

# January 2021 Weather Digest



# January 2021 Weather Summary

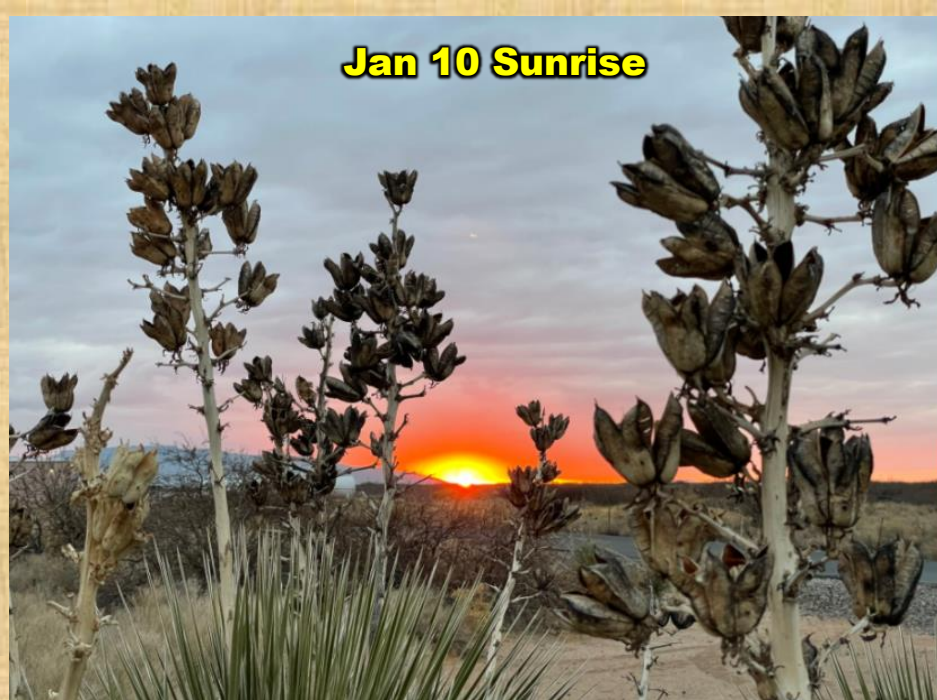
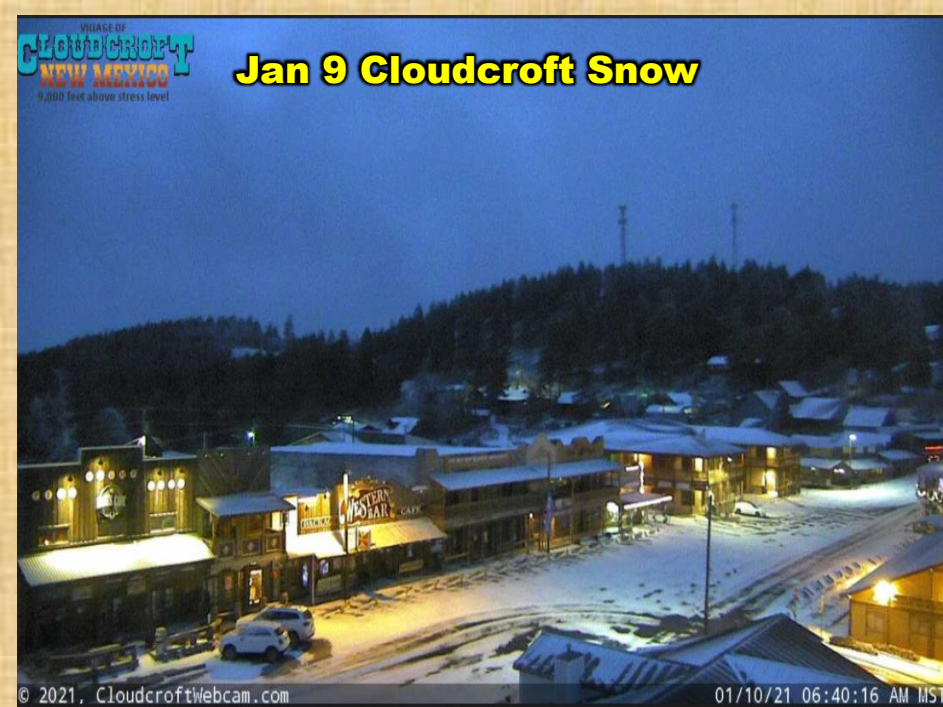
January turned out to be a relatively quiet month with most of the weather limited to the last week of the month, as a series of Pacific storms finally reached the area. The month on the whole was near normal to slightly below normal with temperatures, while precipitation was once again below normal, as is often the case during a La Niña seasonal pattern.

The first half of the month was very dry, with temperatures above normal. The second half of the month finally seen a bit more action. On the Jan 20-21, a Pacific storm moved across northern Mexico and far southern New Mexico, spreading light rain along the International Border. On Jan 24-26, two Pacific storms passed across central New Mexico. The first one brought some light snow to area mountains. The second, much larger storm, brought some light rain to the lowlands and heavy snow to the mountains. Snowfall of 6 to 10 inches was common across most of the mountain areas. This surge of moisture in the last week of the month kept the month from being extremely dry. As it was, drought conditions continued to slowly deteriorate with the lack of precipitation. Most of the Borderland is now in extreme to exceptional drought conditions.

# January 2021 Weather Summary, cont'd

**Looking ahead to February, daylight and warming continue. The length of daylight on the 1st is 10 hours and 41 minutes, increasing to 11 hours and 29 minutes of daylight on the 28th. The normal high in El Paso begins the month at 60 degrees and finishes the month at 66 degrees. Though we start to warm up noticeably, events like February of 2011 remind us it can still get quite cold during the month. The first four days of that month saw temperatures extremely below normal, culminating with a low of 1 above on February 3rd. Most other sites around the area fell below zero.**

**For lunar fans out there, the full moon will occur on the 27th, while the new moon occurs on the 11th.**

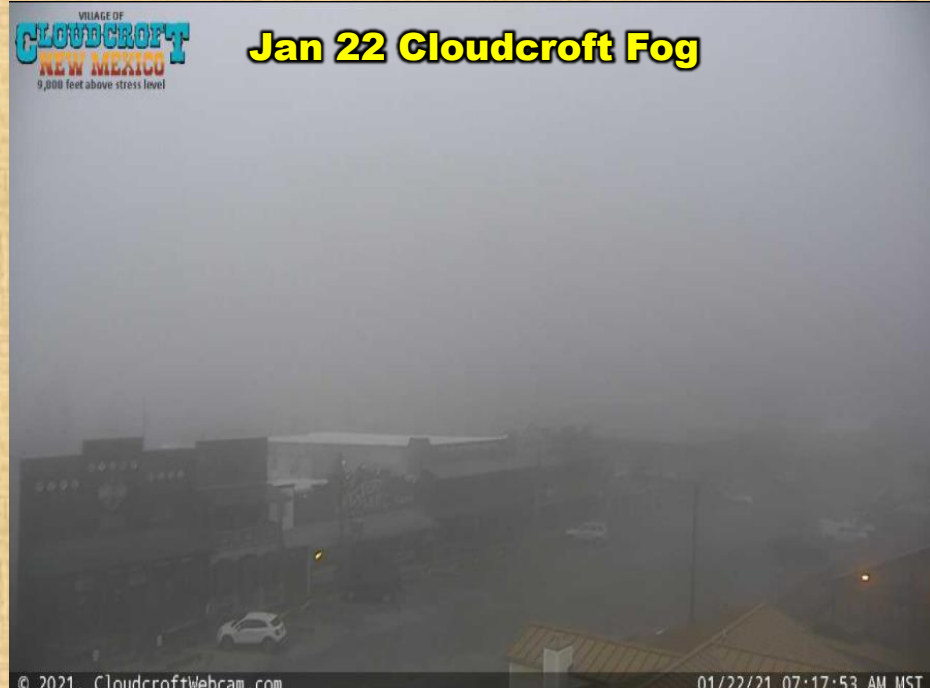


**Jan 22 El Paso Fog**



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

**Jan 22 Cloudcroft Fog**



© 2021, Cloudcroftwebcam.com

01/22/21 07:17:53 AM MST

**Jan 22 Cloudcroft Fog**



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

© 2021, Cloudcroftwebcam.com

01/22/21 07:22:57 AM MST

**Jan 20 Gila HS Snow**



**Jan 20 Hillsboro Lenticular Clouds**



**Jan 20 Hillsboro Lenticular Clouds**



**Jan 24 Silver City Snow**



**Jan 24 Cloudcroft Snow**



**Jan 26 El Paso Snow**



**Jan 26 El Paso Snow**



**Jan 26 El Paso Snow**





Happy Perihelion Day! This is the day when the Earth makes it's closest approach to the Sun. Today we are 91,399,454 miles (147,098,074 km) away from the sun. In June at aphelion we will be 94,510,886 miles (152,097,701 km) away. So why is it so cold? The tilt of the Earth on it's axis causes the changing of the seasons. That is also why the Southern hemisphere has summer while the northern hemisphere has winter.

# **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.

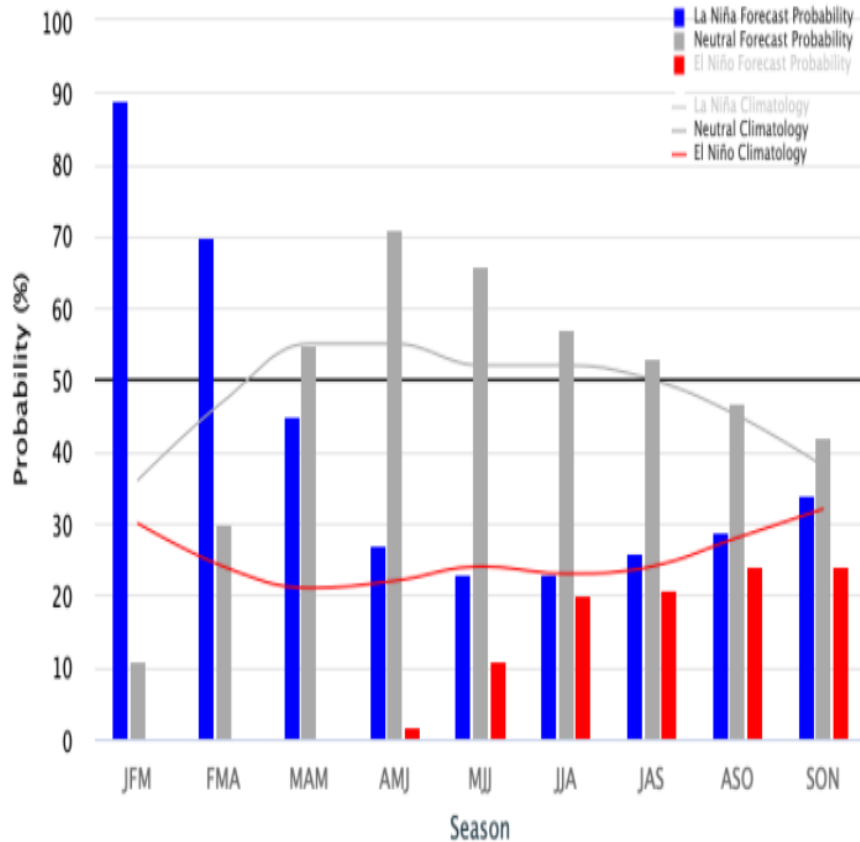
# ENSO Forecast

**ENSO is now in a moderate La Niña phase, though expected to lessen to weak phase soon; ENSO probably back to neutral by end of spring**

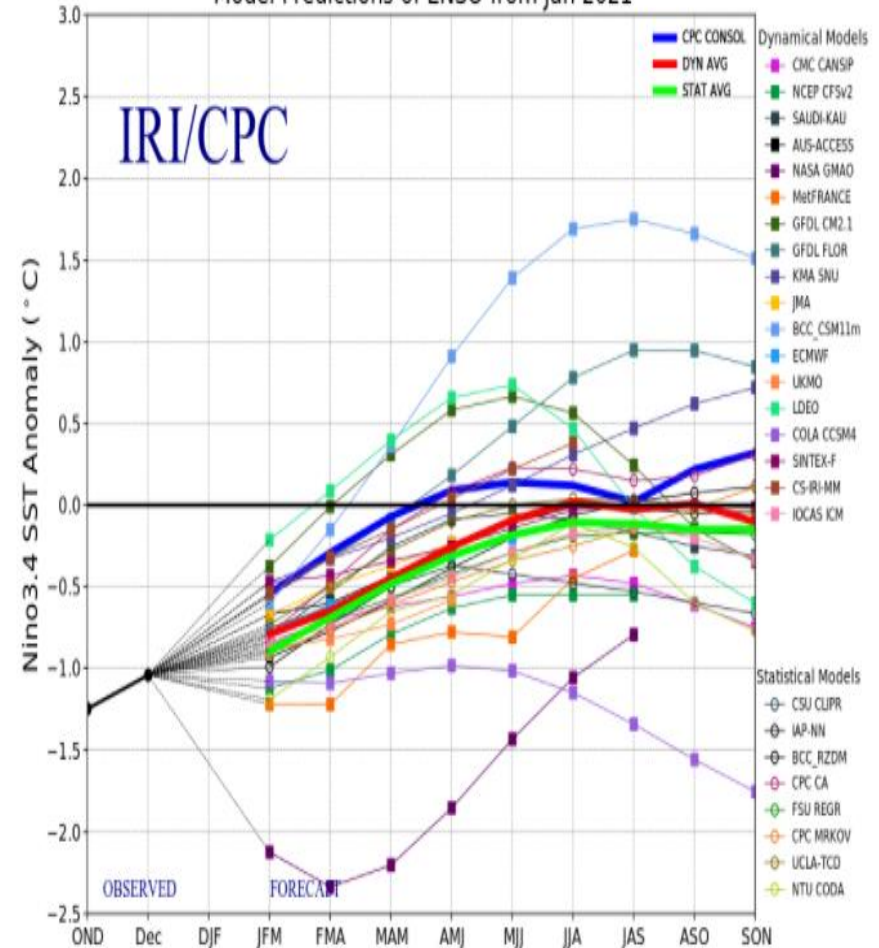
Mid-January 2021 IRI/CPC Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly

