

March 2024 Climate & Weather Summary

Issued: April 17, 2024



ALBUQUERQUE
Weather Forecast Office

March 2024 was full of winter storms and high wind events. The month began windy and dry with rounds of strong winds in excess of 55 mph throughout eastern NM. Then, there was a transition to wetter weather around the middle of the month. A tandem of storms from the 13th through the 17th brought feet of snow to the northern mountains and wind gusts in excess of 65 mph to central and eastern NM where precipitation was mostly in the form of rain. To cap off the active month, two more high wind events created dust storms in the Roswell area on the 24th and 31st. Despite numerous days with critical fire weather conditions throughout the month, no large fires were started fortunately. Monthly precipitation was above average to well-above average across the western half of the state and near to below average across the eastern half of the state.



March 17 | South Tijeras, NM
Photo courtesy Jeff Young



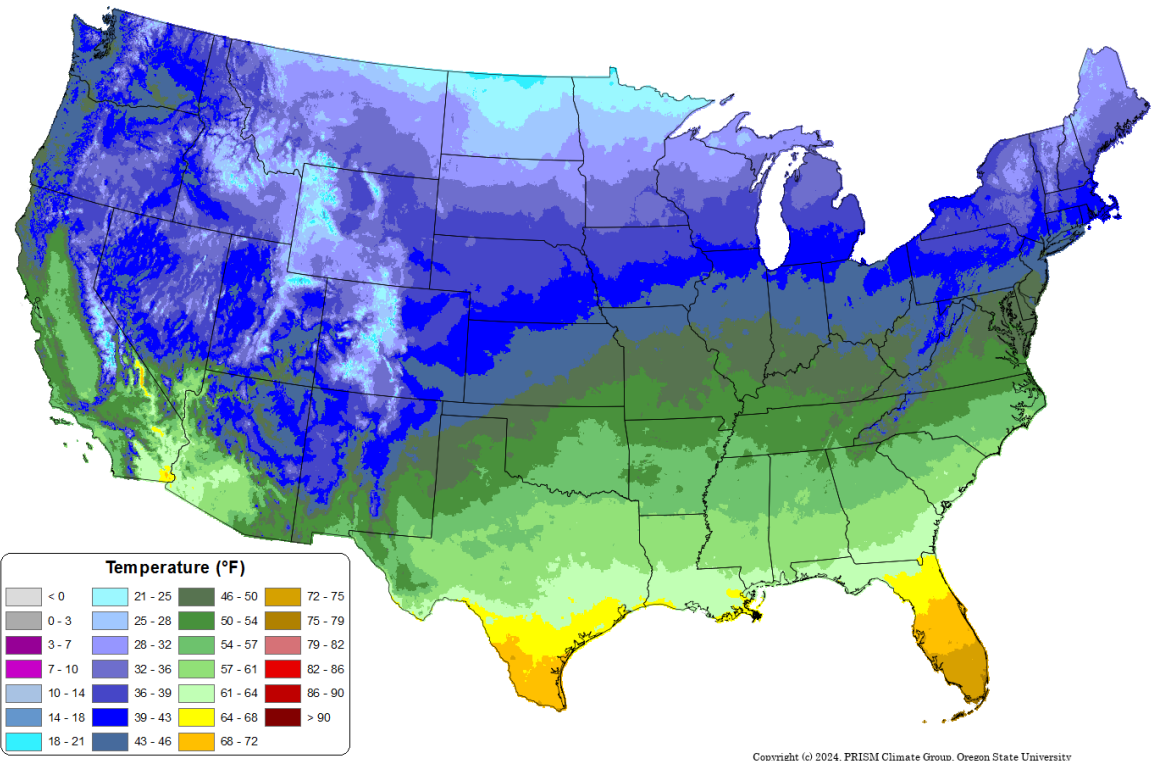
March 31 | Roswell, NM
Photo courtesy Jim Tucker



March 17 | Abiquiu, NM
Photo courtesy Mike Caffey

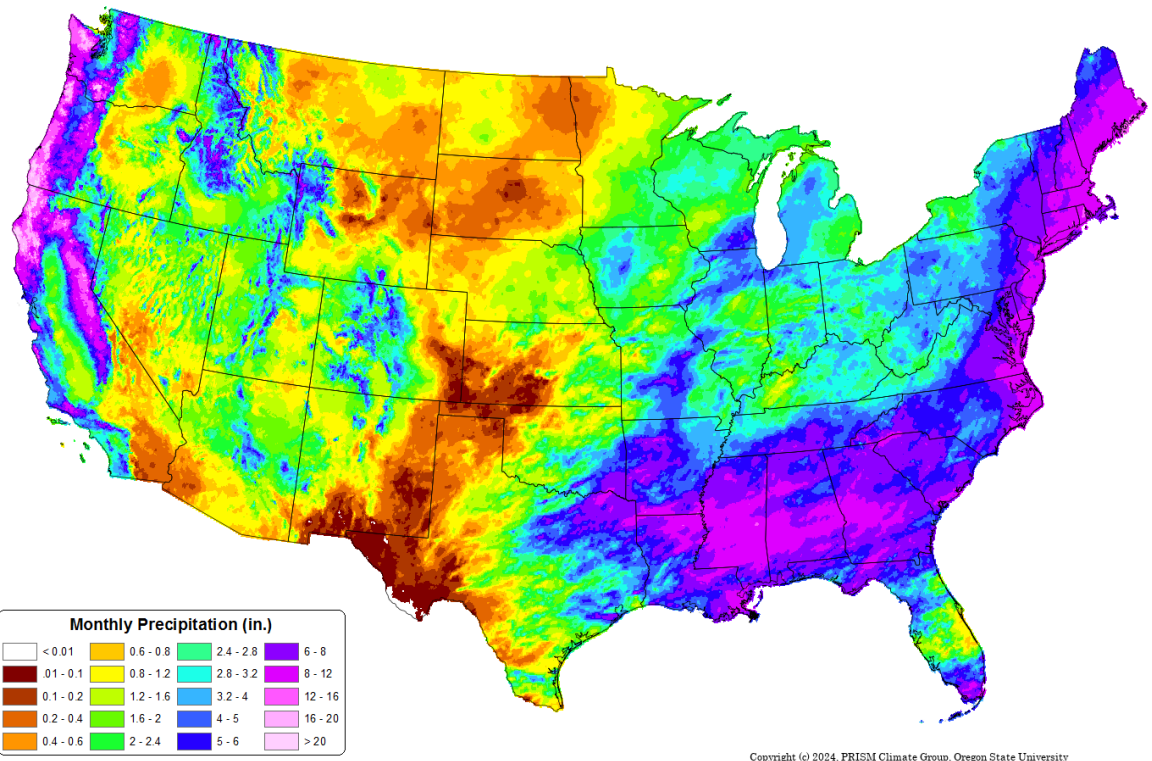
Average Temperatures

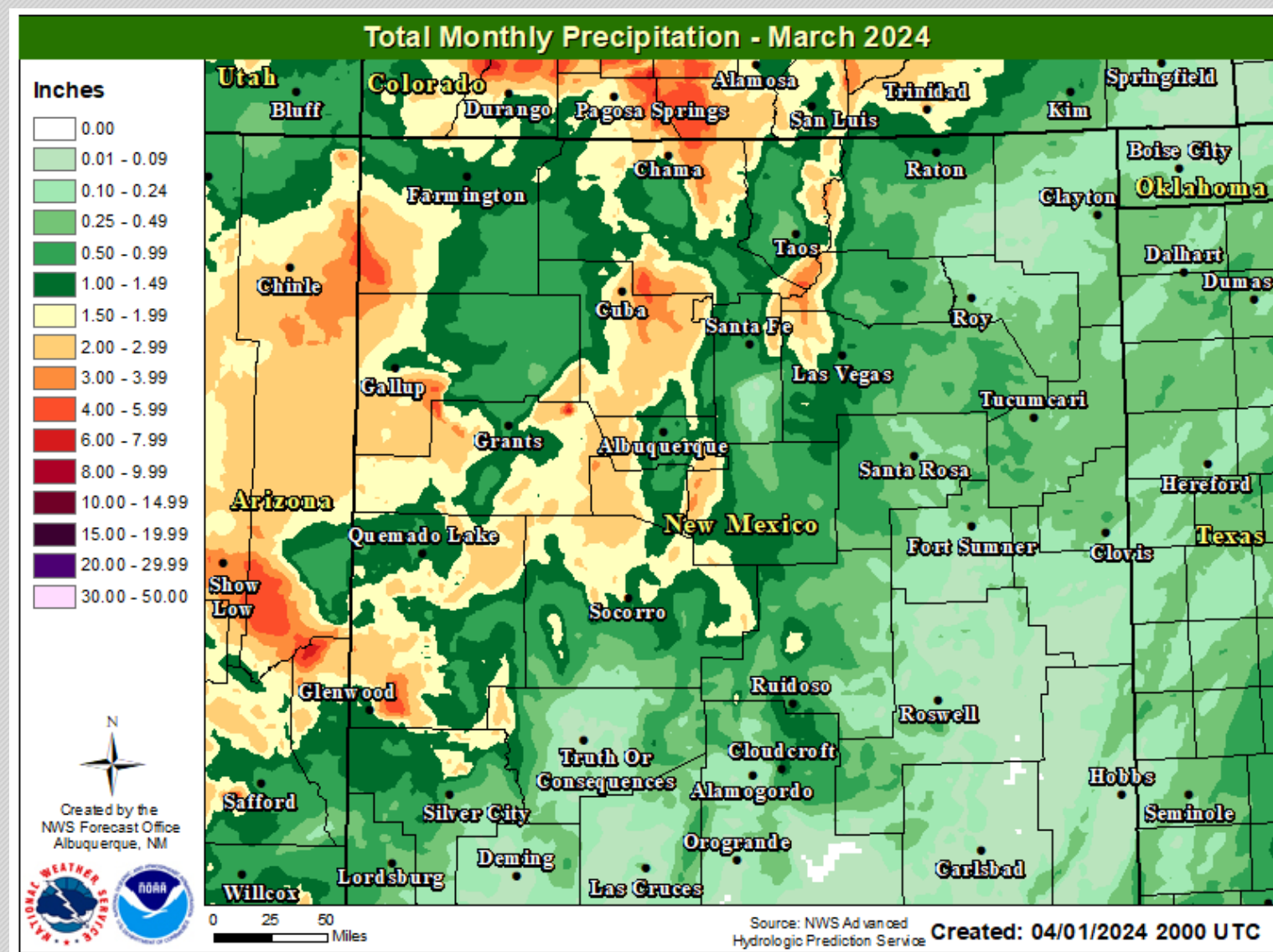
Average Daily Mean Temperature: Mar 2024
Period ending 7 AM EST 31 Mar 2024
(Map created 02 Apr 2024)



