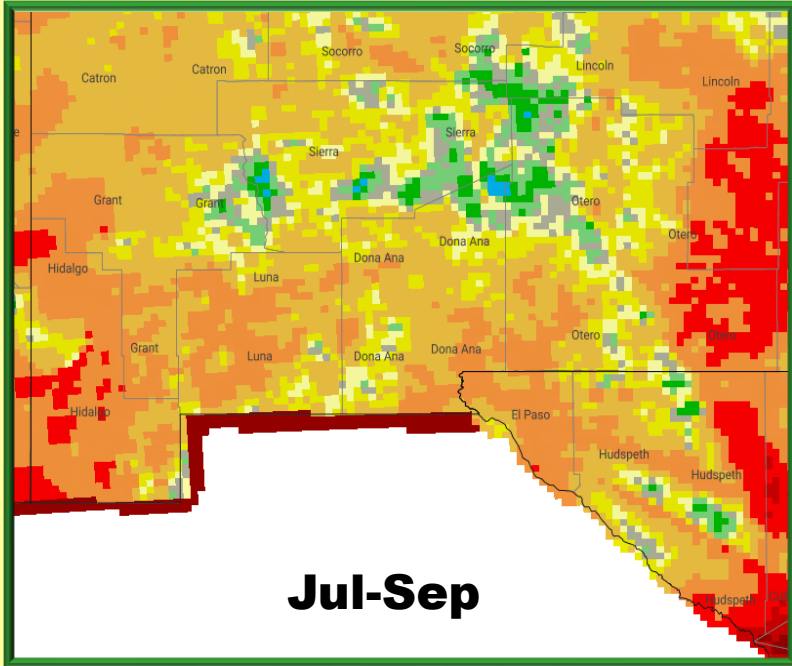
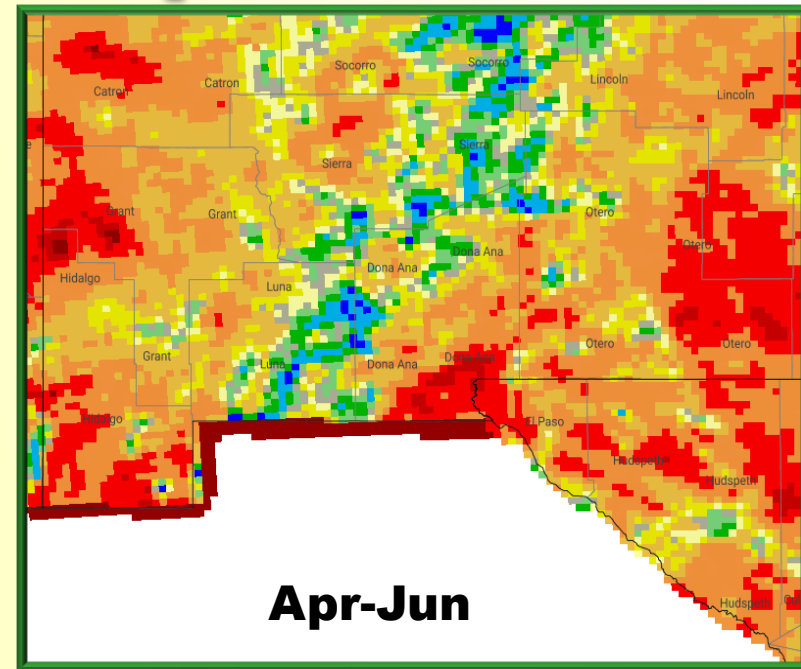
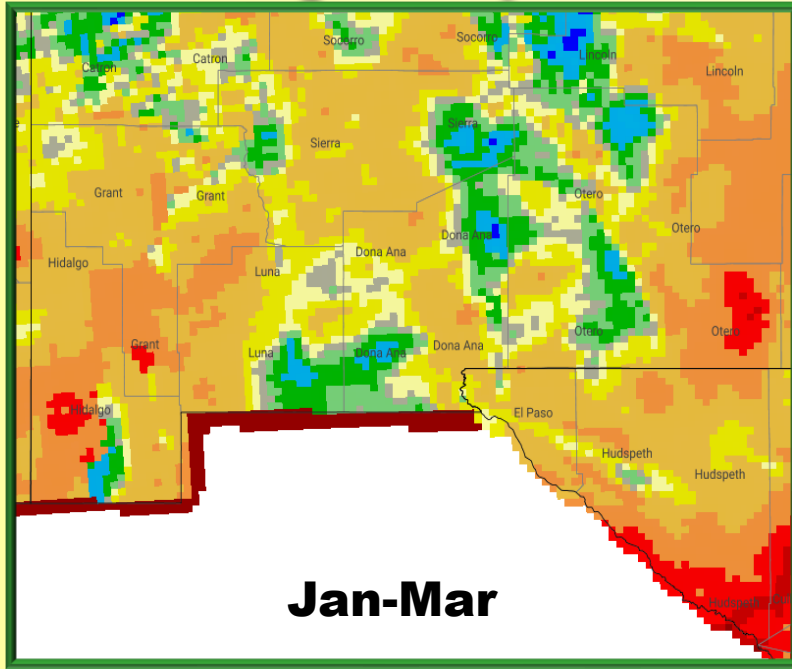


