

December 2020 Weather Digest



Al Braden

December 2020 Weather Summary

Like a broken record, December turned out to be much like the previous two months; very dry with generally one rain event each month of October, November and December. However, unlike the past several months, December turned out to be colder than normal. Most sites were about 1 to 2 degrees below normal with the average daily temperature. Of course with the dry month, the regional drought continues to worsen. The majority of southern New Mexico and far west Texas are now in extreme to exceptional drought conditions. Most of the area saw monthly precipitation of between five and thirty percent of normal.

Weather events were few and far between for December, with just two events worth mentioning. On the 9th, a Pacific low moved up from the Baja over the Borderland, giving most of the area its only precipitation of the month, with most totals remained light. Then on the 30th a storm originating in the Pacific dropped down over northern Mexico, eventually bringing up moisture and precipitation in the form of snow, over Hudspeth County. Most of the county reported snowfall of two to five inches and places further east into western Texas reported up to 9 inches.

December 2020 Weather Summary, cont'd

Looking ahead to January, the daylight begins to lengthen and temperatures slowly warm up as the middle of winter gives way to late winter with spring in the back ground. Daylight on the first is 10 hours and 7 minutes, while on the last day of January daylight is 10 hours and 40 minutes long. The average high temperature in El Paso at the beginning of January is 56 degrees, while on the last day of the month the high has increased to 60 degrees. Moon highlights include the full Moon on the 28th and the new Moon on the 12th.

Dec 3 Helmholtz Waves El Paso



VILLAGE OF
CLOUDCROFT
NEW MEXICO
9,000 feet above stress level

Dec 4 Sierra Blanca



© 2020, CloudcroftWebcam.com

12/04/20 09:51:07 AM MST

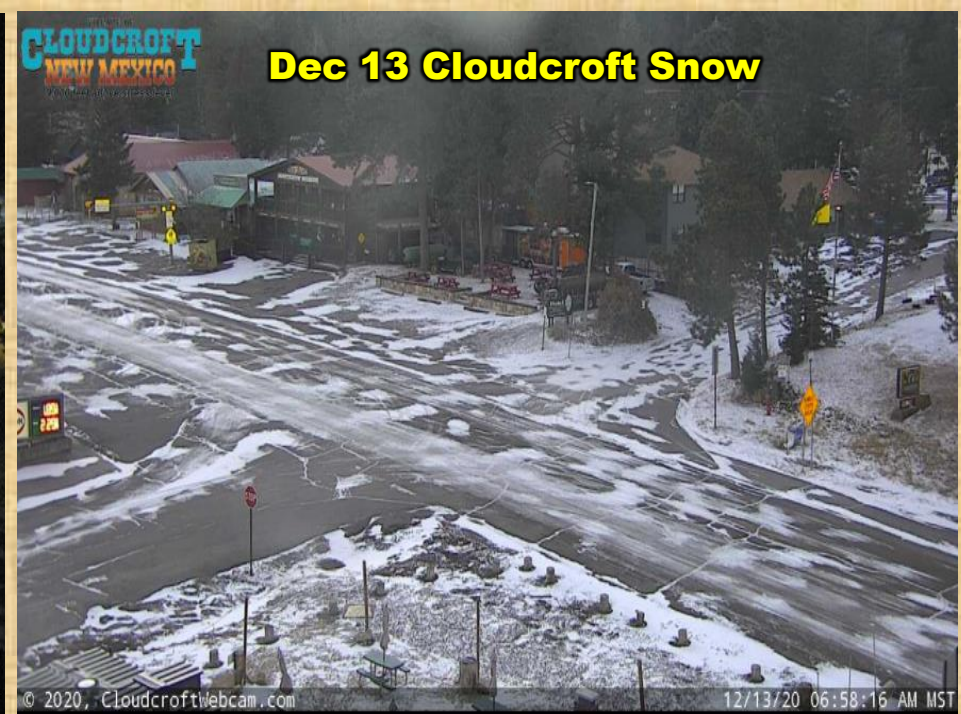
Dec 9 Silver City Rain



VILLAGE OF
CLOUDCROFT
NEW MEXICO
9,000 feet above stress level

Dec 9 Cloudcroft Snow





Dec 20 The Moon and Conjunction of Jupiter and Saturn

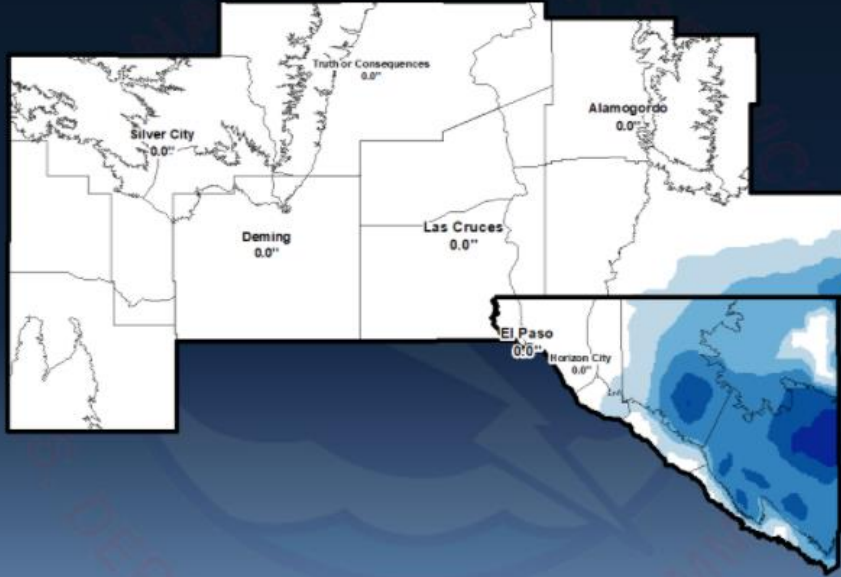


Dec 30 Snow Hudspeth Co.

National Weather Service El Paso Texas

Snowfall Analysis 12/30/2020 05:00AM MST to 12/31/2020 05:00AM MST

Analysis Data Source: NOHRSC (Values Estimated at Locations)



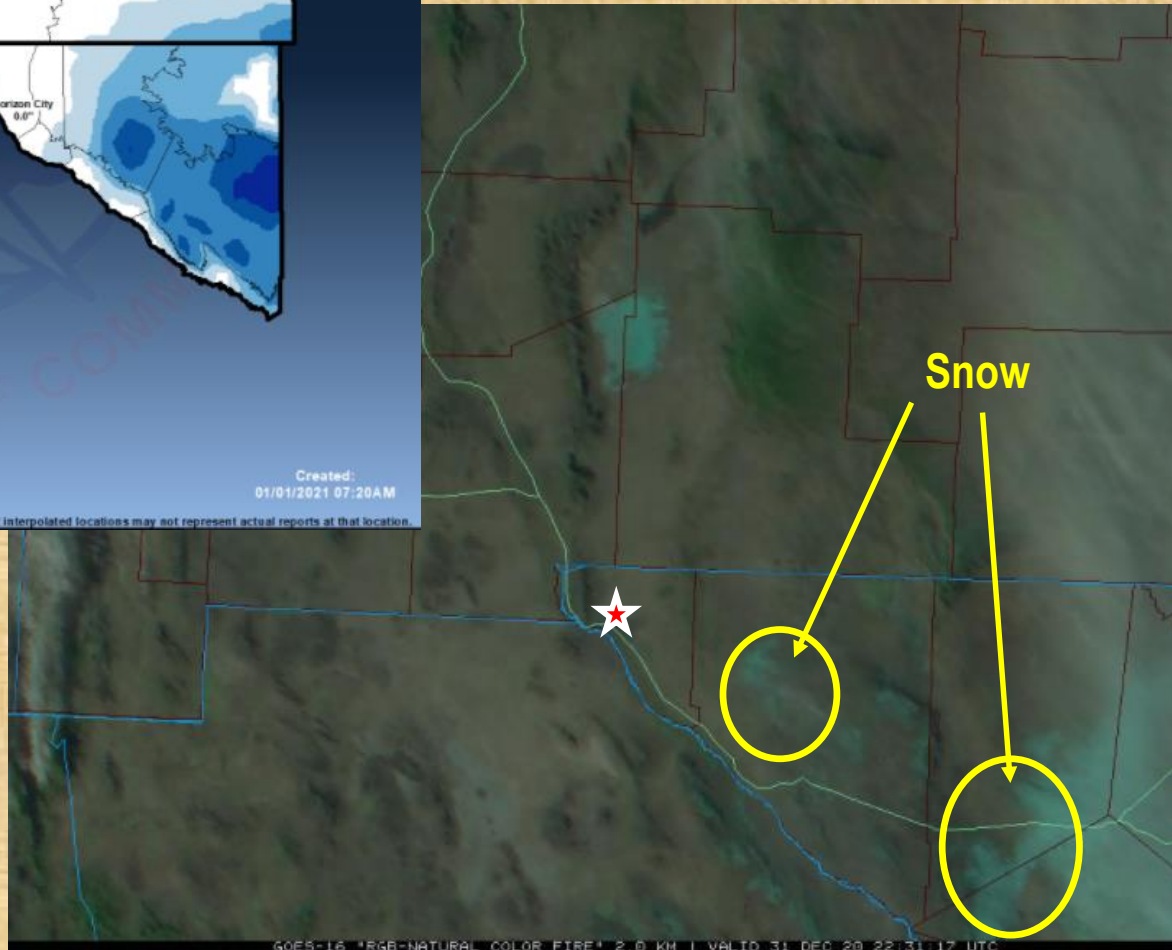
Snowfall Analysis 0" - 120"



0.0"
< 1.0"
1.0" - 2.0"
2.0" - 3.0"
3.0" - 4.0"
4.0" - 6.0"
6.0" - 8.0"
8.0" - 12.0"
12.0" - 18.0"
18.0" - 24.0"
24.0" - 30.0"
30.0" - 36.0"
36.0" - 48.0"
48.0" - 60.0"
60.0" - 72.0"
72.0" - 96.0"
96.0" - 120.0"

Created:
01/01/2021 07:20AM

This is an experimental product. Care should be taken in using the data. Unofficial observations are plotted. Values at interpolated locations may not represent actual reports at that location.



ENSO Alert System Status: La Niña Advisory

ENSO Alert System

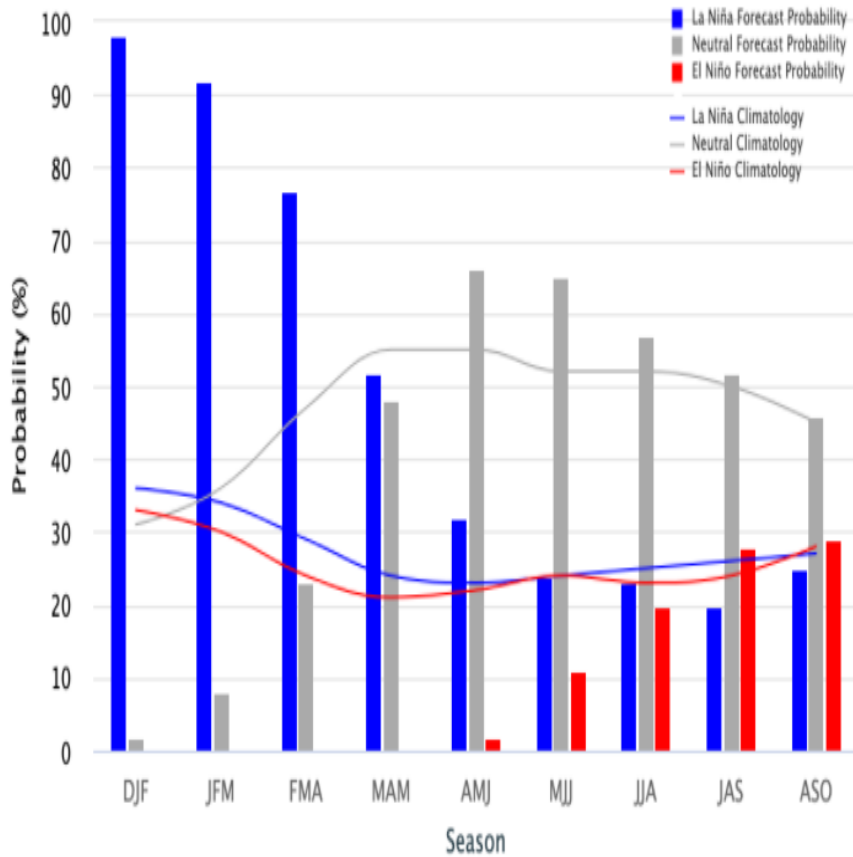
- **El Niño or La Niña Watch:** Issued when conditions are favorable for the development of El Niño or La Niña conditions in the next six months.
- **El Niño or La Niña Advisory:** Issued when El Niño or La Niña conditions are observed and expected to continue.

