Weather Outlook



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Recap of the 2024 - Present Weather

- January 4, 2024: Rain and Snow
- January 8, 2024: Wind and Snow
- February 11, 2024: Heavy Snow
- February 29, 2024: Rain, Sleet and Snow
- March 15-17, 2024: Cool Rains
- April 8-9, 2024: Eclipse and Storms
- May 1, 2024: Tornadoes and Flooding
- May 15-16, 2024: Wind and Rains
- May 28-29, 2024: Rain, Wind and Hail
- May 30-31, 2024: Rain, Wind and Hail

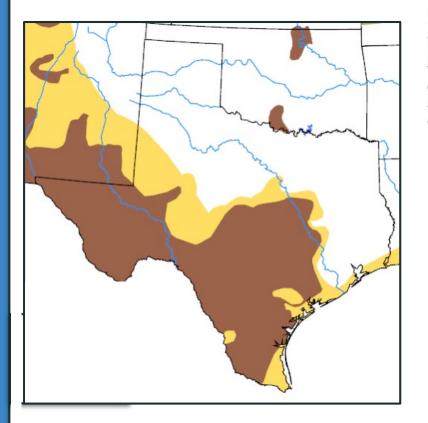
- June 9-10, 2024: Widespread Rain
- July 4, 2024: Winds and Rain
- Augst 30- September 3, 2024: Rain
- September 21-22, 2024: Heavy Rain
- November 2-4, 2024: Heavy Rain
- November 7-8, 2024: Heavy Rain
- November 17-18, 2024: Heavy Rain
- December 6-7, 2024: Rain
- December 10, 2024: Rain
- January 8-10, 2025: Snow

Lubbock Rain Numbers for the 2024

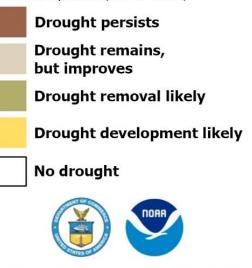
Year	Total Precip	Total Precip Normal	
2024	22.31 inches	18.33 inches	

3.98 inches above normal

Seasonal Drought Outlook Valid for January 16 - April 30, 2025 Released January 16, 2025



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).

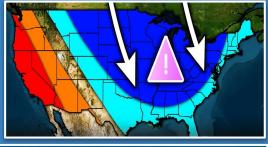


https://go.usa.gov/3eZ73

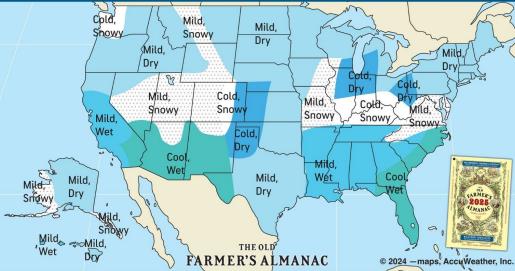


So Many Outlooks



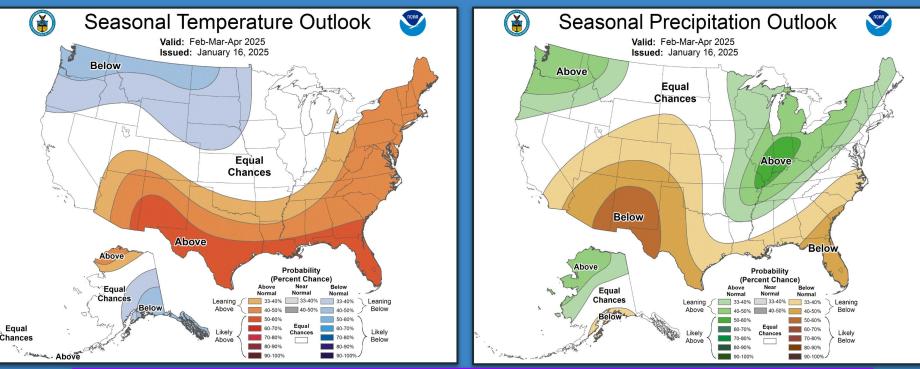


WINTER WEATHER FORECAST 2024-25





NOAA's Official Forecast





These "90-day outlooks" are based on a variety of factors & patterns that result in *the <u>probability</u>* (% chance) of seeing above, below, or near normal temperatures and precipitation (during that 90-day period)



Outlooks are not designed for answering:

- How many snow or severe storms will we see this year?
- Will it rain July 4th?
- Will we have record cold temperatures in February?
- Will March be an unseasonably windy/wet month?

So, in Summary....

