

December 2023 Weather Digest



December 2023 Weather Summary

December started out slow as most Pacific storms remained to our north. With this dry stretch, as is often the case, temperatures were well above normal. Average temperatures for the month ranged from about 1 to 3 degrees above normal. The Pacific storms finally reached down to our area toward the end of the month. Strong sub-tropical flow ahead of a Pacific storm brought some much needed moisture to most of the area on the 20th. The rain left the ground saturated over much of the area, which lead to unusually dense fog in many areas on the morning of the 21st. The main storm then moved over the area a couple of days later for some more rain. This storm helped spawn several strong thunderstorms across areas from Deming to Radium Springs and over to Alamogordo.

Overall, the monthly precipitation was below normal for much of the area. From west to east, west Texas and Otero County were well below normal, Dona Ana and Luna Counties were slightly below normal, Sierra County was well above normal, and Grant and Hidalgo Counties were

December 2023 Weather Summary

well below normal. This put most of the area in extreme to exceptional drought conditions.

Looking ahead to January, length of daylight begins to accelerate up. Daylight on the 1st is 10 hours, 7 minutes, and by the 31st the length of daylight increases to 10 hours, 39 minutes. Time of sunrise peaks on January 9th. The sunrise time then begins to decrease. Temperatures begin a steady climb with the increasing daylight. At El Paso the average high temperature on the 1st is 57 degrees, warming to 61 degrees on the final day of January. The Full Moon for January occurs on the 25th, also known as the Wolf Moon. The Quadrantid Meteor shower is on full display the first week of January.

Dec 1 Rainbow in El Paso



Dec 20 Rain moving into El Paso



Dec 21 El Paso fog from Franklin Mtns



Dec 21 Fog at Santa Teresa NWS

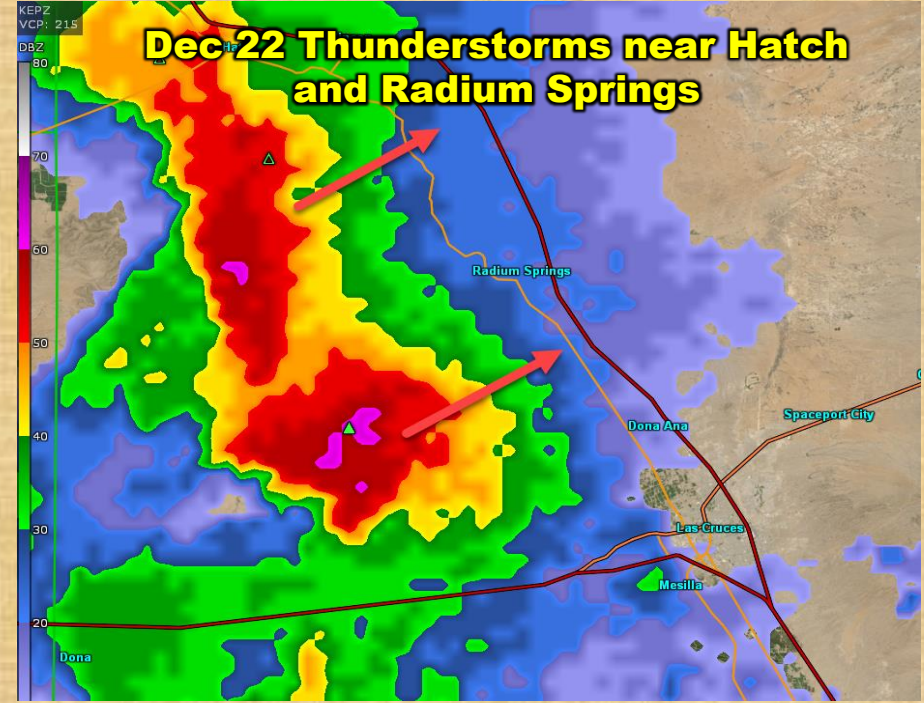


0:15

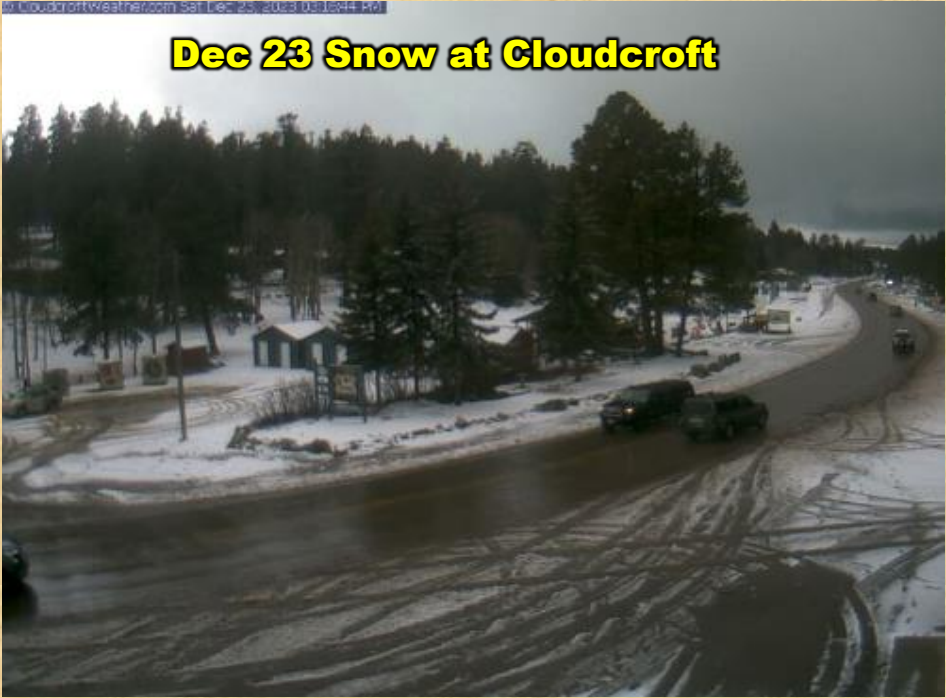
Dec 22 Mammatus Clouds near Silver City



Dec 22 Thunderstorms near Hatch and Radium Springs



Dec 23 Snow at Cloudcroft



Dec 23 Snow at Cloudcroft



Dec 23 Rainbow El Paso



Dec 23 Storm moving into El Paso



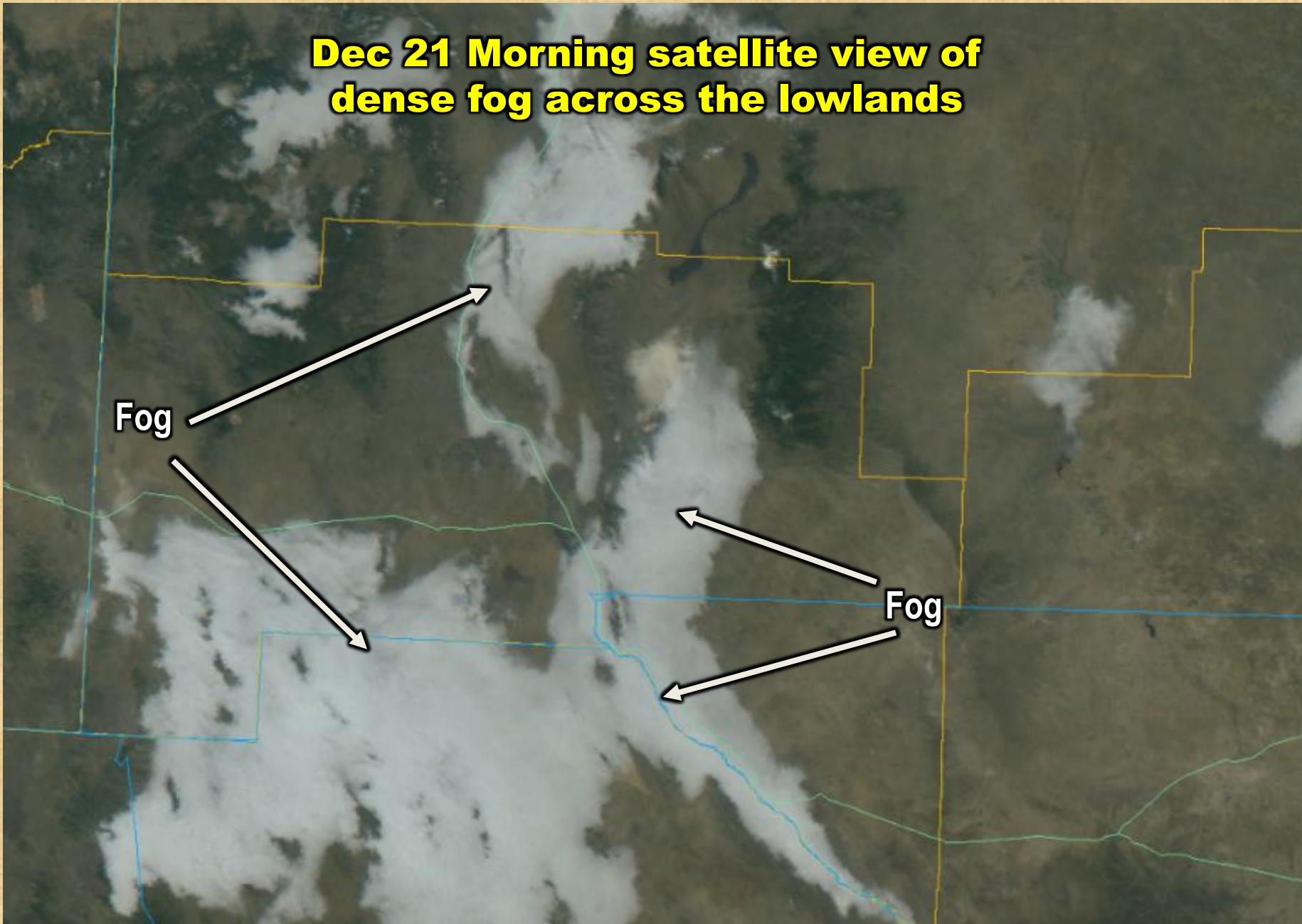
**Dec 23 Mountain top snow
Gila Wilderness**



**Dec 23 Rainbow in the
Gila Wilderness**



**Dec 21 Morning satellite view of
dense fog across the lowlands**



Fog

Fog



ENSO Alert System Status: El Niño Advisory is in Effect

ENSO Alert System

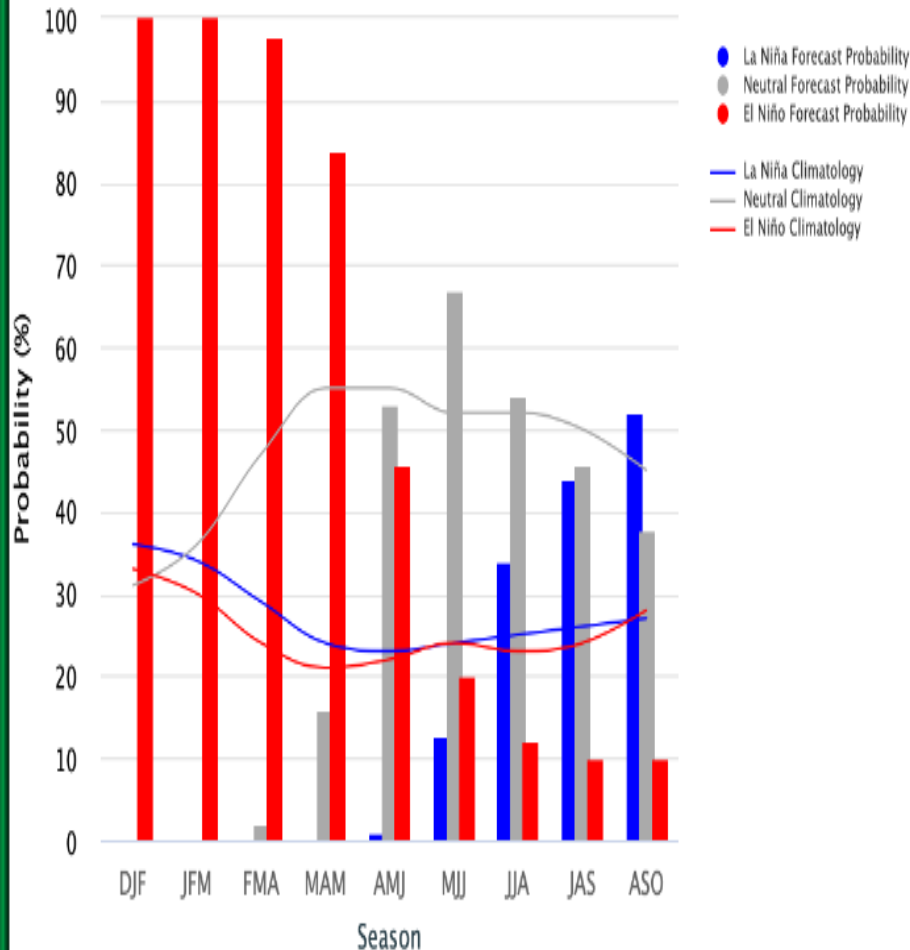
- **El Niño or La Niña Watch:** Issued when conditions are favorable for the development of El Niño or La Niña conditions in the next six months.
- **El Niño or La Niña Advisory:** Issued when El Niño or La Niña conditions are observed and expected to continue.