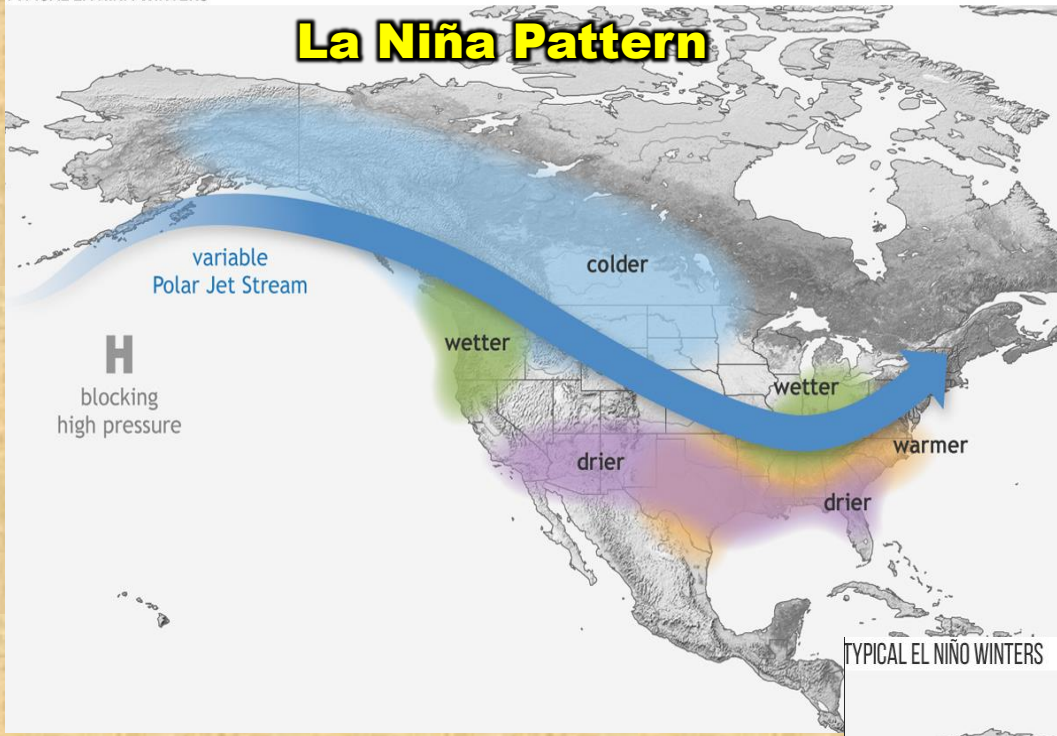
Neutral ENSO:  $-0.5^{\circ}\text{C}$  to  $0.5^{\circ}\text{C}$



Model Predictions of ENSO from Jan 2021



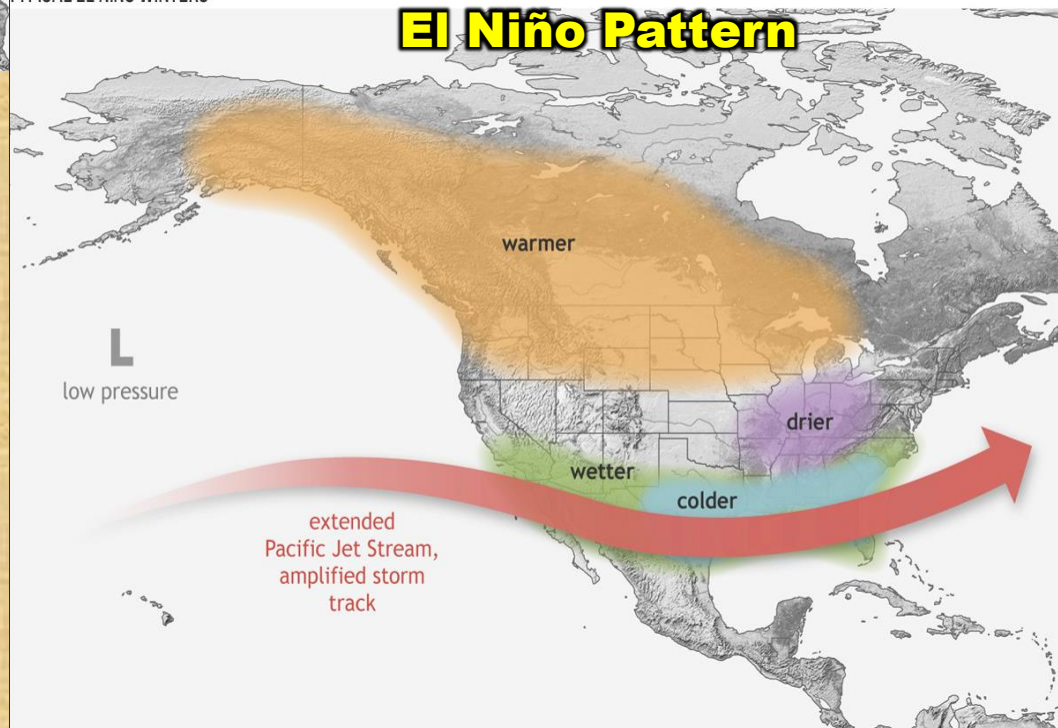
# La Niña Pattern



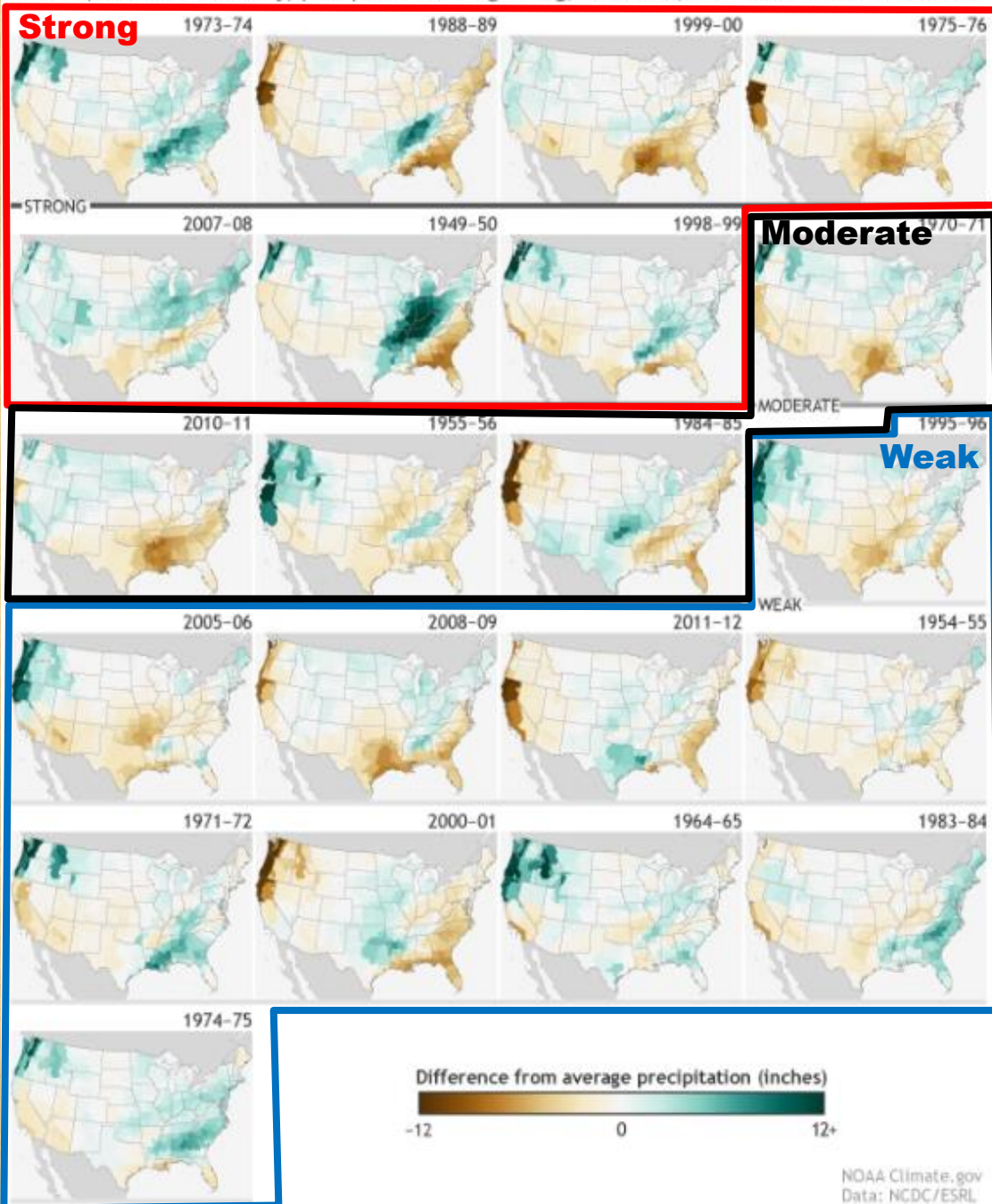
We are heading into a weak to moderate La Niña for much of this winter. As the pattern shows, a ridge of high pressure tends to build off the west coast of the U.S., blocking most of our Pacific winter storm systems. These storms tend to end up moving across the northern Plains and down to the southeastern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

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.

# El Niño Pattern



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

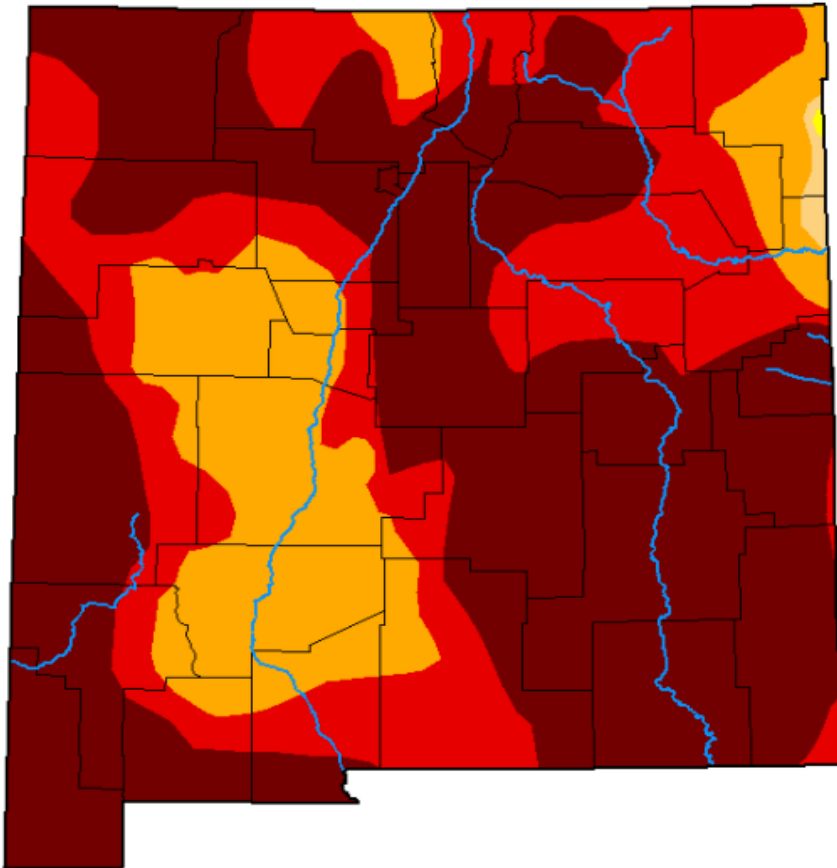


Examples of the numerous La Niña winters since 1950. These maps depict the departure from normal precipitation amounts for a winter.

