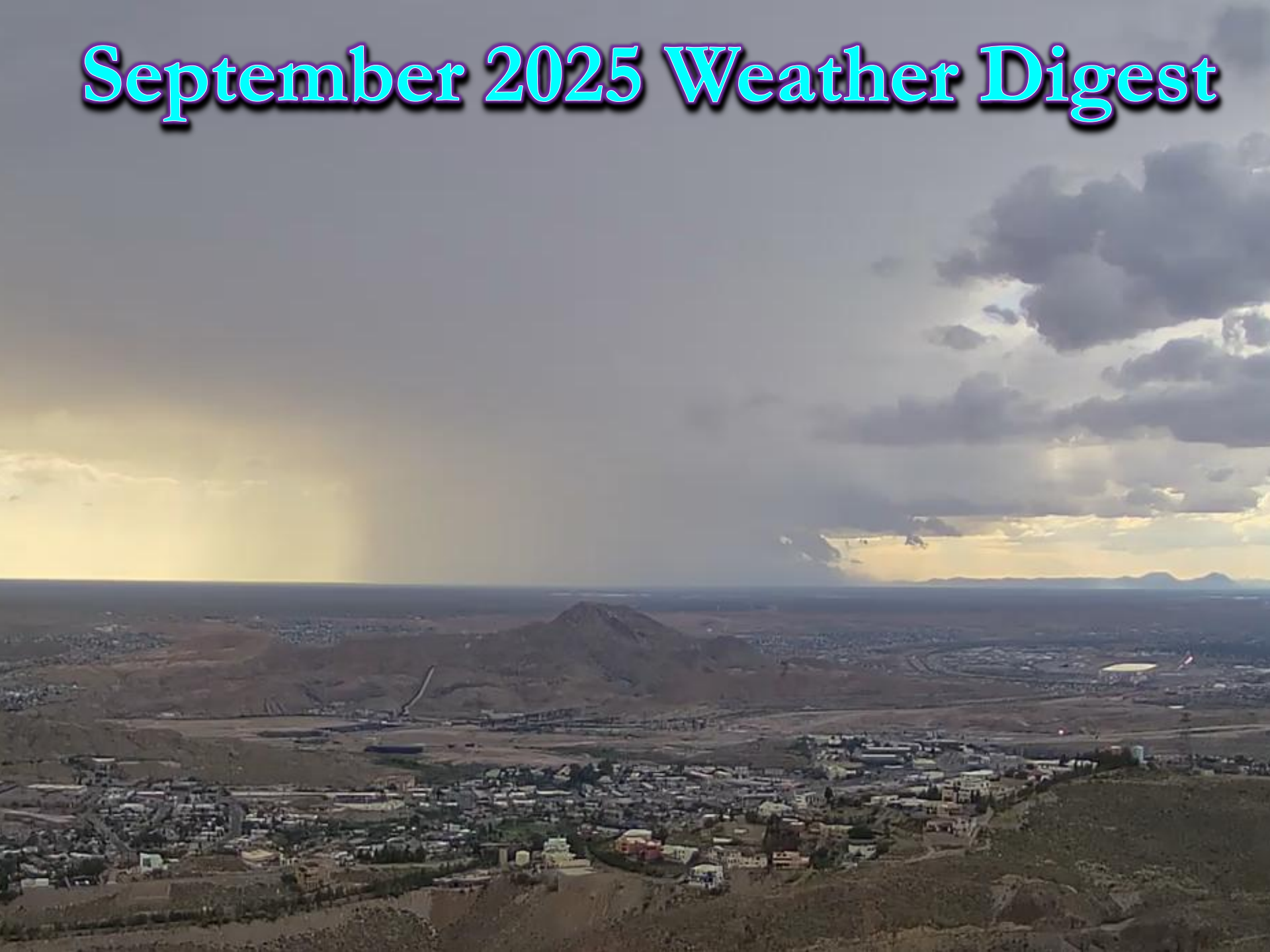
September 2025 Weather Digest



September 2025 Weather Summary

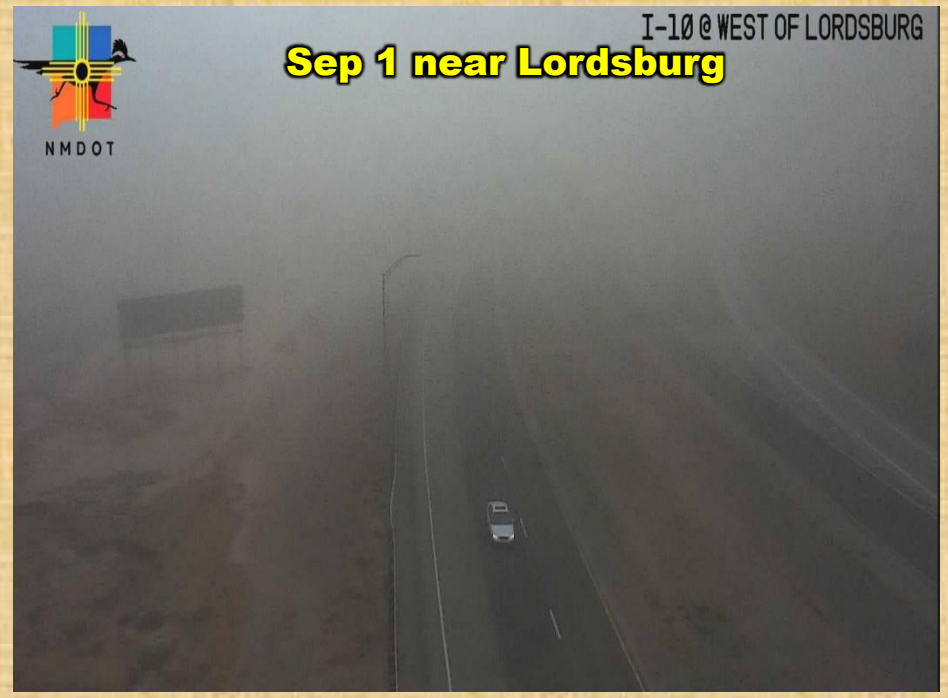
After a relatively dry August, the September monsoon kicked back into high gear. Most of the areas east of the Continental Divide received ample rainfall with the majority of the area 125-300% of their normal monthly rainfall. The areas west of the Divide remained mostly below normal, but even there, a few areas such as Hidalgo and western Grant Counties received above normal rainfall. There were two big tropical surges of note; the first being the remnants of Tropical Storm Lorena at the beginning of the month and again around the last 4-5 days of the month.

The rain and clouds kept the area from receiving much abnormally hot temperatures. Though average daily temperatures were around 1-3 degrees above normal, most of this was due to warm overnight lows, as average high temperatures ranged mostly from zero to one degree above normal. El Paso failed to reach triple digits for the month, when they normally average one or two for the month. El Paso did record 19 days above 90 degrees, slight above the average of 16 days for the month. El Paso warmest high temperature for September was 98 degrees.

September 2025 Weather Summary

Looking ahead to October, daylight and average temperatures continue to decrease. The average high temperature at El Paso on October 1 is 84 degrees, falling to 74 on the last day of October. Length of daylight on the first at El Paso is 11 hours, 50 mins, which decreases to 10 hours, 55 mins on the last day of October. Average rainfall for most areas begins a significant decline into the drier Winter and Spring seasons. Average rainfall at El Paso is 0.76 of an inch.

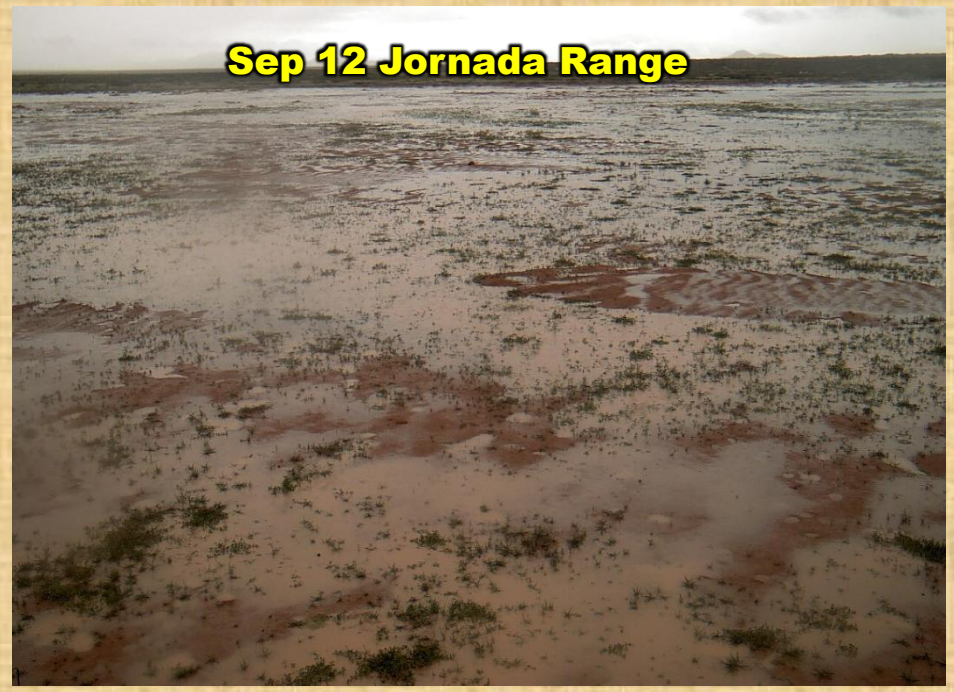
The full moon for October occurs on October 6. Usually this moon is known as the Hunter's Moon, but since the October full moon is the closest to the Autumn Equinox, it is called the Harvest Moon. The new moon arrives on October 21. There are no Lunar or Solar Eclipses in October.


