October 2021 Climate Summary

Overview

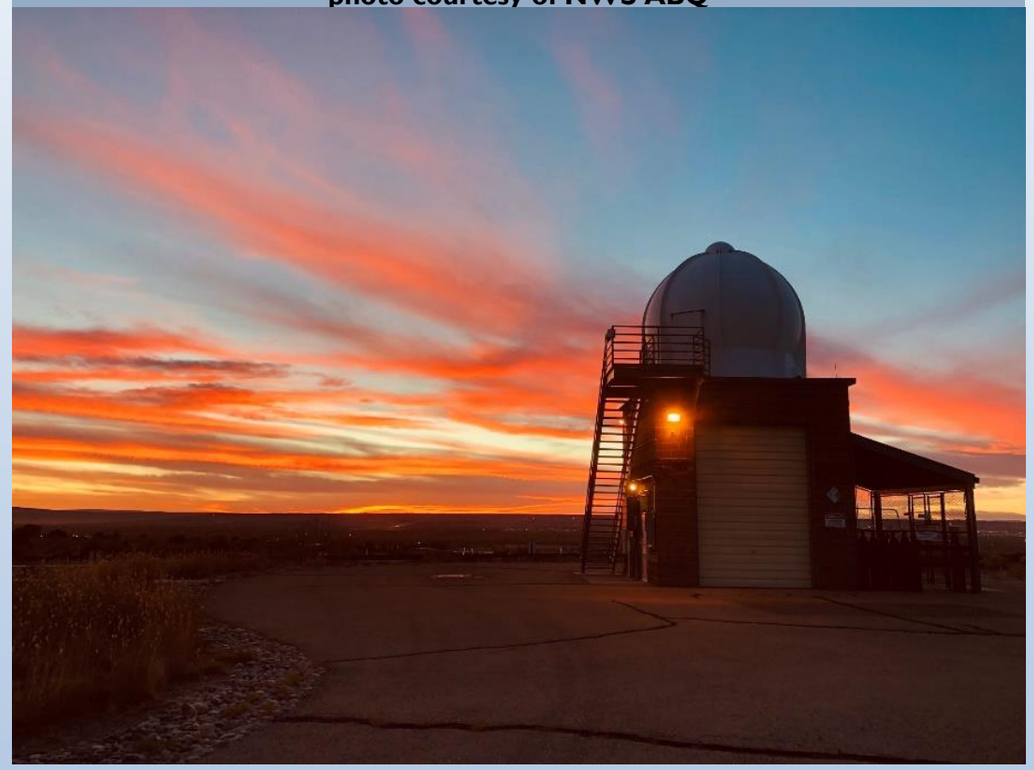
Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Synopsis

October 2021 was drier than normal for most locations. Temperatures were more varied with below normal readings in the west, near normal central, and above normal temperatures in the east. There were only two storms that impacted the state, one on the 1st and the other on the 10th. The first storm delivered widespread rain and high mountain snow, the second storm brought rain, and isolated hail and high winds.

October 31, 2021 Northern NM – photo courtesy of BullGuyNow@84elcamino

October 24, 2021 ABQ Sunset – photo courtesy of NWS ABQ



October 2021 Climate Summary

State Temperatures

Weather Forecast Office
Albuquerque, NM
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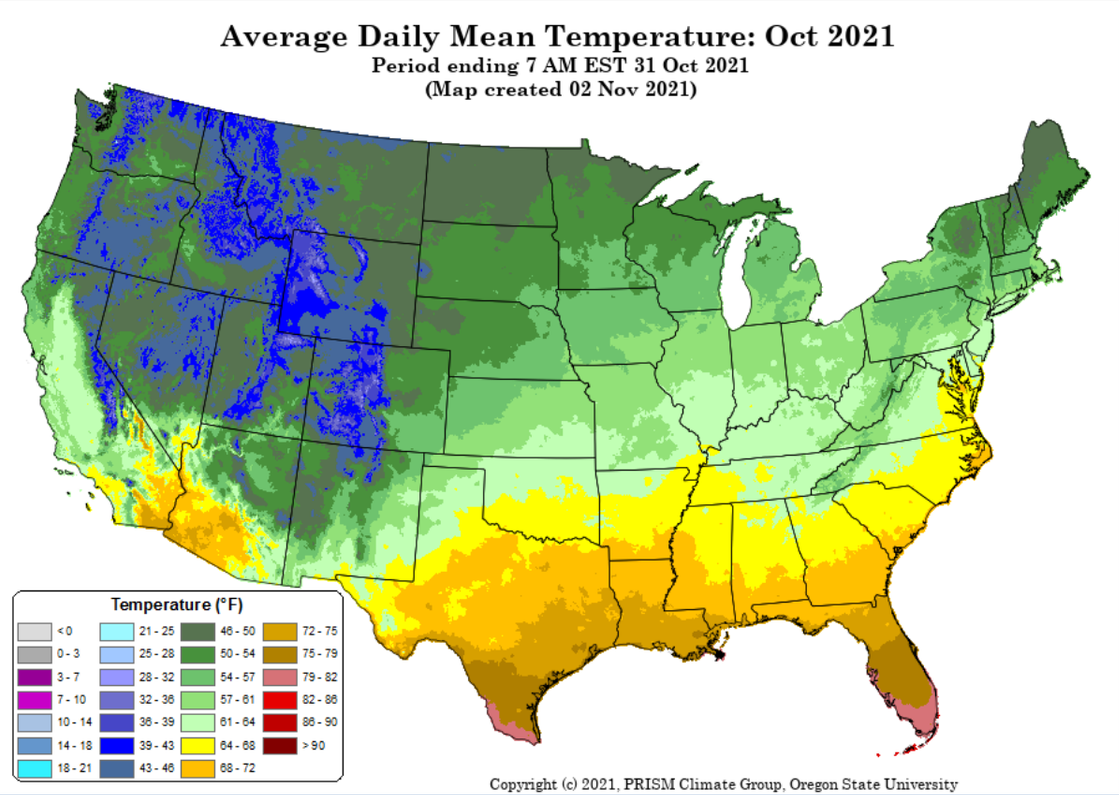
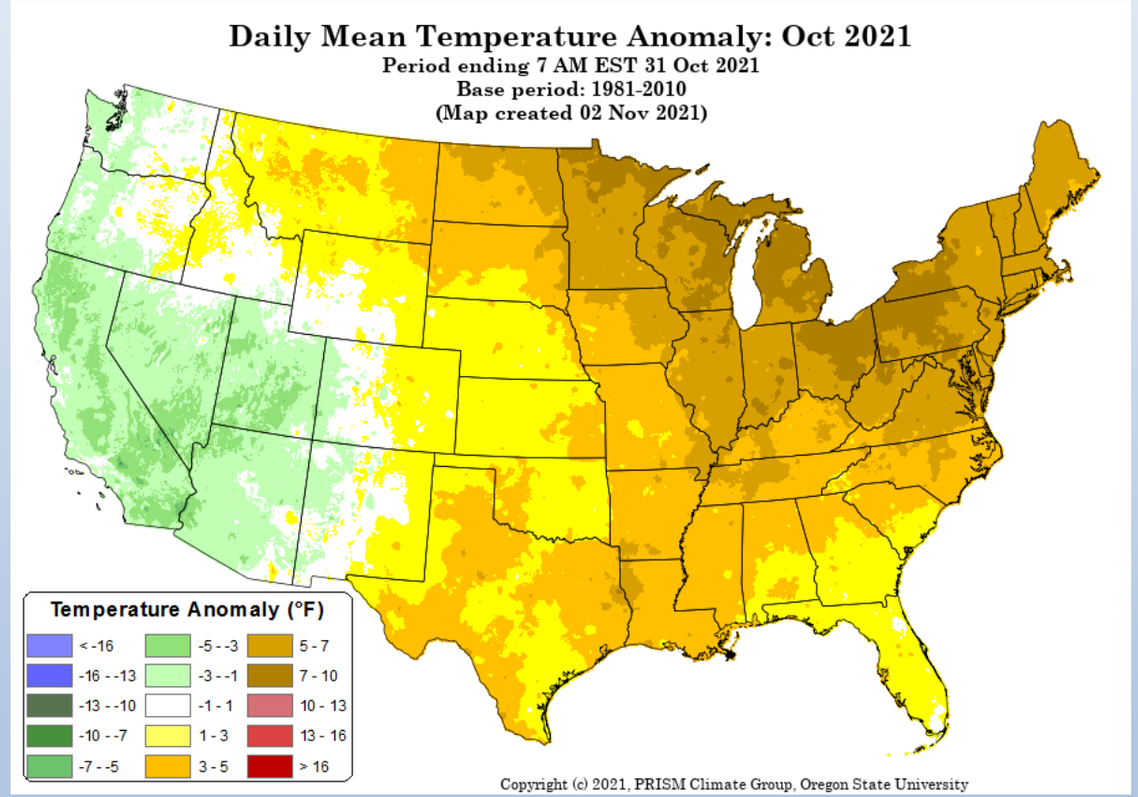
Actual