# 2023 radar rainfall estimate percent of normal



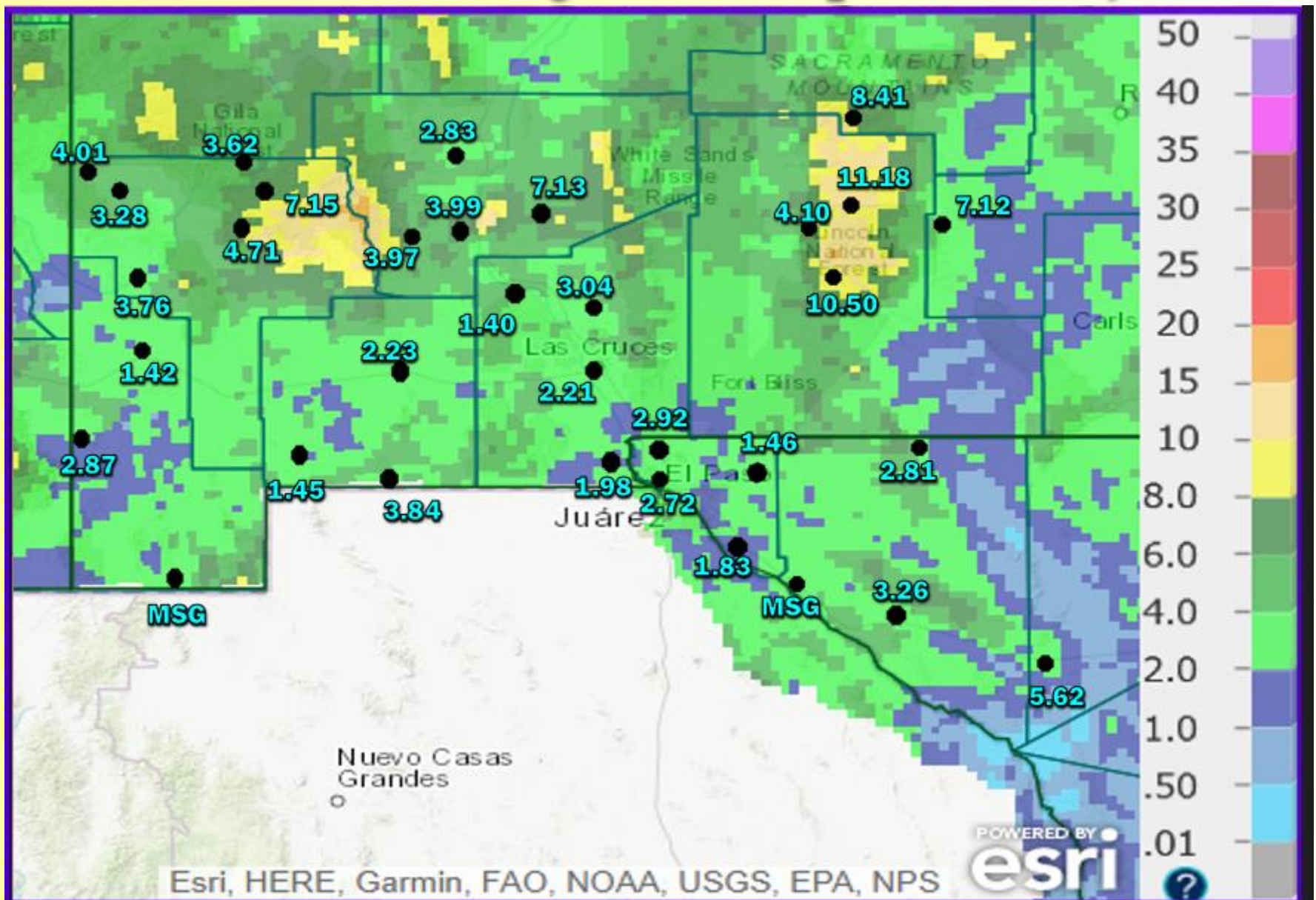


# 2023 quarterly radar rainfall estimated percent of normal

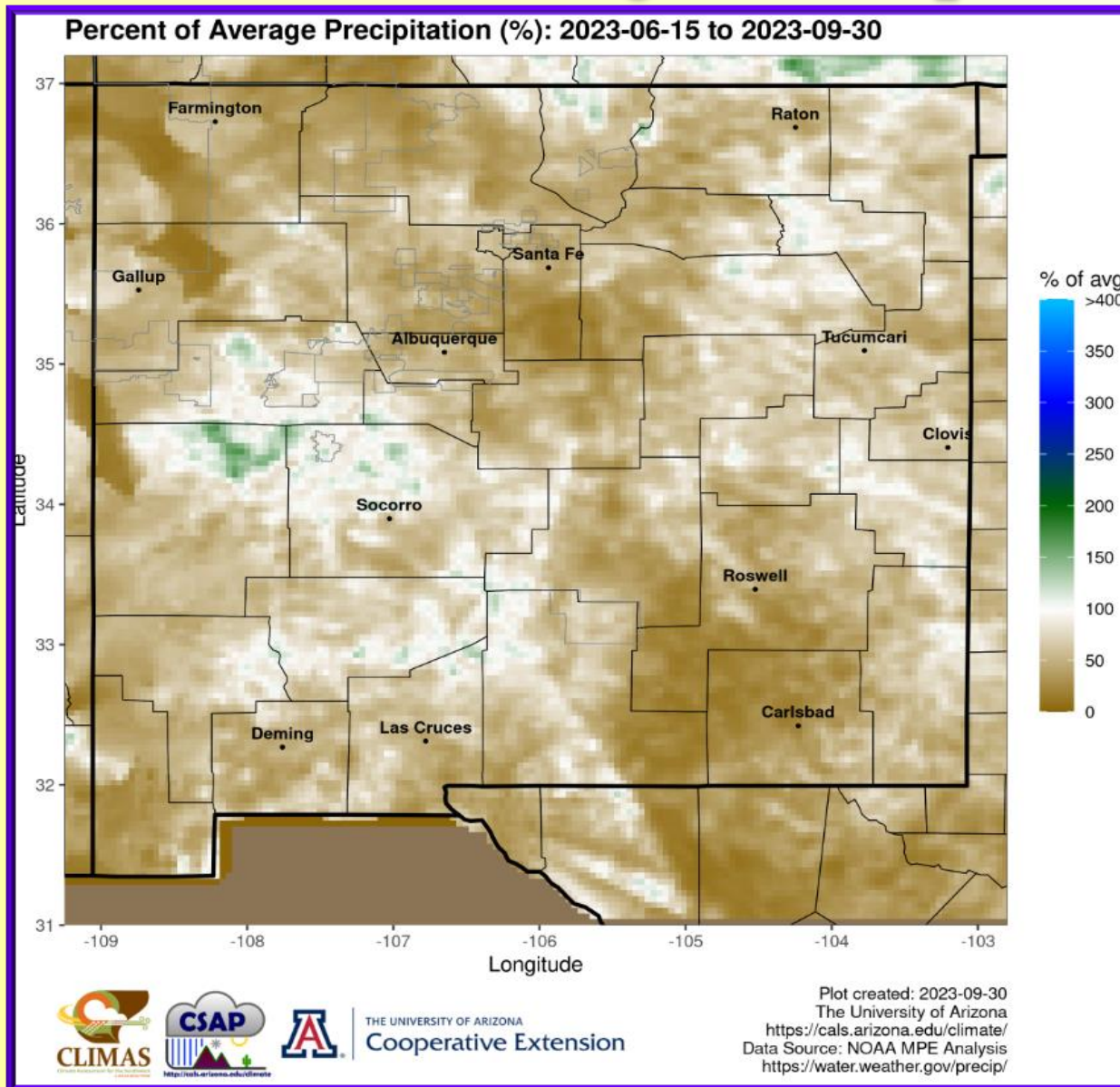




# Radar rainfall estimate for the Monsoon Season 2023 (June 1 – September 30)



# Radar rainfall estimate percent of normal for Monsoon season 2023 (June 1-September 30)

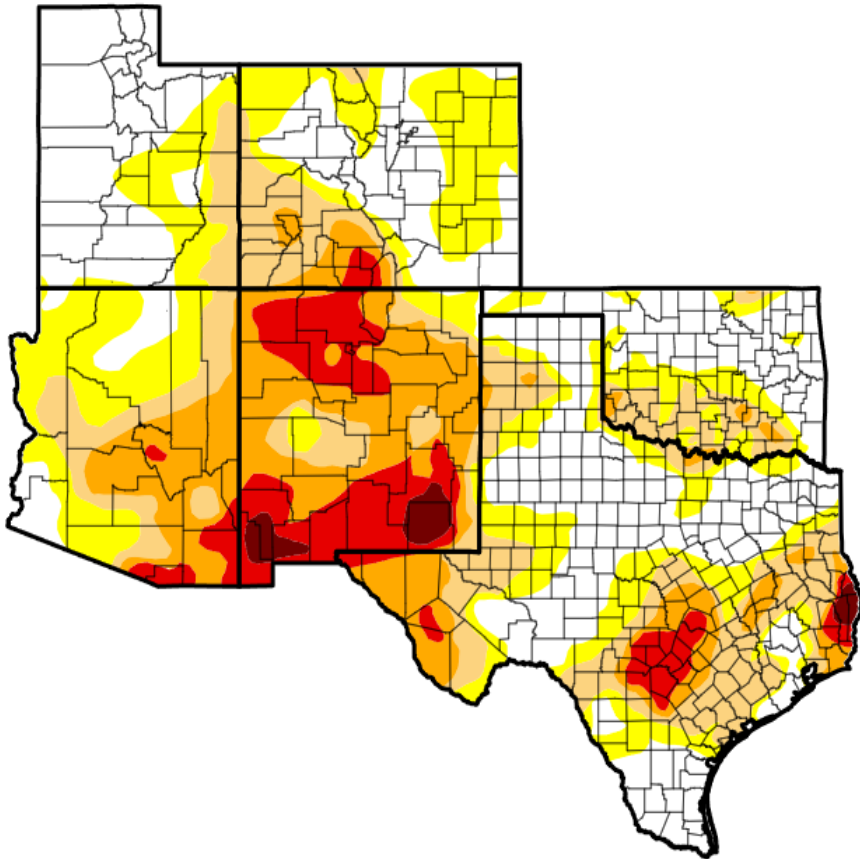




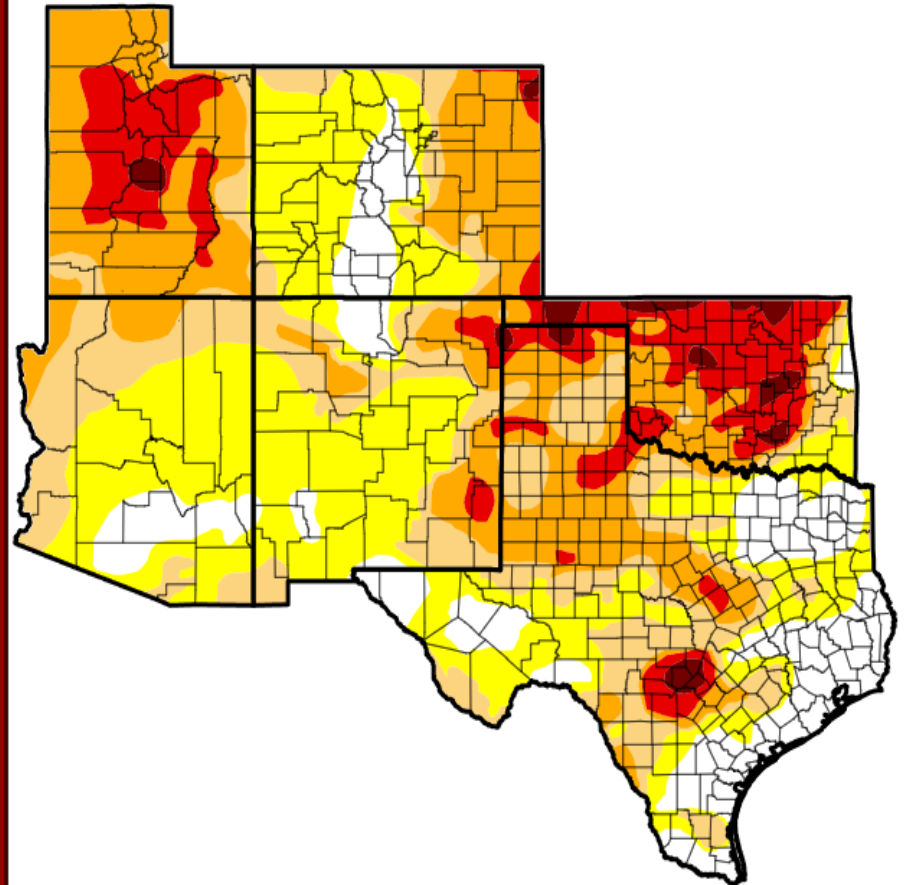
# Beginning and end of year drought conditions for Texas and New Mexico

- Abnormally Dry – D0
- Moderate Drought – D1
- Severe Drought – D2
- Extreme Drought – D3
- Exceptional – D4

**December 26, 2023**



**December 27, 2022**

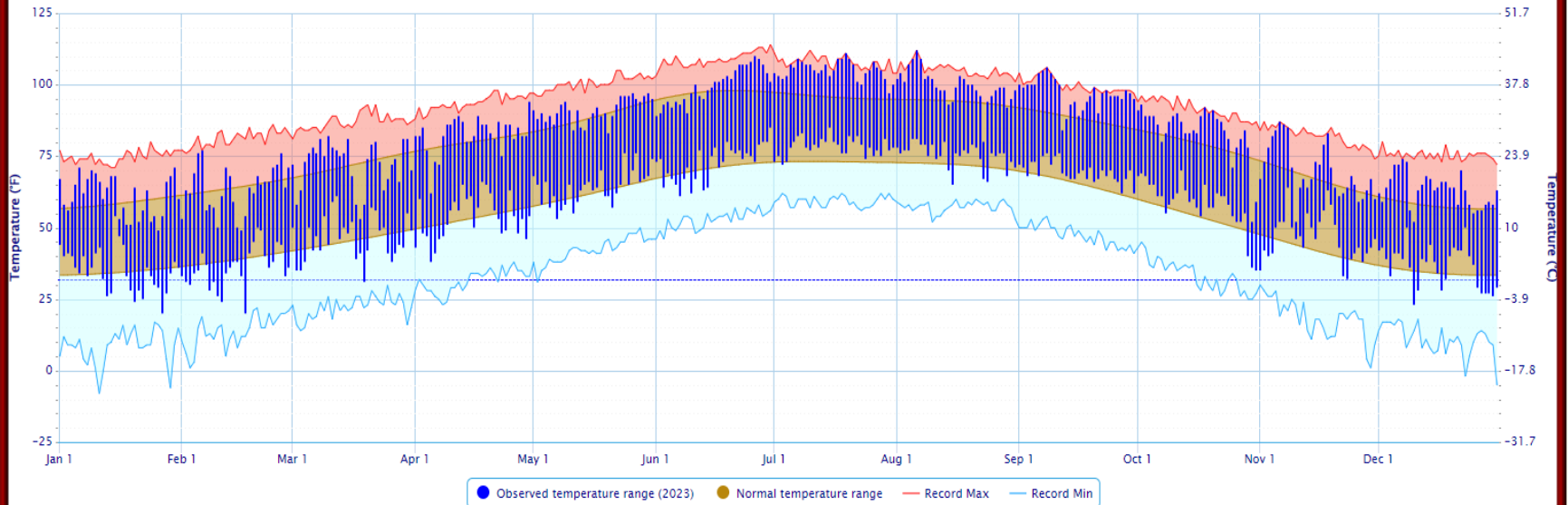


# **2023 Selected Individual Sites**

# El Paso, TX

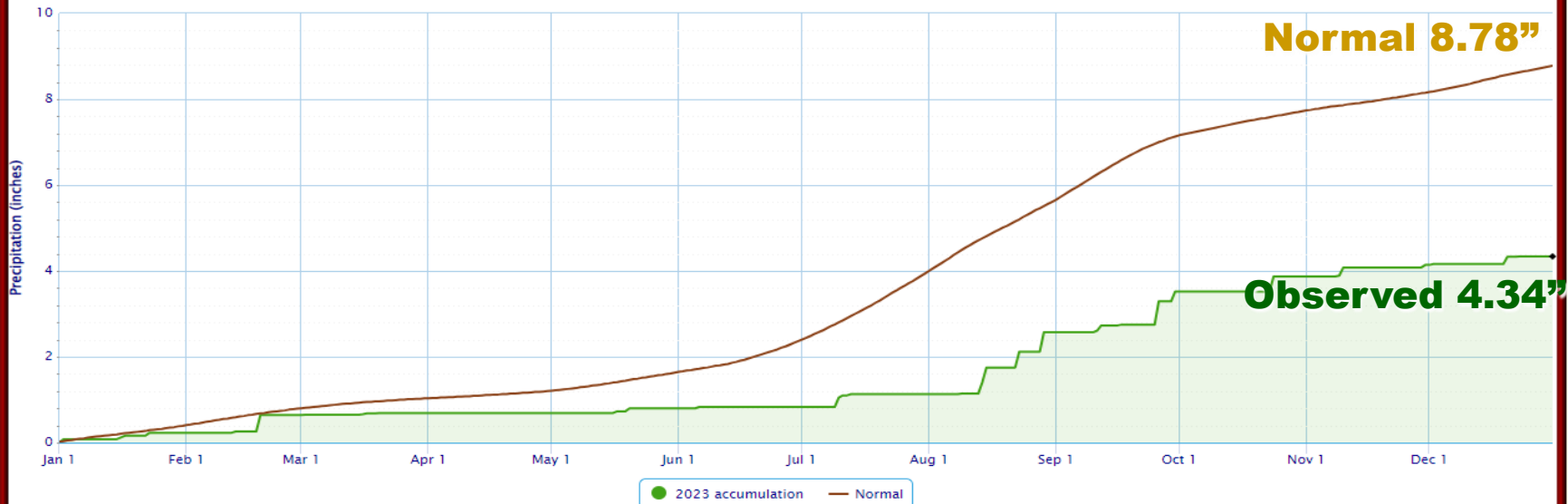
Daily Temperature Data – El Paso Area, TX (ThreadEx)

Period of Record – Max temperature: 1887-01-01 to 2024-01-03; Min temperature: 1879-01-01 to 2024-01-03. Normals period: 1991-2020. Click and drag to zoom chart.