I-10 @ WEST OF LORDSBURG
Sep 1 near Lordsburg
NMDOT

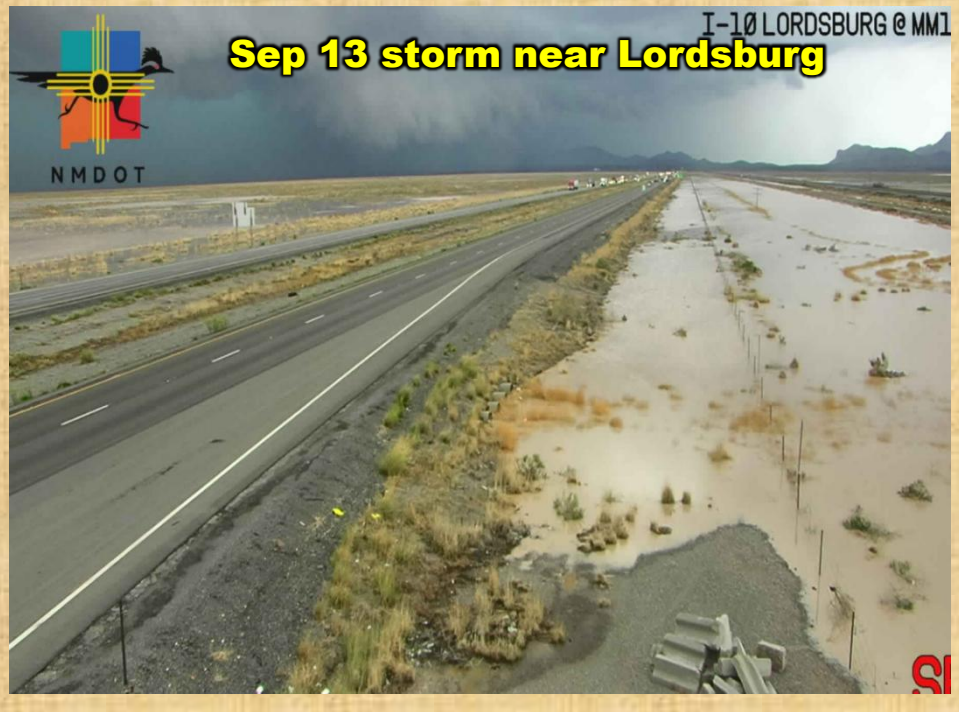

Sep1 near Lordsburg
I-10 LORDSBURG @ MM 15
NMDOT


I-10 LORDSBURG @ MM11
Sep 12 near Lordsburg
NMDOT
SE

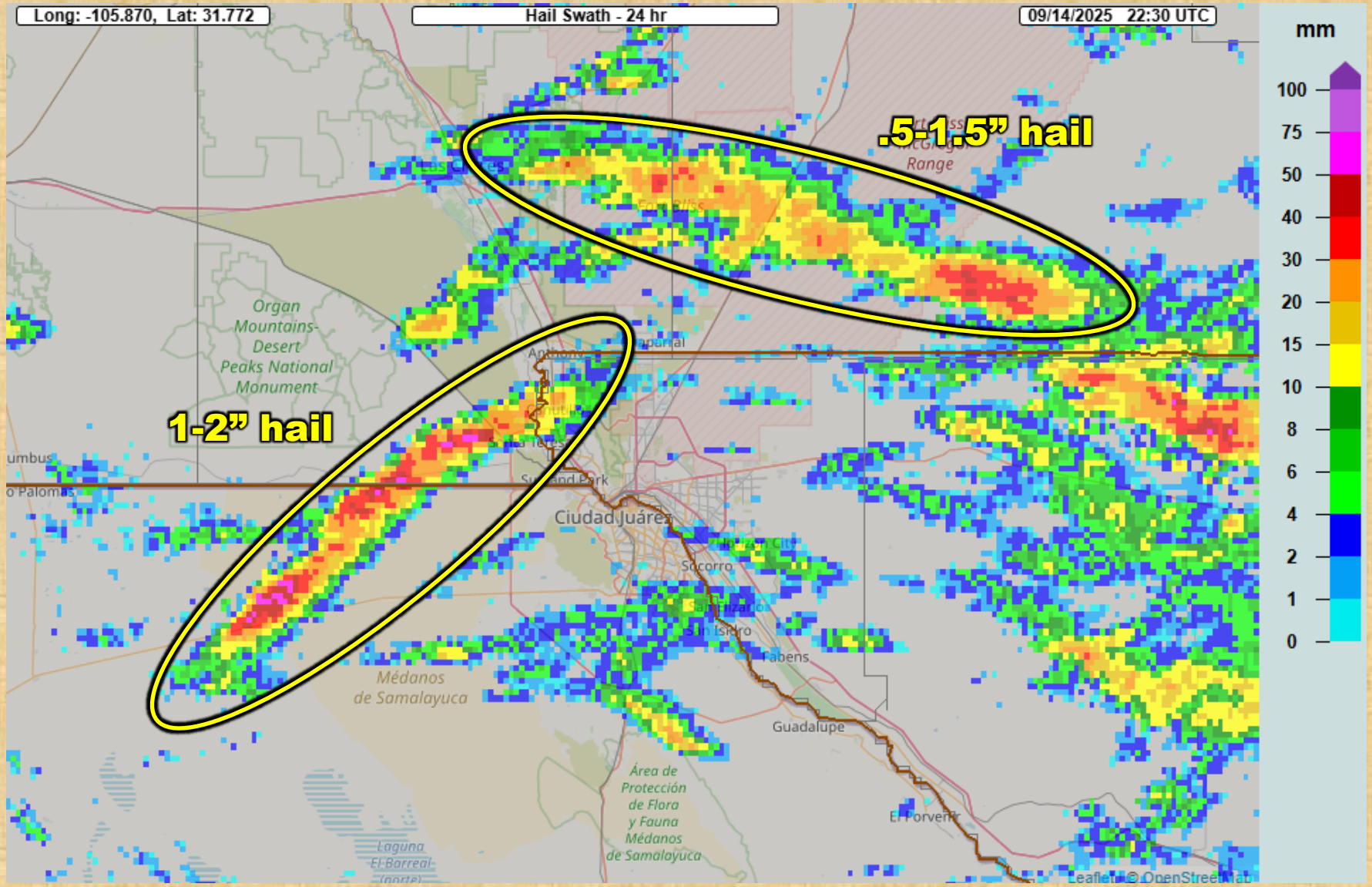

I-10 LORDSBURG @ MM 12
Sep 12 near Lordsburg
NMDOT
W


Sep 12 Jornada Range


I-10 LORDSBURG @ MM 12
NMDOT
Sep 13 heavy rain near Lordsburg


I-10 LORDSBURG @ MM1
NMDOT
Sep 13 storm near Lordsburg

Sep 13 Hail Tracks




Sep 14 storm near Cliff


Sep 14 storm near Cliff

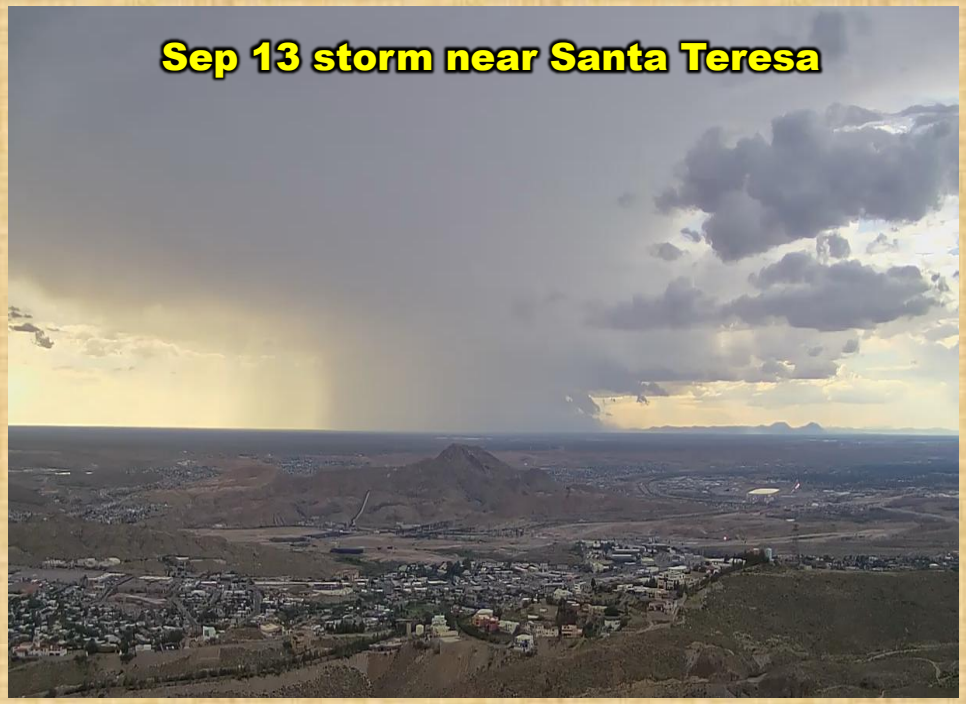

Sep 17 storm east El Paso


Sep 13 Silver City Lightning


Sep 13 Silver City Lightning


Sep 13 Silver City Lightning


Sep 13 Silver City Lightning


Sep 13 storm near Santa Teresa


Sep 13 storm near Santa Teresa


Sep 17 storm over east El Paso

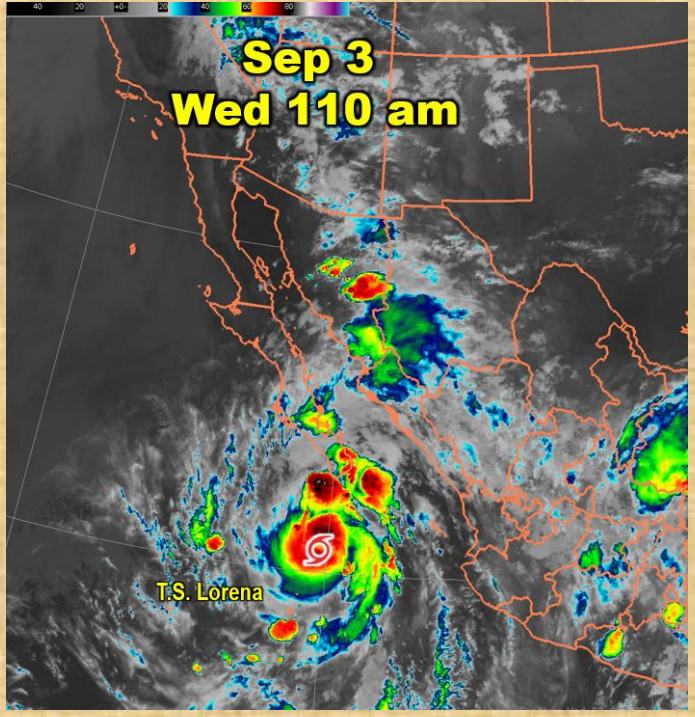

Sep 19 storm over El Paso

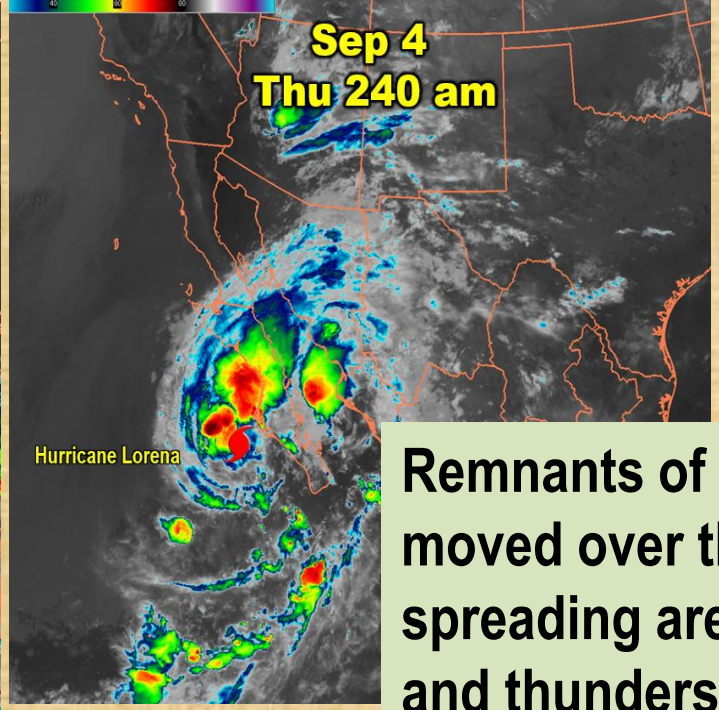

Sep 27 lightning at El Paso


Sep 27 lightning at El Paso

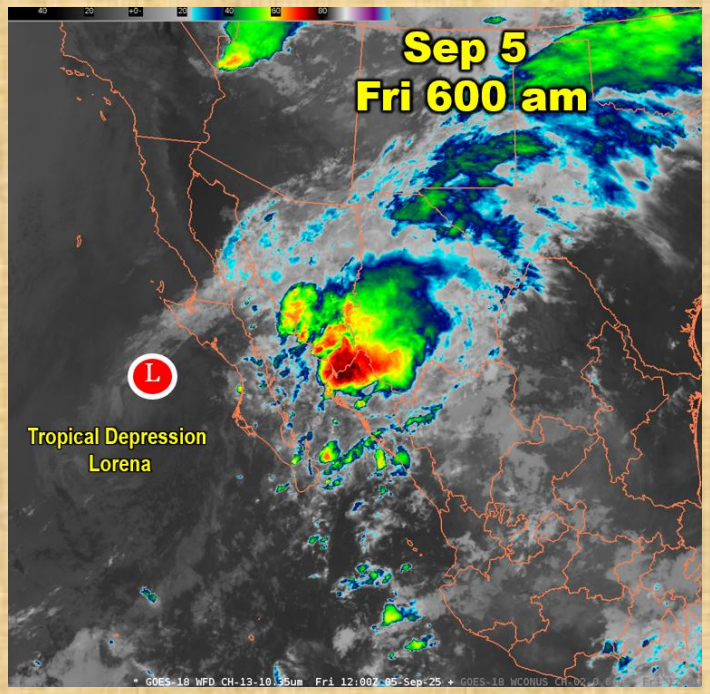

Sep 27 lightning at El Paso

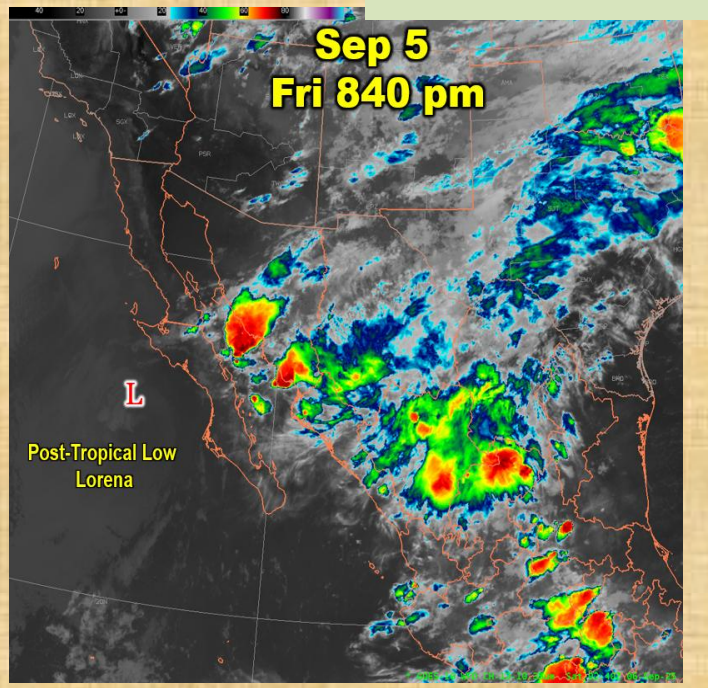

Sep 28 storm near White Sands NP





Remnants of Hurricane Lorena moved over the area on Sep 4-6, spreading areas of showers and thunderstorms to the area.





ENSO Alert System Status:
La Niña Watch

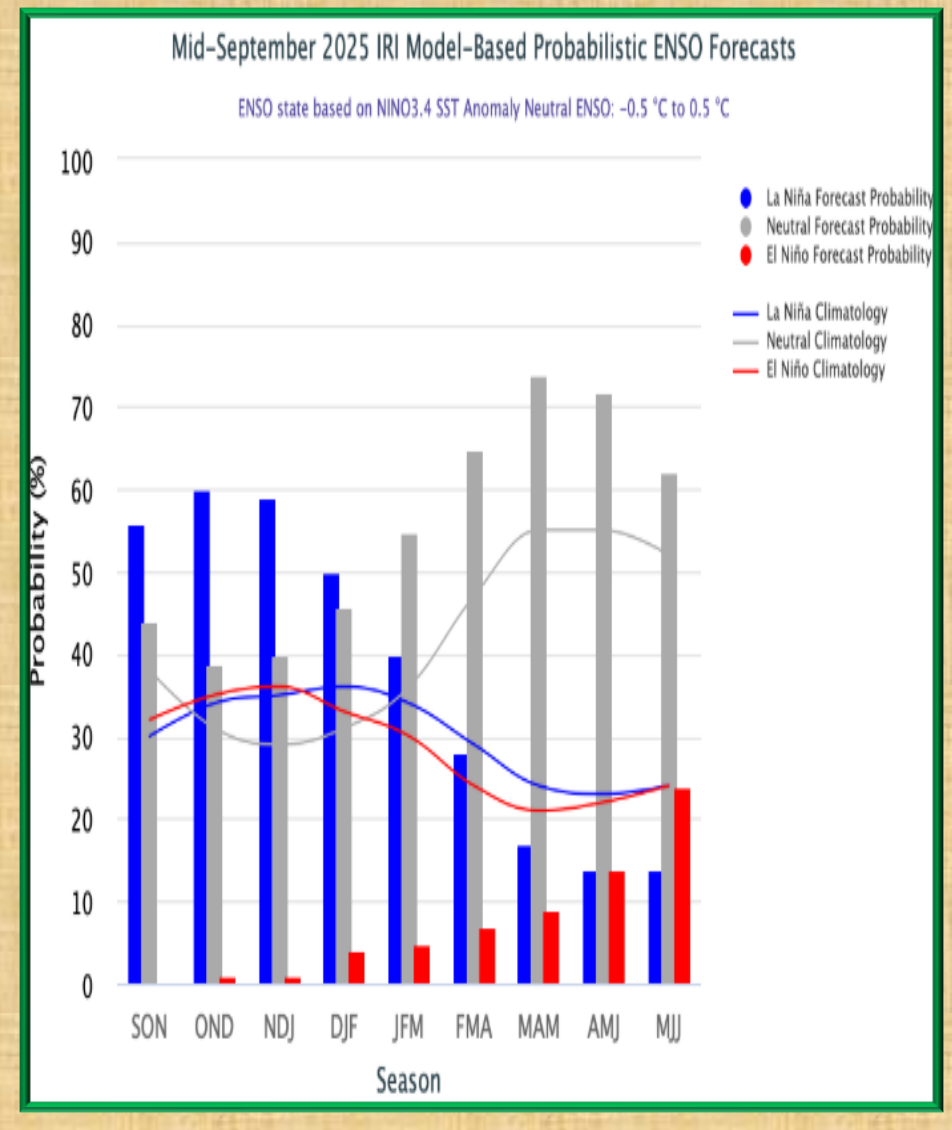
ENSO Alert System

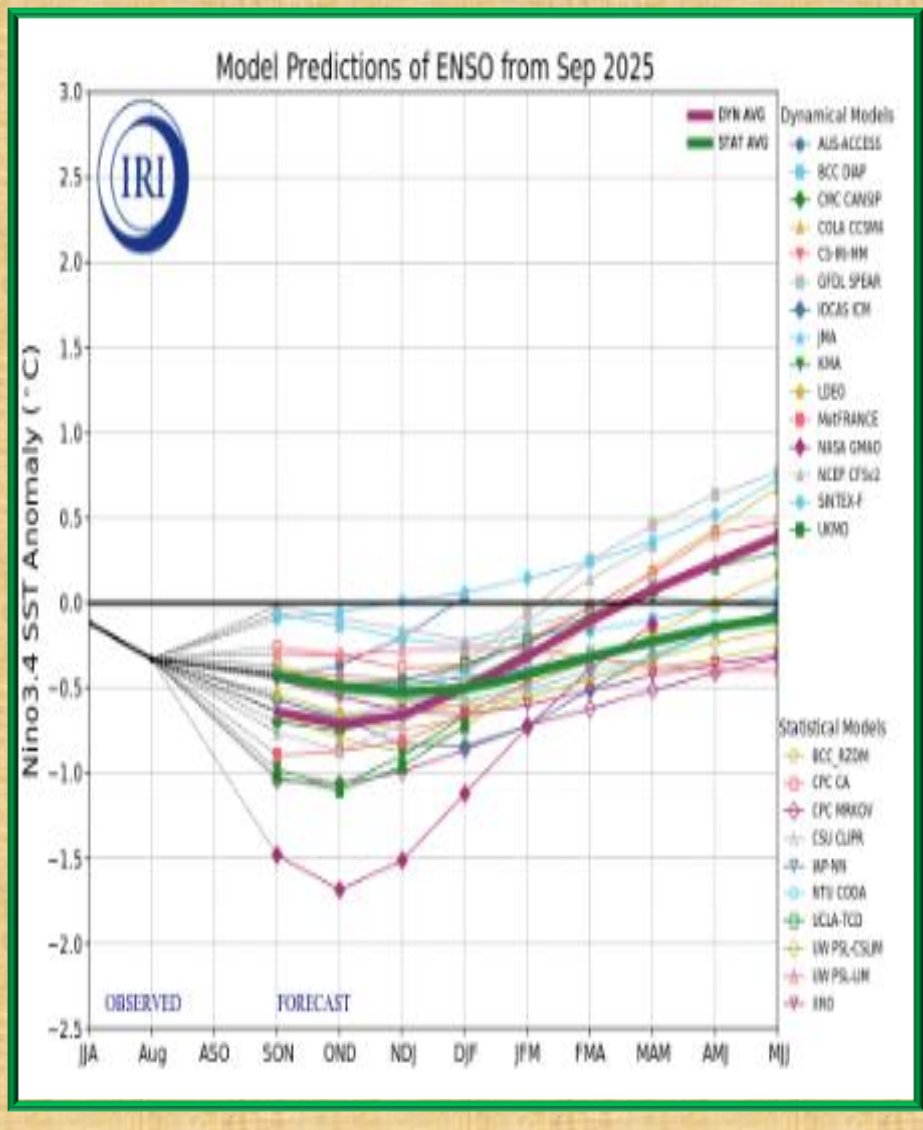
- El Niño or La Niña Watch: Issued when conditions are favorable for the development of El Niño or La Niña conditions in the next six months.

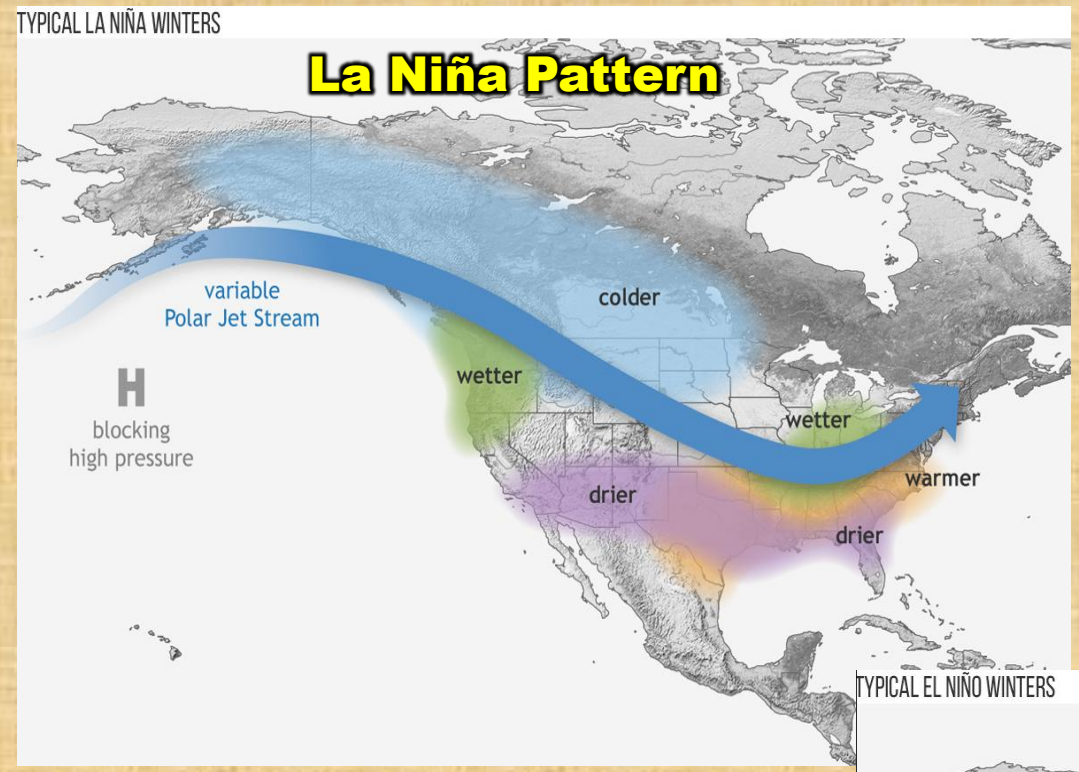
- El Niño or La Niña Advisory: Issued when El Niño or La Niña conditions are observed and expected to continue.

ENSO Forecast

ENSO is currently in neutral phase and likely to transition to a weak La Niña early this winter.

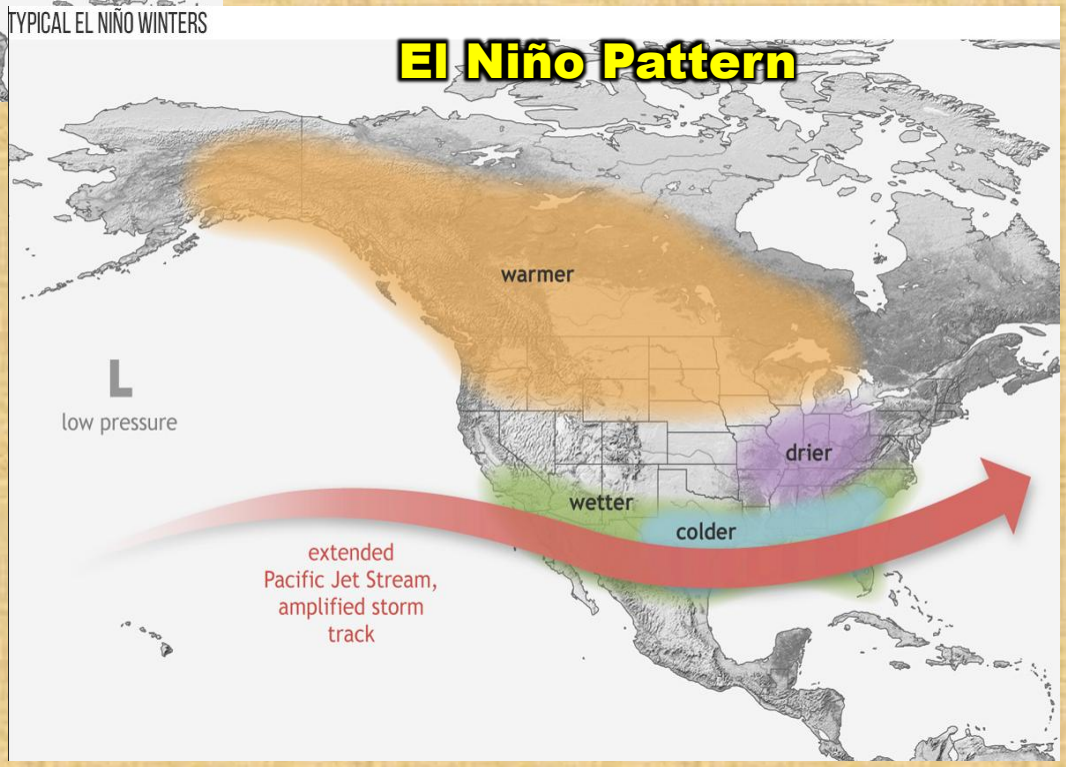






With a La Niña pattern, a ridge of high pressure tends to build off the west coast of the U.S., blocking most of our Pacific winter storm systems. These storms tend to end up moving across the northern Plains and down to the southeastern part of the country. Of course it is important to remember that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

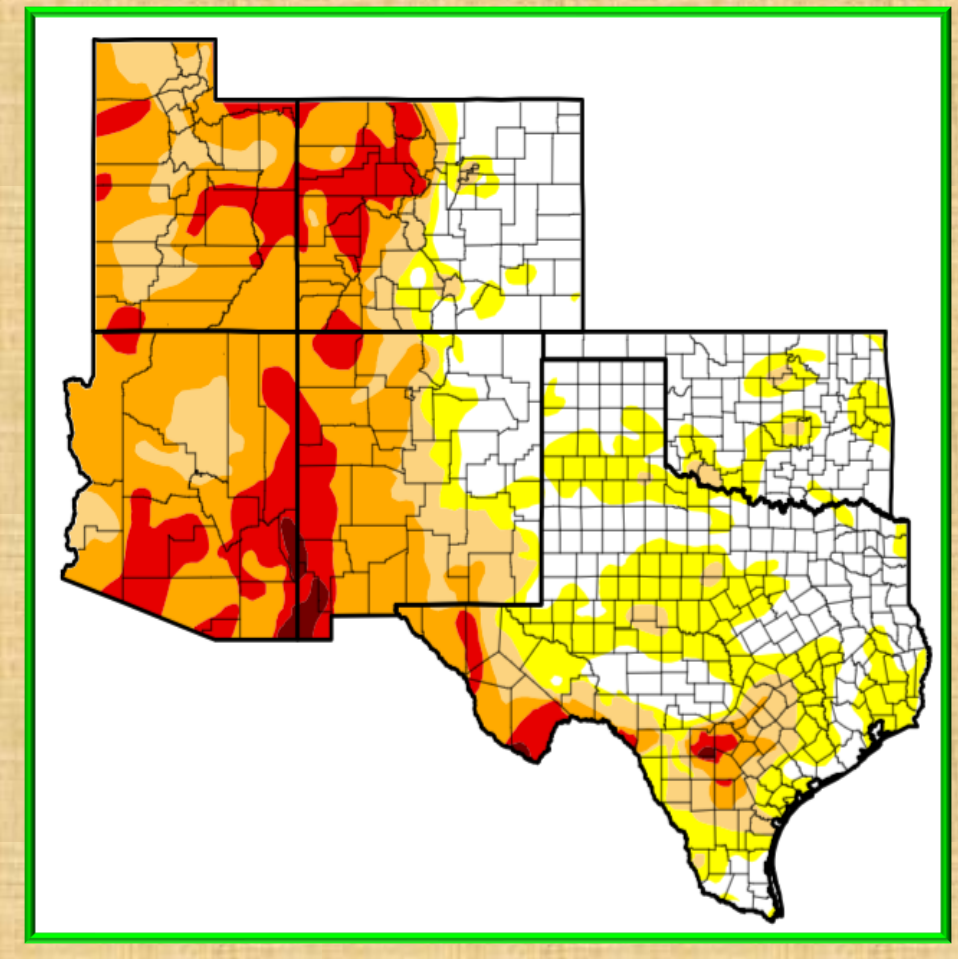
With El Niño, we often see the opposite pattern where the eastern Pacific ridge of high pressure is often weak or non-existent, allowing winter storms to sweep across the southern U.S. This typically will give the south-western U.S. above normal precipitation.