ENSO Forecast

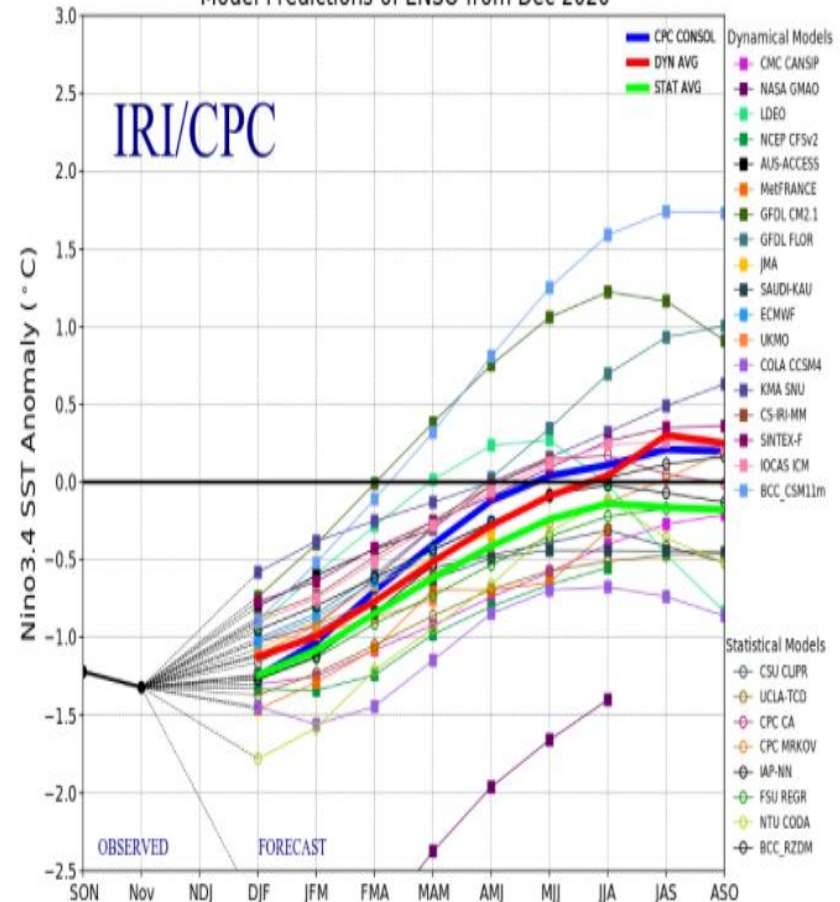
ENSO is now in a moderate La Niña phase; likely to persist through at least early spring.

Mid-December 2020 IRI/CPC Model-Based Probabilistic ENSO Forecasts

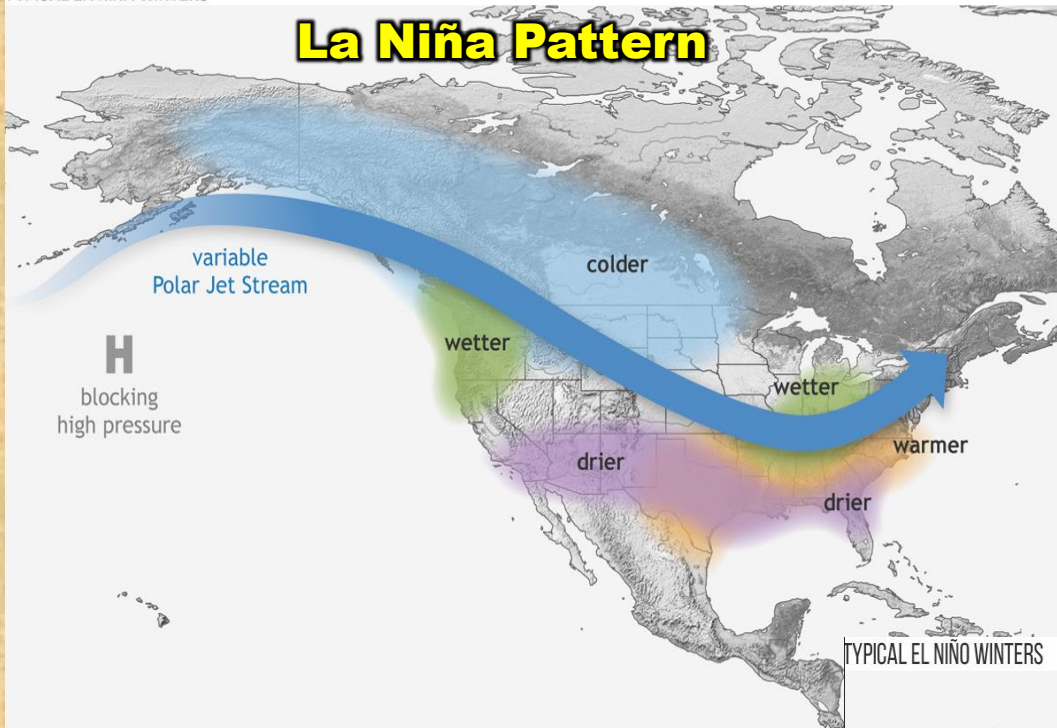
ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5°C to 0.5°C



Model Predictions of ENSO from Dec 2020

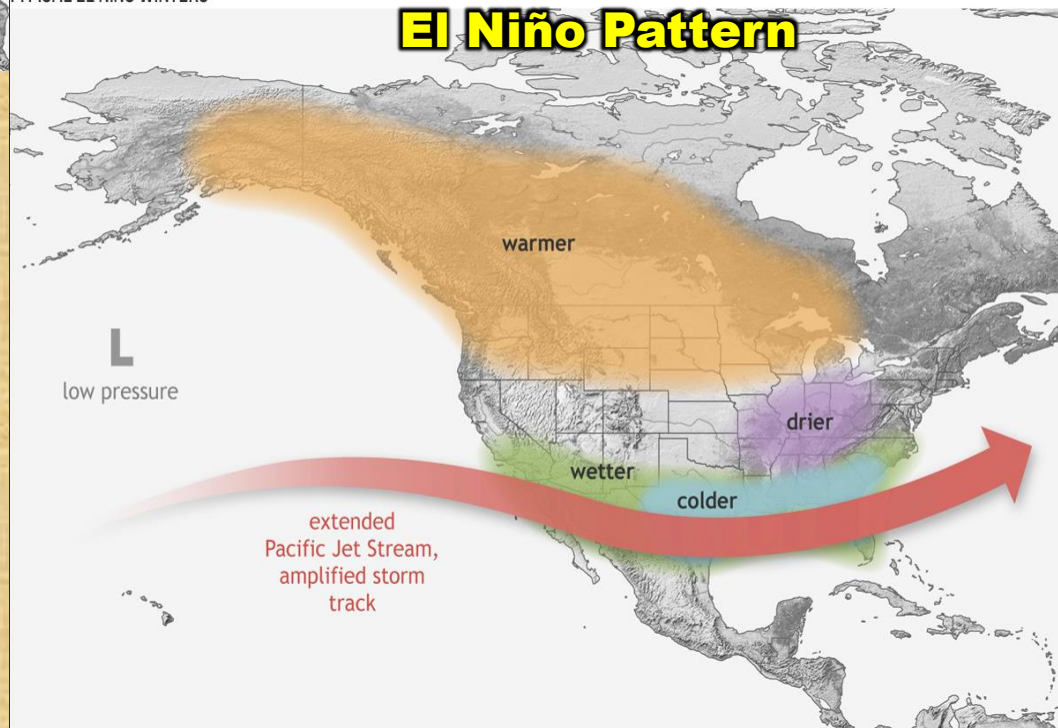


La Niña Pattern



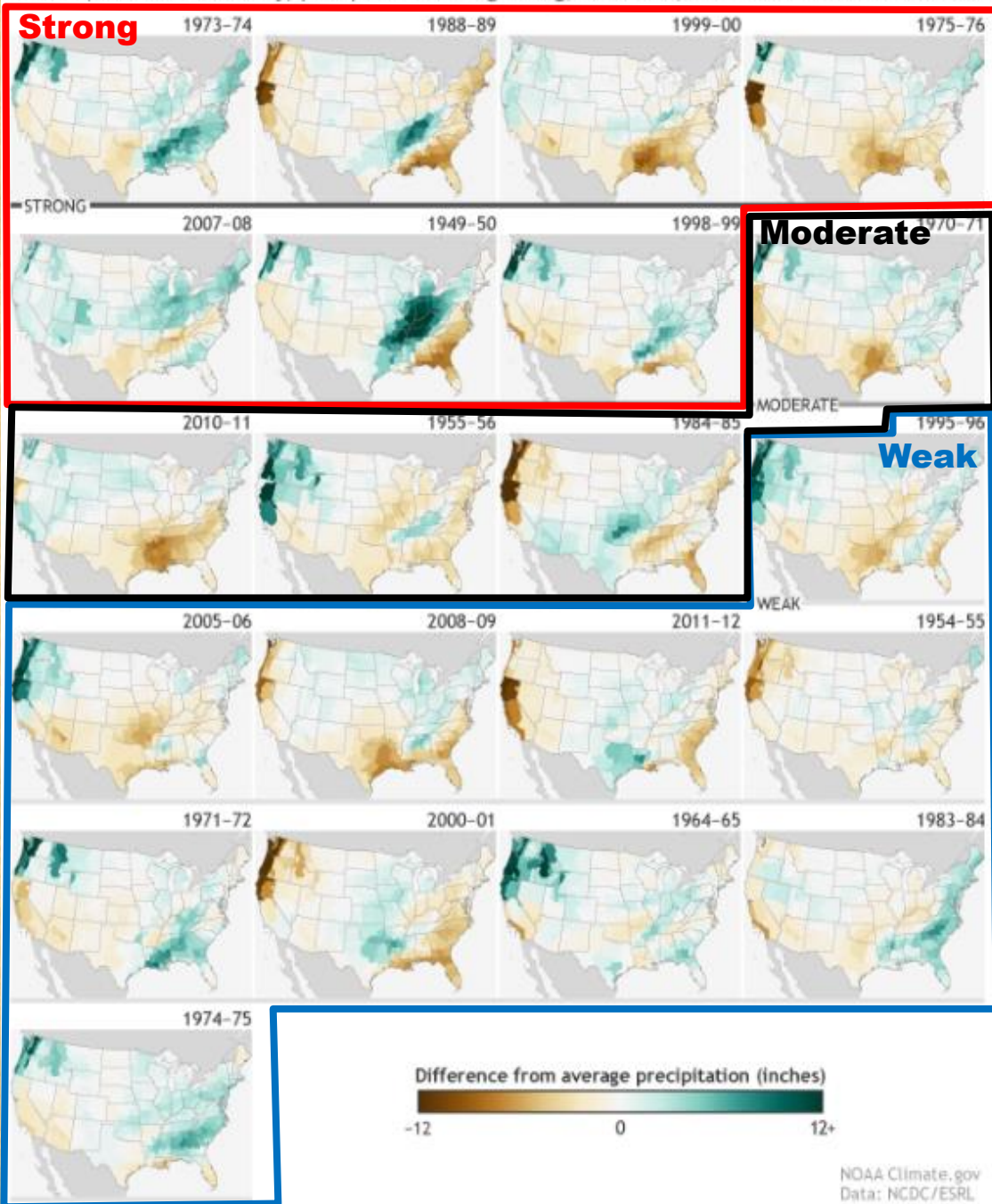
We are heading into a weak to moderate La Niña for much of this winter. As the pattern shows, a ridge of high pressure tends to build off the west coast of the U.S., blocking most of our Pacific winter storm systems. These storms tend to end up moving across the northern Plains and down to the southeastern 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.

Winter (December-February) precipitation during strong, moderate, and weak La Niñas since 1950

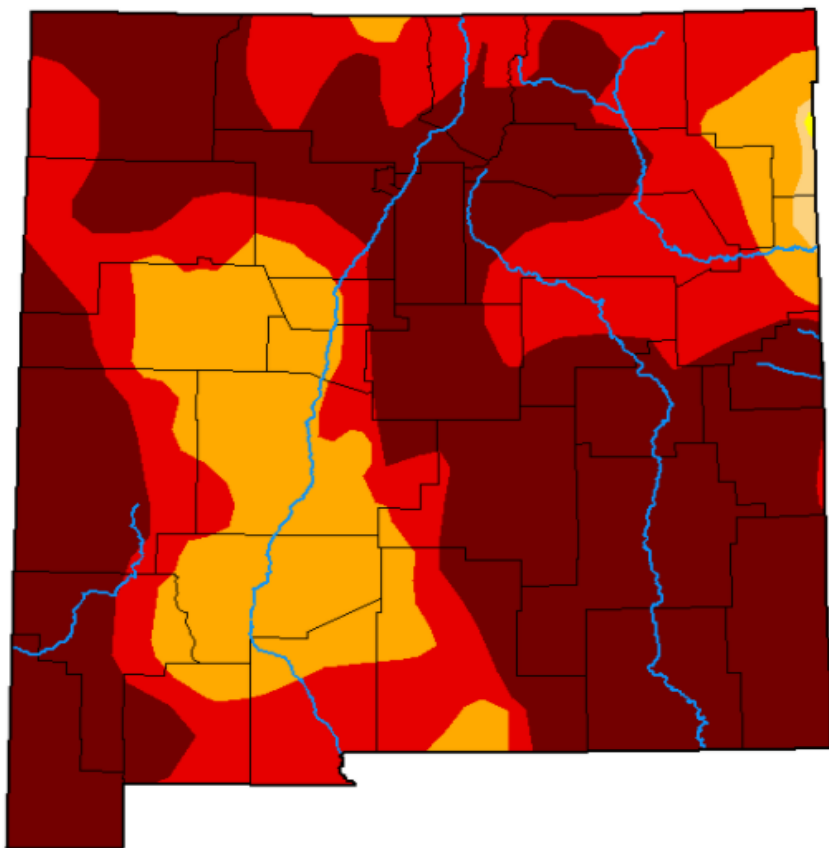


Examples of the numerous La Niña winters since 1950. These maps depict the departure from normal precipitation amounts for a winter.

