

Synopsis

August 2023 was another hot and dry month, but there were a few monsoonal surges that brought beneficial rainfall. A moisture surge around the middle of the month led to flooding over burn scars in the northern mountains and in the Albuquerque area. Despite this rainfall, drought conditions continued to intensify since storms were far and few between for most of the month. Numerous record high temperatures were broken on route to the 4th hottest August in New Mexico history.



Photo courtesy Wendell Malone
Ski Apache on 8/24



Photo courtesy Eric Queller
Ruidoso Canyon on 8/15

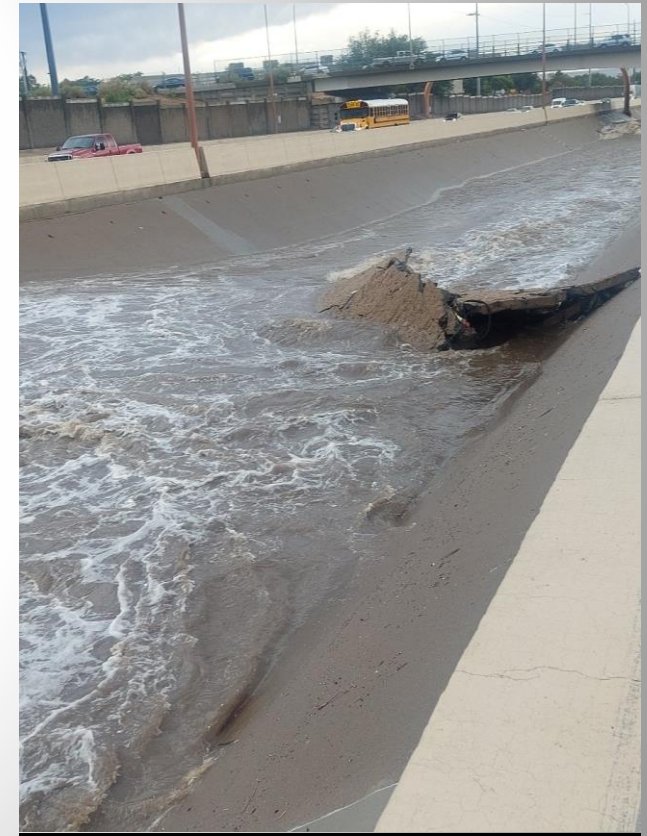
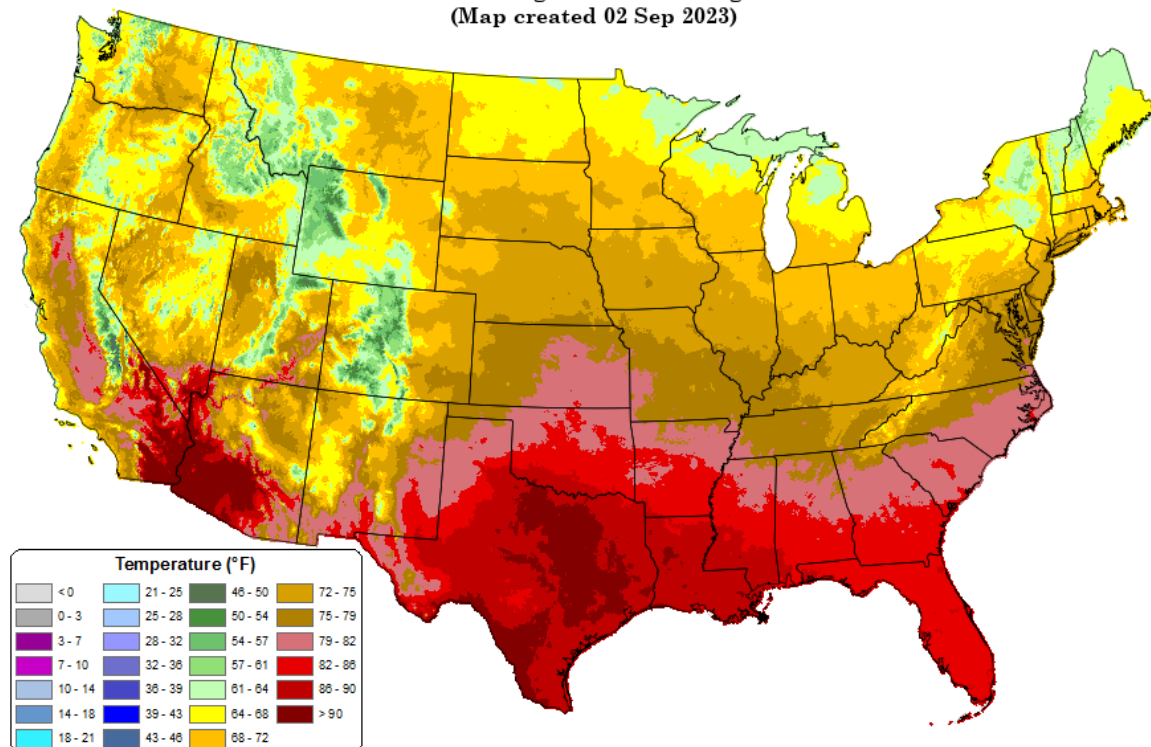


Photo courtesy NMDOT
ABQ I-40 Channel on 8/8

Temperatures

Average Daily Mean Temperature: Aug 2023

Period ending 7 AM EST 31 Aug 2023
(Map created 02 Sep 2023)