Accumulated Precipitation – El Paso Area, TX (ThreadEx)

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values





# 2023 El Paso Review (137 years)

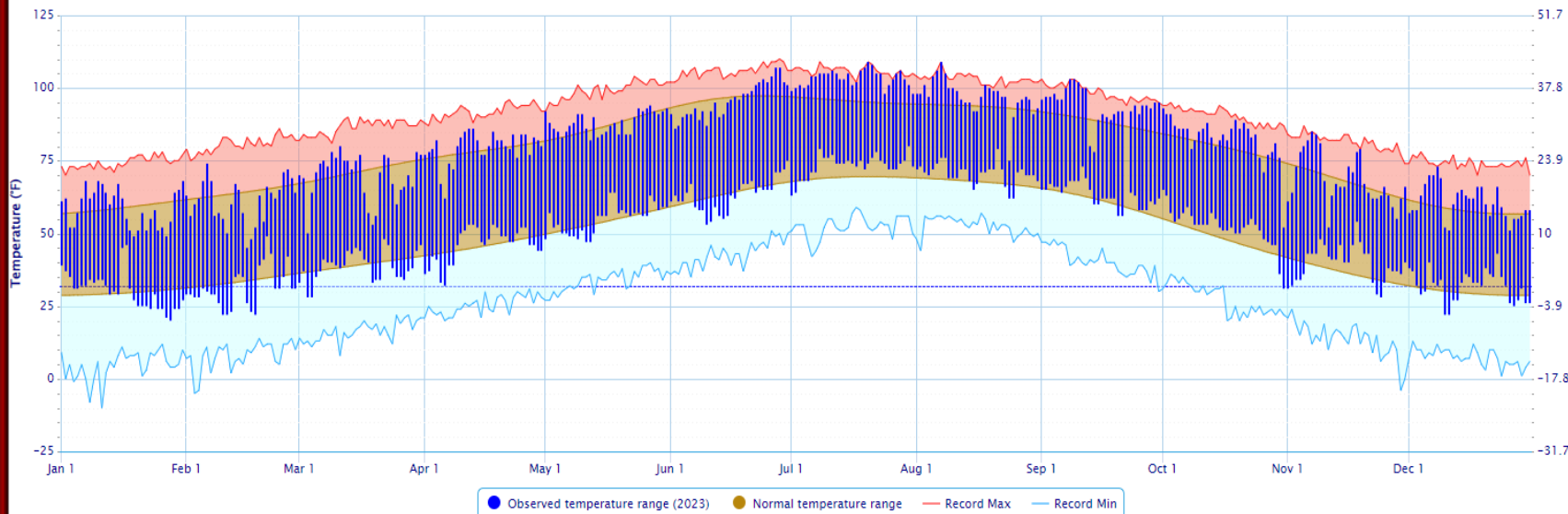
## El Paso Intl Airport - KELP

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 137=Coldest
Jan	61.0	71 – 30th	34.8	20 – 27th	47.9	28
Feb	63.5	77 - 6th	35.9	20 – 17th	49.7	64
Mar	72.2	82 - 10th	46.1	31 – 19th	59.1	25
Apr	82.5	94 – 30th	53.4	38 - 5th	68.0	13
May	90.9	97 - 30th	63.9	53 - 7th	77.4	7
Jun	99.6	110 - 26 <sup>th</sup>	72.4	61 – 7th	86.0	9
Jul	105.1	111 - 19th	78.2	72 – 3rd	91.6	1
Aug	99.4	112 – 6th	75.1	65- 15th	87.3	3
Sep	96.9	106 - 8th	69.4	62 - 30th	83.1	1
Oct	83.6	93 – 2nd	58.1	35- 31st	70.8	2
Nov	69.9	87 - 6 <sup>th</sup>	46.4	32 – 23 <sup>rd</sup>	58.2	4
Dec	63.1	74 – 7th	36.4	23 – 10th	49.7	7

# Las Cruces (University), NM

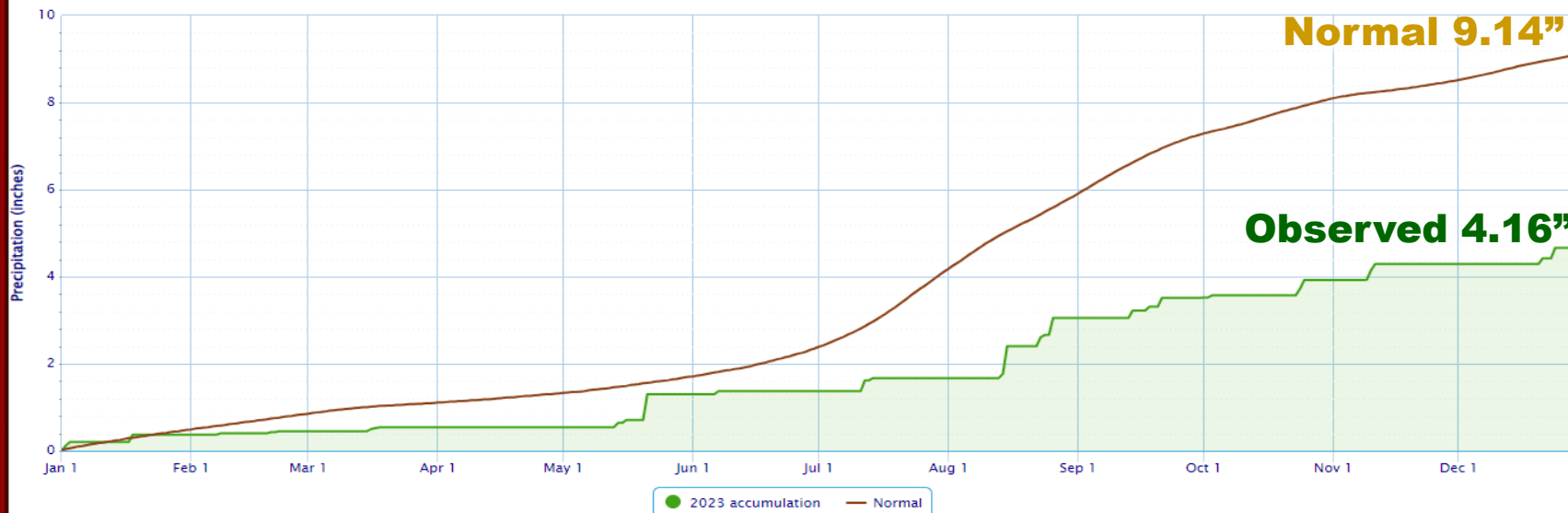
Daily Temperature Data – STATE UNIVERSITY, NM

Period of Record – 1892-01-01 to 2024-01-04. Normals period: 1991-2020. Click and drag to zoom chart.



Accumulated Precipitation – STATE UNIVERSITY, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values

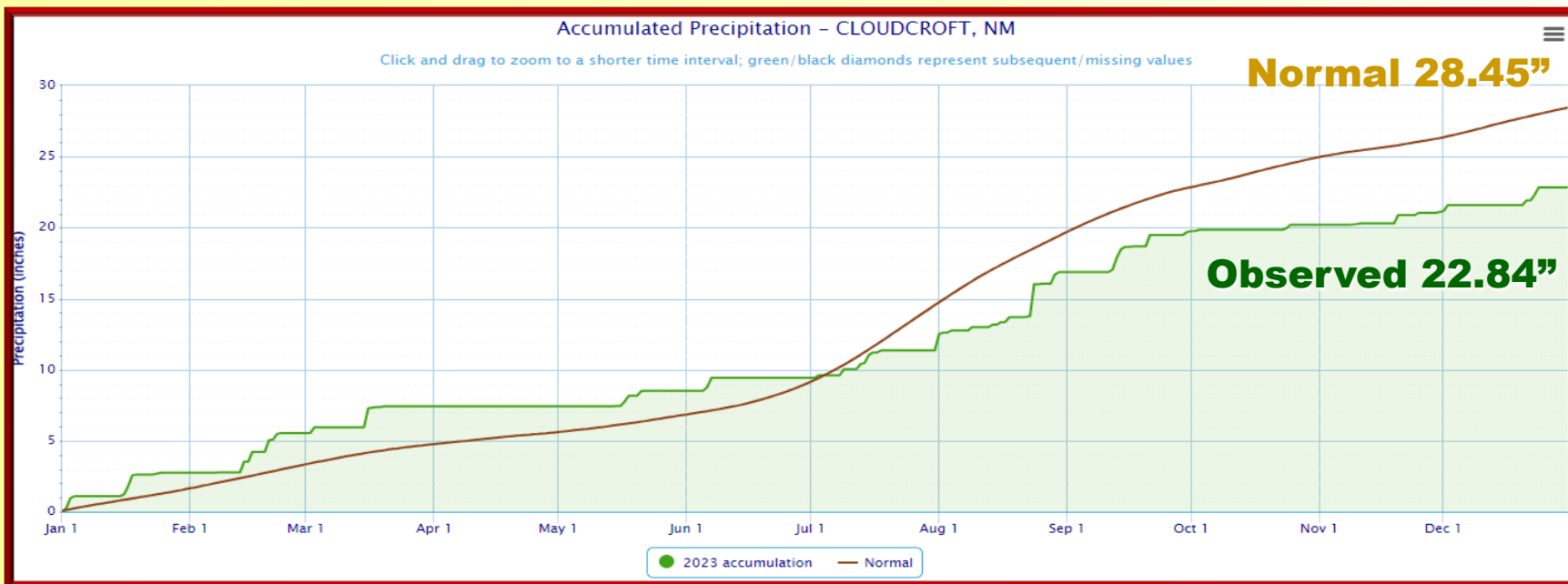
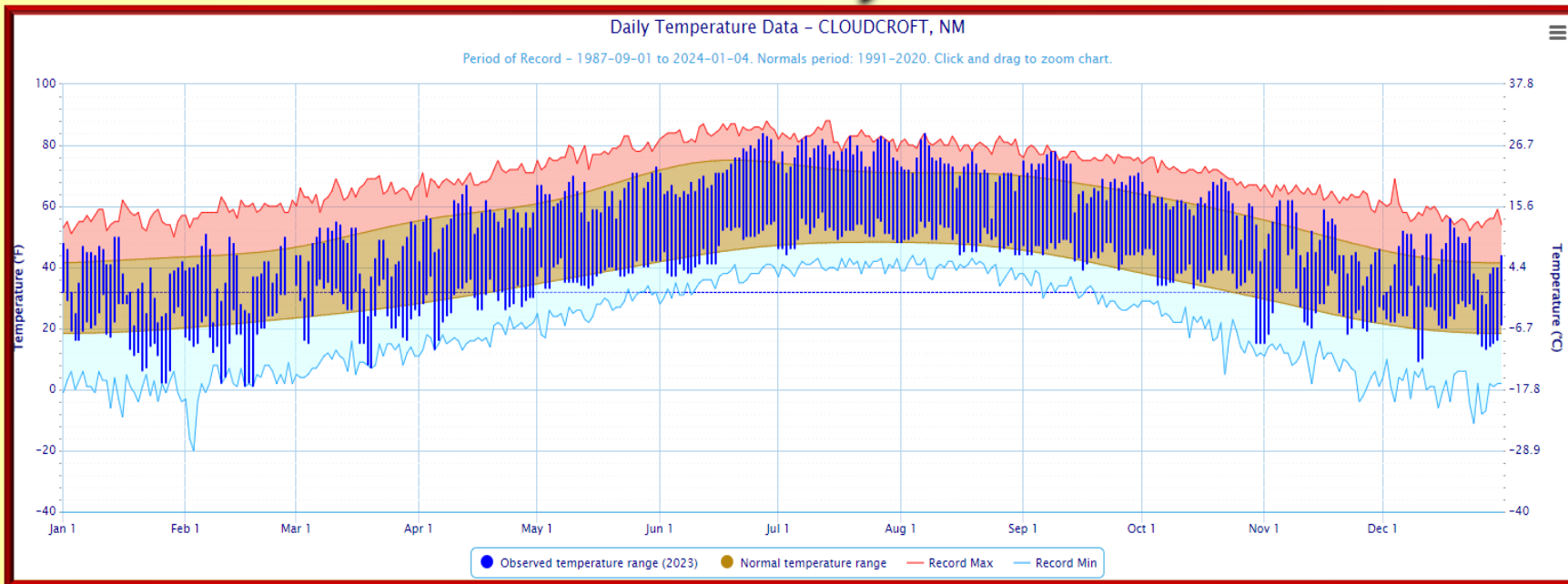