Anomaly



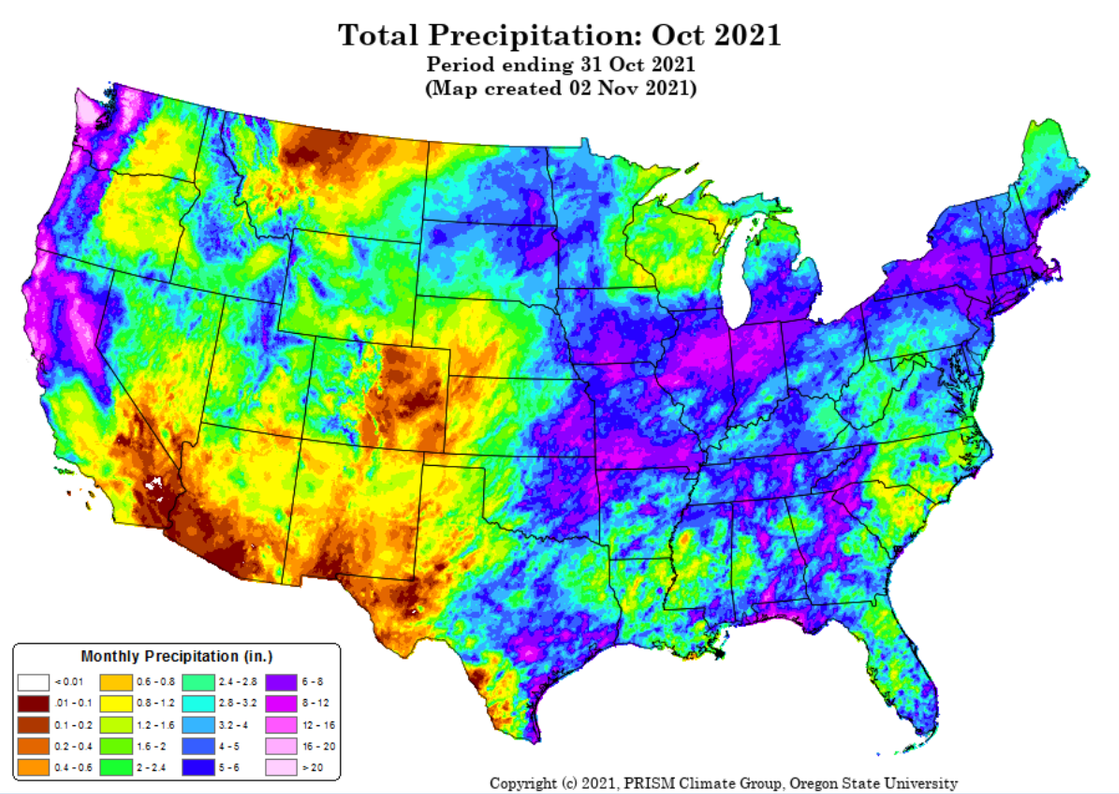
Temperatures were mostly below normal in the west, near normal central areas and above normal in the east.