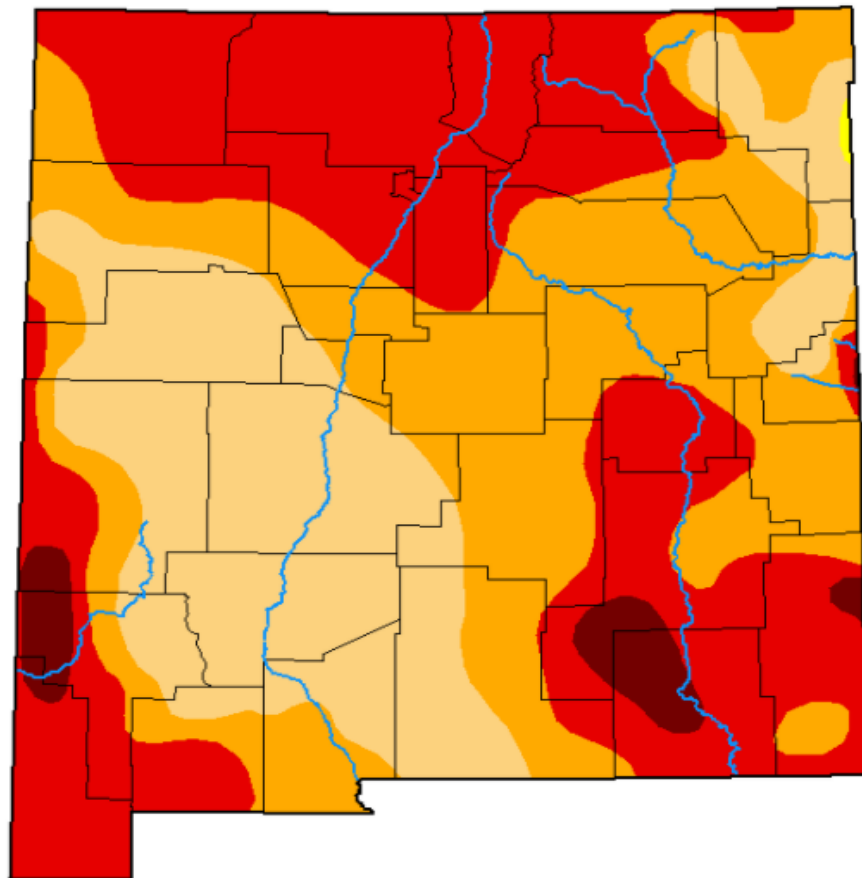
Current drought conditions for New Mexico and 3 month change

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

December 22, 2020








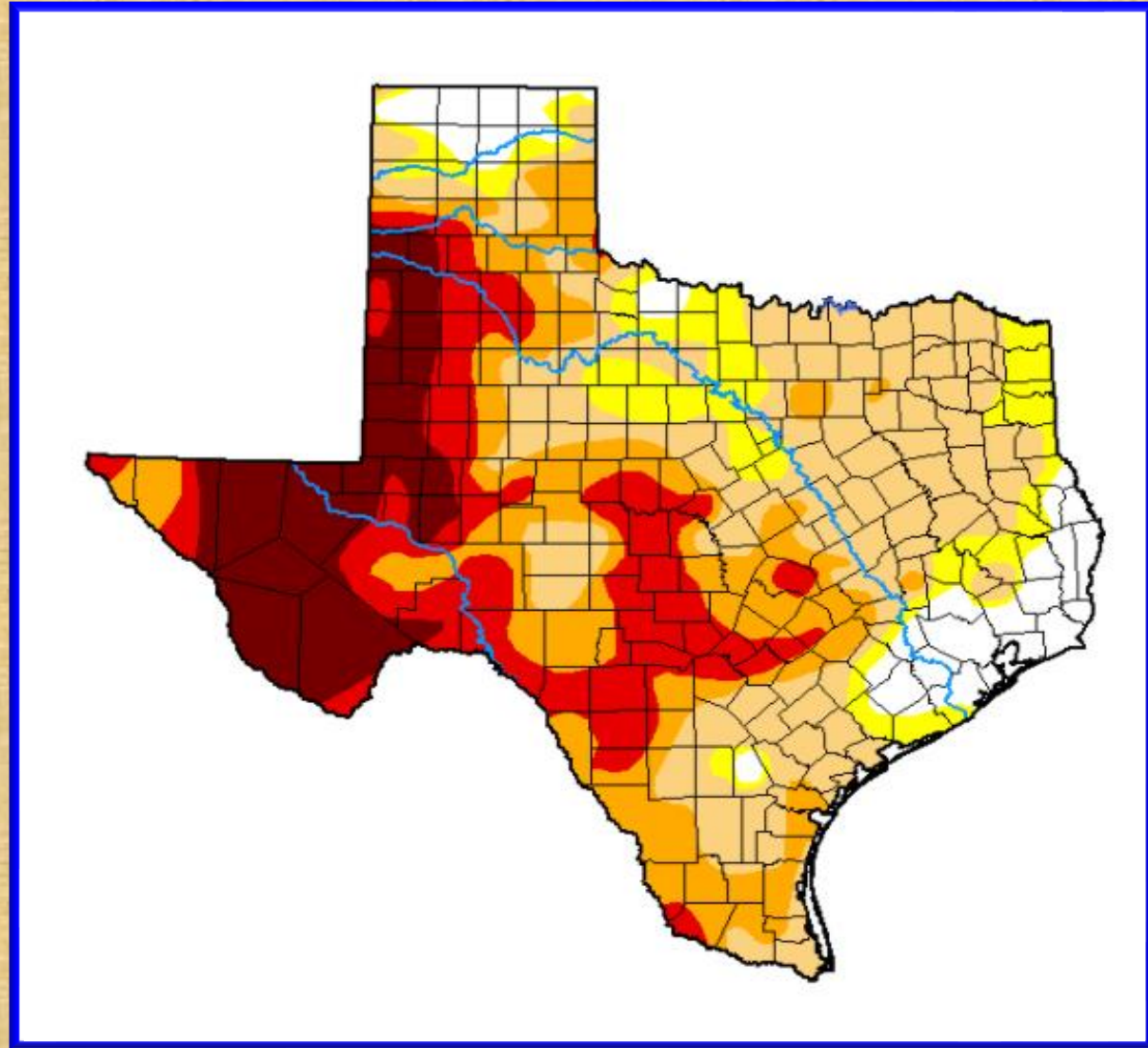
September 29, 2020



Current drought conditions for Texas as of December 22, 2020

Intensity:

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

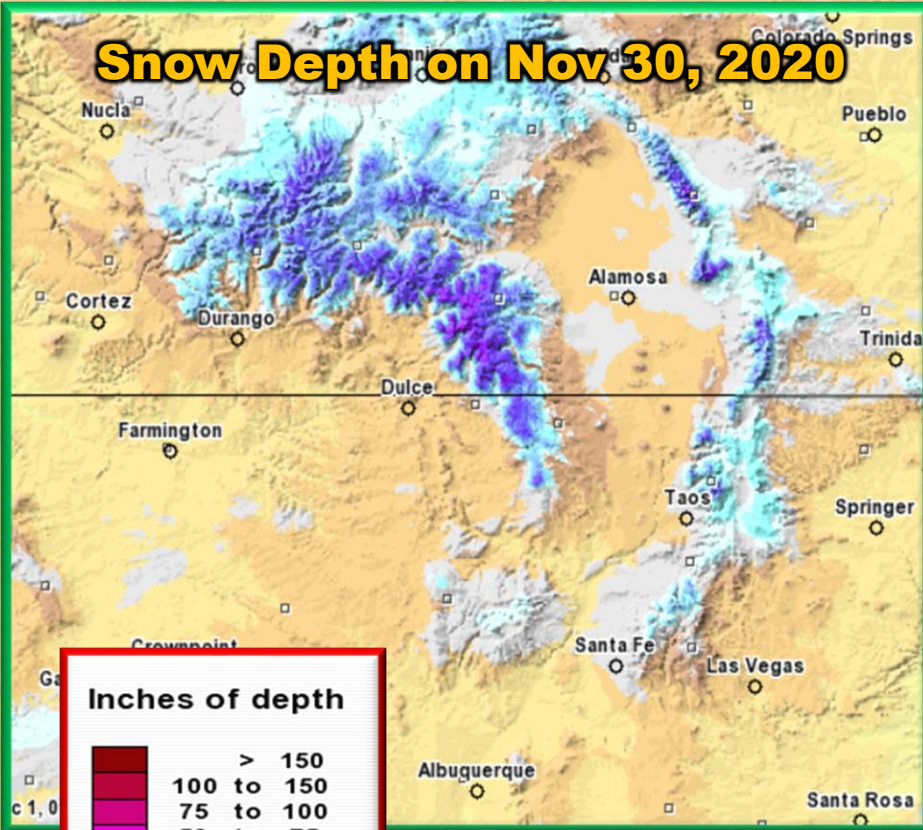


Build your own custom slider maps here at:

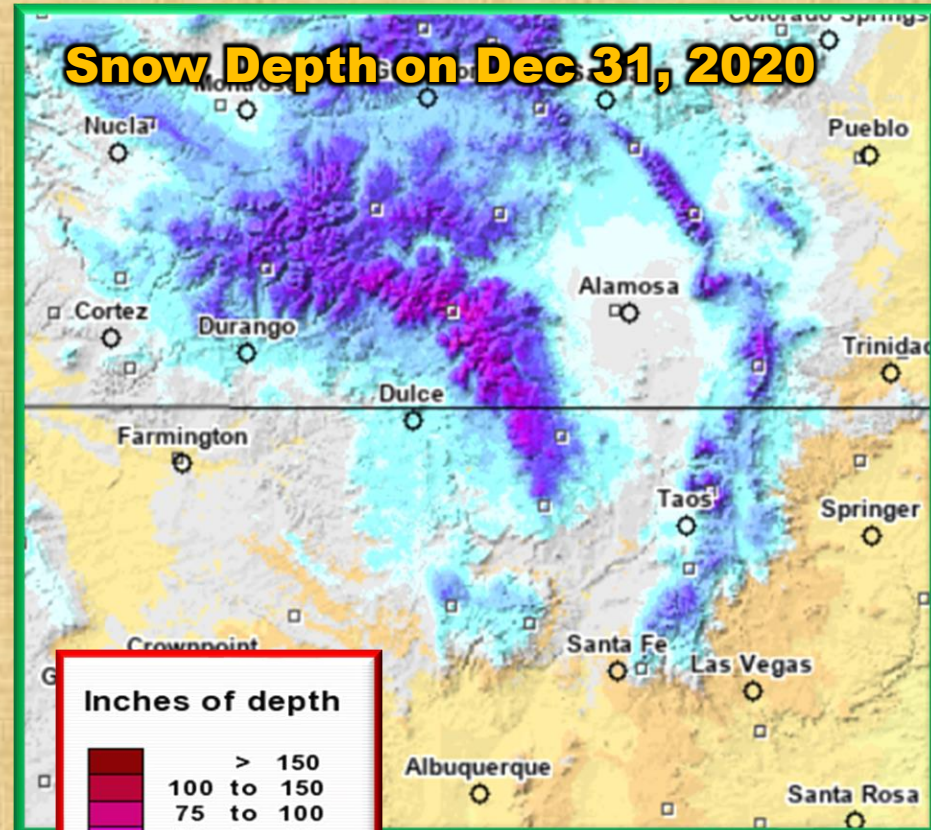
<http://droughtmonitor.unl.edu/Maps/ComparisonSlider.aspx>