# 2023 Las Cruces Review (132 years)

## State University (NMSU) COOP Station - STCN5

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 132=Coldest
Jan	58.7	68	30.1	20	44.4	32
Feb	61.2	74	31.3	22	46.2	70
Mar	69.6	80	38.5	28	54.0	43
Apr	79.5	86	45.9	32	62.7	22
May	88.1	94	54.9	47	71.5	16
Jun	95.8	107	63.0	53	79.4	27
Jul	103.4	109	73.1	63	88.2	1
Aug	97.1	109	70.4	62	83.8	4
Sep	94.1	103	63.2	56	78.7	1
Oct	82.7	93	52.1	31	67.4	3
Nov	68.7	79	39.5	24	54.1	10
Dec	60.8	73	31.8	22	46.3	9

# Cloudcroft, NM



# 2023 Cloudcroft Review (36 years)

## Cloudcroft COOP Station – CLDN5

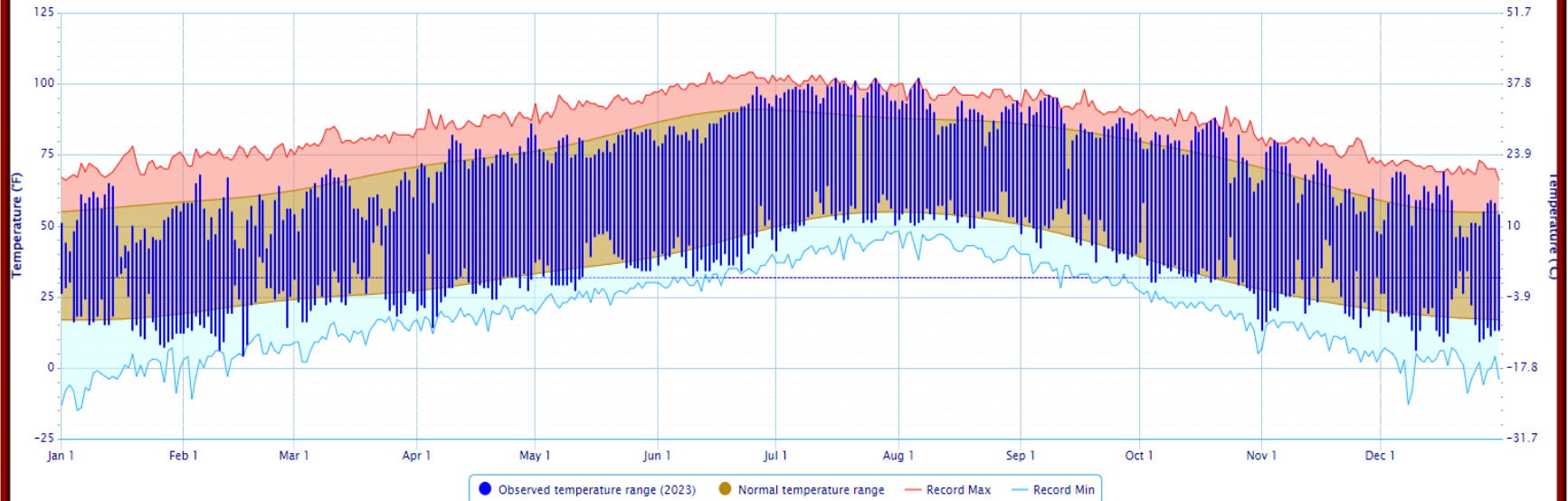
Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 36=Coldest
Jan	37.3	50	18.3	2	27.8	29
Feb	39.0	51	16.6	1	27.7	33
Mar	45.7	55	24.9	7	35.3	31
Apr	56.0	67	28.7	13	42.4	31
May	64.4	73	37.7	33	51.1	24
Jun	72.0	84	46.0	37	59.0	20
Jul	78.1	83	51.2	44	64.6	1
Aug	72.5	84	49.0	44	60.8	5
Sep	69.8	78	44.9	39	57.3	3
Oct	61.1	69	36.5	15	48.8	7
Nov	48.8	62	27.0	15	37.8	18
Dec	43.2	56	21.8	9	32.5	11



# Gila Hot Springs, NM

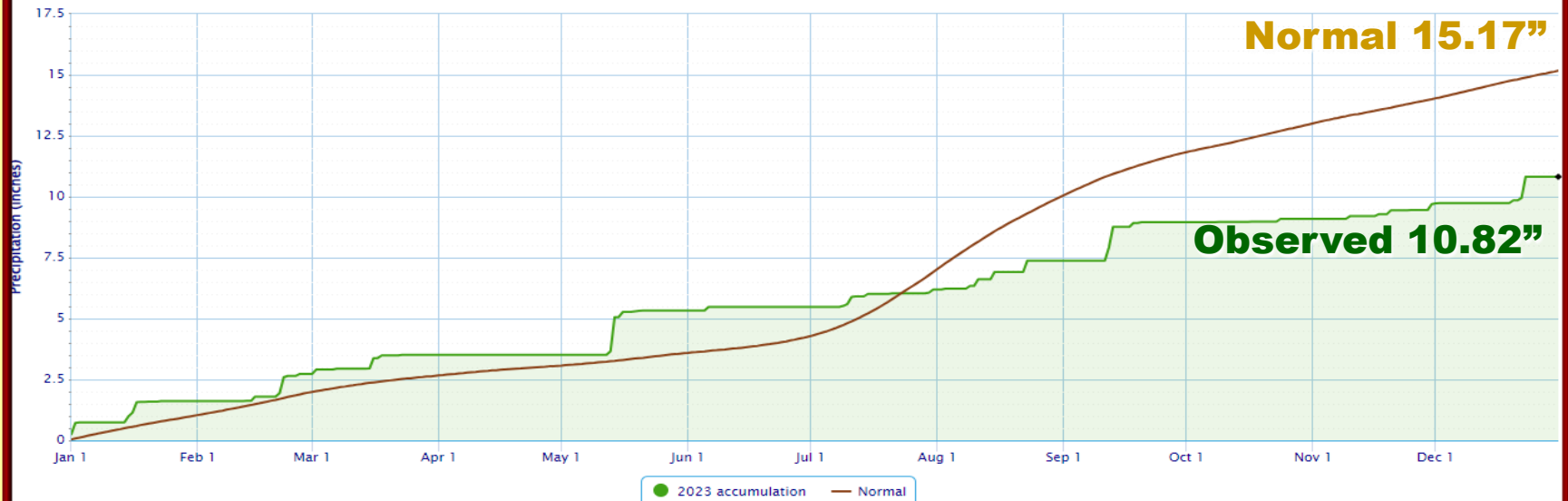
Daily Temperature Data – GILA HOT SPRINGS, NM

Period of Record – 1957-05-24 to 2024-01-04. Normals period: 1991-2020. Click and drag to zoom chart.



Accumulated Precipitation – GILA HOT SPRINGS, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



# 2023 Gila Hot Springs Review (67 years)

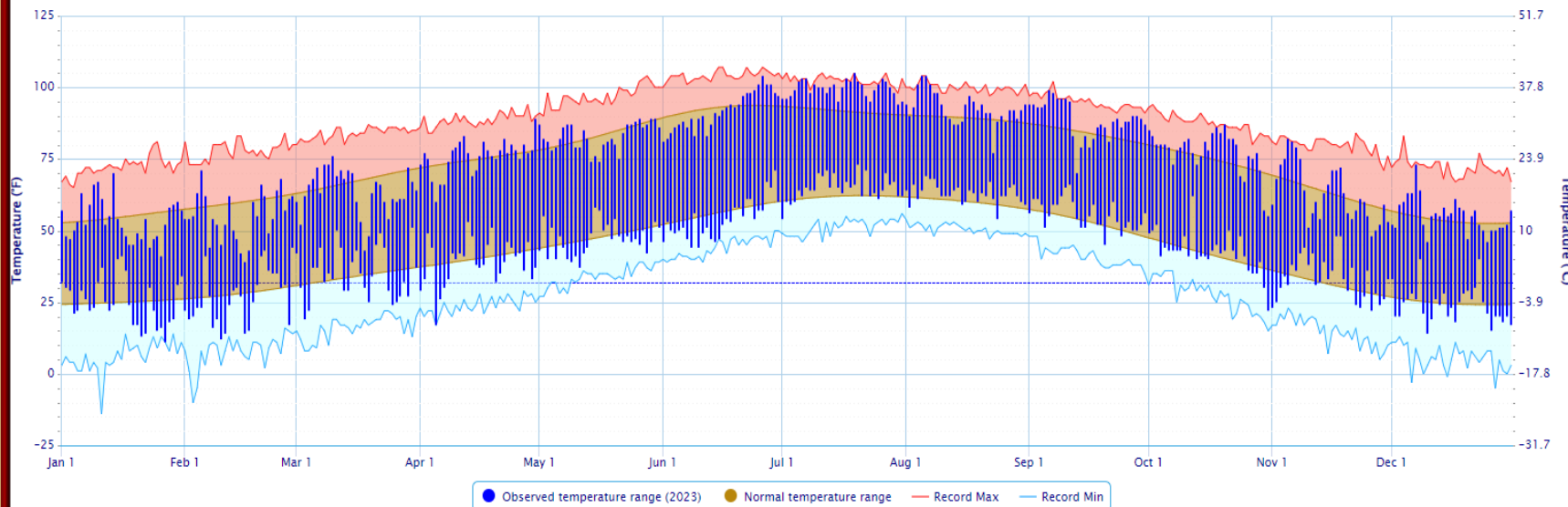
## Gila Hot Springs COOP Station – GHSN5

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 67=Coldest
Jan	51.5	65	18.3	7	34.9	51
Feb	54.6	68	19.2	4	36.9	57
Mar	60.7	70	27.0	10	43.9	22
Apr	74.1	86	27.6	14	50.9	40
May	79.0	84	36.3	27	57.6	39
Jun	87.2	99	40.2	32	63.7	57
Jul	97.8	102	53.2	41	75.5	1
Aug	90.4	102	53.9	49	72.1	4
Sep	86.6	96	46.6	37	66.6	5
Oct	78.2	88	33.5	17	55.8	12
Nov	65.8	80	25.4	13	45.6	10
Dec	57.5	69	17.8	6	37.7	23