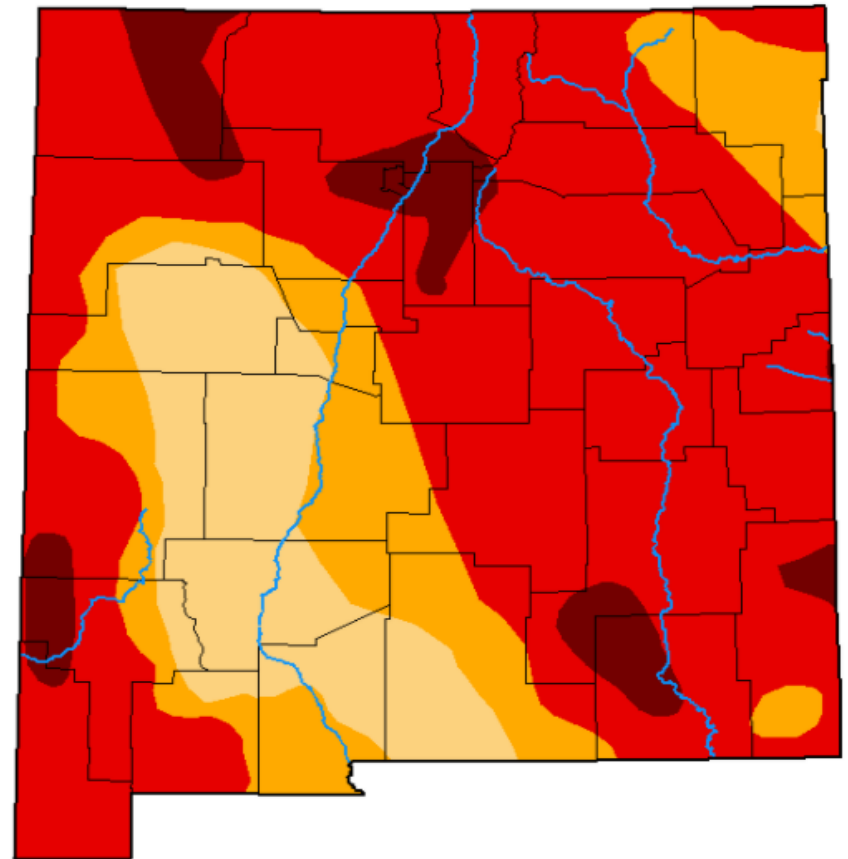
# Current drought conditions for New Mexico and 3 month change

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

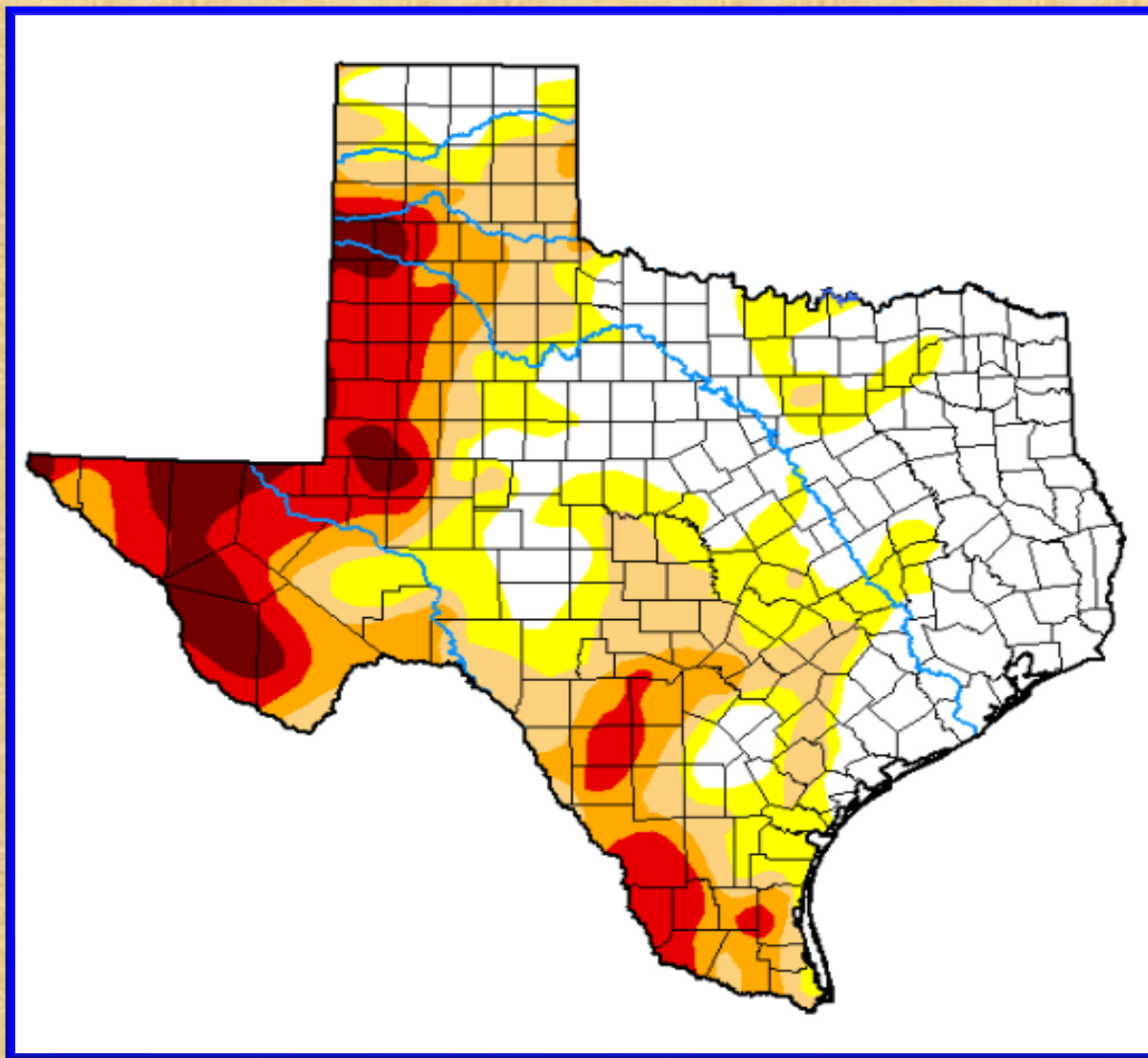
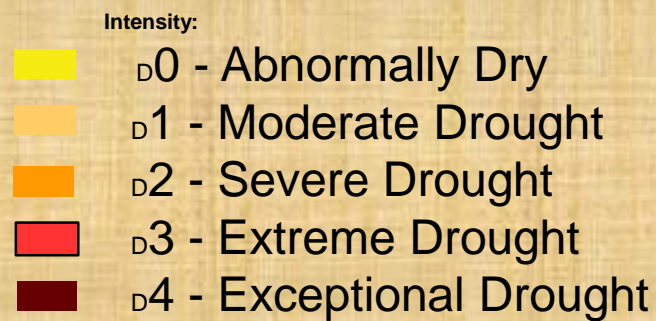
**January 26, 2021**



**October 27, 2020**



# Current drought conditions for Texas as of January 26, 2021

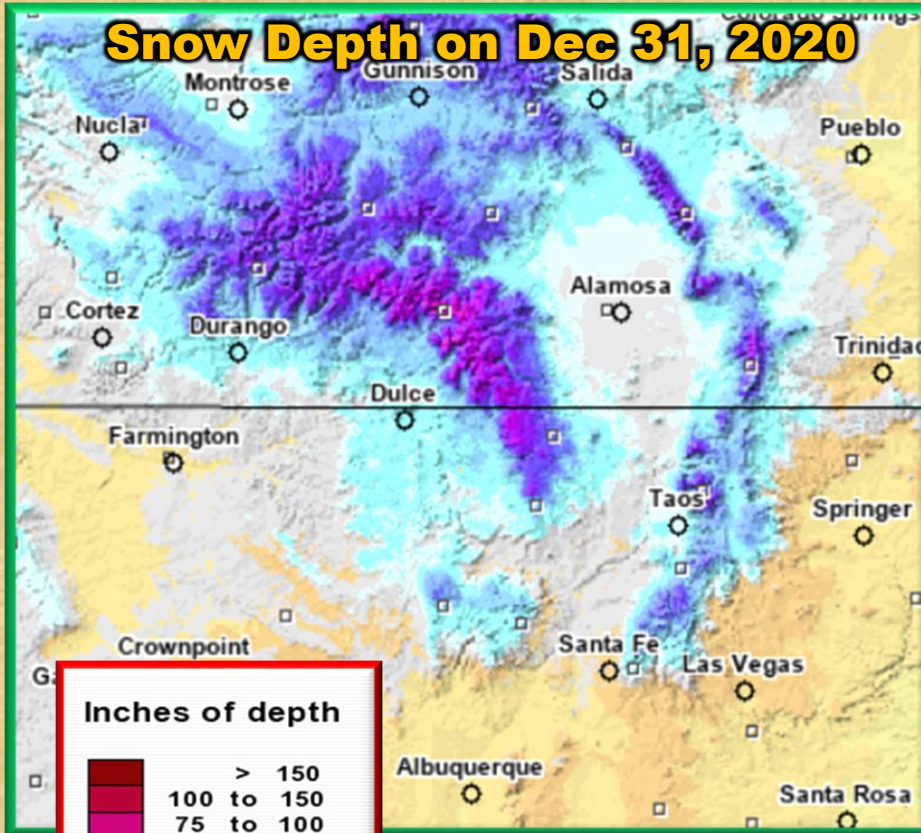


**Build your own custom slider maps here at:**

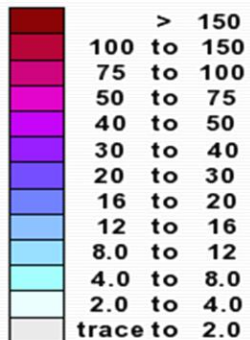
**<http://droughtmonitor.unl.edu/Maps/ComparisonSlider.aspx>**