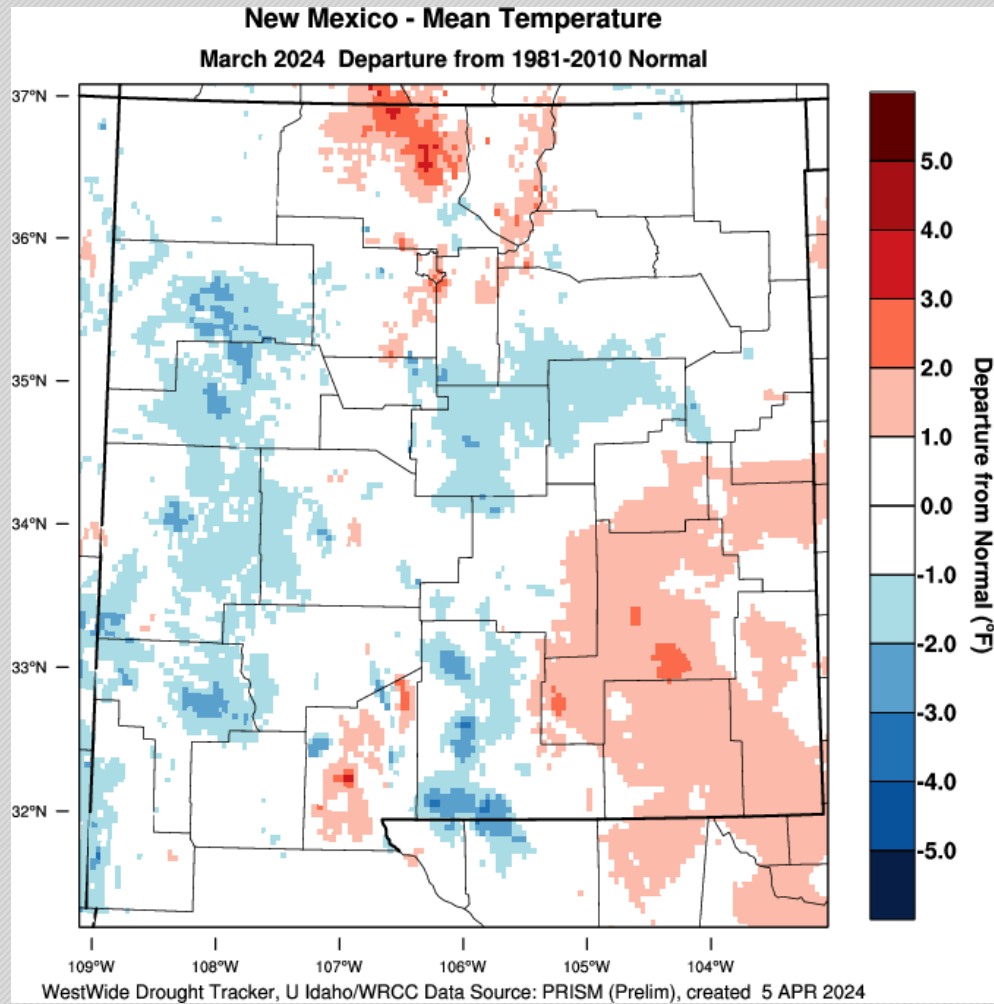
Total Precipitation

Total Precipitation: Mar 2024
Period ending 31 Mar 2024
(Map created 02 Apr 2024)