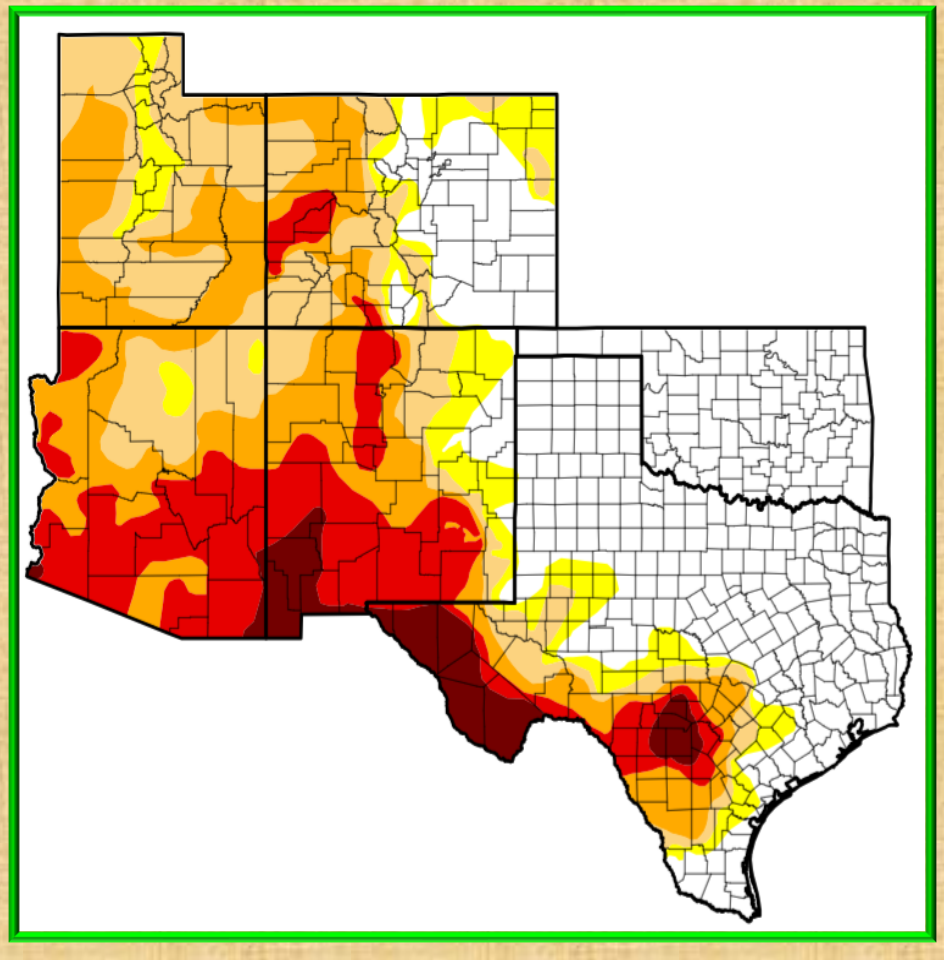
Current drought conditions and 3 month change

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

September 23, 2025



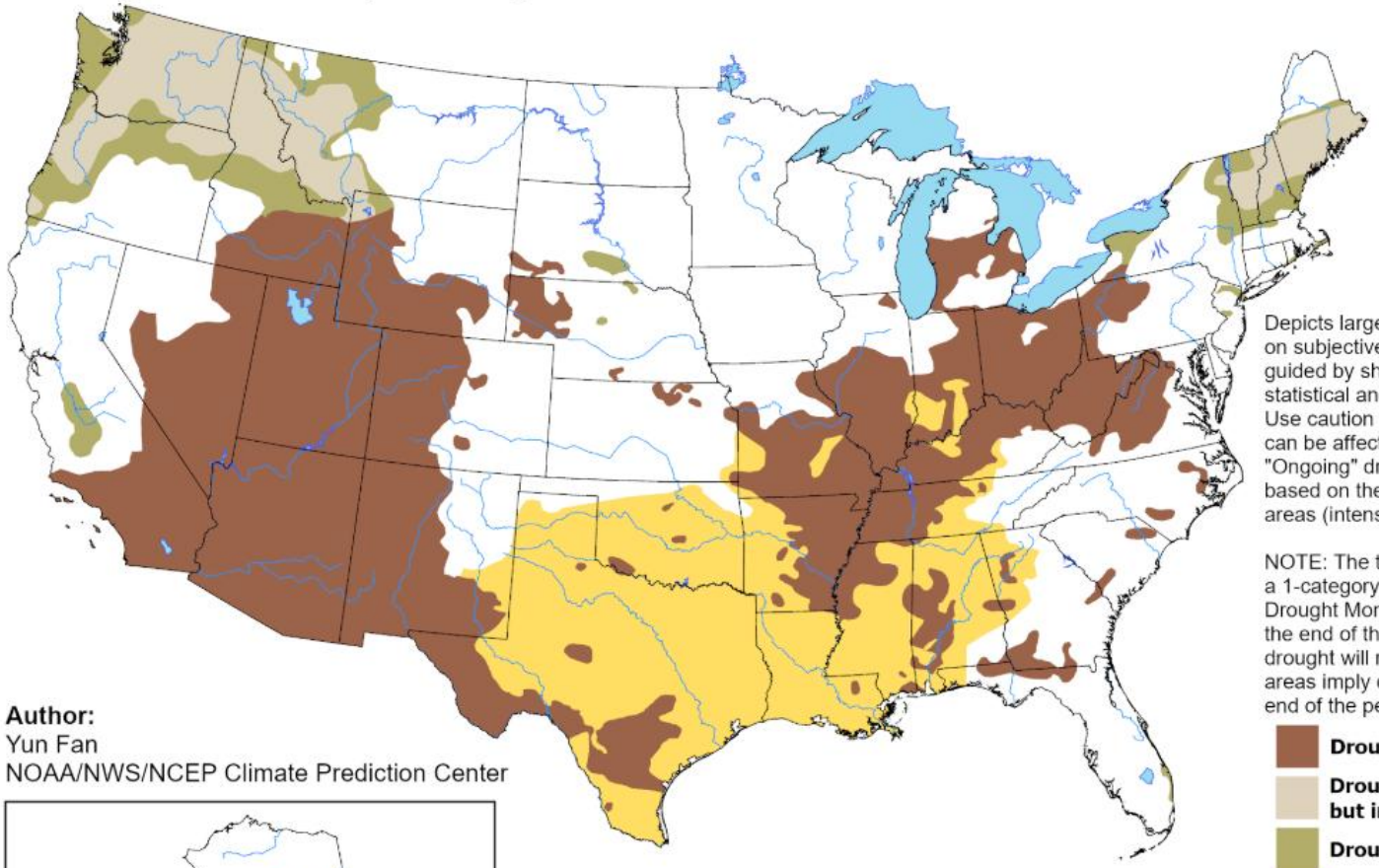
June 24, 2025



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for September 18 - December 31, 2025
Released September 18, 2025

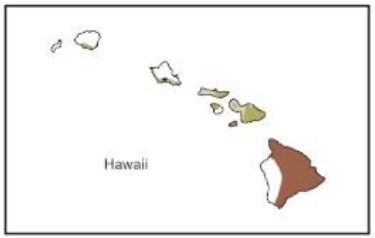


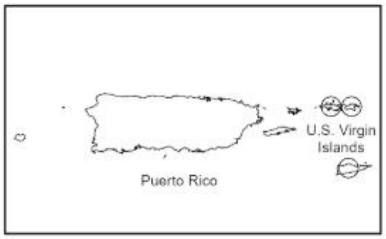
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

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

Author:
Yun Fan
NOAA/NWS/NCEP Climate Prediction Center

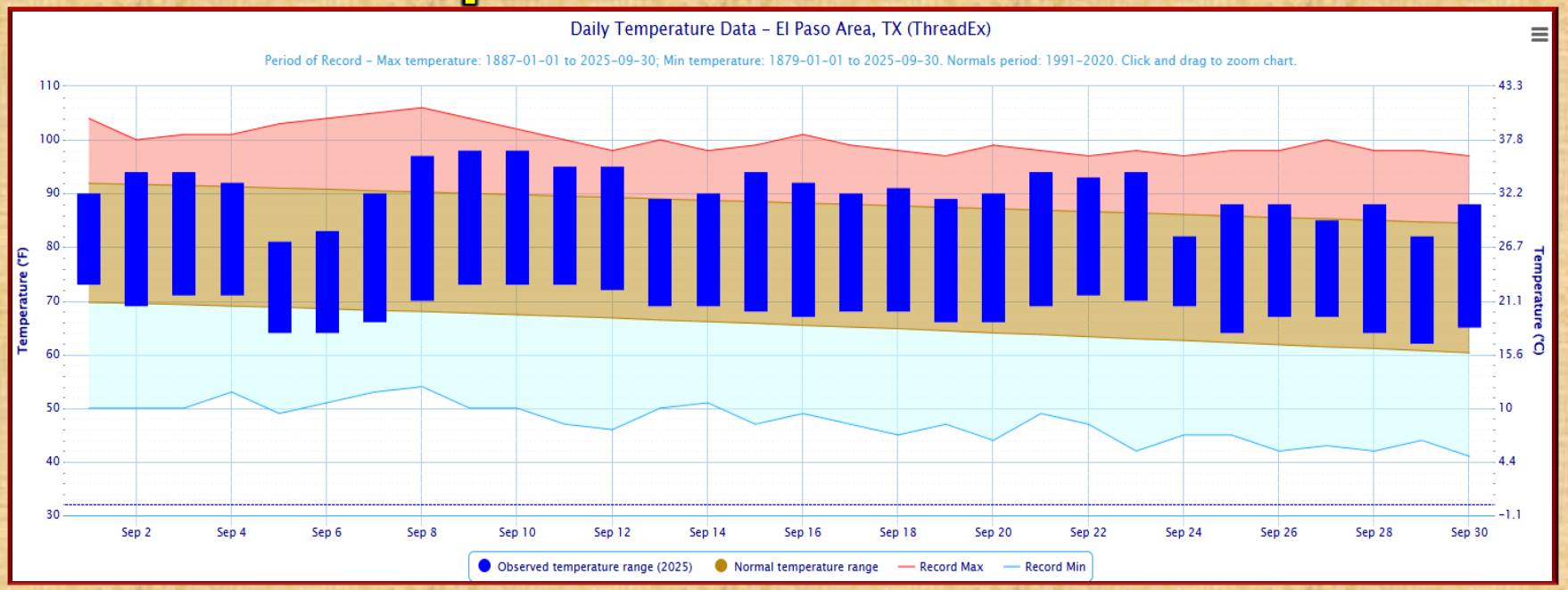


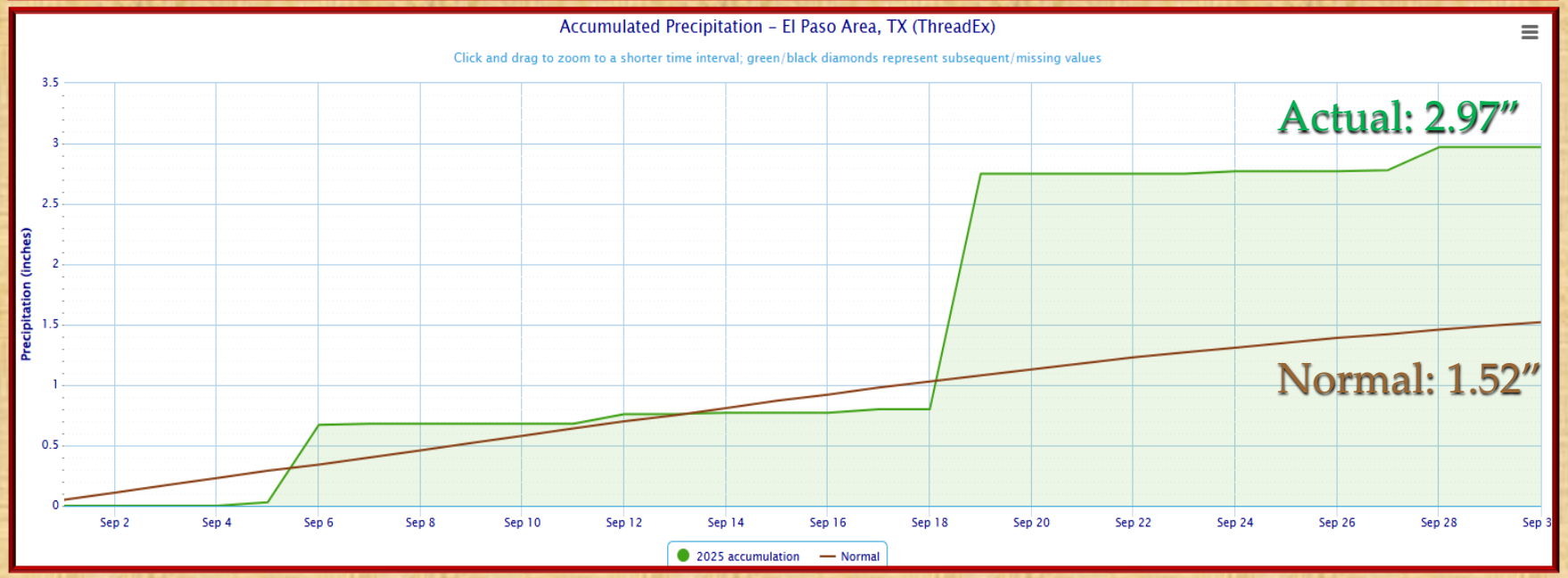


https://go.usa.gov/3eZ73

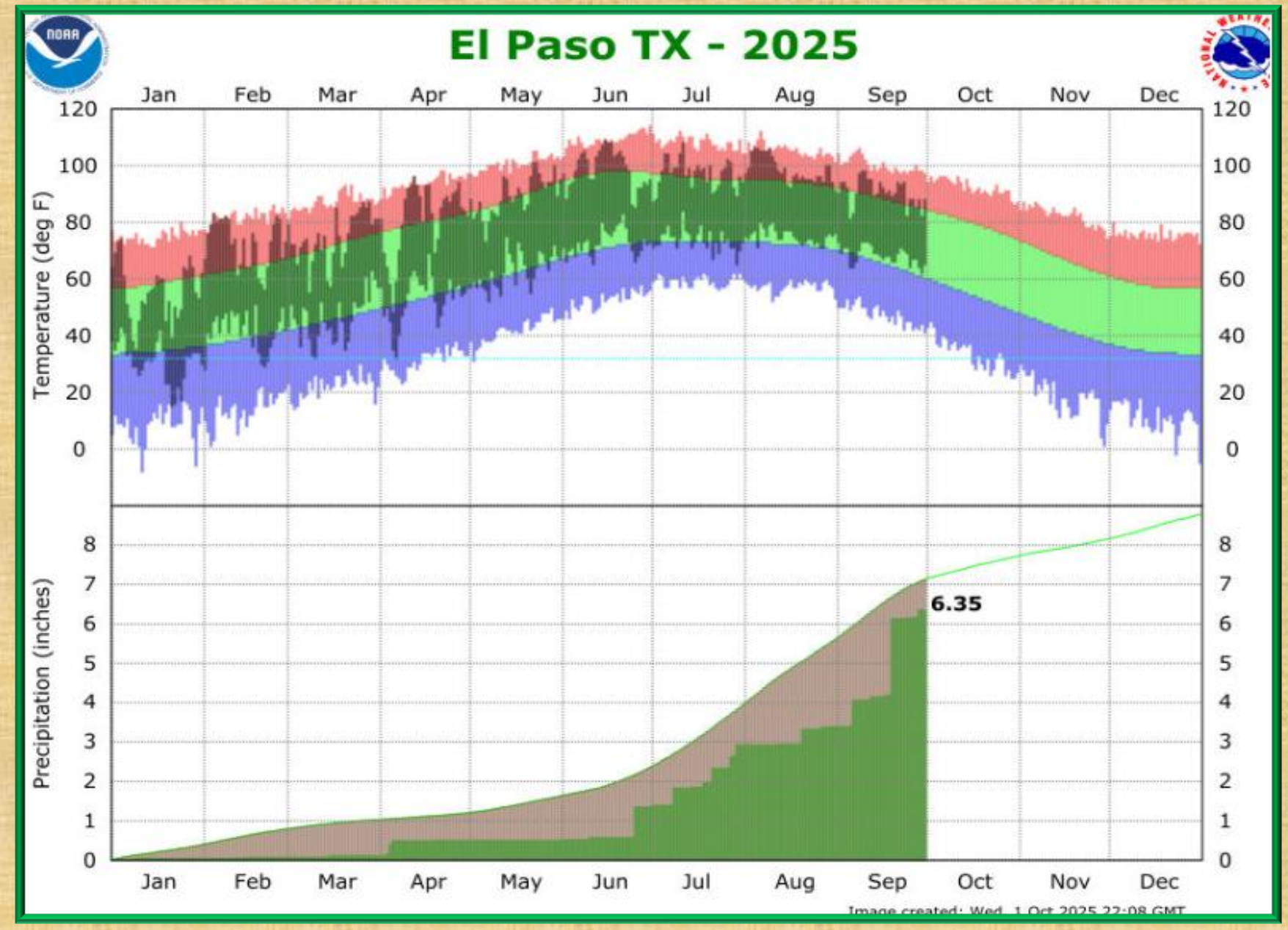
Temperature and precipitation data for September 2025 in El Paso

