



Synopsis

March 2021 was wetter than normal in the northeast quarter of the state, with pockets of near to above normal precipitation in central New Mexico. The rest of the state was drier than normal. Temperatures were near to below normal statewide, except a little above normal in the southeast.

March was highlighted by two major storms, one on the 16th, the other March 23rd through 24th. They were very similar with widespread light to moderate snow and areas of heavy snow. Strong to high winds with some damage occurred with both storms. High winds slammed NM on the 14th.



NE Albuquerque 3/24/21 © Mark Ronchetti via Twitter



NE Albuquerque 3/24/21 © Mark Ronchetti via Twitter



NE Albuquerque 3/24/21 © Mark Ronchetti via Twitter

March 2021 Climate Summary

State Temperatures

Weather Forecast Office
Albuquerque, NM
Issued January 8, 2022 6:39 PM MDT

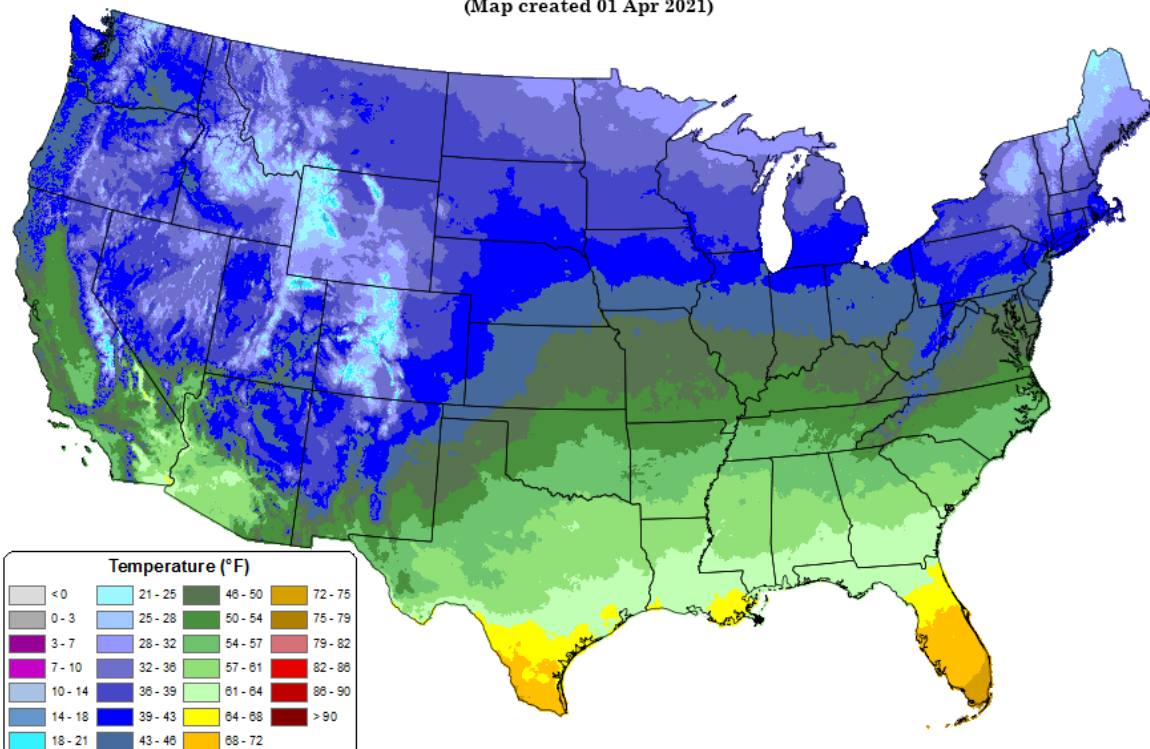


Actual

Average Daily Mean Temperature: 01 Mar 2021 - 31 Mar 2021

Period ending 7 AM EST 31 Mar 2021

(Map created 01 Apr 2021)



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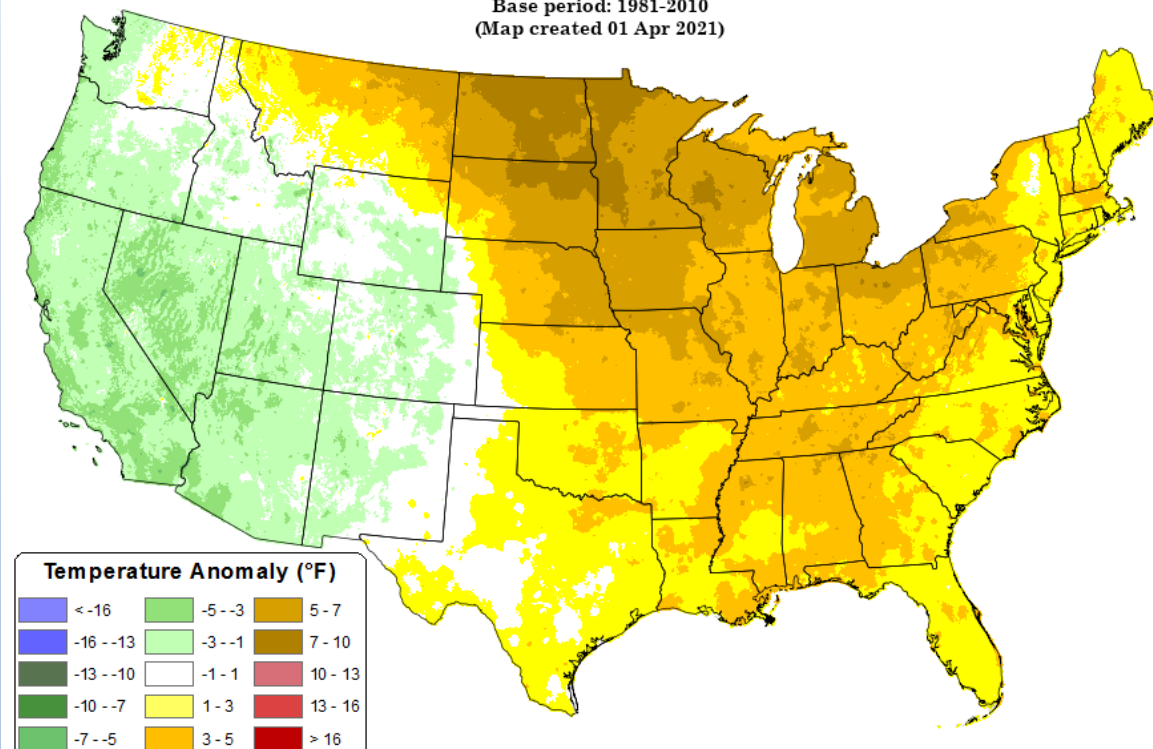
Anomaly

Daily Mean Temperature Anomaly: 01 Mar 2021 - 31 Mar 2021

Period ending 7 AM EST 31 Mar 2021

Base period: 1981-2010

(Map created 01 Apr 2021)