Snow Data Upper Rio Grand Basin as of December 31, 2020

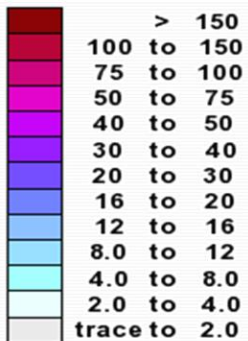
Snow Depth on Nov. 30, 2020



Snow Depth on Dec 31, 2020

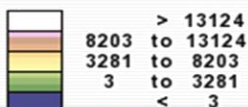


Inches of depth

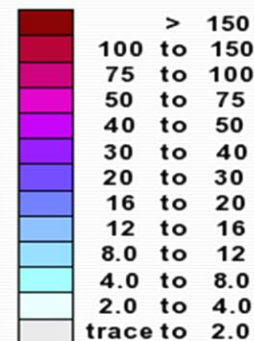


Not Estimated

Elevation in feet

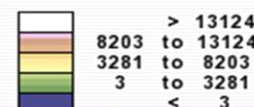


Inches of depth

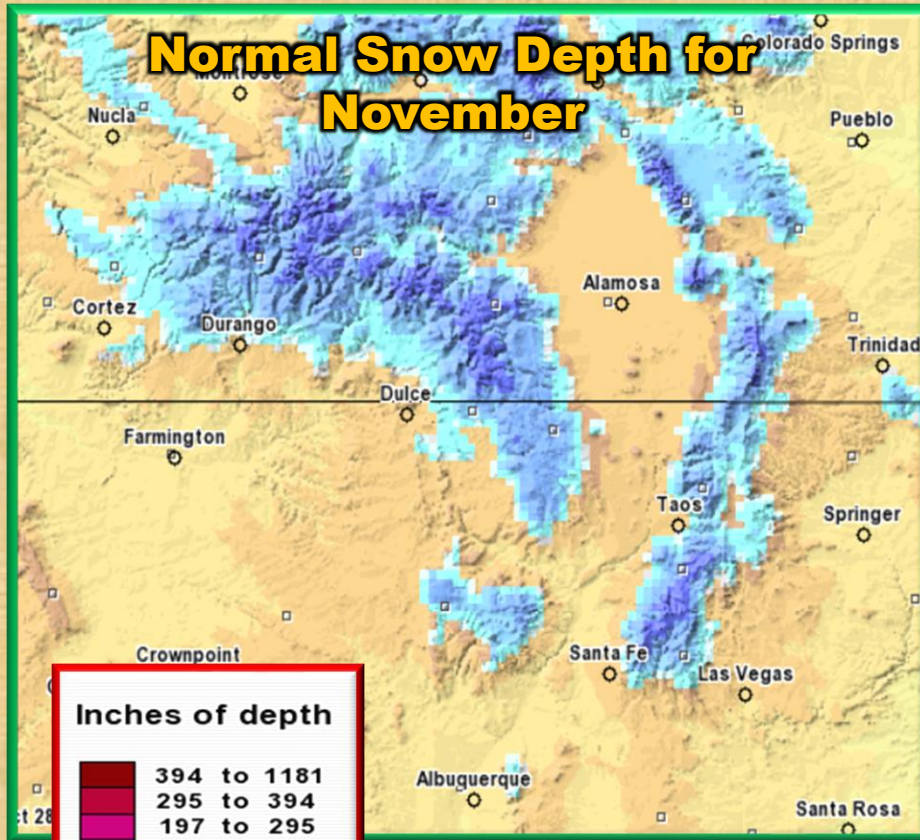


Not Estimated

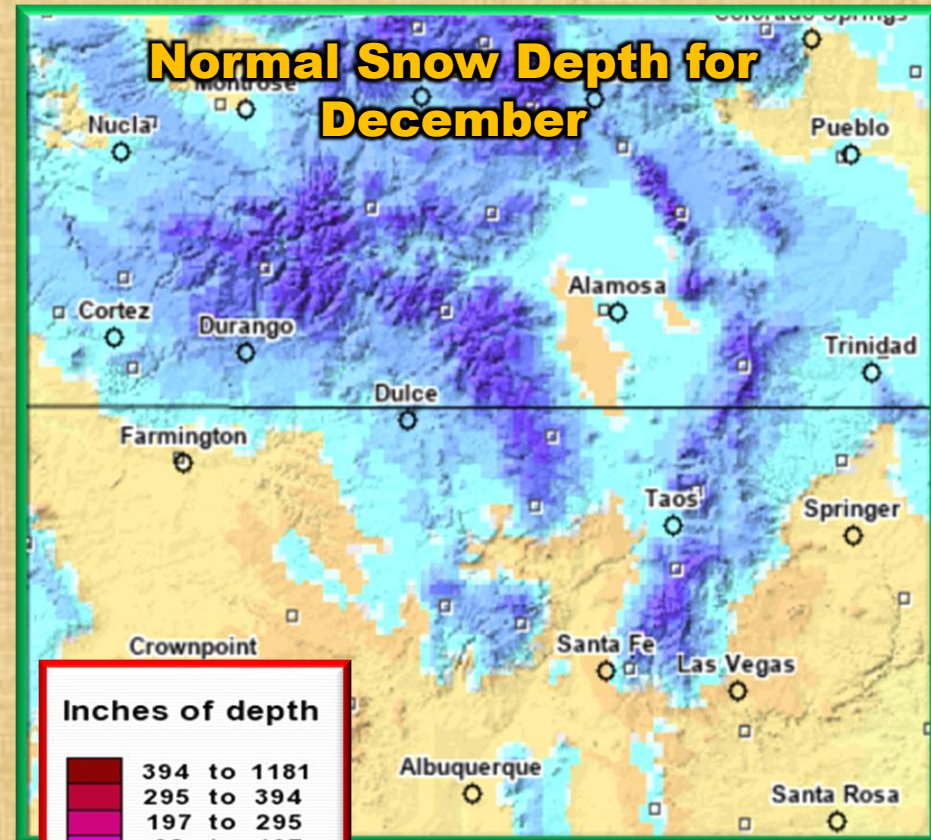
Elevation in feet



Snow Data Upper Rio Grand Basin as of December 31, 2020



Normal Snow Depth for November



Normal Snow Depth for December

Inches of depth

Dark Red	394 to 1181
Red	295 to 394
Dark Purple	197 to 295
Purple	98 to 197
Light Purple	59 to 98
Blue	39 to 59
Light Blue	20 to 39
Very Light Blue	9.8 to 20
Lightest Blue	3.9 to 9.8
Very Lightest Blue	2.0 to 3.9
White	0.39 to 2.0
Lightest White	0.04 to 0.39
White	trace to 0.04

Not Estimated

Elevation in feet

White	> 13124
Lightest Yellow	8203 to 13124
Yellow	3281 to 8203
Light Green	3 to 3281
Dark Green	< 3

Inches of depth

Dark Red	394 to 1181
Red	295 to 394
Dark Purple	197 to 295
Purple	98 to 197
Light Purple	59 to 98
Blue	39 to 59
Light Blue	20 to 39
Very Light Blue	9.8 to 20
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White	0.39 to 2.0
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Not Estimated

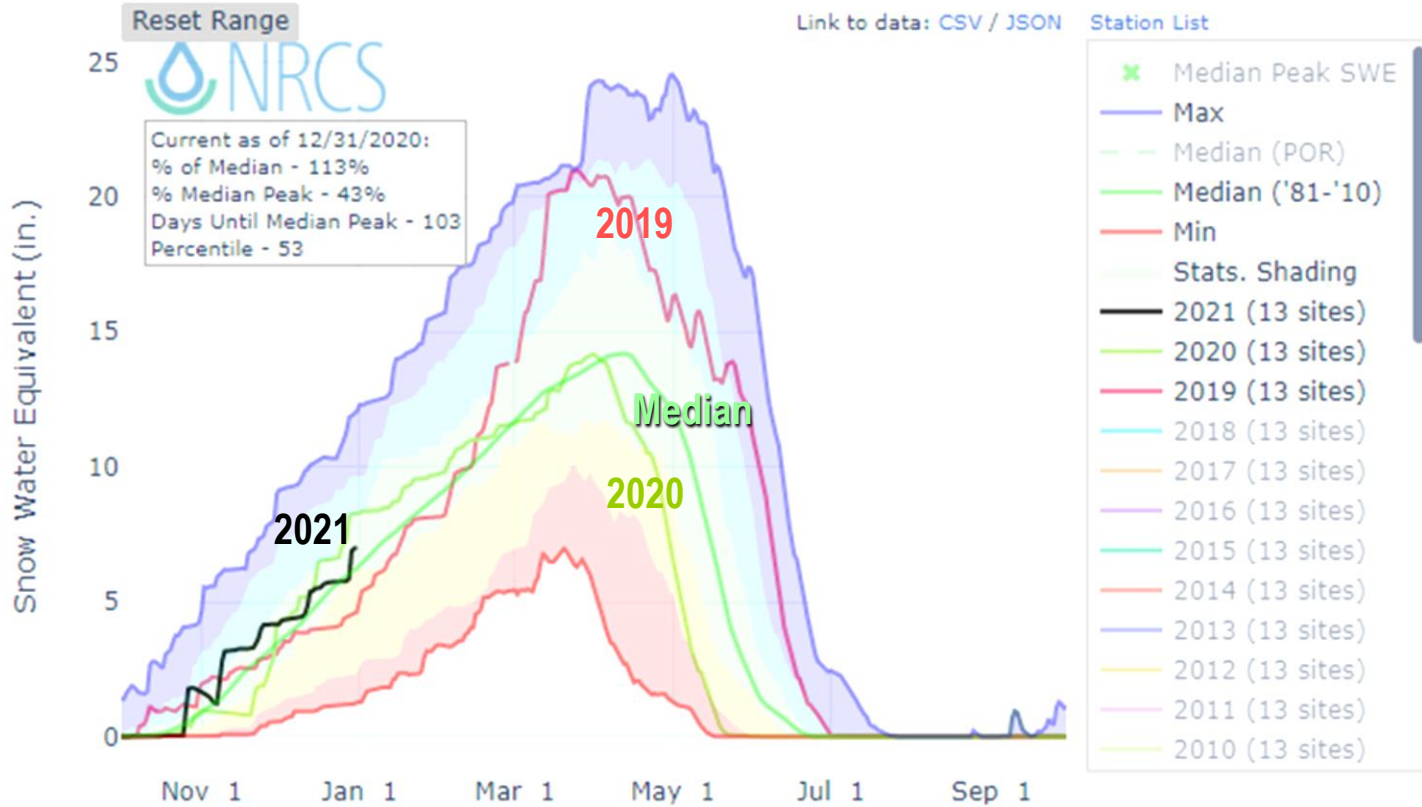
Elevation in feet

White	> 13124
Lightest Yellow	8203 to 13124
Yellow	3281 to 8203
Light Green	3 to 3281
Dark Green	< 3

Snow Water Equivalent as of Dec 31, 2020

Compare to last few years and average values

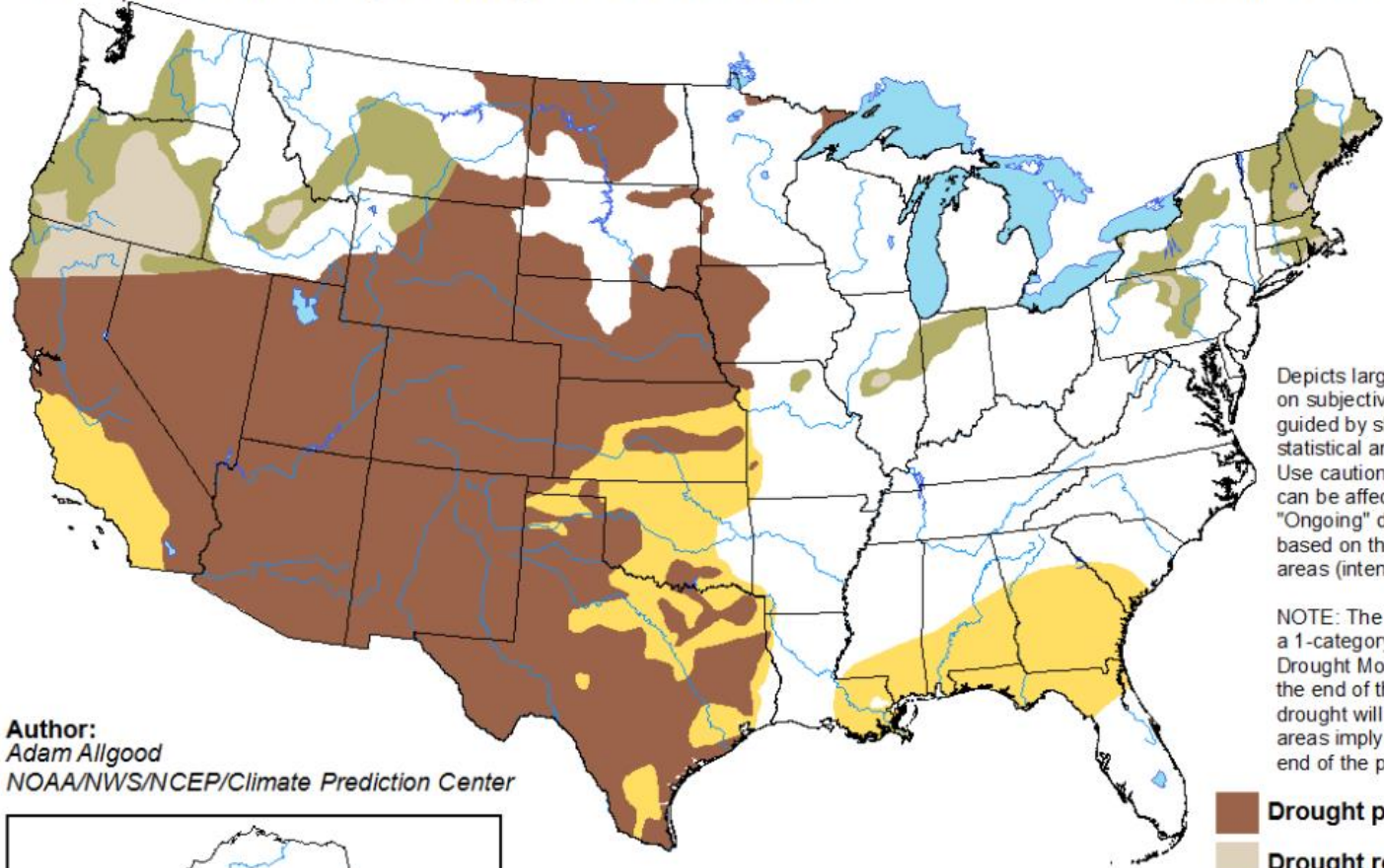
SNOW WATER EQUIVALENT IN UPPER RIO GRANDE



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th Percentiles.
 For more information visit: [30 year normals calculation description](#).