# Hillsboro, NM

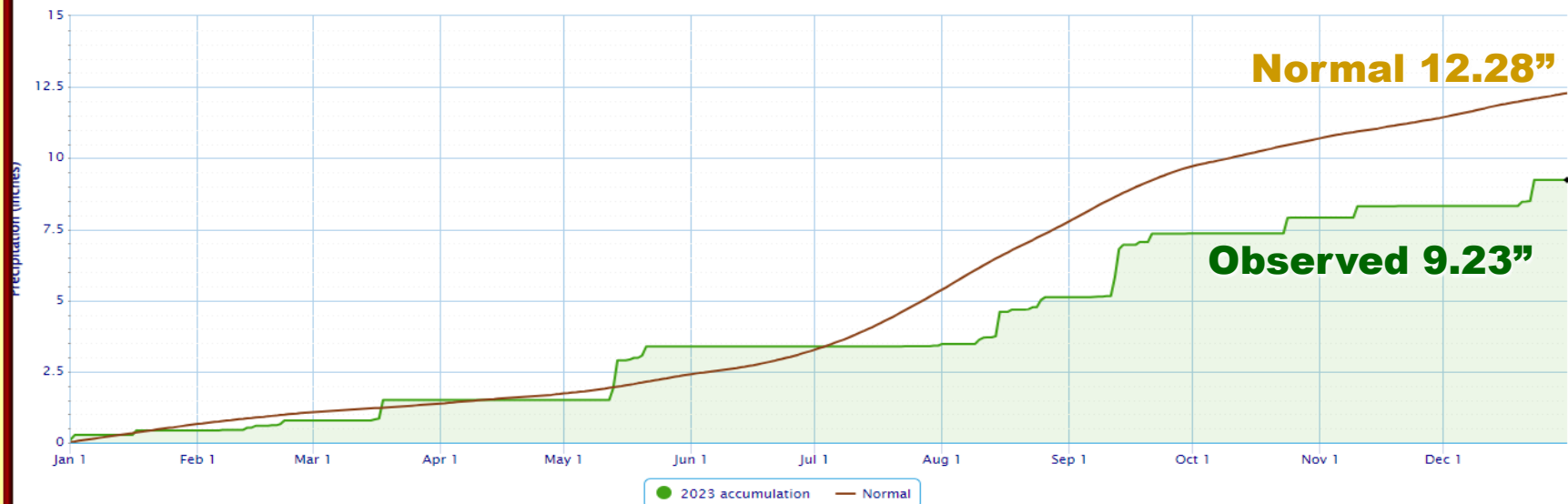
Daily Temperature Data – HILLSBORO, NM

Period of Record – 1893-01-01 to 2024-01-04. Normals period: 1991-2020. Click and drag to zoom chart.



Accumulated Precipitation – HILLSBORO, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



# 2023 Hillsboro Review (78 years)

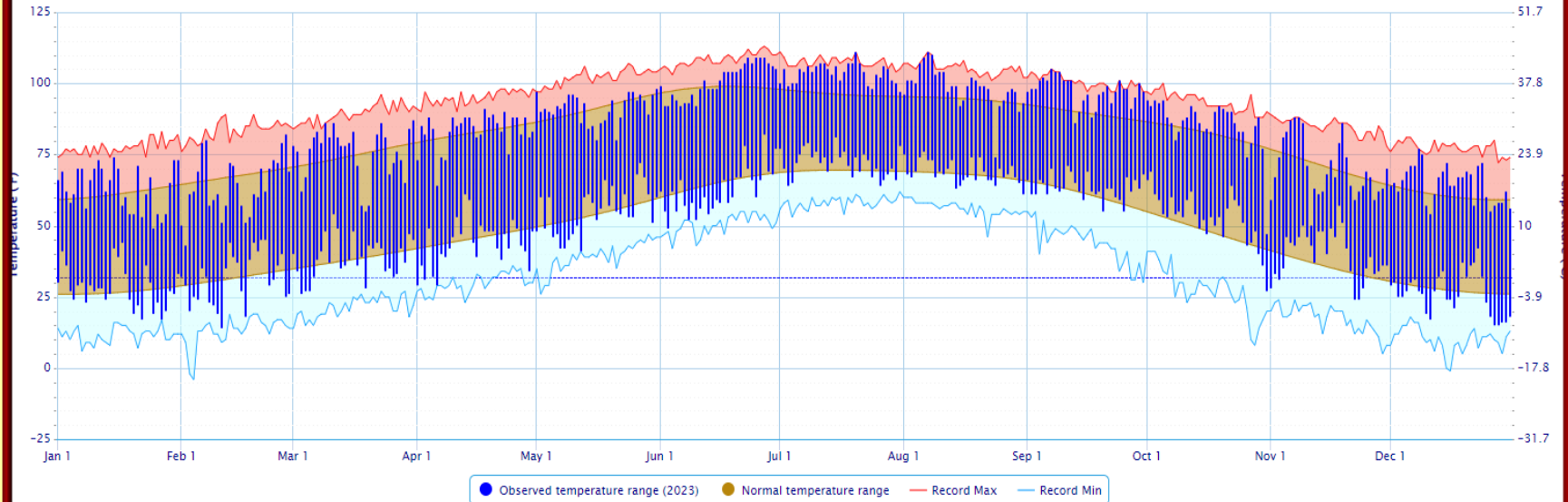
## Hillsboro COOP Station – HLLN5

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 78=Coldest
Jan	53.5	70	24.9	11	39.2	48
Feb	55.3	71	26.5	12	40.9	70
Mar	63.7	76	34.8	19	49.2	54
Apr	75.9	89	38.9	17	57.4	42
May	82.8	89	46.9	37	64.9	35
Jun	91.9	104	53.8	44	72.8	52
Jul	99.5	105	64.7	54	82.1	1
Aug	92.7	104	62.8	54	77.8	3
Sep	88.6	99	55.4	45	72.0	3
Oct	77.3	87	42.4	22	59.8	17
Nov	62.9	82	33.1	22	48.0	32
Dec	55.2	73	24.0	14	39.6	42

# Ft Hancock, TX

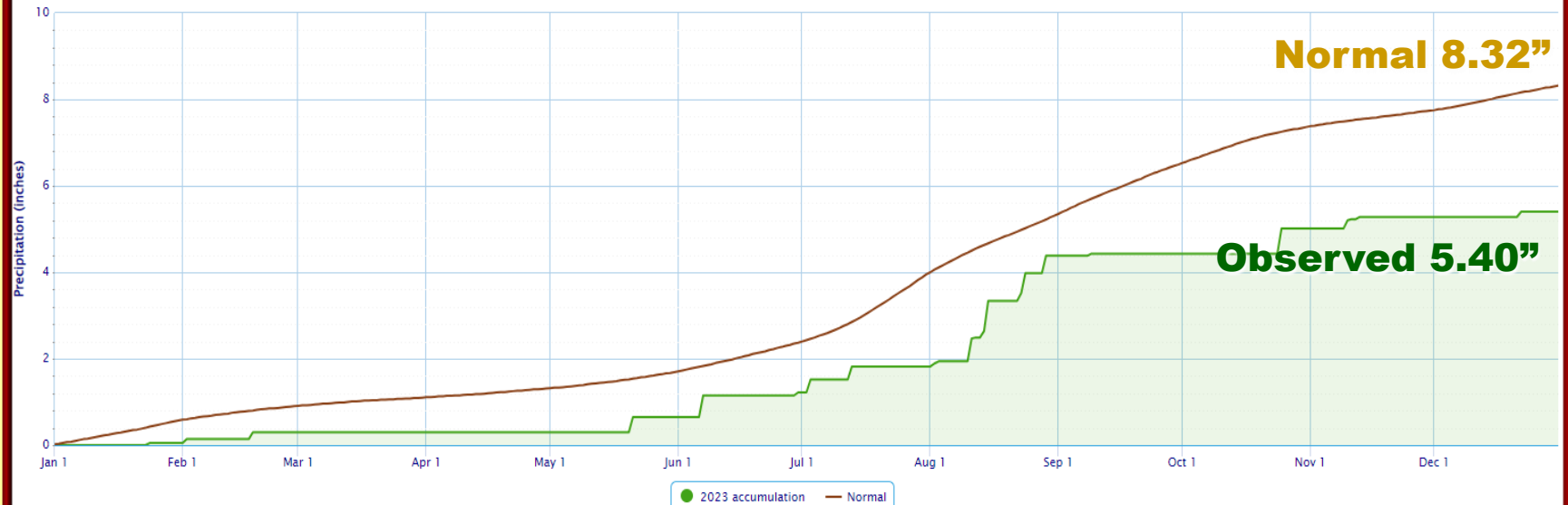
Daily Temperature Data – FORT HANCOCK 8SSE, TX

Period of Record – 1966-07-01 to 2023-12-31. Normals period: 1991-2020. Click and drag to zoom chart.



Accumulated Precipitation – FORT HANCOCK 8SSE, TX

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values





# 2023 Fort Hancock Review (70 years)

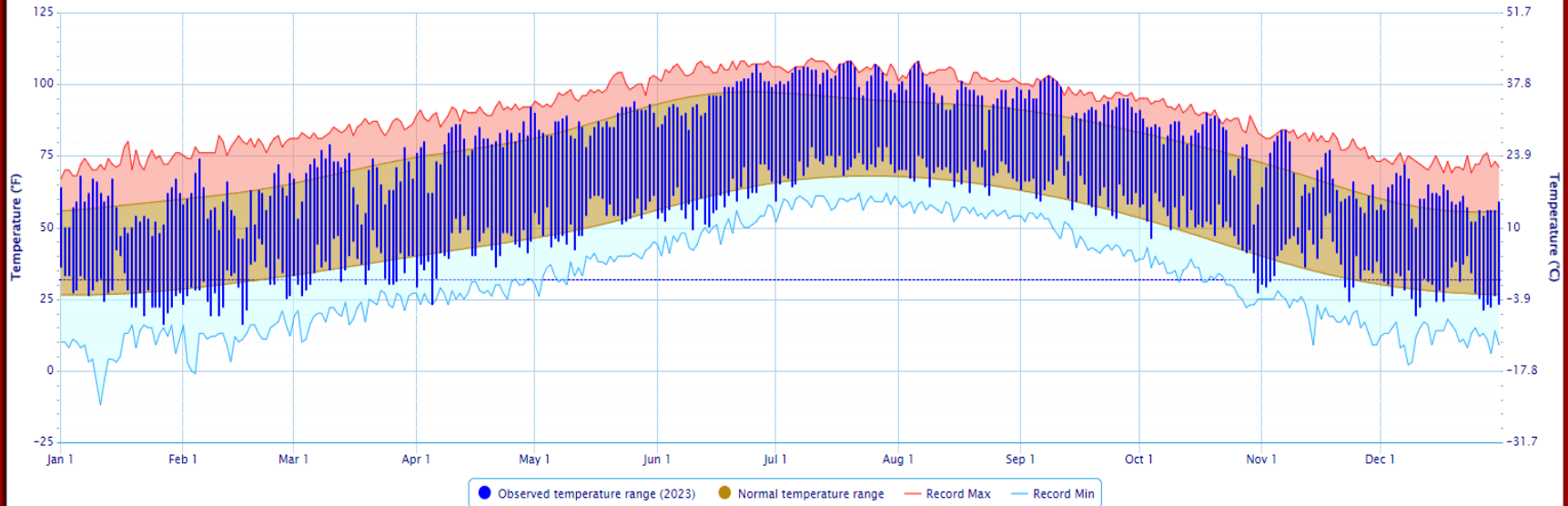
## Fort Hancock COOP Station – FHAT2

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 70=Coldest
Jan	63.2	74	28.2	17	45.7	24
Feb	64.1	82	31.3	14	47.7	46
Mar	75.6	87	38.4	26	57.0	39
Apr	83.4	91	43.5	29	63.5	5
May	91.2	98	55.0	41	73.1	5
Jun	100.7	109	62.2	49	81.5	5
Jul	103.5	111	71.8	64	87.7	6
Aug	98.5	111	68.7	61	83.6	17
Sep	97.3	105	63.3	55	80.3	16
Oct	85.5	94	52.7	27	69.1	37
Nov	70.2	88	39.5	24	54.9	42
Dec	62.4		30.3		46.4	9