= record

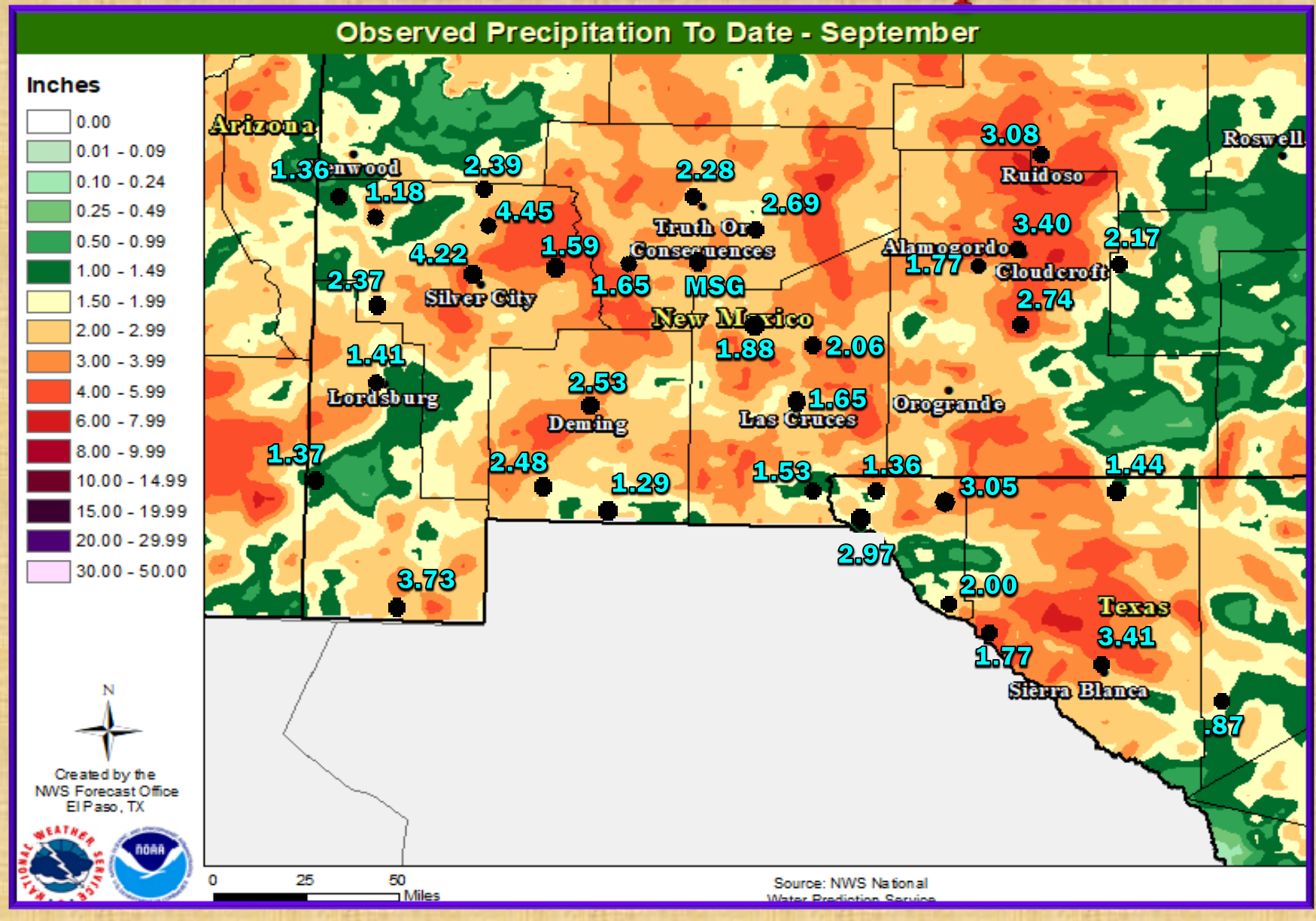




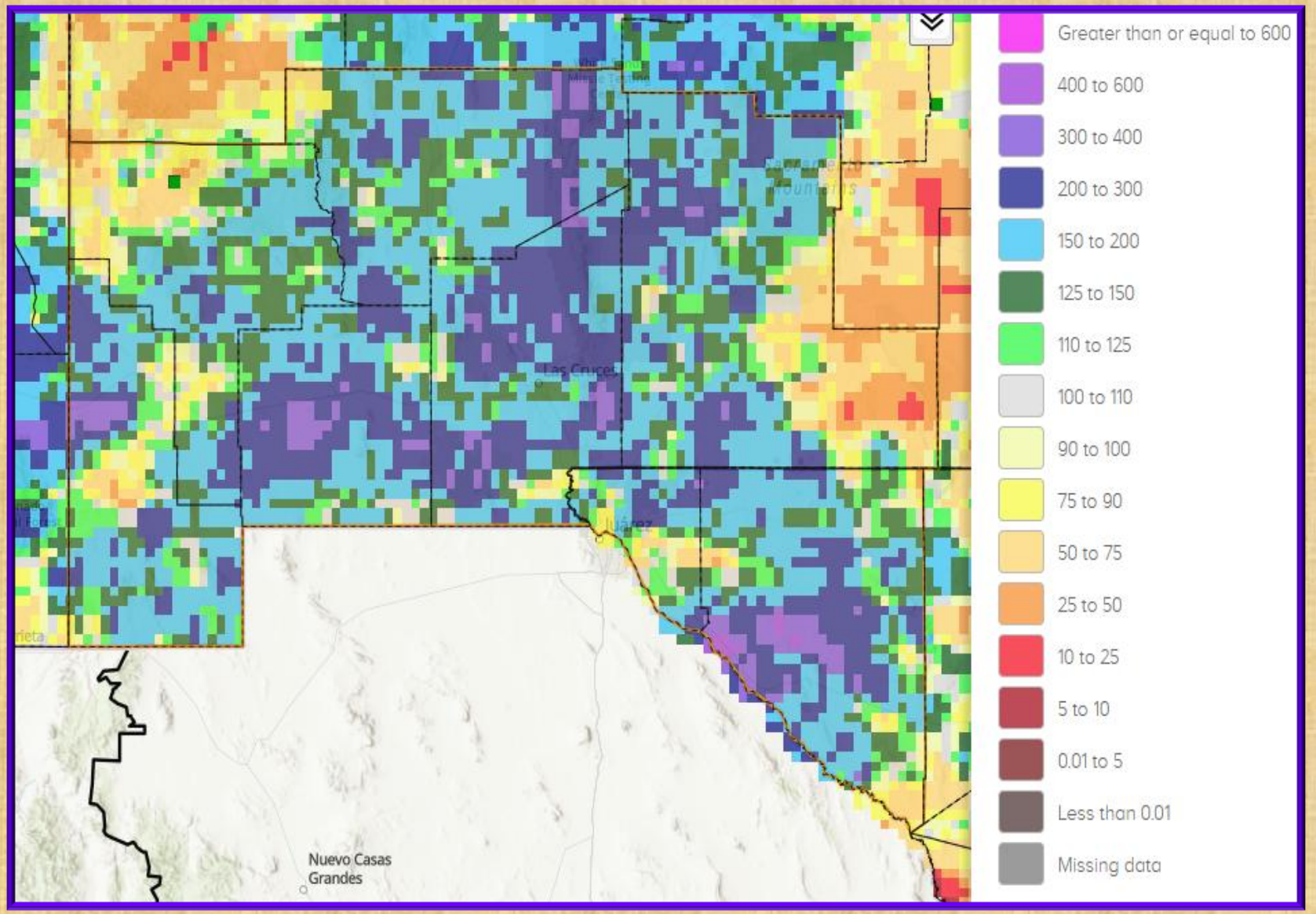
2025 Temperature and Precipitation through September for El Paso



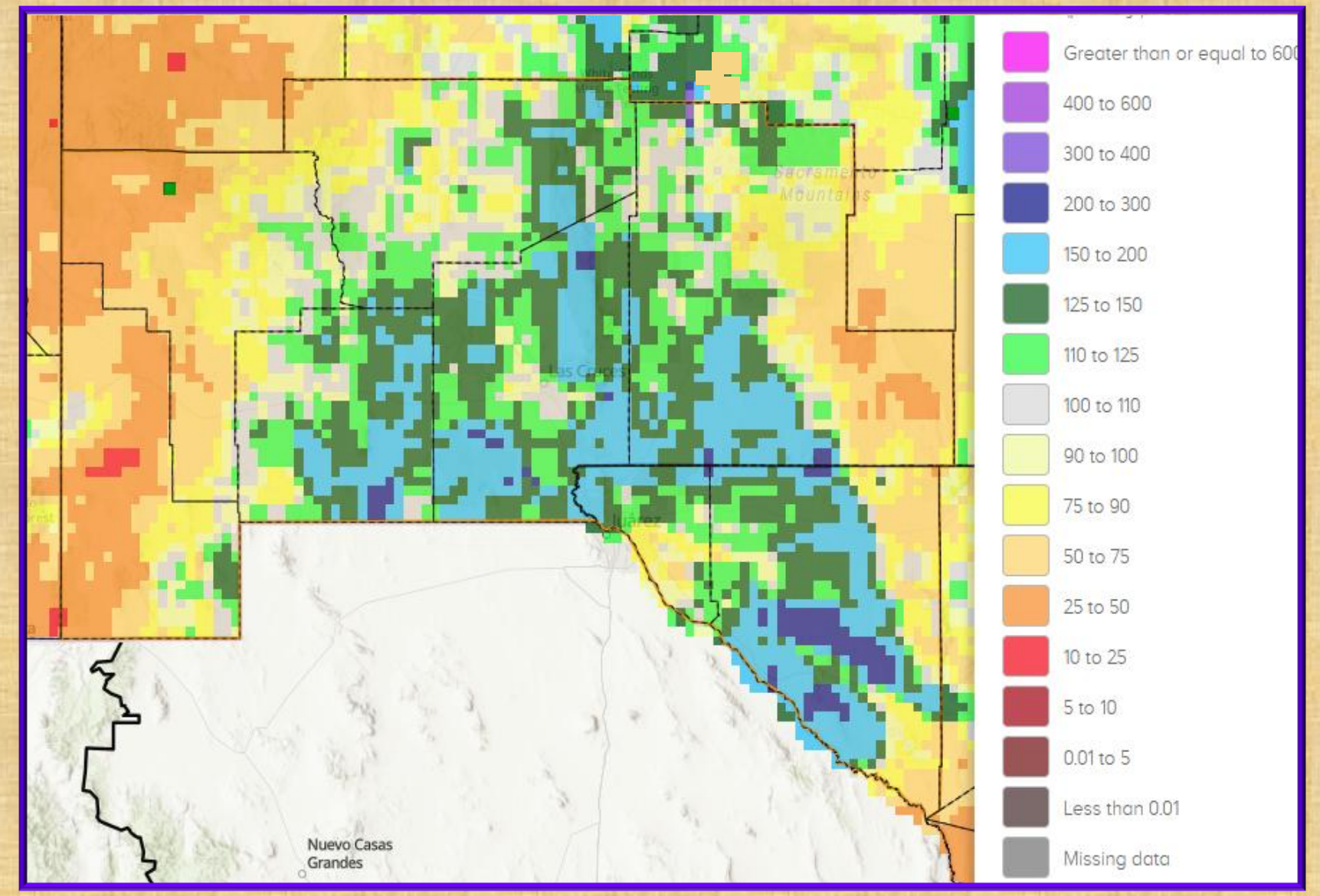
September 2025 rainfall estimate with surface rainfall reports



September 2025 rainfall estimate percent of normal



Radar rainfall estimate percent of normal for the Water Year (Oct 1 – Sep 30)



Tracking the 2025 Monsoon Season across the El Paso Forecast Area

A transition to monsoon flow began around June 20-24 this year with winds shifting to the south and east and bringing in higher humidity. This is about 10-14 days earlier than normal [see fig 1 and 2]. Widespread thunderstorms over northern Mexico and southern New Mexico also began around this same time.

Monsoon 2025 is off to a much-needed wet start, with the 23rd-27th period already contributing about one-quarter to one-half of their average monsoon rainfall total. This likely ends most of the wildfire season, and should begin improving the extreme drought conditions that have developed this year.

July continued the productive monsoon rain that started in late June. Most areas east of the Continental Divide saw above normal rainfall, while areas to the west remained dry and below normal. The dewpoint temperatures and upper air patterns remained in a typical monsoon pattern. There were signs at the end of the month of the monsoon high pressure center to move over New Mexico for a stretch of drier, quieter weather leading into the beginning of August.

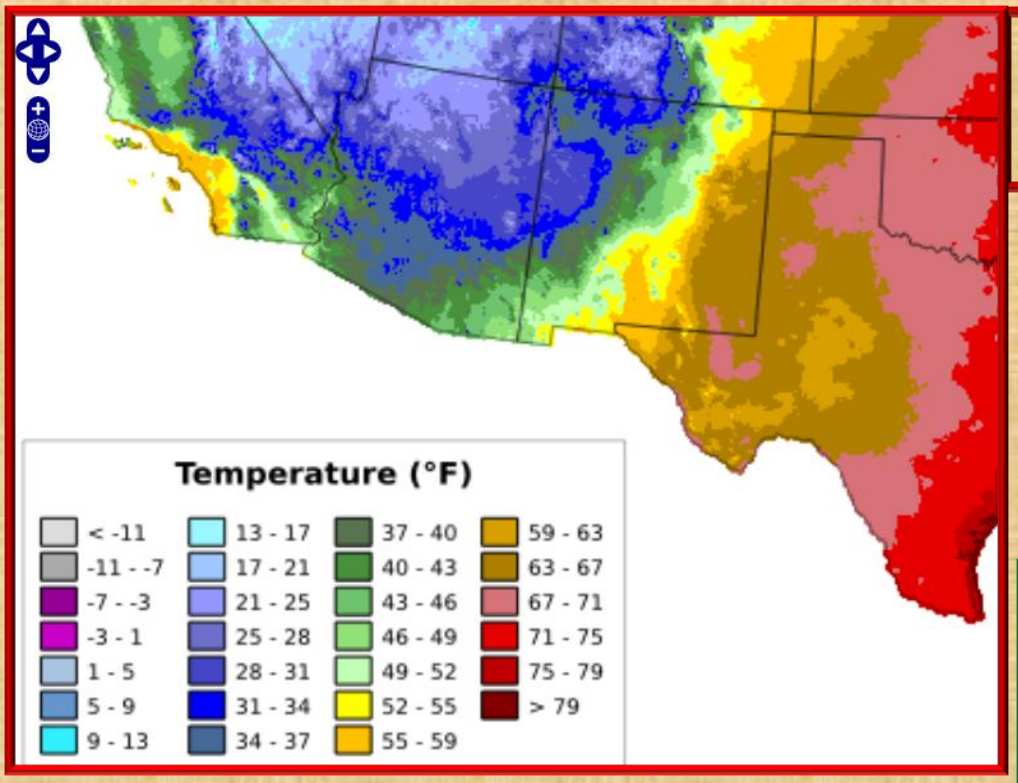
Tracking the 2025 Monsoon Season across the El Paso Forecast Area

Updating our monsoon season through the end of August; after a relatively wet July, at least east of the Continental Divide, August saw a much spottier rainfall pattern, with areas west of the Divide still well below normal. With the rainfall, areas east of the Divide have seen their drought condition improve significantly. West of the Divide, the extreme drought has seen little or no improvement since June.

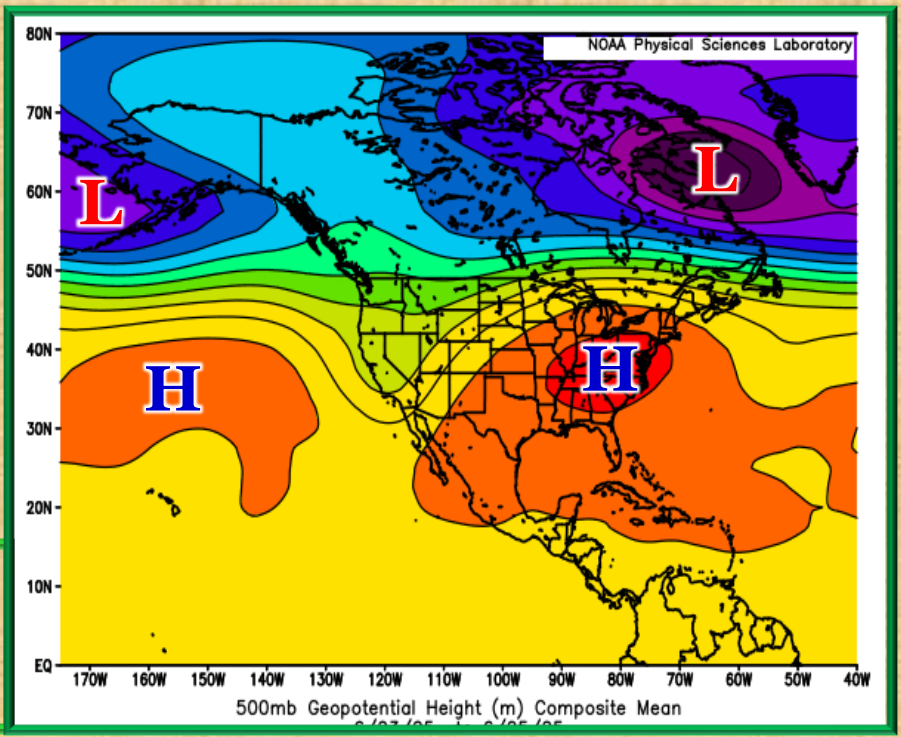
As of the end of August, the monsoon pattern was still holding strong, with the large-scale high pressure still persisting from the western Atlantic across the Desert Southwest and over to the eastern Pacific [see fig 4].

The summer monsoon continued through much of September with plenty of rainfall throughout the month. Though areas west of the Continental Divide still remained dry overall, a few areas received moderate amounts of rain. One last big push of tropical moisture began the last week of the month and by September 29th, after several days of scattered thunderstorms, the monsoon season ended as the upper air flow and large-scale cells shifted to the Autumn pattern [see fig 5]. With that being said, the season was able to last around 5-7 days longer than the average monsoon season.

Tracking the 2025 Monsoon Season across the El Paso Forecast Area. Fig 1

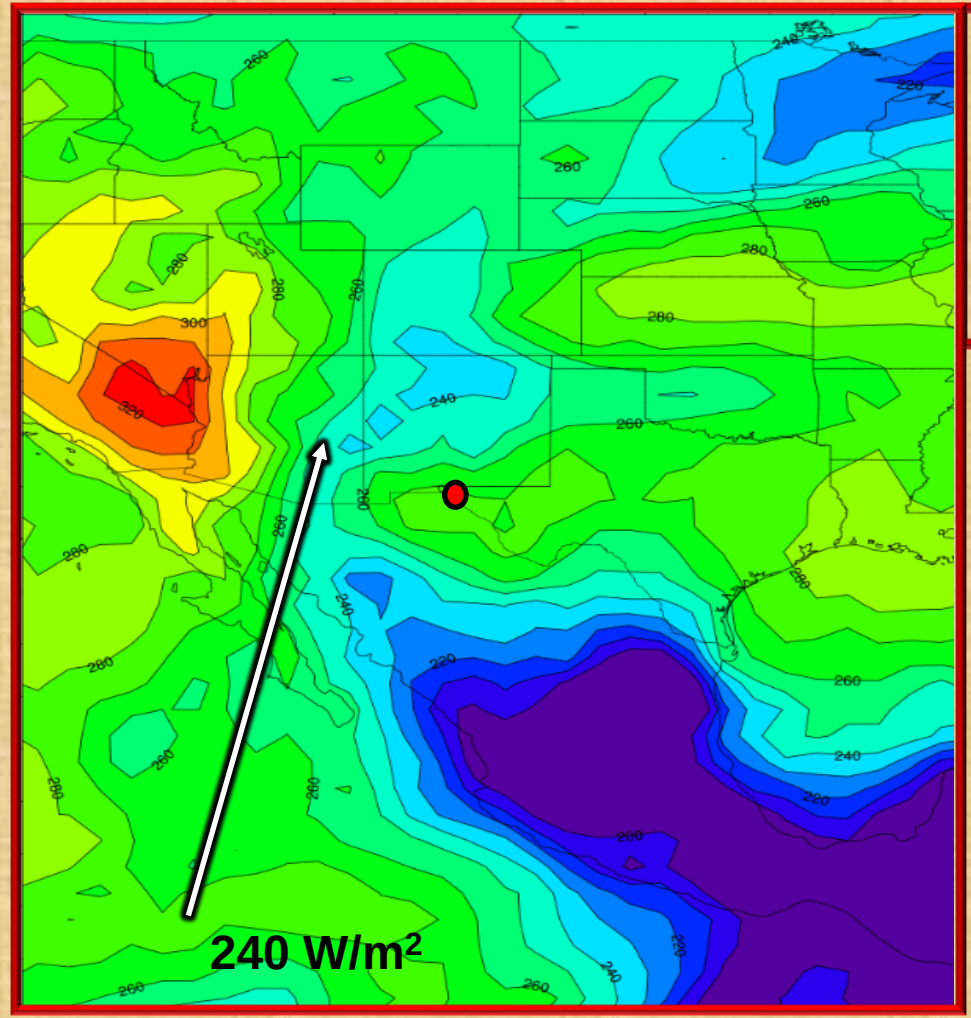


June 24 – Dewpoints in the 50s reach the Borderland and remain in place for the season.

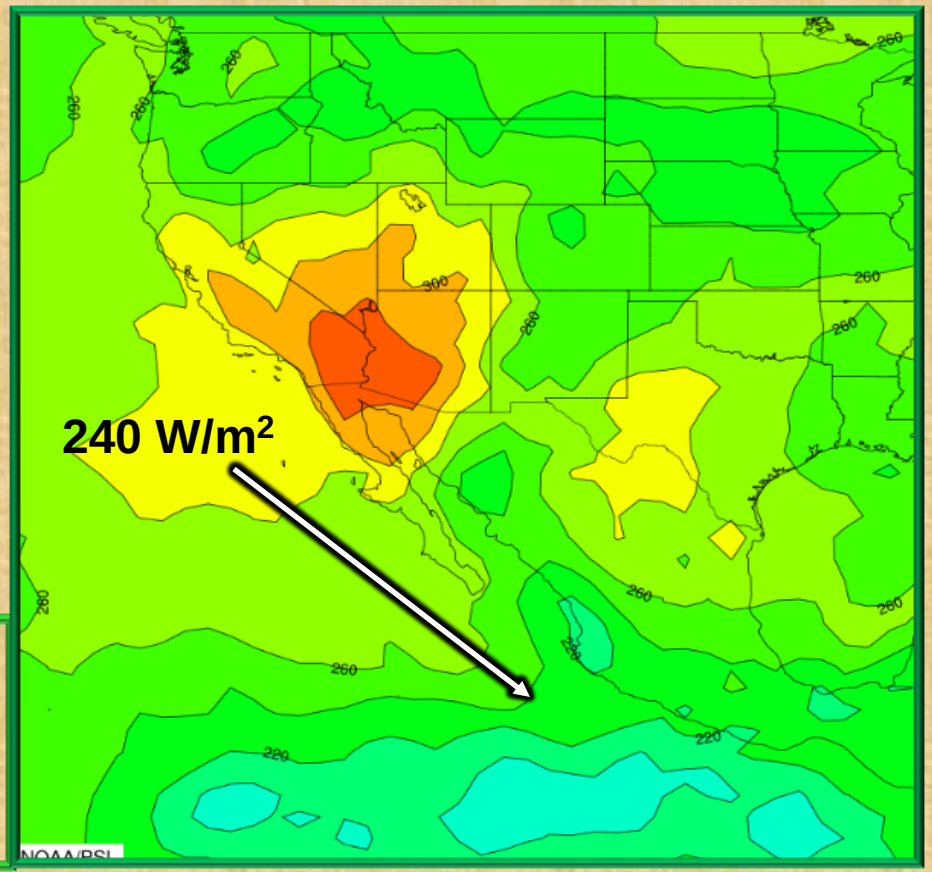


By June 25, 500mb (18,000 ft) sub-tropical high reaches the Desert Southwest as the polar jet stream migrates northward.