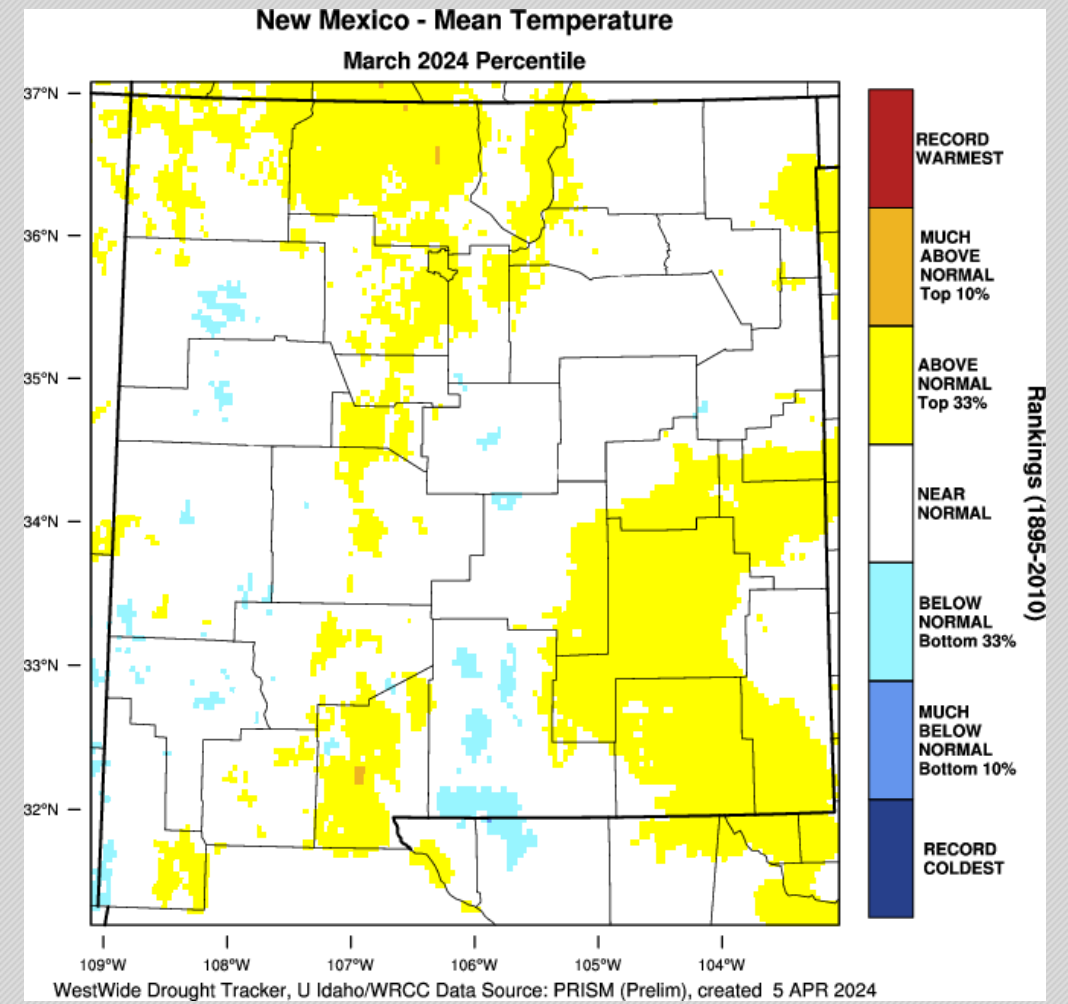




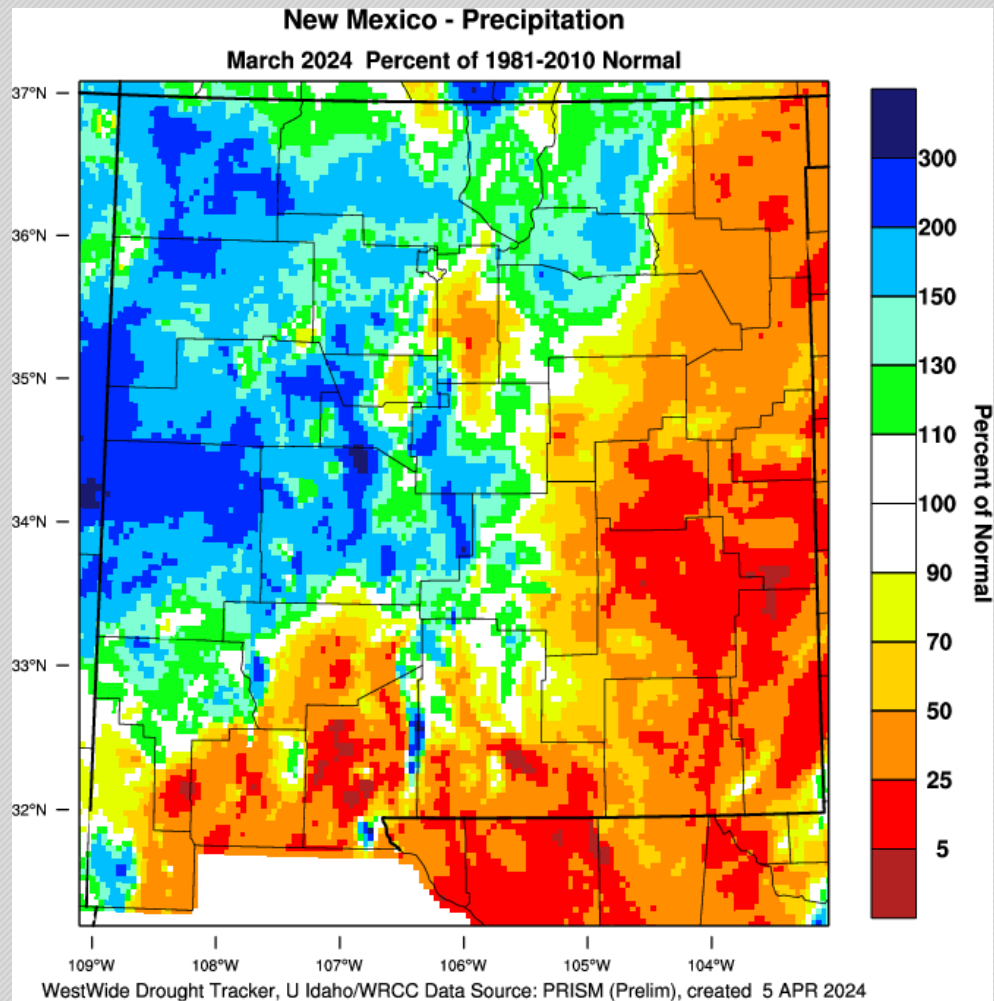
Anomaly



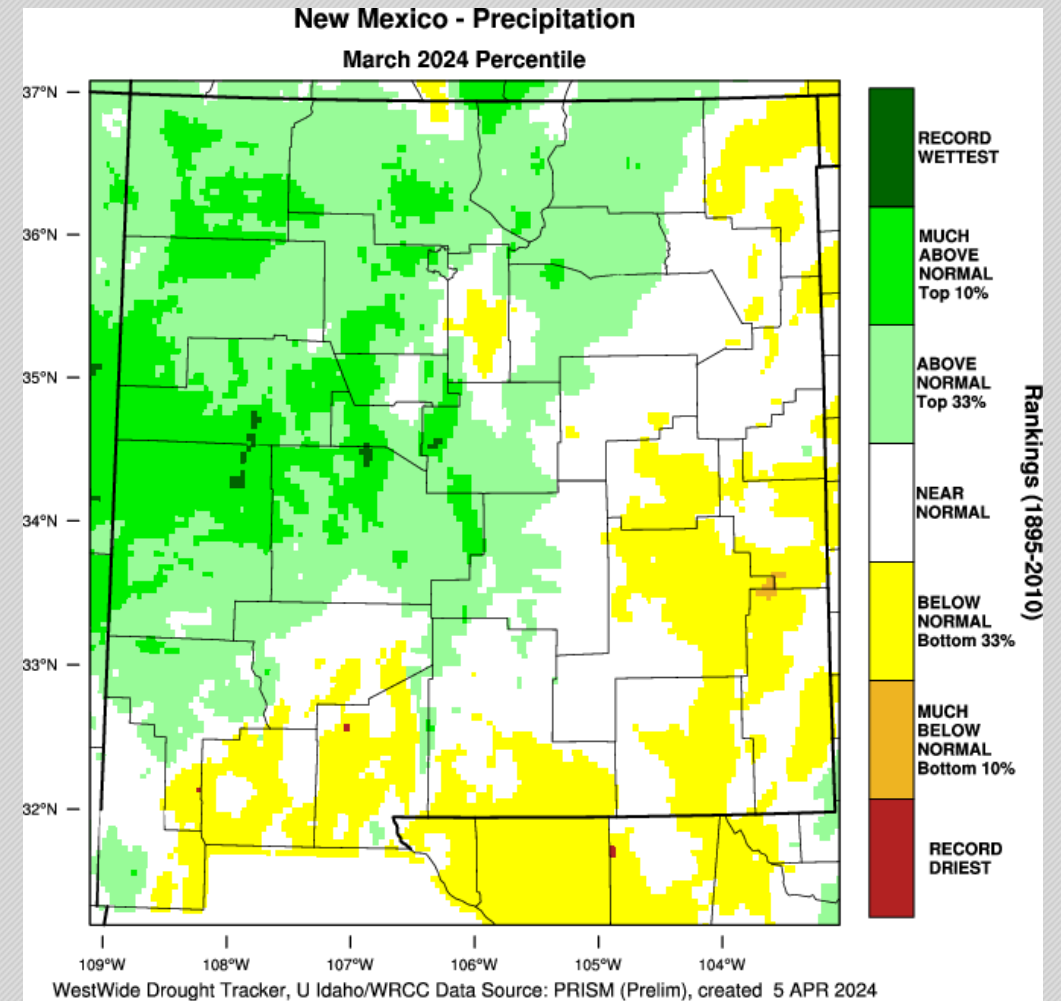
Percentile



Anomaly

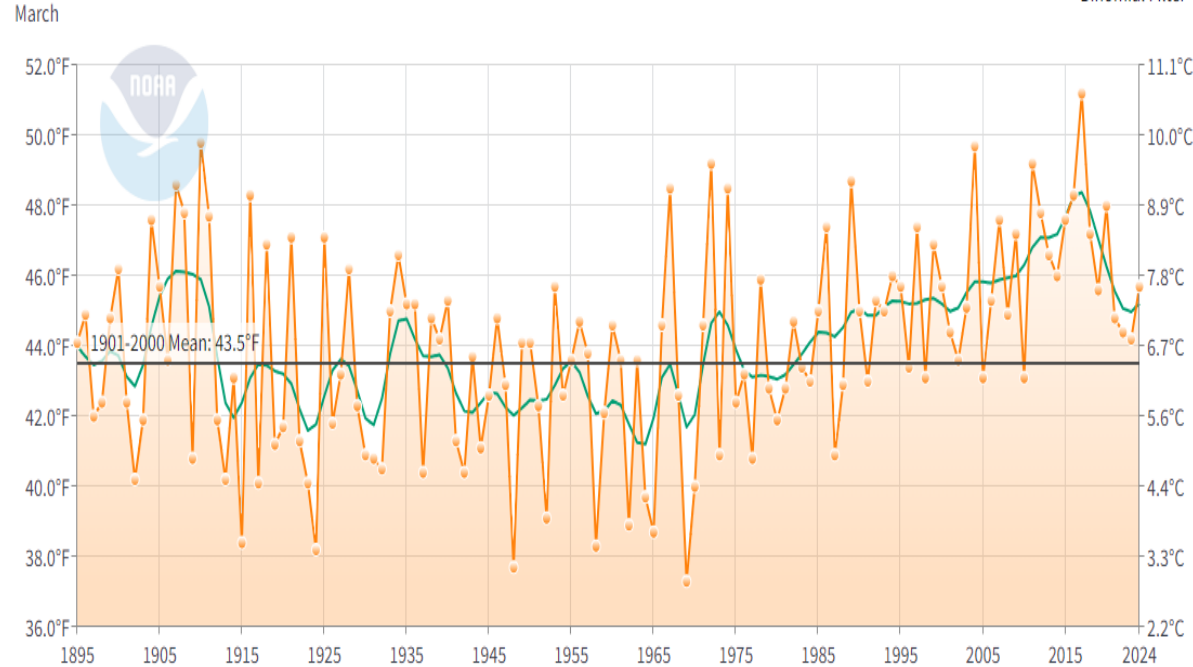


Percentile



Temperature

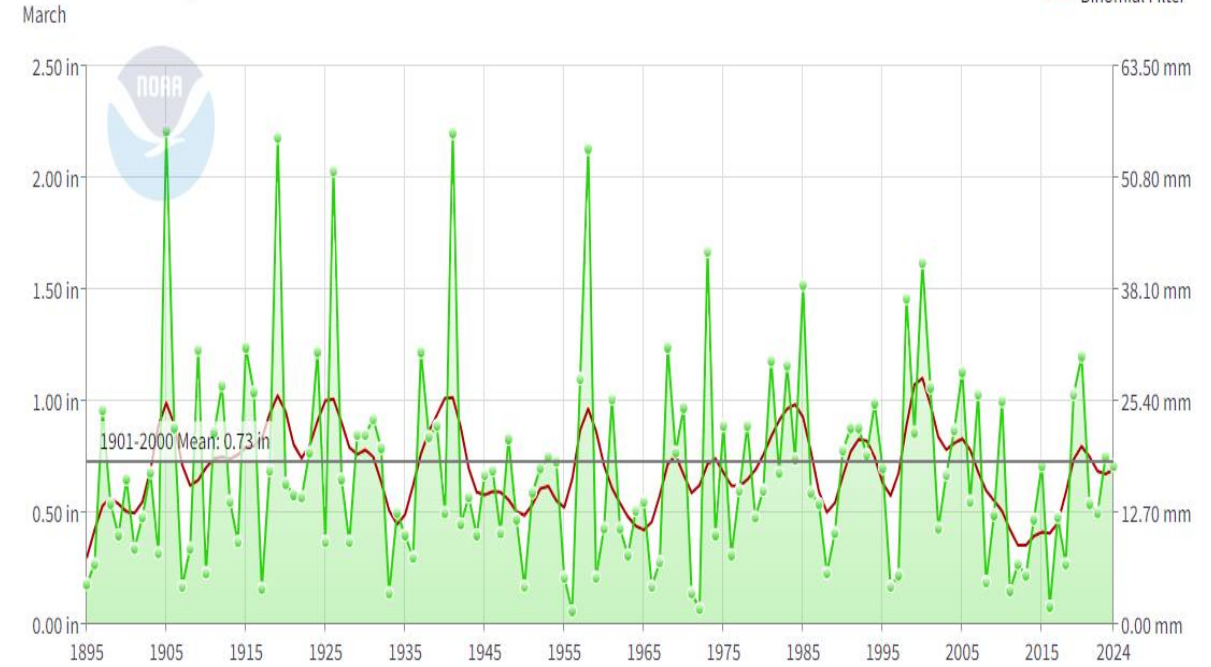
New Mexico Average Temperature



The March 2024 average statewide temperature was 45.7°, which was 2.2° above the long-term normal of 43.5° (1901-2000). This ranked as the 33rd warmest March on record (1895-2024).