ENSO Forecast

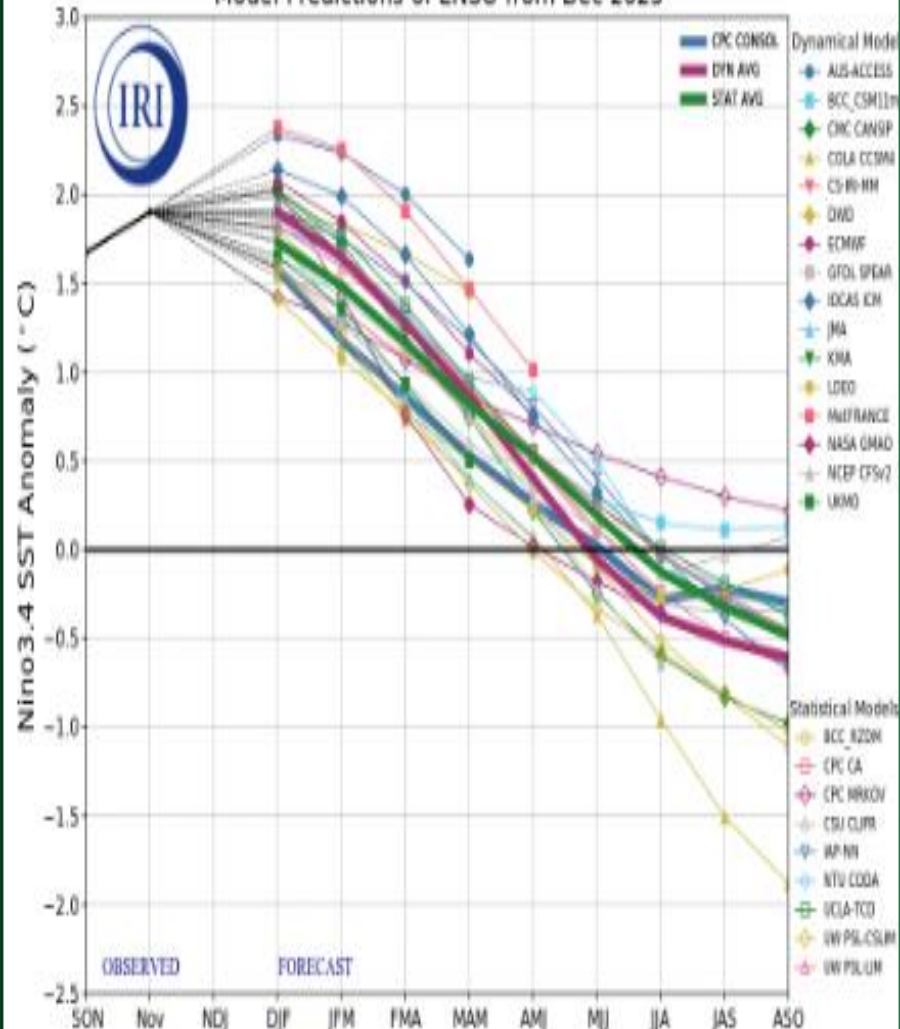
ENSO is in strong El Niño status and is expected to last into spring before transitioning to neutral for the summer of 2024.

Mid-December 2023 IRI Model-Based Probabilistic ENSO Forecasts

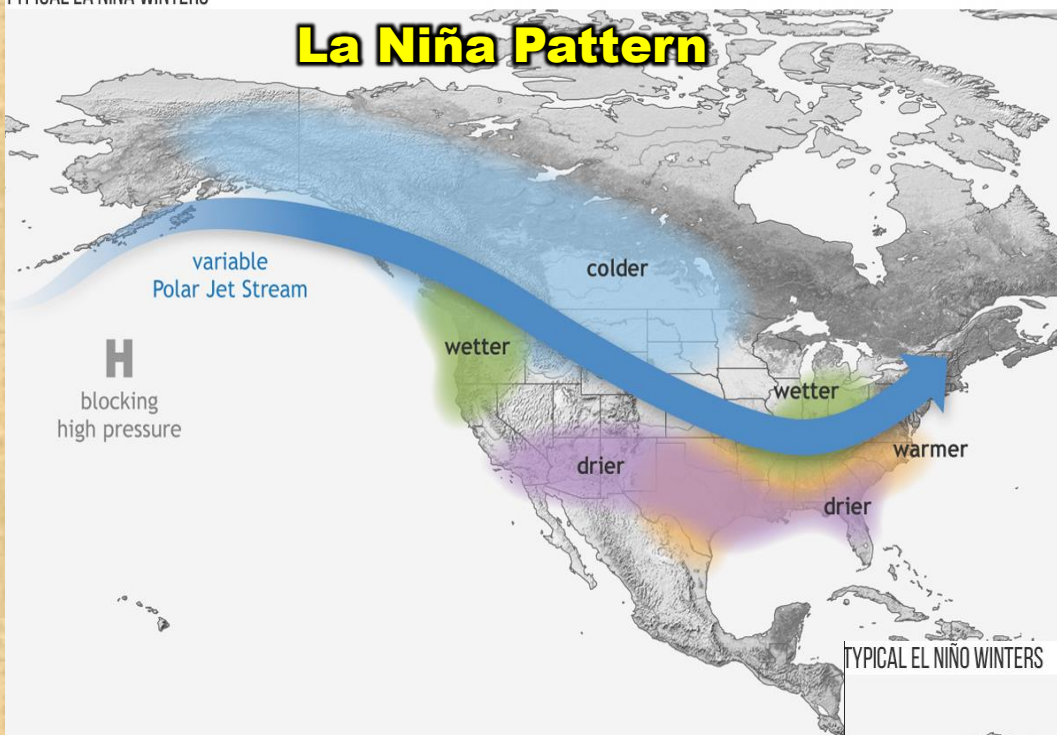
ENSO state based on NINO3.4 SST Anomaly Neutral ENSO: -0.5°C to 0.5°C



Model Predictions of ENSO from Dec 2023

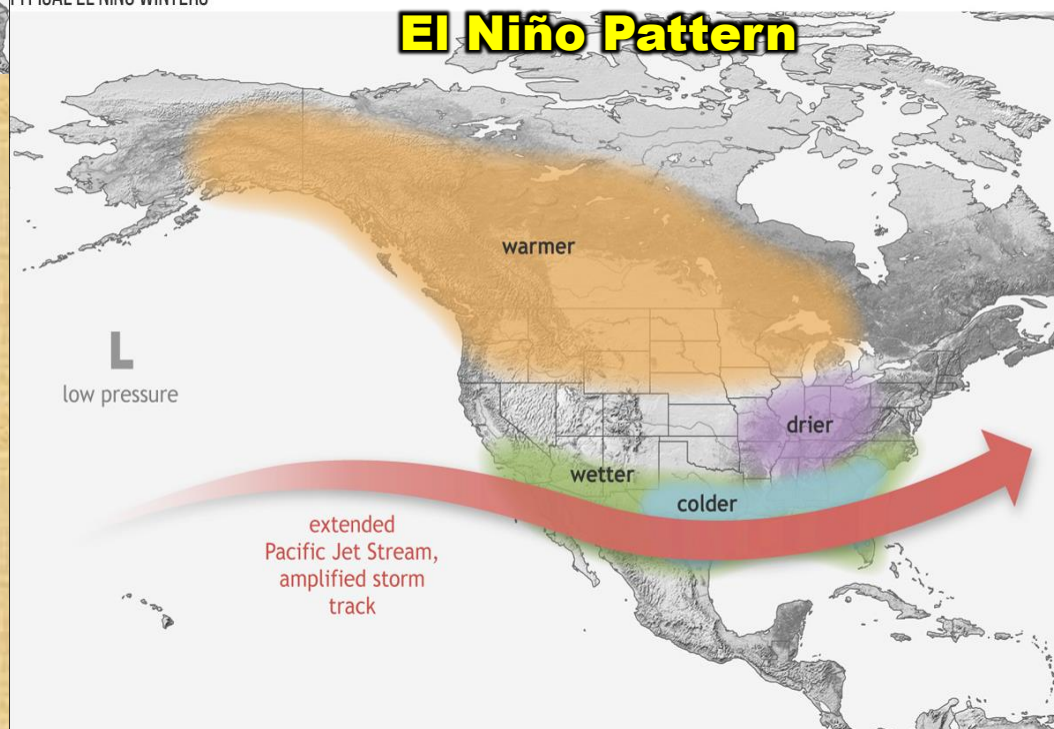


La Niña Pattern



With a La Niña pattern, a ridge of high pressure tends to build off the west coast of the U.S., blocking most of our Pacific winter storm systems. These storms tend to end up moving across the northern Plains and down to the southeastern part of the country. Of course it is important to remember that these patterns are only what typically happens and are not guaranteed to occur.

El Niño Pattern



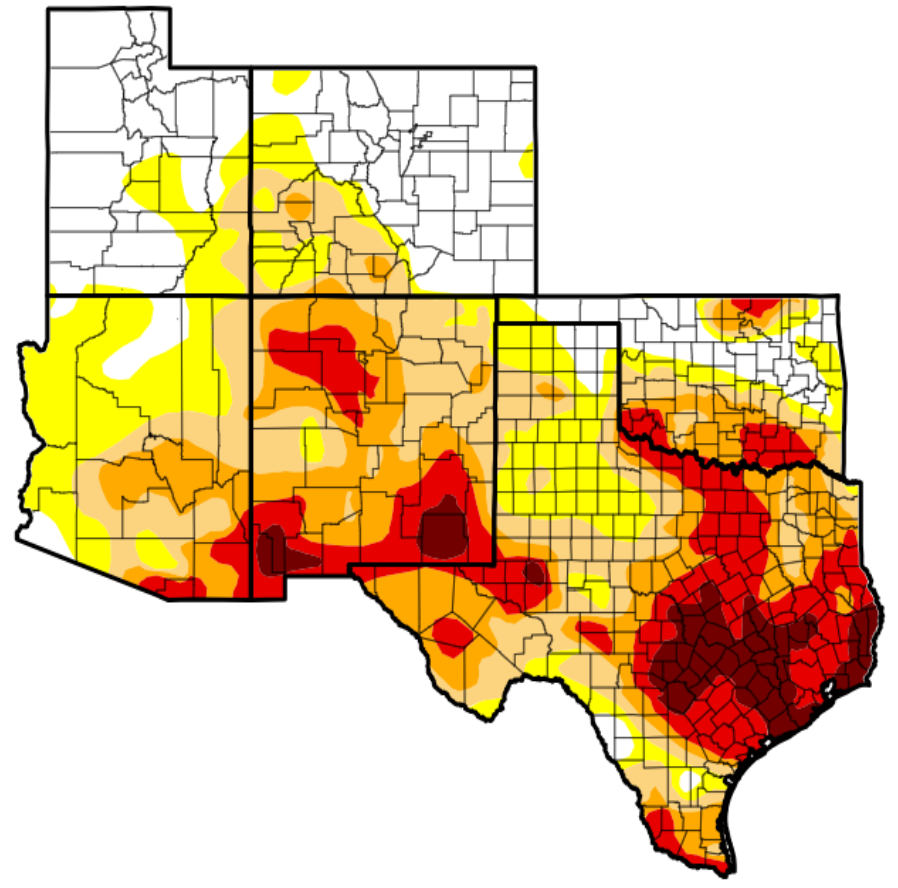
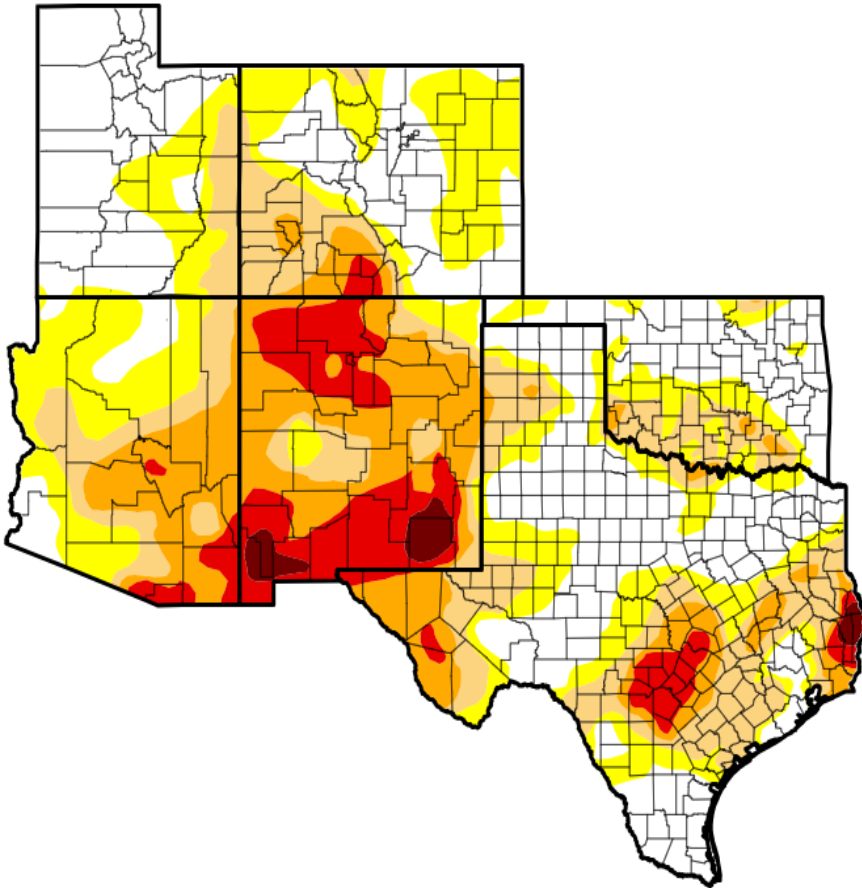
With El Niño, we often see the opposite pattern where the eastern Pacific ridge of high pressure is often weak or non-existent, allowing winter storms to sweep across the southern U.S. This typically will give the southwestern U.S. above normal precipitation.