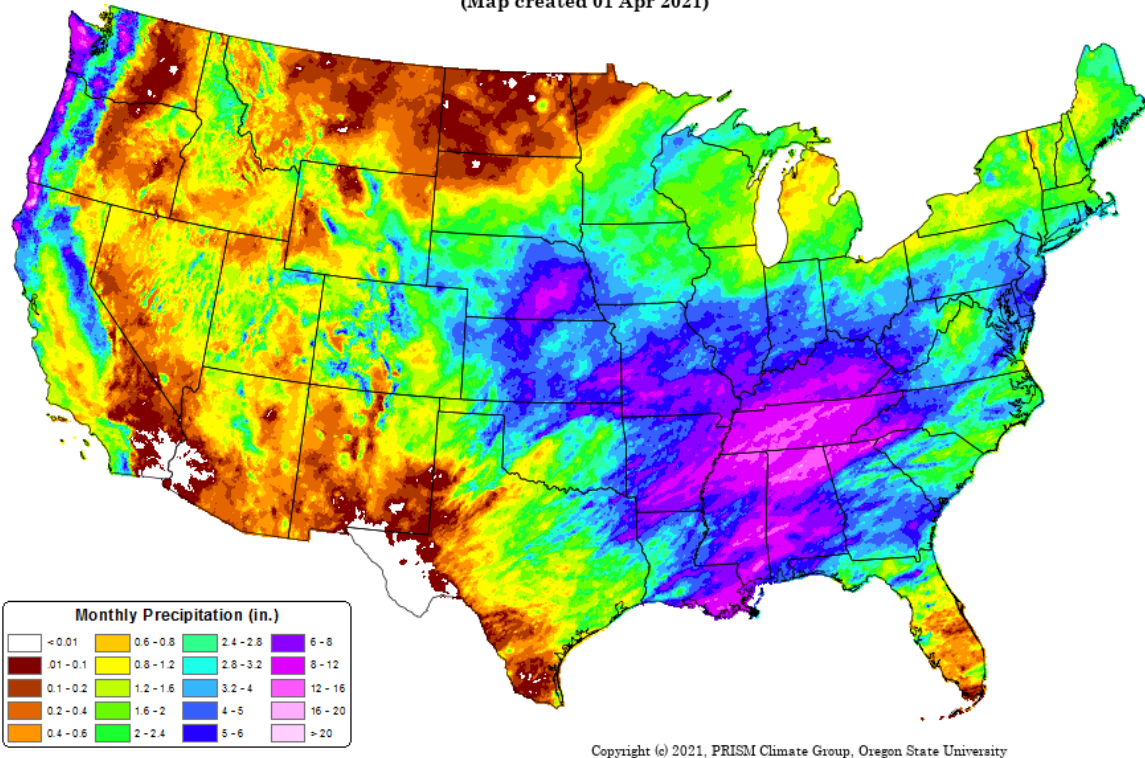
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Temperatures were near to below normal statewide, except a little above normal in the southeast.



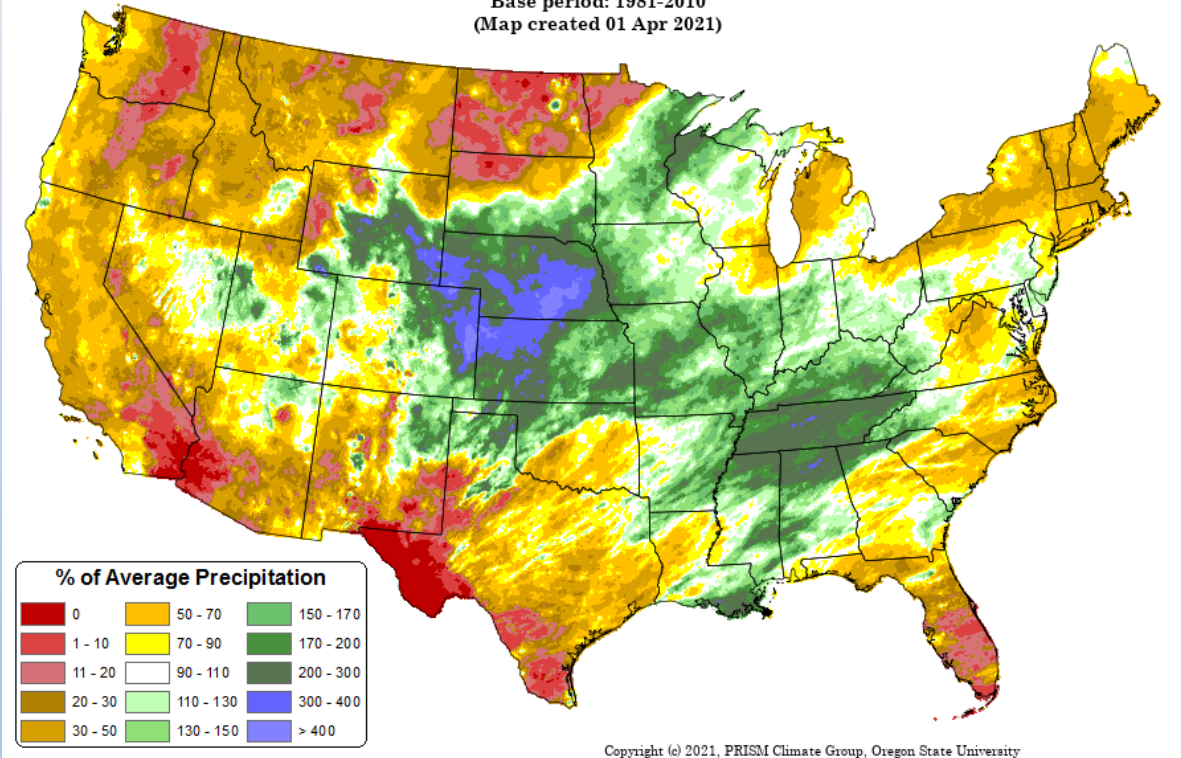
Actual

Total Precipitation: 01 Mar 2021 - 31 Mar 2021
Period ending 7 AM EST 31 Mar 2021
(Map created 01 Apr 2021)



Anomaly

Total Precipitation Anomaly: 01 Mar 2021 - 31 Mar 2021
Period ending 7 AM EST 31 Mar 2021
Base period: 1981-2010
(Map created 01 Apr 2021)



March 2021 was wetter than normal in the northeast quarter of the state, with pockets of near to above normal precipitation in west-central New Mexico. The rest of the state was drier than normal. March averaged $-0.52''$, which was $0.21''$ below normal. This ranks as the 52nd driest on record.