October 2021 Climate Summary

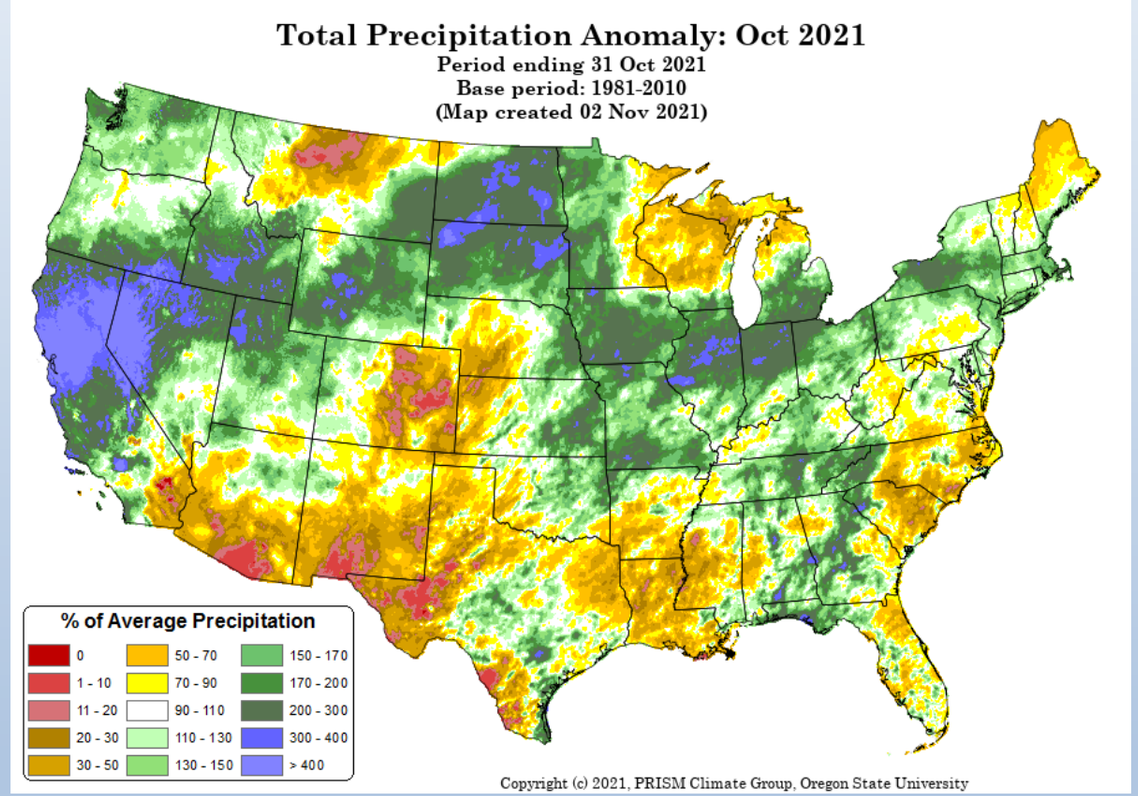
State Precipitation

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Actual



Anomaly

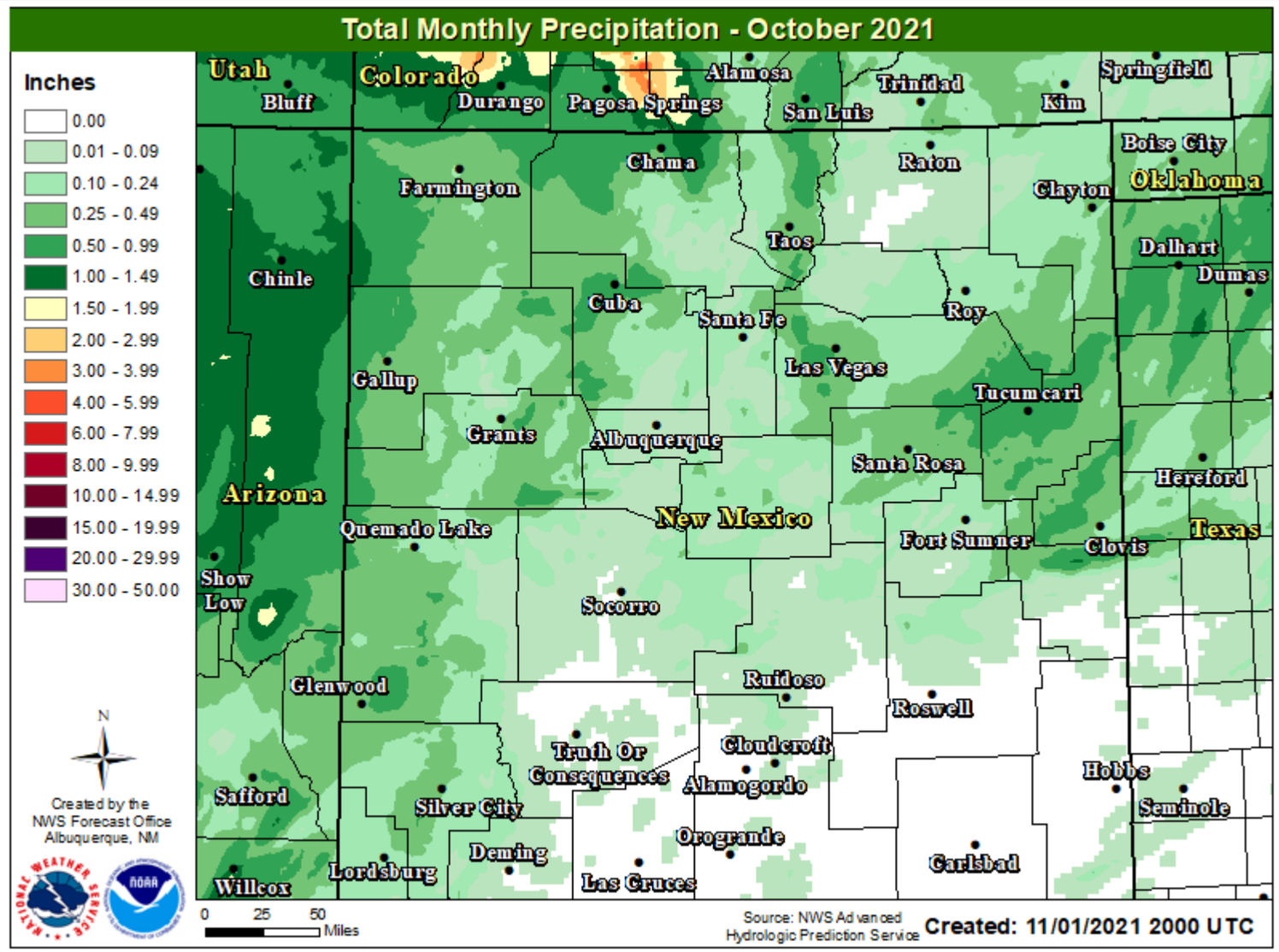


Precipitation was near to below normal in the north, and below to well below in the south.

October 2021 Climate Summary

Monthly Precipitation

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT



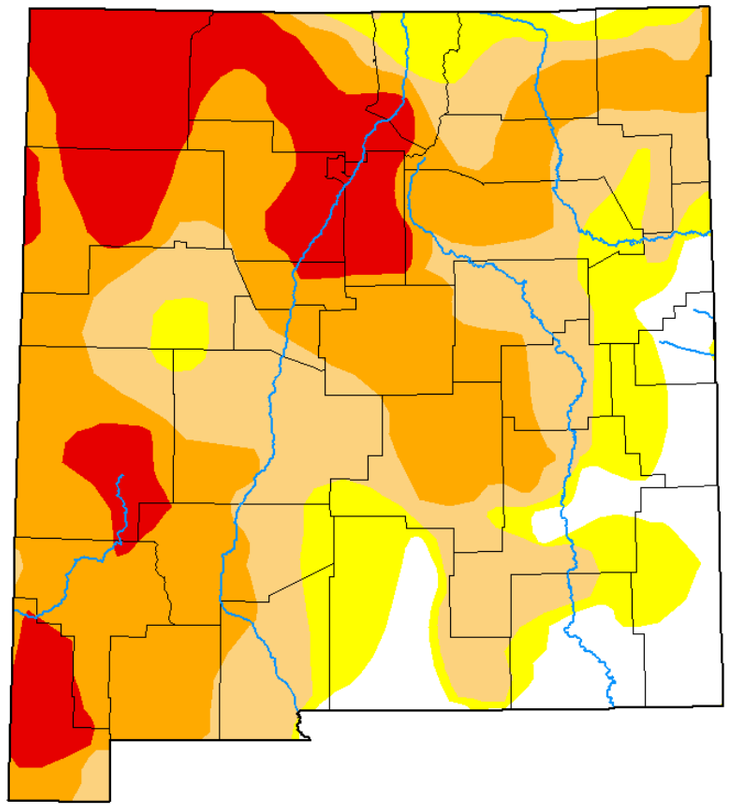
Here is a more detailed image of the October 2021 precipitation.