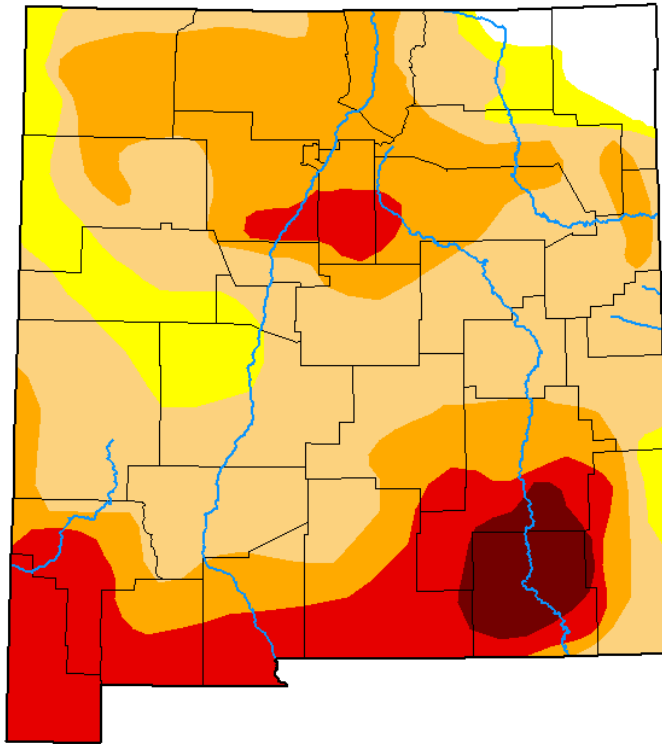
Precipitation

New Mexico Precipitation



The March 2024 average statewide precipitation was 0.71", which was 0.02" below the long-term normal of 0.73" (1901-2000). This ranked as the 78th driest March on record (1895-2024).

U.S. Drought Monitor New Mexico



March 5, 2024
(Released Thursday, Mar. 7, 2024)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|--------|-------|-------|-------|------|
| Current | 2.81 | 97.19 | 88.19 | 47.28 | 19.28 | 3.51 |
| Last Week 02-27-2024 | 2.82 | 97.18 | 88.19 | 47.86 | 19.28 | 3.51 |
| 3 Months Ago 12-05-2023 | 0.39 | 99.61 | 96.83 | 87.73 | 43.00 | 6.48 |
| Start of Calendar Year 01-02-2024 | 0.71 | 99.29 | 94.04 | 79.22 | 38.39 | 6.48 |
| Start of Water Year 09-26-2023 | 0.00 | 100.00 | 96.87 | 67.52 | 32.31 | 6.85 |
| One Year Ago 03-07-2023 | 28.27 | 71.73 | 37.12 | 15.52 | 3.82 | 0.19 |

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

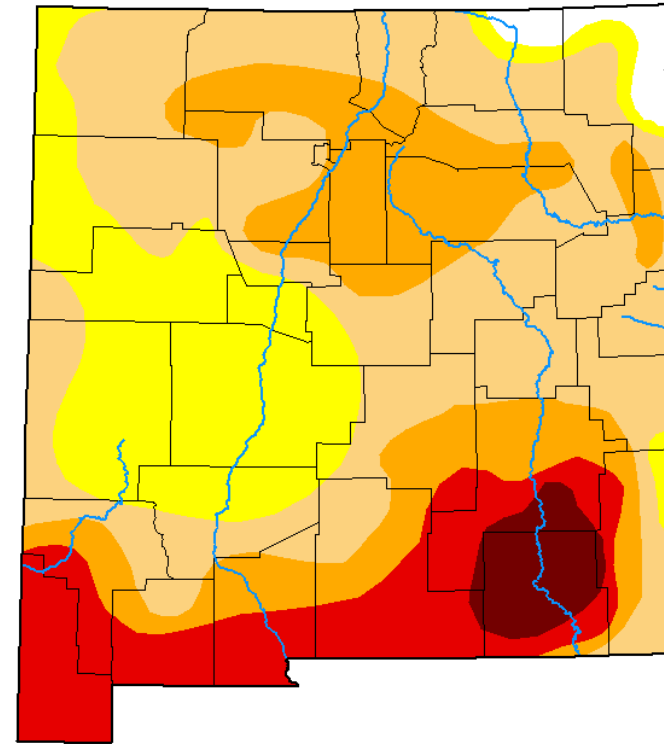
Author:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor New Mexico



March 26, 2024
(Released Thursday, Mar. 28, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|--------|-------|-------|-------|------|
| Current | 1.76 | 98.24 | 77.63 | 37.77 | 16.72 | 3.51 |
| Last Week 03-19-2024 | 1.76 | 98.24 | 85.69 | 43.95 | 18.86 | 3.51 |
| 3 Months Ago 12-26-2023 | 0.71 | 99.29 | 94.04 | 82.04 | 41.16 | 6.48 |
| Start of Calendar Year 01-02-2024 | 0.71 | 99.29 | 94.04 | 79.22 | 38.39 | 6.48 |
| Start of Water Year 09-26-2023 | 0.00 | 100.00 | 96.87 | 67.52 | 32.31 | 6.85 |
| One Year Ago 03-28-2023 | 36.06 | 63.94 | 32.91 | 15.67 | 4.20 | 0.21 |

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brad Rippey
U.S. Department of Agriculture



droughtmonitor.unl.edu

Drought conditions in March improved slightly for parts of the region, mainly central and northwest NM. A more active storm track entering the western U.S. in February helped to focus the greater rain and snow across the northern and western high terrain.

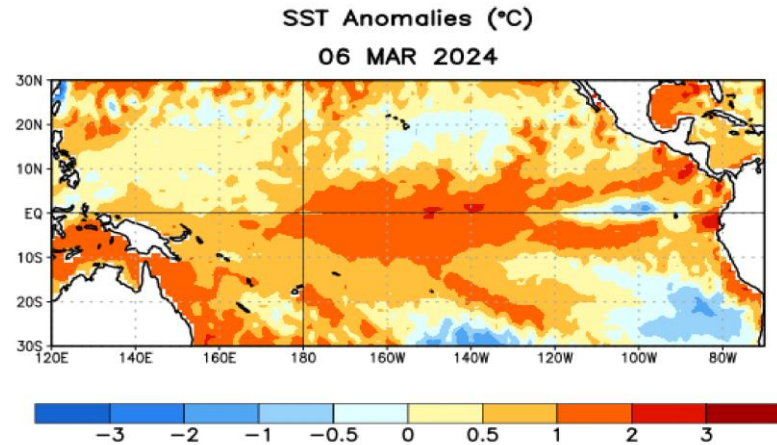


Figure 1. Average sea surface temperature (SST) anomalies ($^{\circ}\text{C}$) for the week centered on 6 March 2024. Anomalies are computed with respect to the 1991-2020 base period weekly means.

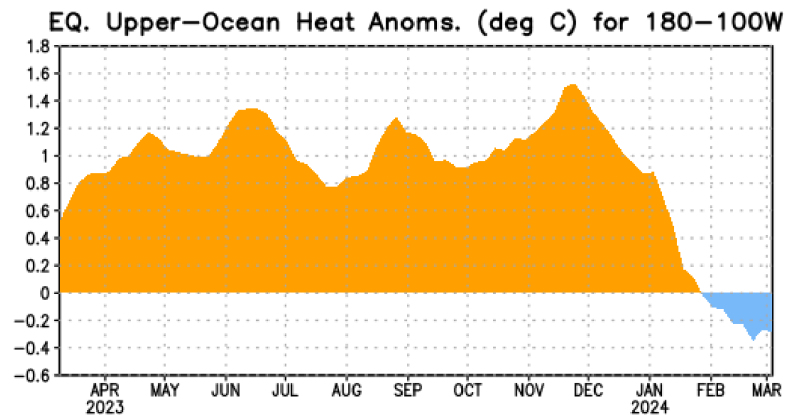


Figure 3. Area-averaged upper-ocean heat content anomaly ($^{\circ}\text{C}$) in the equatorial Pacific (5°N - 5°S , 180° - 100°W). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