# Deming, NM

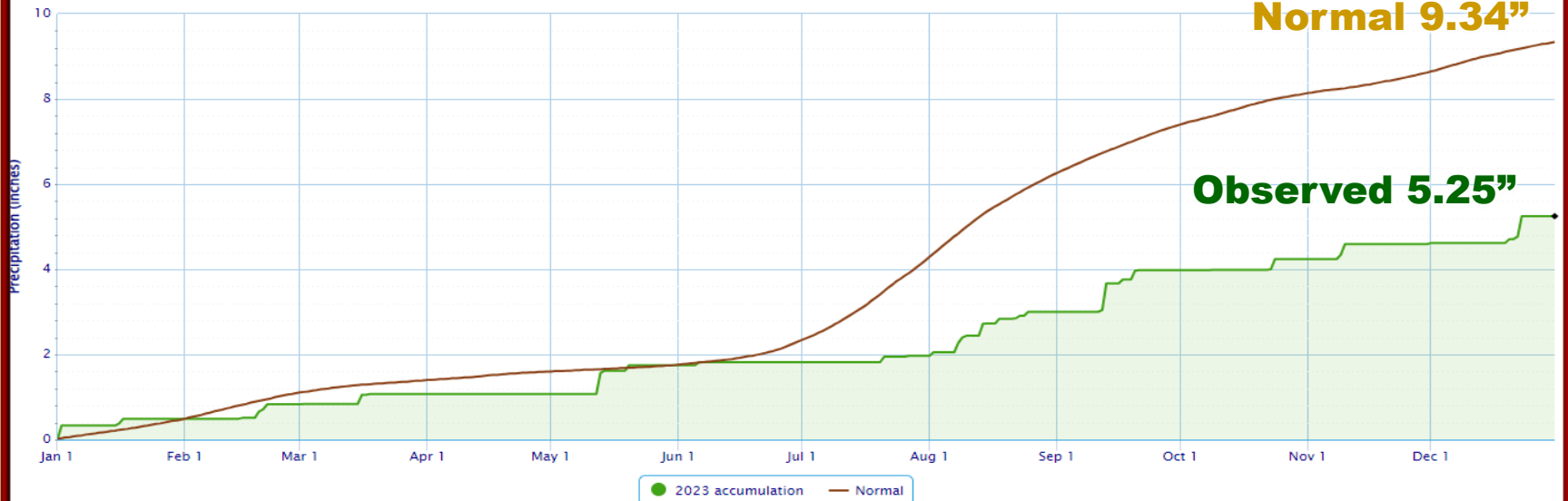
Daily Temperature Data – DEMING MUNICIPAL AP, NM

Period of Record – Max temperature: 1961-04-07 to 2024-01-03; Min temperature: 1961-04-08 to 2024-01-03. Normals period: 1991-2020. Click and drag to zoom chart.



Accumulated Precipitation – DEMING MUNICIPAL AP, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



# 2023 Deming Review (44 years)

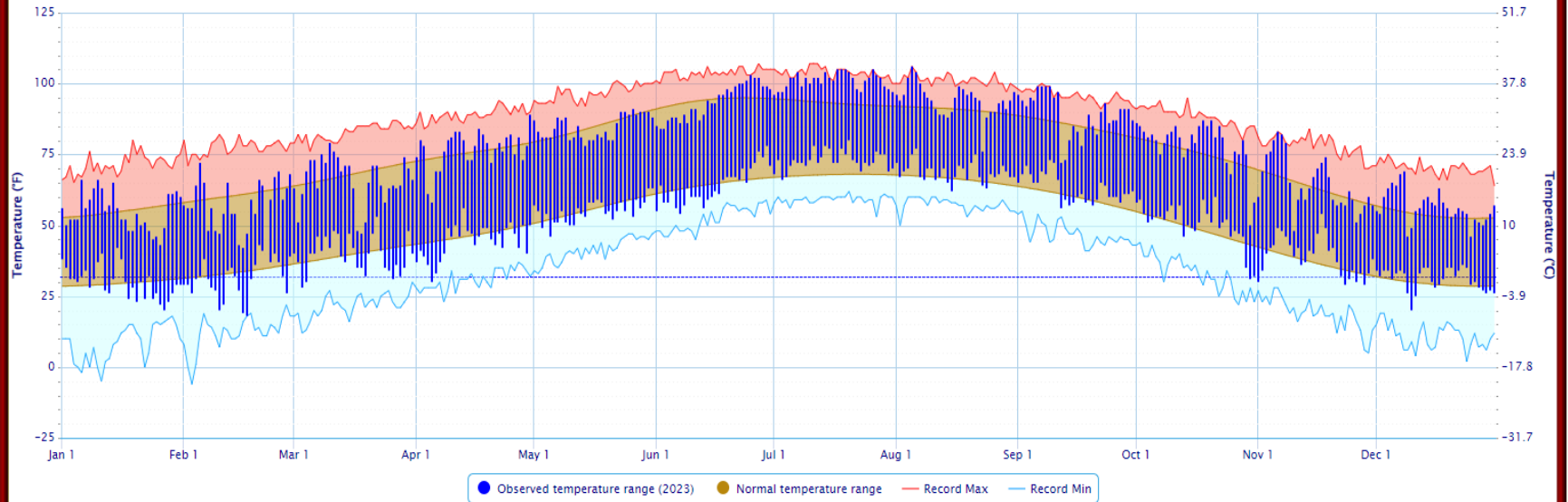
## Deming COOP/Airport

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 44=Coldest
Jan	57.1	68	27.6	16	42.4	20
Feb	59.6	74	29.6	16	44.6	30
Mar	68.0	79	36.5	26	52.2	21
Apr	79.8	92	42.4	23	61.1	13
May	87.0	94	52.8	42	69.9	10
Jun	95.6	107	59.6	49	77.6	25
Jul	103.3	108	71.2	59	87.2	1
Aug	97.0	108	68.7	61	82.9	2
Sep	93.3	103	61.9	53	77.6	1
Oct	81.1	91	65.6	27	65.6	3
Nov	67.2	84	39.0	24	53.1	7
Dec	59.8	72	29.0	19	44.4	11

# Truth Or Consequences, NM

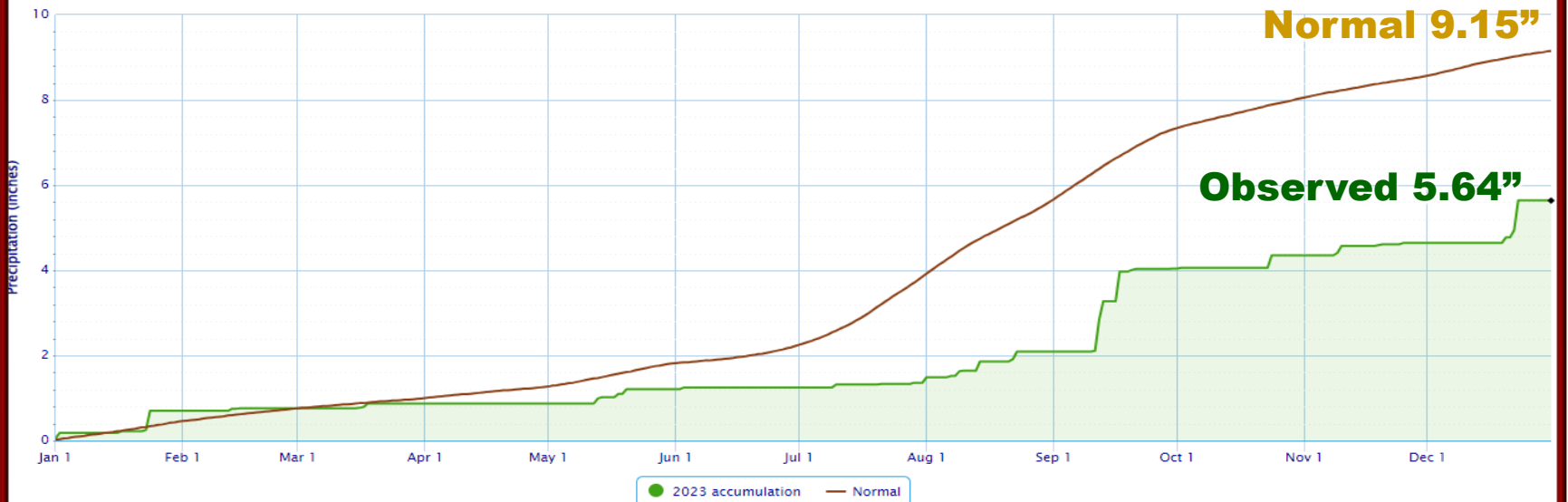
Daily Temperature Data – TRUTH OR CONSEQUENCES MUNICIPAL AP, NM

Period of Record – Max temperature: 1950-05-26 to 2024-01-03; Min temperature: 1950-05-27 to 2024-01-03. Normals period: 1991-2020. Click and drag to zoom chart.



Accumulated Precipitation – TRUTH OR CONSEQUENCES MUNICIPAL AP, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values





# 2023 Truth or Consequences Review (59 years)

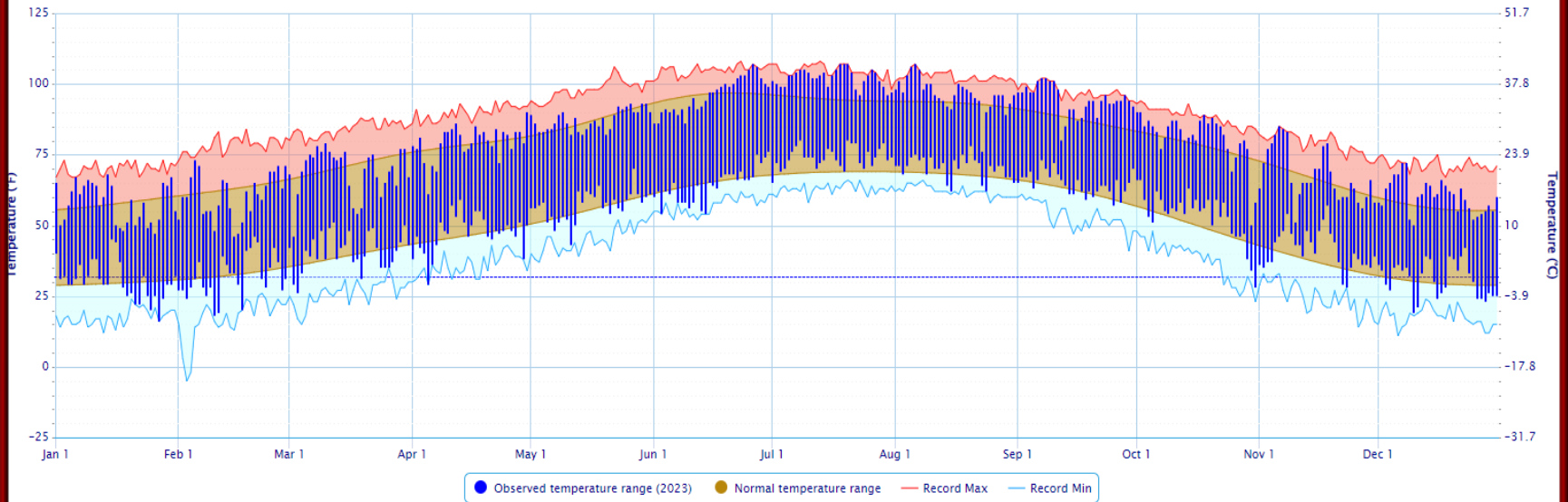
## T or C COOP/Airport

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 59=Coldest
Jan	54.8	66	29.7	20	42.2	30
Feb	57.6	72	31.4	18	44.4	37
Mar	65.9	79	39.5	28	52.7	25
Apr	76.8	89	44.3	30	60.5	26
May	84.6	91	55.9	46	69.8	21
Jun	93.5	103	63.8	54	78.7	28
Jul	101.0	105	72.7	66	86.9	1
Aug	94.1	106	68.5	62	81.3	4
Sep	89.1	99	62.8	56	76.0	2
Oct	78.7	87	50.3	31	64.5	9
Nov	64.7	83	39.0	29	51.9	14
Dec	56.4	69	30.9	20	43.6	14