Tracking the 2025 Monsoon Season across the El Paso Forecast Area. Fig. 2

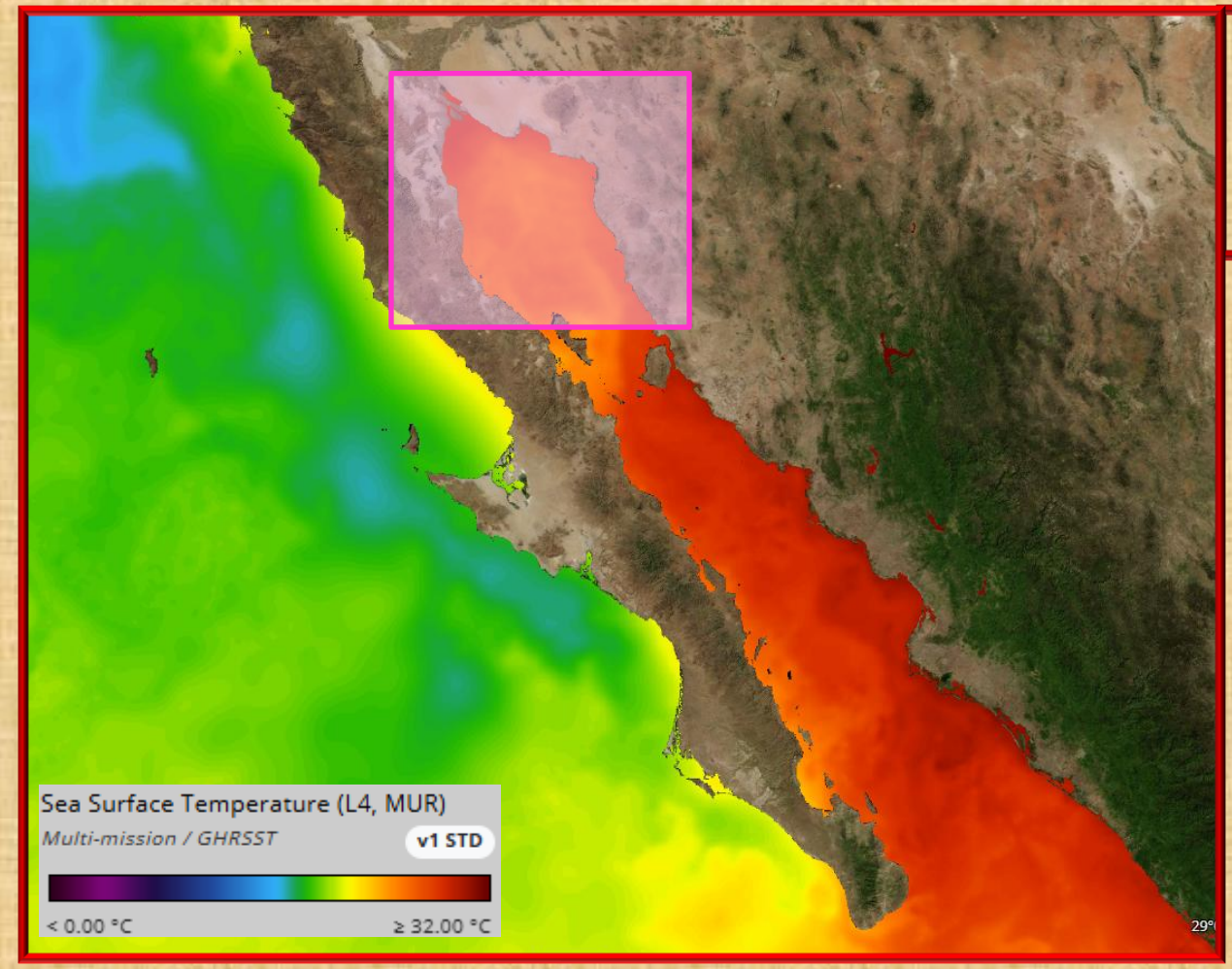


June 20-24 - Outgoing Longwave Radiation (OLR) diminishes to less than 240 W/m² in the area though over much of New Mexico. Thick clouds and anvil tops from thunderstorms diminish the OLR values, often indicative of the monsoon moisture and thunderstorms moving into the area. (Pentad data Jun 20-24)



Jul 29-Aug 4 – Outgoing Longwave Radiation increases some to 260-280 W/m2. This denotes slight decrease in overall thunderstorm coverage from beginning of month as we see a stretch of dry, non-active weather starting August off.

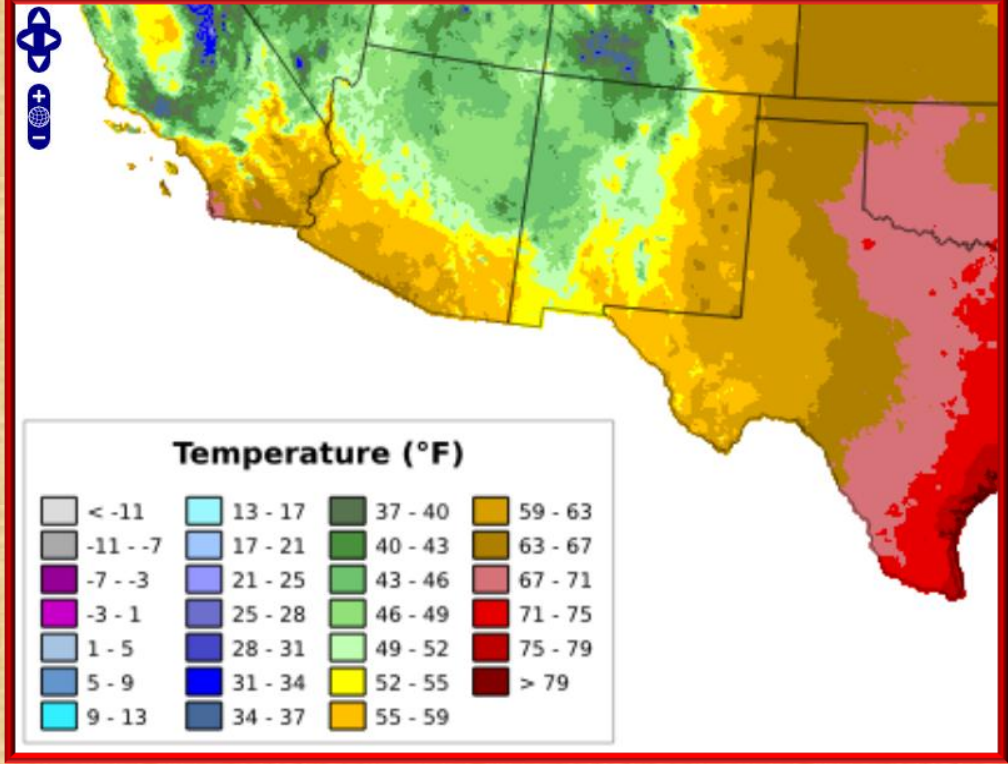
Tracking the 2025 Monsoon Season across the El Paso Forecast Area. Fig. 3



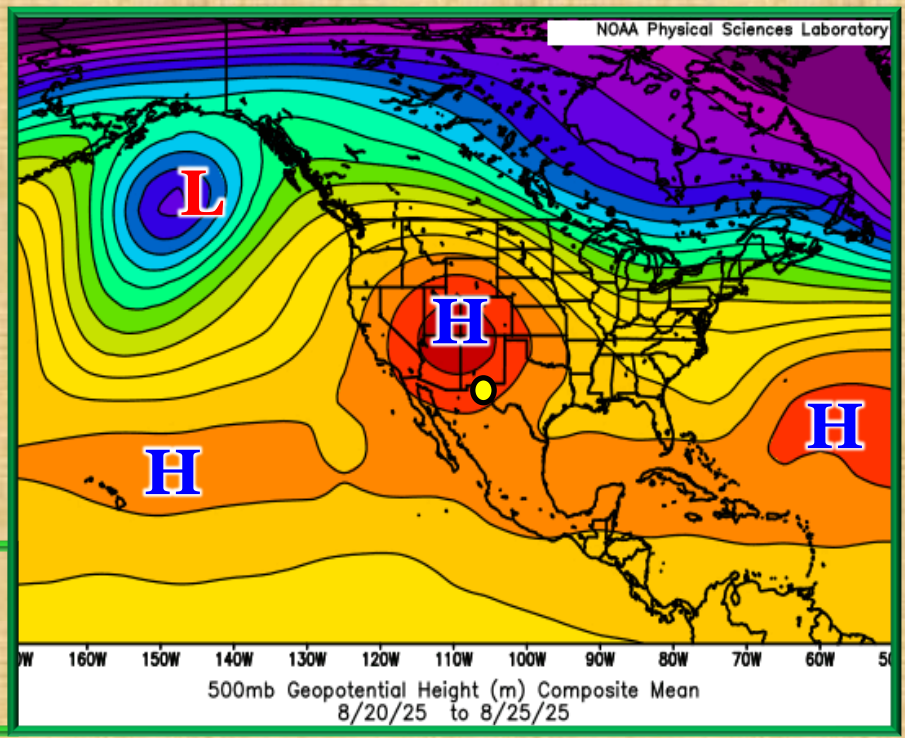
June 19 – Sea surface temperatures in the northern Gulf of California reach 26°C deg (79°F)

Studies have shown that once northern Gulf of California sea surface temperatures reach 26°C, that monsoon rains will begin within about a week. Studies have also shown that when the sea surface temperature reaches 29°C, New Mexico/Arizona will begin receiving the bulk of their rainfall (around 65-70%). This date normally occurs during the last half of July [see fig 6].

As we enter the last few weeks of the 2025 Monsoon Season. Fig 4

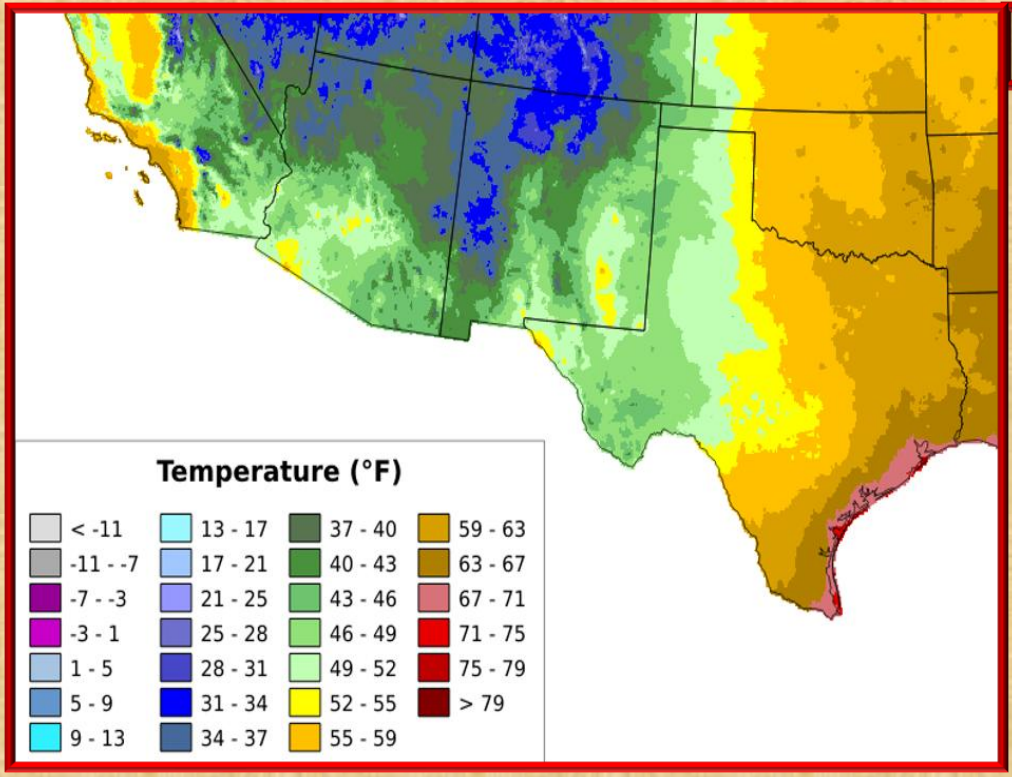


Aug 29– Dewpoints remain in the 50s, indicating the monsoon season is still in full swing.

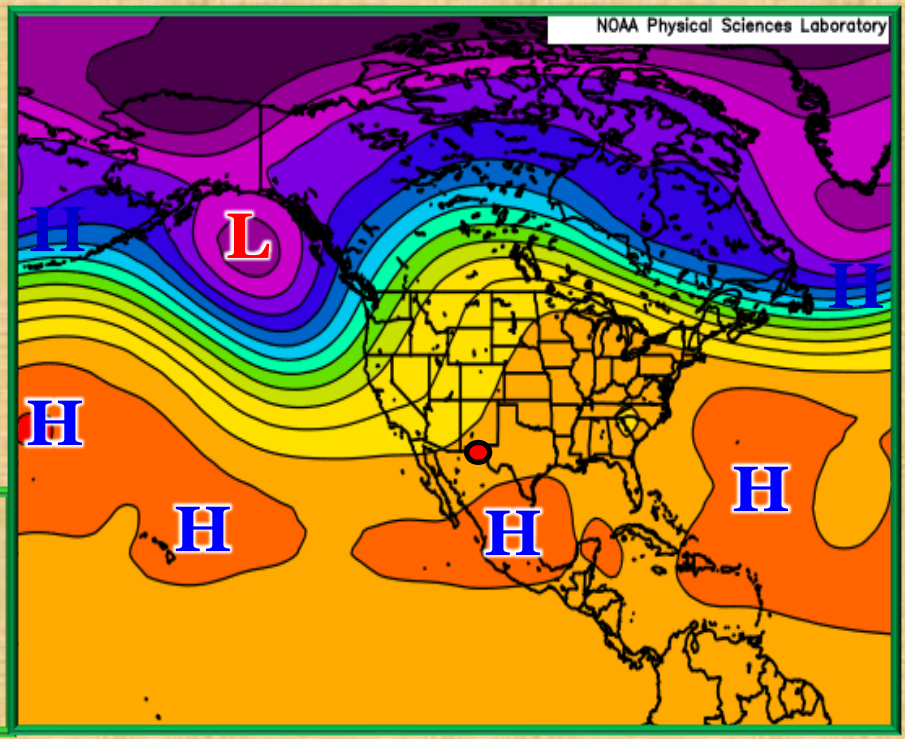


At the end August, the 500mb (18,000 ft) upper flow is still well in the Monsoon pattern.

The end of the 2025 Monsoon Season. Fig 5



Oct 2; dewpoints fall into the 40s



By September 29, the 500mb (18,000 ft) upper flow had transitioned from a monsoon pattern to an Autumn mid-latitude flow

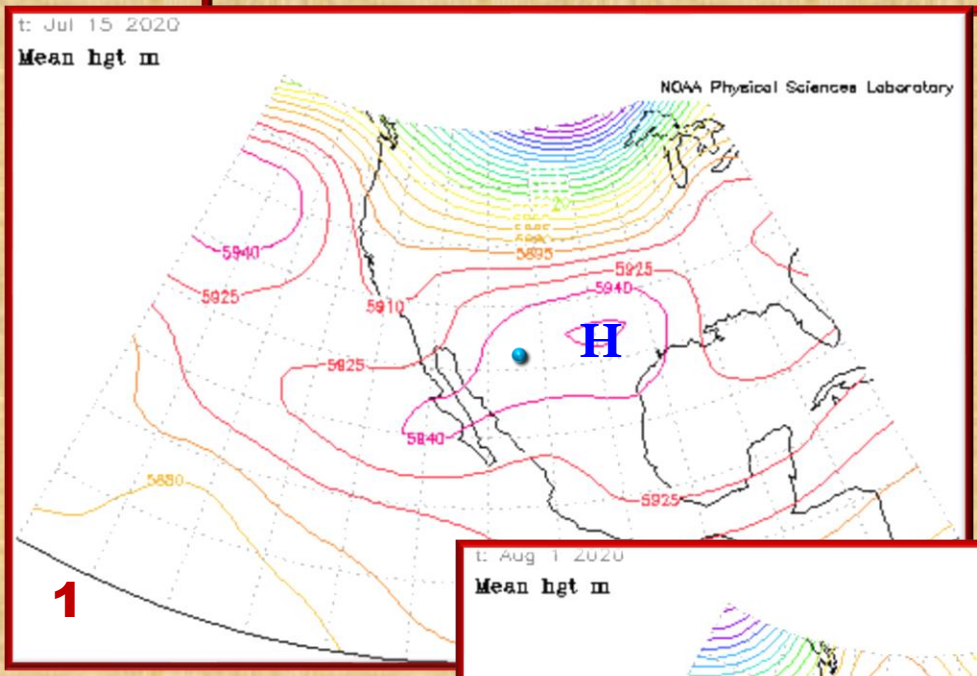
Fig. 6

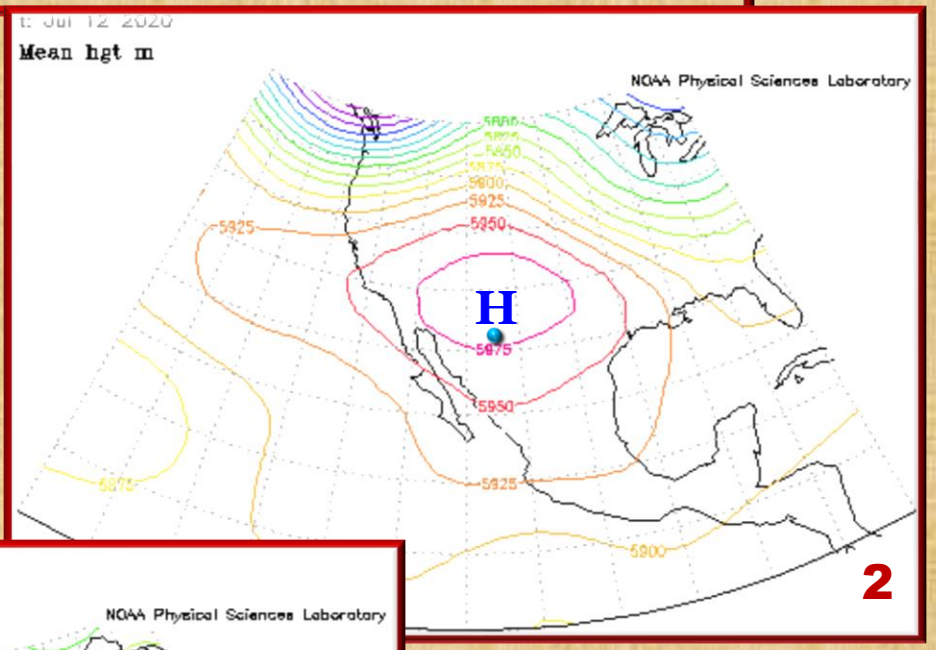
Percent of monsoon rainfall after 29C							
Year	29C Date	ELP	DMN	CLD	TCS	HIL	BKN
2025	Jul 24	70	69	MSG	59	44	67
2024	Jul 17	41	56	75	33	59	73
2023	Jul 17	89	100	83	97	100	81
2022	Jun 29	85	82	85	67	74	80
2021	Jul 16	51	75	68	60	63	71
2020	Jul 22	88	65	67	98	89	86
2019	Aug 8	83	91	62	67	71	34
2018	Jul 21	59	46	74	80	62	61
2017	Jul 23	58	67	66	88	61	64
2016	Aug 3	93	92	71	79	85	73
2015	Jul 27	63	43	56	53	61	57
2014	Jul 23	92	82	77	91	89	MSG
2013	Aug 8	61	68	61	88	75	MSG
2012	Jul 24	53	64	73	42	52	80
2011	Jul 29	37	90	36	86	62	68
2010	Jul 29	47	31	43	33	47	32
2009	Jul 24	54	61	47	56	65	56
2008	Jul 27	48	39	54	46	58	58
2007	Jul 26	65	62	60	91	72	100
2006	Jul 29	84	81	73	86	85	MSG
2005	Jul 30	95	79	72	83	87	80
AVE	Jul 25	66	67	64	70	67	67

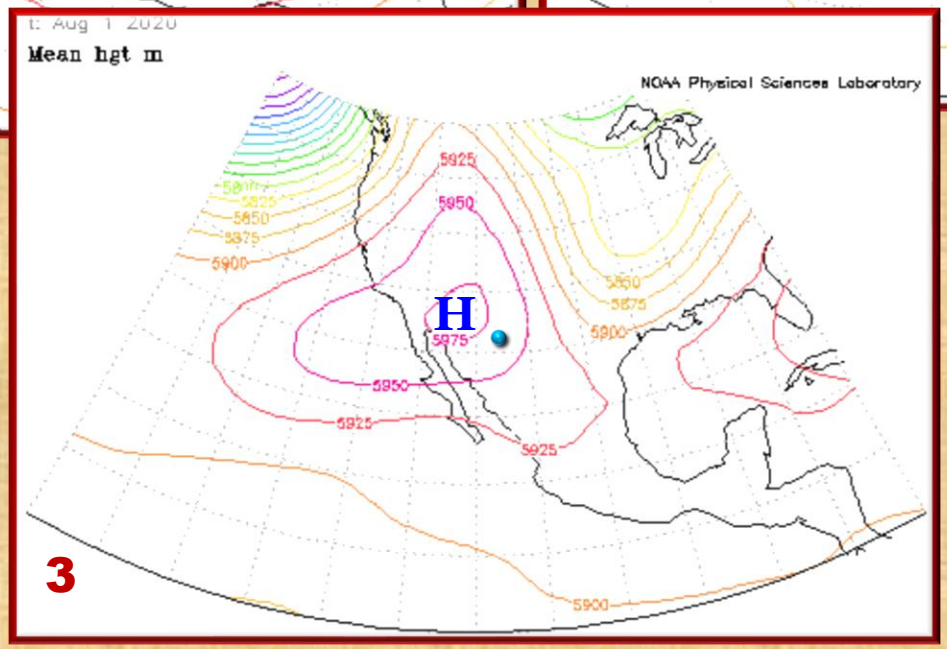
ELP=El Paso Intl Airport
DMN=Deming Airport
CLD=Cloudcroft COOP
TCS=T or C Airport
HIL=Hillsboro COOP
BKN=Buckhorn COOP

The northern Gulf of California sea surface temperature this year reached 29C on July 24. Research has shown that, on average, around 65-75% of the total Monsoon rainfall will fall after that date.