October 2021 Climate Summary

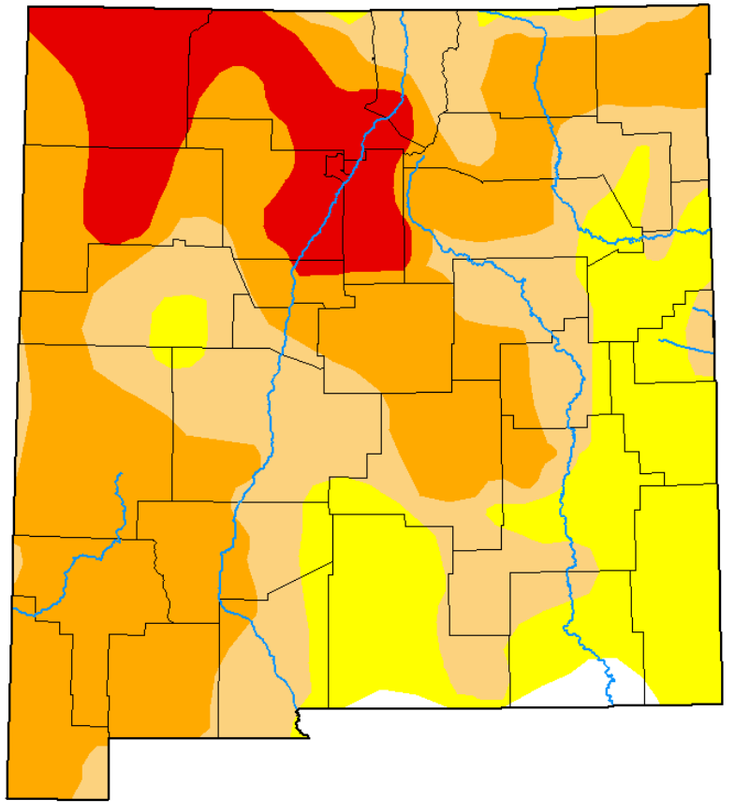
Drought

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

October 5th



October 26th



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

In October (from October 5th to 26th), drought has improved in the southwest with the elimination of the exceptional drought, but worsened over the east and south central areas with more abnormally dry and moderate drought.

October 2021 Climate Summary

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ENSO

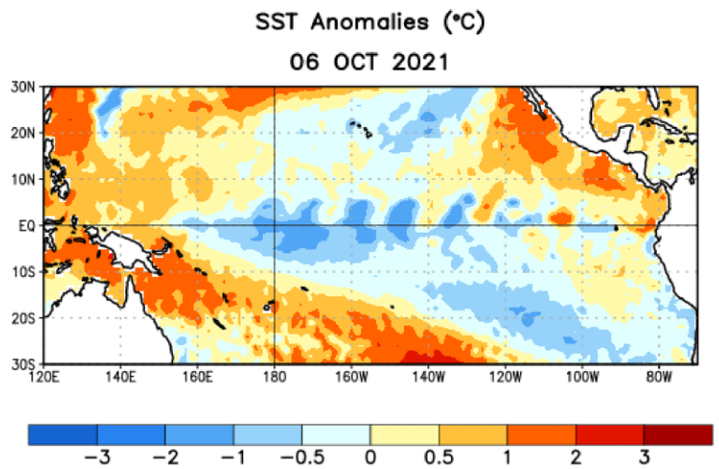


Figure 1. Average sea surface temperature (SST) anomalies (°C) for the week centered on 6 October 2021. Anomalies are computed with respect to the 1991-2020 base period weekly means.

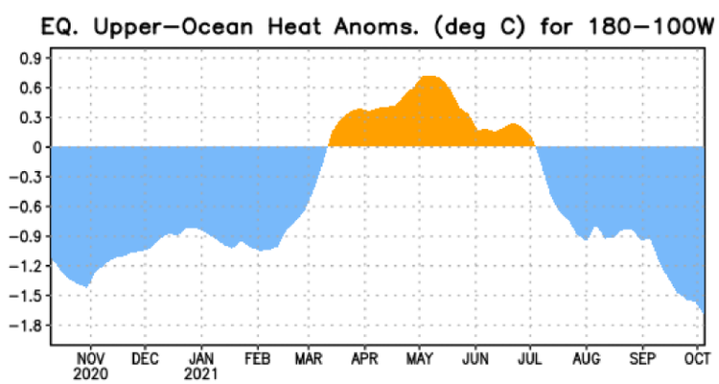


Figure 3. Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

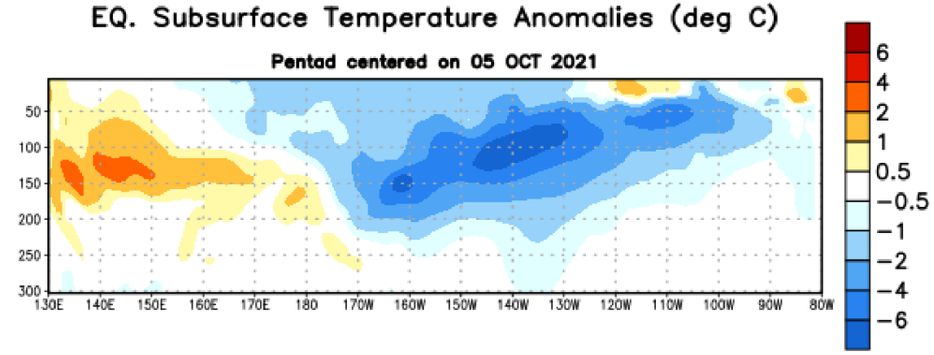


Figure 4. Depth-longitude section of equatorial Pacific upper-ocean (0-300m) temperature anomalies (°C) centered on the pentad of 5 October 2021. Anomalies are departures from the 1991-2020 base period pentad means.