Current drought conditions and 3 month change

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

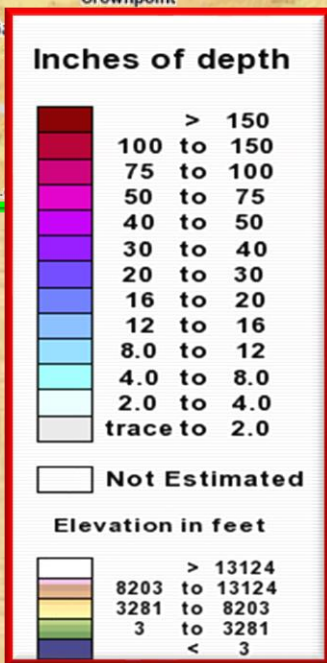
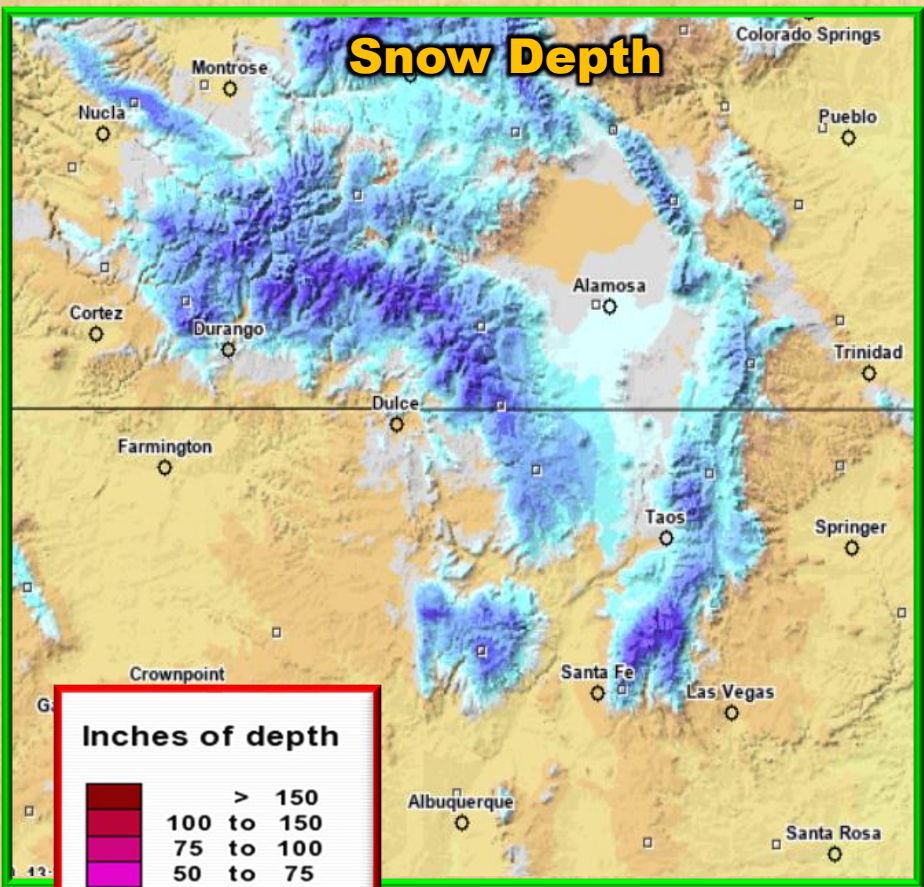
Dec 26, 2023

Sep 26, 2023

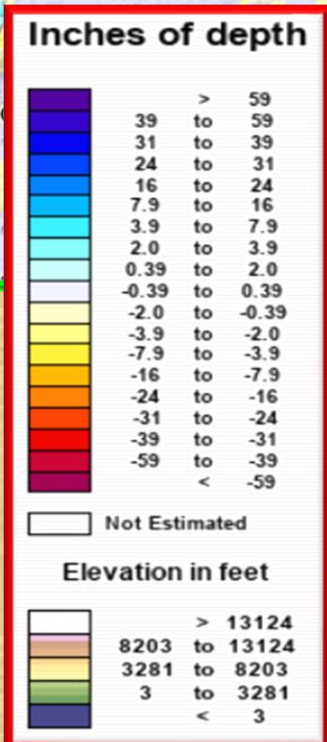
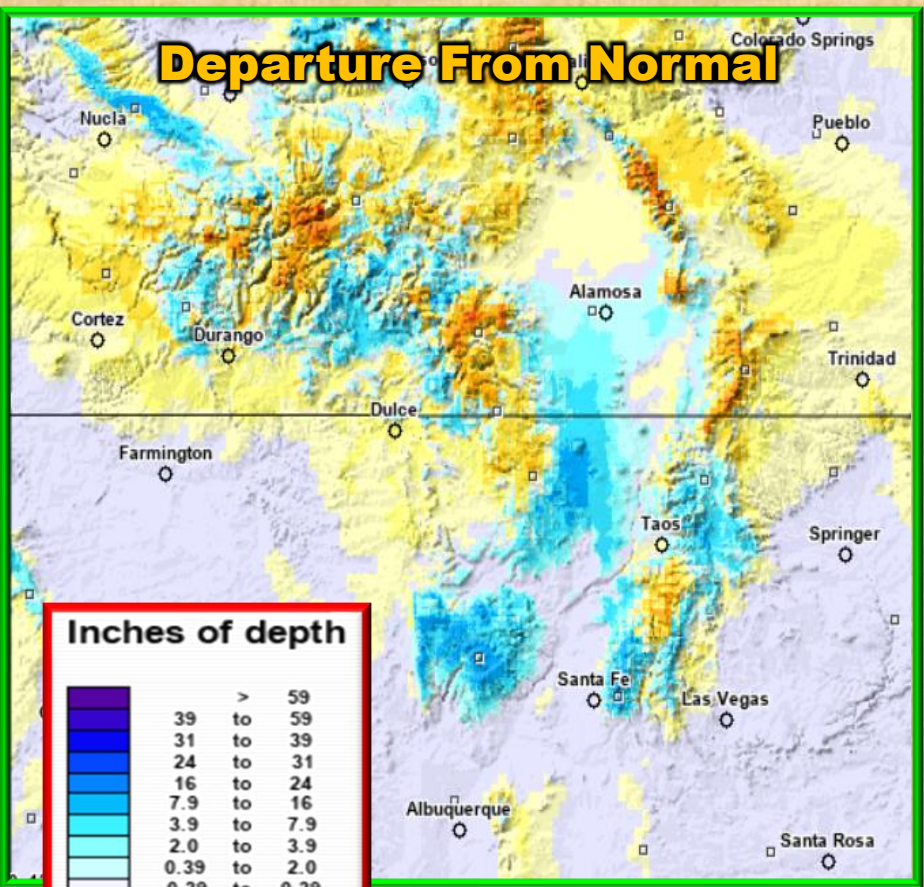


Snow Data Upper Rio Grand Basin as of December 31, 2023

Snow Depth

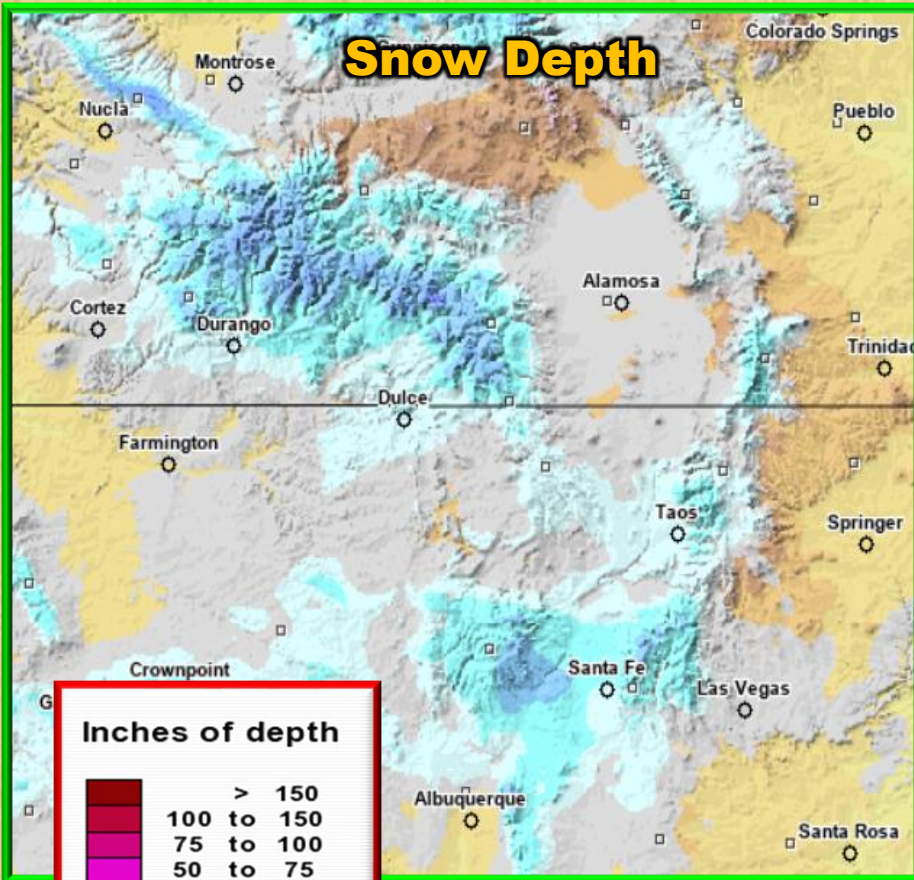


Departure From Normal

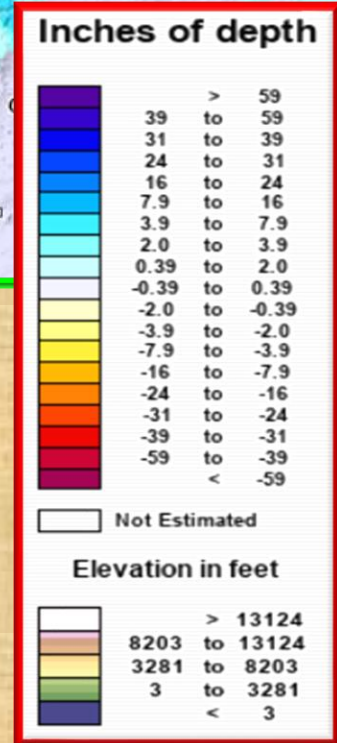
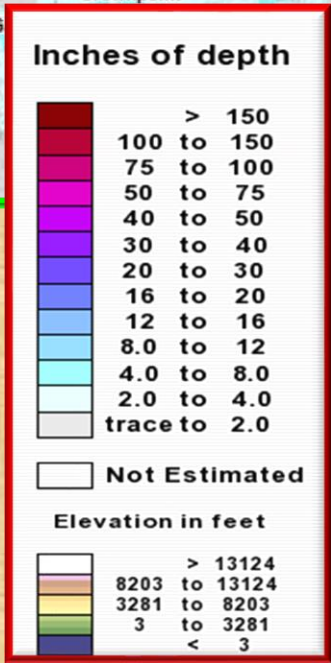
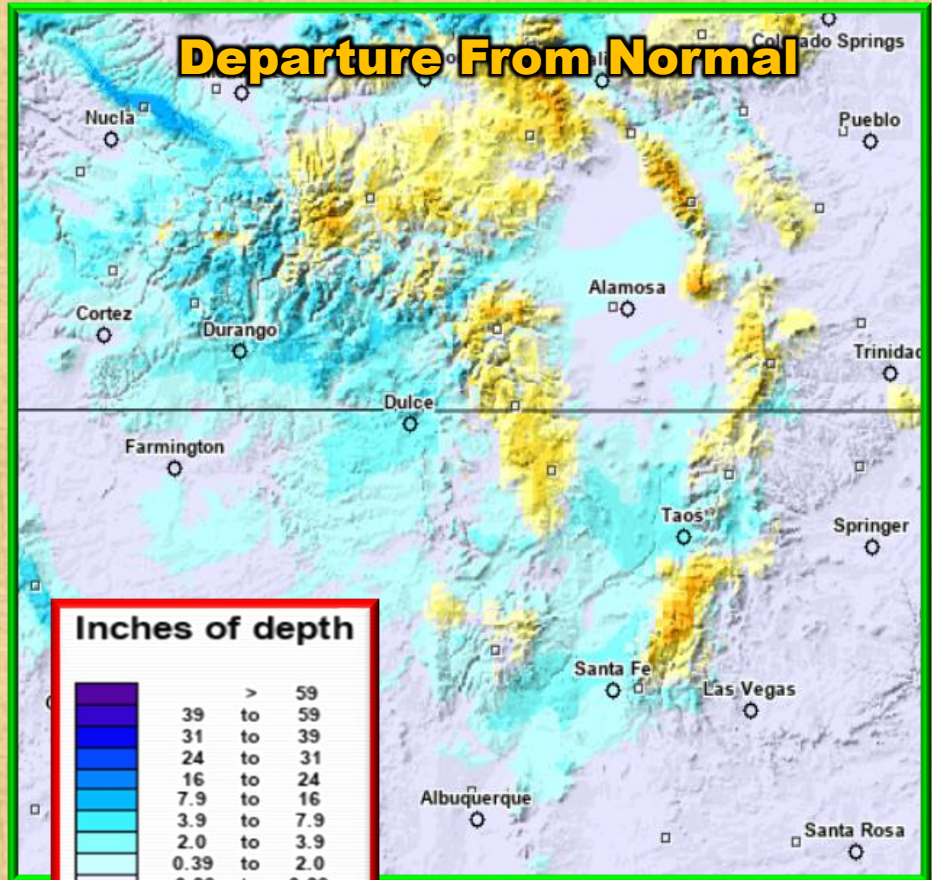