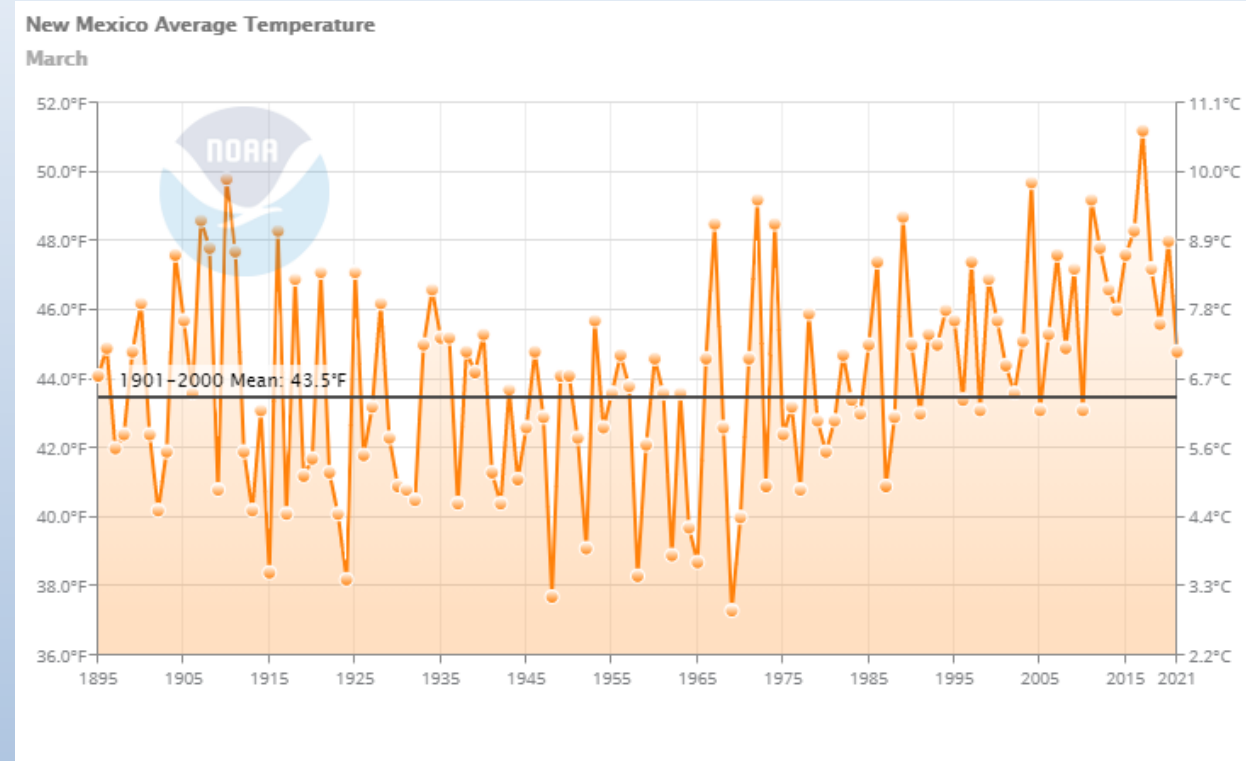
March 2021 Climate Summary

Statewide Temperature & Precipitation Trends

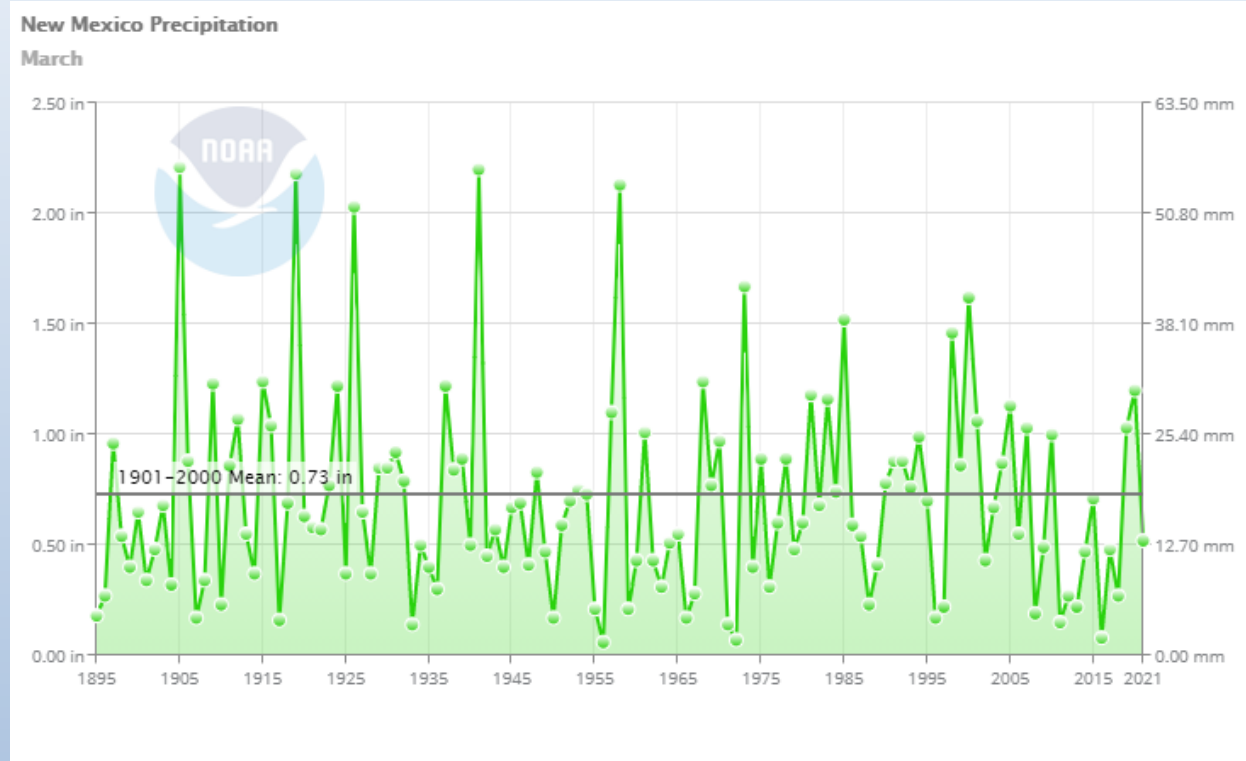
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Temperature



Precipitation



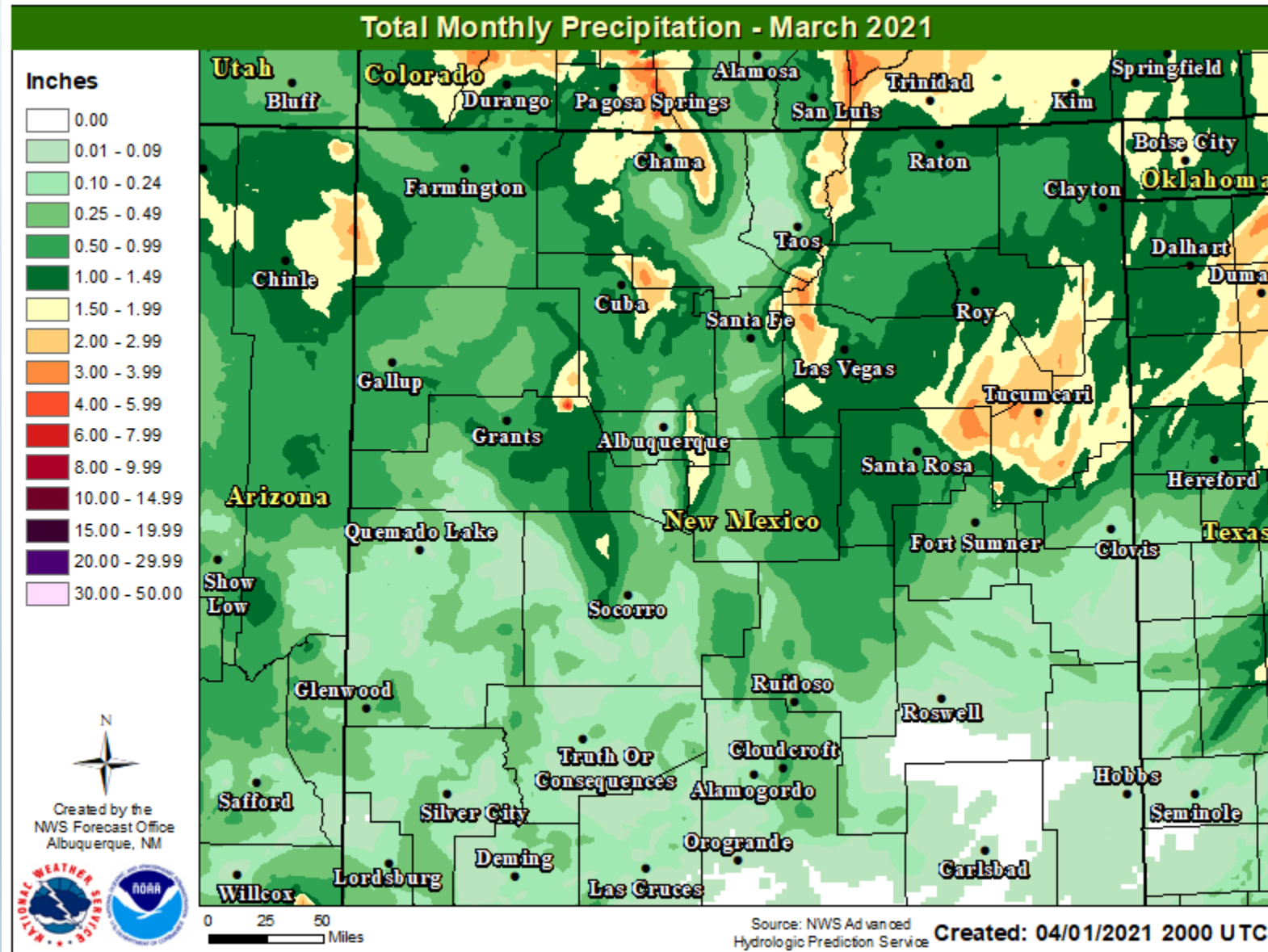
The average statewide temperature was 44.8°, which was 1.3° above the long-term normal of 43.5° (1901-2000). This ranked as the 77th warmest March on record.

The average statewide precipitation was 0.52", which was 0.21" below the long-term normal of 0.73" (1901-2000). This ranked as the 52nd driest March on record.