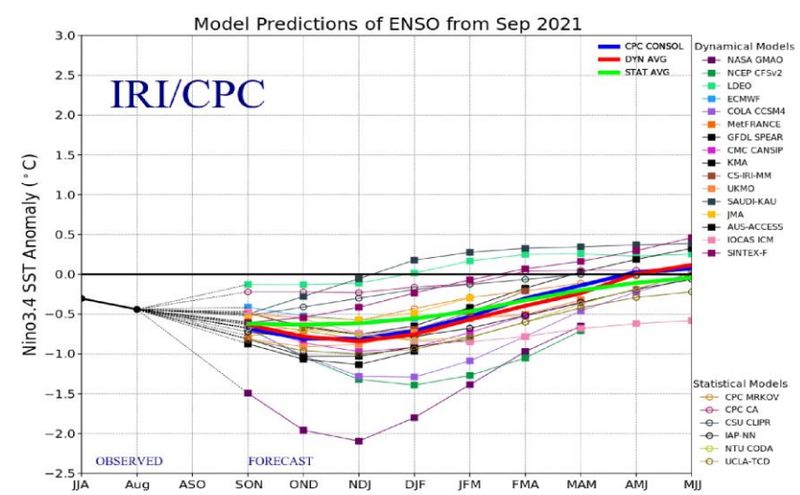


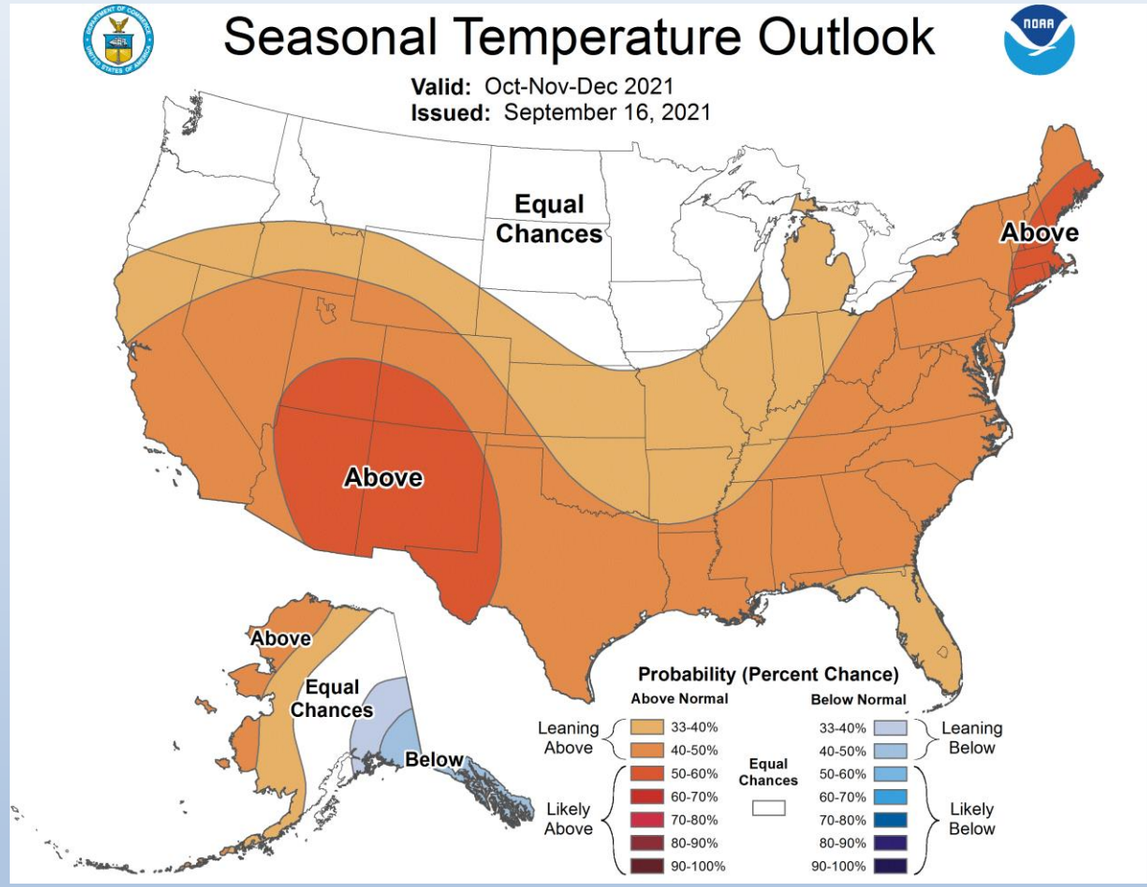
Figure 6. Forecasts of sea surface temperature (SST) anomalies for the Niño 3.4 region (5°N-5°S, 120°W-170°W). Figure updated 20 September 2021.

October 2021 Climate Summary

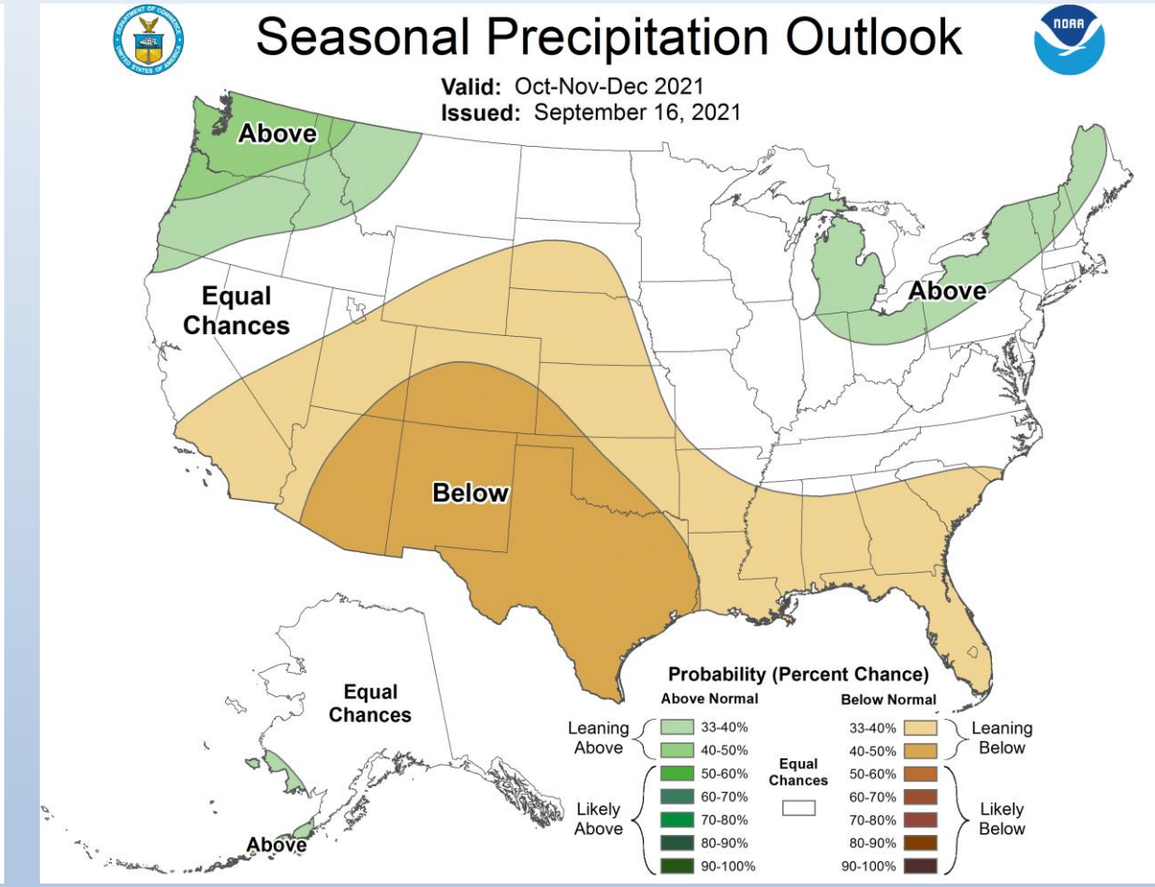
Temperature & Precipitation Outlook

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Temperature
October-November-December



Precipitation
October-November-December



Above normal temperatures and below normal precipitation continue to be the most likely weather scheme for the rest of the Fall and early Winter seasons.