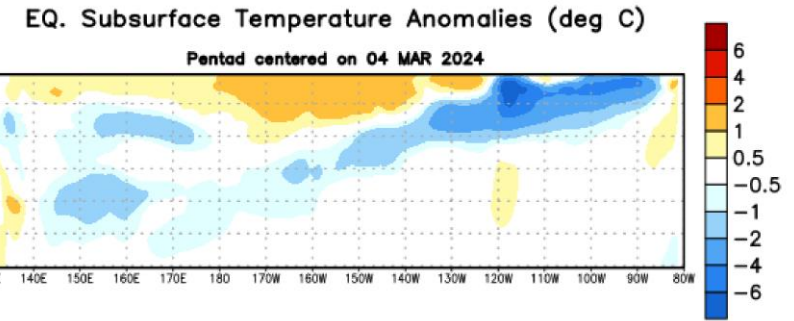
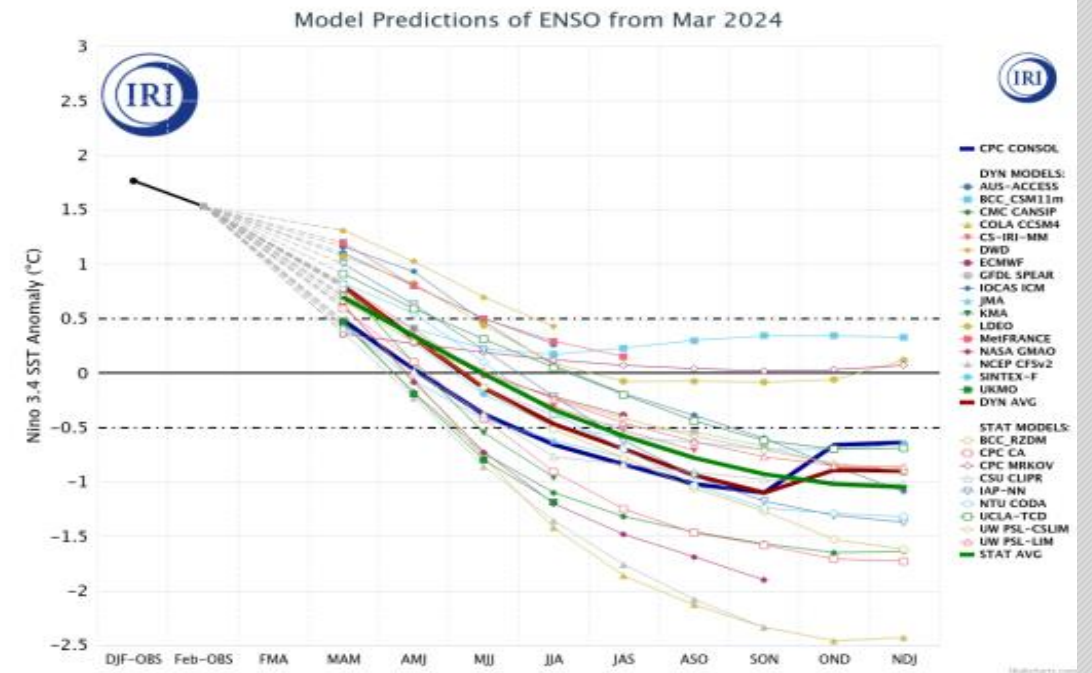
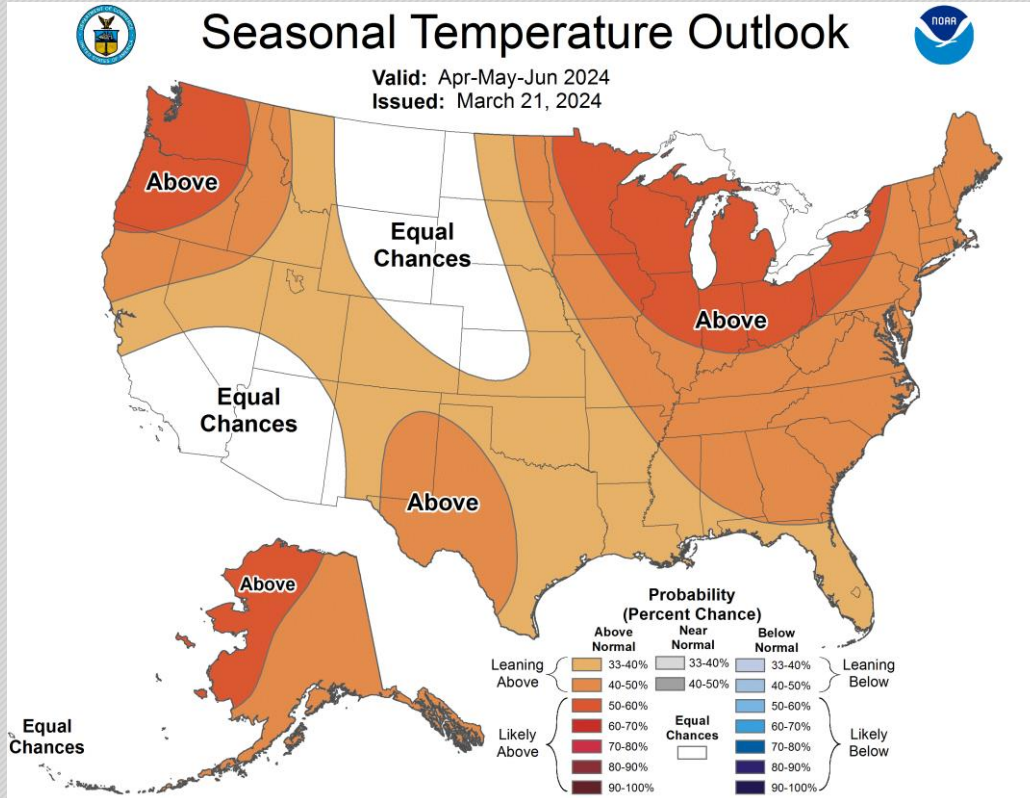


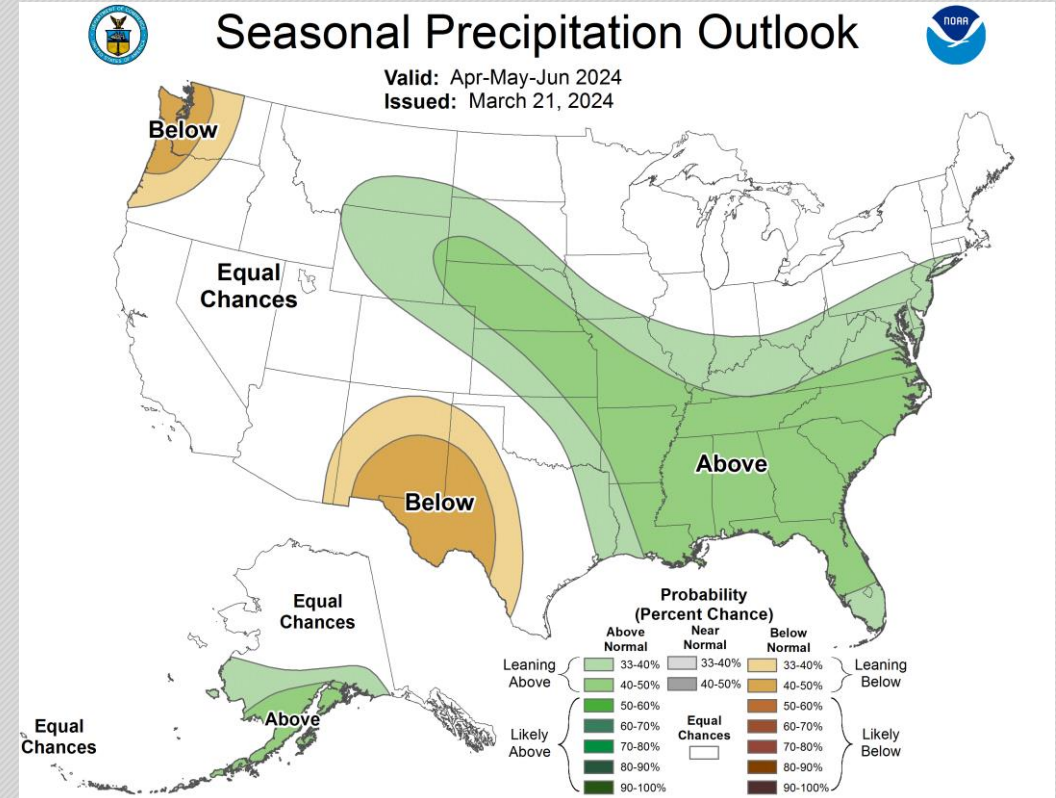
Figure 4. Depth-longitude section of equatorial Pacific upper-ocean (0-300m) temperature anomalies ($^{\circ}\text{C}$) centered on the pentad of 4 March 2024. Anomalies are departures from the 1991-2020 base period pentad means.



Temperature April-May-June



Precipitation April-May-June



There are equal chances for above, near, and below normal temperatures and precipitation for most of New Mexico through the end of spring. Southeast NM has the greater likelihood to see below normal temperatures and extreme northeast NM has the greater likelihood for above normal precipitation.