March 2021 Climate Summary

Monthly Precipitation

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Albuquerque, NM
Issued January 8, 2022 6:39 PM MDT



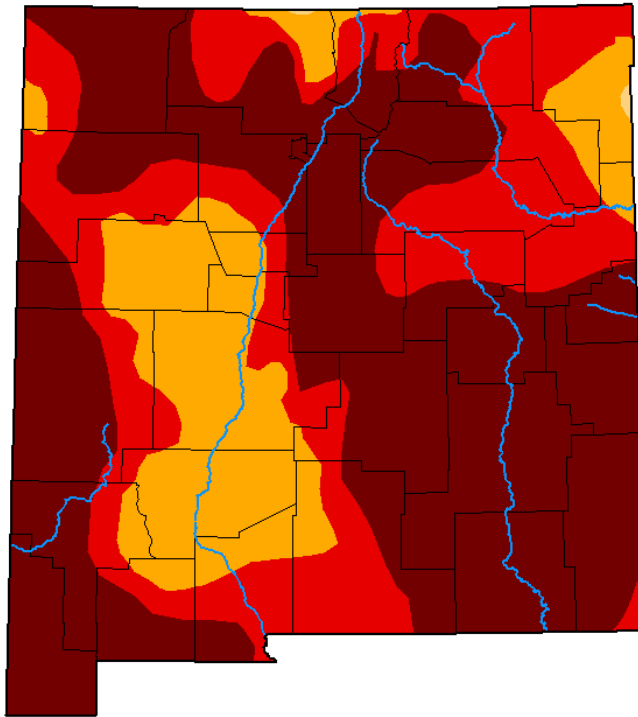
Here is a more detailed image of the March 2021 precipitation.



March 2

March 30

U.S. Drought Monitor New Mexico



March 2, 2021

(Released Thursday, Mar. 4, 2021)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	99.91	82.18	54.15
Last Week 02-23-2021	0.00	100.00	100.00	99.91	82.03	54.24
3 Months Ago 12-01-2020	0.00	100.00	100.00	99.59	82.26	53.27
Start of Calendar Year 12-29-2020	0.00	100.00	99.97	99.59	82.26	53.20
Start of Water Year 09-29-2020	0.00	100.00	99.92	73.65	39.88	2.90
One Year Ago 03-03-2020	44.24	55.76	28.52	11.40	0.00	0.00

Intensity:

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

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>

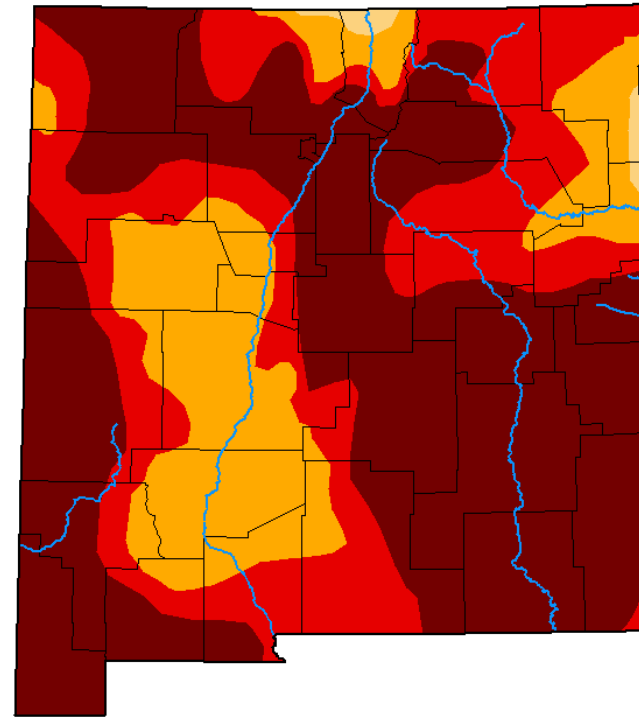
Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor New Mexico



March 30, 2021

(Released Thursday, Apr. 1, 2021)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	99.35	79.88	53.28
Last Week 03-23-2021	0.00	100.00	100.00	99.68	80.21	53.38
3 Months Ago 12-29-2020	0.00	100.00	99.97	99.59	82.26	53.20
Start of Calendar Year 12-29-2020	0.00	100.00	99.97	99.59	82.26	53.20
Start of Water Year 09-29-2020	0.00	100.00	99.92	73.65	39.88	2.90
One Year Ago 03-31-2020	55.74	44.26	26.25	11.40	0.00	0.00

Intensity:

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

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>

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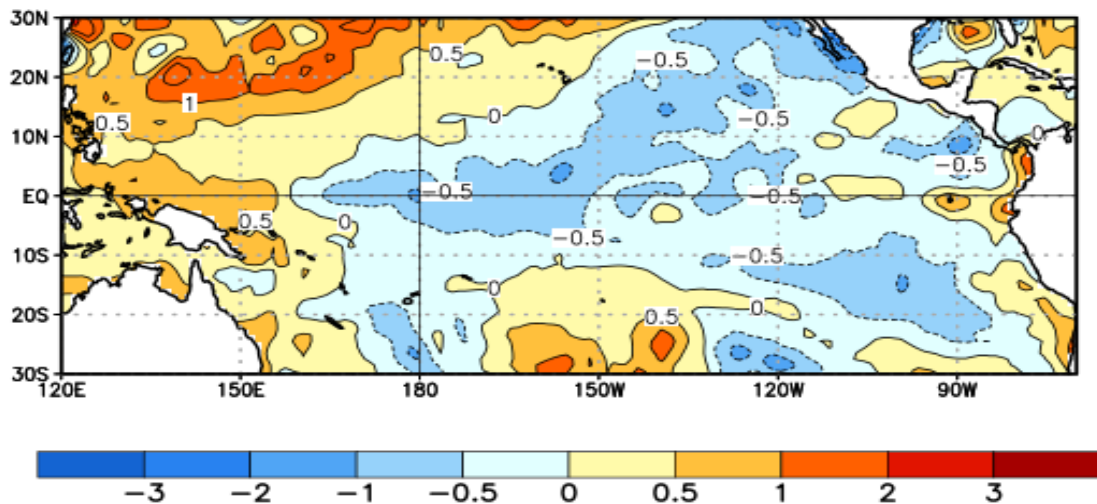


droughtmonitor.unl.edu

Little change occurred to drought conditions through much of March 2021. There was a little improvement in the northern mountains and northeast. Extreme to exceptional drought covers just under 80% of the state, of which over 53% is exceptional.



Average SST Anomalies
28 FEB 2021 – 27 MAR 2021



EQ. Subsurface Temperature Anomalies (deg C)

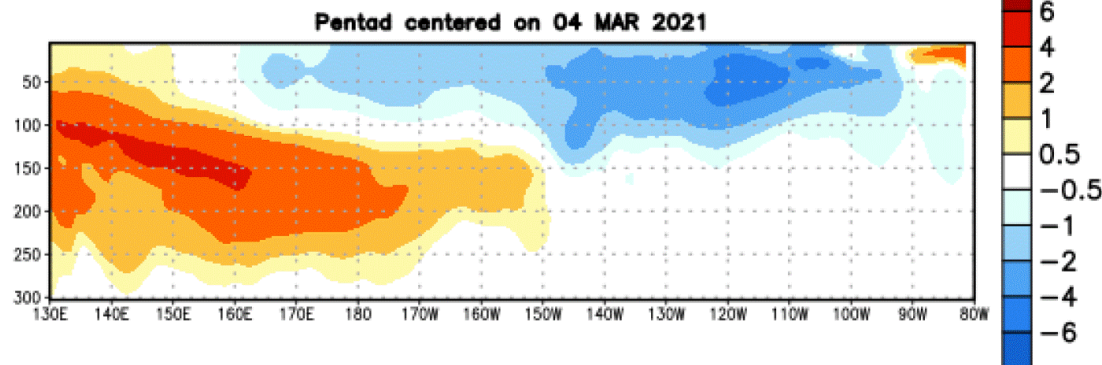


Figure 4. Depth-longitude section of equatorial Pacific upper-ocean (0-300m) temperature anomalies ($^{\circ}\text{C}$) centered on the pentad of 4 March 2021. Anomalies are departures from the 1991-2020 base period pentad means.