# Snow Data Upper Rio Grand Basin as of January 31, 2021

## Snow Depth on Dec 31, 2020

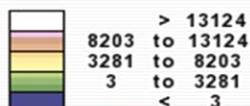


### Inches of depth

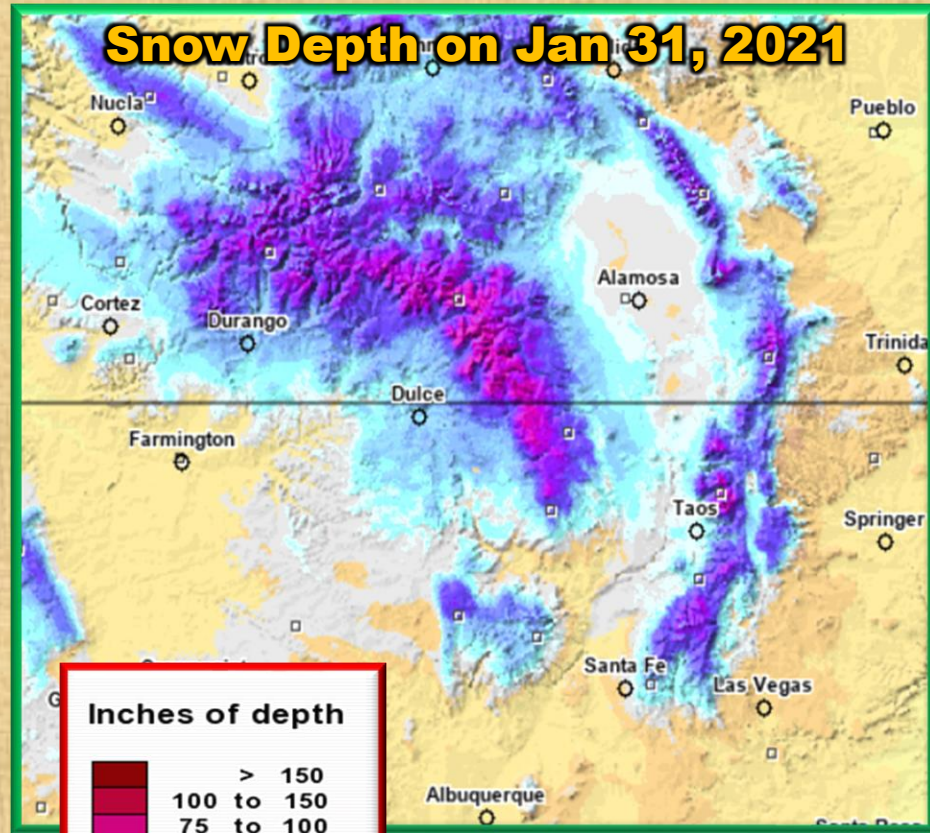


Not Estimated

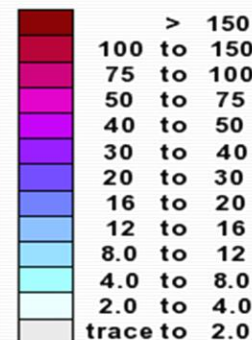
### Elevation in feet



## Snow Depth on Jan 31, 2021

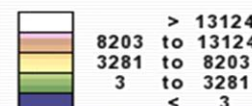


### Inches of depth



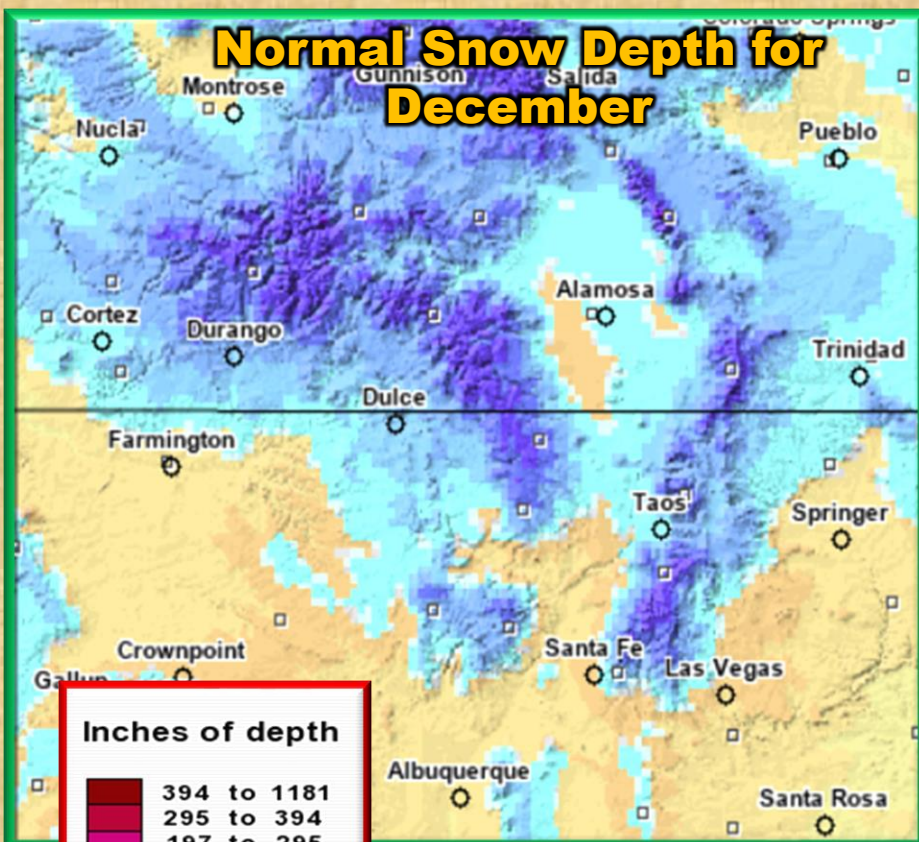
Not Estimated

### Elevation in feet

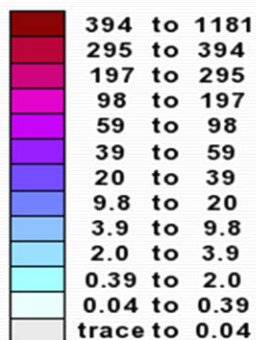


# Snow Data Upper Rio Grand Basin as of January 31, 2021

## Normal Snow Depth for December

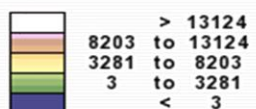


### Inches of depth

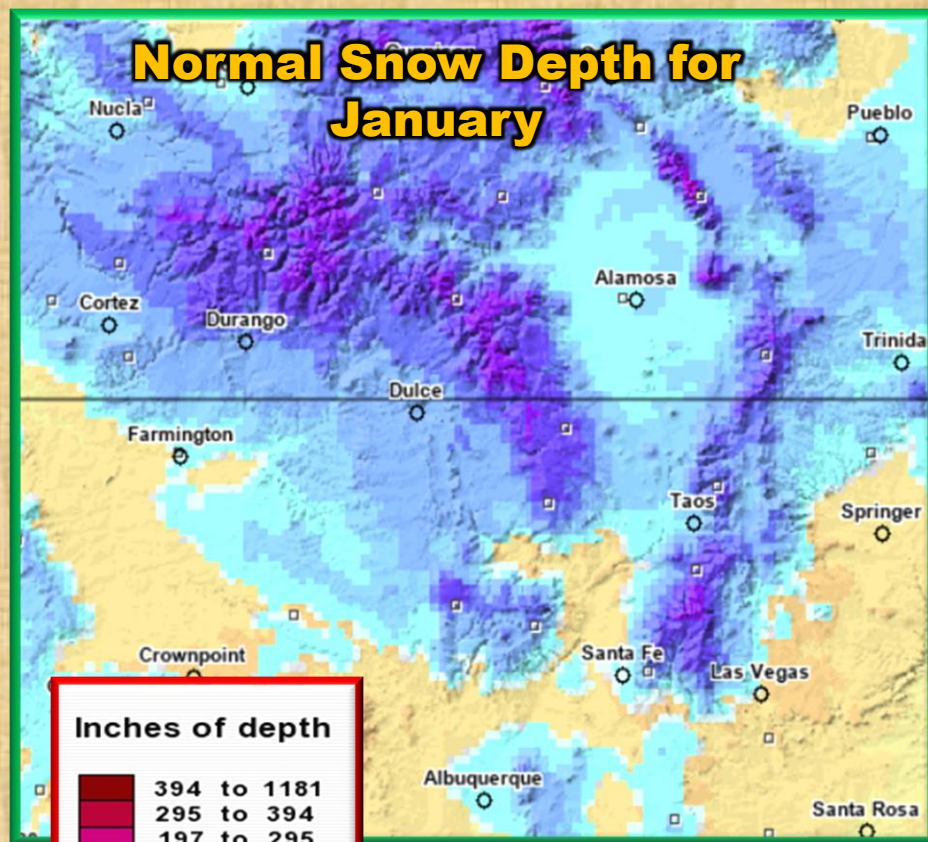


Not Estimated

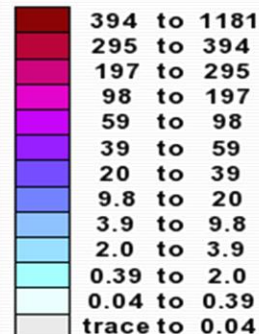
### Elevation in feet



## Normal Snow Depth for January

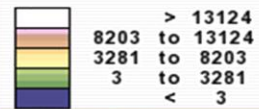


### Inches of depth



Not Estimated

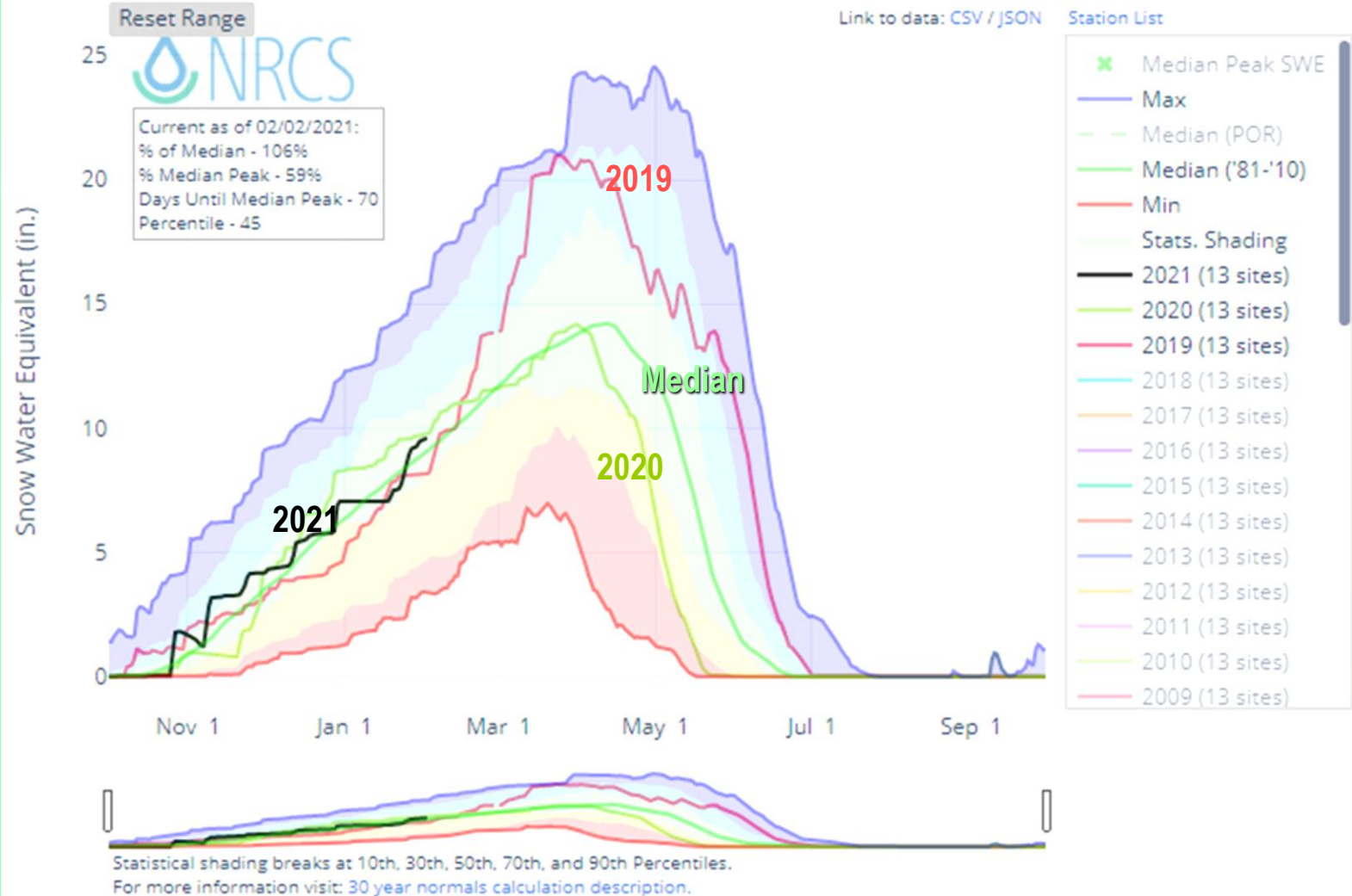
### Elevation in feet



# Snow Water Equivalent as of Jan 31, 2020

## Compare to last few years and average values

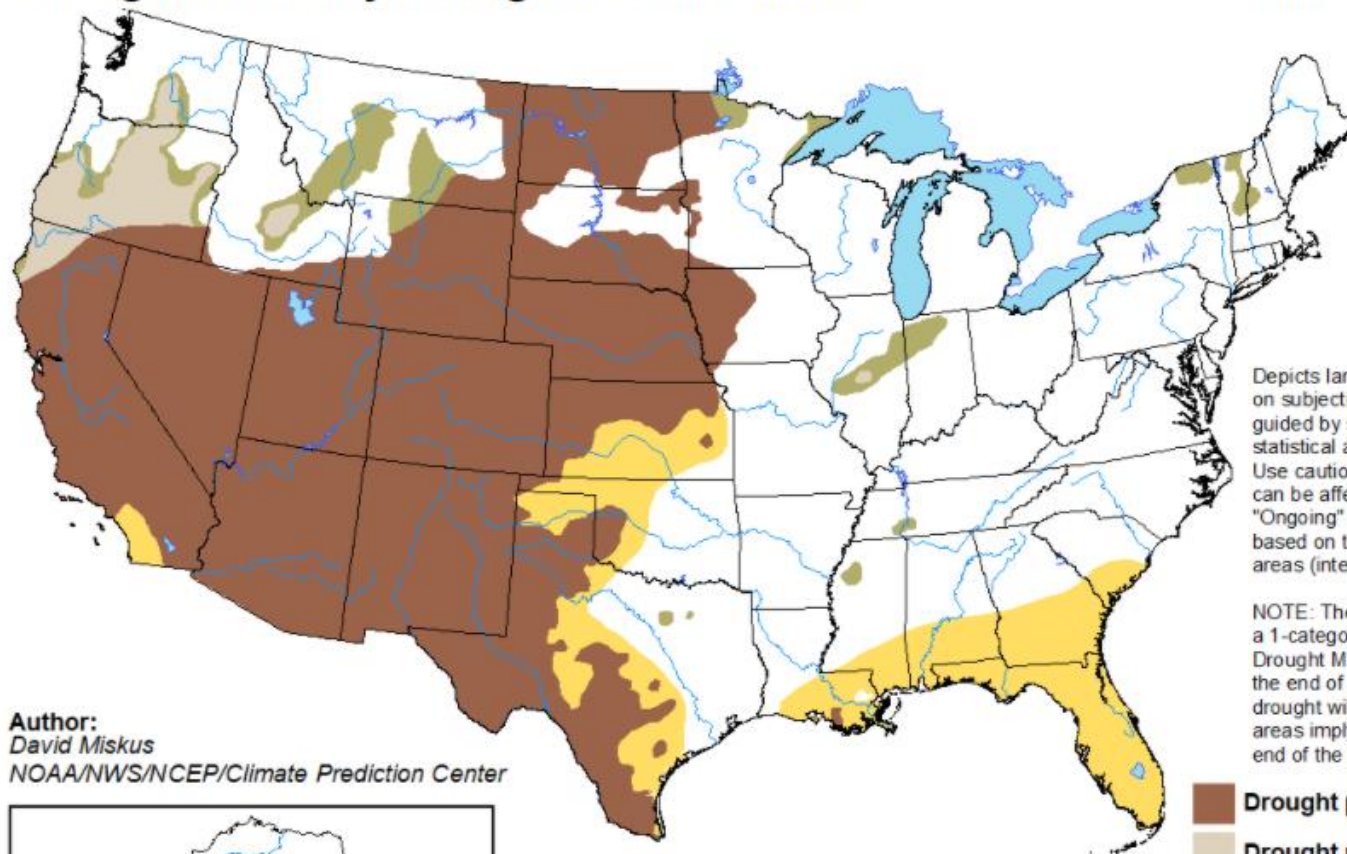
### SNOW WATER EQUIVALENT IN UPPER RIO GRANDE



# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

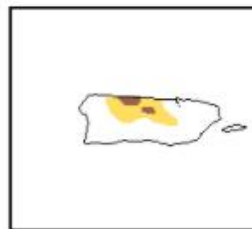
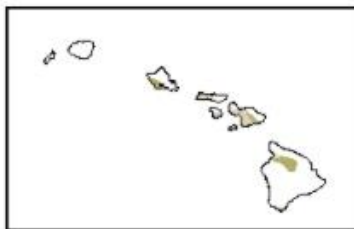
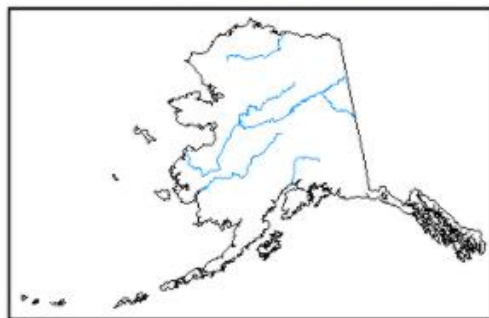
Valid for January 21 - April 30, 2021  
Released January 21



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:**  
David Miskus  
NOAA/NWS/NCEP/Climate Prediction Center



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



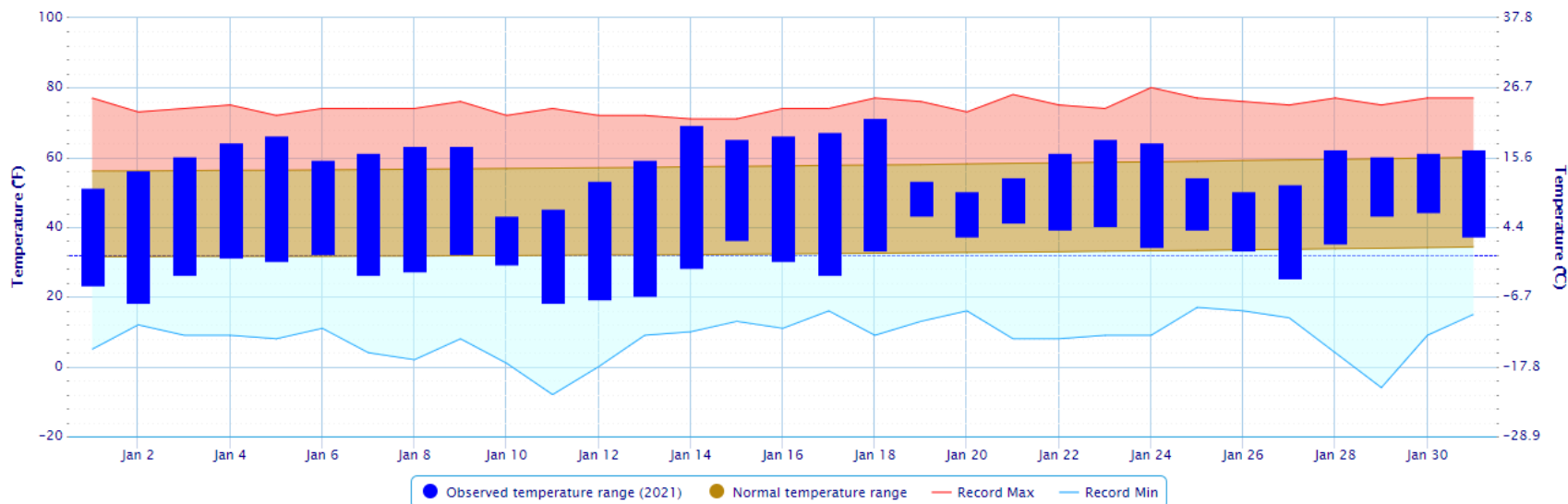
<http://go.usa.gov/3eZ73>

# Temperature and precipitation data for January 2021 in El Paso

○ = record

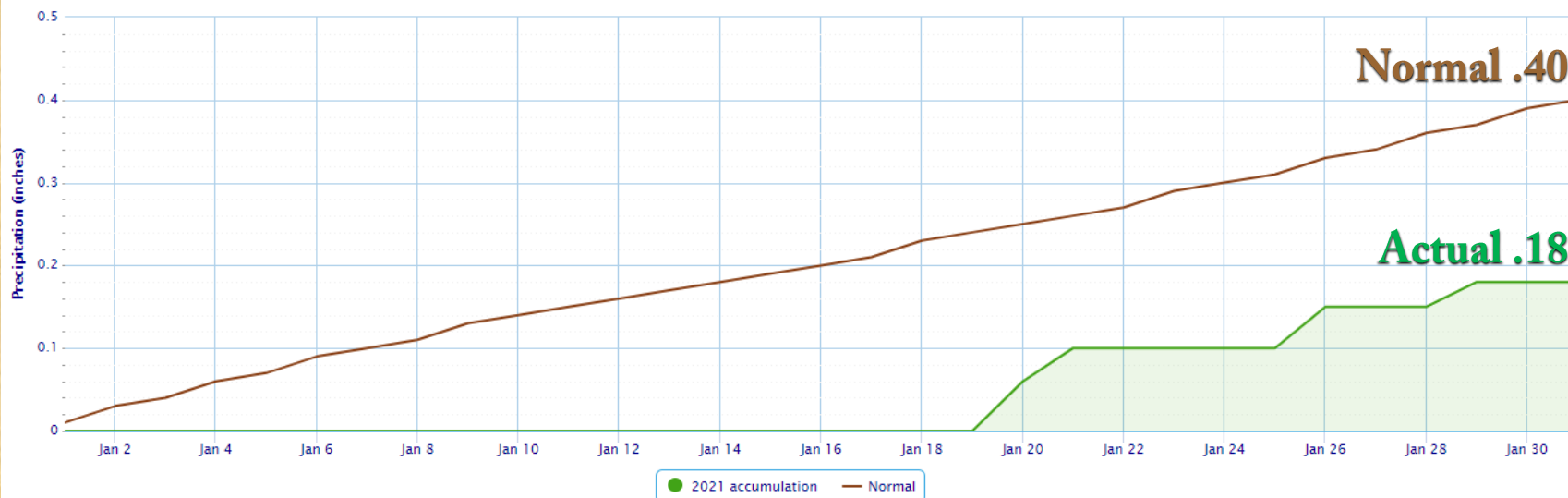
Daily Temperature Data – El Paso Area, TX (ThreadEx)

Period of Record – Max temperature: 1887-01-01 to 2021-02-01; Min temperature: 1879-01-01 to 2021-02-01. Normals period: 1981-2010. 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



# 2021: Temperature and Precipitation Data for El Paso



## El Paso TX - 2021

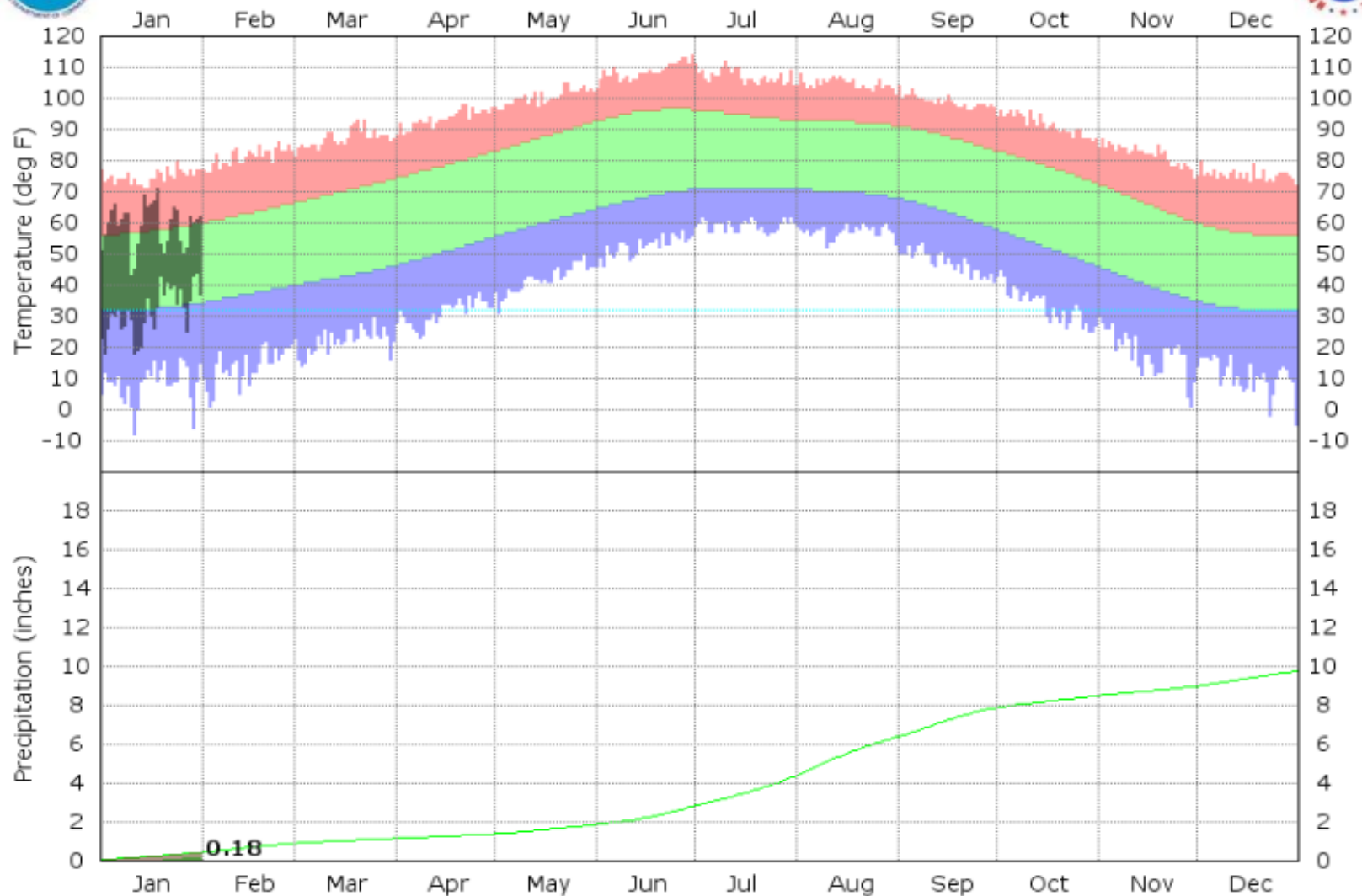
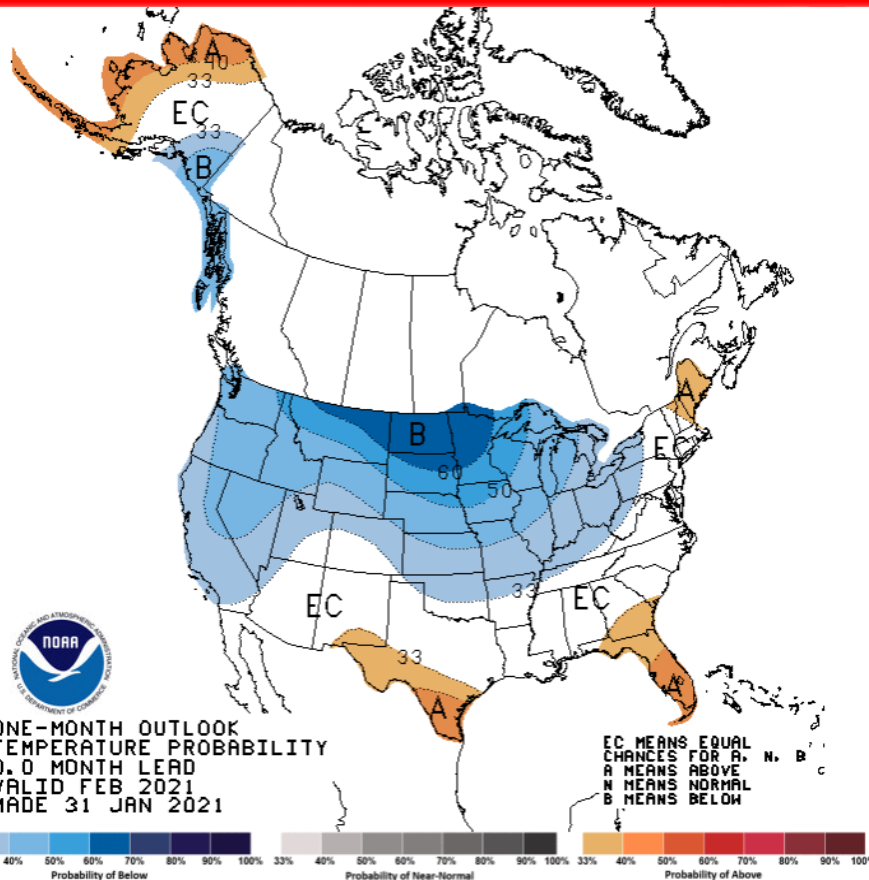