U.S. Seasonal Drought Outlook Valid for November 19, 2020 - February 28, 2021

Drought Tendency During the Valid Period Released November 19, 2020

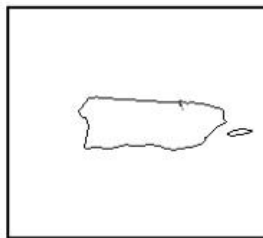
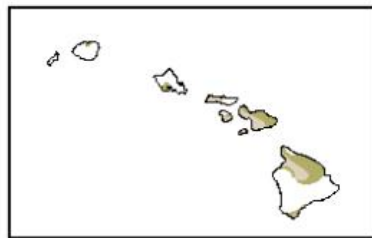


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

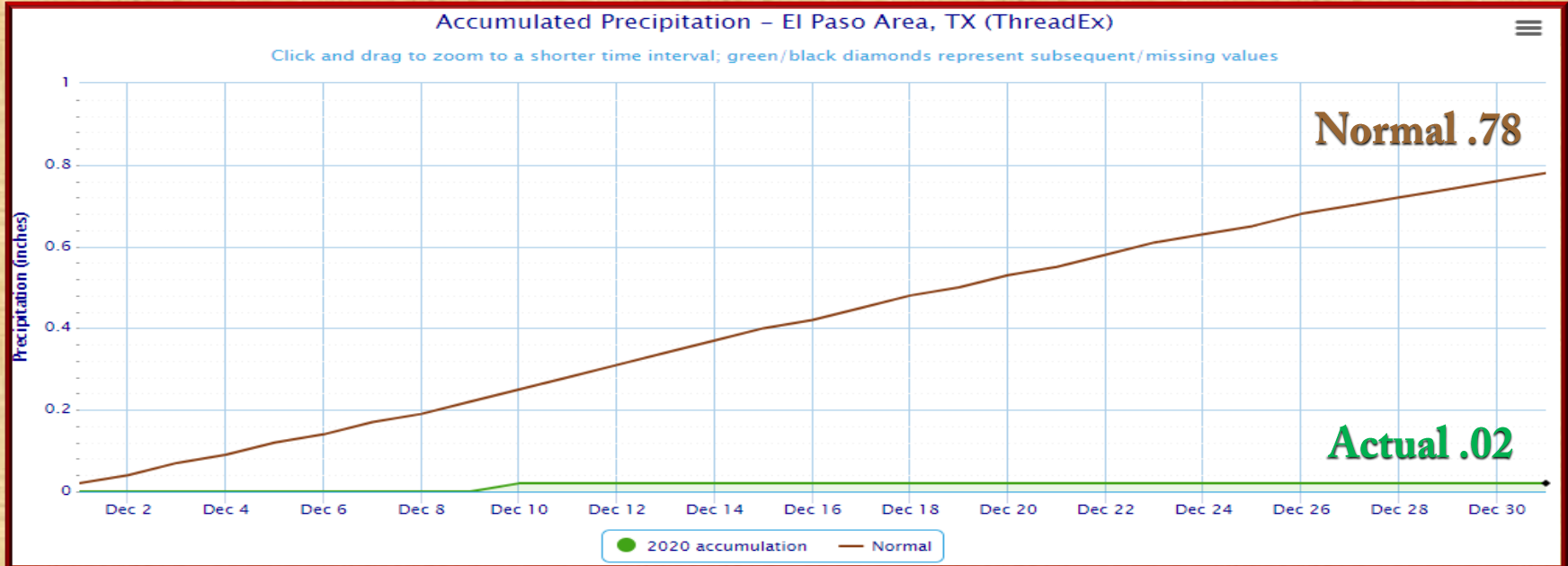
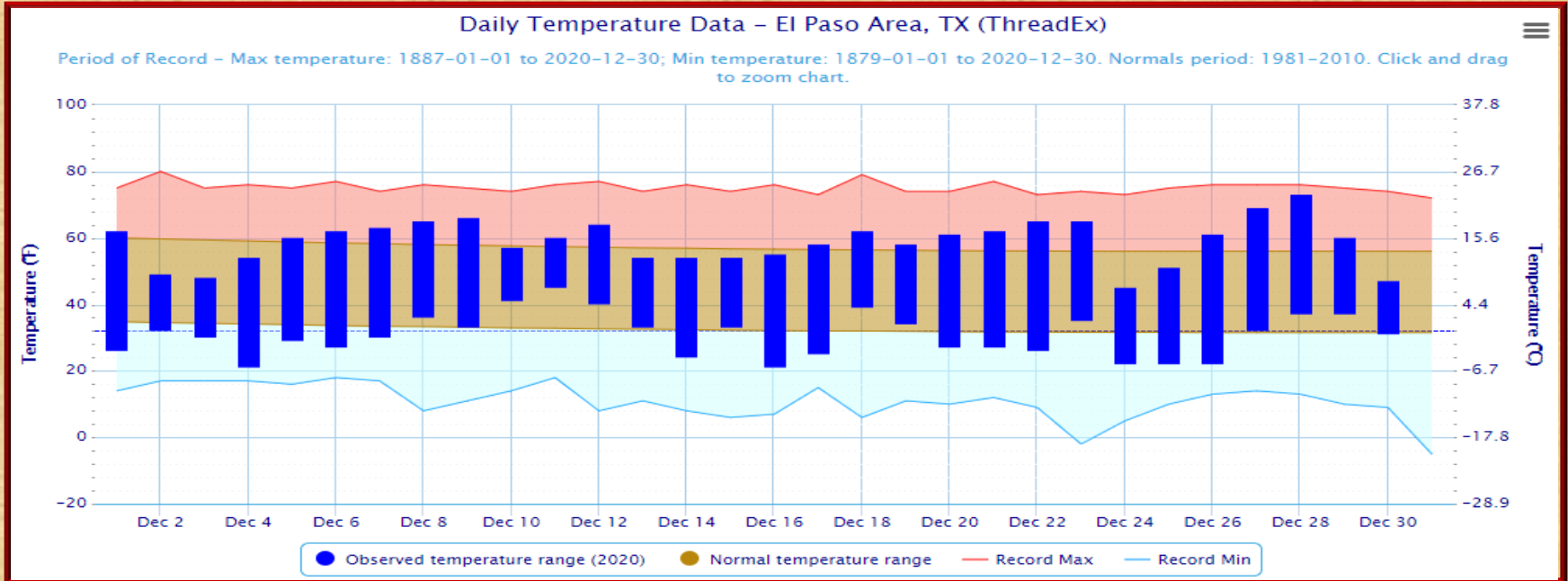
-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



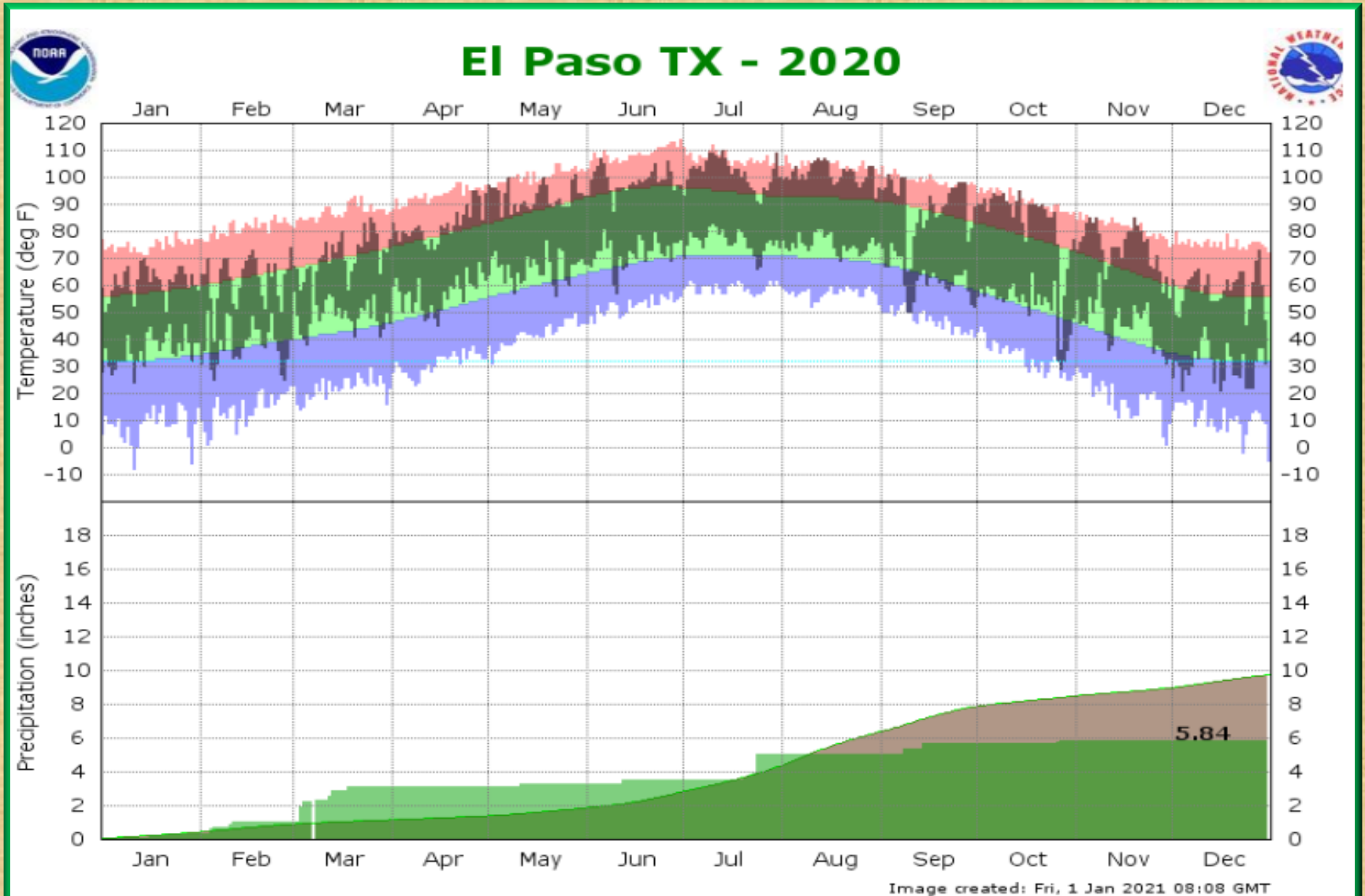
<http://go.usa.gov/3eZ73>

Temperature and precipitation data for December 2020 in El Paso

○ = record



2020: Temperature and Precipitation Data for El Paso

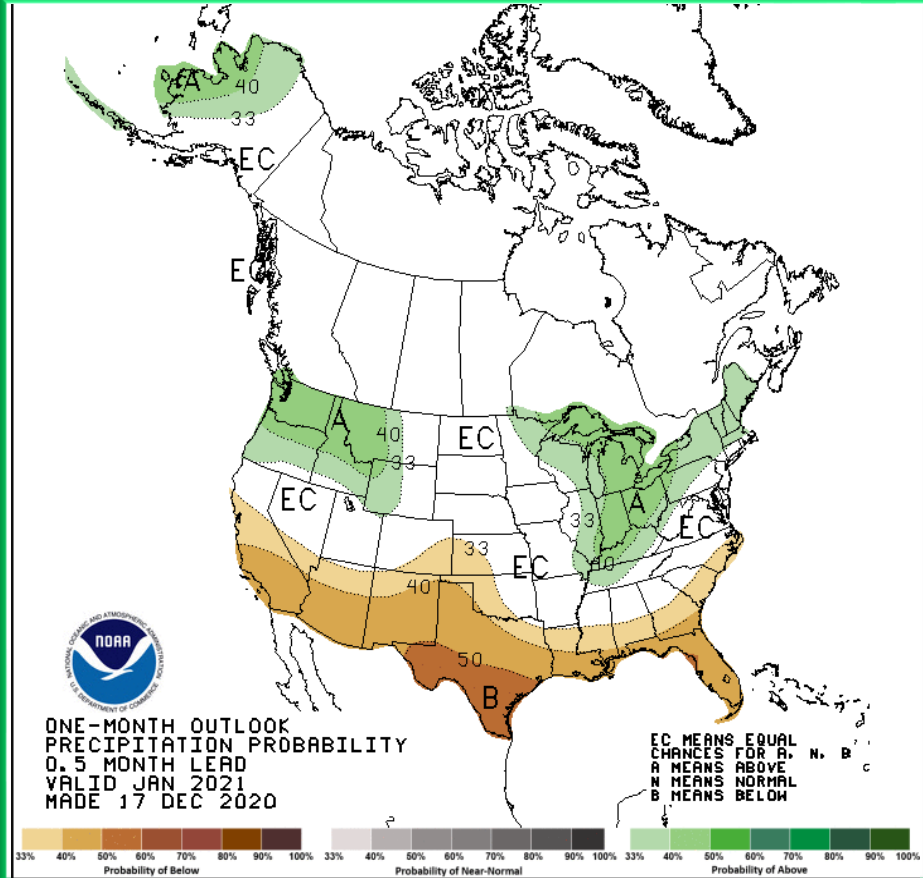
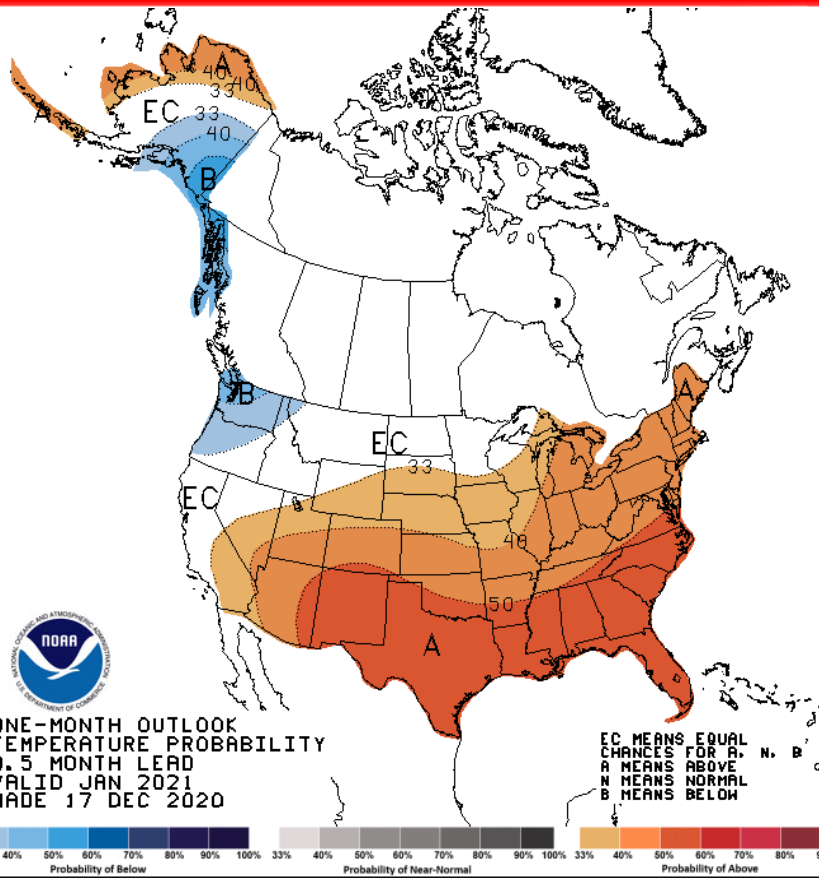