EQ. Upper-Ocean Heat Anoms. ($^{\circ}\text{C}$) for 180–100W

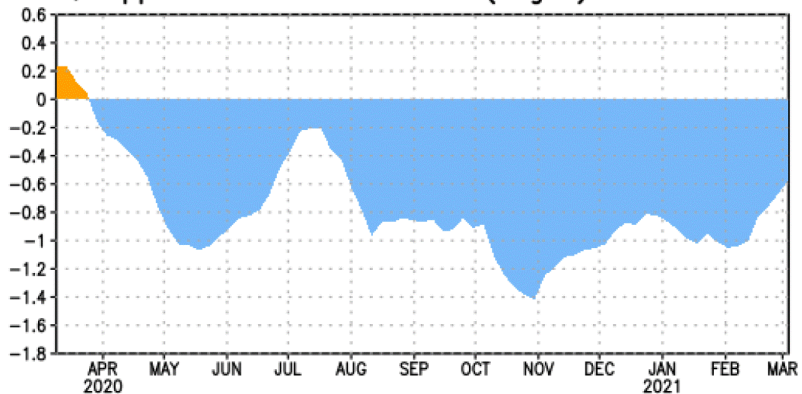
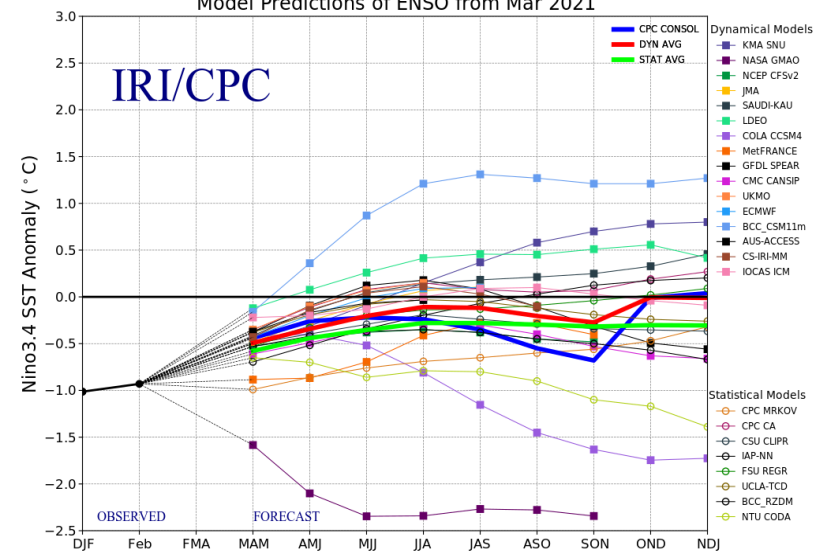


Figure 3. Area-averaged upper-ocean heat content anomaly ($^{\circ}\text{C}$) in the equatorial Pacific (5°N - 5°S , 180° - 100°W). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

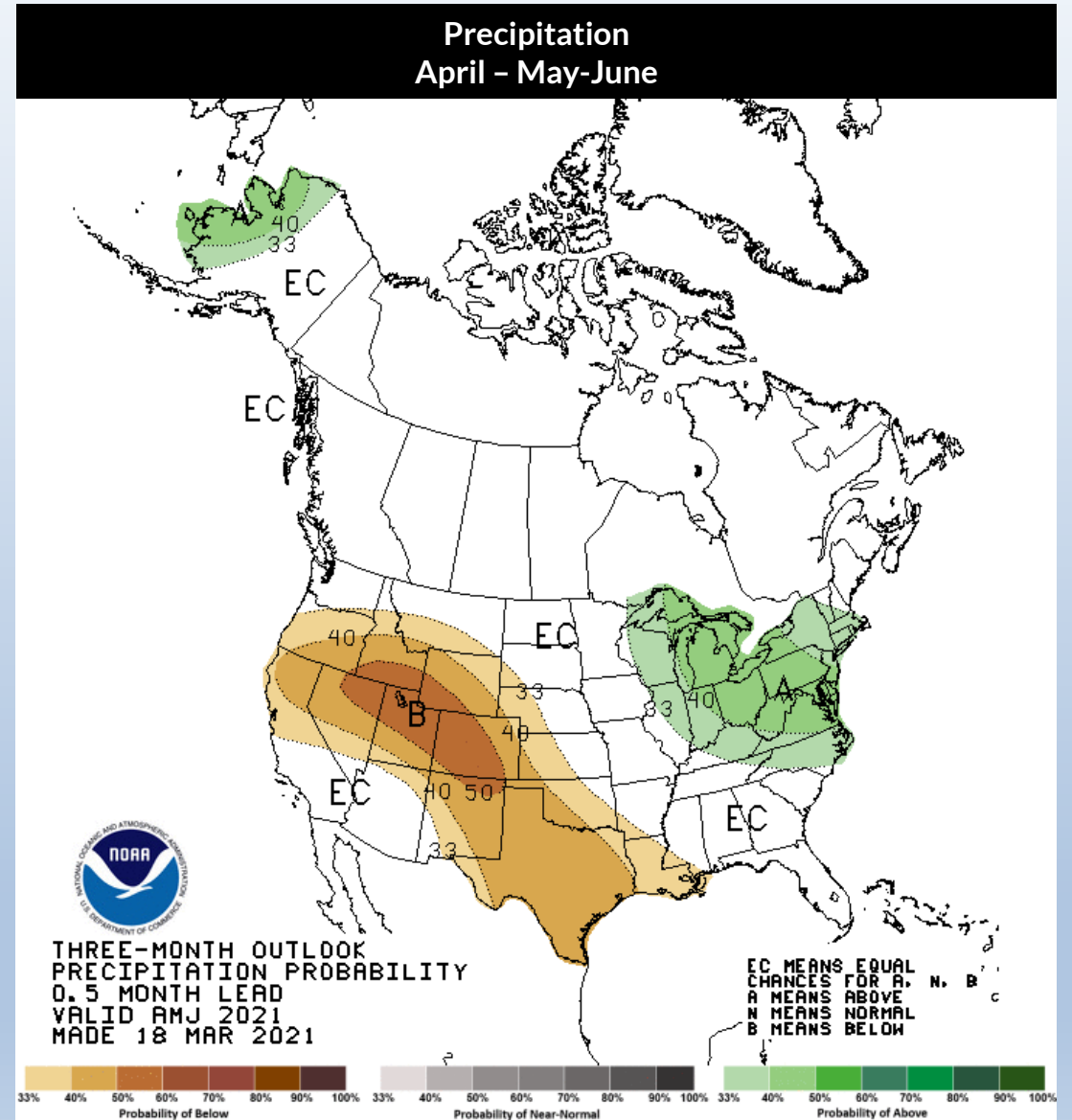
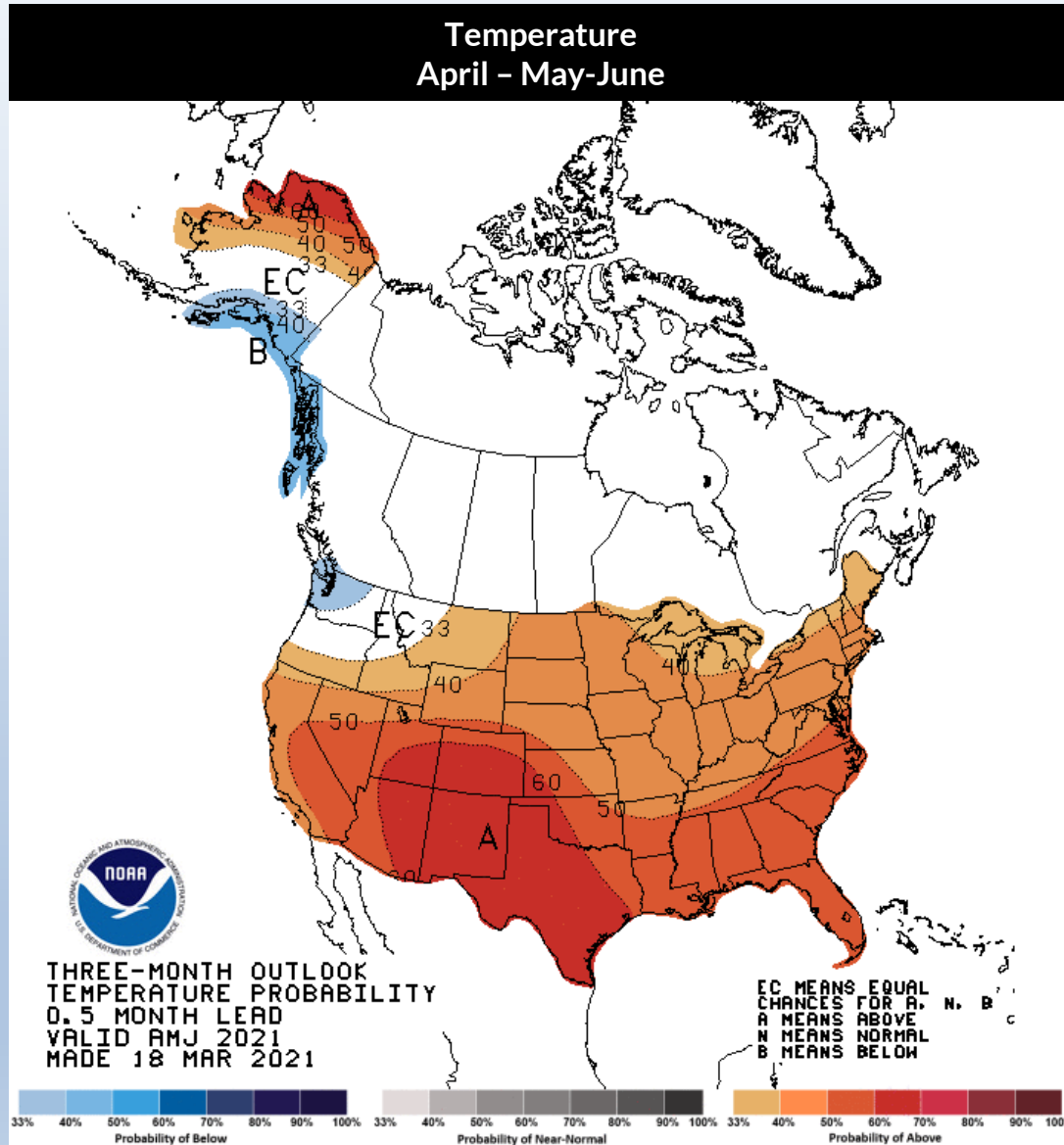
Model Predictions of ENSO from Mar 2021