This rest of the year will be warm and dry, right?!!!

Not so fast!!

2025 Outlook

DISCLAIMER: Long-range (> 14 days) outlooks are just thatoutlooks They are intended to provide a big picture, probabilistic view of potential long-wave patterns that could impact temperatures and precipitation across different regions of the world. *Disclaimer*It's important to know that our weather can be influenced by a large number of global patterns as well as local/regional-scale meteorological factors! Some of these variables include but are not limited to:

ENSO (El Nino Southern Oscillation)

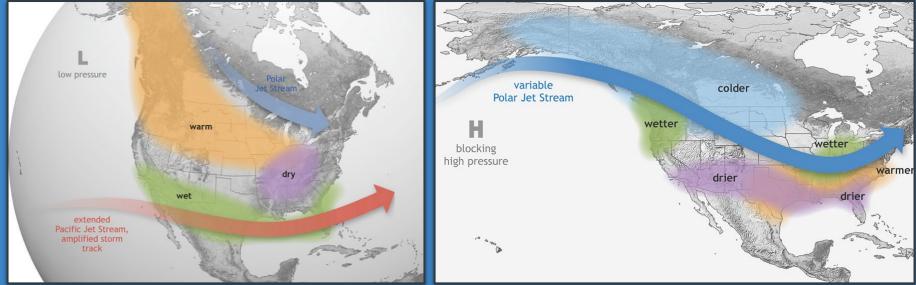
iii.

- PDO (Pacific Decadal Oscillation) / AMO (Atlantic...)
- NAO / AO (North Atlantic / Arctic Oscillation)
- Other Variables (Upper Level Heights + MSLP anomalies, etc.)

What is ENSO (El Nino -Southern Oscillation)?

Typical El Niño

Typical La Niña





During winter, La Niña episodes feature a very wave-like jet stream flow over the United States and Canada, with colder and stormier than average conditions across the North, and warmer and less stormy conditions across the South.



Things You Need to Know

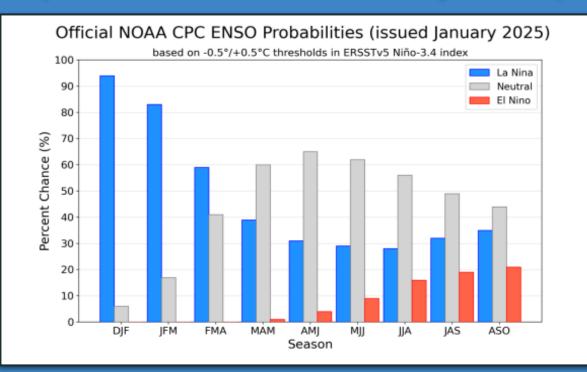
- ENSO or El Nino Southern Oscillation is the irregular oscillation between warm and cool patterns.
- Directly affects rainfall distribution in the tropics and can have a strong influence on weather across the United States.
- On periods ranging from about two to seven years, the surface waters across a large swath of the tropical Pacific Ocean warm or cool by anywhere from 1 °C to 3°C, compared to normal.
- El Niño and La Niña are the extreme phases of the ENSO cycle; between these two phases is a third phase called ENSO-neutral.





NOAA's Official Forecast

La Nina conditions are expected to persist through April (59%) with a transition to neutral by March (60%).









NOAA's Official Forecast

A weak La Nina is likely, as this is late for the La Nina to arrive. However, this doesn't mean it won't influence our weather.

La Niña Categories: 3 consecutive overlapping 3-month periods with SST anomalies of the following categories:

WEAK: -0.5 to -0.9 °C MODERATE: -1 to -1.4 °C STRONG: -1.5 to -1.9 °C VERY STRONG: \geq -2 °C



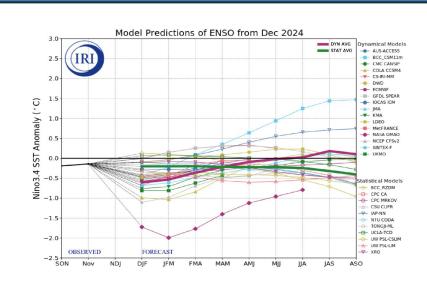
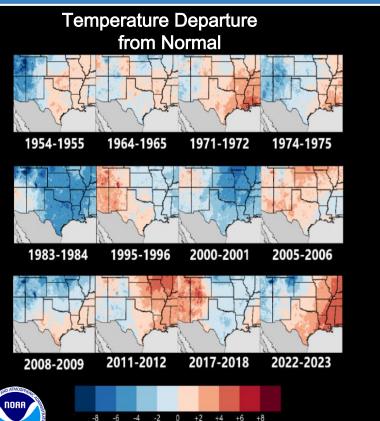


Figure 6. Forecasts of sea surface temperature (SST) anomalies for the Niño 3.4 region (5°N-5°S, 120°W-170°W). Figure updated 19 December 2024 by the International Research Institute (IRI) for Climate and Society.