Temperature and Precipitation Plot for El Paso, Texas for 2020

Temperature and precipitation outlook for January 2021

Temperature

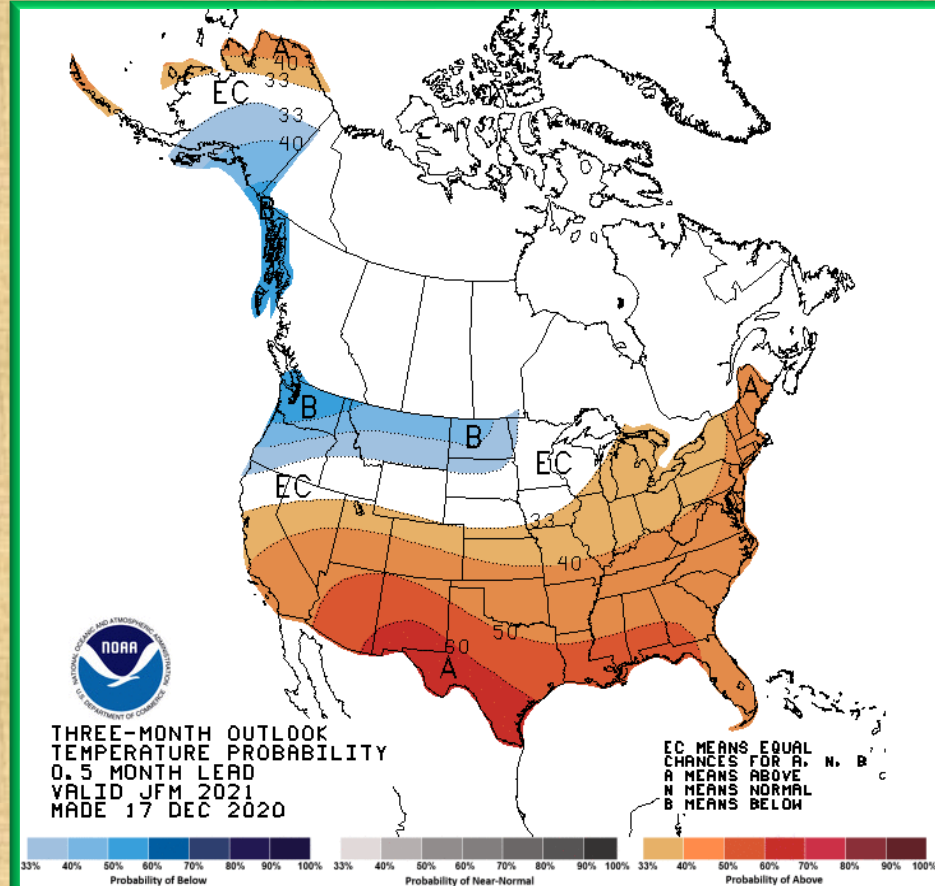
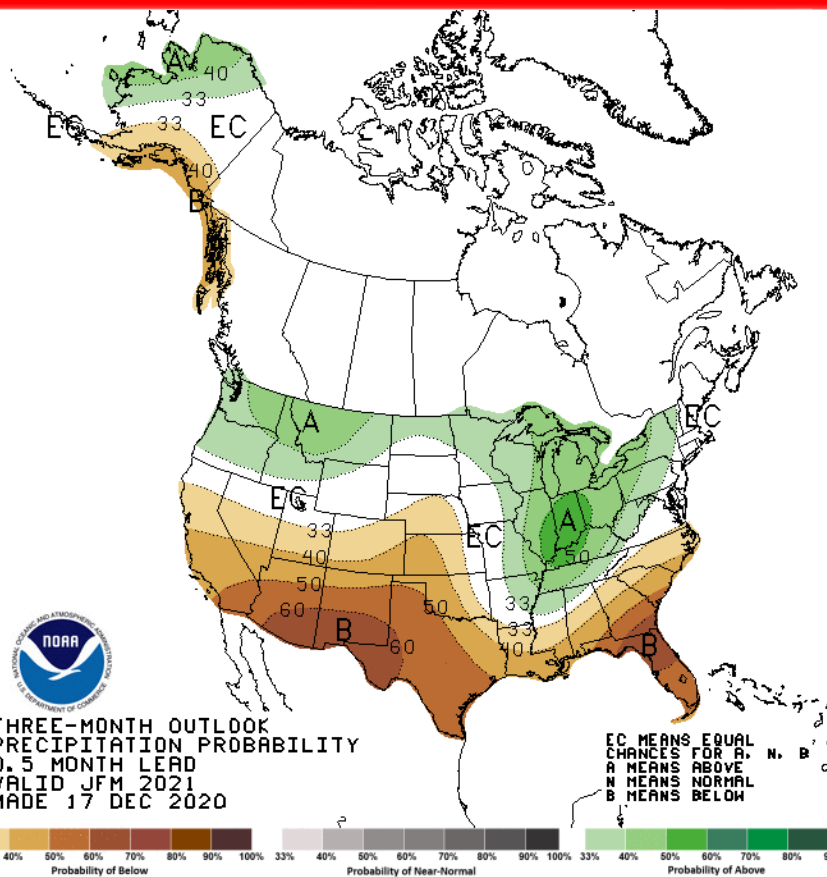
Precipitation



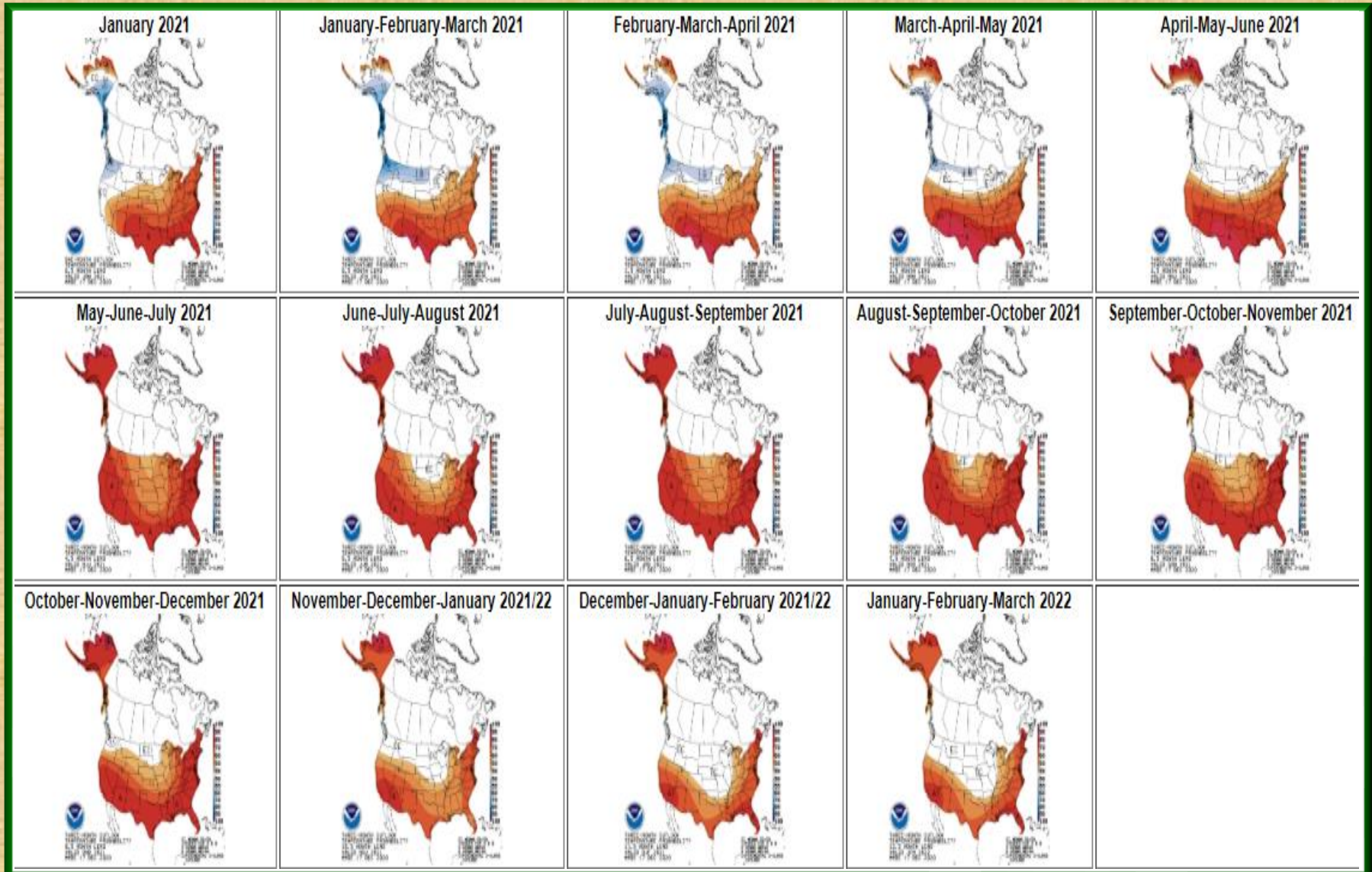
Temperature and precipitation outlook For January-March 2021