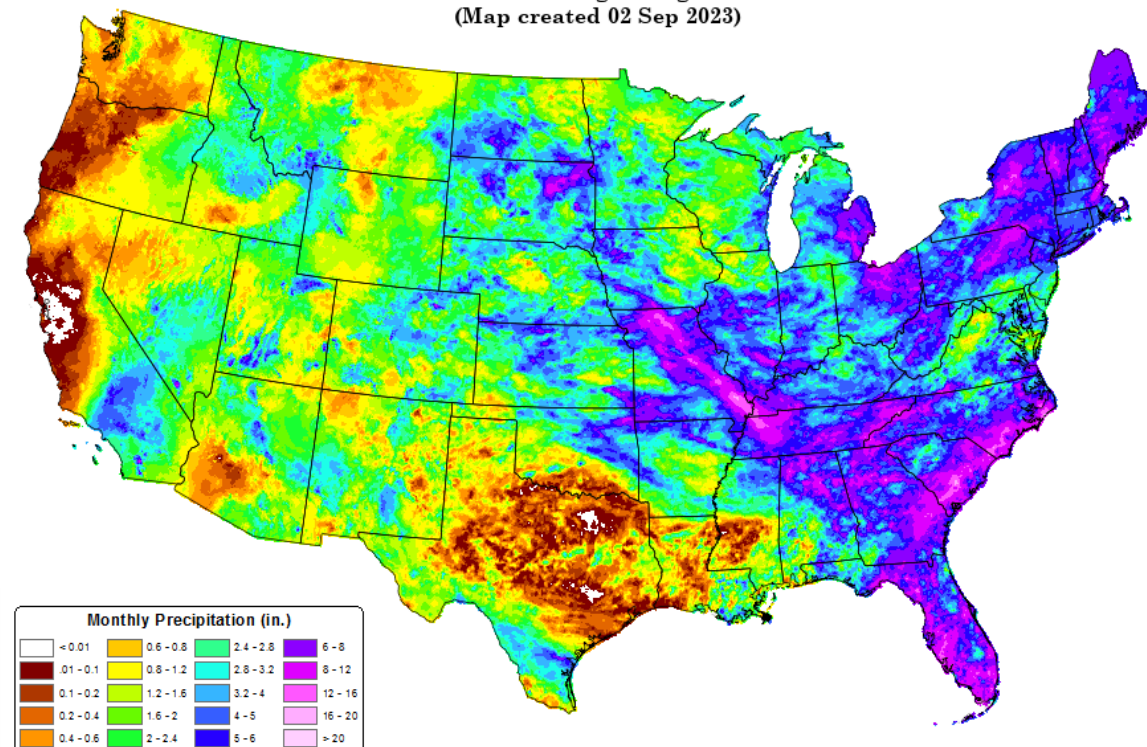


Copyright (c) 2023, PRISM Climate Group, Oregon State University

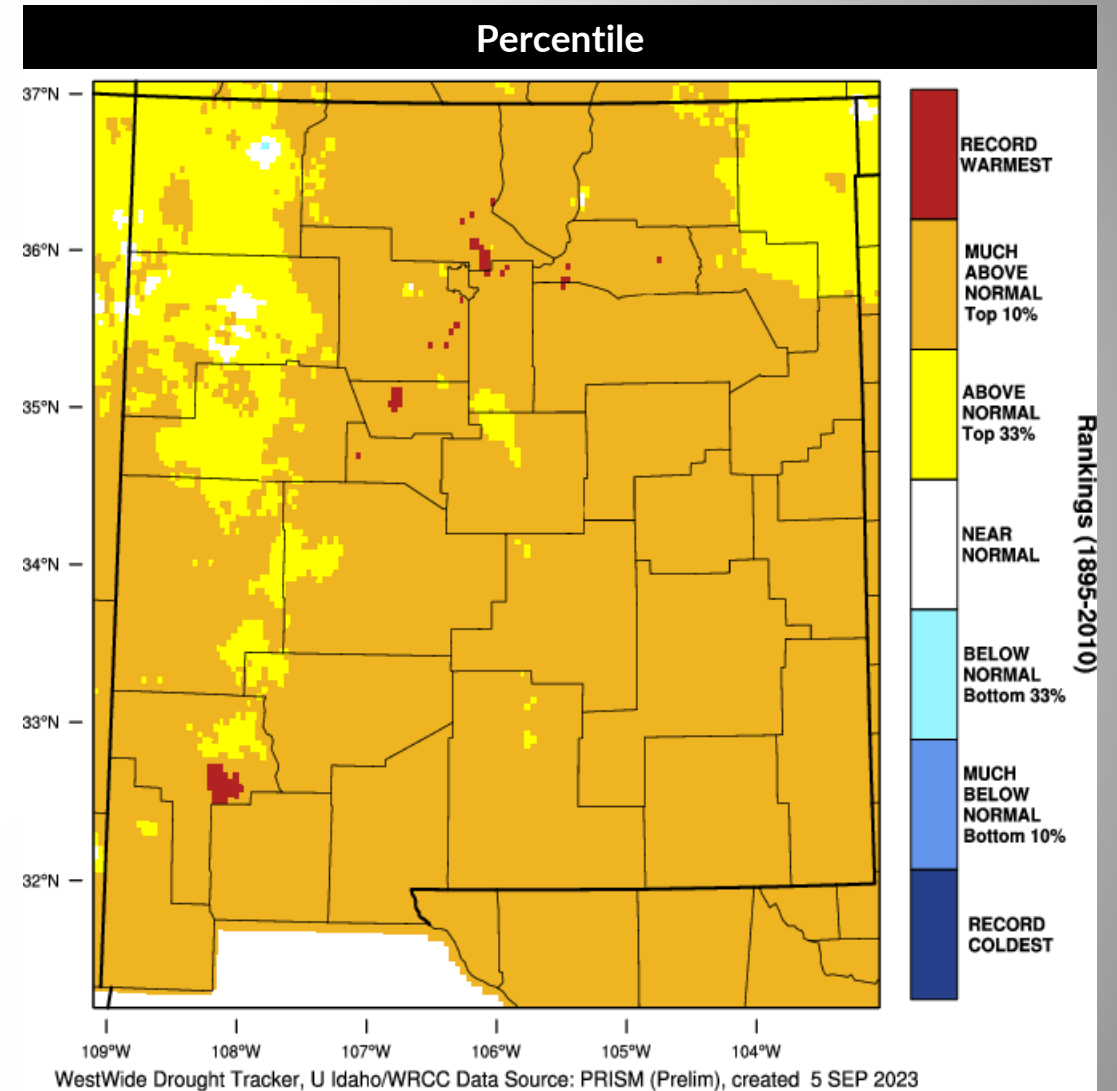
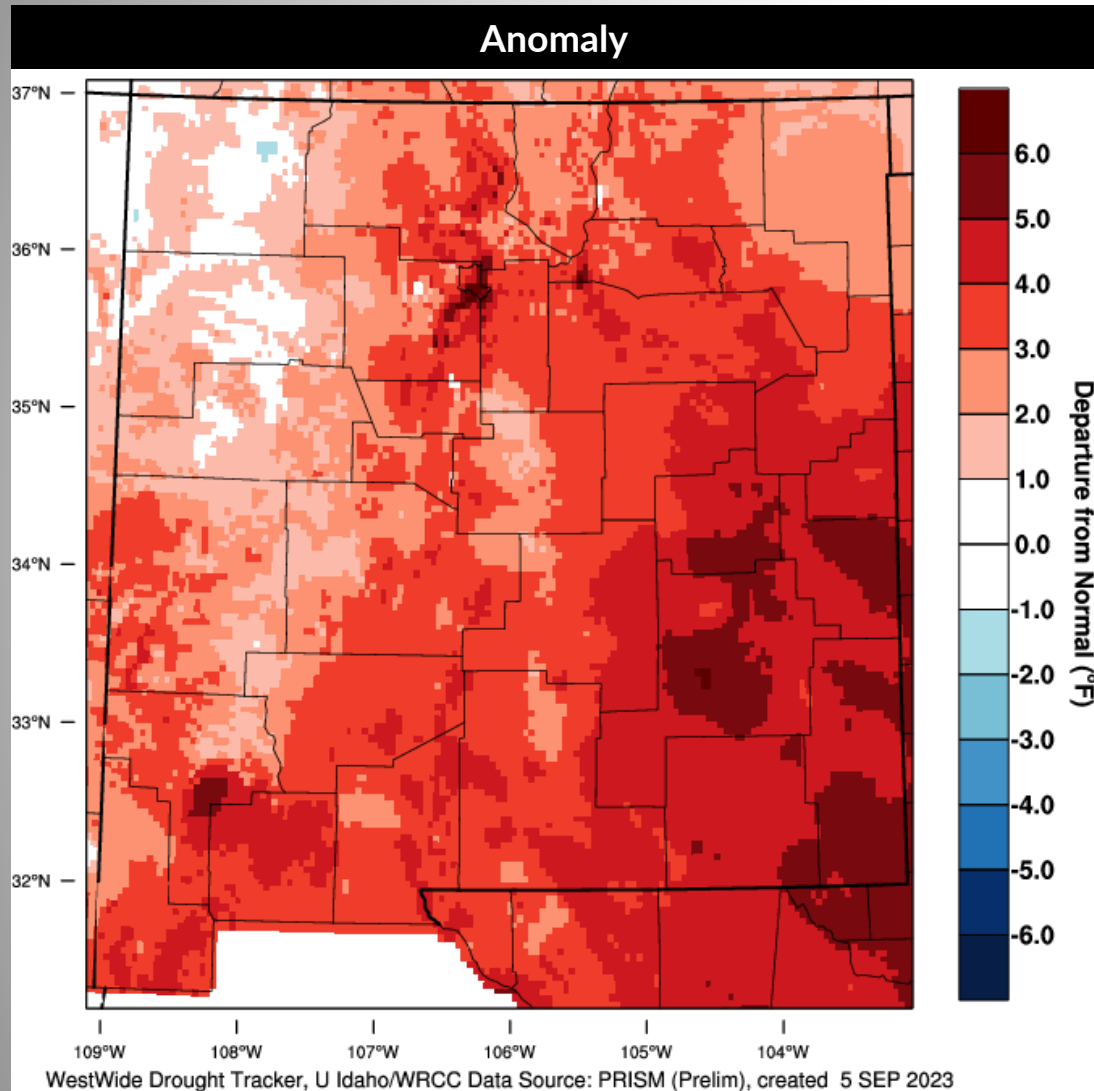
Precipitation