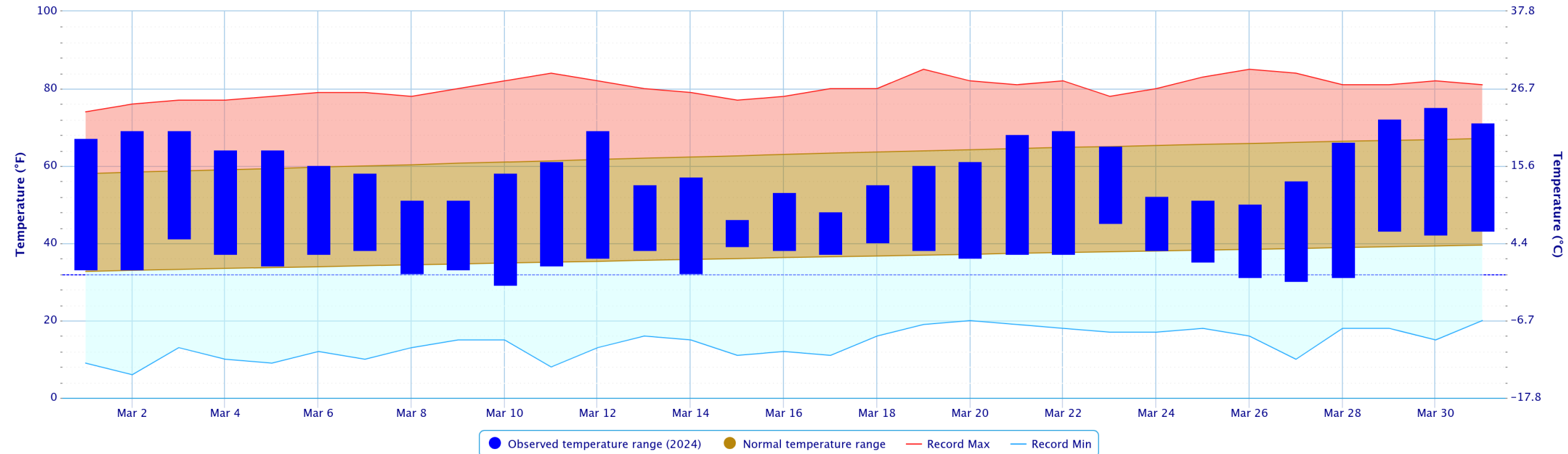
March 2024

Albuquerque Sunport Temperatures

Average Temperature: 48.4°

Daily Temperature Data – ALBUQUERQUE INTL AP, NM

Period of Record – 1891-12-01 to 2024-04-07. Normals period: 1991-2020. Click and drag to zoom chart.



Powered by ACIS

The March 2024 average temperature for Albuquerque was 48.4°, which was 1.1° below the normal of 49.5°. The average maximum temperature for the month was 60.4°. This was 2.4° below the normal average maximum temperature of 62.8°. The average minimum temperature for the month was 36.4°. This was 0.2° above the normal average minimum temperature of 36.2°. This ranked as the 85th coldest March on record.

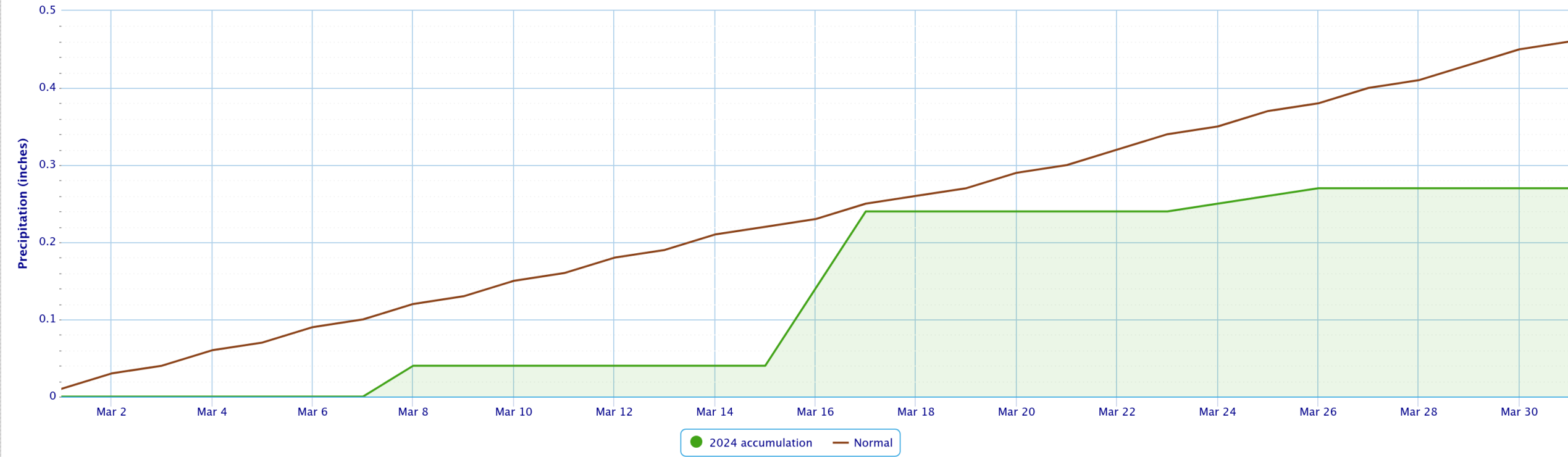
March 2024

Albuquerque Sunport Precipitation

Precipitation: 0.27"

Accumulated Precipitation – ALBUQUERQUE INTL AP, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

The March 2024 precipitation for Albuquerque was 0.27", which was 0.19" below the normal of 0.46". This ranked as the 56th driest March on record.

There was a Trace of snow, compared to the normal of 0.7".

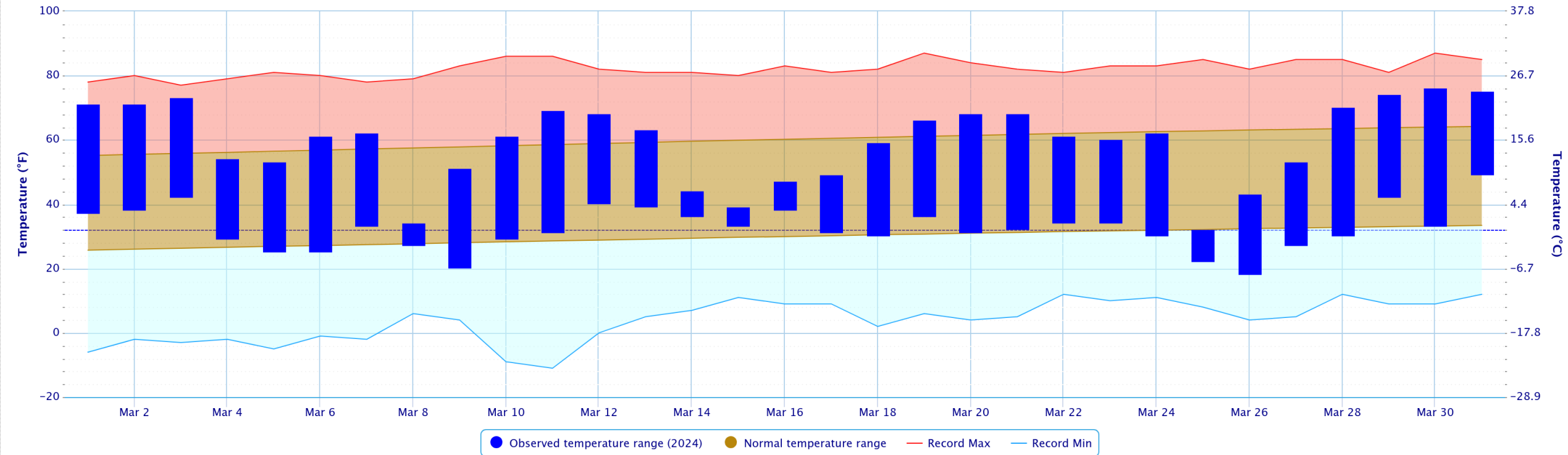
March 2024

Clayton Temperatures

Average Temperature: 45.8°

Daily Temperature Data – CLAYTON MUNICIPAL AIR PARK, NM

Period of Record – 1896-02-01 to 2024-04-07. Normals period: 1991-2020. Click and drag to zoom chart.



Powered by ACIS

The March 2024 average temperature for Clayton was 45.8°, which was 0.9° above the normal of 44.9°. The average maximum temperature for the month was 59.3°. This was 0.7° below the normal average maximum temperature of 60.0°. The average minimum temperature for the month was 32.3°. This was 2.5° above the normal average minimum temperature of 29.8°. This ranked as the 28th warmest March on record.

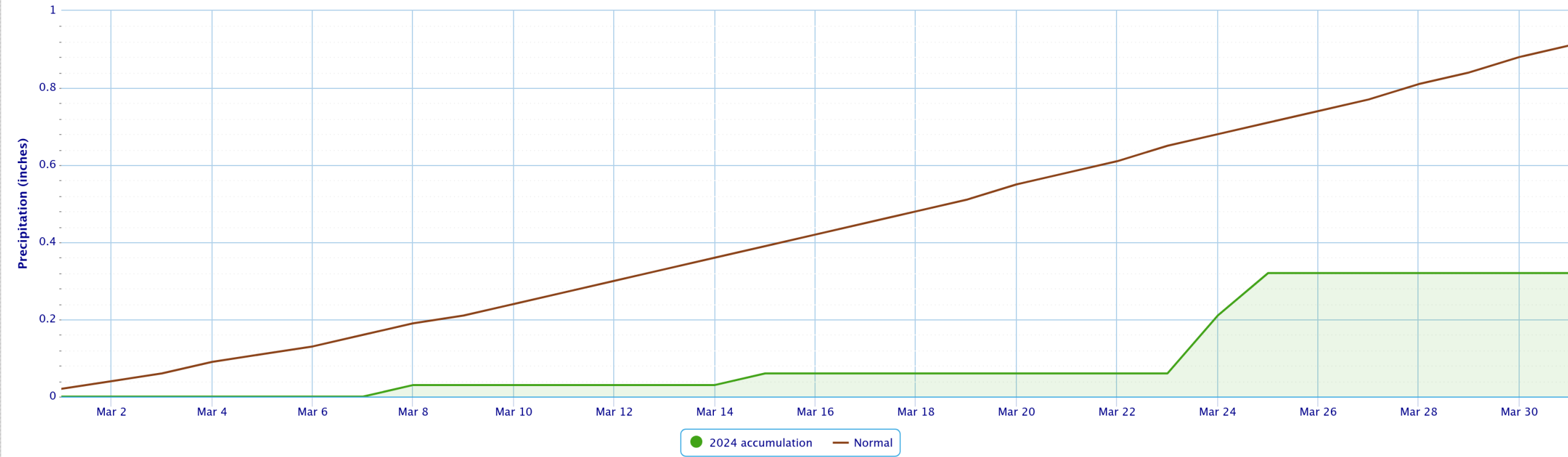
March 2024

Clayton Precipitation

Precipitation: 0.32"

Accumulated Precipitation – CLAYTON MUNICIPAL AIR PARK, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

The March 2024 precipitation for Clayton was 0.32", which was 0.59" below the normal of 0.91". This ranked as the 48th driest March on record.