March 2021 Climate Summary

Temperature & Precipitation Outlook

Weather Forecast Office
Albuquerque, NM
Issued January 8, 2022 6:39 PM MDT



The three month climate outlook strongly favors above normal temperature probabilities while precipitation favors below normal probabilities, especially in the northeast. This outlook will favor persistent or worsening drought conditions over NM.

March 2021 Climate Summary

Albuquerque Sunport Temperatures

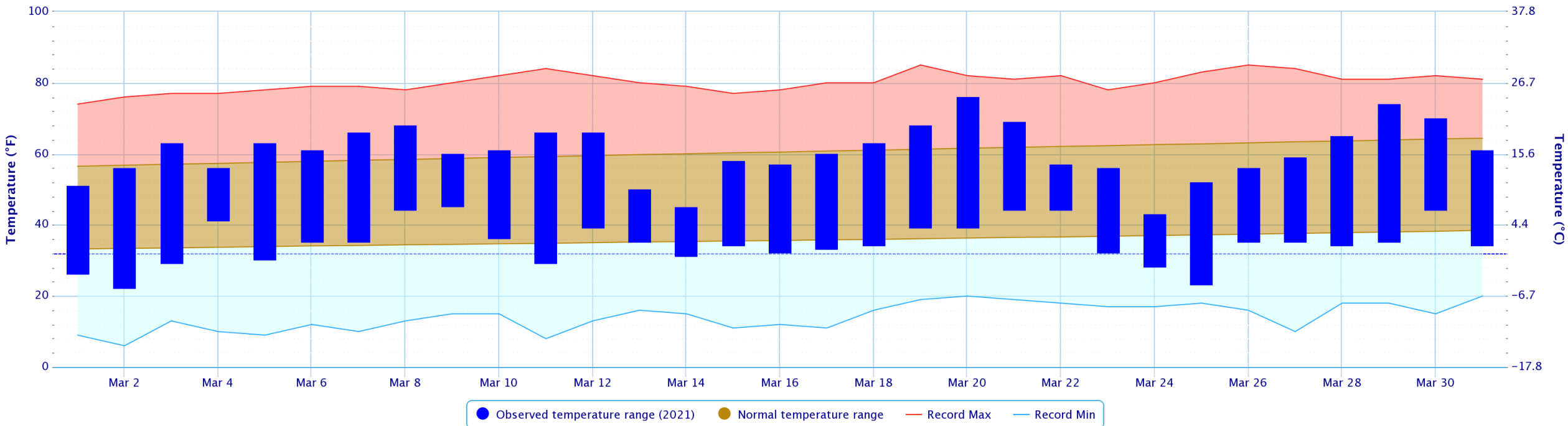
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Average Temperature = 47.6

Daily Temperature Data – Albuquerque Area, NM (ThreadEx)

Period of Record – 1891-12-01 to 2021-03-31. Normals period: 1981-2010. Click and drag to zoom chart.



Powered by ACIS

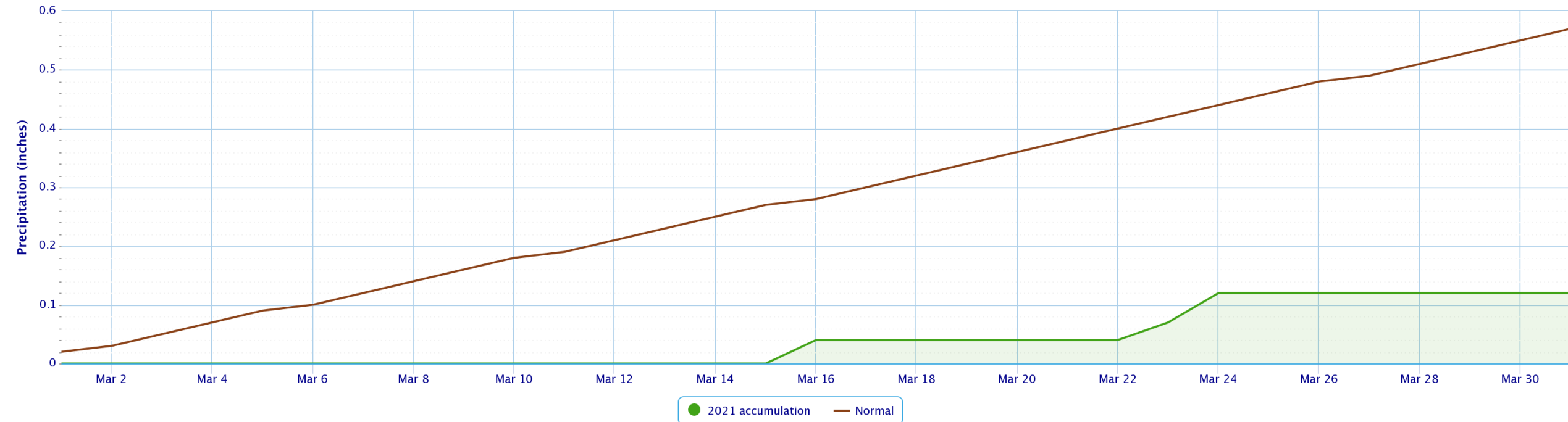
The average temperature for Albuquerque was 47.6°, which was 0.5° below the normal of 48.1°. The average maximum temperature for the month was 60.5°. This was exactly the normal average maximum temperature of 60.5°. The average minimum temperature for the month was 34.7°. This was 1.0° below the normal average minimum temperature of 35.7°. This March's average temperature was the 73rd coldest March on record (1892-2021).



Total Precipitation 0.12"

Accumulated Precipitation – Albuquerque Area, NM (ThreadEx)

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



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There was 0.12" of precipitation measured at the Sunport, compared to the normal of 0.57", or 0.45" below normal. This ranks as the 33rd driest March on record (1892-2021). Snowfall measured 0.5 inches, compared to the normal of 1.1 inches. This was tied for the 44th least snowiest March on record.