# Santa Teresa, NM

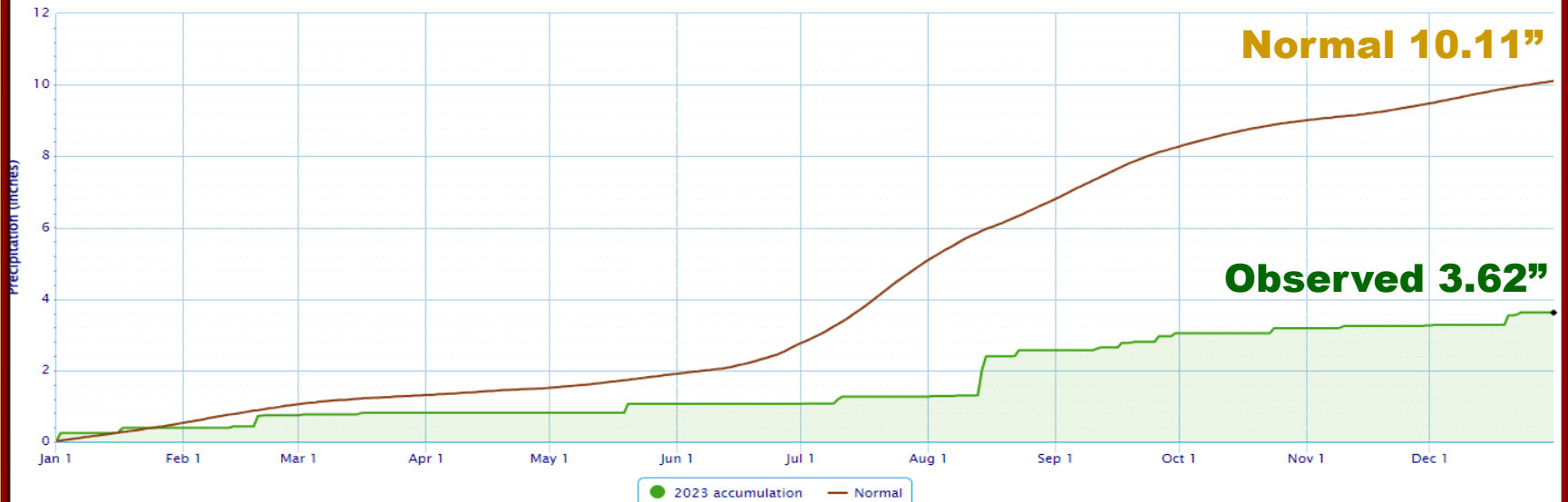
Daily Temperature Data – SANTA TERESA AIRPORT, NM

Period of Record – 2002-02-25 to 2024-01-03. Normals period: 1991–2020. Click and drag to zoom chart.



Accumulated Precipitation – SANTA TERESA AIRPORT, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



# 2023 Santa Teresa (27 years)

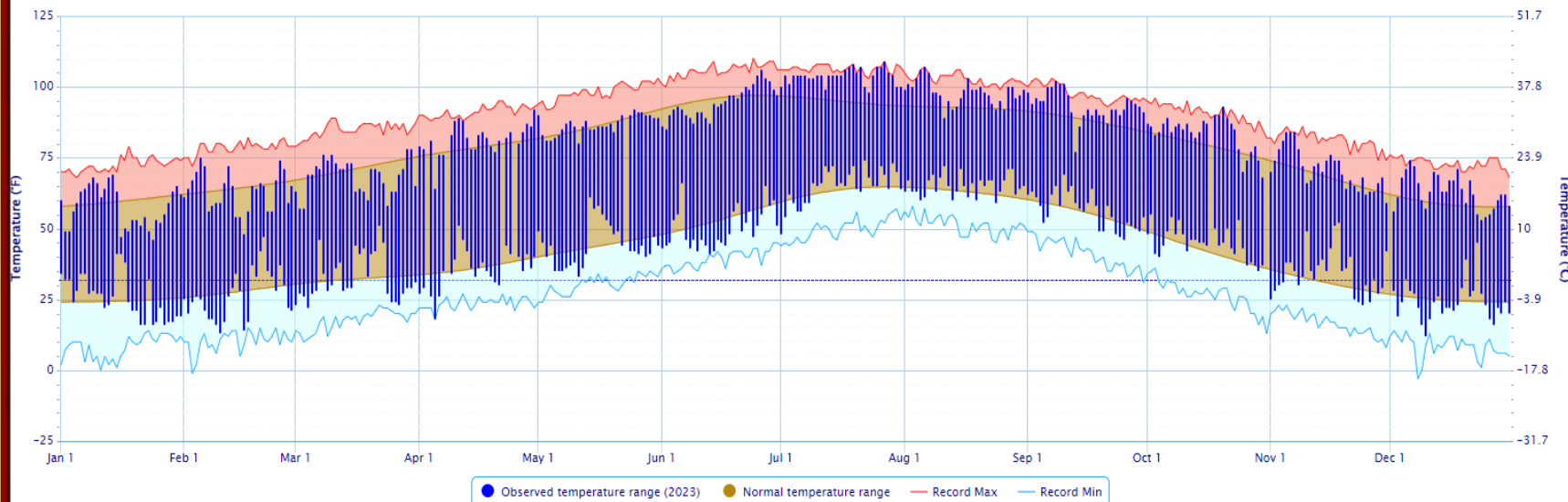
## Santa Teresa NWS COOP

Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 27=Coldest
Jan	57.5	68	30.2	16	44.0	13
Feb	60.4	73	31.6	18	46.0	21
Mar	69.0	78	40.5	26	54.8	16
Apr	79.3	90	47.2	29	63.3	14
May	87.2	93	57.0	43	72.1	11
Jun	96.0	107	64.0	54	80.0	18
Jul	102.1	107	73.9	65	88.0	1
Aug	96.3	107	70.2	62	83.3	4
Sep	94.3	102	64.5	57	79.5	1
Oct	81.0	90	53.4	28	67.2	3
Nov	67.7	85	41.4	28	54.6	7
Dec	60.3	72	30.9	19	45.6	6

# Redrock, NM

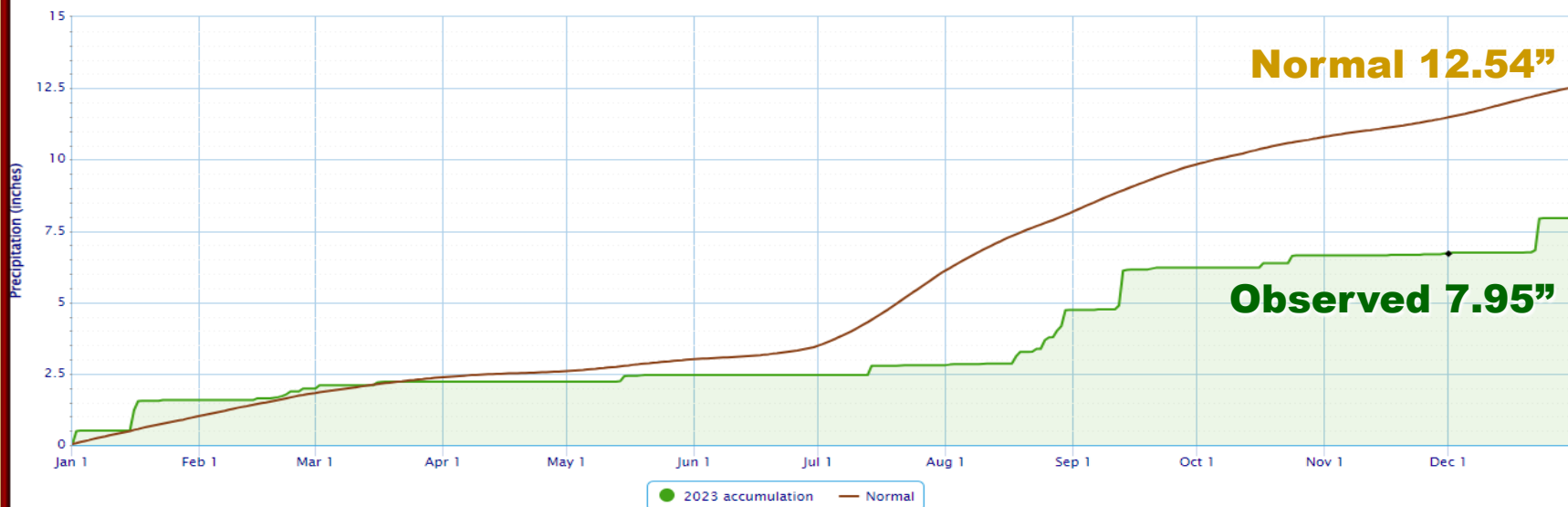
## Daily Temperature Data – REDROCK 1 NNE, NM

Period of Record – 1958-02-01 to 2024-01-04. Normals period: 1991-2020. Click and drag to zoom chart.