Snow Data Upper Rio Grand Basin as of Nov 30, 2023

Snow Depth

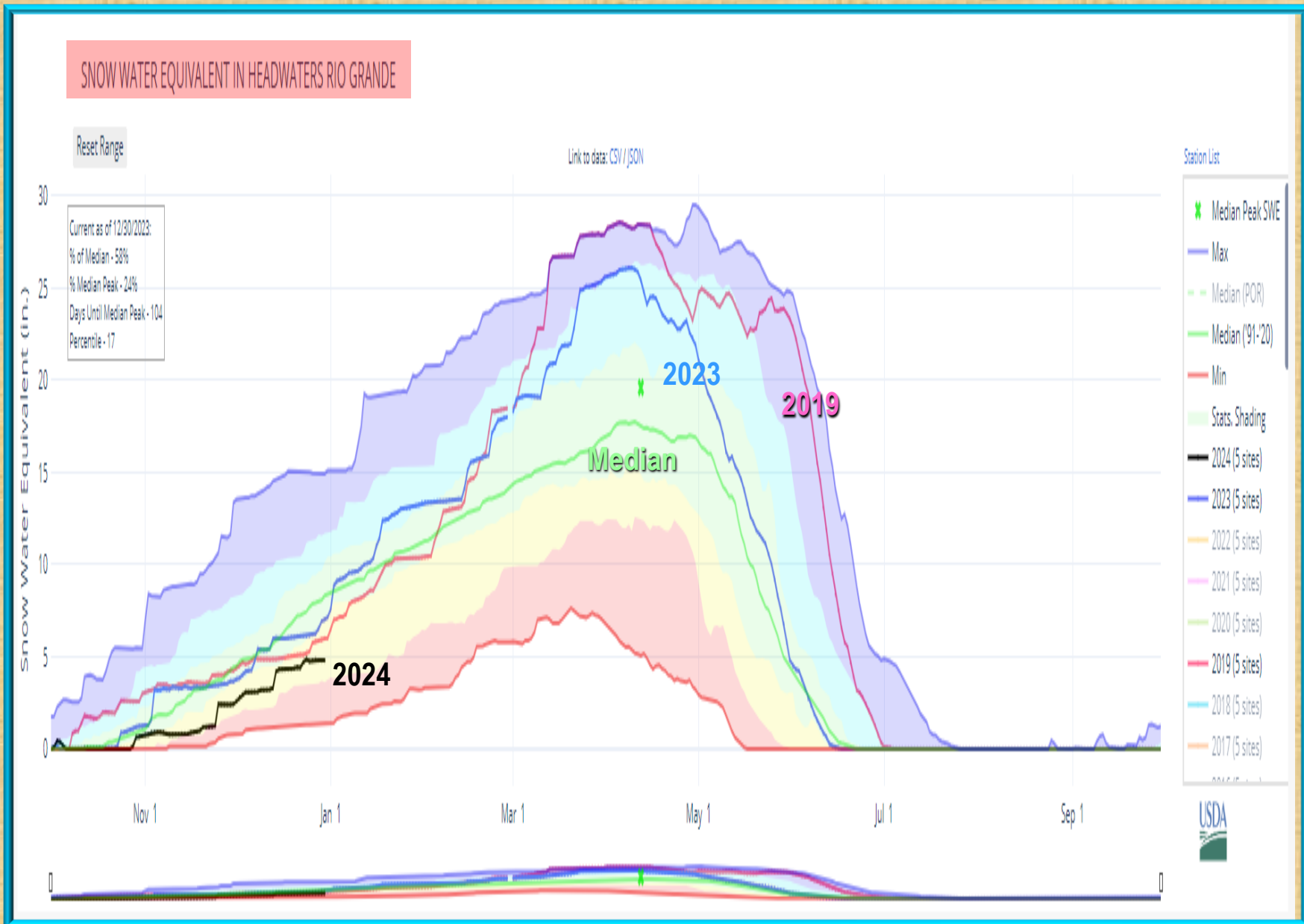


Departure From Normal



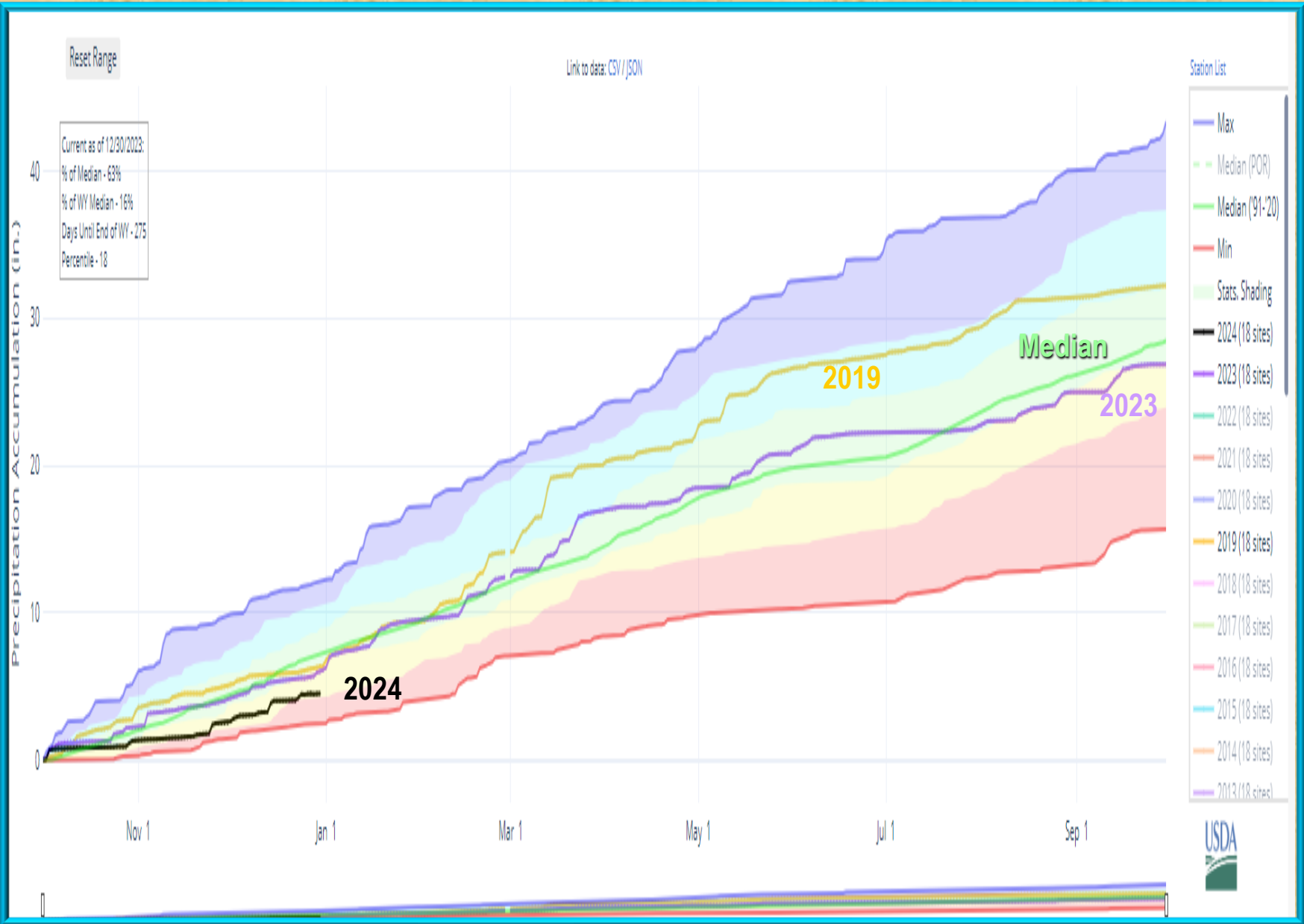
Snow Water Equivalent as of December 31, 2023

Compare to last few years and average values



Precipitation for the Water Year Oct 1 – Dec 31, 2023

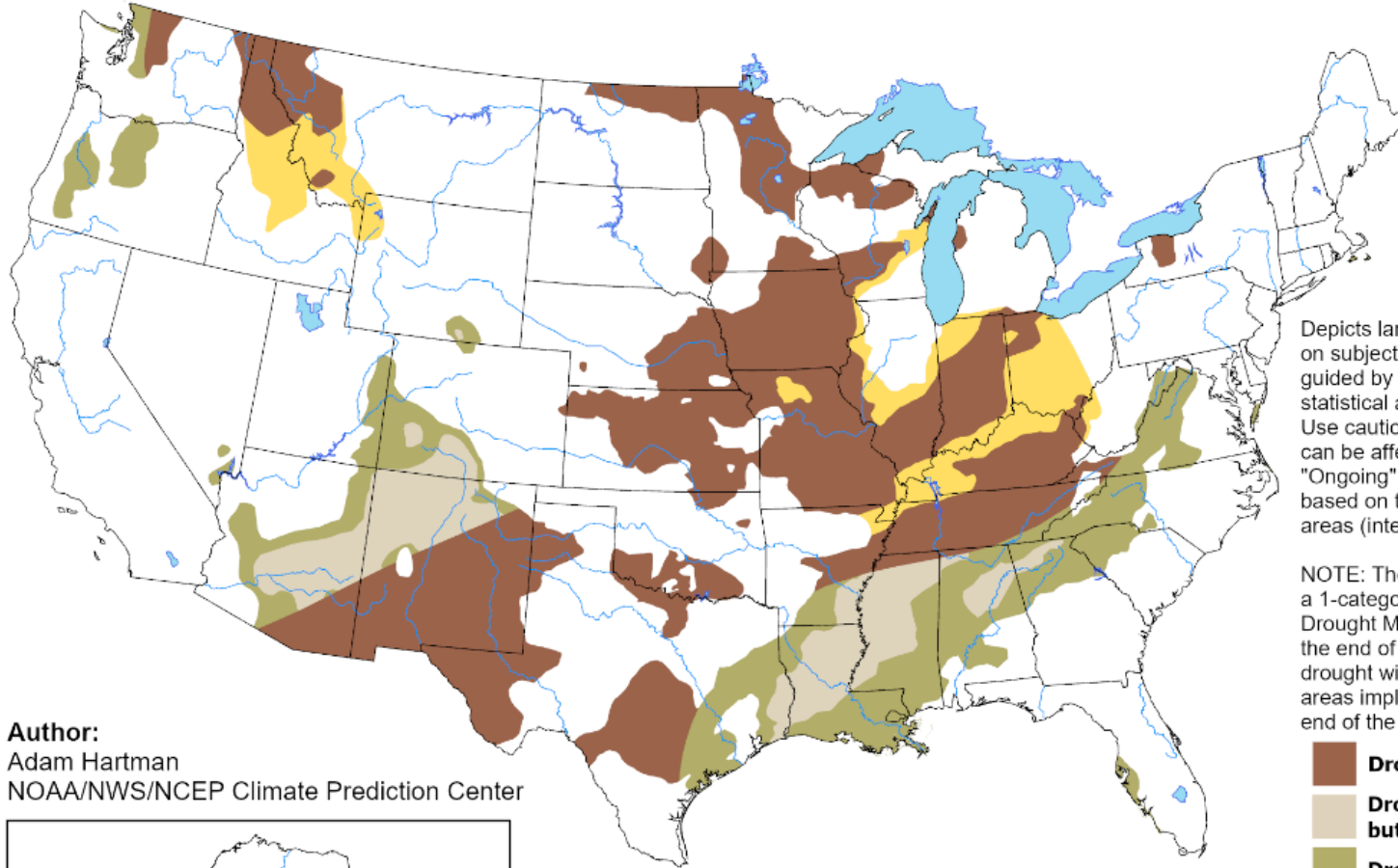
Compare to last few years and average values