March 2021 Climate Summary

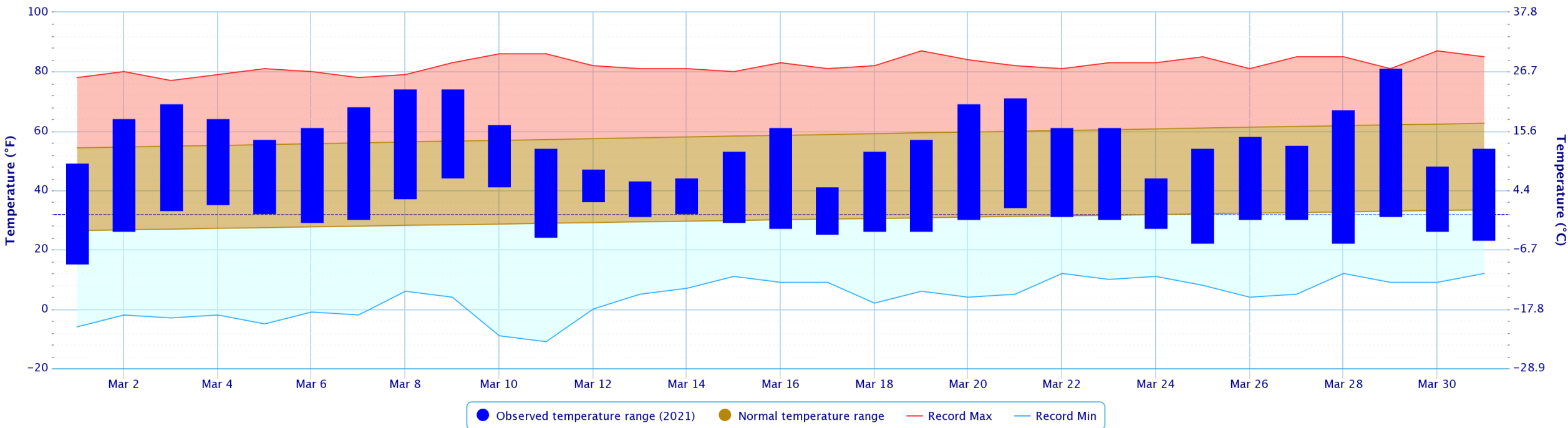
Clayton Temperatures



Average Temperature = 44.1

Daily Temperature Data – Clayton Area, NM (ThreadEx)

Period of Record – 1896-02-01 to 2021-03-31. Normals period: 1981-2010. Click and drag to zoom chart.



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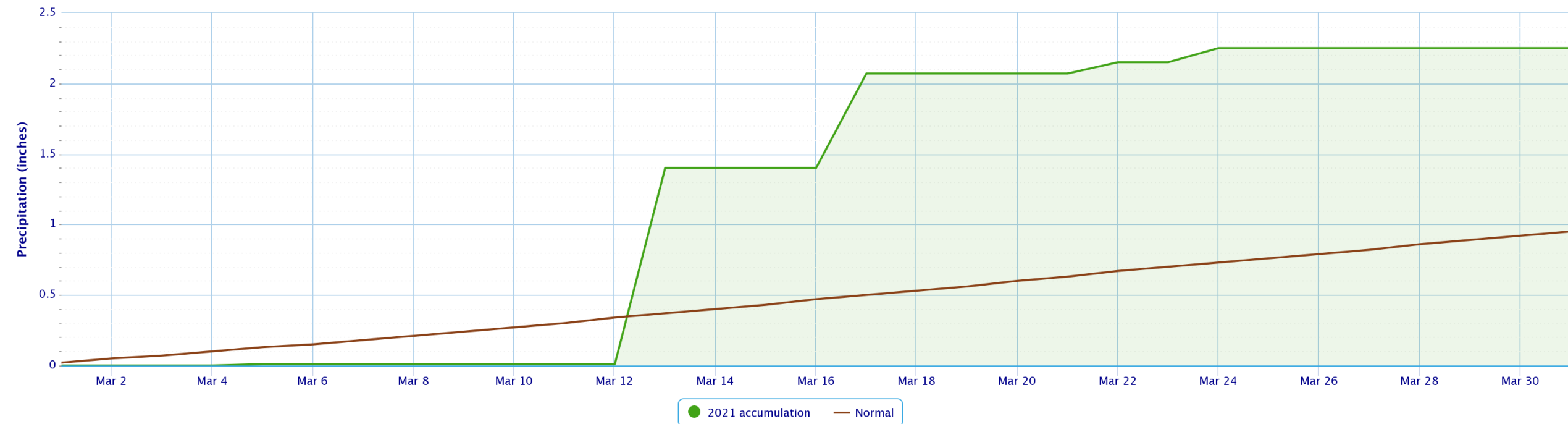
The average temperature for Clayton was 44.1°, which was 0.1° below the normal of 44.2°. The average maximum temperature for the month was 58.6°. This was 0.1° above the normal average maximum temperature of 58.5°. The average minimum temperature for the month was 29.5°. This was 0.5° below the normal average minimum temperature of 30.0°. March 2021 was the 58th coldest on record (1896-2021).



Total Precipitation 2.25"

Accumulated Precipitation - Clayton Area, NM (ThreadEx)

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



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There was 2.25" of precipitation measured at Clayton, which was 1.30" above the normal of 0.95". This was for the 9th wettest March on record (1896-2021)! Snowfall measured 6.0 inches, while the normal is 6.3 inches. This was tied for the 73rd snowiest March on record.

March 2021 Climate Summary

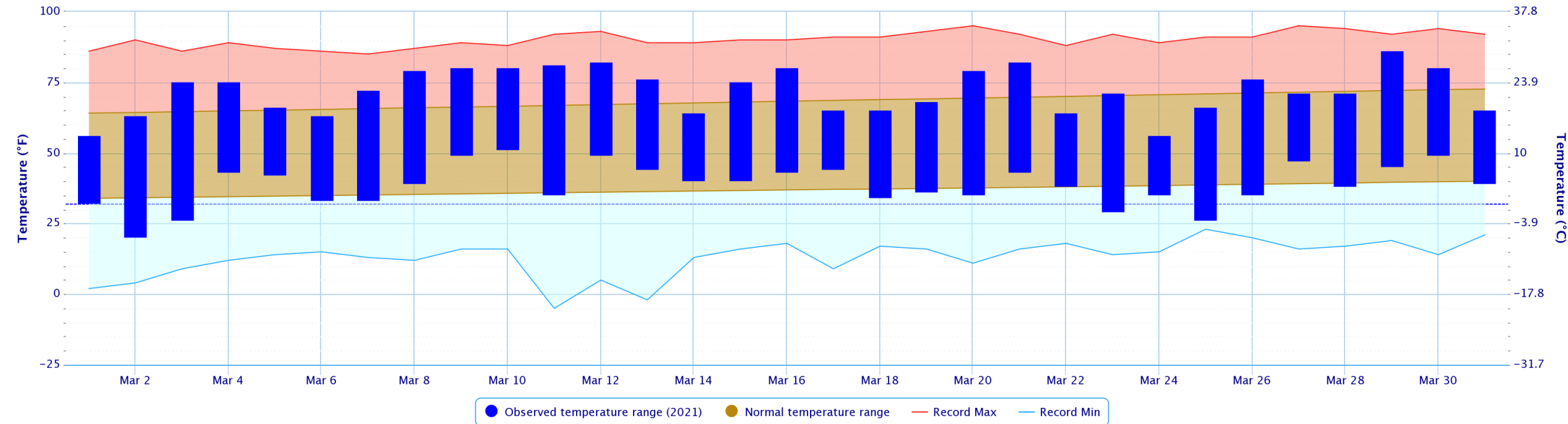
Roswell Temperatures



Average Temperature = 55.2

Daily Temperature Data – Roswell Area, NM (ThreadEx)

Period of Record – Max temperature: 1893-01-03 to 2021-03-31; Min temperature: 1893-01-21 to 2021-03-31. Normals period: 1981-2010. Click and drag to zoom chart.