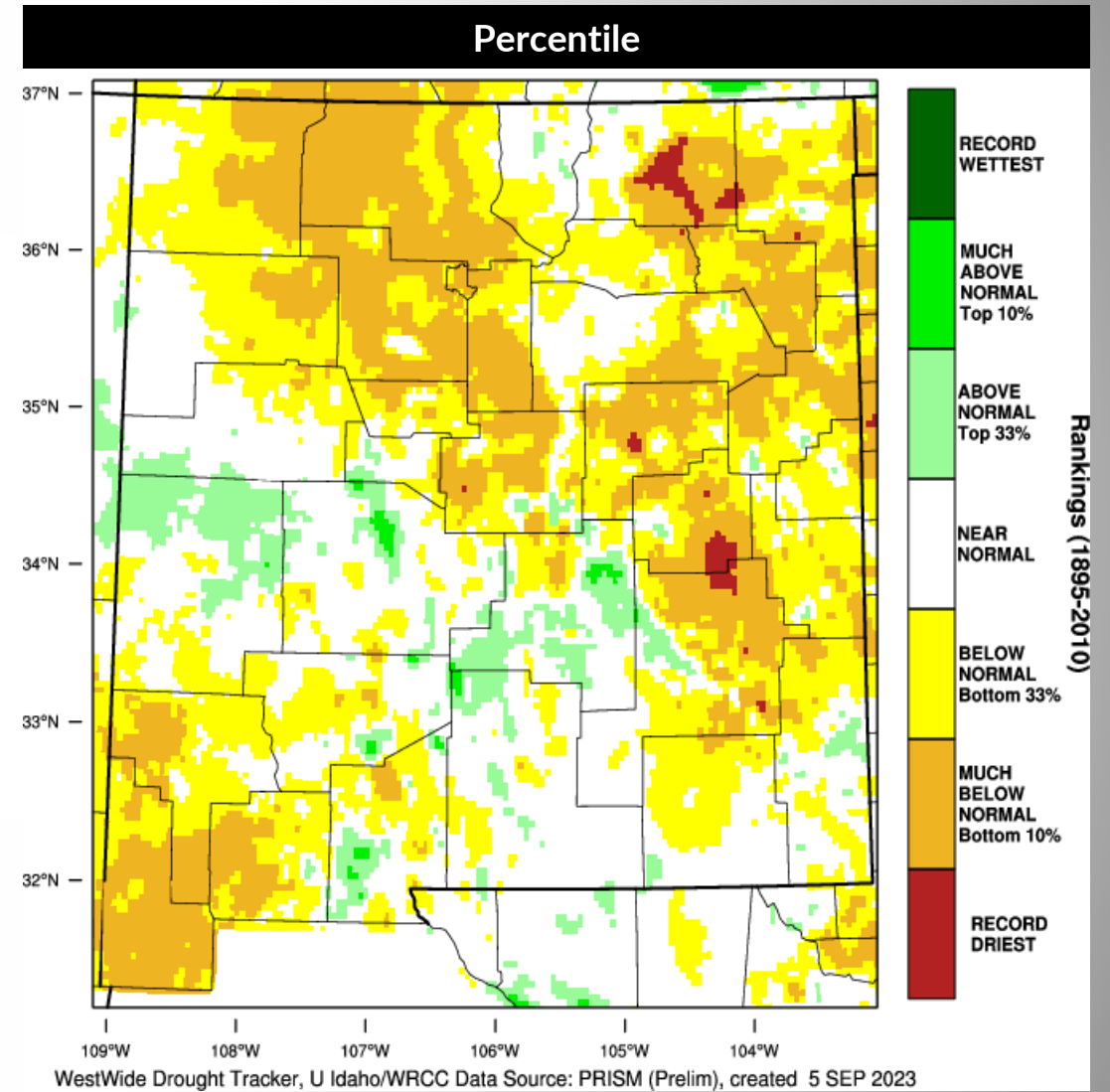
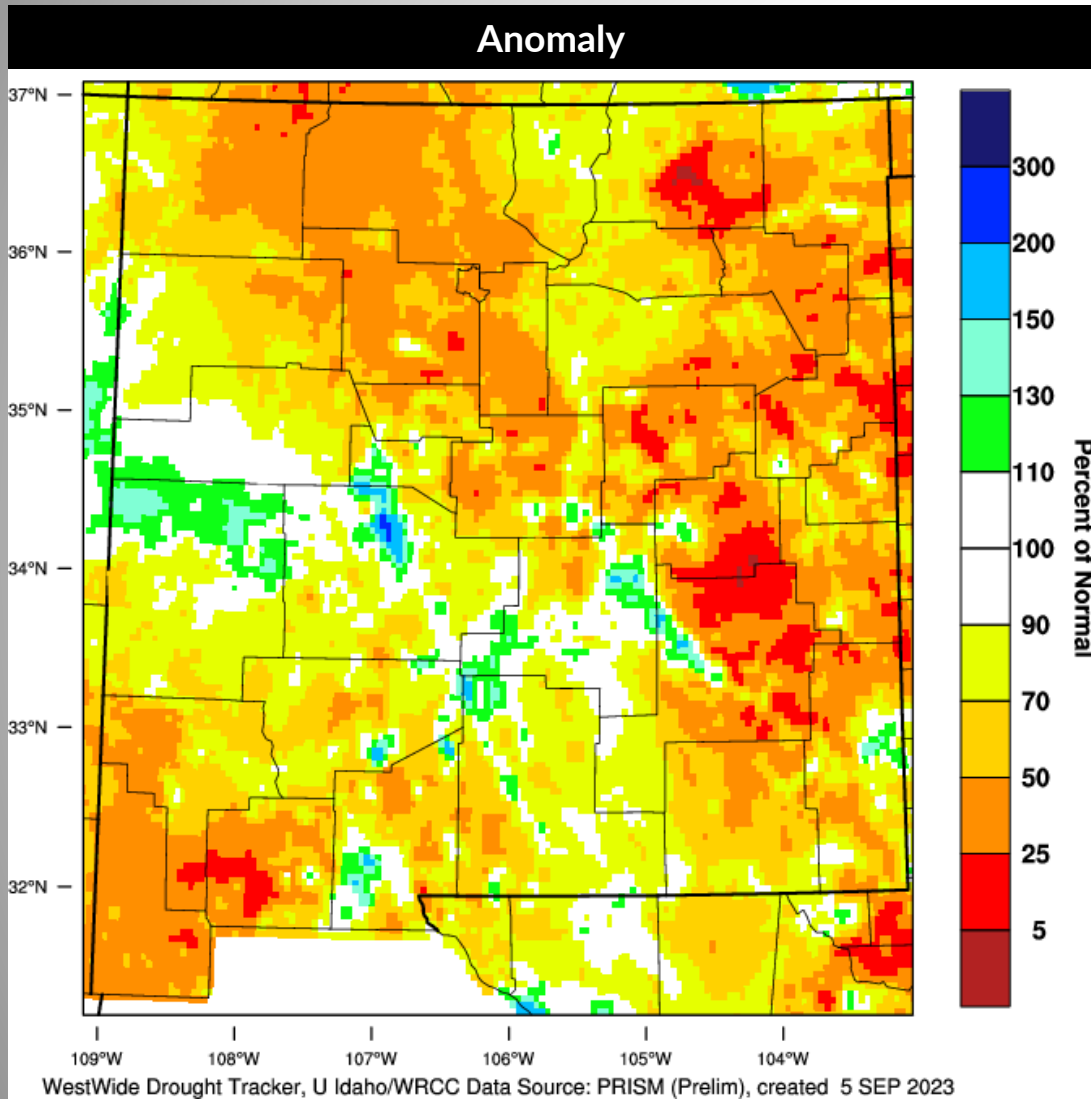
Total Precipitation: Aug 2023

Period ending 31 Aug 2023
(Map created 02 Sep 2023)