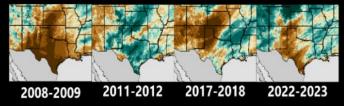
Weak La Niñas In the Past (DEC-JAN - FEB)

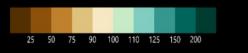


Precipitation Percent of Normal









Temperatures: 6 out of 12 had mild winters

• 5 had colder

• 1 normal

Precipitation:

- 9 out of 12 had dry winters
- 2 had wetter
- Inormal



What is La Nina?

- Water temps are cooler-than-normal in the eastern Pacific along the equator (all it takes is 0.5 degree cooler than the long-term average: 1991-2020).
- La Nina favors drier and milder winters for much of the southern U.S., including Texas.
- However, this doesn't mean winter storms and bitter cold can't reach the southern states.
- Texas' historic deep freeze of February 2021 occurred during a La Nina.





What Does ENSO Neutral Mean?

- When neither El Nino or La Nino conditions are present.
- ENSO Neutral favors average precipitation and temperatures.
 - April precipitation average is 1.33 inches
- However, this doesn't mean one storm or outbreak can't cause above normal averages for a month or day.



There is a 60% chance of transition to ENSO-Neutral conditions in March-May 2025.

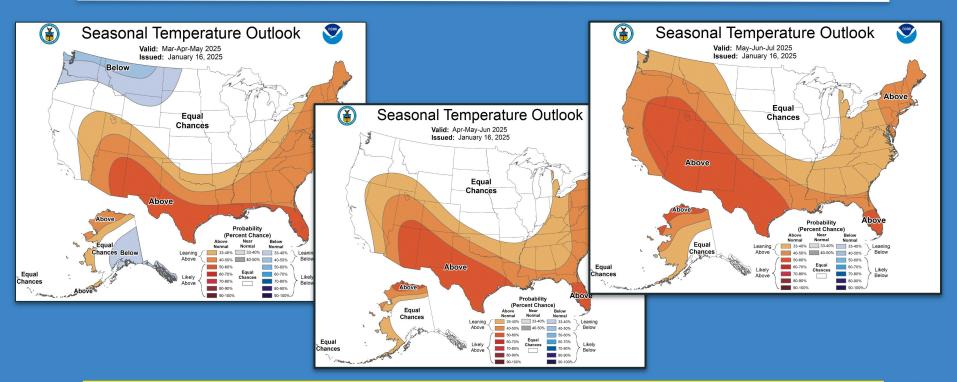




Outlook Seasonal (Longerange) Models



NOAA's Official Temperature Outlook ook

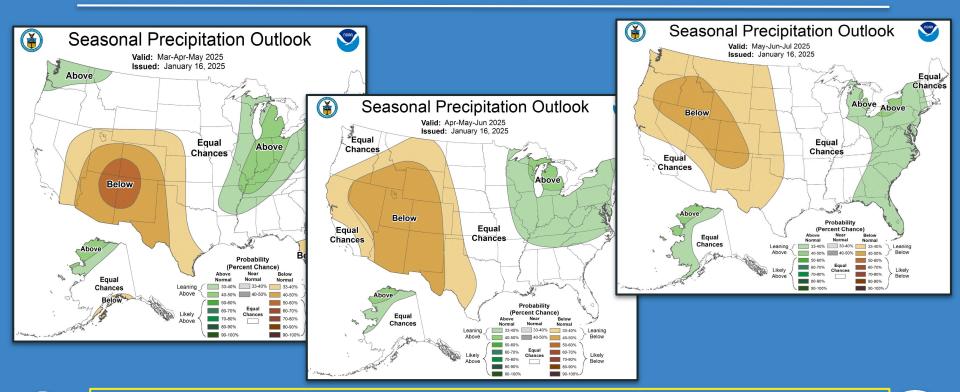




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NOAA's Official Precipitation Outlook ook

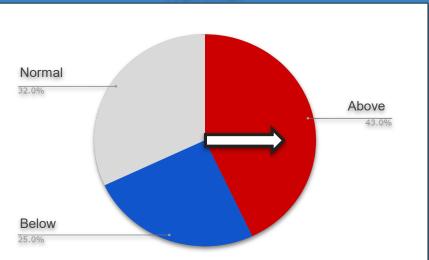




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Climate Outlooks...what do they represent?