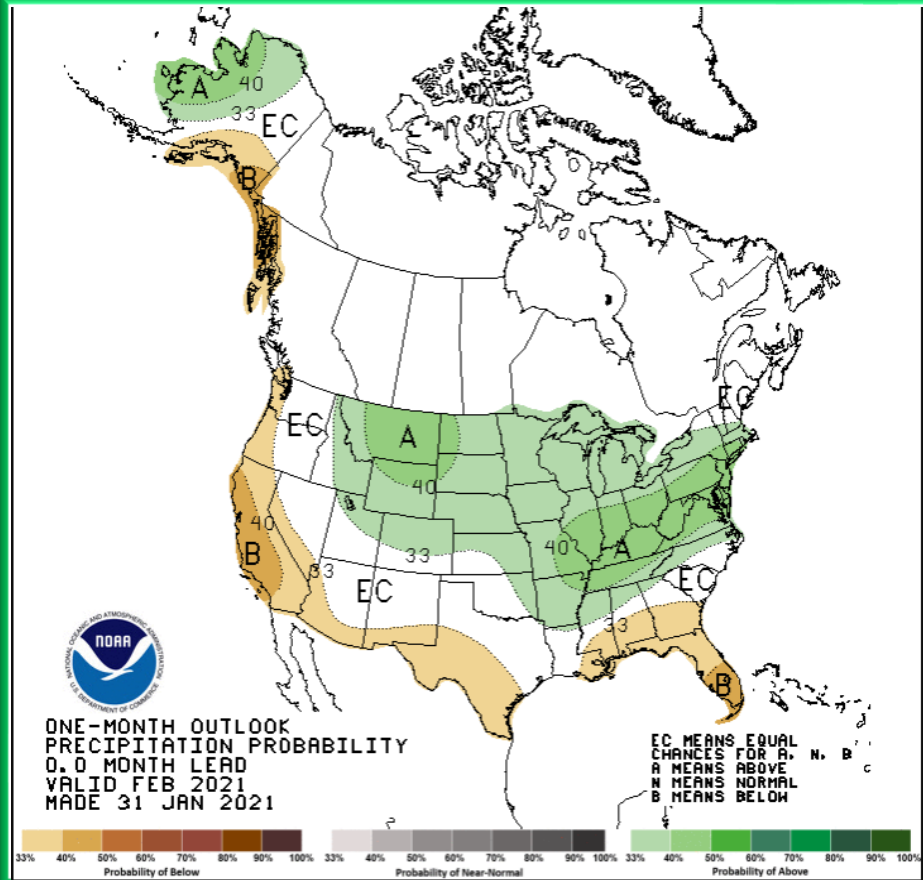
Image created: Mon, 1 Feb 2021 19:08 GMT