Copyright (c) 2023, PRISM Climate Group, Oregon State University

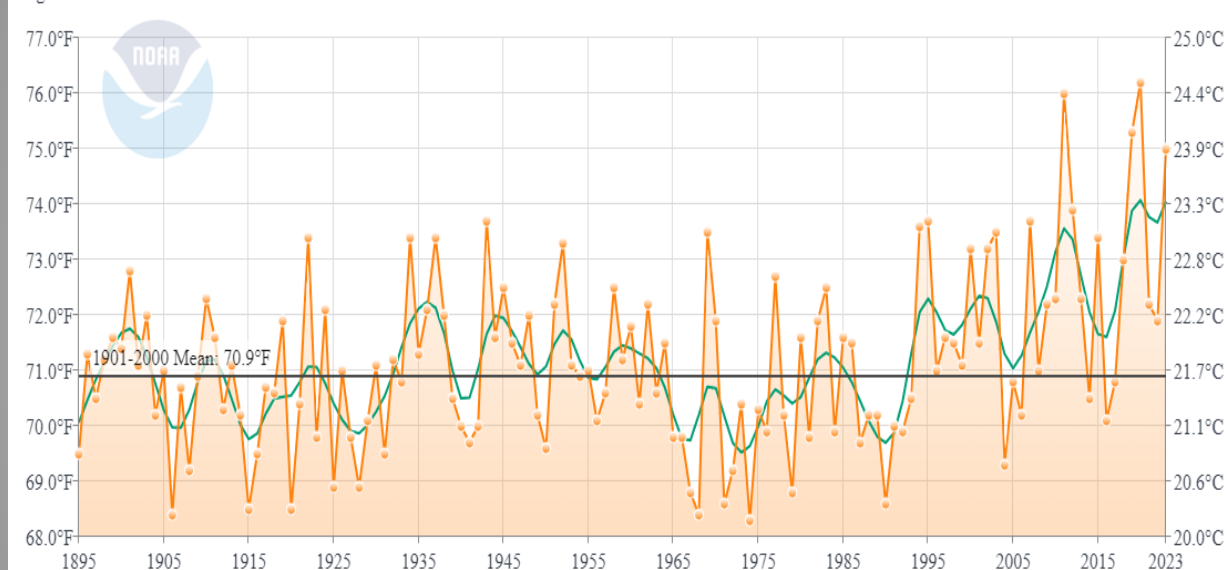




Temperature

New Mexico Average Temperature

August

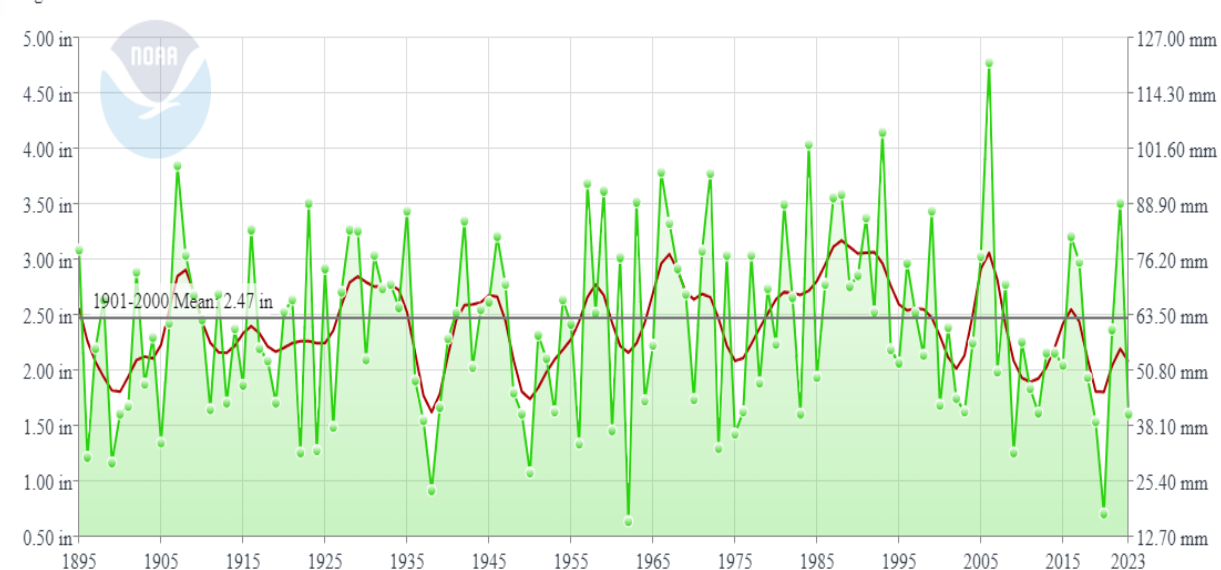


The August 2023 average statewide temperature was 75.0°, which was 4.1° above the long-term normal of 70.9° (1901-2000). This ranked as the 4th warmest August on record (1895-2023).

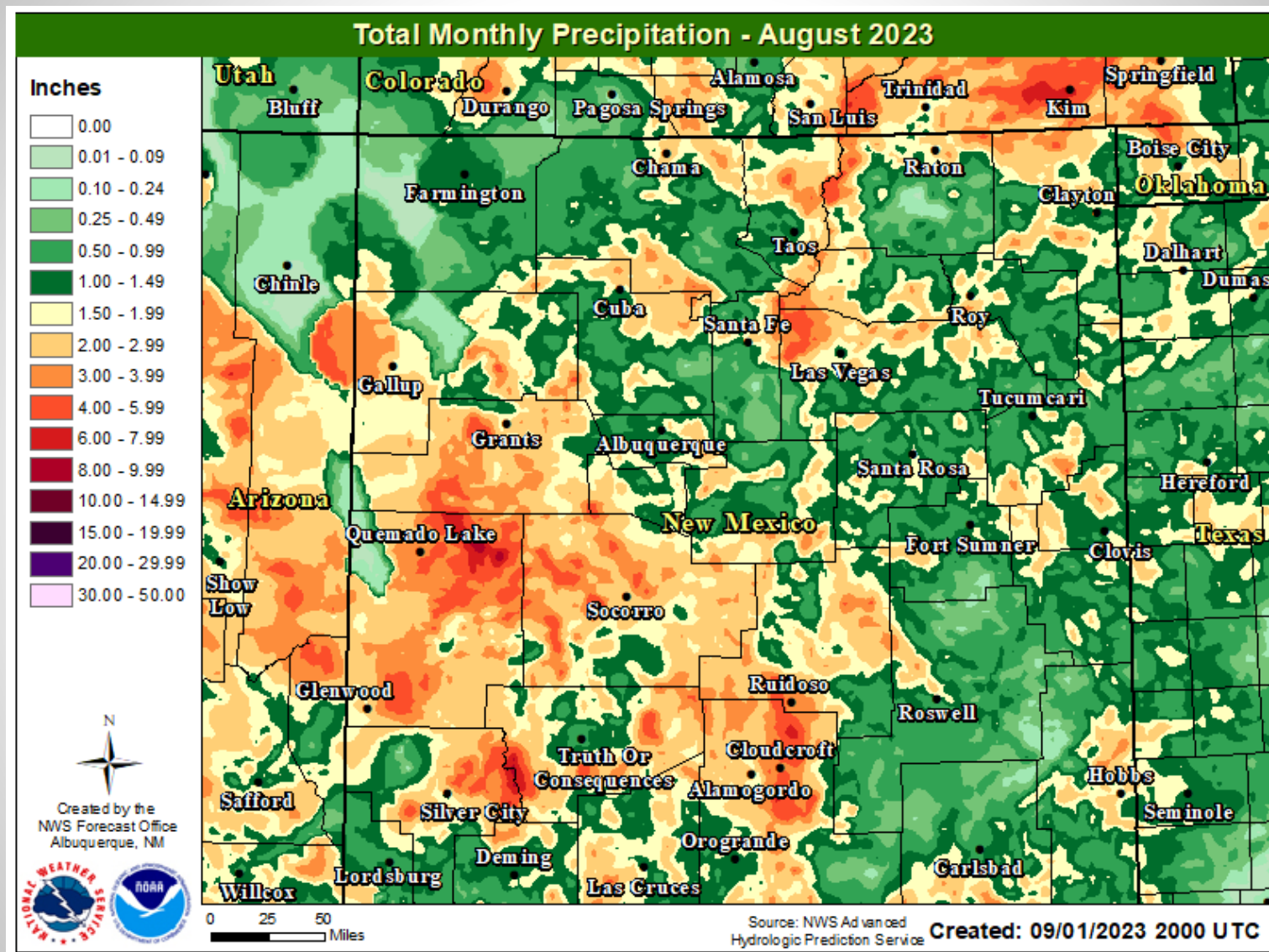
Precipitation

New Mexico Precipitation

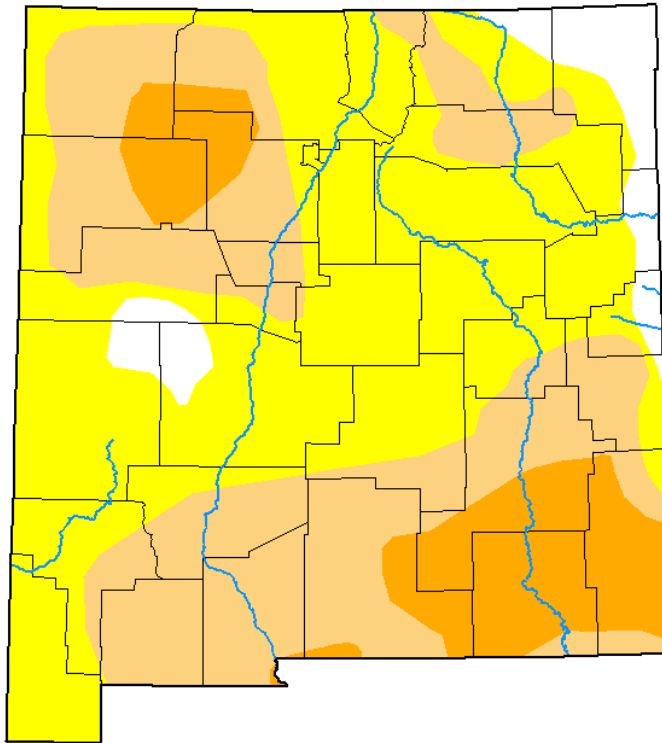
August



The August 2023 average statewide precipitation was 1.61", which was 0.86" below the long-term normal of 2.47" (1901-2000). This ranked as the 18th driest August on record (1895-2023).