Temperature

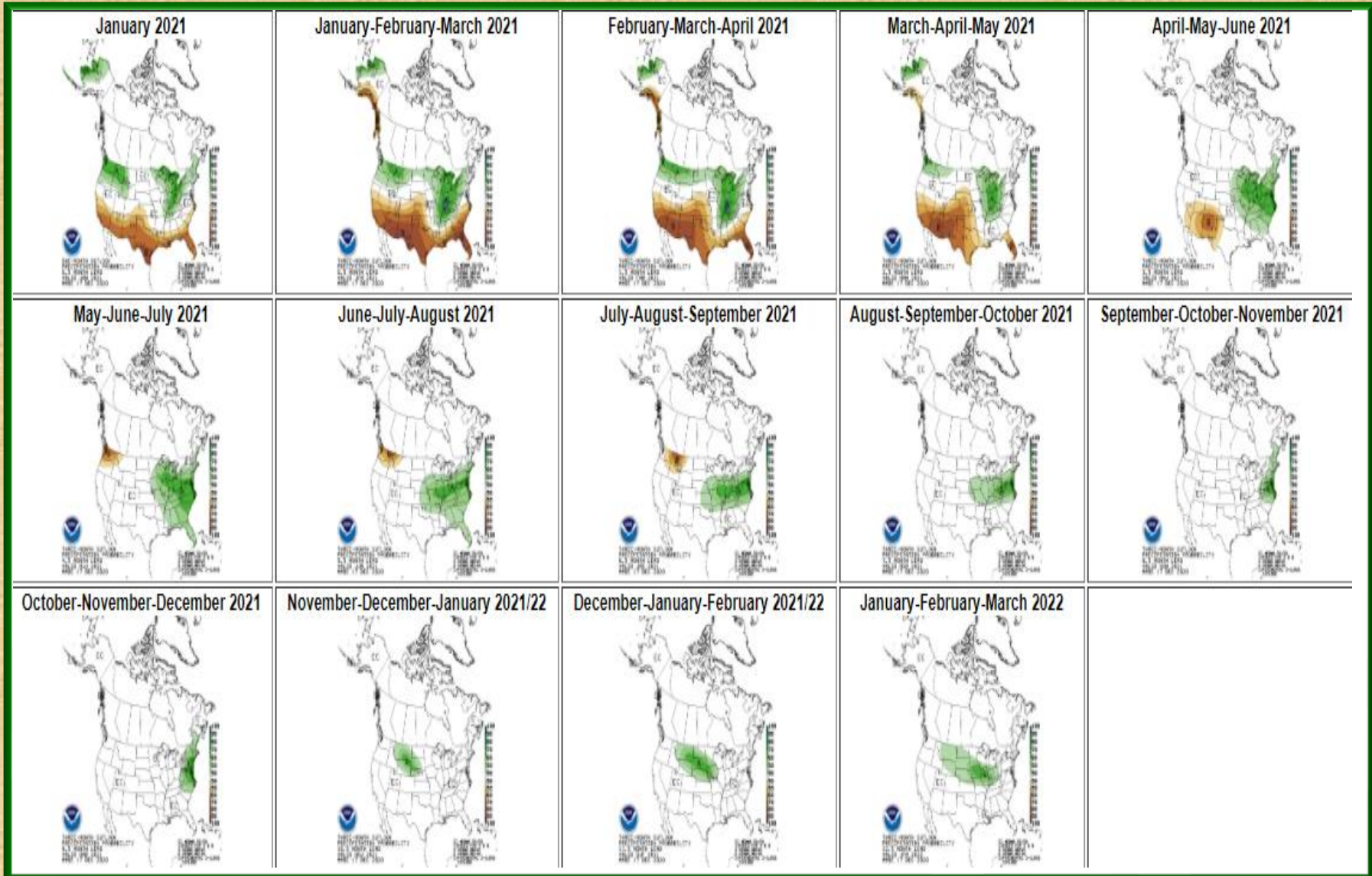
Precipitation



Temperature Outlook Through March 2022



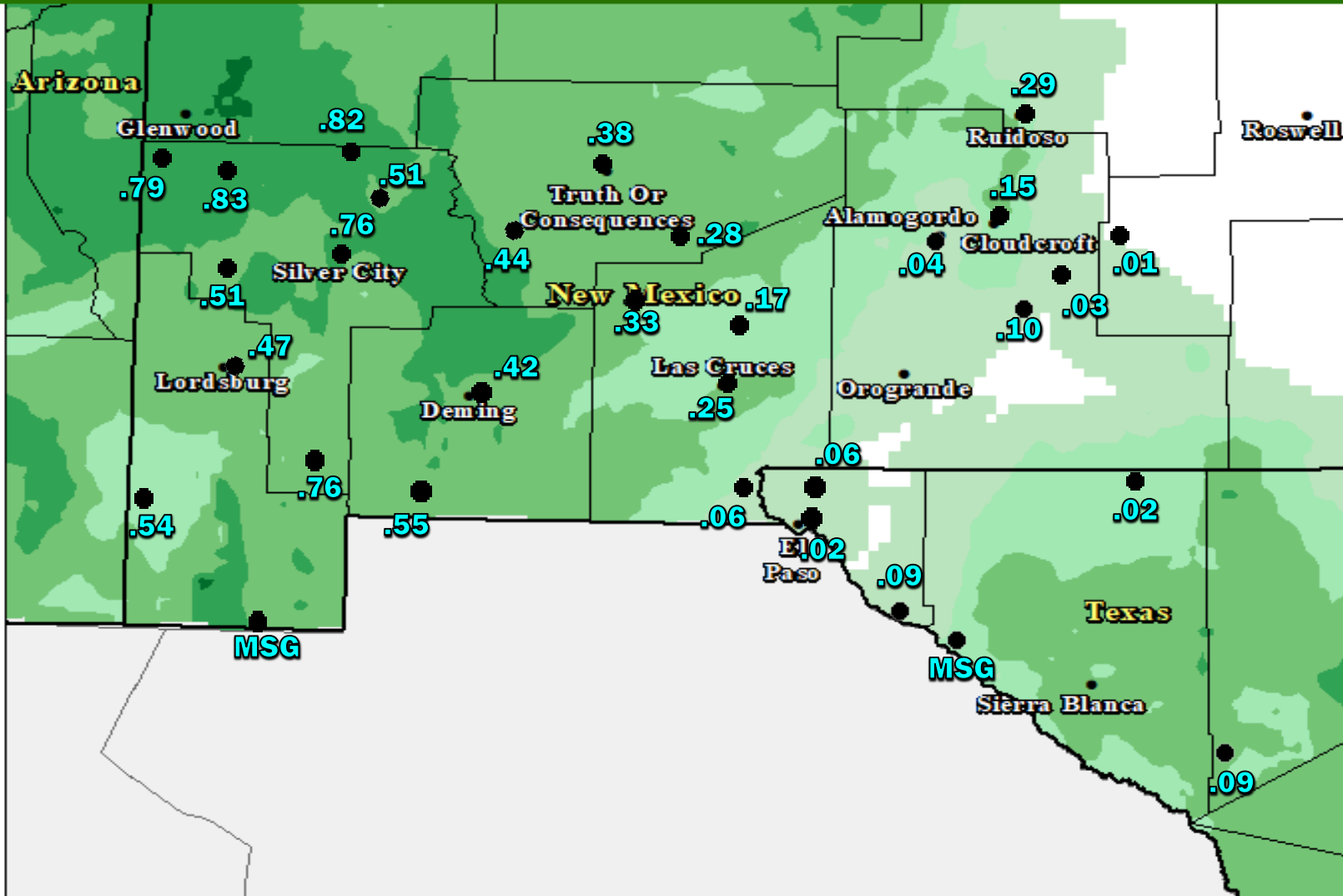
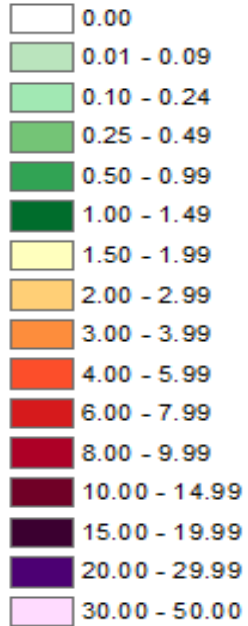
Precipitation Outlook Through March 2022



December 2020 radar rainfall estimate with surface rainfall reports

Total Monthly Precipitation - December 2020

Inches



Created by the
NWS Forecast Office
El Paso, TX

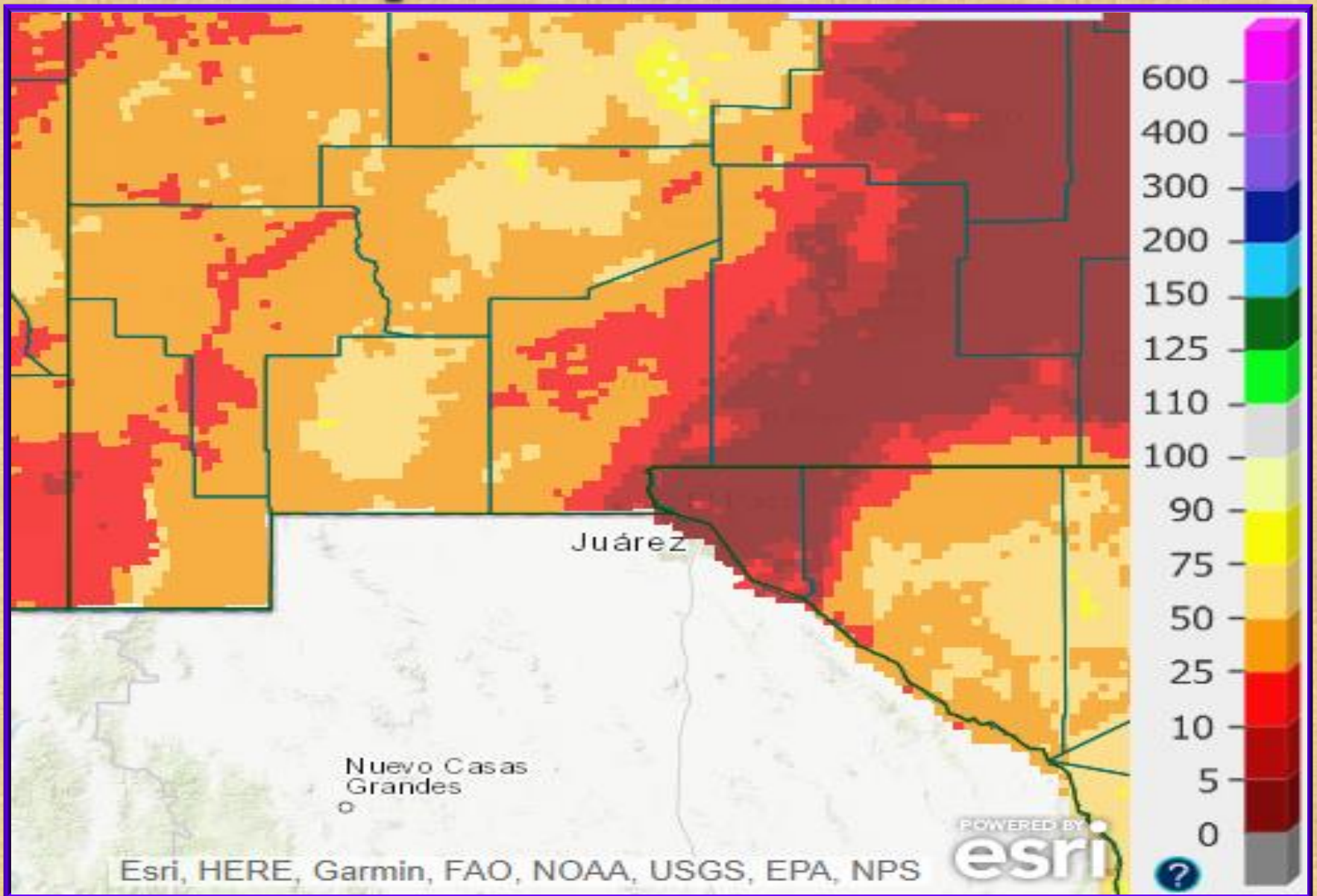


0 25 50 Miles

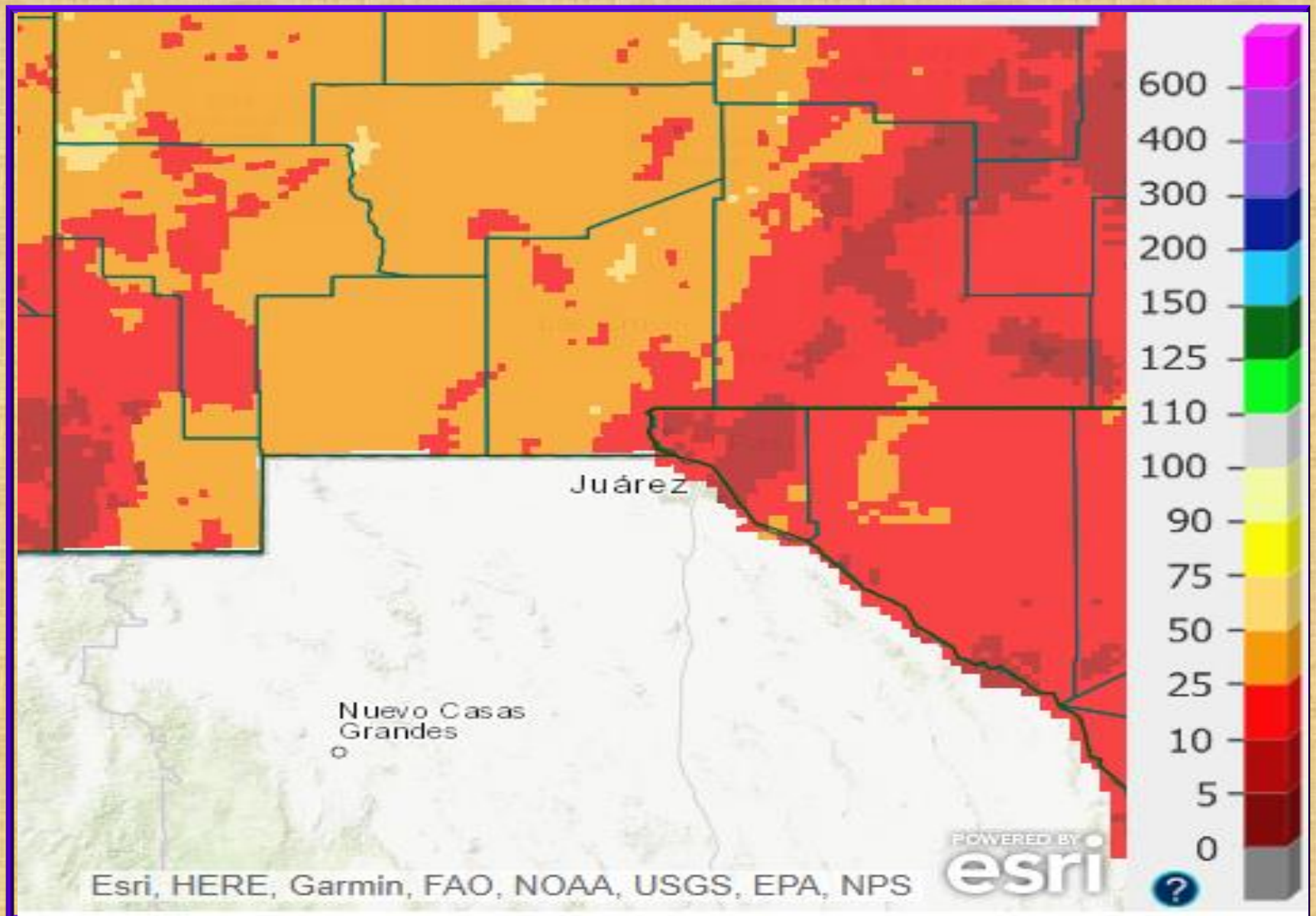
Source: NWS Advanced
Hydrologic Prediction Service