# Temperature and precipitation outlook for February 2021

## Temperature

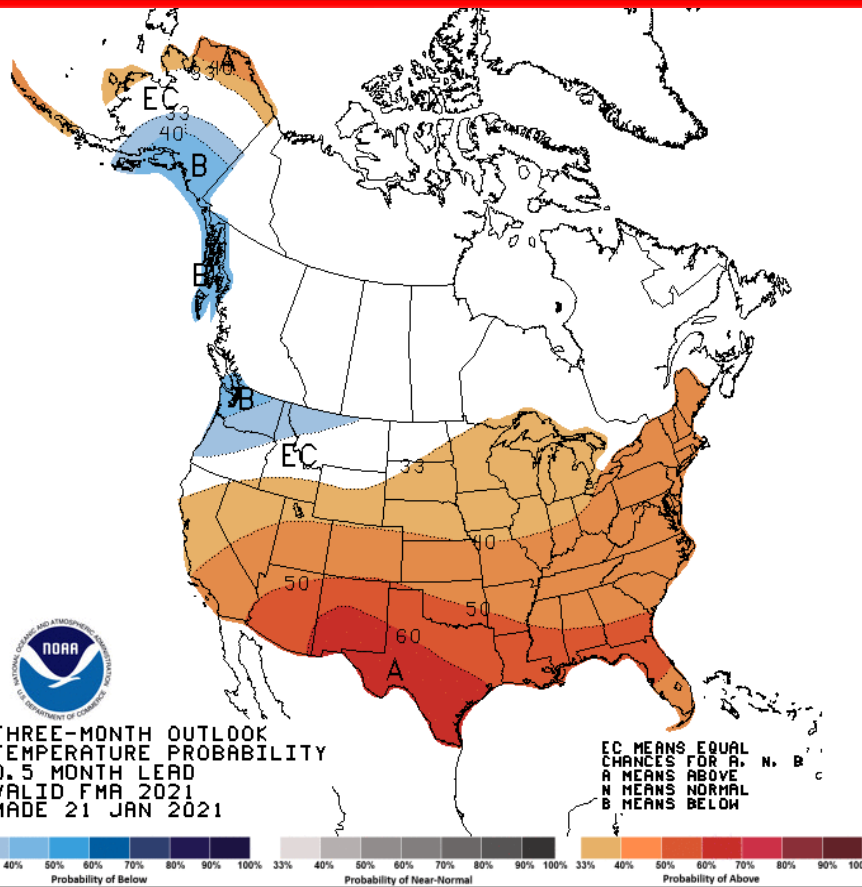


## Precipitation

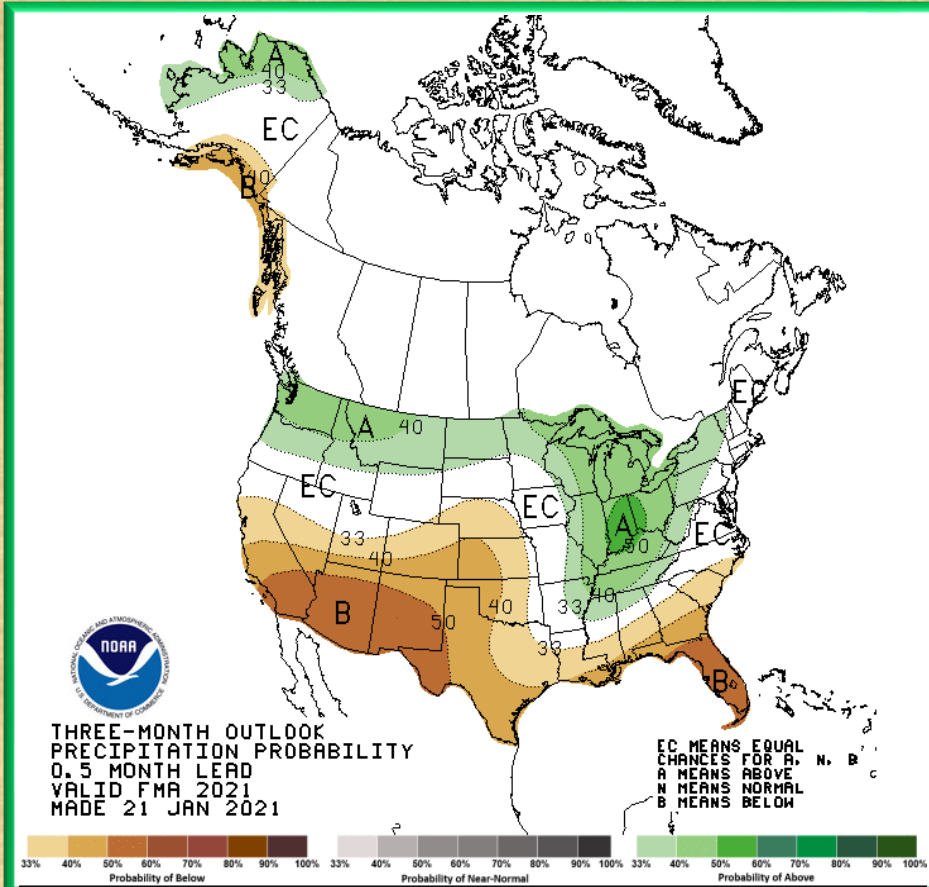


# Temperature and precipitation outlook For February-April 2021

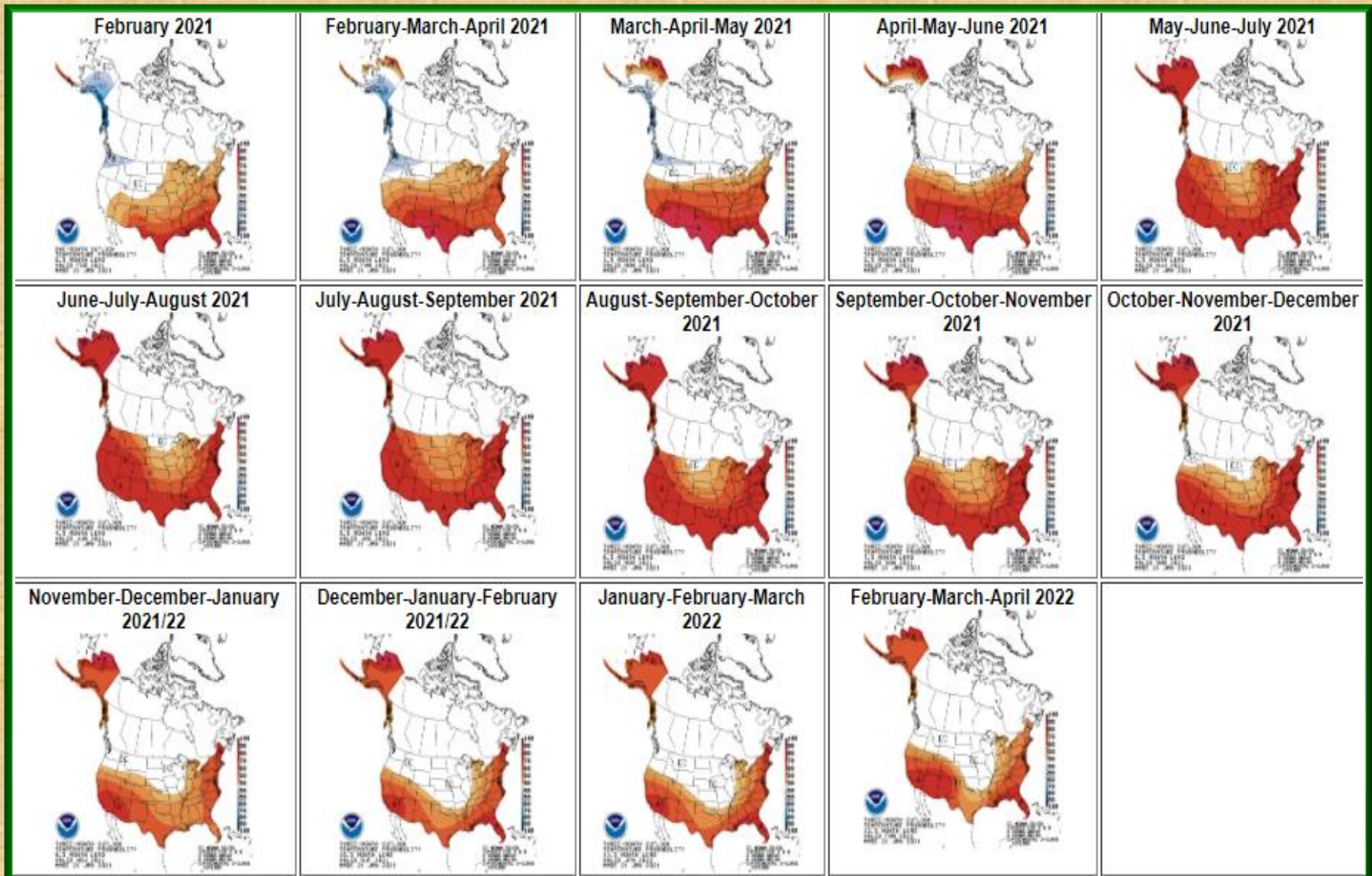
## Temperature



## Precipitation

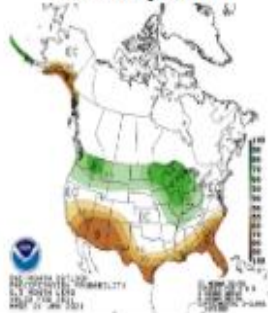


# Temperature Outlook Through April 2022

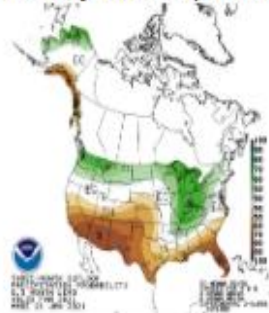


# Precipitation Outlook Through April 2022

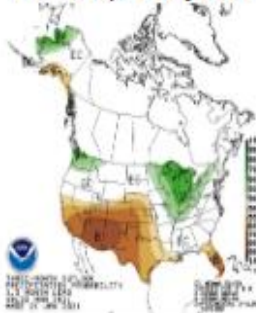
February 2021



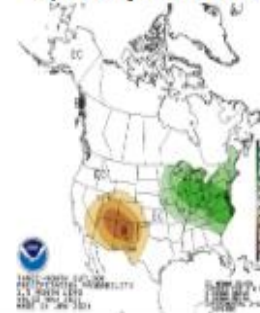
February-March-April 2021



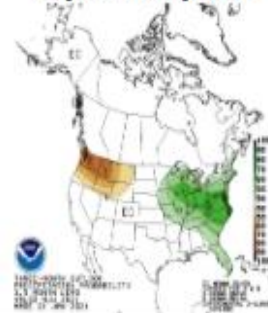
March-April-May 2021



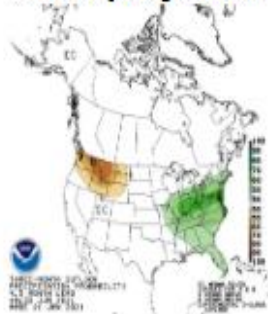
April-May-June 2021



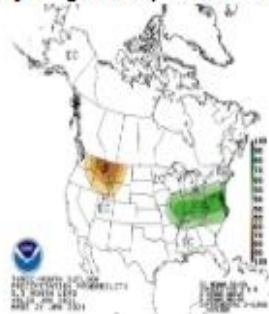
May-June-July 2021



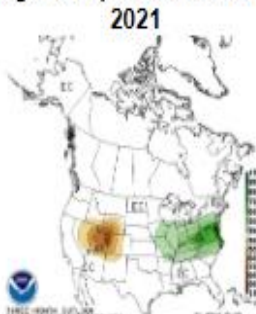
June-July-August 2021



July-August-September 2021



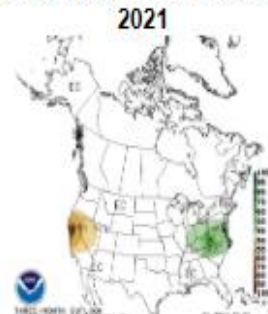
August-September-October 2021



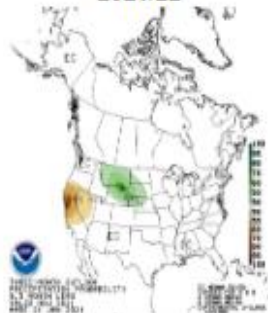
September-October-November 2021



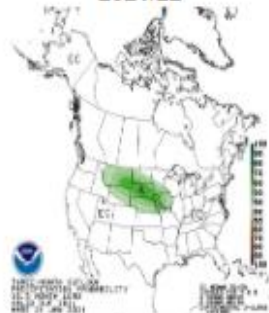
October-November-December 2021



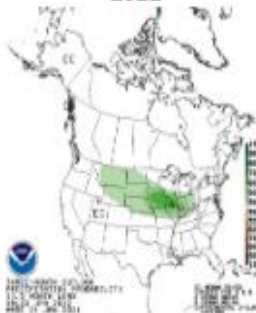
November-December-January 2021/22



December-January-February 2021/22



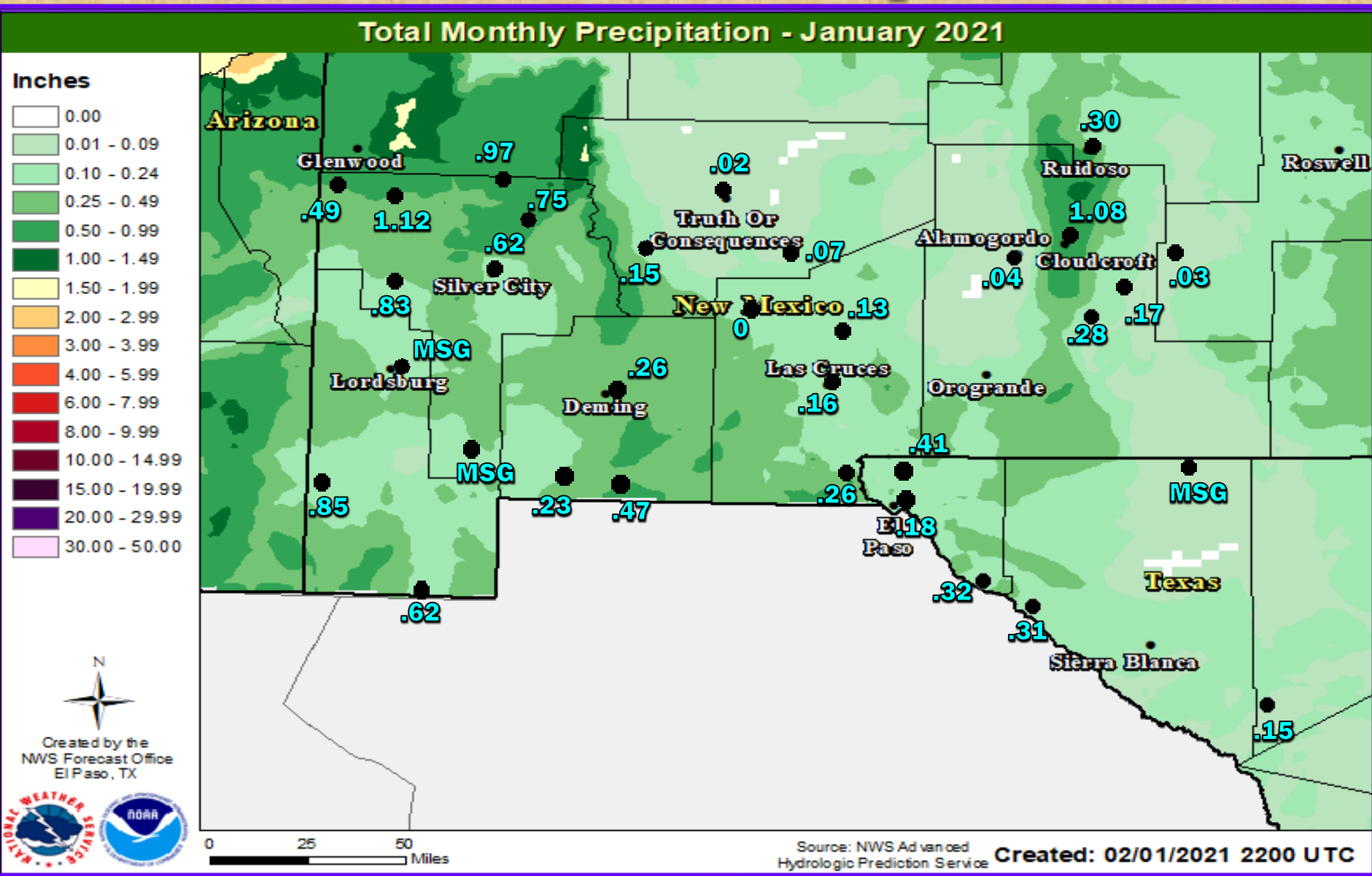
January-February-March 2022



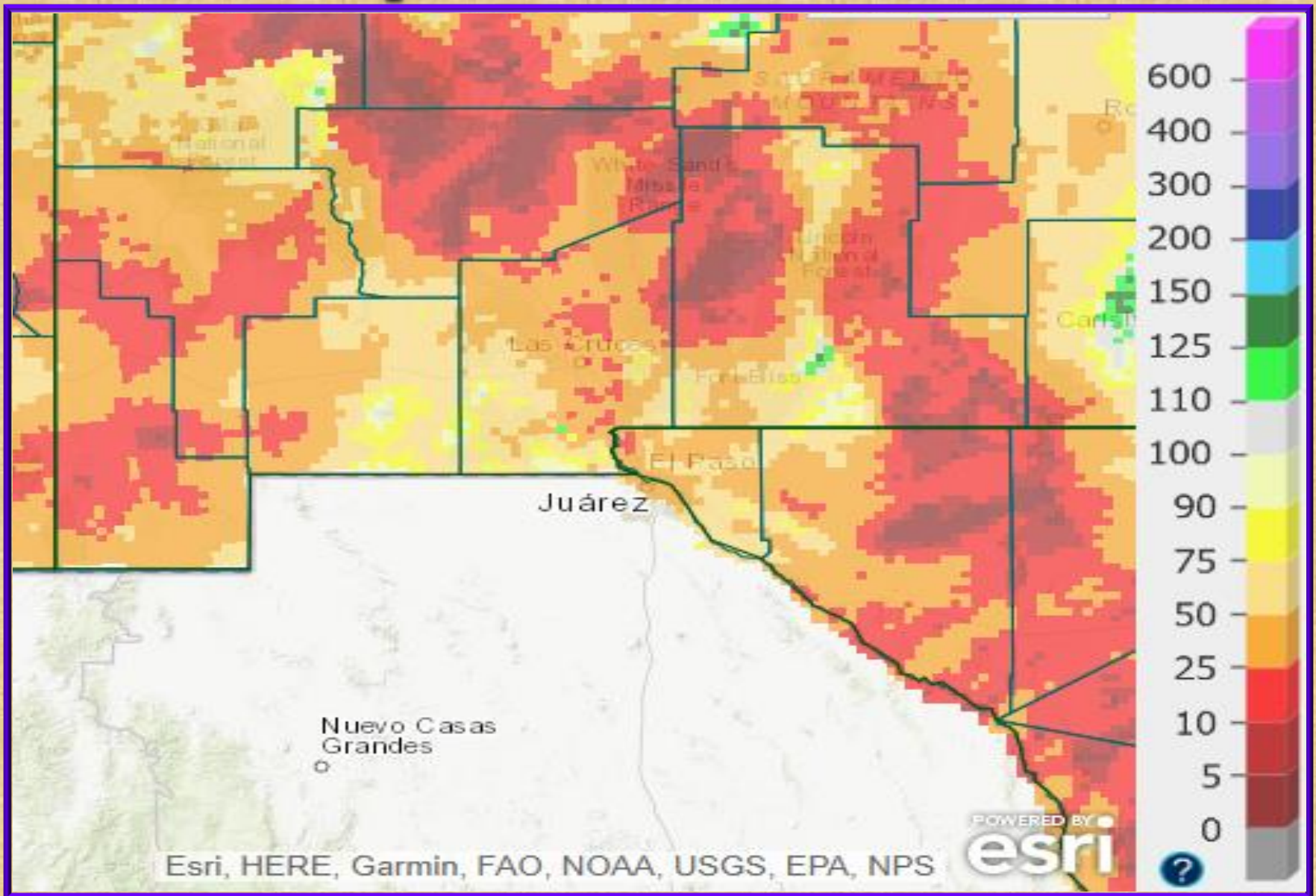
February-March-April 2022



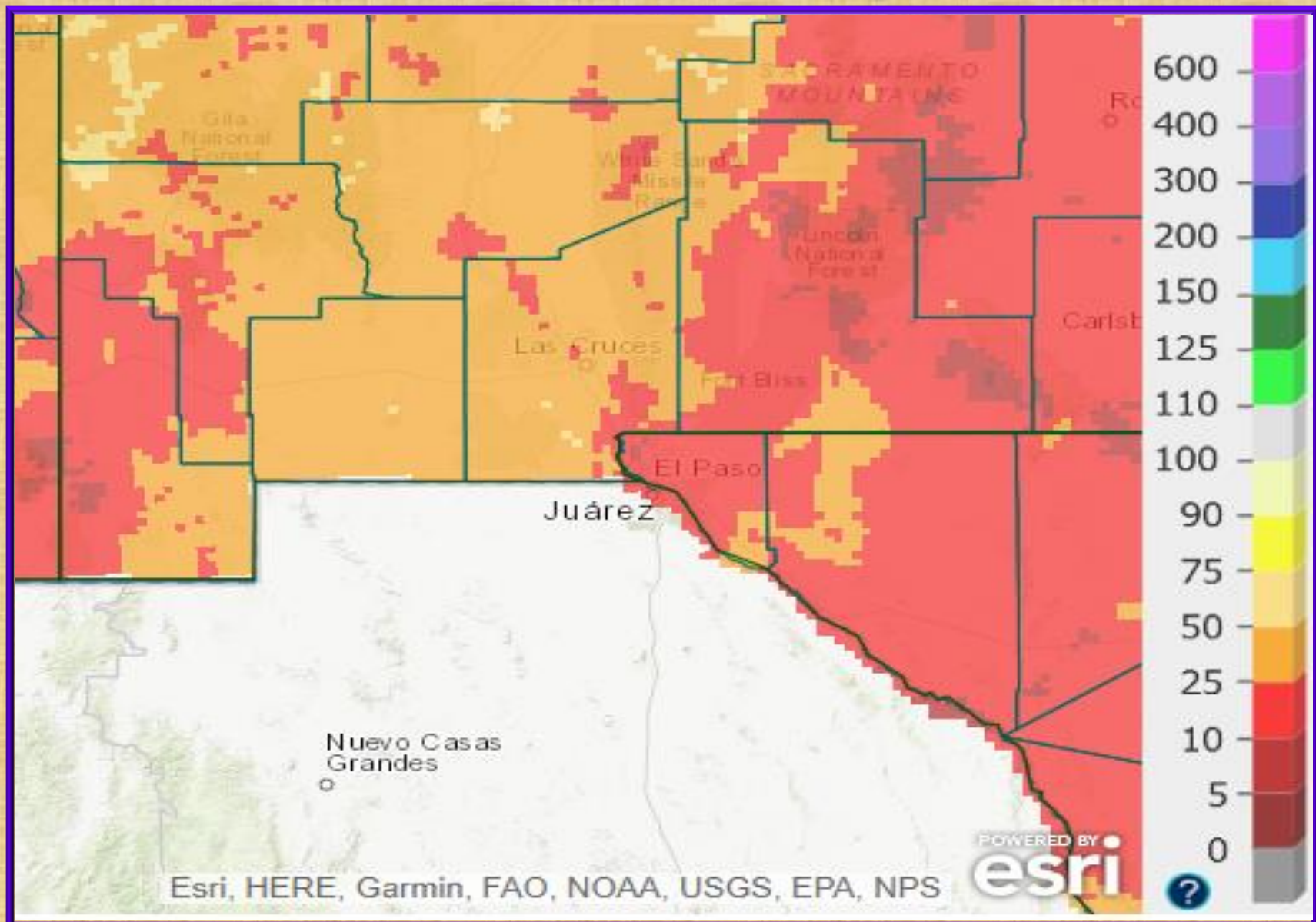
# January 2021 radar rainfall estimate with surface rainfall reports