U.S. Drought Monitor New Mexico



August 1, 2023
(Released Thursday, Aug. 3, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5.72	94.28	46.89	12.99	0.00	0.00
Last Week 07-25-2023	13.64	86.36	34.04	8.22	0.00	0.00
3 Months Ago 05-02-2023	46.60	53.40	32.10	16.18	4.99	0.21
Start of Calendar Year 01-03-2023	7.03	92.97	41.30	18.55	3.74	0.19
Start of Water Year 09-27-2022	0.99	99.01	76.80	31.46	6.99	0.00
One Year Ago 08-02-2022	0.68	99.32	95.91	71.24	29.41	9.34

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>

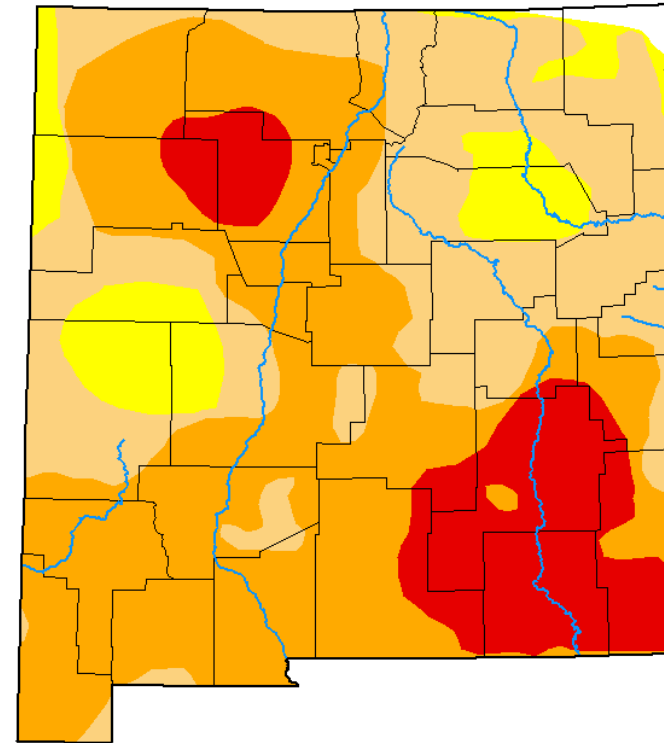
Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor New Mexico



August 29, 2023
(Released Thursday, Aug. 31, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.61	99.39	90.24	57.95	14.90	0.00
Last Week 08-22-2023	3.40	96.60	85.37	52.80	9.89	0.00
3 Months Ago 05-02-2023	51.73	48.27	28.82	16.18	0.60	0.00
Start of Calendar Year 01-03-2023	7.03	92.97	41.30	18.55	3.74	0.19
Start of Water Year 09-27-2022	0.99	99.01	76.80	31.46	6.99	0.00
One Year Ago 08-02-2022	0.93	99.07	87.78	58.58	10.43	0.23

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:

David Simlar
Western Regional Climate Center



droughtmonitor.unl.edu

Long stretches with very little to no rain during the climatologically wettest time of year led to the intensification of drought conditions, particularly in southeastern New Mexico where there are now extreme drought conditions. The hot temperatures and mostly sunny skies created very high evapotranspiration rates which depleted the soil moisture in many areas.

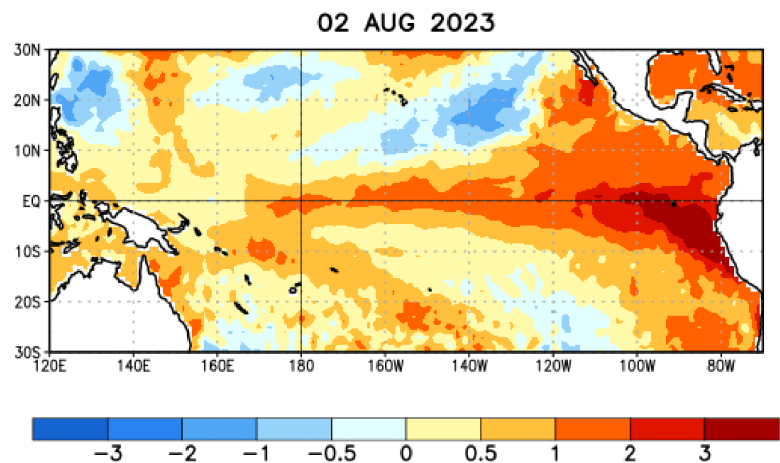


Figure 1. Average sea surface temperature (SST) anomalies (°C) for the week centered on 2 August 2023. Anomalies are computed with respect to the 1991-2020 base period weekly means.

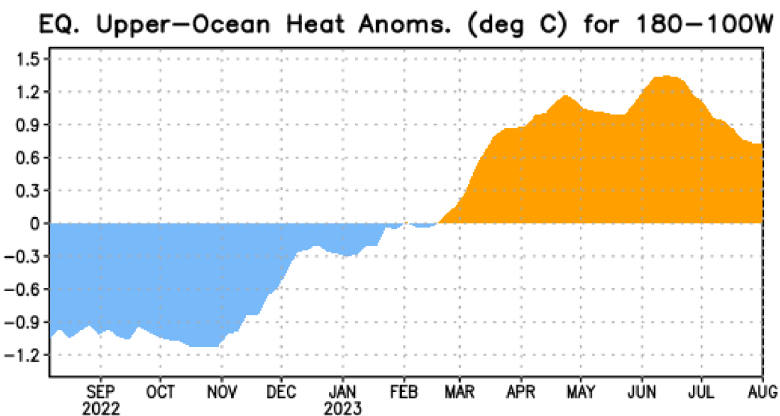


Figure 3. Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

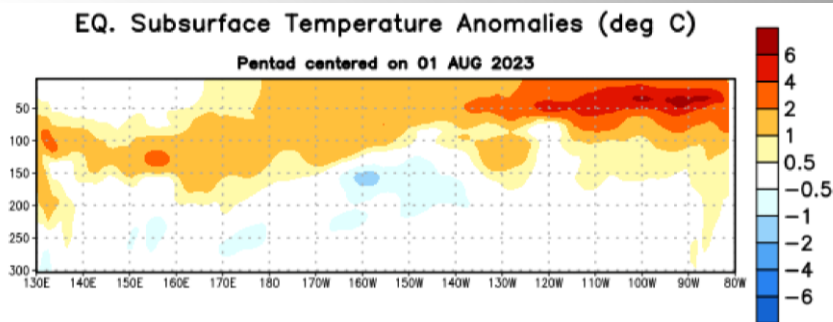


Figure 4. Depth-longitude section of equatorial Pacific upper-ocean (0-300m) temperature anomalies (°C) centered on the pentad of 1 August 2023. Anomalies are departures from the 1991-2020 base period pentad means.