Position of NAM upper high determines our rainfall potential. Blue dot represents El Paso.





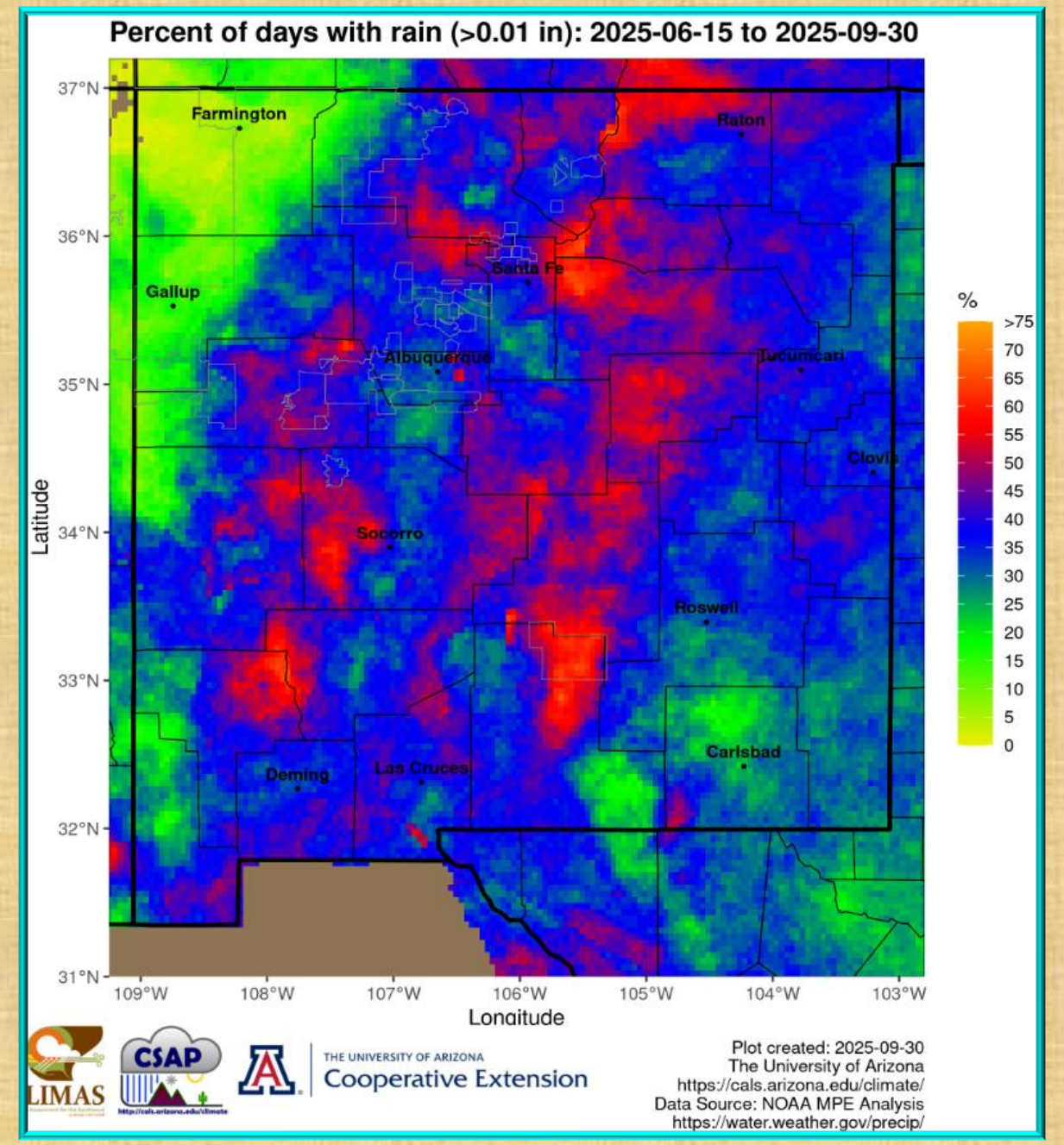


No. 1 High center east of New Mexico. Often brings ample tropical moisture and widespread heavy rain and flooding to the area under southerly flow.

No. 2 High center over New Mexico. Often brings very hot temperatures and little if any rain (usually limited to the mountains).

No. 3 High center north and west of New Mexico. Often brings scattered storms with hit and miss heavy rains and large hail and strong wind potential.

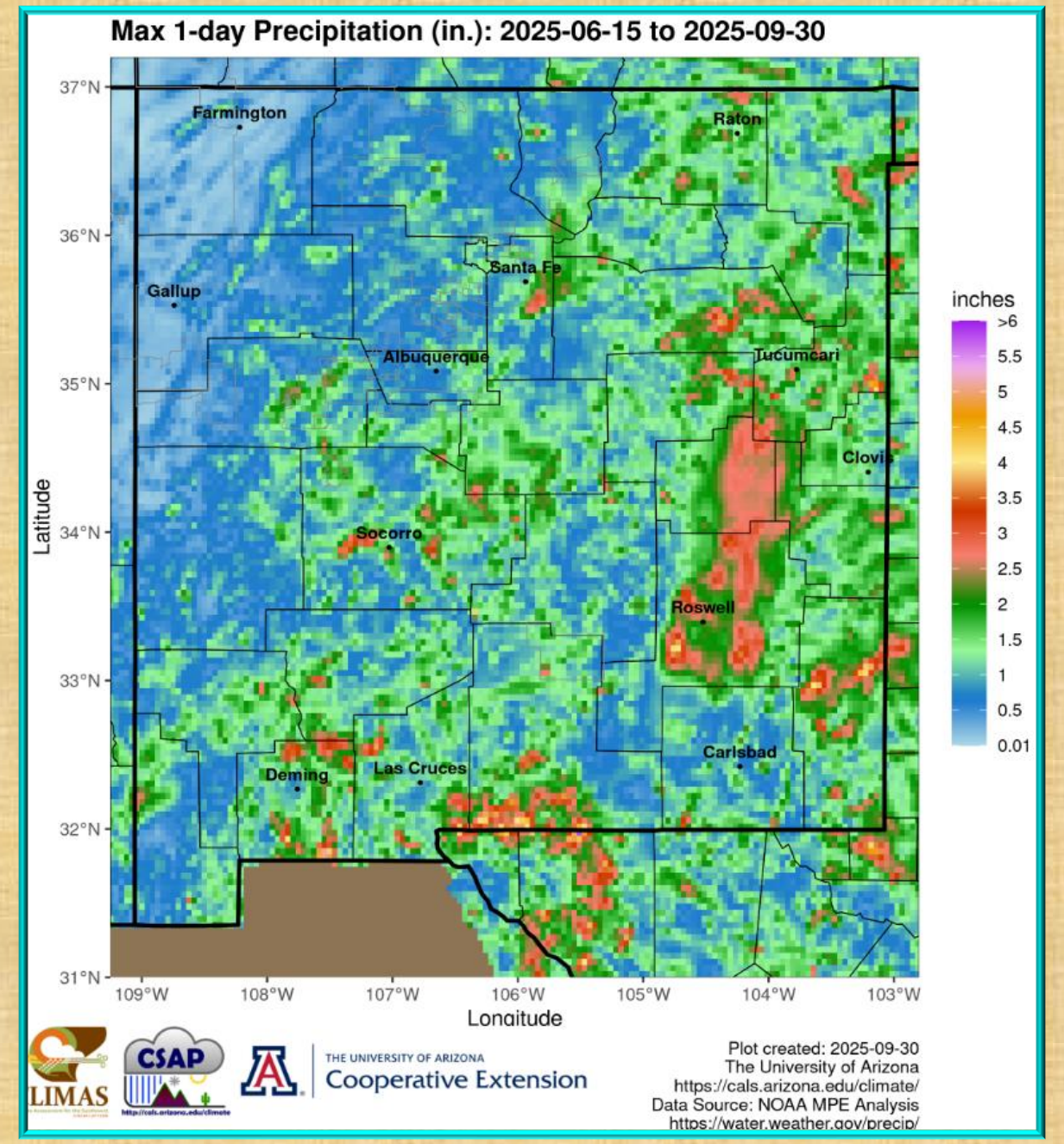
June 15 – September 30



CLIMAS — THE UNIVERSITY OF ARIZONA

This map shows the percentage of measurable rainfall days so far during the Monsoon season. Courtesy of Climate Assessment for the Southwest.

June 15 – September 30



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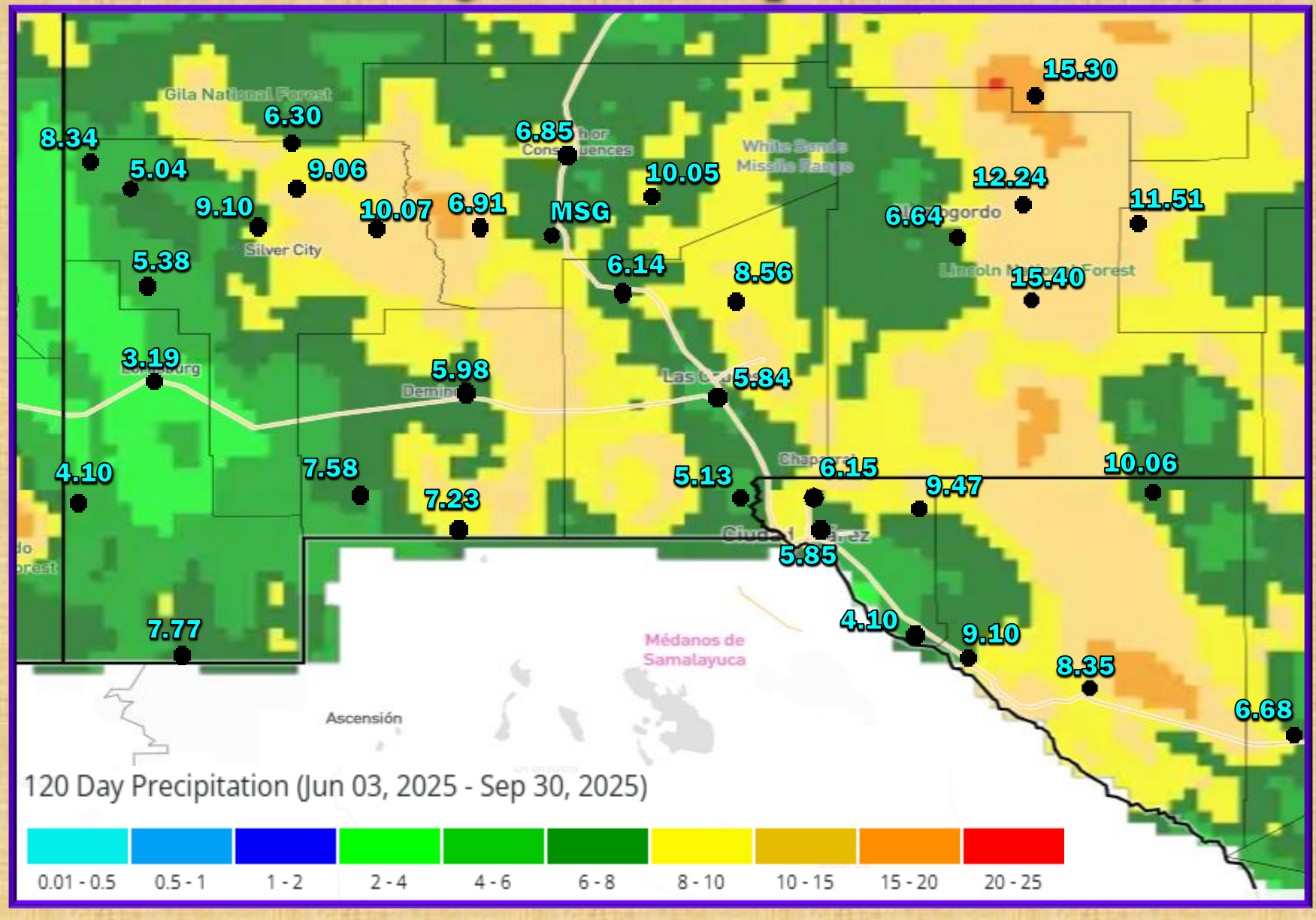
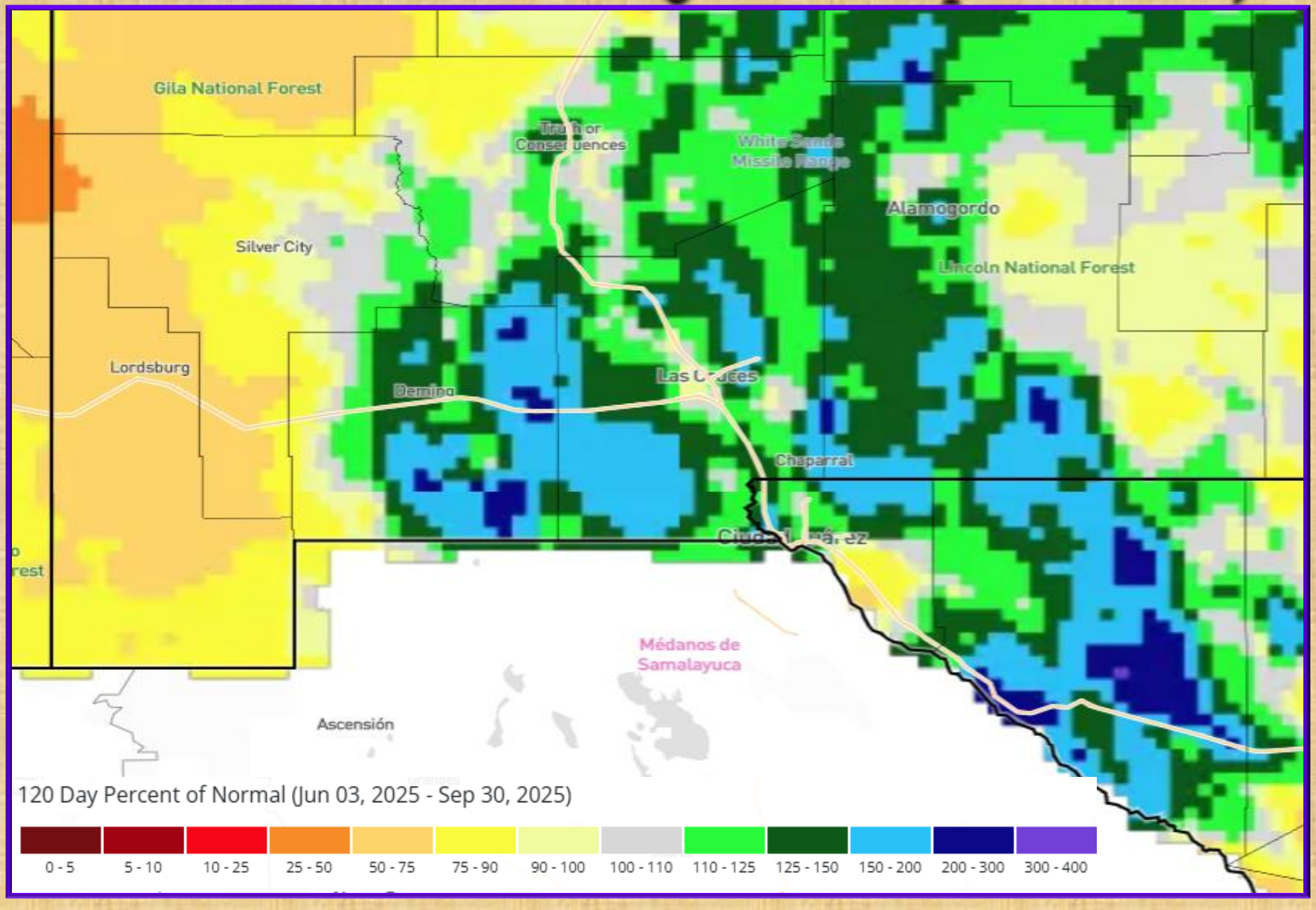
This map shows greatest one day rainfall total so far during the Monsoon season. Courtesy of Climate Assessment for the Southwest.