Created: 01/01/2021 2200 UTC

December 2020 radar rainfall estimate percent of normal



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

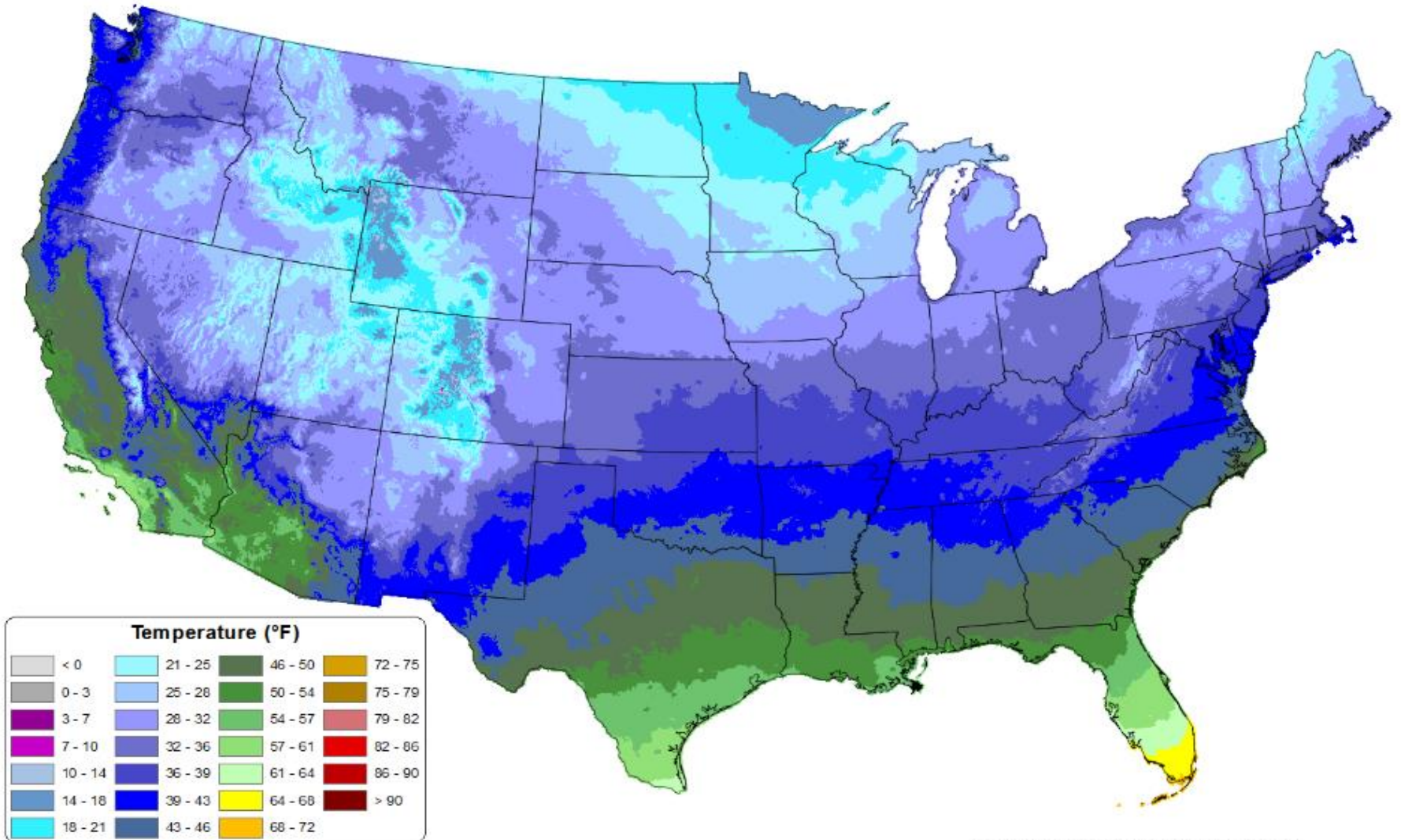


Average Daily Mean Temperature for December 2020

Average Daily Mean Temperature: 01 Dec 2020 - 31 Dec 2020

Period ending 7 AM EST 31 Dec 2020

(Map created 01 Jan 2021)

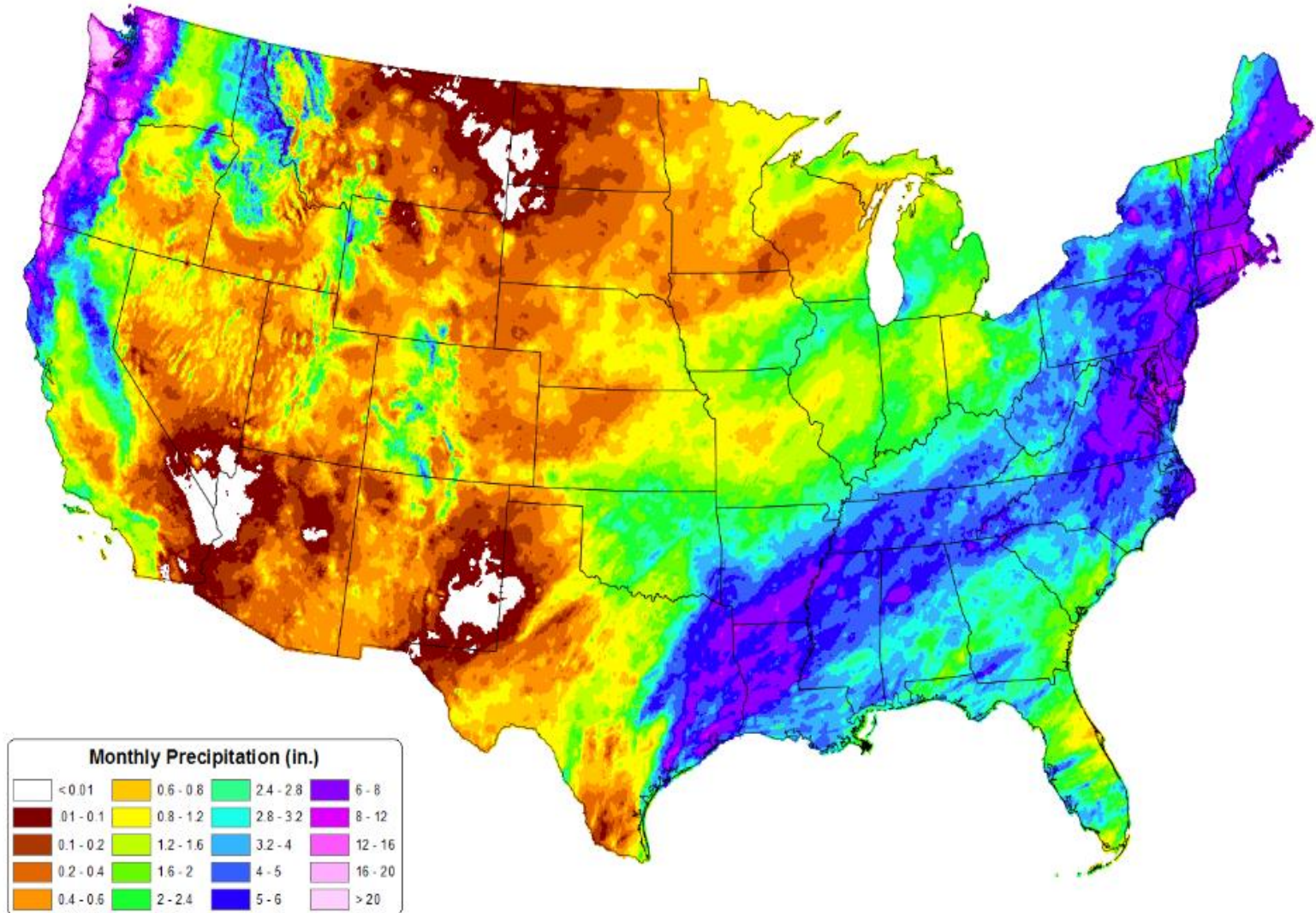


Total Precipitation for December 2020

Total Precipitation: 01 Dec 2020 - 31 Dec 2020

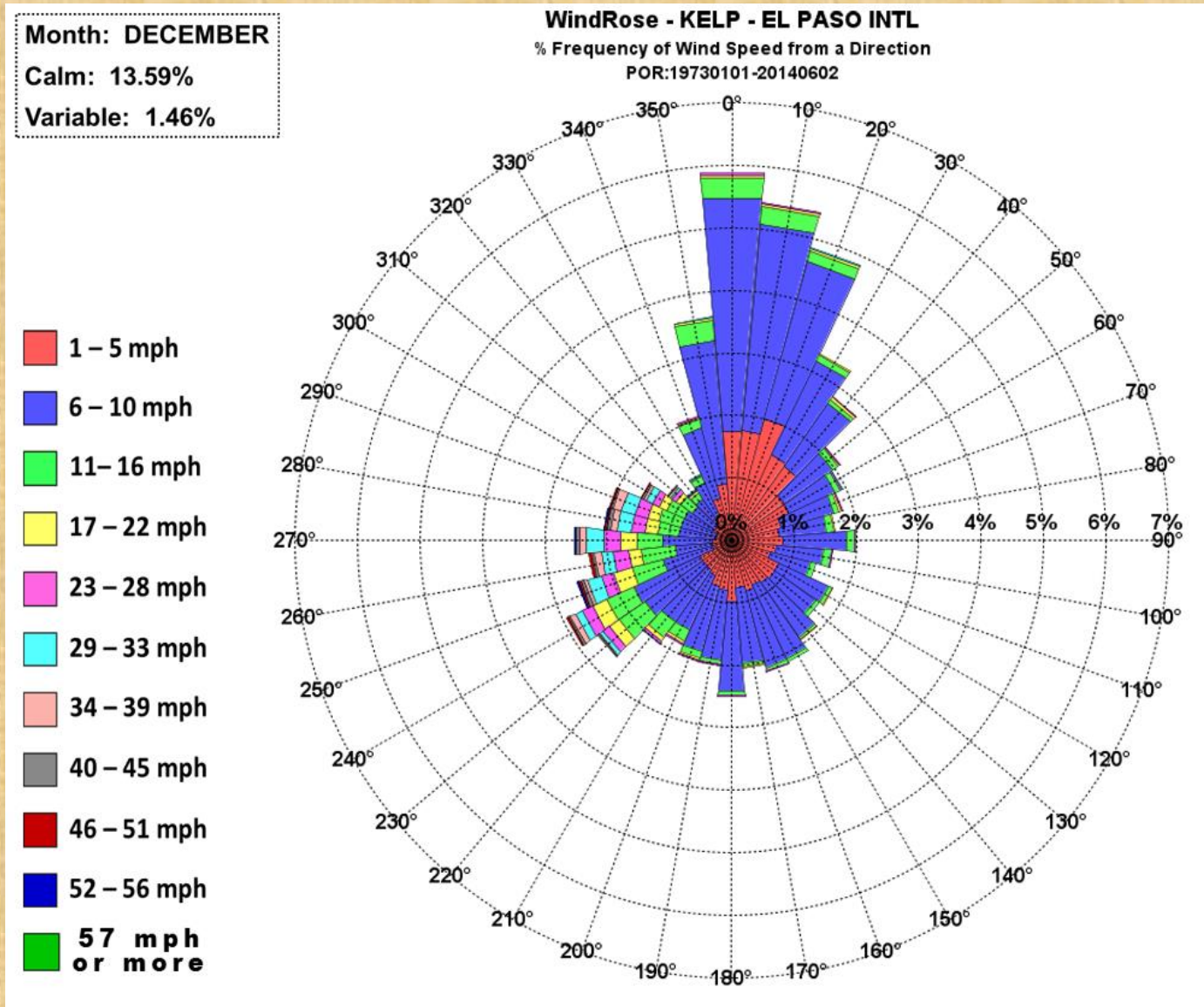
Period ending 7 AM EST 31 Dec 2020

(Map created 01 Jan 2021)



Special Features

<http://www.srh.noaa.gov/epz/?n=elpwindrosedata>



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

El Paso, TX
 Weather Forecast Office

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.gov/epz

Don't Forget-Current and past issues of our Weather Digest are available on our website at <http://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 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	

**NWS DOPPLER RADAR
WATCHING THE MONSOON SKIES
OVER EL PASO 24/7**