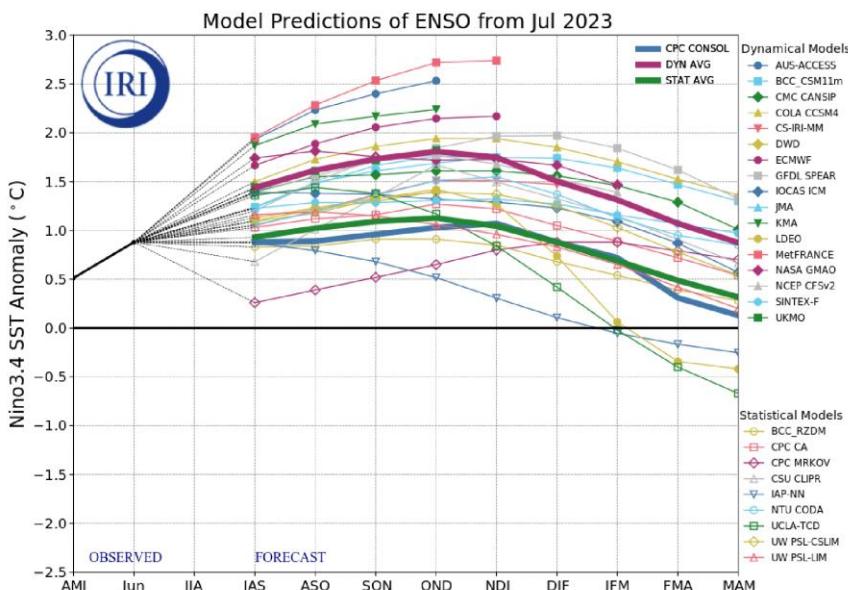
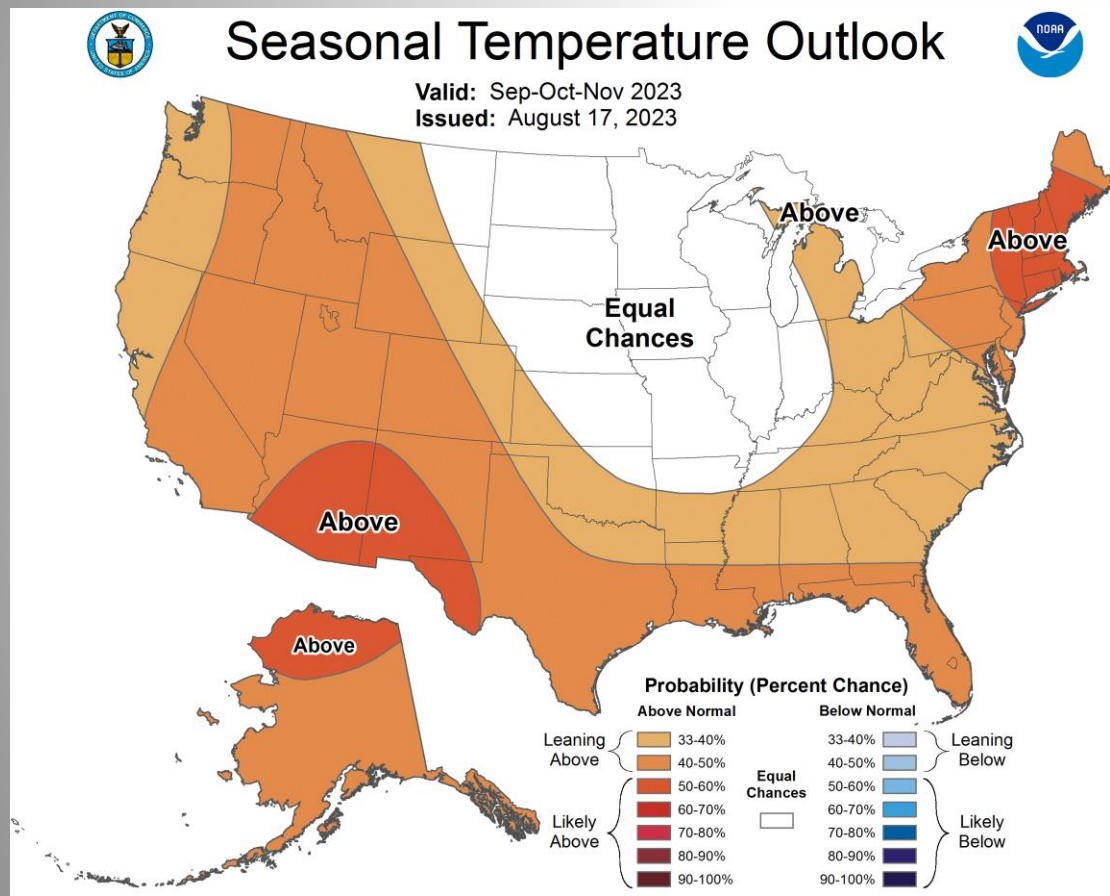
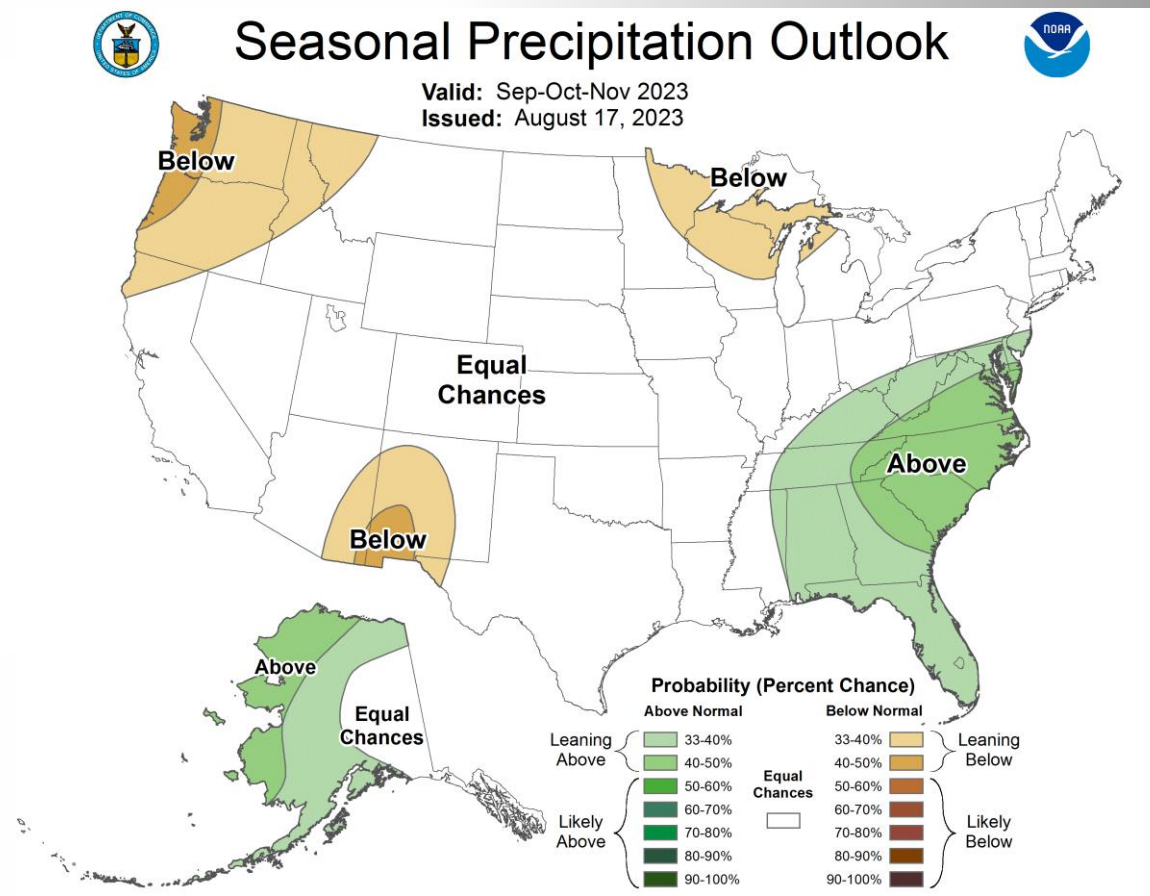


Figure 6. Forecasts of sea surface temperature (SST) anomalies for the Niño 3.4 region (5°N-5°S, 120°W-170°W). Figure updated 19 July 2023 by the International Research Institute (IRI) for Climate and Society.

Temperature September-October-November



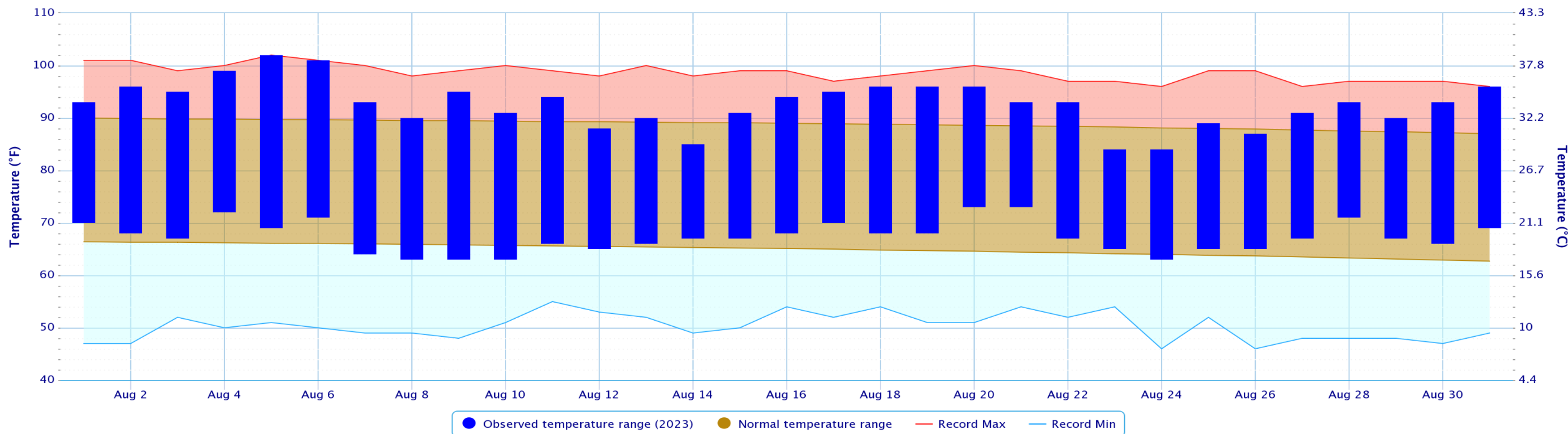
Precipitation September-October-November



Average Temperature: 80.0°

Daily Temperature Data – ALBUQUERQUE INTL AP, NM

Period of Record – 1891–12-01 to 2023–09-09. Normals period: 1991–2020. Click and drag to zoom chart.