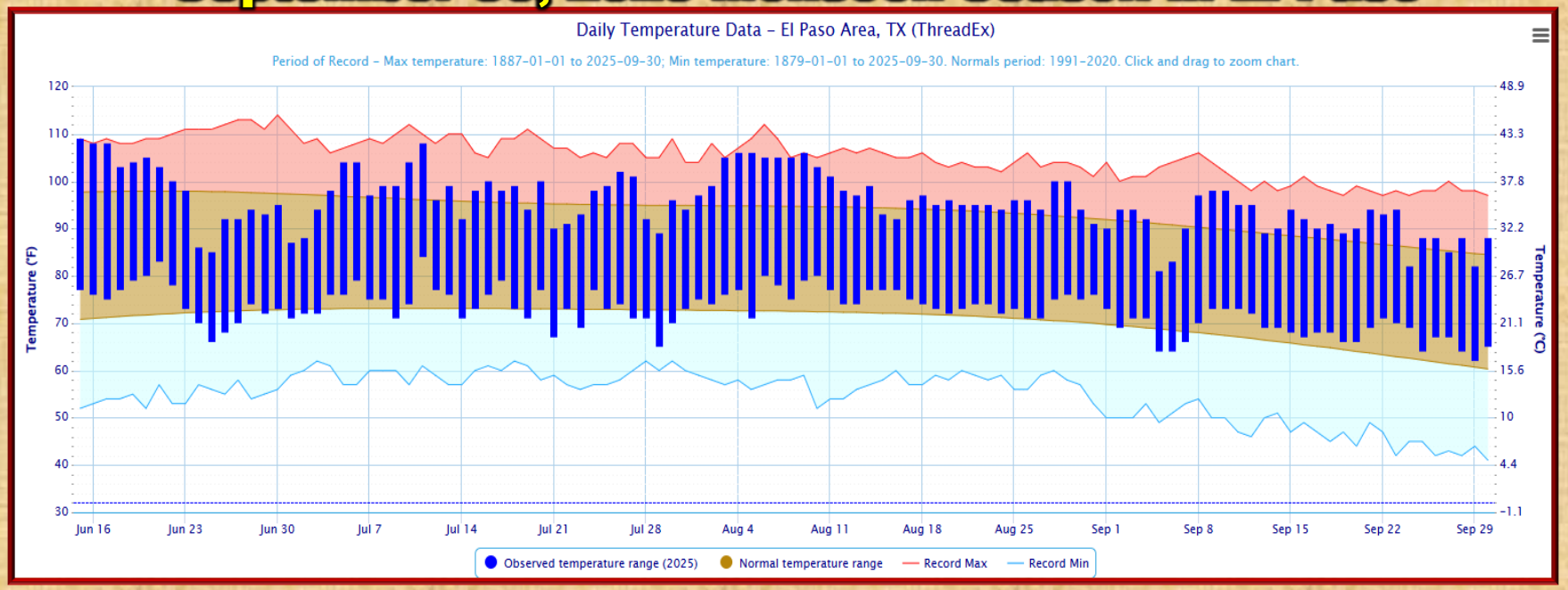
Radar rainfall estimate for the Monsoon Season 2025 (June 15 – September 30, 2025)

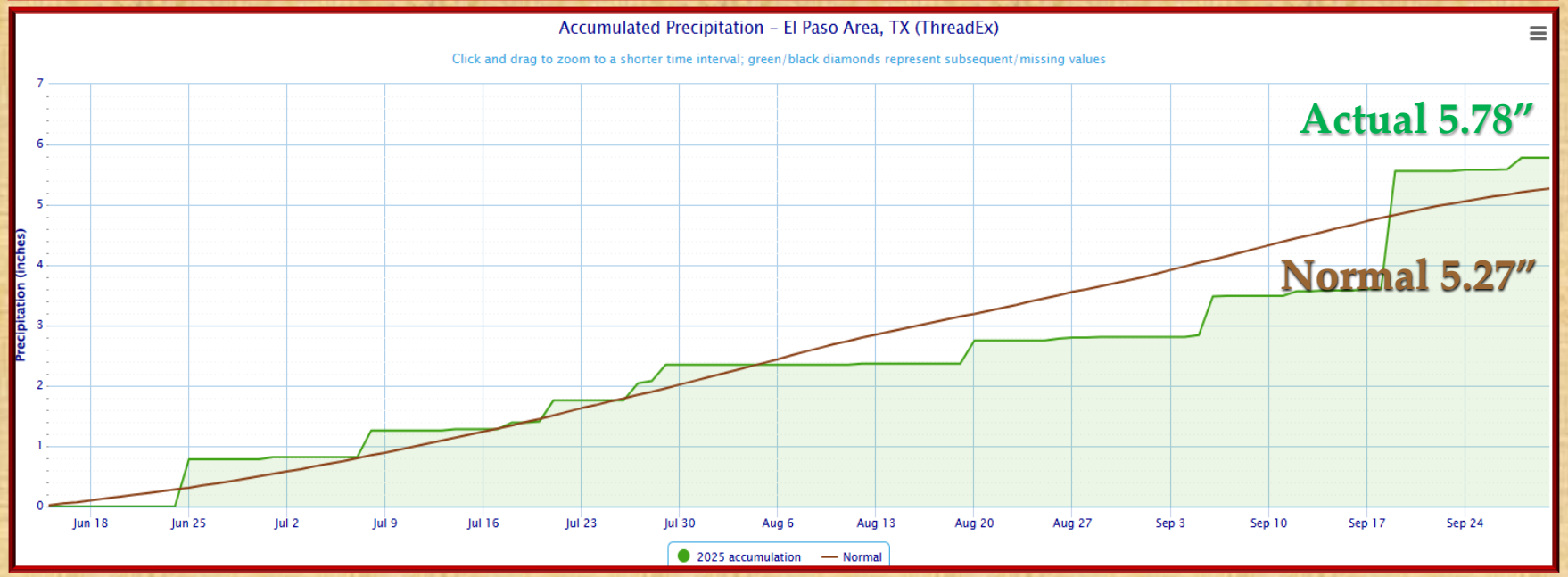


Radar rainfall estimate percent of normal for Monsoon season 2025 (June 15-September 30)



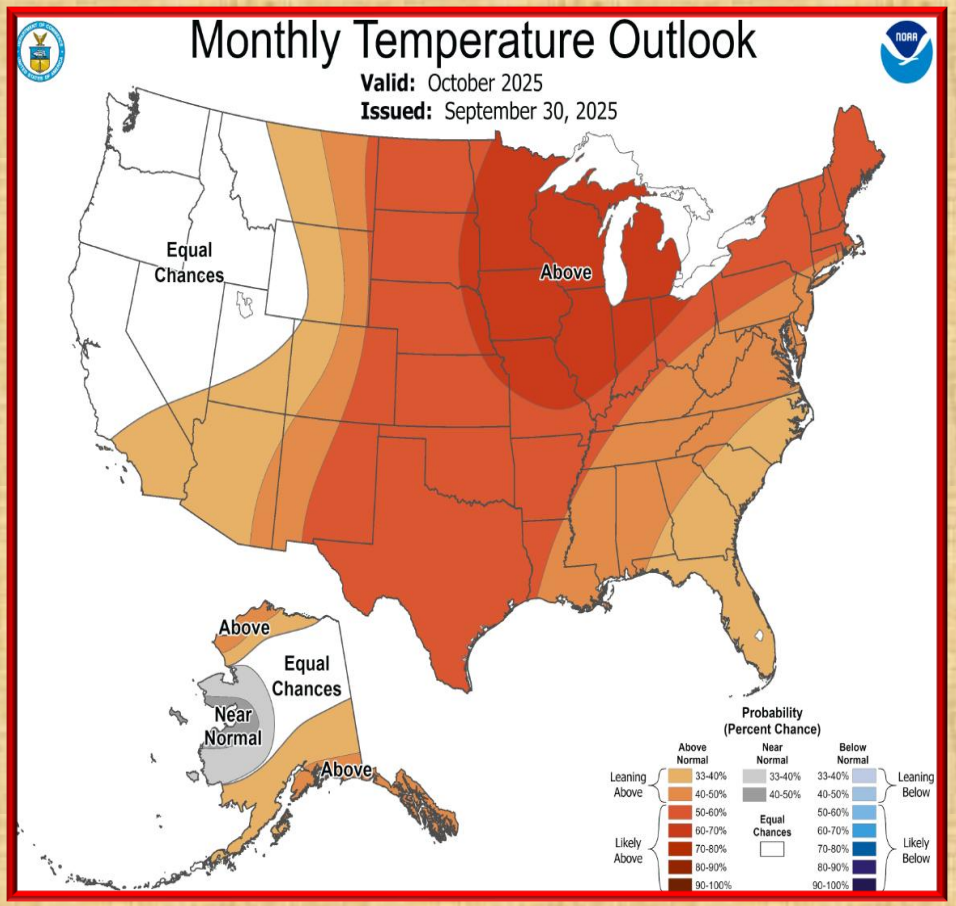
Temperature and precipitation data through September 30, 2025 Monsoon Season in El Paso