October 2021 Climate Summary

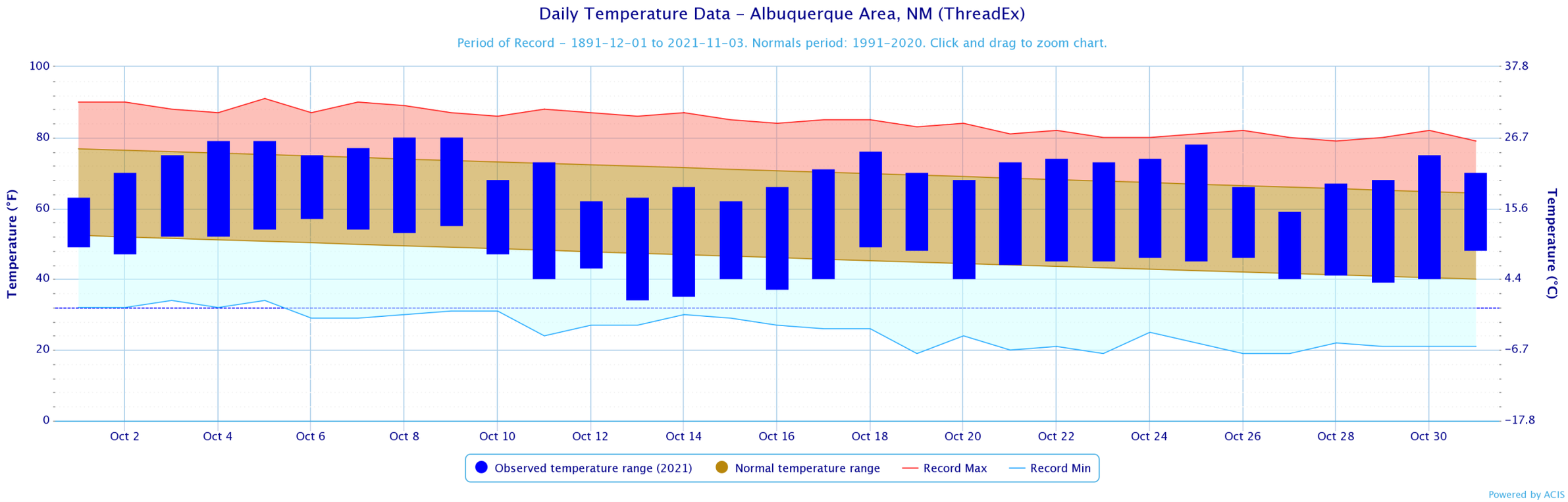
Albuquerque Sunport Temperatures

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

(New 1991-2020 Normals)

Average Temperature: 58.1°

(Period of record 1892-2021)



The average temperature for Albuquerque was 58.1°, which was 0.3° below the normal of 58.4°. The average maximum temperature for the month was 71.0°. This was 0.4° above the normal average maximum temperature of 70.6°. The average minimum temperature for the month was 45.3°. This was 0.8° below the normal average minimum temperature of 46.1°. This ranks as a tie for the 84th coldest (or 44th warmest) October on record.

Record Type	Date	New Record	Previous Record
none			

October 2021 Climate Summary

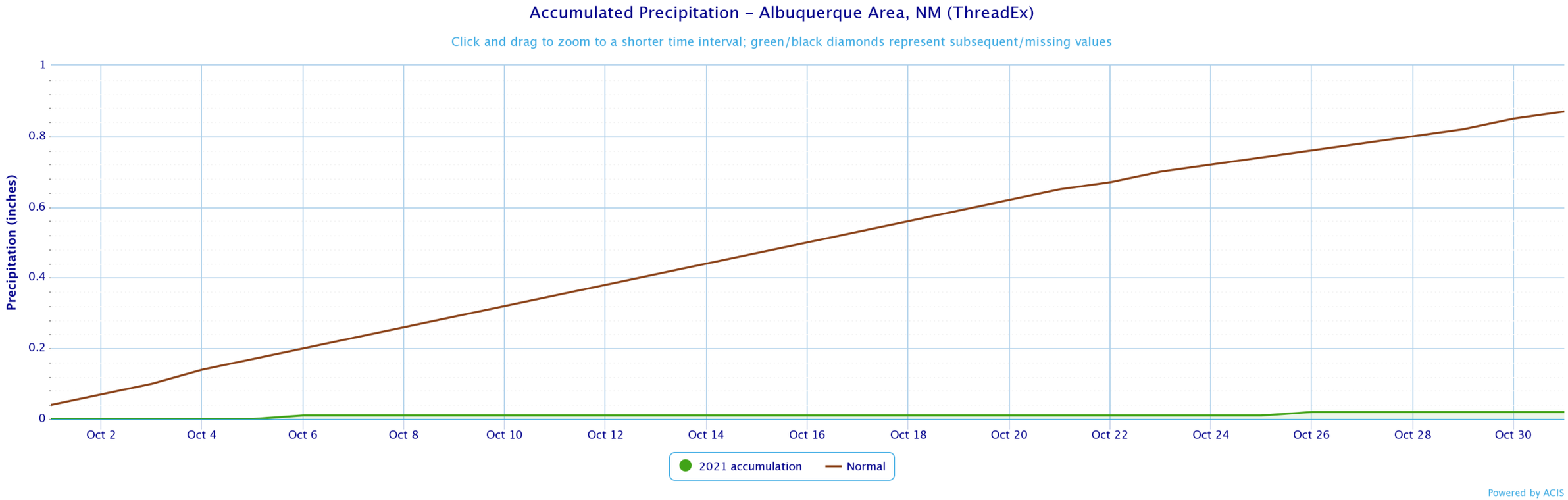
Albuquerque Sunport Precipitation

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Total Precipitation: 0.02“ Total Snow: 0.0“

(Based on new 1991-2020 Normals)

(Period of record 1893-2021)



There was 0.02” of precipitation measured at Albuquerque, compared to the normal of 0.87”, or 0.85” below normal. This ranks as the 13th driest October on record. There was no snowfall in October. Normal 0.3”.

Record Type	Date	New Record	Previous Record
Rainfall	October 1st	0.54”	0.44” in 2017

October 2021 Climate Summary

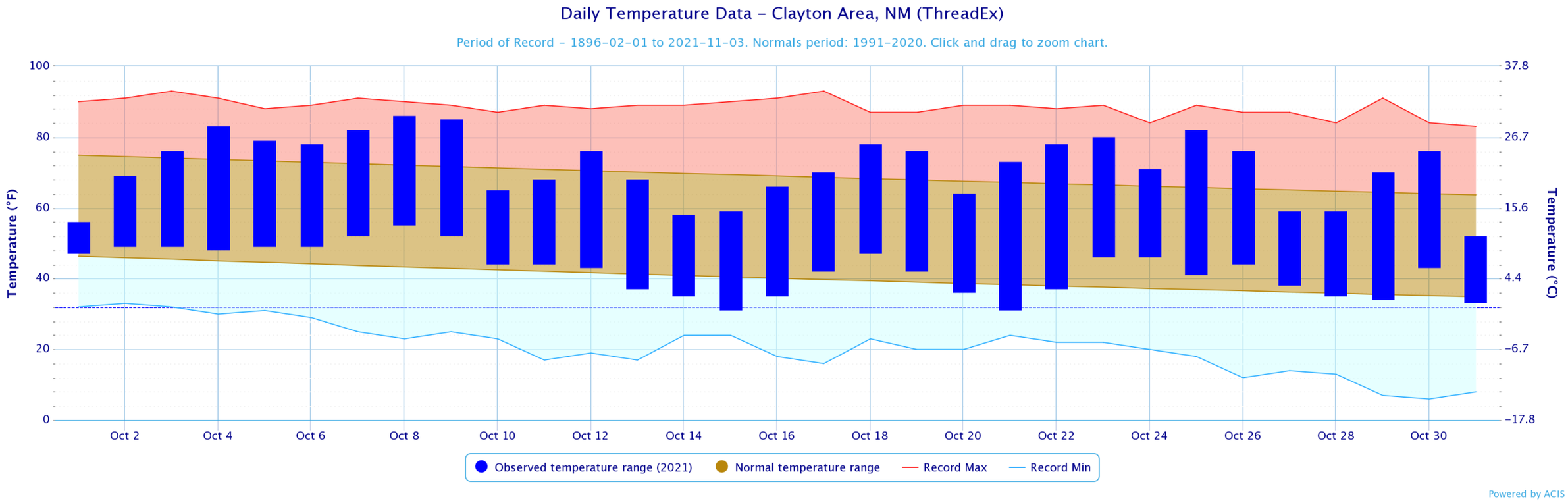
Clayton Temperatures

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Average Temperature: 57.0°

(Based on new 1991-2020 Normals)