Powered by ACIS

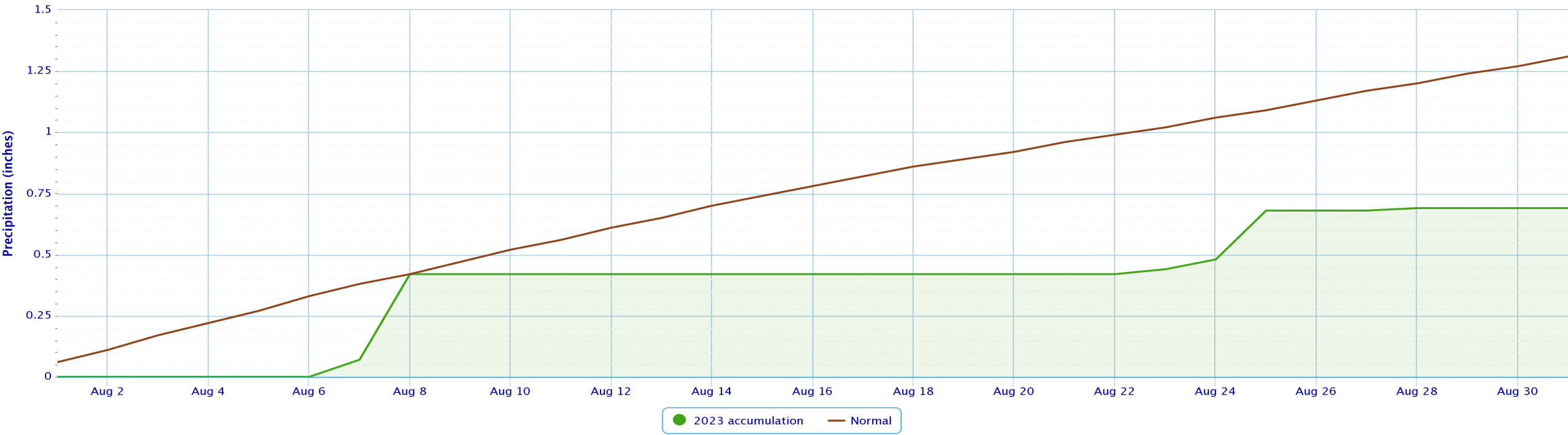
The August 2023 average temperature for Albuquerque was 80.0°, which was 3.1° above the normal of 76.9°. The average maximum temperature for the month was 92.7°. This was 3.9° above the normal average maximum temperature of 88.8°. The average minimum temperature for the month was 67.3°. This was 2.4° above the normal average minimum temperature of 64.9°. This ranked as the 3rd warmest August on record.



Precipitation: 0.69"

Accumulated Precipitation – ALBUQUERQUE INTL AP, NM

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



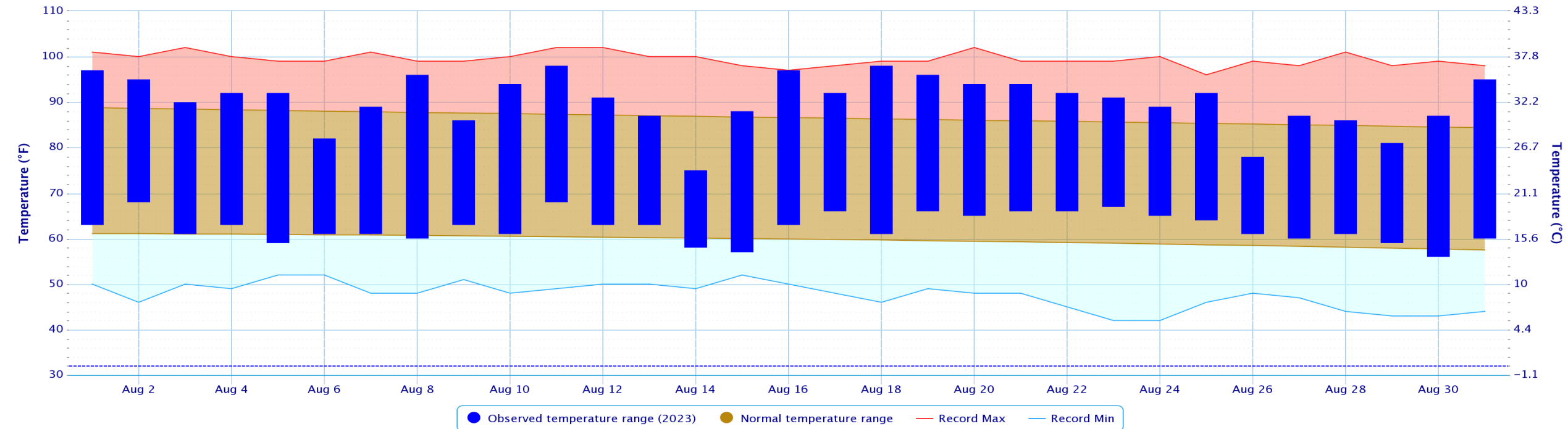
Powered by ACIS

The August 2023 precipitation for Albuquerque was 0.69", which was 0.62" below the normal of 1.31". This ranked as the 35th driest August on record.

Average Temperature: 76.4°

Daily Temperature Data – CLAYTON MUNICIPAL AIR PARK, NM

Period of Record – 1896-02-01 to 2023-09-09. Normals period: 1991-2020. Click and drag to zoom chart.



Powered by ACIS

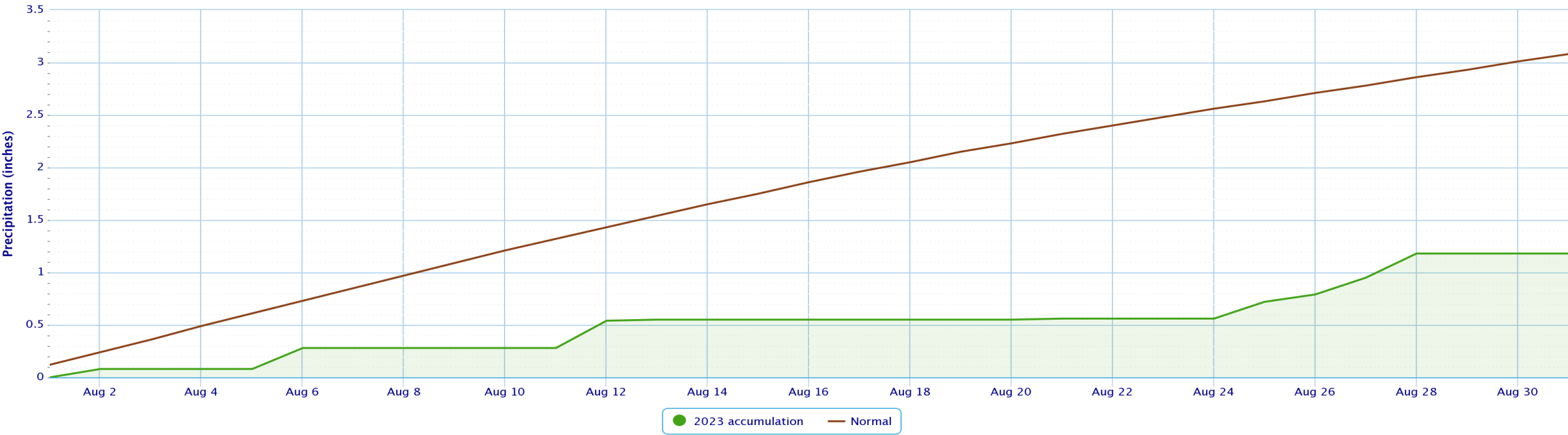
The August 2023 average temperature for Clayton was 76.4°, which was 3.3° above the normal of 73.1°. The average maximum temperature for the month was 90.4°. This was 3.8° above the normal average maximum temperature of 86.6°. The average minimum temperature for the month was 62.4°. This was 2.7° above the normal average minimum temperature of 59.7°. This ranked as the 9th warmest August on record.



Precipitation:1.18"

Accumulated Precipitation – CLAYTON MUNICIPAL AIR PARK, NM

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



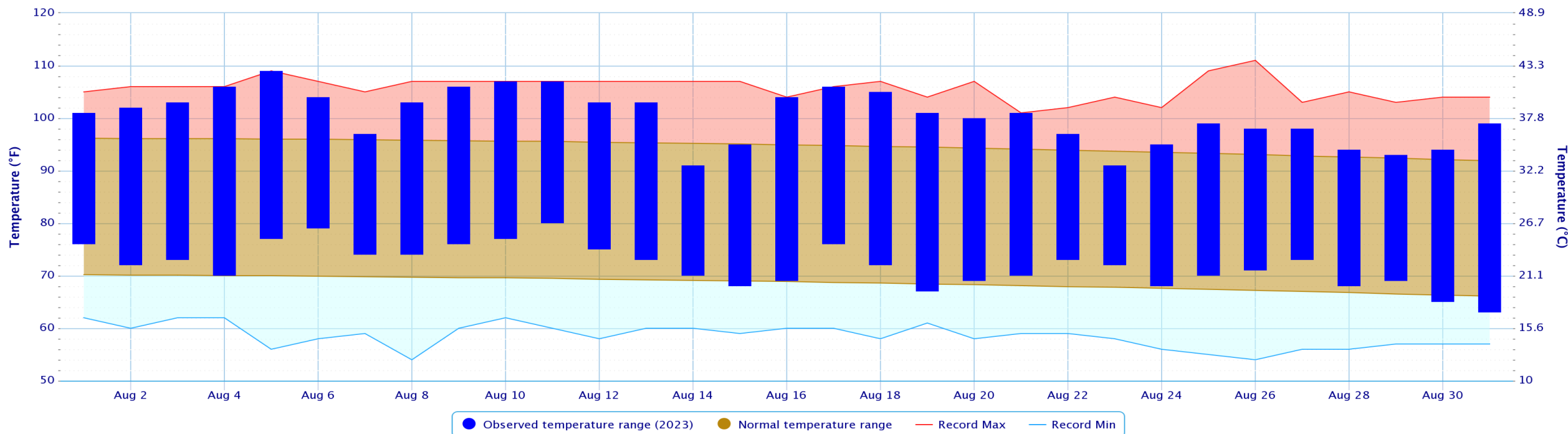
Powered by ACIS

The August 2023 precipitation for Clayton was 1.18", which was 1.90" below the normal of 3.08". This ranked as the 23rd driest August on record.