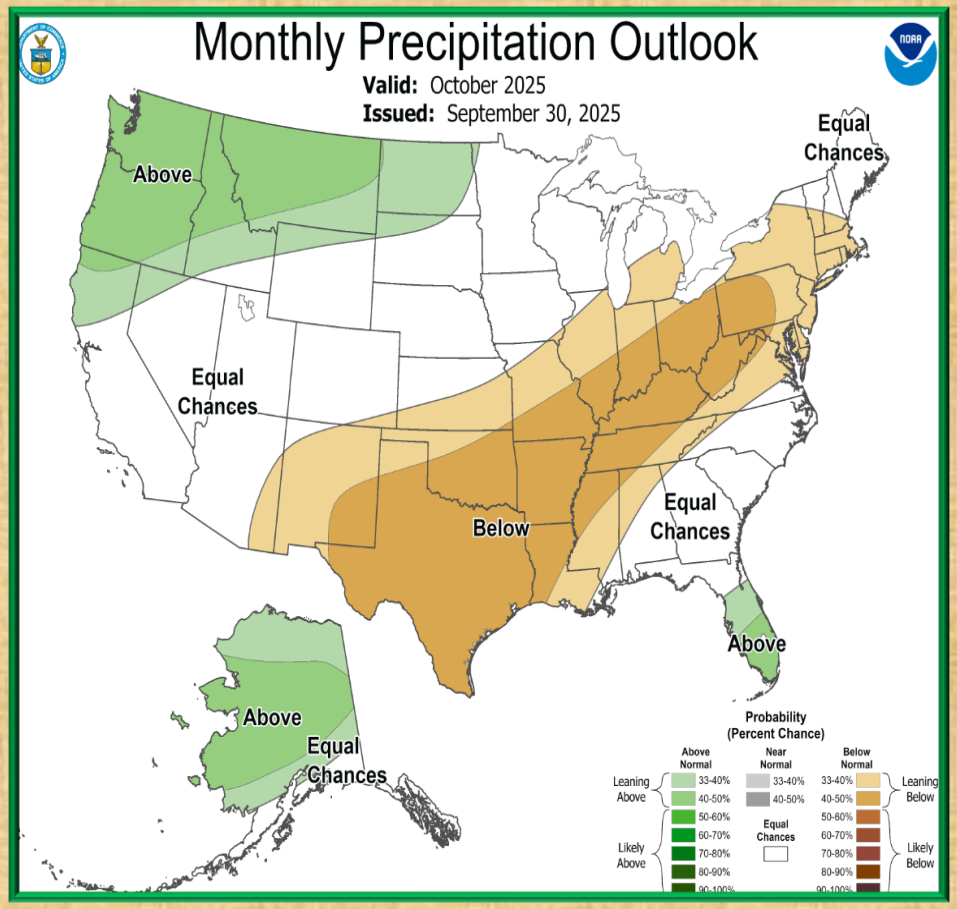


Temperature and precipitation outlook For October 2025

Temperature

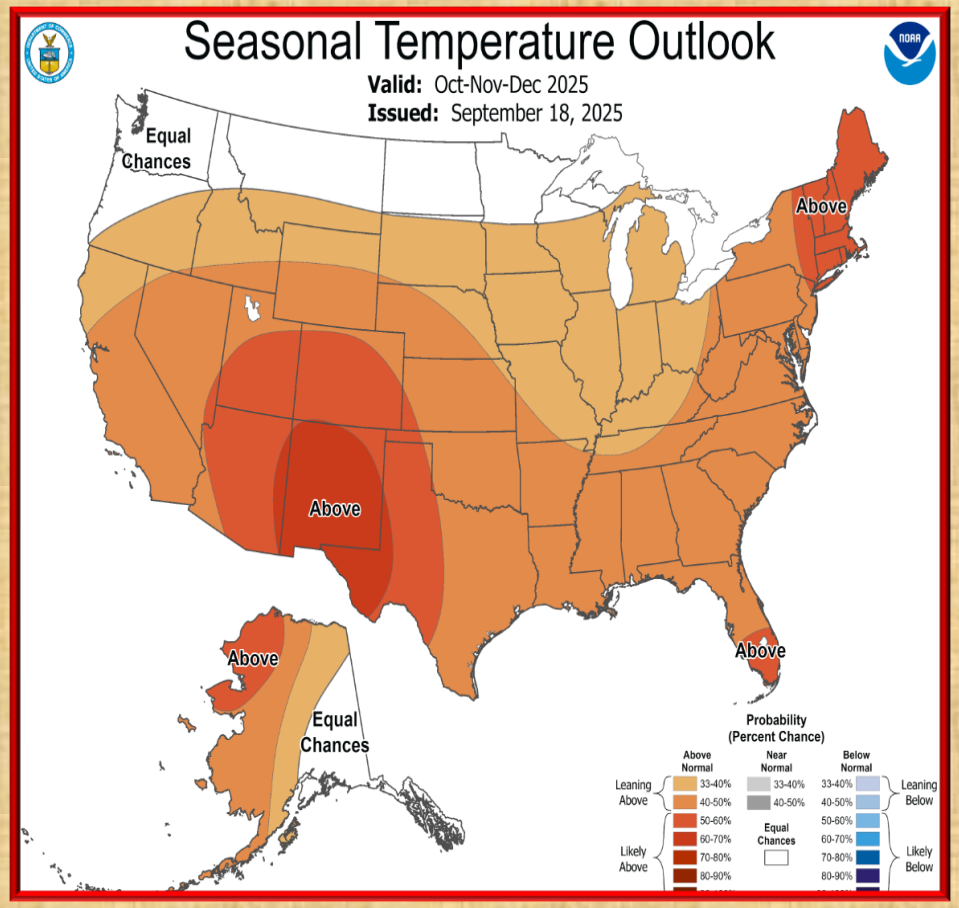


Precipitation

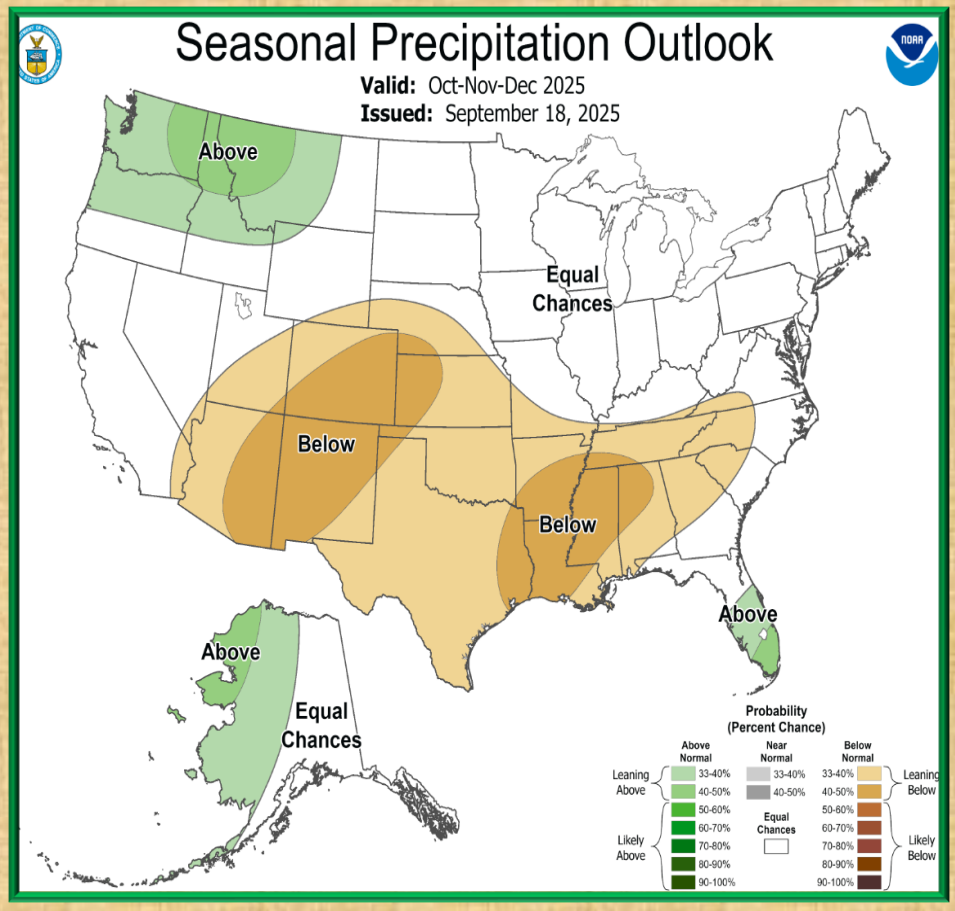


Temperature and precipitation outlook for Oct-Dec 2025

Temperature

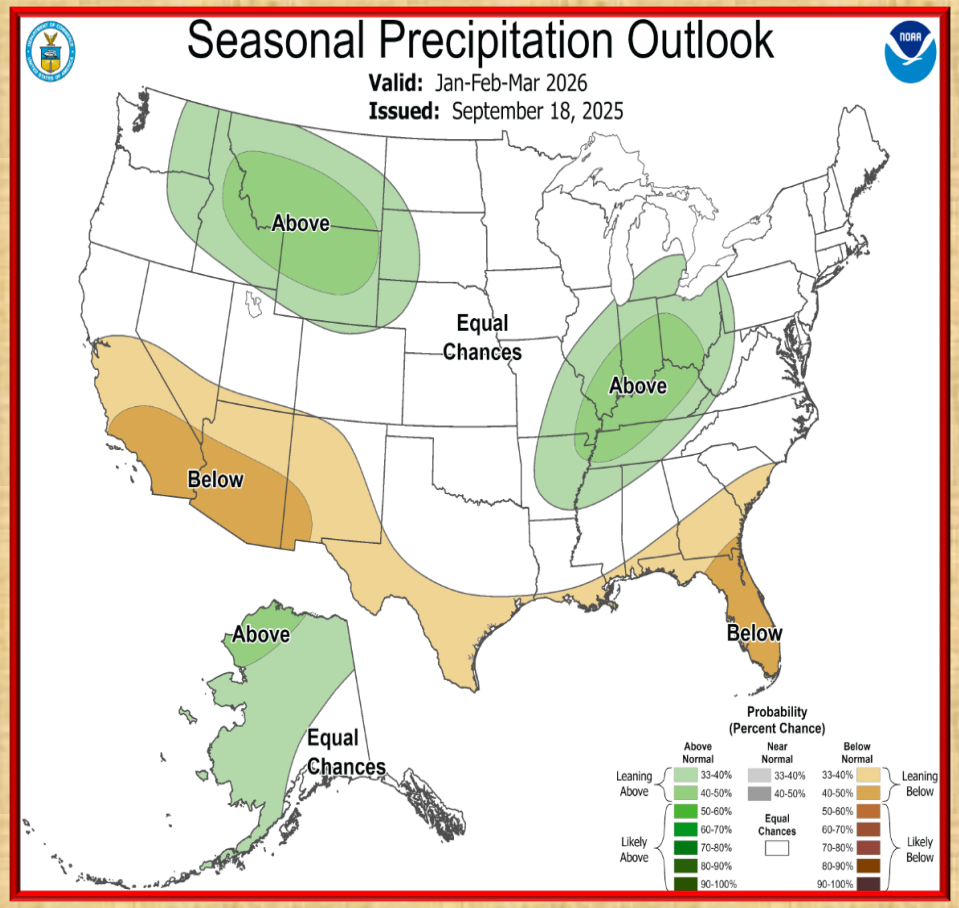


Precipitation

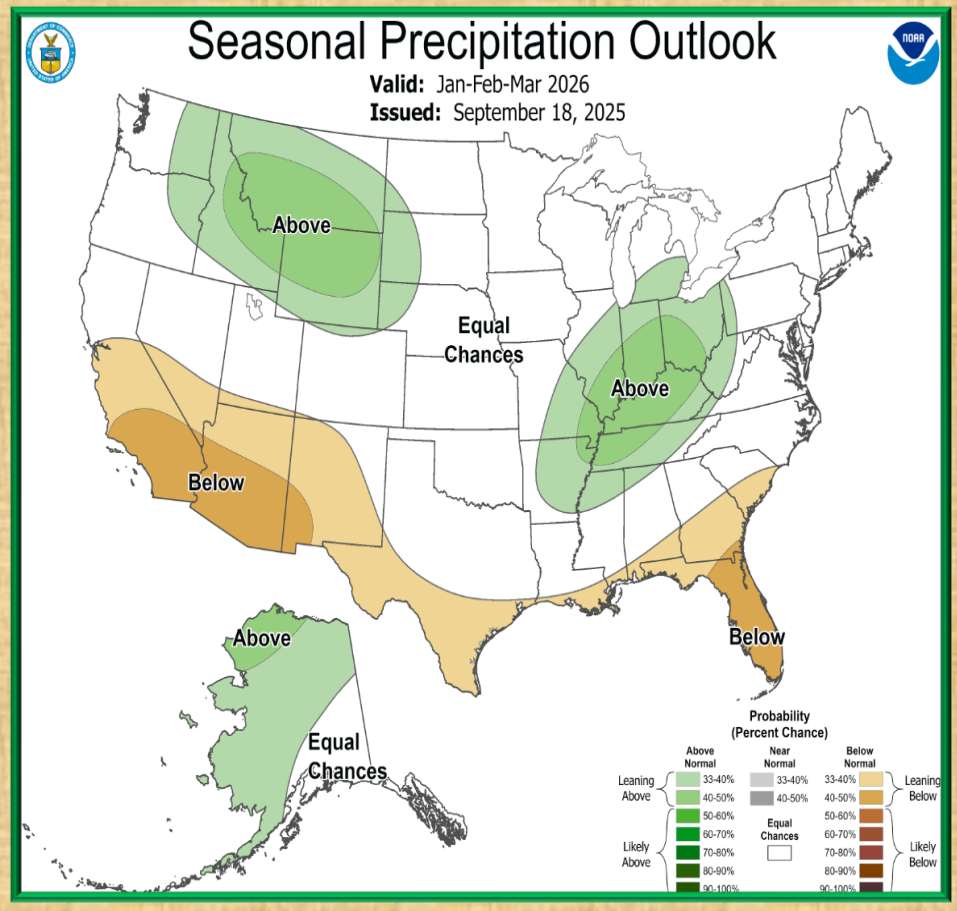


Temperature and precipitation outlook for Jan-Mar 2026

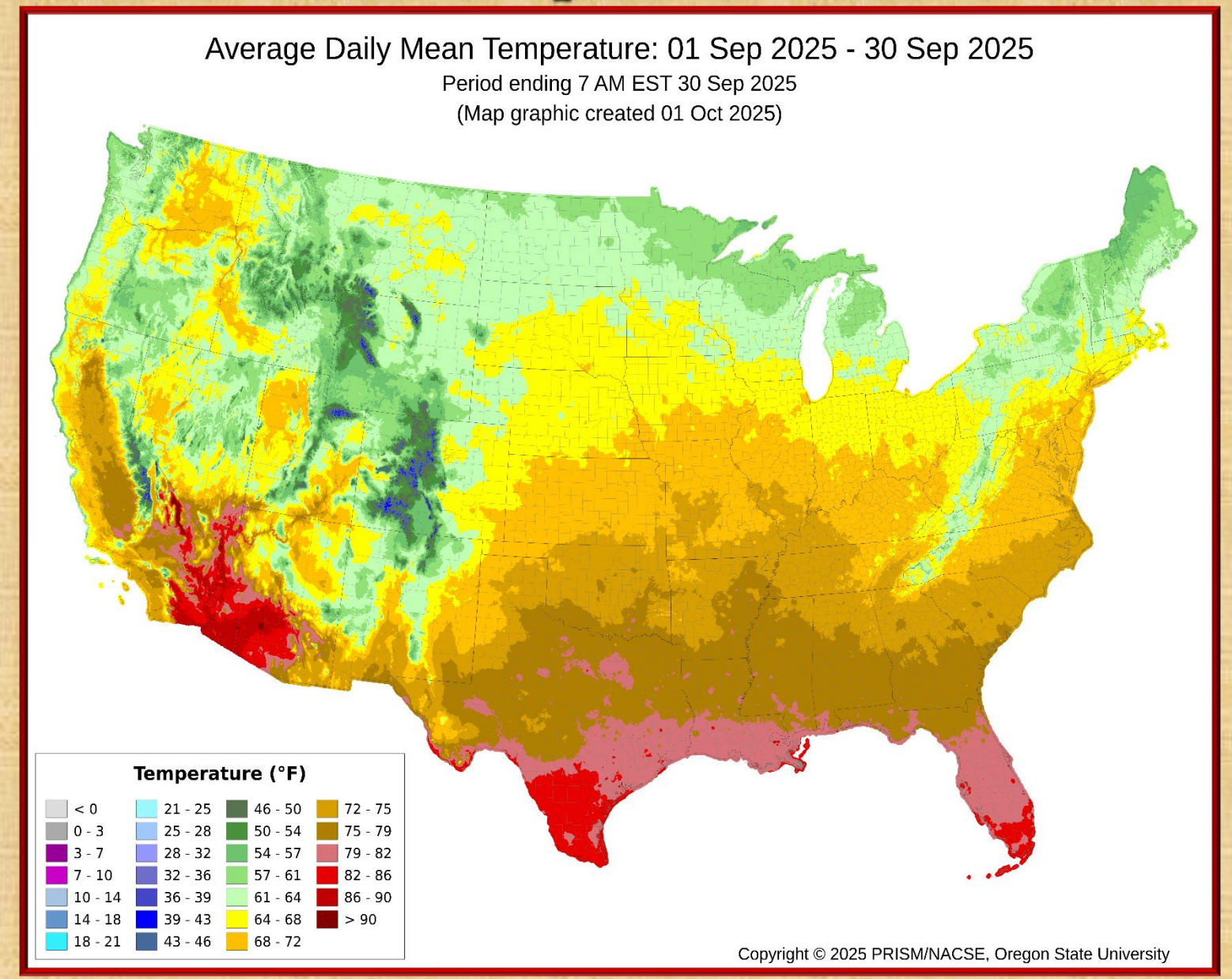
Temperature



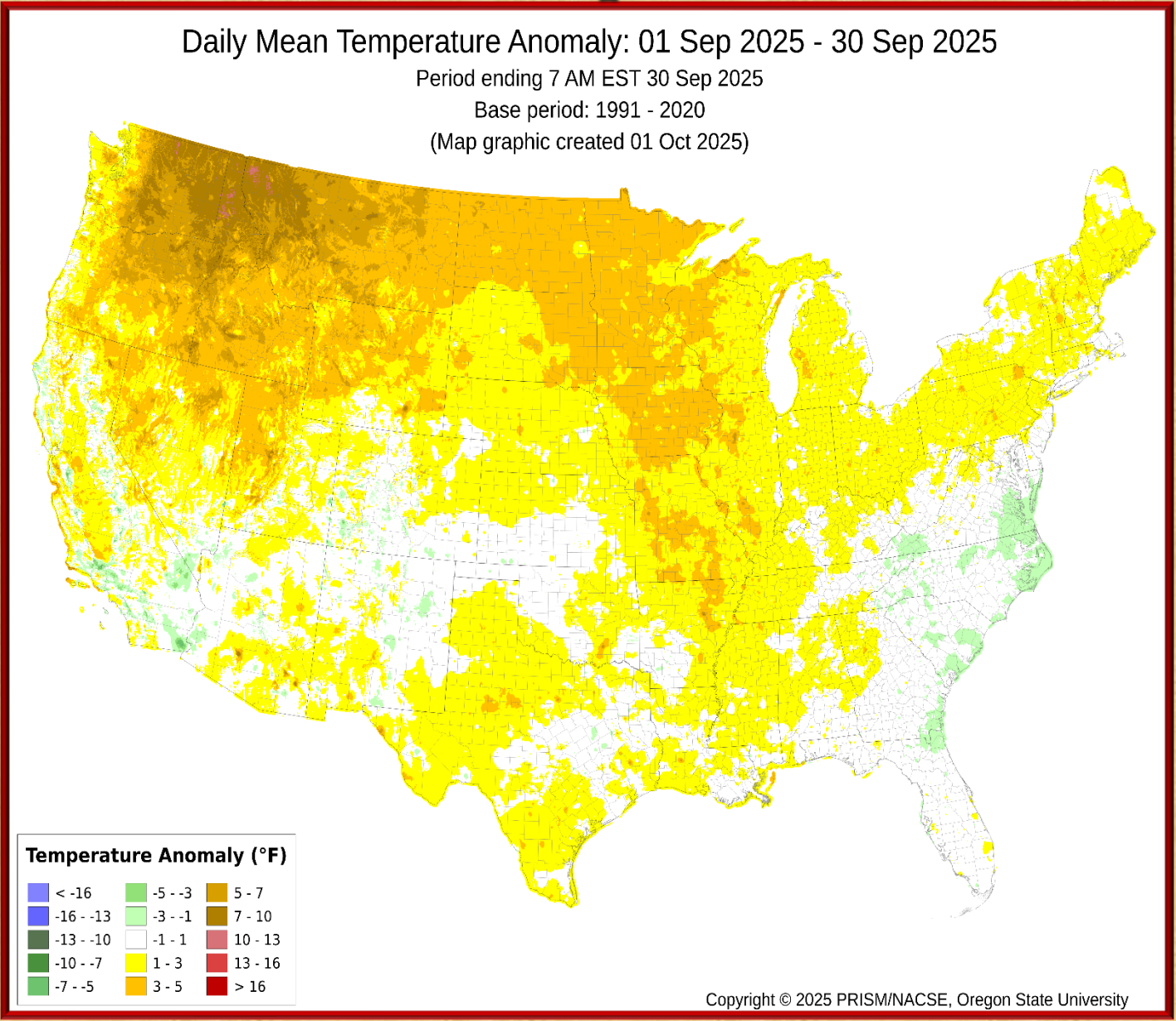
Precipitation



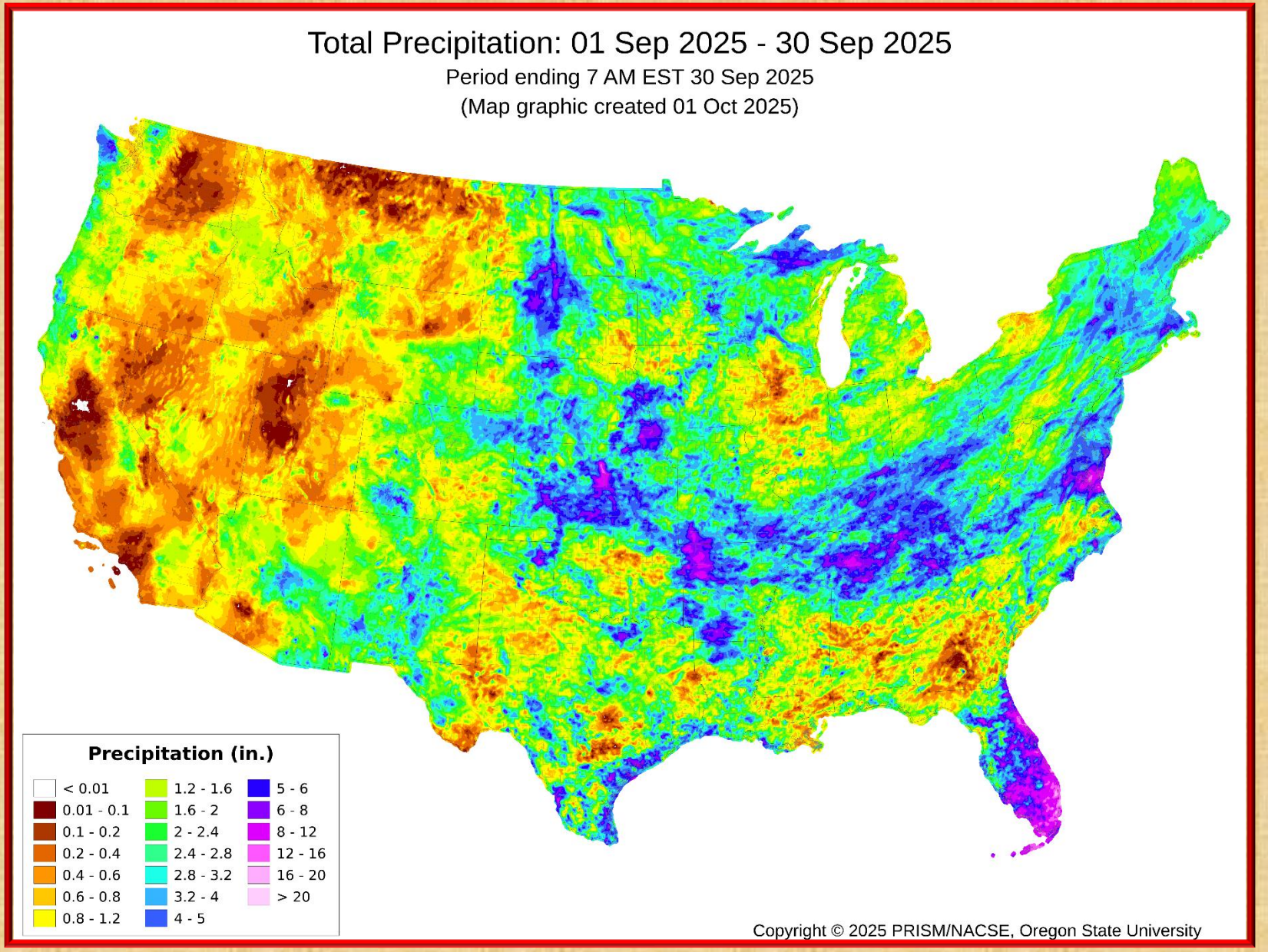
Average Daily Mean Temperature for September 2025



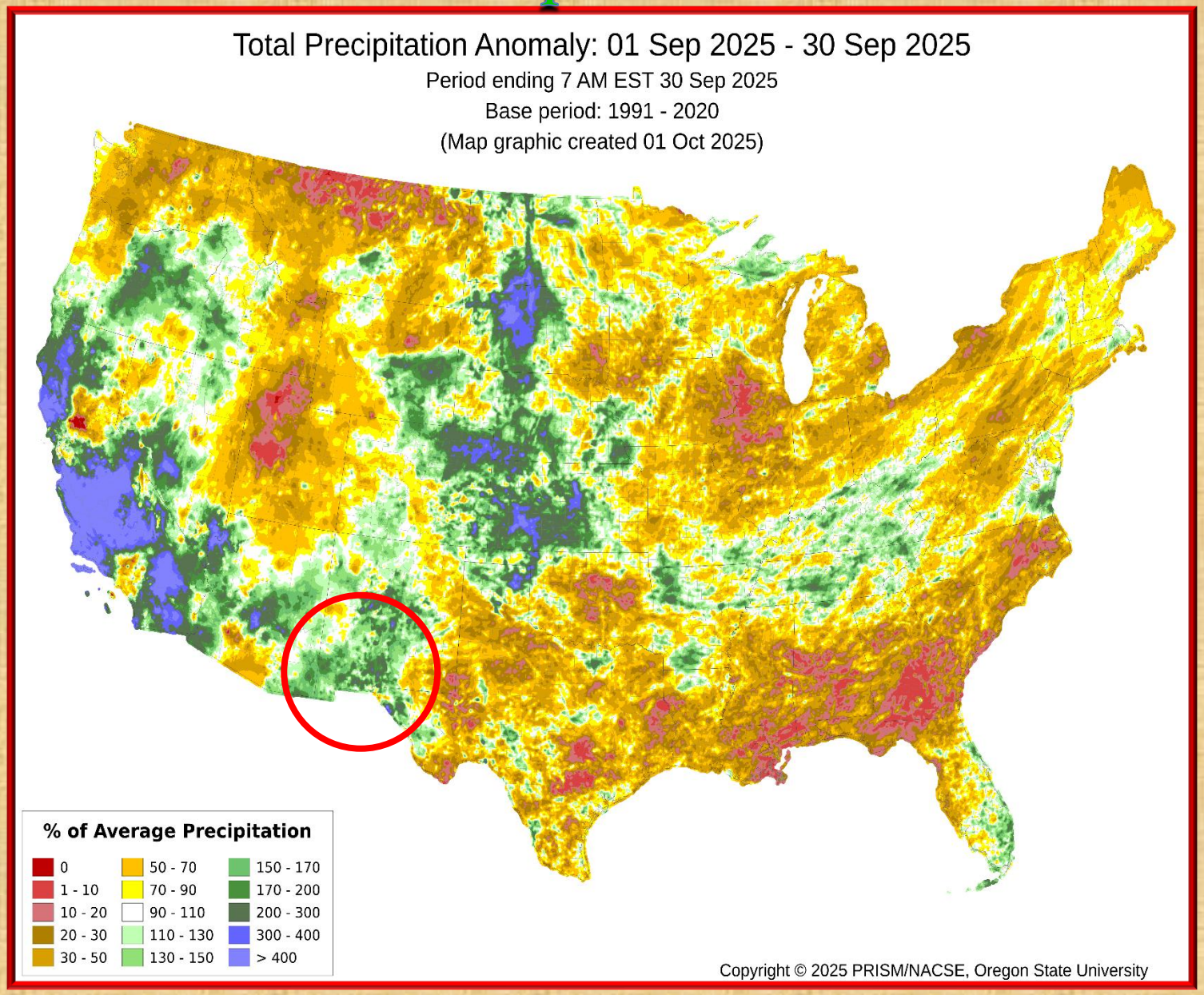
Daily Mean Temperature Departure from Normal, September 2025



Total Precipitation for September 2025

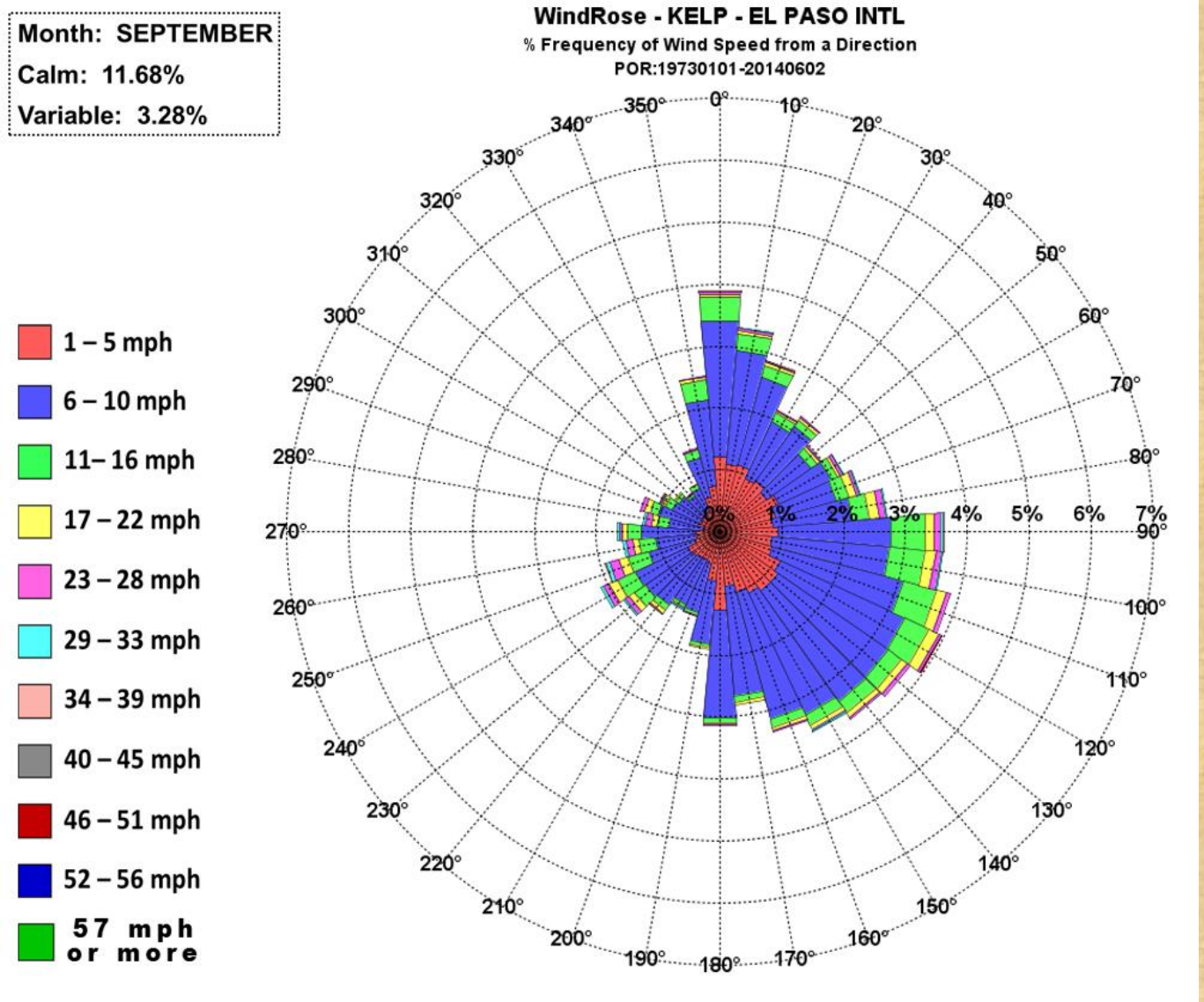


Percent of Normal Precipitation for September 2025



Special Features

www.weather.gov/epz/elpwindrosedata



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www.weather.gov/epz/

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