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period






Valid for December 21, 2023 - March 31, 2024
Released December 21, 2023

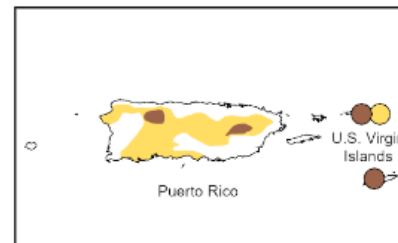
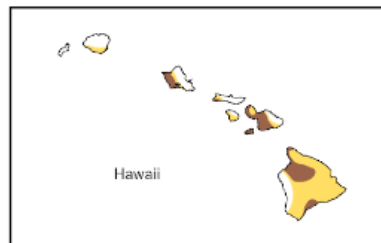


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Adam Hartman
NOAA/NWS/NCEP Climate Prediction Center

-  **Drought persists**
-  **Drought remains, but improves**
-  **Drought removal likely**
-  **Drought development likely**
-  **No drought**



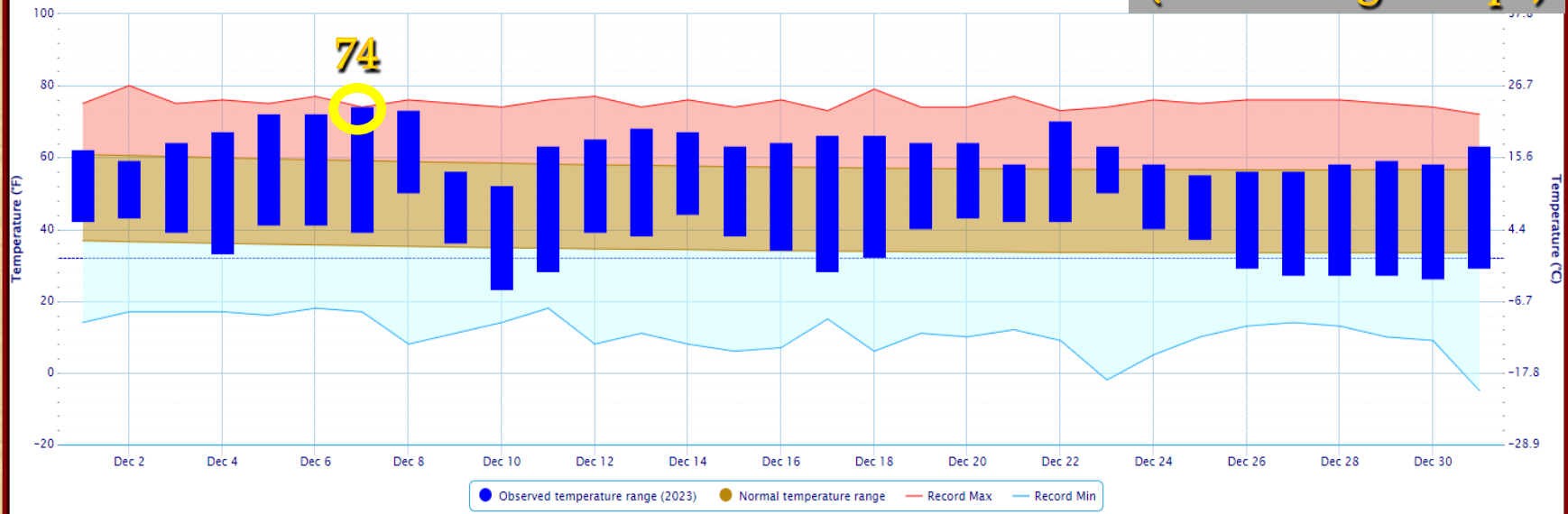
Temperature and precipitation data for December 2023 in El Paso

○ = record

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

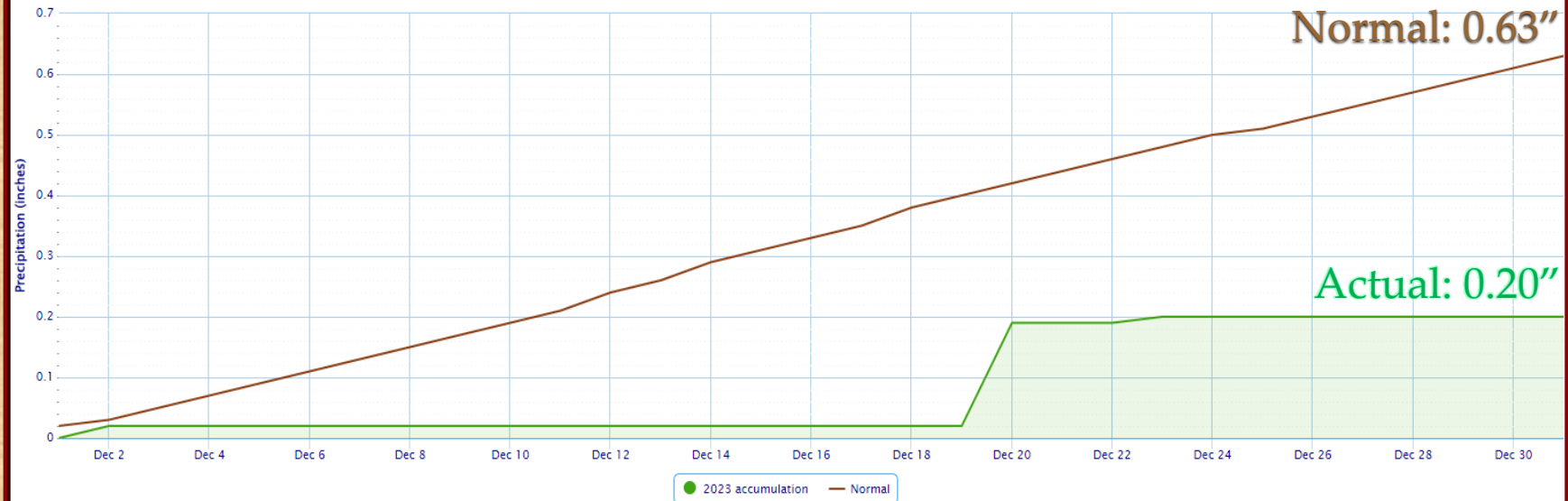
Period of Record – Max temperature: 1887-01-01 to 2023-12-31; Min temperature: 1879-01-01 to 2023-12-31. Normals period: 1991-2020.

(Record High Temps)

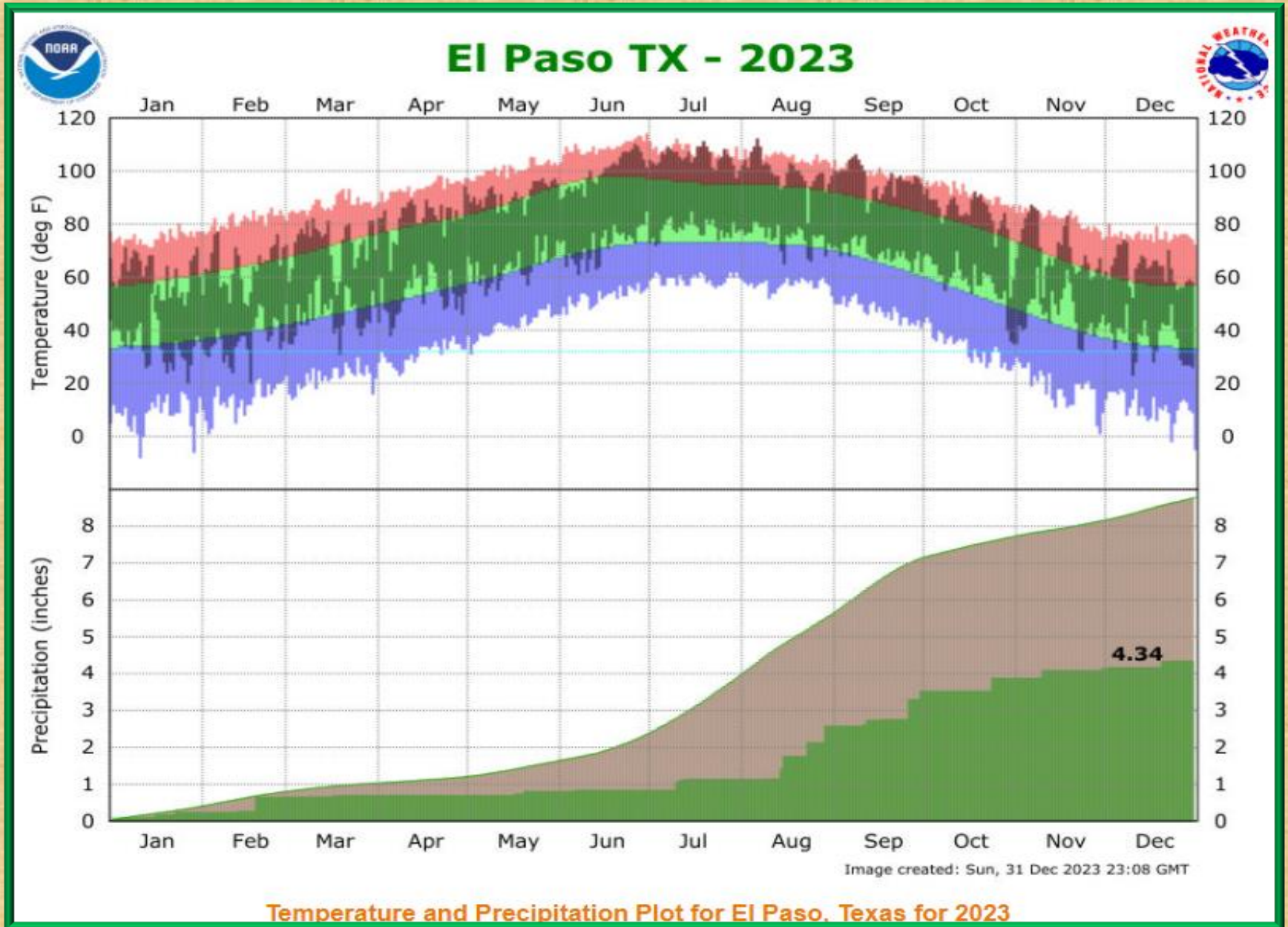


Accumulated Precipitation – El Paso Area, TX (ThreadEx)

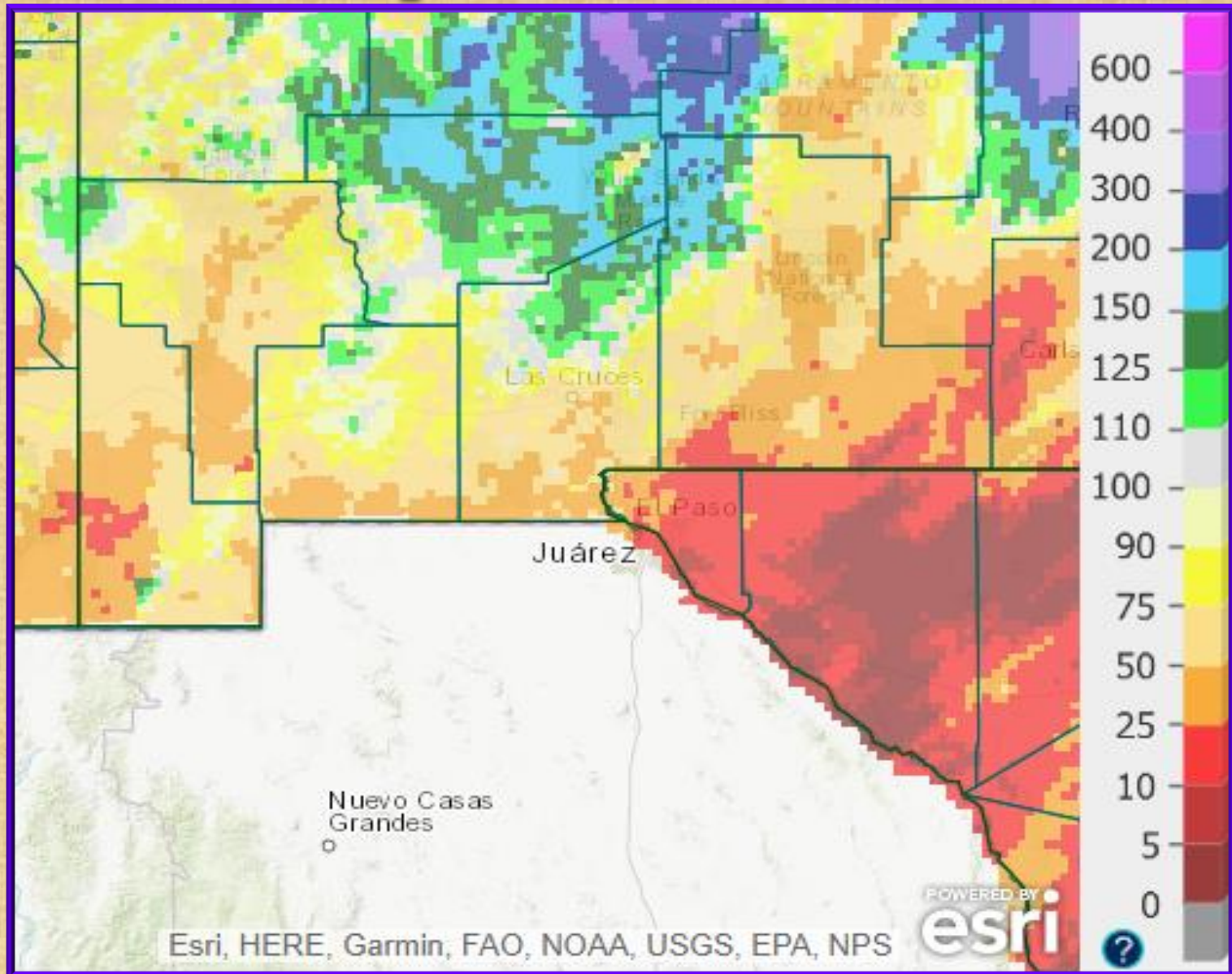
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