Average Temperature: 86.1°

Daily Temperature Data – ROSWELL INDUSTRIAL AIR PARK, NM

Period of Record – 1946–12–01 to 2023–09–09. Normals period: 1991–2020. Click and drag to zoom chart.



Powered by ACIS

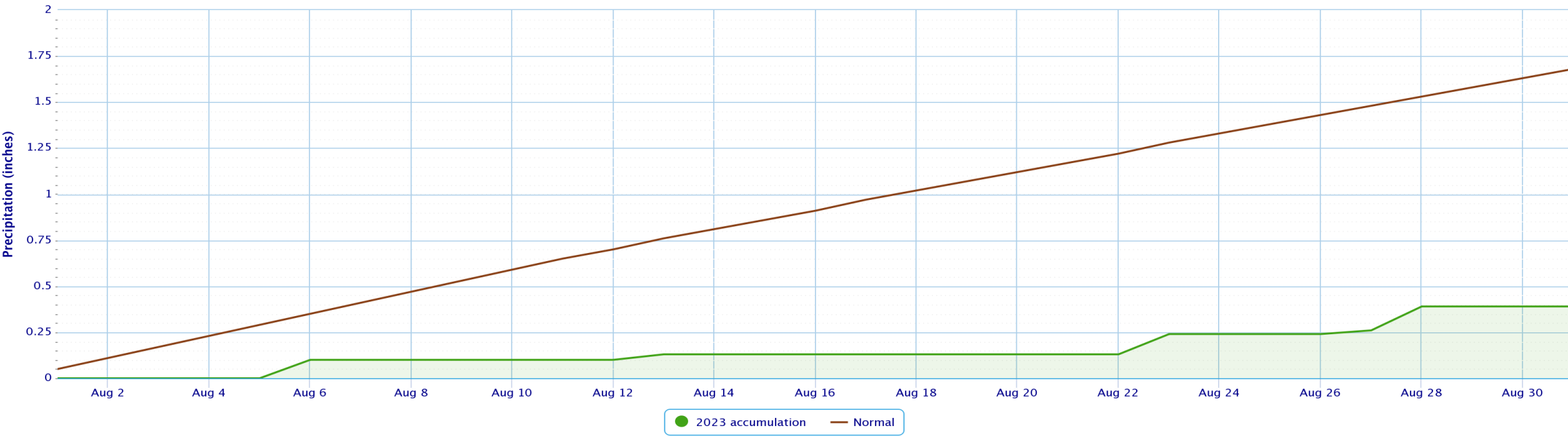
The August 2023 average temperature for Roswell was 86.1°, which was 4.5° above the normal of 81.6°. The average maximum temperature for the month was 100.4°. This was 5.8° above the average maximum temperature of 94.6°. The average minimum temperature for the month was 71.9°. This was 3.3° above the normal average minimum temperature of 68.6°. This ranked as the 2nd warmest August on record.



Precipitation: 0.39"

Accumulated Precipitation – ROSWELL INDUSTRIAL AIR PARK, NM

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










Powered by ACIS

The August 2023 precipitation for Roswell was 0.39", which was 1.29" below the normal of 1.68". This ranked as the 4th driest August on record.



Event Type	Begin Date	County Name	Magnitude	Type	Event Narrative
Thunderstorm Wind	8/2/2023	SAN JUAN	50 kt	Gust	There was a downed utility pole from a likely strong gust front and microburst ahead of a line of storms moving east from Arizona.
Thunderstorm Wind	8/2/2023	SAN JUAN	50 kt	Gust	Several trees were blown down in Kiwanis Park from a likely microburst. The microburst also came with a wall of sand and a possible dust devil.
Thunderstorm Wind	8/2/2023	SAN JUAN	50 kt	Gust	A greenhouse was damaged from a strong gust front and likely microburst ahead of a line of storms moving east from Arizona.
Thunderstorm Wind	8/2/2023	SAN JUAN	50 kt	Gust	Two utility poles were damaged at the Navajo Dam from strong winds.
Thunderstorm Wind	8/2/2023	SAN JUAN	50 kt	Gust	Wind gust reported at KFMN.
Hail	8/6/2023	UNION	1.75 "		A home window was knocked out by copious amounts of golf ball size hail.
Hail	8/6/2023	UNION	1.25 "		Hail between penny to half dollar size diameter fell in the area.
Thunderstorm Wind	8/7/2023	MCKINLEY	51 kt	Gust	
Thunderstorm Wind	8/7/2023	DE BACA	57 kt	Gust	
Thunderstorm Wind	8/7/2023	QUAY	50 kt	Gust	Outflow boundary induced wind gust.
Hail	8/8/2023	BERNALILLO	0.88 "		
Hail	8/8/2023	BERNALILLO	0.75 "		
Hail	8/8/2023	BERNALILLO	0.75 "		
Flash Flood	8/8/2023	BERNALILLO			Flash flooding in several locations of northeastern Albuquerque and along I-40.
Hail	8/9/2023	SOCORRO	0.88 "		
Thunderstorm Wind	8/12/2023	UNION	60 kt	Gust	Severe winds destroyed a wall and blew part of the roof off of an old horse barn. It also blew two fiberglass windows out of a metal barn.
Thunderstorm Wind	8/12/2023	UNION	50 kt	Gust	The Southwestern Electric Cooperative reported severe winds having knocked down six power poles along state highway 56.
Thunderstorm Wind	8/13/2023	GUADALUPE	52 kt	Gust	The Santa Rosa Airport measured a thunderstorm wind gust of 60 mph.
Thunderstorm Wind	8/13/2023	QUAY	50 kt	Gust	The Tucumcari Airport measured a thunderstorm wind gust of 58 mph.
Flash Flood	8/15/2023	LINCOLN			Floodwaters carried significant amounts of mud, rocks, and debris across Mescalero Lane along the Rio Ruidoso west of Ruidoso.
Flash Flood	8/13/2023	MORA			Debris flow across state highway 518 in Holman required removal of rocks and mud across the road.
Flash Flood	8/13/2023	SAN MIGUEL			Debris flow from heavy rainfall required the state emergency operations center to deliver sandbags to protect homes in and around Rociada.
Flash Flood	8/13/2023	SAN MIGUEL			Debris flow across state highway 434 required removal of rocks and mud across the road.
Flash Flood	8/16/2023	SAN MIGUEL			Road leading up to residence was covered in flowing water near state roads 105 and 276 in lower Rociada.
Flash Flood	8/21/2023	SAN MIGUEL			Mud/debris flow overs county road A3A with water over a bridge and culvert. Debris left behind by the waters was stuck against guard rails.
Flash Flood	8/25/2023	SOCORRO			There were several flood areas along White Sands Missile Range Road Seven. Water was two to three feet deep with mud and debris on the road.
Flash Flood	8/28/2023	LINCOLN			Flooding at Gavilan and Warrior. County roads in the area were closed shortly after.
Thunderstorm Wind	8/28/2023	TORRANCE	50 kt	Gust	Eight to ten inch branch snapped off tree in sudden change of wind direction. Accompanied by pea sized hail.
Thunderstorm Wind	8/28/2023	CHAVES	55 kt	Gust	
High Wind	8/28/2023	LOWER RIO GRANDE VALLEY	56 kt	Gust	The Stallion Runway White Sands Missile Range station measured a peak wind gust of 65 mph.
High Wind	8/28/2023	UPPER TULAROSA VALLEY	50 kt	Gust	The Chupadera RAWs station measured a peak wind gust of 65 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
-  NWS Albuquerque Facebook
-  @NWSAlbuquerque & #nmwx