There was 2.0" of snow, compared to the normal of 3.4".

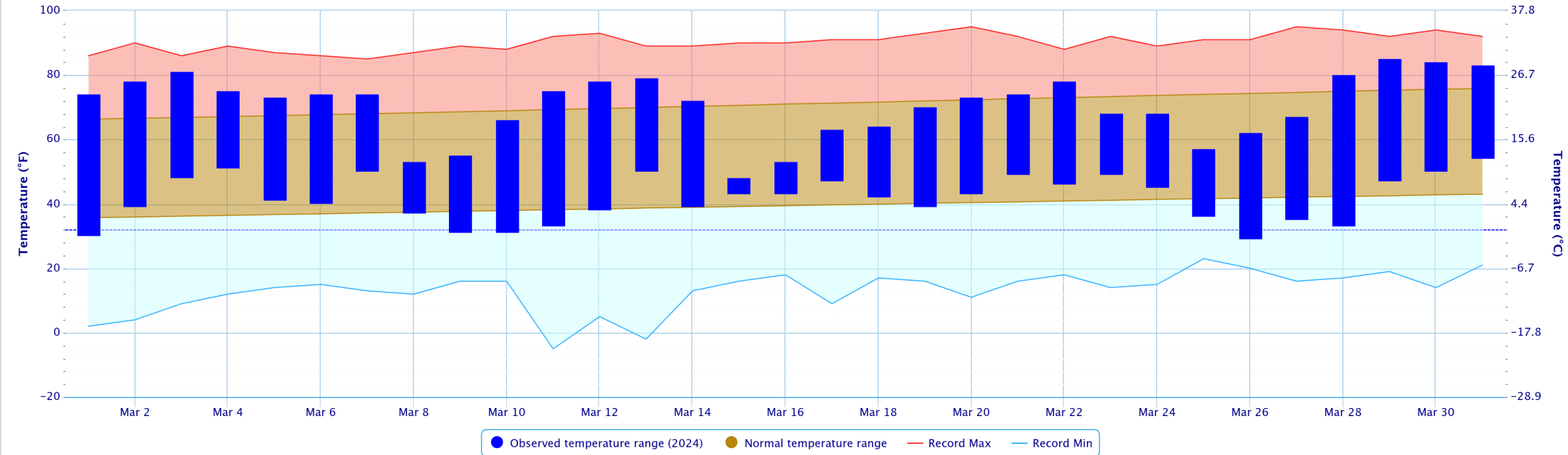
March 2024

Roswell Temperatures

Average Temperature: 56.0°

Daily Temperature Data – Roswell Area, NM (ThreadEx)

Period of Record – Max temperature: 1893-01-03 to 2024-04-07; Min temperature: 1893-01-21 to 2024-04-07. Normals period: 1991-2020. Click and drag to zoom chart.



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The March 2024 average temperature for Roswell was 56.0°, which was 0.8° above the normal of 55.2°. The average maximum temperature for the month was 70.5°. This was 0.5° below the average maximum temperature of 71.0°. The average minimum temperature for the month was 41.5°. This was 2.1° above the normal average minimum temperature of 39.4°. This ranked as the 12th warmest March on record.

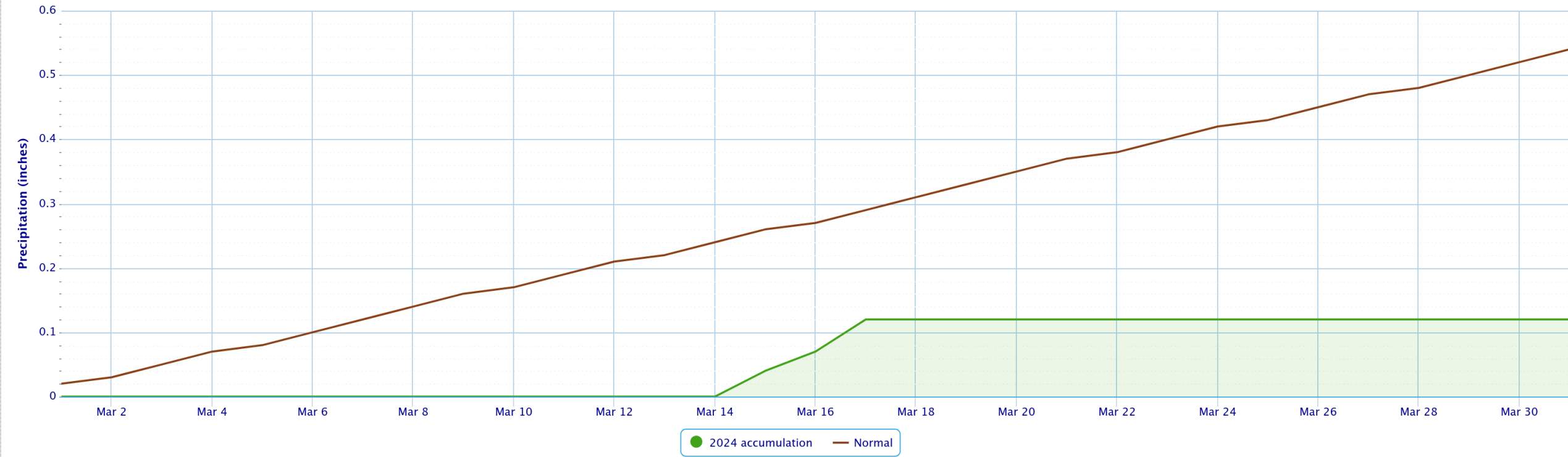
March 2024

Roswell Precipitation

Precipitation: 0.12"

Accumulated Precipitation – ROSWELL INDUSTRIAL AIR PARK, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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The March 2024 precipitation for Roswell was 0.12", which was 0.42" below the normal of 0.54". This ranked as the 31st driest March on record.

There was 0.0" of snow, compared to the normal of 0.7".



| Event Type | Begin Date | County Name | Magnitude | Type | Event Narrative |
|------------|------------|---|-----------|------|---|
| High Wind | 3/3/2024 | WEST CENTRAL PLATEAU | 50 kt | Gust | The Gallup Municipal airport observed a wind gust of 58 mph at 13:21 MST. |
| High Wind | 3/3/2024 | SOUTH CENTRAL MOUNTAINS | 56 kt | Gust | The Nogal ZiaMet station observed a peak wind gust of 64 mph at 9:00 MST. |
| High Wind | 3/2/2024 | NORTHERN SANGRE DE CRISTO MOUNTAINS | 60 kt | Gust | A public weather station at Kachina Peak in Taos Ski Valley observed a peak wind gust of 69 mph at 21:00 MST on March 2nd. |
| High Wind | 3/3/2024 | FAR NORTHEAST HIGHLANDS | 57 kt | Gust | The Raton Municipal Airport observed a peak wind gust of 66 mph. |
| High Wind | 3/3/2024 | NORTHEAST HIGHLANDS | 53 kt | Gust | The Las Vegas Municipal airport observed a peak wind gust of 61 mph. |
| High Wind | 3/3/2024 | UNION COUNTY | 59 kt | Gust | The Clayton Municipal Airport observed a high wind gusts of 68 mph. |
| High Wind | 3/3/2024 | GUADALUPE COUNTY | 52 kt | Gust | The Vaughn ZiaMet station observed a peak wind gust of 60 mph. |
| High Wind | 3/3/2024 | JOHNSON AND BARTLETT MESAS INCLUDING RATON PASS | 52 kt | Gust | A COOP observer at Sugarite Canyon estimated wind gusts as high as 60 mph. |
| High Wind | 3/3/2024 | HARDING COUNTY | 52 kt | Gust | A trained spotter just south of Roy estimated wind gusts as high as 60 mph. |
| Heavy Snow | 3/8/2024 | SANDIA/MANZANO MOUNTAINS INCLUDING EDGEWOOD | 8.3 " | | A CoCoRaHS observer at Sandia Park observed 8.3 inches of snowfall. |
| Heavy Snow | 3/8/2024 | SOUTHERN SANGRE DE CRISTO MOUNTAINS | 15 " | | The Ski Santa Fe resort observed 15 inches of snowfall. |
| Heavy Snow | 3/8/2024 | JEMEZ MOUNTAINS | 14 " | | The Pajarito Ski Resort observed 14 inches of snowfall. |
| Heavy Snow | 3/15/2024 | WEST CENTRAL MOUNTAINS | 6 " | | The Rice Park SNOTEL site observed an estimated snowfall accumulation of 6 inches. |
| Heavy Snow | 3/15/2024 | SOUTHWEST MOUNTAINS | 10 " | | A CoCoRaHS observer in Pietown observed 10 inches of snowfall. |
| Heavy Snow | 3/14/2024 | JEMEZ MOUNTAINS | 20 " | | The Pajarito Ski Resort near Los Alamos observed 20 inches of snowfall over the time period. |
| Heavy Snow | 3/14/2024 | NORTHERN SANGRE DE CRISTO MOUNTAINS | 10 " | | The Red River ski area observed 10 inches of snowfall during the time period. |
| Heavy Snow | 3/14/2024 | EAST SLOPES SANGRE DE CRISTO MOUNTAINS | 12 " | | An observer in Holman measured 12 inches of snowfall. Angel Fire ski resort observed 10 inches of snowfall. |
| Heavy Snow | 3/14/2024 | SANDIA/MANZANO MOUNTAINS INCLUDING EDGEWOOD | 8 " | | The Sandia ski area observed 8 inches during the time period. |
| Heavy Snow | 3/14/2024 | JOHNSON AND BARTLETT MESAS INCLUDING RATON PASS | 6 " | | The Raton Port of Entry reported 6 inches of snowfall. |
| Heavy Snow | 3/14/2024 | FAR NORTHEAST HIGHLANDS | 8 " | | A spotter just south of Cimarron reported 8 inches of snowfall. |
| High Wind | 3/15/2024 | MIDDLE RIO GRANDE VALLEY/ALBUQUERQUE METRO AREA | 61 kt | Gust | A public weather station near Carnuel measured a peak wind gust of 70 mph. There were reports of roof damage to structures in southeastern Albuquerque. |
| High Wind | 3/15/2024 | SOUTH CENTRAL HIGHLANDS | 62 kt | Gust | The Tower mesonet station in the White Sands Missile Range measured a peak gust of 71 mph. |
| Heavy Snow | 3/16/2024 | CHUSKA MOUNTAINS | 10 " | | The Navajo Whiskey SNOTEL observed an estimated 10 inches of snow. |
| Heavy Snow | 3/16/2024 | TUSAS MOUNTAINS INCLUDING CHAMA | 10 " | | The San Antonio SNOTEL observed an estimated 10 inches of snow. There were reports of 3 to 6 inches of snow elsewhere in the zone. |
| Heavy Snow | 3/16/2024 | JEMEZ MOUNTAINS | 13 " | | The Pajarito Ski area reported 13 inches of snow. There were reports of 4 to 11 inches elsewhere in the zone. |
| Heavy Snow | 3/16/2024 | SOUTHERN SANGRE DE CRISTO MOUNTAINS | 12 " | | The Wesner Springs SNOTEL reported 12 inches of snow. There were reports of 3 to 8 inches elsewhere in the zone. |
| Heavy Snow | 3/16/2024 | EAST SLOPES SANGRE DE CRISTO MOUNTAINS | 18 " | | There was a public report of 18 inches of snow near Chacon, NM. There were reports of 5 to 11 inches elsewhere in the zone. |
| Heavy Snow | 3/16/2024 | SANDIA/MANZANO MOUNTAINS INCLUDING EDGEWOOD | 10 " | | The Sandia Ski area reported 10 inches of snow. There were reports of 2 to 9 inches elsewhere in the zone. |