## Accumulated Precipitation – REDROCK 1 NNE, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values





# 2023 Redrock (66 years)

## Redrock COOP

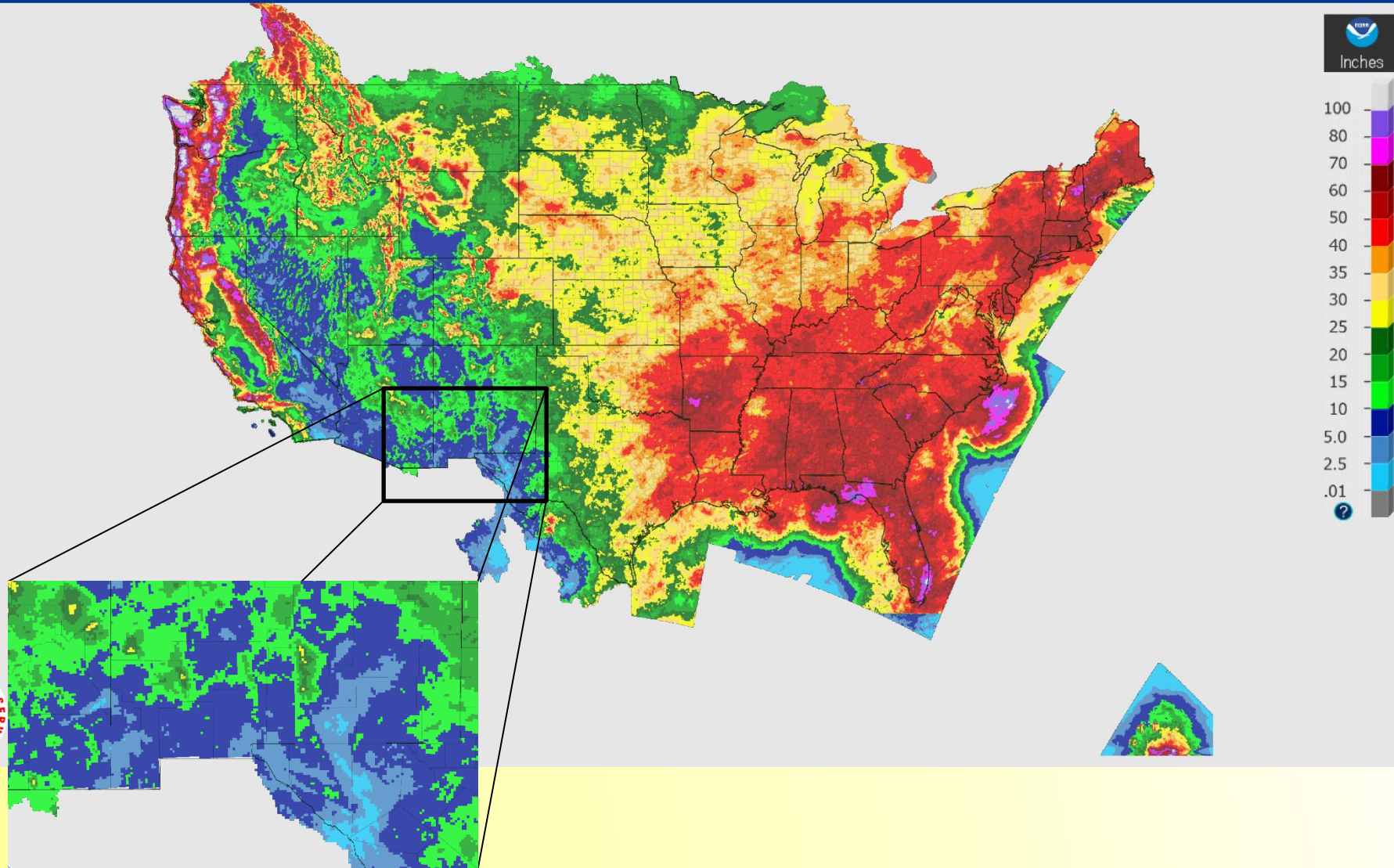
Month	Ave Max Temp	Highest Temp	Ave Min Temp	Lowest Temp	Ave Temp	Rank 1=Warmest 66=Coldest
Jan	57.6	69	25.5	16	41.6	33
Feb	63.0	75	26.3	13	44.6	40
Mar	68.3	78	32.4	22	50.4	33
Apr	81.6	92	35.5	18	58.5	18
May	86.8	92	44.0	33	65.3	26
Jun	94.6	106	49.9	41	72.3	51
Jul	103.8	109	64.9	48	84.3	1
Aug	98.0	107	65.0	59	81.5	3
Sep	93.3	102	56.4	46	74.9	3
Oct	83.6	93	44.9	35	64.2	4
Nov	70.9	84	34.3	23	52.6	3
Dec	62.9	74	24.0	12	43.5	14

# Annual Precipitation 2023 for the U.S.

January 01, 2023 Annual Observed Precipitation

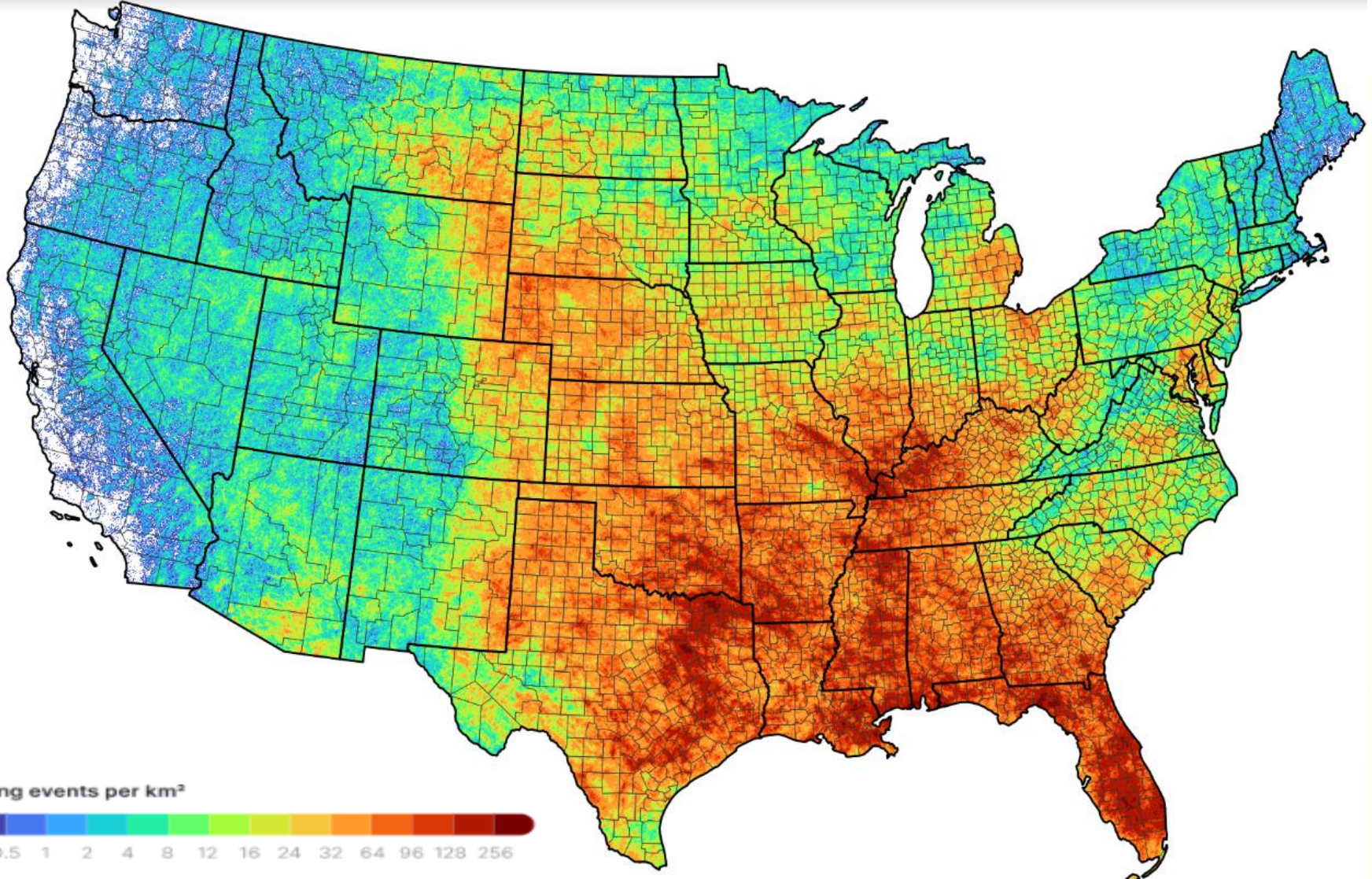
Created on: January 06, 2024 - 15:11 UTC

Valid on: January 01, 2024 12:00 UTC





# Total Lightning Density for 2023



Lightning events per km<sup>2</sup>



# El Paso Weather Highlights 2023

**1991-2020 normals in parenthesis**

Highest Temperature	112 – August 6
Lowest Temperature	20 – Feb 17
Greatest Daily Precipitation	.54 – Sep 26
Greatest Daily Snowfall	T - Feb 18, Mar 2
Wettest Month	1.44” - Aug
Driest Month	0.00” – April
Highest Peak Wind	72 mph – Sep 30
Last Freeze-Spring	Mar 19
First Freeze-Fall	November 23
Heating Degree Days (Normal)	1919 (2201)
Cooling Degree Days (Normal)	3537 (2654)



# El Paso Weather Highlights - All Time

Highest Temperature	114 on June 30, 1994
Lowest Temperature	-8 on January 11, 1962
Greatest Daily Precipitation	6.50" on July 9, 1881
Greatest Daily Snowfall	14.5 on Dec 13, 1987
Wettest Month	8.18" July 1881
Driest Month	0.00" Numerous months
Highest Peak Wind	84 mph on March 26, 2010
Latest Last Freeze-Spring	May 2, 1967
Earliest Last Freeze-Spring	January 28, 1925
Latest First Freeze-Fall	December 20, 1939 & 2021
Earliest First Freeze-Fall	October 16, 1880
Season Heating Degree Days	3256 in 1976-1977
Annual Cooling Degree Days	3537 in 2023

# El Paso Summer Heat

## Consecutive Days at or Above 100 Deg

Rank	Number of Days	Ending Date
1	44	July 29, 2023
2	23	July 15, 1994
3	21	June 30, 1980
4	18	July 20, 2020
5	16	July 18, 2016
5	14	June 18, 1994
5	14	August 6, 1980
5	14	June 27, 1978
8	12	July 8 , 2005
8	12	June 30, 1998
10	11	June 29, 2013
10	11	July 1, 1979

# El Paso Summer Heat

Number of Days Each Summer at or Above 100 Deg  
(30 Year Average=27 days)

Year	Days	Year	Days	Year	Days
2023	70	2012	28	2001	16
2022	20	2011	50	2000	13
2021	20	2010	30	1999	8
2020	57	2009	19	1998	18
2019	47	2008	15	1997	17
2018	46	2007	16	1996	11
2017	23	2006	18	1995	11
2016	38	2005	36	1994	62
2015	18	2004	16	1993	25
2014	30	2003	18	1992	26
2013	26	2002	32	1991	11

# El Paso Summer Heat

## Consecutive Days at or Above 90 Deg

Rank	Number of Days	Ending Date
1	106	September 9, 2015
2	91	September 8, 2020
3	89	September 8, 2019
4	82	August 22, 2023
5	80	September 12, 1983
6	79	August 14, 1994
6	79	August 10, 1980
8	70	August 24, 1934
9	66	September 9, 1982
10	65	July 28, 2011



# El Paso Winter Cold Consecutive Days with Lows at or Below 32 Deg

Rank	Number of Days	Ending Date
1	27	January 23, 1944
2	25	December 30, 1960
3	23	January 24, 1925
4	20	January 29, 1987
4	20	December 30, 1985
6	19	January 22, 1967
7	18	December 27, 1966
7	18	January 12, 1893
9	17	January 8, 1954
9	17	February 2, 1897
9	17	January 13, 1881
12	16	January 29, 2001
12	16	January 27, 1898
12	16	January 15, 1886

# El Paso Winter Cold Consecutive Days with Lows at or Below 20 Deg

Rank	Number of Days	Ending Date
1	6	December 19, 1985
1	6	January 9, 1971
1	6	January 13, 1967
1	6	January 25, 1963
1	6	January 17, 1963
6	5	February 5, 2011
6	5	December 20, 1996
6	5	January 13, 1962
6	5	December 27, 1953
6	5	February 3, 1951
6	5	January 31, 1948
6	5	January 10, 1913

# El Paso Winter Cold Number of Days Each Year With Lows at or Below 32 Deg (30 Year Average=42 days)

Year	Days	Year	Days	Year	Days
2023	31	2012	36	2001	67
2022	50	2011	56	2000	44
2021	29	2010	43	1999	46
2020	40	2009	37	1998	46
2019	28	2008	43	1997	56
2018	31	2007	46	1996	55
2017	21	2006	38	1995	29
2016	31	2005	29	1994	42
2015	38	2004	41	1993	39
2014	37	2003	43	1992	50
2013	57	2002	59	1991	51

# El Paso Drought-Consecutive Days with No Measureable Rain (Trace or less)

Rank	Number of Days	Ending Date
1	136	June 22, 1910
2	128	June 13, 2002
3	126	June 29, 1896
4	119	June 1, 2011
5	101	January 24, 2006
5	101	June 7, 1902
5	101	July 15, 1892
8	99	May 22, 1963
9	98	March 2, 1964
10	93	May 3, 1972

# El Paso Drought-Consecutive Days with No Rain

Rank	Number of Days	Ending Date
1	118	May 31, 2011
2	109	May 25, 2002
3	88	December 31, 1950
4	80	May 9, 1904
5	72	December 10, 1903
6	69	May 8, 1902
7	68	June 12 1996
8	64	July 4, 1916
9	63	December 9, 1954
10	58	October 19, 2005