March 2024 Weather Digest

March 2024 Weather Summary

This March was pretty typical of most March weather around the Borderland with plenty of wind storms and sparse precipitation. Most of the lowlands finished the month below normal with precipitation. Most of the mountains including Gila/Black Range, Sacramentos and the San Andres/Organs all received above normal precipitation. A strong Pacific storm system rolled through on the 7th through 9th, bringing heavy snow to the mountains. The Sacramento Mountains reported up to 10 inches of snow.

A more unusual feature moved in mid month in the shape of a Pacific upper low which became stationary for nearly a week over Arizona and kept our area in prolonged southwest flow and several wind storms. This pattern only resulted in some isolated showers and no significant rainfall. With the numerous storms passing through, average temperatures ended up near normal, with below normal high temperatures off-setting above normal low temperatures.

March 2024 Weather Summary

Looking ahead to April we continue the steady warmup and lengthening daylight. April ends with 13 hours and 25 minutes of light, an increase of 53 minutes from the beginning of the month. High temperatures in El Paso warm from 77 degrees on the first, to 83 degrees on the 30th. As far as the celestial news goes, obviously the biggest news is the Solar Eclipse on April 8th. The percent of totality ranges from about 85% over west Texas, to 75% further west over the Gila Region. The April full moon occurs the 23rd and is know as the Pink Moon, while the new moon occurs on the 8th during the eclipse. **Mar: 8 Heavy snow near** Stateen Springs

Mar 8 Heavy snow near Cloudcroft

Mar 9 Fog near Clouderoft



Mar 9 Fog near Clouderoft

Mar 9 Snow over the Gila Wilderness

Mar 10 Fog in the Mimbres Valley

Mar 26 Snow near Pinos Altos

Mar 26 Snow near Pinos Altos



Mar 26 Snow near Mimbres



Mar 26 Showers in the Cila

Mar 15 cold front brought low clouds and fog to the Sacramento Mountains and blowing dust to the southern desert.



April 8 Solar Eclipse

Borderland will be in 70-80% totality range, peaking at around 1230 pm





Mar 10 - Water released from Elephant Butte Reservoir Into the Rio Grande-reaches El Paso Mar 11



EPPT2/plotting HCIPC) "Cage 0" Datum: 3723-92"

Observations courtesy of IBWC-US Section

ENSO Alert System Status El Niño Advisory is in effect/ La Niña Watch is also 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 Forceast

ENSO is in El Niño phase and is expected to last into spring before transitioning to neutral by the beginning of this summer; likely back to La Niña by the end of summer.



TYPICAL LA NIÑA WINTERS La Niña Pattern variable colder Polar Jet Stream wetter blocking high pressure warmer drier YPICAL EL NIÑO WINTERS

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 Patterr

wetter

colder

warmer

extended Pacific Jet Stream, amplified storm track

low pressure

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

Mar 26, 2024

Dec 26, 2023





March 31 Snow Depth Upper Rio Crande Basin



Snow Data Upper Rio Grande Basin as of Mar 31, 2024

Pueblo 0 ⁰

Trinidad

O.

0.0

Springer

o

Santa Rosa

о

Fort'S

O-

Q.



Snow Data Upper Rio Grande Basin as of February 29, 2024





Snow Water Equivalent as of March 31, 2024 Compare to last few years and average values



Precipitation for the Water Year Oct 1 - Mar 31, 2024 Compare to last few years and average values





Temperature and precipitation data for March 2024 in El Paso

= record



Temperature and Precipitation Year-to-date for 2024 for El Paso



Temperature and Precipitation Plot for El Paso, Texas for 2024

March 2024 rainfall estimate with surface rainfall reports



March 2024 rainfall estimate percent of normal



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





Temperature and precipitation outlook for Apr-Jun 2024

Temperature

Precipitation





Average Daily Mean Temperature for March 2024

Average Daily Mean Temperature: 01 Mar 2024 - 31 Mar 2024 Period ending 7 AM EST 31 Mar 2024 (Map created 01 Apr 2024)



Total Precipitation for March 2024



Selected Weather Reports March 2024

Date/Time	Location (County)	Event
MAR 15 826 PM	DRIPPING SPRINGS-DONA ANA	64 MPH PEAK WIND GUST
MAR 15 140 PM	SAN AUGUSTIN PASS-DONA ANA	62 MPH PEAK WIND GUST
MAR 15 339 AM	HIGH ROLLS-OTERO	59 MPH PEAK WIND GUST
MAR 15 710 PM	NORTH LORDSBURG PLAYA-HIDALGO	54 MPH PEAK WIND GUST
MAR 15 115 AM	ALAMOGORDO ARIPORT-OTERO	45 MPH PEAK WIND GUST
MAR 15 358 PM	DEMING AIRPORT-LUNA	44 MPH PEAK WIND GUST
MAR 14 1115 PM	LAS CRUCES AIRPORT-DONA ANA	43 MPH PEAK WIND GUST
MAR 14 1120 PM	SANTA TERESA NWS-DONA ANA	41 MPH PEAK WIND GUST
MAR 15 515 PM	SILVER CITY MTN VIEW-GRANT	41 MPH PEAK WIND GUST
MAR 24 925 AM	SAN AUGUSTIN PASS-DONA ANA	93 MPH PEAK WIND GUST
MAR 24 1009 AM	HIGH ROLLS-OTERO	71 MPH PEAK WIND GUST
MAR 24 945 AM	WSMR MAIN POST-DONA ANA	69 MPH PEAK WIND GUST

Selected Weather Reports March 2024

Date/Time	Location (County)	Event
MAR 24 341 PM	MESCALERO-OTERO	68 MPH PEAK WIND GUST
MAR 24 307 PM	T OR C AIRPORT-SIERRA	63 MPH PEAK WIND GUST
MAR 24 435 PM	EL PASO INTL AIRPORT-EL PASO	62 MPH PEAK WIND GUST
MAR 24 1126 AM	DRIPPING SPRINGS-DONA ANA	60 MPH PEAK WIND GUST
MAR 24 1110 AM	SANTA TERESA NWS-DONA ANA	56 MPH PEAK WIND GUST
MAR 24 1230 PM	SPACEPORT AMERICA-SIERRA	56 MPH PEAK WIND GUST
MAR 24 1013 AM	SIERRA BLANCA-HUDSPETH	57 MPH PEAK WIND GUST
MAR 24 140 PM	SAN AUGUSTIN PASS-DONA ANA	93 MPH PEAK WIND GUST
MAR 24 140 PM	SAN AUGUSTIN PASS-DONA ANA	93 MPH PEAK WIND GUST
MAR 24 140 PM	SAN AUGUSTIN PASS-DONA ANA	93 MPH PEAK WIND GUST
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Selected Weather Reports March 2024

Date/Time	Location (County)	Event
MAR 24 234 PM	ALAMOGORDO AIRPORT-OTERO	49 MPH PEAK WIND GUST
MAR 24 340 PM	LORDSBURG PLAYA MP11	49 MPH PEAK WIND GUST
MAR 24 415 PM	CLOUDCROFT-OTERO	46 MPH PEAK WIND GUST
MAR 24 1144 AM	CHAPARRAL FIRE STATION-DONA ANA	45 MPH PEAK WIND GUST

Special Features

www.weather.gov/epz/elpwindrosedata





2007 Spring Fall
2008 Spring Fall

2009 Spring Fall

2010 Spring Fall

2011 <u>Spring</u> Fall 2012 <u>Spring</u> Fall

2013 Spring Fall

2014 Spring Fall

March

April May

June

July

August

September

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

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.