*Storm reports are considered preliminary until a final review is certified in the NWS Storm Data publication. Certified data is available three to four months post-event at: <https://www.ncdc.noaa.gov/stormevents/>

| Event Type | Begin Date | County Name | Magnitude | Type | Event Narrative |
|------------|------------|---|-----------|------|--|
| Heavy Snow | 3/16/2024 | NORTHEAST HIGHLANDS | 6 " | | The National Wildlife Refuge office in Las Vegas reported 6 inches of snow. |
| High Wind | 3/24/2024 | MIDDLE RIO GRANDE VALLEY/ALBUQUERQUE METRO AREA | 52 | Gust | The Albuquerque Sunport measured a peak gust of 60 mph. |
| High Wind | 3/24/2024 | LOWER RIO GRANDE VALLEY | 58 | Gust | The Zumwalt White Sands Missile Range mesonet station measured a peak gust of 67 mph. |
| High Wind | 3/24/2024 | CENTRAL HIGHLANDS | 51 | Gust | The Clines Corners ASOS measured a peak wind gust 59 mph. |
| High Wind | 3/24/2024 | UPPER TULAROSA VALLEY | 54 | Gust | The Pole 616 White Sands Missile Range mesonet station measured a peak gust of 62 mph. |
| High Wind | 3/24/2024 | NORTHEAST HIGHLANDS | 50 | Gust | The Las Vegas Airport measured a peak gust of 58 mph. |
| High Wind | 3/24/2024 | UNION COUNTY | 35 | Gust | The Amistad mesonet station measured high sustained winds peaking at 40 mph. |
| High Wind | 3/24/2024 | SOUTH CENTRAL MOUNTAINS | 63 | Gust | A public weather station near Buck Mountain measured a peak wind gust of 73 mph. High sustained winds peaking to 43 mph were also observed. |
| High Wind | 3/24/2024 | HARDING COUNTY | 51 | Gust | A public weather station at the Tequesquite Ranch measured a peak wind gust of 59 mph. |
| High Wind | 3/24/2024 | EASTERN SAN MIGUEL COUNTY | 56 | Gust | A public weather station at the Conchas Dam measured a peak wind gust of 65 mph. |
| High Wind | 3/24/2024 | GUADALUPE COUNTY | 51 | Gust | The SE Vaughn mesonet station measured high sustained winds peaking at 59 mph. |
| High Wind | 3/24/2024 | QUAY COUNTY | 53 | Gust | The Tucumcari Airport measured a peak gust of 61 mph. |
| High Wind | 3/24/2024 | CURRY COUNTY | 58 | Gust | The Cannon Air Force Base measured a peak gust of 67 mph. Peak gusts of 62 to 66 mph were measured elsewhere in the zone. |
| High Wind | 3/24/2024 | ROOSEVELT COUNTY | 50 | Gust | The Roosevelt SWCD mesonet measured a peak gust of 58 mph. |
| High Wind | 3/24/2024 | DE BACA COUNTY | 55 | Gust | A mesonet station east of Fort Sumner measured a peak gust of 63 mph. High sustained winds peaking to 45 mph were also measured. |
| High Wind | 3/24/2024 | CHAVES COUNTY PLAINS | 65 | Gust | The Roswell Airport measured a peak gust of 75 mph, as well as high sustained winds peaking to 54 mph with blowing dust. |
| High Wind | 3/24/2024 | SOUTHWEST CHAVES COUNTY | 50 | Gust | The Dunken RAWS station measured a peak gust of 58 mph. |
| Dust Storm | 3/24/2024 | CHAVES COUNTY PLAINS | | | The NMDOT closed U.S. Highway 285 from Roswell to Artesia due to near zero visibility from a dust storm. |
| Heavy Snow | 3/24/2024 | TUSAS MOUNTAINS INCLUDING CHAMA | 13 " | | There was an estimated 13 inches at the Hopewell SNOTEL. Three to nine inches fell elsewhere in the zone. |
| Heavy Snow | 3/24/2024 | NORTHERN SANGRE DE CRISTO MOUNTAINS | 40 " | | The Taos Ski Valley measured 40 inches of snow during this timeframe. Five to 25 inches of snow fell elsewhere in the zone. |
| Heavy Snow | 3/24/2024 | SOUTHERN SANGRE DE CRISTO MOUNTAINS | 26 " | | Ski Santa Fe measured 26 inches of snow. Two to 26 inches of snow fell elsewhere in the zone. |
| Heavy Snow | 3/24/2024 | EAST SLOPES SANGRE DE CRISTO MOUNTAINS | 17.6 " | | A CoCoRaHS station near Chacon measured 17.6 inches of snow. Three to 11 inches of snow fell elsewhere in the zone. |
| Heavy Snow | 3/25/2024 | UPPER RIO GRANDE VALLEY | 9.4 " | | A CoCoRaHS station near San Cristobal measured 9.4 inches of snow. Five inches was reported in Taos. |
| High Wind | 3/31/2024 | CENTRAL HIGHLANDS | 53 | Gust | The Clines Corners ASOS observed a peak wind gust of 61 mph. |
| High Wind | 3/31/2024 | SOUTH CENTRAL MOUNTAINS | 52 | Gust | The Sierra Blanca ASOS observed a peak wind gust of 60 mph. The station also observed high sustained winds peaking at 49 mph during the time period. |
| High Wind | 3/31/2024 | NORTHEAST HIGHLANDS | 55 | Gust | The Las Vegas ASOS observed a wind gust of 63 mph. |
| High Wind | 3/31/2024 | UNION COUNTY | 50 | Gust | The Clayton ASOS observed a wind gust of 58 mph. |
| High Wind | 3/31/2024 | EASTERN SAN MIGUEL COUNTY | 50 | Gust | A wunderground weather station just south of Conchas Lake observed a wind gust of 58 mph. |
| High Wind | 3/31/2024 | GUADALUPE COUNTY | 56 | Gust | The Ziamet station southeast of Vaughn observed a peak wind gust of 65 mph. |
| High Wind | 3/31/2024 | CHAVES COUNTY PLAINS | 55 | Gust | The Roswell ASOS observed a peak wind gust of 63 mph. |

*Storm reports are considered preliminary until a final review is certified in the NWS Storm Data publication.

Certified data is available three to four months post-event at: <https://www.ncdc.noaa.gov/stormevents/>

- ▶ NCEI Climatological Rankings: <https://www.ncdc.noaa.gov/cag/national/rankings>
- ▶ PRISM Climate Data: <http://www.prism.oregonstate.edu/>
- ▶ NWS Local Climate Pages: <https://w2.weather.gov/climate/index.php?wfo=abq>
- ▶ NCEI Storm Data: <https://www.ncdc.noaa.gov/stormevents/>
- ▶ Questions?: sr-abq.webmaster@noaa.gov
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