(Period of record 1896-2021)



The average temperature for Clayton was 57.0°, which was 2.3° above the normal of 54.7°. The average maximum temperature for the month was 71.5°. This was 2.4° above the normal average maximum temperature of 69.1°. The average minimum temperature for the month was 42.4°. This was 2.1 ° above the normal average minimum temperature of 40.3°. This ranks as the 22nd warmest October on record.

Record Type	Date	New Record	Previous Record
none			

October 2021 Climate Summary

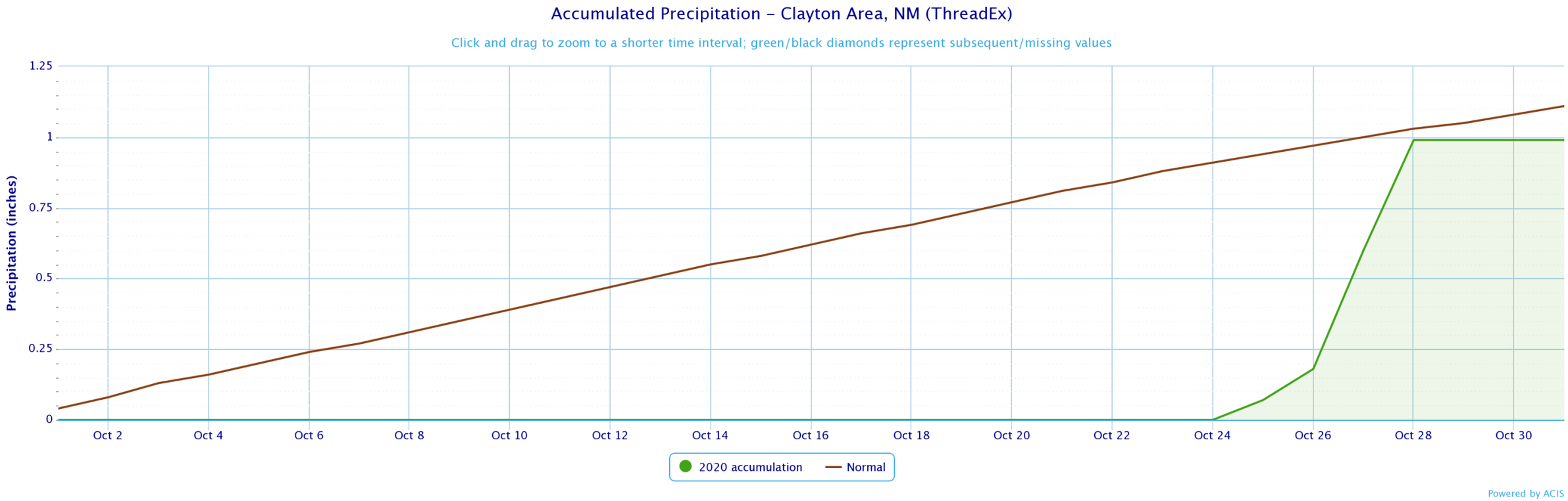
Clayton Precipitation

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Total Precipitation: 1.13“ Total Snow: 0.0“

(Based on new 1991-2020 Normals)

(Period of record 1893-2020)



There was 1.13” of precipitation measured at Clayton, compared to the normal of 1.13”, or exactly normal! This was the 36th wettest October on record. There was snowfall in October.

Record Type	Date	New Record	Previous Record
none			

October 2021 Climate Summary

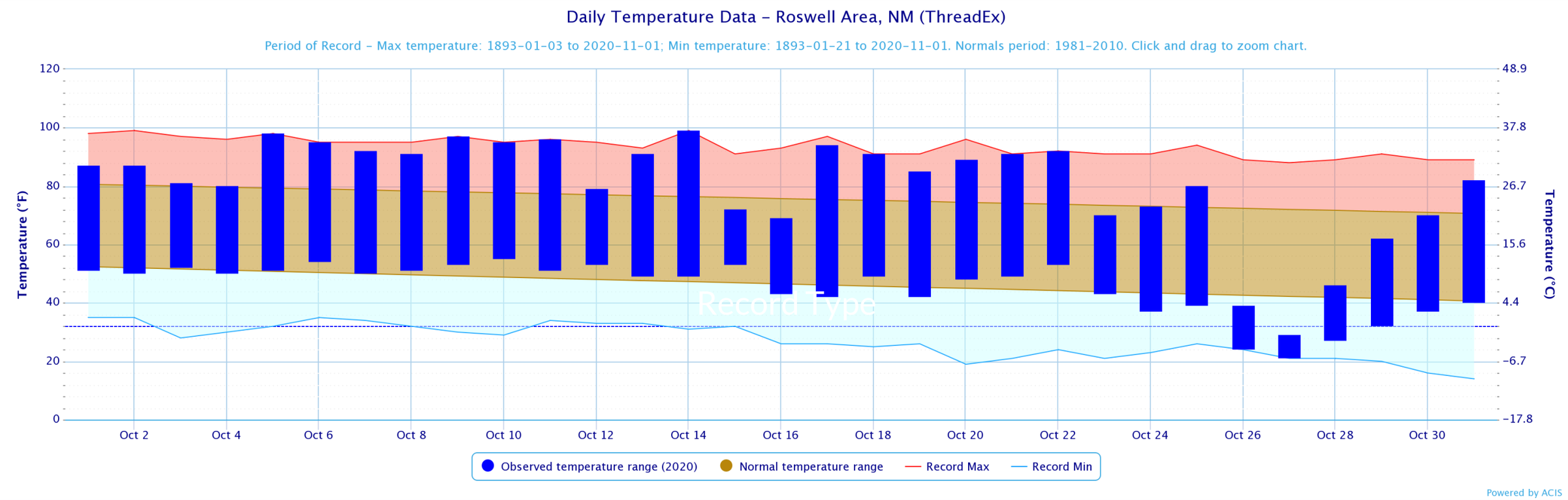
Roswell Temperatures

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Average Temperature: 65.6°

(Based on new 1991-2020 Normals)

(Period of record 1893-2021)



The average temperature for Roswell was 65.6°, which was 2.4° above the normal of 63.2°. The average maximum temperature for the month was 83.0°. This was 5.3° above the average maximum temperature of 77.7°. The average minimum temperature for the month was 48.2°. This was 0.6° below the normal average minimum temperature of 48.8°. This was the xth warmest October on record.