# January 2021 radar rainfall estimate percent of normal



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

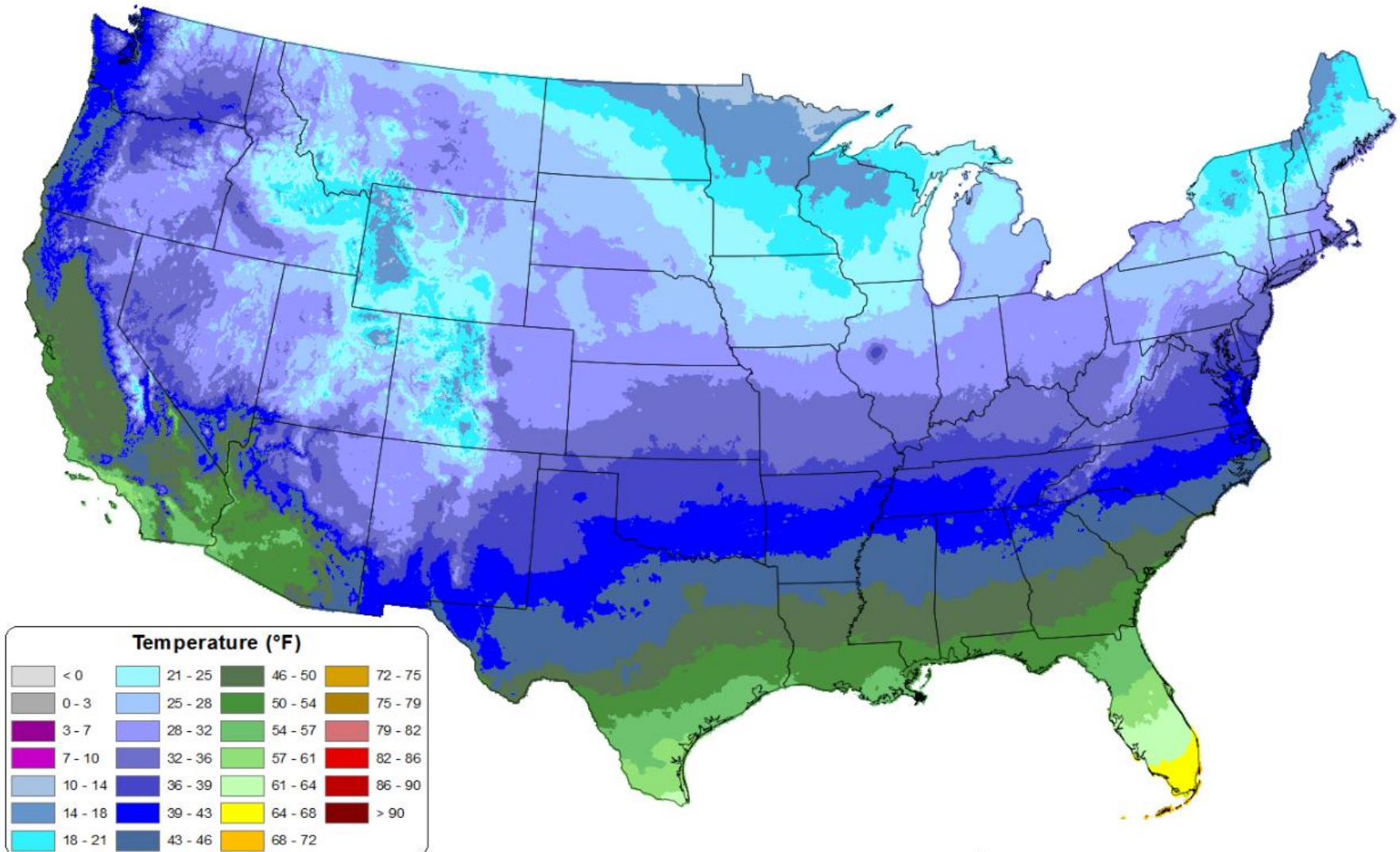


# Average Daily Mean Temperature for January 2021

Average Daily Mean Temperature: Jan 2021

Period ending 7 AM EST 31 Jan 2021

(Map created 02 Feb 2021)

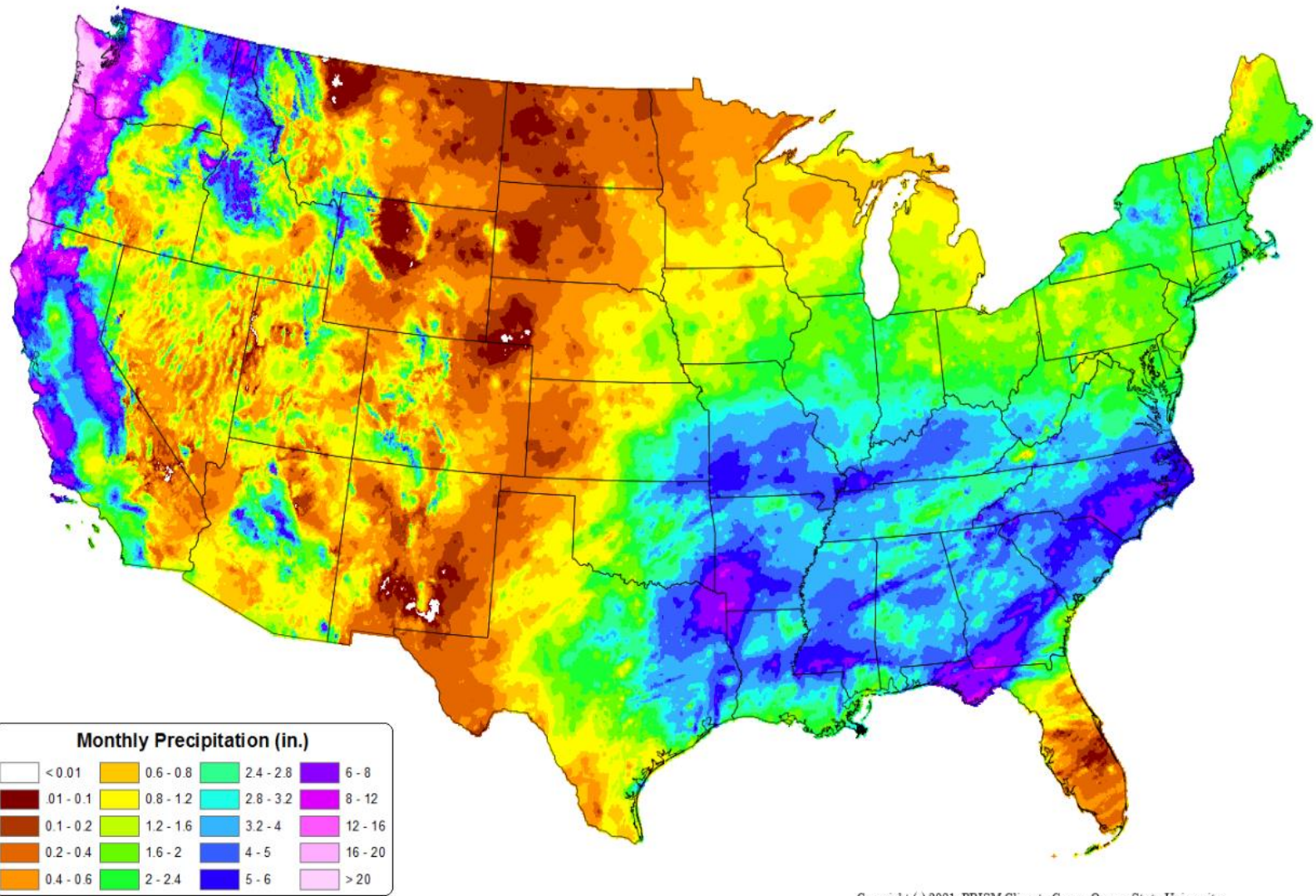


# Total Precipitation for January 2021

Total Precipitation: Jan 2021

Period ending 31 Jan 2021

(Map created 02 Feb 2021)



# Selected weather reports January 2021

Date/Time	Location (County)	Event
JANUARY 26 700 AM	SILVER CITY 1SW-GRANT	8.5 INCHES OF SNOW
JANUARY 26 630 AM	SUNSPOT-OTERO	7.6 INCHES OF SNOW
JANUARY 26 700 AM	TYRONE 3SW-GRANT	7.0 INCHES OF SNOW
JANUARY 26 700 AM	CLOUDCROFT-OTERO	6.0 INCHES OF SNOW
JANUARY 26 700 AM	GILA HOT SPRINGS-GRANT	5.5 INCHES OF SNOW
JANUARY 26 700 AM	HANOVER 9NE-GRANT	5.0 INCHES OF SNOW
JANUARY 26 800 AM	WINSTON 1SE-SIERRA	3.0 INCHES OF SNOW

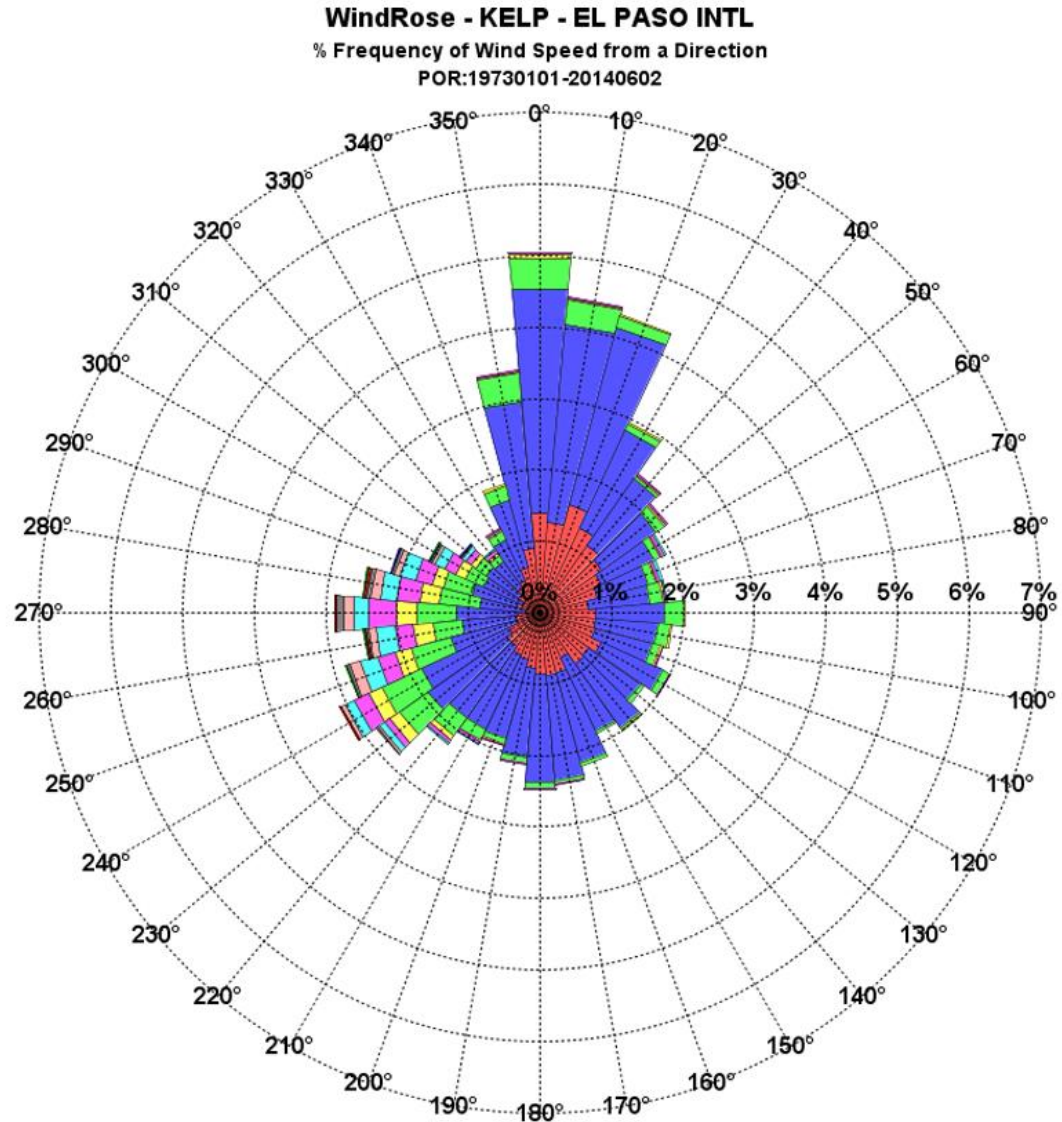
# Special Features


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

Month: JANUARY

Calm: 13.27%

Variable: 1.45%





# NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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Local forecast by "City, ST" or ZIP code


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## 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 >](#)

### NWS El Paso

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


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Weather Forecast Office

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#### Today

##### Wednesday

Warmer with a Few Afternoon Storms



Weather Forecast Office  
El Paso, TX  
September 27, 2016 4:43 PM


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 >](#)

### Monthly Weather Digest

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

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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
<a href="#">January</a>	2005 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">February</a>	2006 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">March</a>	2007 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">April</a>	2008 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">May</a>	2009 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">June</a>	2010 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">July</a>	2011 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">August</a>	2012 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">September</a>	2013 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">October</a>	2014 <a href="#">Spring</a> <a href="#">Fall</a>
<a href="#">November</a>	
<a href="#">December</a>	

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.**

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