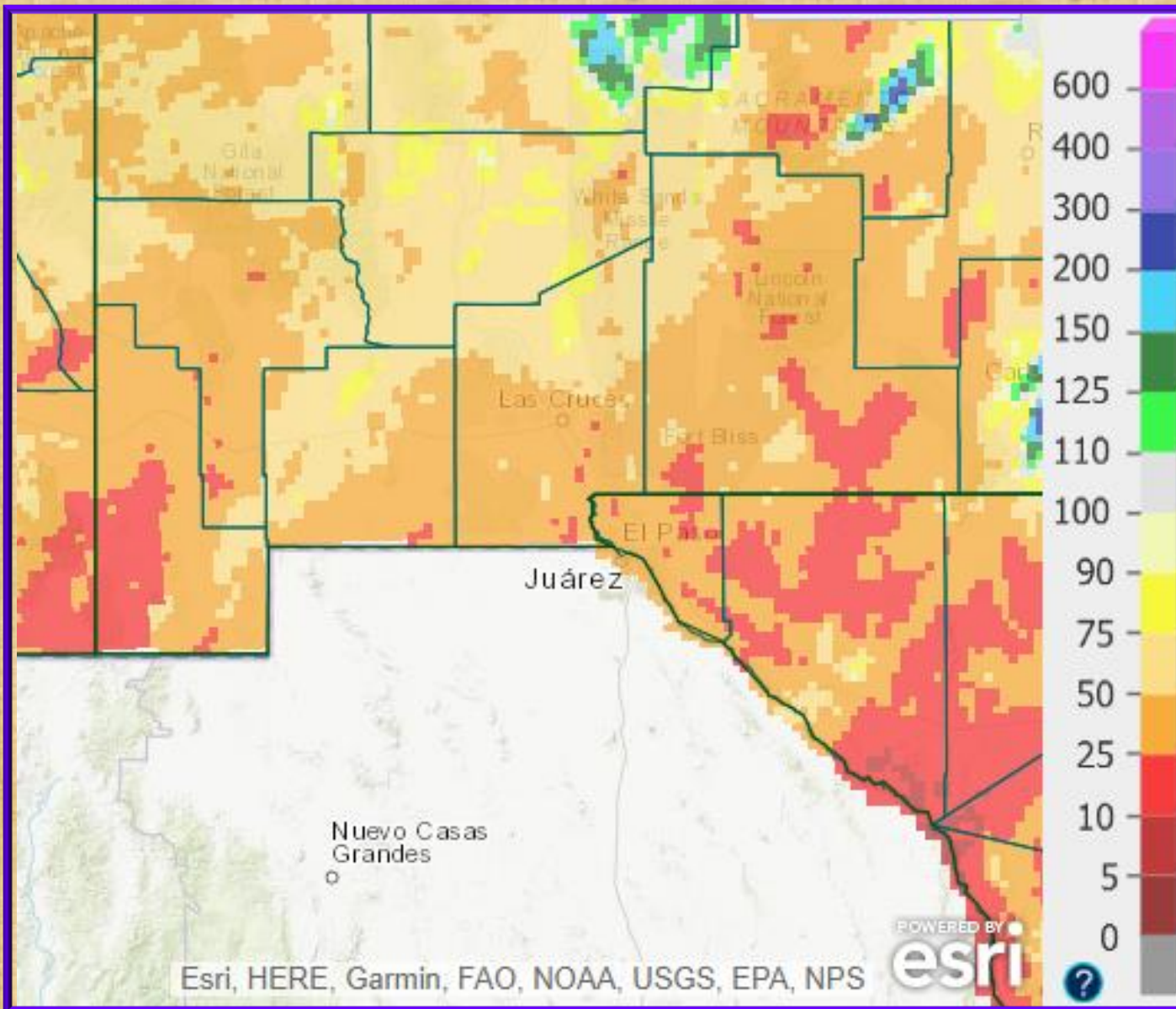
Temperature and Precipitation for 2023 for El Paso



December 2023 rainfall estimate percent of normal



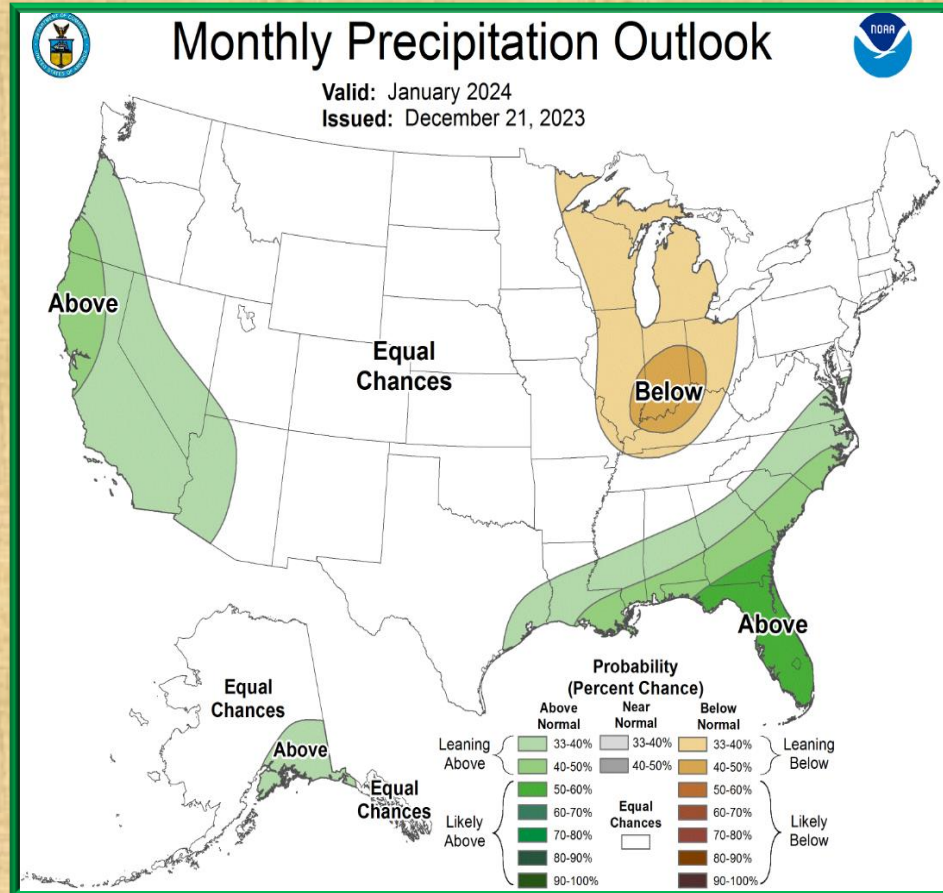
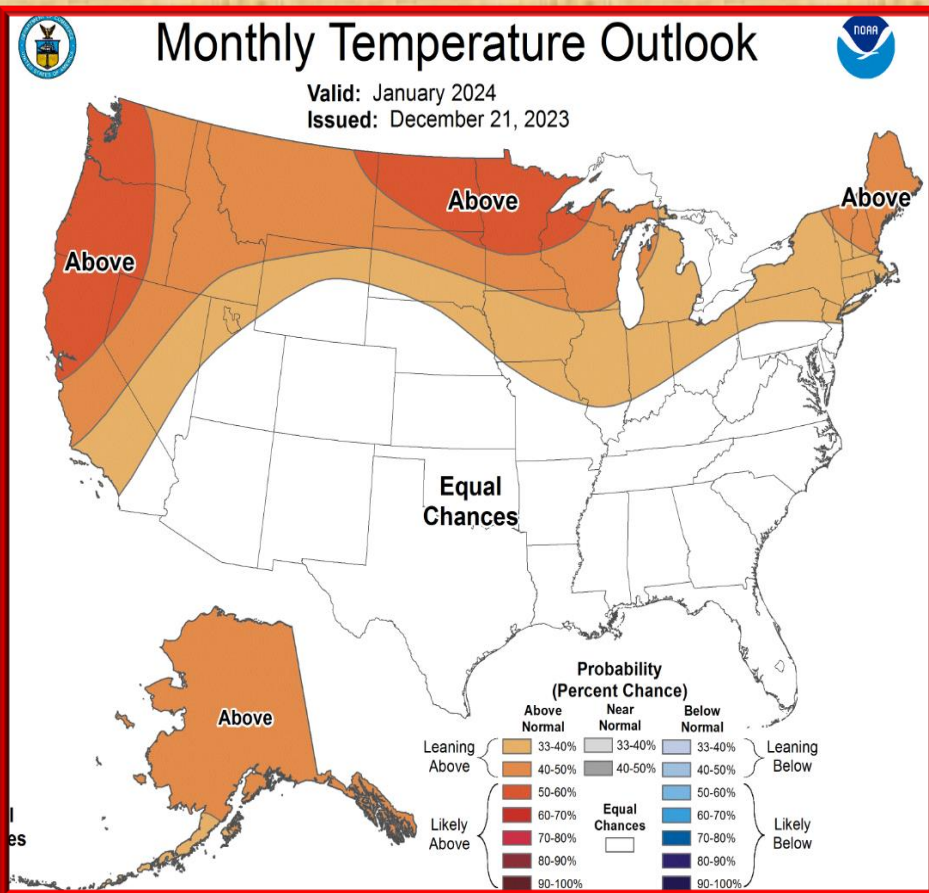
Radar rainfall estimate percent of normal for the Water Year (Oct 1 – Dec 31)