Record Type	Date	New Record	Previous Record
Daily Maximum Temperature	October 8	95° (tied)	95° In 1979
Daily Maximum Temperature	October 9	99°	97° in 2020
Daily Maximum Temperature	October 23	91° (tied)	91° in 2012

October 2021 Climate Summary

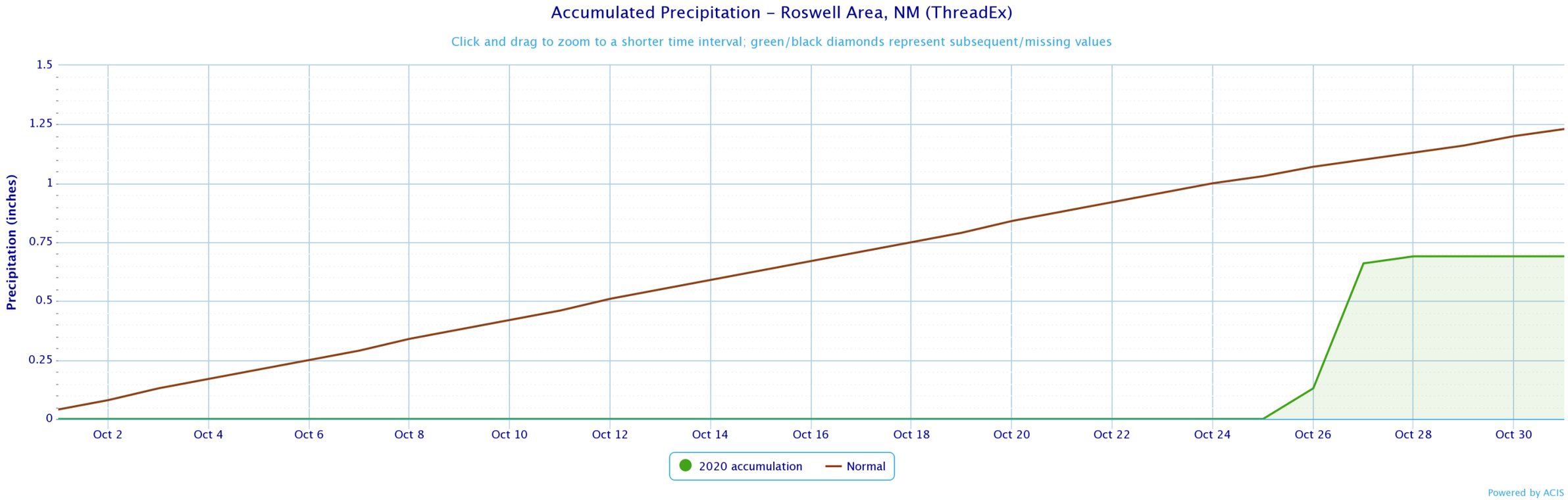
Roswell Precipitation

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Total Precipitation: 0.14“ Total Snow: 0.0“

(Based on new 1991-2020 Normals)

(Period of record 1893-2020)



There was 0.14” of precipitation measured at Roswell, compared to the normal of 1.33”, or 1.19” below normal. This was the 3rd driest October on record. The was no snow in October.

Record Type	Date	New Record	Previous Record
none			

October 2021 Climate Summary

Severe Weather*

Weather Forecast Office
Albuquerque, NM
Issued November 4, 2021 12:01 PM MDT

Event Type	Begin Date	County/Zone Name	Magnitude	Type	Event Narrative
Hail	10/1/2021	Socorro	0.5"		Pea to half inch hail accumulated up to 8" near Luis Lopez. I-25 was closed due to multiple vehicle accidents. Leaves were stripped from trees. Chile crop damage was reported. Minor flooding washed mud, rocks, and debris over roadways.
High Wind	10/12/2021	West Central Highlands	51 kt	Gust	An approaching line of rain and snow showers along a strong cold front produced a brief wind gust up to 59 mph at Gallup.
High Wind	10/12/2021	Southwest Mountains	58 kt	Gust	The Magdalena Ridge Observatory reported peak wind gusts up to 67 mph. Areas around Red Hill peaked at 57 mph.
High Wind	10/12/2021	Sandia/Manzano Mountains	52 kt	Gust	The Sandia Airpark north of Edgewood reported peak wind gusts up to 60 mph.
High Wind	10/12/2021	Central Highlands	55 kt	Gust	Clines Corners reported peak wind gusts up to 63 mph.
High Wind	10/12/2021	South Central Highlands	52 kt	Gust	Several White Sands Missile Range mesonet sites reported peak wind gusts between 55 and 60 mph.
High Wind	10/12/2021	Upper Tularosa Valley	50 kt	Gust	A White Sands Missile Range site reported a peak wind gust up to 58 mph.
High Wind	10/12/2021	South Central Mountains	61 kt	Gust	The Sierra Blanca Regional Airport reported peak wind gusts up to 70 mph. Power lines and trees were downed around Ruidoso.
High Wind	10/12/2021	Far Northeast Highlands	51 kt	Gust	The Raton airport reported peak wind gusts up to 59 mph.
High Wind	10/12/2021	Northeast Highlands	40 kt	Sustained	Public weather stations around Los Montoyas and Tecolotito reported sustained winds between 43 and 46 mph for several hours.
T-storm Wind	10/12/2021	Quay	54 kt	Gust	An area of thunderstorms moving over Tucumcari produced a brief wind gust up to 62 mph.
High Wind	10/12/2021	Southwest Chaves County	35 kt	Sustained	The Dunken RAWS site reported sustained winds of 40 mph.
High Wind	10/26/2021	South Central Mountains	59 kt	Gust	An AWOS station in Ruidoso measured several hours of high wind gusts with a peak gust of 68 mph.
High Wind	10/26/2021	South Central Mountains	37 kt	Sustained	An AWOS station in Ruidoso measured several hours of high wind speeds with a peak sustained wind speed of 43 mph.
High Wind	10/26/2021	West Central Highlands	50 kt	Gust	A Mesonet station near Mesita briefly measured a wind gust of 58 mph with the passage of a cold front.
High Wind	10/26/2021	Upper Tularosa Valley	35 kt	Sustained	A Mesonet station near Ancho briefly measured a sustained wind speed of 40 mph.
High Wind	10/26/2021	Central Highlands	53 kt	Gust	An ASOS station in Clines Corners measured high wind gusts with a peak gust of 61 mph.
High Wind	10/26/2021	Northeast Highlands	50 kt	Gust	An ASOS station in Las Vegas measured a peak wind gust of 58 mph.
High Wind	10/26/2021	Curry	35 kt	Sustained	An ASOS station in Clovis measured a couple hours of sustained wind speeds of 40 mph.
High Wind	10/26/2021	Upper Rio Grande Valley	35 kt	Sustained	An AWOS station in Taos briefly measured sustained wind speeds of 40 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/

Resources

- NCEI Climatological Rankings: https://www.ncdc.noaa.gov/cag/national/rankings
- PRISM Climate Data: http://www.prism.oregonstate.edu/
- U.S. Drought Monitor: https://droughtmonitor.unl.edu/
- NWS Local Climate Pages: https://w2.weather.gov/climate/index.php?wfo=abq
- CPC ENSO: https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.shtml
- NCEI Storm Data: https://www.ncdc.noaa.gov/stormevents/
- Questions?: sr-abq.webmaster@noaa.gov
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