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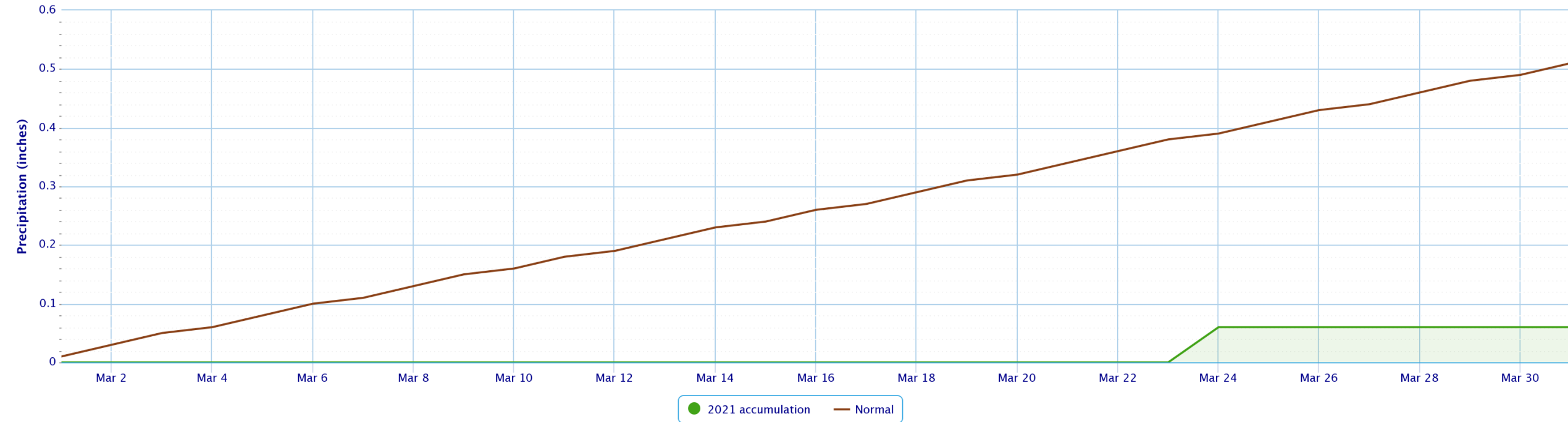
The average temperature for Roswell was 55.2°, which was 2.6° above the normal of 52.6°. The average maximum temperature for the month was 72.0°. This was 3.7° above the average maximum temperature of 68.3°. The average minimum temperature for the month was 38.5°. This was 1.6° above the normal average minimum temperature of 36.9°. This was the 20th warmest March on record (1893-2021).



Total Precipitation 0.05"

Accumulated Precipitation – Roswell Area, NM (ThreadEx)

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



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There was 0.06" of precipitation measured at Roswell, compared to the normal of 0.51", or 0.45" below normal. This ranks as a tie for the 36th driest March on record (1892-2021). There was no snowfall, compared to the normal of 1.2 inches. There have been 38 March's with no snow.

March 2021 Climate Summary

Severe Weather*

Weather Forecast Office
Albuquerque, NM
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Event Type	Date	County/Zone Name	Magnitude	Type	Event Narrative
Heavy Snow	3/13-3/14/2021	Tusas Mountains including Chama	13-17"		SNOTELs.
Heavy Snow	3/13-3/14/2021	Jemez Mountains	10-13"		SNOTELs.
Heavy Snow	3/13-3/14/2021	Northern Sangre de Cristo Mountains	20-27"		SNOTELs, Taos Ski Valley, and Red River.
Heavy Snow	3/13-3/14/2021	Southern Sangre de Cristo Mountains	15-20"		SNOTELs and Santa Fe Ski Basin.
High Wind	3/14/2021	Sandia/Manzano Mountains and Edgewood	42 kt	Sustained	Edgewood measured sustained winds of 40 to 48 mph.
High Wind	3/14/2021	Sandia/Manzano Mountains and Edgewood	50 kt	Gust	Edgewood measured a peak wind gust of 58 mph.
High Wind	3/14/2021	Estancia Valley	42 kt	Sustained	Estancia measured sustained winds of 40 to 48 mph.
High Wind	3/14/2021	Central Highlands	35 kt	Sustained	Duran measured sustained winds of 40 mph.
High Wind	3/14/2021	South Central Mountains	43 kt	Sustained	Capitan measured sustained winds of 40 to 50 mph.
High Wind	3/14/2021	South Central Mountains	52 kt	Gust	Capitan measured a peak wind gust of 60 mph.
High Wind	3/14/2021	Northeast Highlands	41 kt	Sustained	Los Montoyas measured sustained winds of 40 to 47 mph.
High Wind	3/14/2021	Guadalupe County	52 kt	Gust	Vaughn measured a peak wind gust of 60 mph.
High Wind	3/14/2021	Eastern Lincoln County	39 kt	Sustained	Corona measured sustained winds of 40 to 45 mph.
High Wind	3/14/2021	Eastern Lincoln County	54 kt	Gust	Corona measured a peak wind gust of 62 mph.
High Wind	3/14/2021	Quay County	38 kt	Sustained	Tucumcari measured sustained winds of 40 to 44 mph.
Hail	3/13/2021	Quay County	1"		Quarter size hail near Tucumcari.
Thunderstorm Wind	3/13/2021	Quay County	51 kt	Gust	Endee measured a thunderstorm wind gust of 59 mph.
Heavy Snow	3/16-3/17/2021	Sandia/Manzano Mountains and Edgewood	6-8"		Sandia Park to Sedillo and Ponderosa.
Heavy Snow	3/16-3/17/2021	Johnson & Bartlett Mesa, Raton Pass	3-64"		Raton Pass. Severe travel and road closures.
Blizzard	3/16-3/17/2021	Union County	4-5"		Raton to Clayton. Severe travel and road closures.
Heavy Snow	3/16-3/17/2021	Guadalupe County	9.1"		Newkirk measured 9.1 inches of snow.
Heavy Snow	3/16-3/17/2021	Curry County	6"		Broadview reported 6 inches of snow.
High Wind	3/16/2021	South Central Mountains	42 kt	Sustained	Ruidoso measured sustained wind speeds of 40 to 48 mph.
High Wind	3/16/2021	South Central Mountains	55 kt	Gust	Ruidoso measured 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/>

March 2021 Climate Summary

Severe Weather*








Weather Forecast Office
Albuquerque, NM
Issued January 8, 2022 6:39 PM MDT



Event Type	Date	County/Zone Name	Magnitude	Type	Event Narrative
High Wind	3/16/2021	Chaves County Plains	40 kt	Sustained	Roswell measured sustained winds of 40 to 46 mph.
High Wind	3/16/2021	Chaves County Plains	52 kt	Gust	Roswell measured a peak wind gust of 60 mph.
High Wind	3/16/2021	Eastern Lincoln County	50 kt	Gust	Corona measured a peak wind speed of 58 mph.
High Wind	3/16/2021	Southwest Chaves County	36 kt	Sustained	Dunken measured a 42 mph sustained wind.
High Wind	3/16/2021	Southwest Chaves County	54 kt	Gust	Dunken measured a peak wind gust of 62 mph.
Hail	3/22/2021	Chaves County	0.75"		Penny size hail around Roswell.
High Wind	3/24/2021	Middle Rio Grande Valley / ABQ	59 kt	Gust	ABQ metro. Tree damage and power outages from canyon wind.
Heavy Snow	3/23-3/24/2021	Northwest Highlands	6"		
Heavy Snow	3/23-3/24/2021	West Central Highlands	7-14"		Prewitt to Gallup and Grants.
Heavy Snow	3/23-3/24/2021	West Central Highlands	10"		San Fidel.
Heavy Snow	3/23-3/24/2021	Tusas Mountains including Chama	7-10"		SNOTELs.
Heavy Snow	3/23-3/24/2021	Jemez Mountains	8-12"		Ponderosa and Valles Caldera.
Heavy Snow	3/23-3/24/2021	Northern Sangre de Cristo Mountains	8-17"		SNOTELs, Taos Ski Valley, and Red River.
Heavy Snow	3/23-3/24/2021	Southern Sangre de Cristo Mountains	8-18"		SNOTELs and Santa Fe Ski Basin.
Heavy Snow	3/23-3/24/2021	East Slopes Sangre de Cristo Mountains	8-16"		Gascon to Angel Fire.
Heavy Snow	3/23-3/24/2021	Sandia/Manzano Mountains and Edgewood	6-12"		Sandia Park to Sedillo and Miera.
Winter Weather	3/23-3/24/2021	Estancia Valley			Moriarty. Severe travel and road closures.
Heavy Snow	3/23-3/24/2021	Central Highlands			Clines Corners. Severe travel and road closures.
Heavy Snow	3/23-3/24/2021	South Central Highlands	8"		Corona.
Heavy Snow	3/23-3/24/2021	Johnson & Bartlett Mesa, Raton Pass	9"		Vermejo Park.
Heavy Snow	3/23-3/24/2021	Far Northeast Highlands	9-12"		Wagon Mound.
Heavy Snow	3/23-3/24/2021	Northeast Highlands	11.8"		San Pablo.
Heavy Snow	3/24/2021	Guadalupe County	5-8"		Severe travel and road closures.
Heavy Snow	3/24/2021	Eastern Lincoln County	8"		Southeast of Corona.

*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/>
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