Temperature and precipitation outlook For January 2024

Temperature

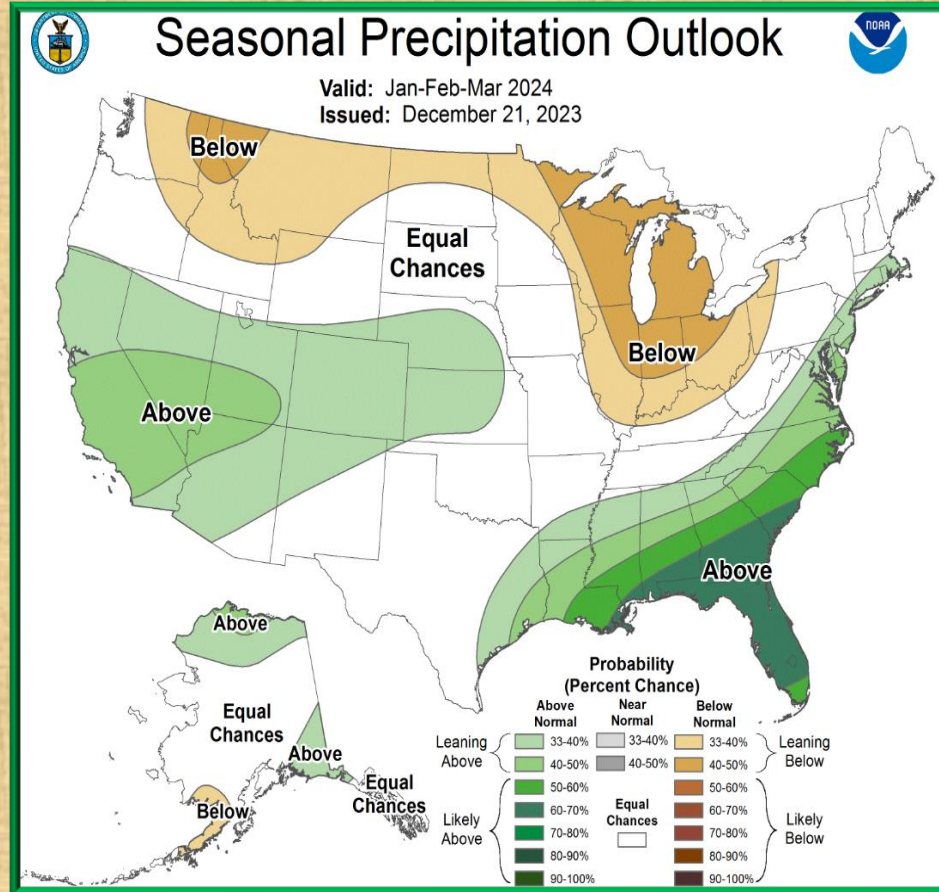
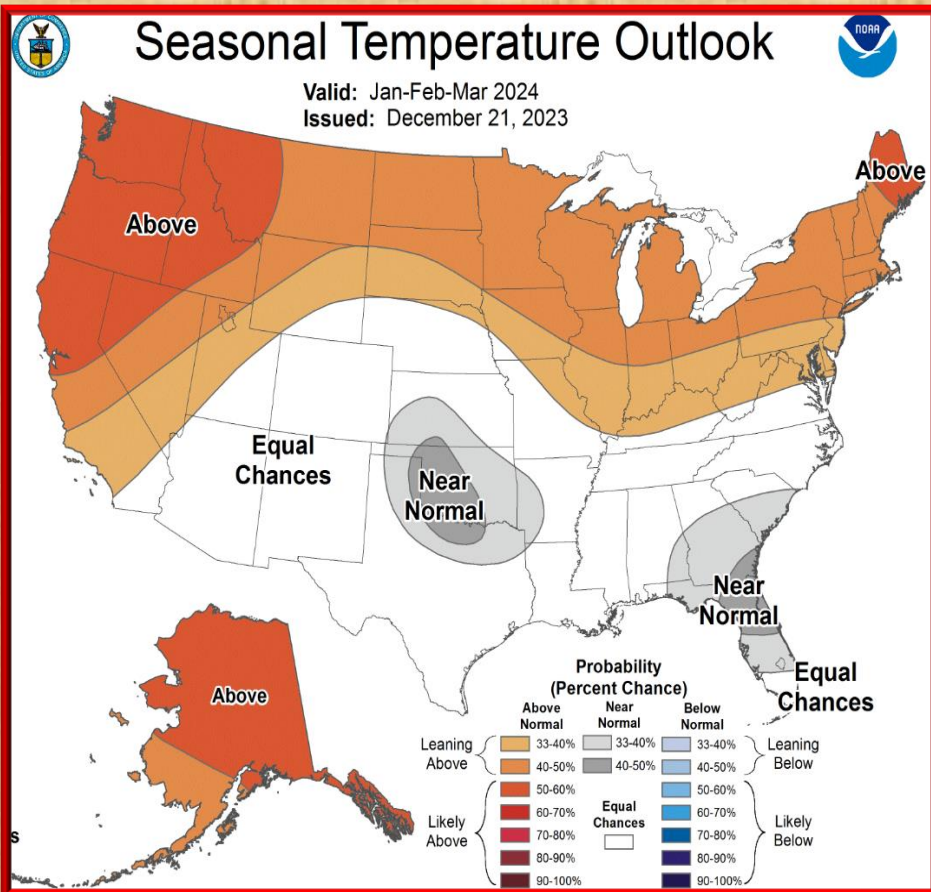
Precipitation



Temperature and precipitation outlook for Jan-Mar 2024

Temperature

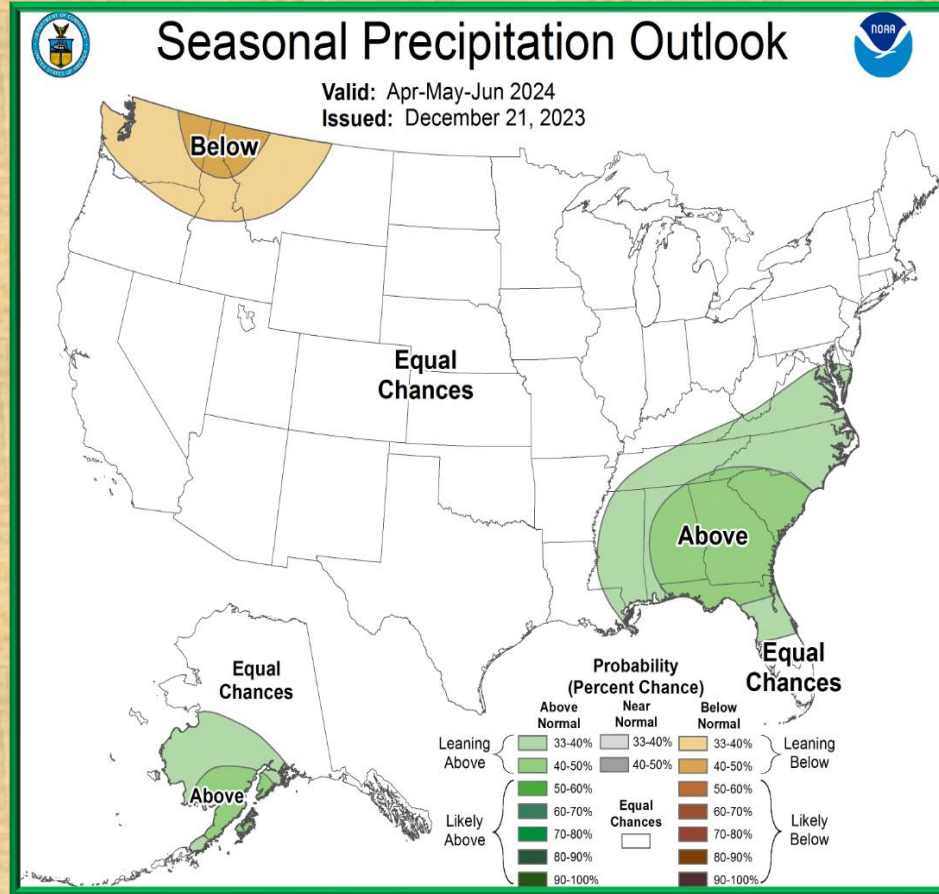
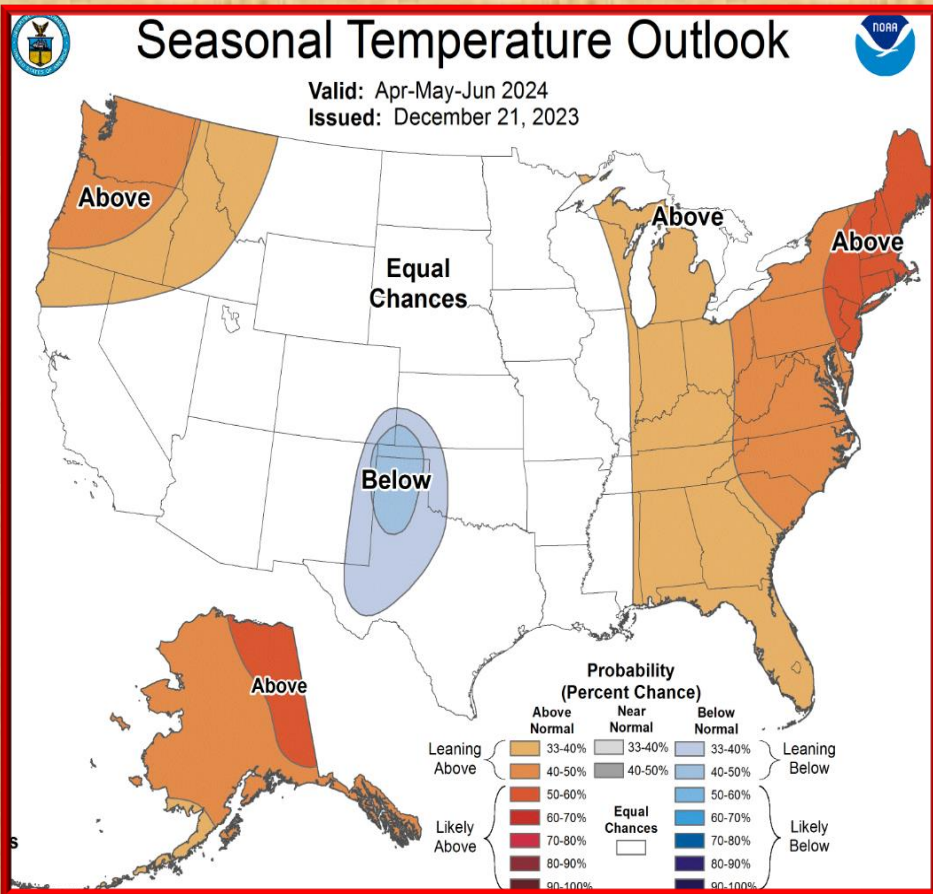
Precipitation



Temperature and precipitation outlook for Apr-Jun 2024

Temperature

Precipitation

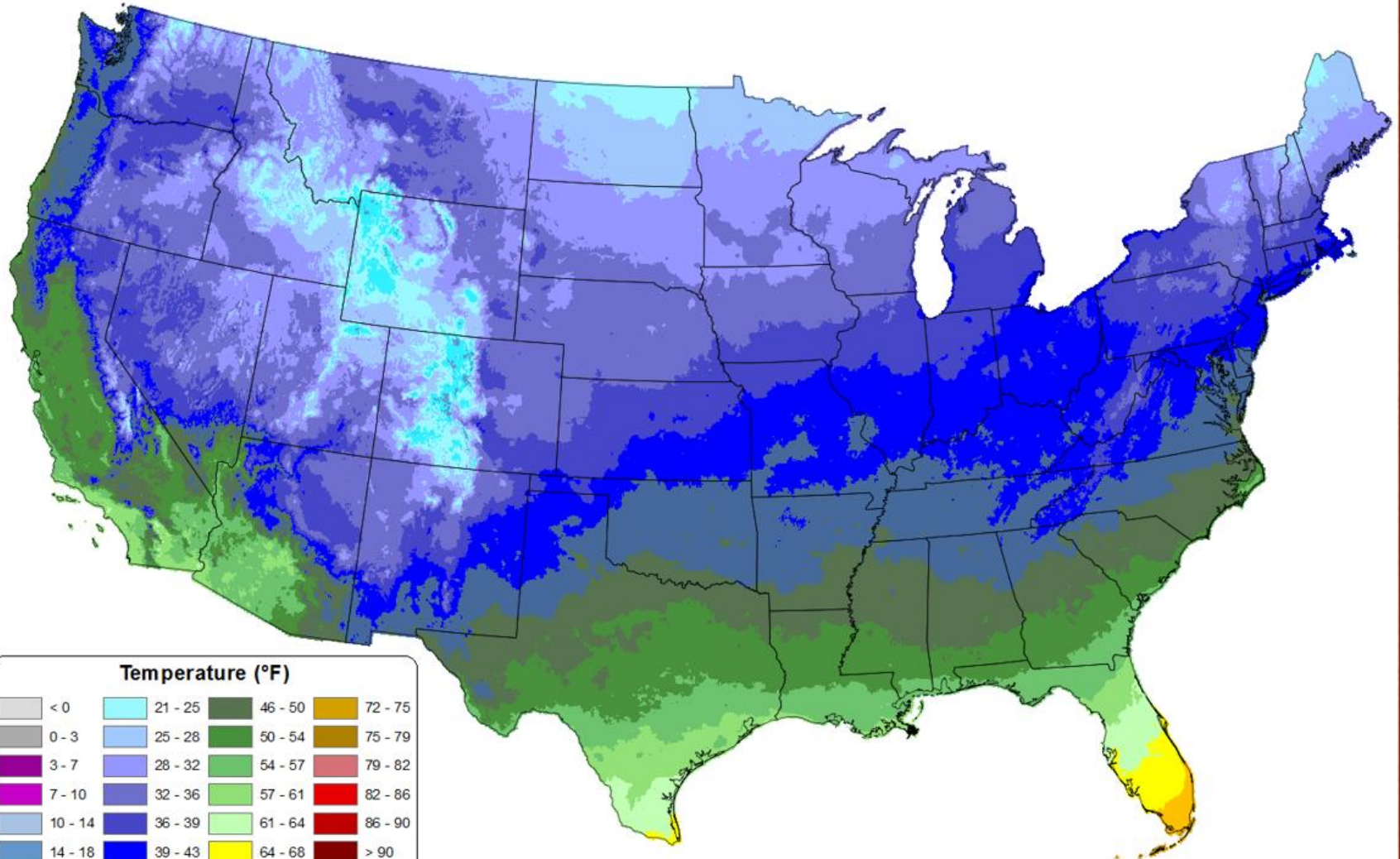


Average Daily Mean Temperature for December 2023

Average Daily Mean Temperature: 01 Dec 2023 - 31 Dec 2023

Period ending 7 AM EST 31 Dec 2023

(Map created 01 Jan 2024)