The Climate Prediction Center outlooks represent the probability of being above, below, or near normal



Think of the probability as a game wheel...

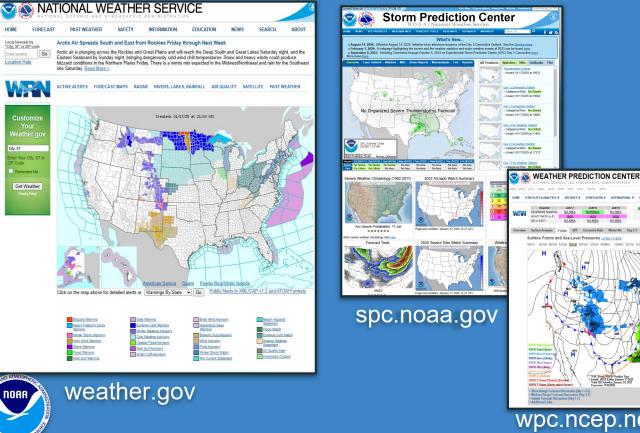
You spin it **100** times. While the slices are bigger for above normal, there is still a HIGHER probability of NOT getting above normal.

43% = Above Normal 57% = Near Normal or Below Normal

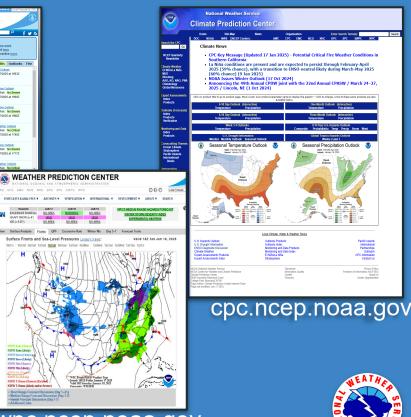




NWS Resources



wpc.ncep.noaa.gov



NWS Resources

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Enter location Go	News Headlines • First Bout of Winter Weather of the Season • Record Warmth for West Texas in 2024. Che • The latest regional and national road condi • West Texas, we need your precipitation rep	ck out the 2024 year in review! ions	w here.		
LUDDOCK TA	NWS Lubbock Weather.gov > Lubbook, TX Current Hazards Current Conditions Rad	ar Forecasts Rivers and L	akes Climate and Past W	Lubbock, TX Weather Forecast Office	
Blowing Dust and Windy	High Wind Wind Warning Advisory	Today and Ligh Tonight Sa	nt Snow Lubbo turday Five I rening Forec	ock Cold Day Weather	
66°F	Extended F			January 17, 2025 3:44 AM	
19°C Get Detailed info		st valid for Lubbock and su	urrounding areas		
This Afternoon Areas Blowing Dust and Windy	Saturday Sund	ay M.L. King Jr. Day	Tuesday	Wednesday	
High: 65°F	Chance of Snow: Chance of		Chance of Snow:		below for detailed forecast.
Tonight	40% 0% Mid 30s Upp		Ø% Mid to	Raton Boise City Clayton	Guymon Beaver Enid
	to Mid 20s	30s 30s	upper 30s	Roy Daihart	amas Borger *Pampa
Clear	+ Single Digits to		Single Tee	Tucumcari Santa Rosa Hereford	II0.
Low: 27°F change location	National Oceanic and Annospheric Administration	Teens Lo	w 10s	Clovis Dimmi	t Childress
	Cooler temperatures this weekend. Ch	ances of snow on Saturday	for the Far Southern Te	Morton, Lit	tefield Matador Wichita Falls
	northern portions of the South Plains	-	ances return Monday fo	Roswell	Post Aspermont
	Panhandle. Temperatures will gradual Hide Caption	ly warm by mid-week.		Carisbad	Abiene
	the control		_		Big Spring , Jan 17, 2025 at 3:02:19 pm C ST

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▶ ▼ ▲ Watches. Warnings & Advisories Temperature (°F) lesonet: Jan 17, 2025 3:00:00 PM CST Winter Storm Warning © 2025 West Texas Mesonet. Disclaimer and Data Policy MESONEL: MESONET FOX High Wind Warnir Developed by ♥ WTM team <u>Winter Weathe</u> Advisory Blowing Dust Advisory mesonet.ttu.edu Wind Advisory Special Weather Statement Hazardous Weather Outlook

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