Temperature (°F)

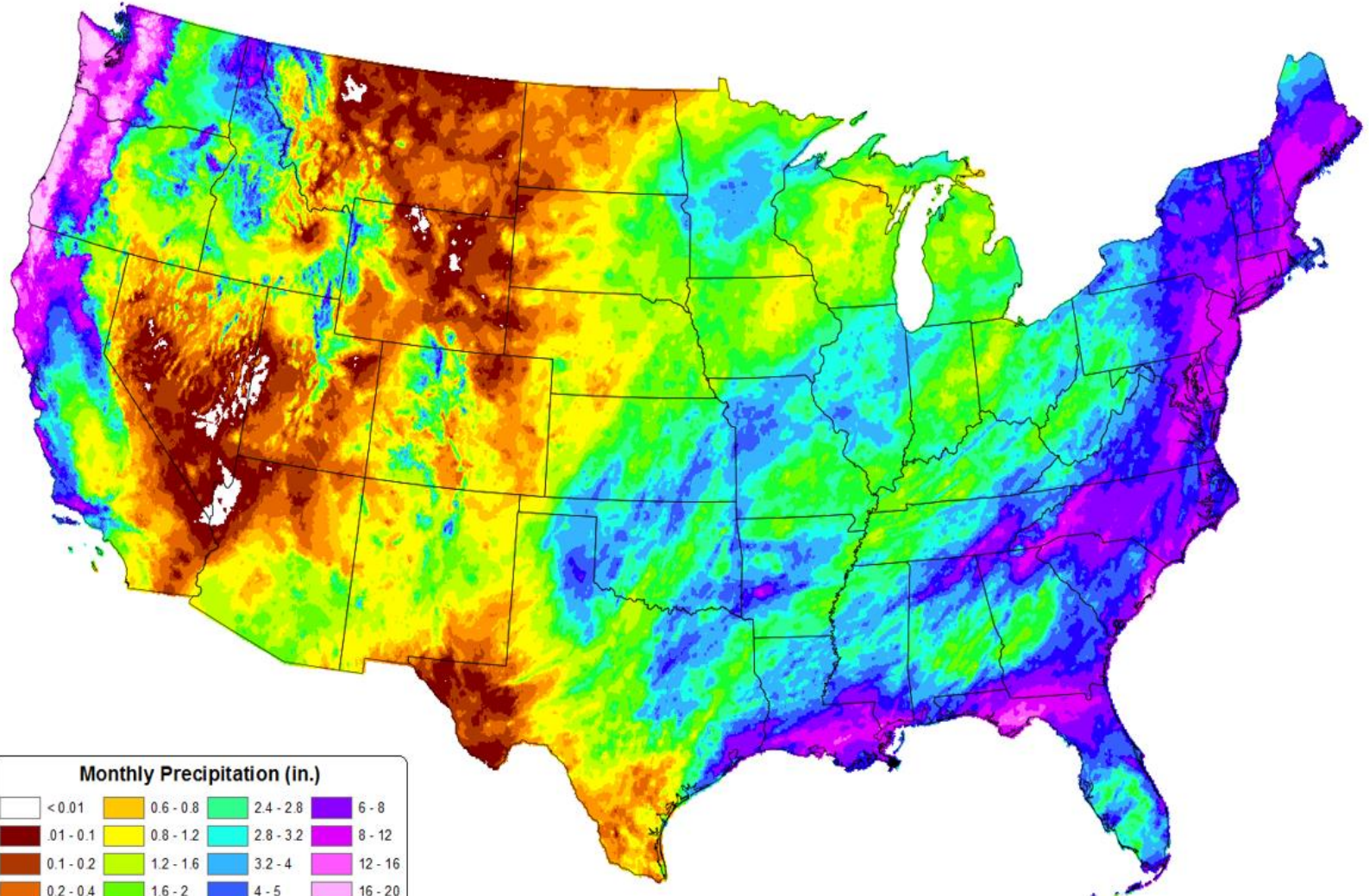
< 0	21 - 25	46 - 50	72 - 75
0 - 3	25 - 28	50 - 54	75 - 79
3 - 7	28 - 32	54 - 57	79 - 82
7 - 10	32 - 36	57 - 61	82 - 86
10 - 14	36 - 39	61 - 64	86 - 90
14 - 18	39 - 43	64 - 68	> 90
18 - 21	43 - 46	68 - 72	

Total Precipitation for December 2023

Total Precipitation: 01 Dec 2023 - 31 Dec 2023

Period ending 7 AM EST 31 Dec 2023

(Map created 01 Jan 2024)



Monthly Precipitation (in.)



Selected Weather Reports December 2023

Date/Time	Location (County)	Event
DEC 23 705 PM	JORNADA RANGE-DONA ANA	1.52" 3-DAY RAIN TOTAL
DEC 23 741 PM	MESCALERO-OTERO	1.40" 3-DAY RAIN TOTAL
DEC 23 800 AM	T OR C .5NE-SIERRA	1.38" 3-DAY RAIN TOTAL
DEC 23 749 PM	HANOVER 5NE-SIERRA	1.36" 3-DAY RAIN TOTAL
DEC 23 530 PM	BUCKHORN-GRANT	1.31" 3-DAY RAIN TOTAL
DEC 23 746 PM	LA LUZ-OTERO	1.28" 3-DAY RAIN TOTAL
DEC 23 800 AM	VIRDEN 1.6NW-HIDALGO	1.24" 3-DAY RAIN TOTAL
DEC 23 800 AM	RECROCK-GRANT	1.19" 3-DAY RAIN TOTAL
DEC 23 800 AM	SILVER CITY 2.6SE-GRANT	1.14" 3-DAY RAIN TOTAL
DEC 23 754 PM	LAKE ROBERTS-GRANT	1.00" 3-DAY RAIN TOTAL
DEC 23 745 PM	PINOS ALTOS-GRANT	.97" 3-DAY RAIN TOTAL
DEC 23 745 PM	ARREY-SIERR	.91" 3-DAY RAIN TOTAL

Selected Weather Reports December 2023

Date/Time	Location (County)	Event
DEC 23 746 PM	BELL CANYON-OTERO	.73" 3-DAY RAIN TOTAL
DEC 23 745 PM	TIMBERO-OTERO	.71" 3-DAY RAIN TOTAL
DEC 23 745 PM	LAS CRUCES SOUTHWIND-DONA ANA	.71" 3-DAY RAIN TOTAL
DEC 23 653 PM	DEMING AIRPORT-LUNA	.63" 3-DAY RAIN TOTAL
DEC 23 800 AM	ALAMOGORDO 2.4NE	.61" 3-DAY RAIN TOTAL

Special Features

www.weather.gov/epz/elpwindrosedata

Month: DECEMBER

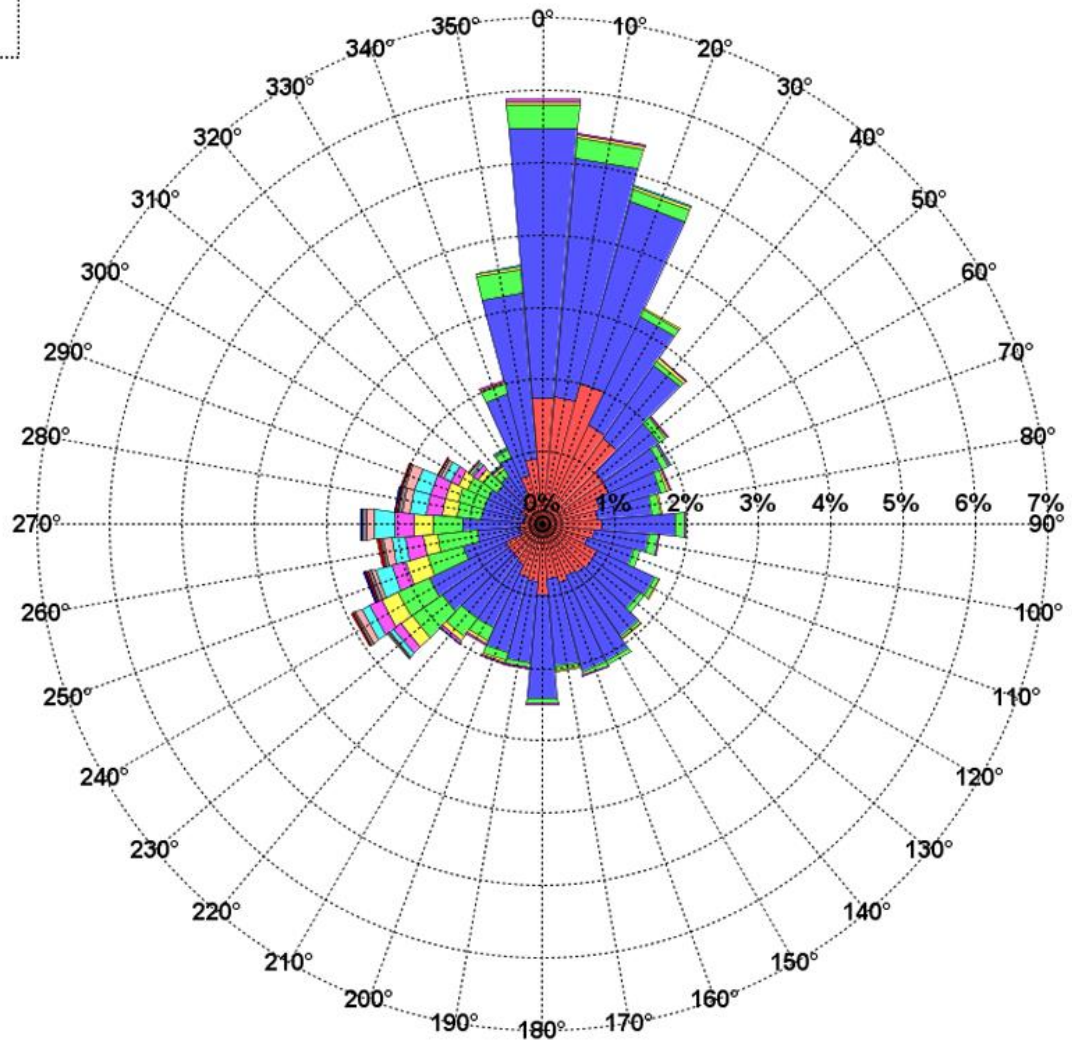
Calm: 13.59%

Variable: 1.46%

WindRose - KELP - EL PASO INTL

% Frequency of Wind Speed from a Direction

POR:19730101-20140602



Local forecast by "City, St" or ZIP code
 Enter location ...
[Location Help](#)

Heavy Rain and Flash Flooding Possible Over Parts of the Eastern United States
 Heavy rainfall is expected over portions of the eastern United States through Thursday. Flooding and flash flooding will be possible in some areas. Click the "Read More" link for excessive rainfall forecasts from the Weather Prediction Center. [Read More >](#)

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NWS El Paso
[Weather.gov > El Paso, TX](#)

El Paso, TX
 Weather Forecast Office

Current Hazards Current Conditions Radar Forecasts Rivers and Lakes Climate and Past Weather **Local Programs**

Today

Wednesday
 Warmer with a Few Afternoon Storms
 Weather Forecast Office
 El Paso, TX
 September 27, 2016 4:43 PM

Local forecast by "City, St" or ZIP code
 Enter location ...
[Location Help](#)

Heavy rain expected across the Mid-Atlantic region and central Appalachians.
 Heavy rainfall is possible over portions of the eastern United States today, with the highest risk across the Mid-Atlantic and central Appalachians. Click the "Read More" link for excessive rainfall forecasts from the Weather Prediction Center. Afternoon showers and thunderstorms are possible over portions of the Southwest and southern Rockies through Friday. [Read More >](#)

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Monthly Weather Digest
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Current Hazards Current Conditions Radar Forecasts Rivers and Lakes Climate and Past Weather **Local Programs**

Southern New Mexico and Far West Texas has a variety of weather from month to month. Conditions can range from extreme drought, to heavy flooding rains, from record breaking heat to bone chilling cold. Below you will find past weather highlights from the area that the NWS office in Santa Teresa NM covers. This area includes the following counties in New Mexico: Hudspeth, Grant, Luna, Sierra, Doña Ana and Otero and the following counties in Texas: El Paso and Hudspeth.

WEATHER DIGESTS AND BULLETINS	
Weather Digest	Southwest Weather Bulletins
January	2005 Spring Fall
February	2006 Spring Fall
March	2007 Spring Fall
April	2008 Spring Fall
May	2009 Spring Fall
June	2010 Spring Fall
July	2011 Spring Fall
August	2012 Spring Fall
September	2013 Spring Fall
October	2014 Spring Fall
November	
December	

Don't Forget-Current and past issues of our Weather Digest are available on our website at www.weather.gov/epz/

Just click on "Local Programs>Weather Digest", then choose which month's Digest to view. Also, though discontinued, don't forget to check out our back issues of Southwest Weather Bulletin.

weather.gov/epz