How to Obtain and Analyze Data from CoCoRahs

(AACD Technical Reference #C-3C)

E. Lamar Smith, PhD

This is an example of how rainfall data can be collected and stored using CoCoRaHS. To find out more about CoCoRaHS, or to join it, just login to https://cocorahs.org/.

Once you have an account (it doesn't cost anything) with CoCoRaHS you have to log in once each day to record your data. The screen looks like this:

The date and time are already in the report. CoCoRahs likes a standard reporting time, if possible, but you can deviate from that if necessary. There is also a "multi day" report for times when you miss a day or more. You can make any observations you like. The additional questions and data types on the lower part of the form are desirable but not required.

Below shows the complete record of daily observations for your station. There is another list of multi-day observations. This list is available online so you don't have to keep your own records. It can be printed out.

COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK
"Because every drop counts"

Home | Countries | States | View Data | Maps   My Data | My Account | Logout

My Data Entry : List My Daily Precipitation Reports US Units ⌄

Enter My New Reports

- Daily Precipitation
- Multi-Day Accumulation
- Hail
- Significant Weather
- Monthly Zeros
- Condition Monitoring Report
- Soil Moisture

FROST Reports
- Frost
- Optics
- Snowflake
- Thunder

List/Edit My Reports

- Daily Precipitation
- Multi-Day Accumulation
- Hail
- Significant Weather
- Condition Monitoring Report
- Soil Moisture

FROST Reports
- Optics
- Frost
- Snowflake
- Thunder

Showing 1 - 50 of 1275 Records.   <Back Page 1 ⌄ Next>

Date ▲	Time	Station Number	Station Name	Total Precip in.	New Snow in. ❄	New Snow in. ◯	Total Snow in. ❄	Total Snow in. ◯	State	County	Actions	Maps
2/24/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/23/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/21/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/20/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/19/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.08	5.0	NA	7.0	NA	TX	Edwards	🔍✏	Active | Static
2/18/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.30	2.5	NA	2.5	NA	TX	Edwards	🔍✏	Active | Static
2/17/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/14/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/13/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/10/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/9/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/8/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/7/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/6/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/5/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/4/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/3/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/2/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
2/1/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/31/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/30/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/29/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/28/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/27/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/26/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.00	0.0	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/25/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	0.03	NA	NA	NA	NA	TX	Edwards	🔍✏	Active | Static
1/24/2021	7:00 AM	TX-ED-28	Carta Valley 4.0 SSE	T	NA	NA	NA	NA	TX	Edwards	🔍✏	Active | Static

Chart of the 2020 water year (October 1, 2019 -September 30, 2020. The bar graph shows the total rainfall for each month. The line graph shows the estimated 30-year average for that month based on PRISM models.

2020 CoCoRaHS Water Year Summary for Station TX-ED-28

Station Number	TX-ED-28	Latitude	29.73257
Station Name	Carta Valley 4.0 SSE	Longitude	-100.656805
County	Edwards	Elevation	2043 feet

Monthly Prcp Totals Chart | Accumulated Prcp Chart | Daily Prcp Chart

Monthly Precipitation for the 2020 Water Year (Oct 2019 – Sept 2020)
Station. TX-ED-28 Carta Valley 4.0 SSE

Legend: Daily Prcp Monthly Total | Multiday Prcp Monthly Total | Snowfall Monthly Total | 30 Year Avg by PRISM
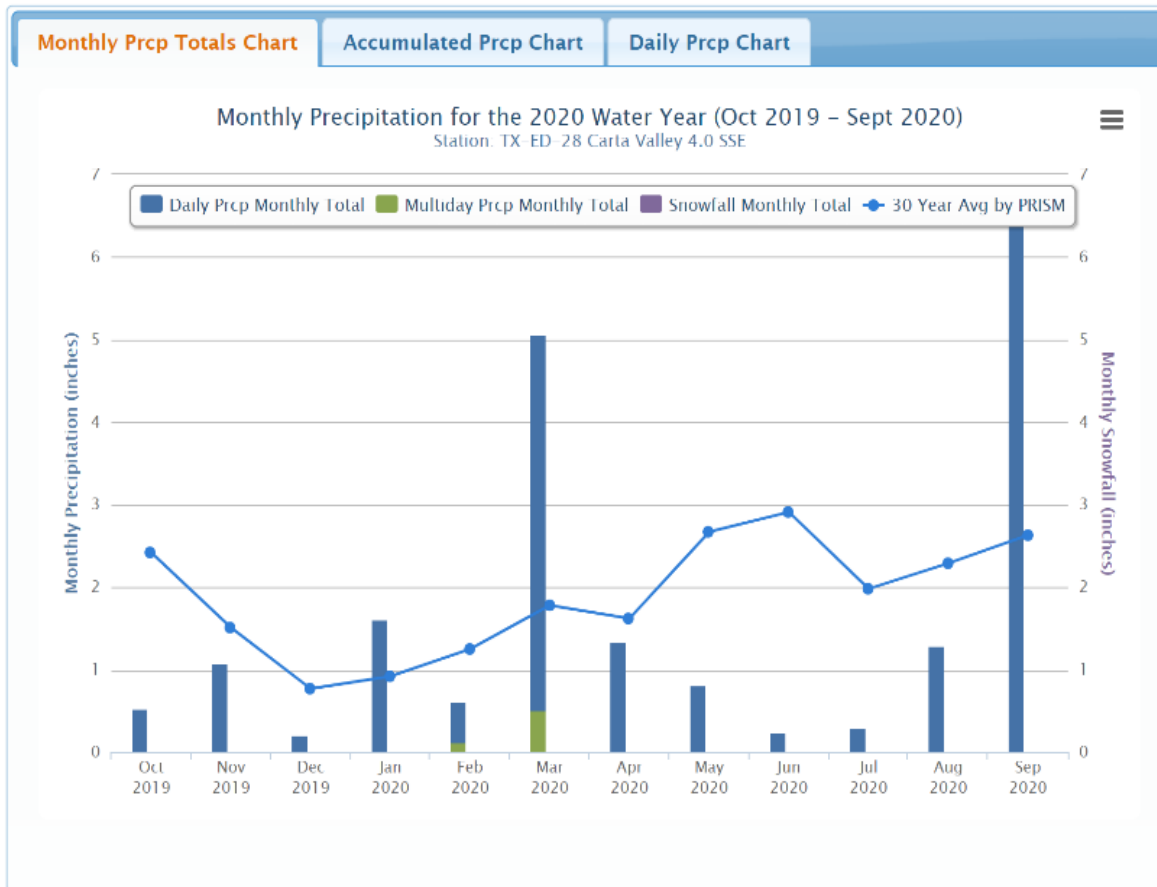
You can also obtain a detailed table for the water year that shows the monthly totals, monthly averages, and other information about the number of days with rain, etc. This type of analysis can be done for each water year for which you have records, i.e., it cannot provide this information for years before you started participating in the program. The estimated 30-year average for the year is 22.75 inches. In 2020 there was 19.61 inches total or 86% of average. However, 43% of it fell in two periods (March and September) with very little effective rain through the hot summer. This was a very poor year for forage growth and some juniper died from the dry conditions. Just shows how hard it is to really assess the effectiveness of precipitation.

You can analyze each water year (forage year) for which you have records. You can also get estimates of monthly precipitation based on PRISM data for your CoCoRahs station location for years before you started collecting CoCoRahs data
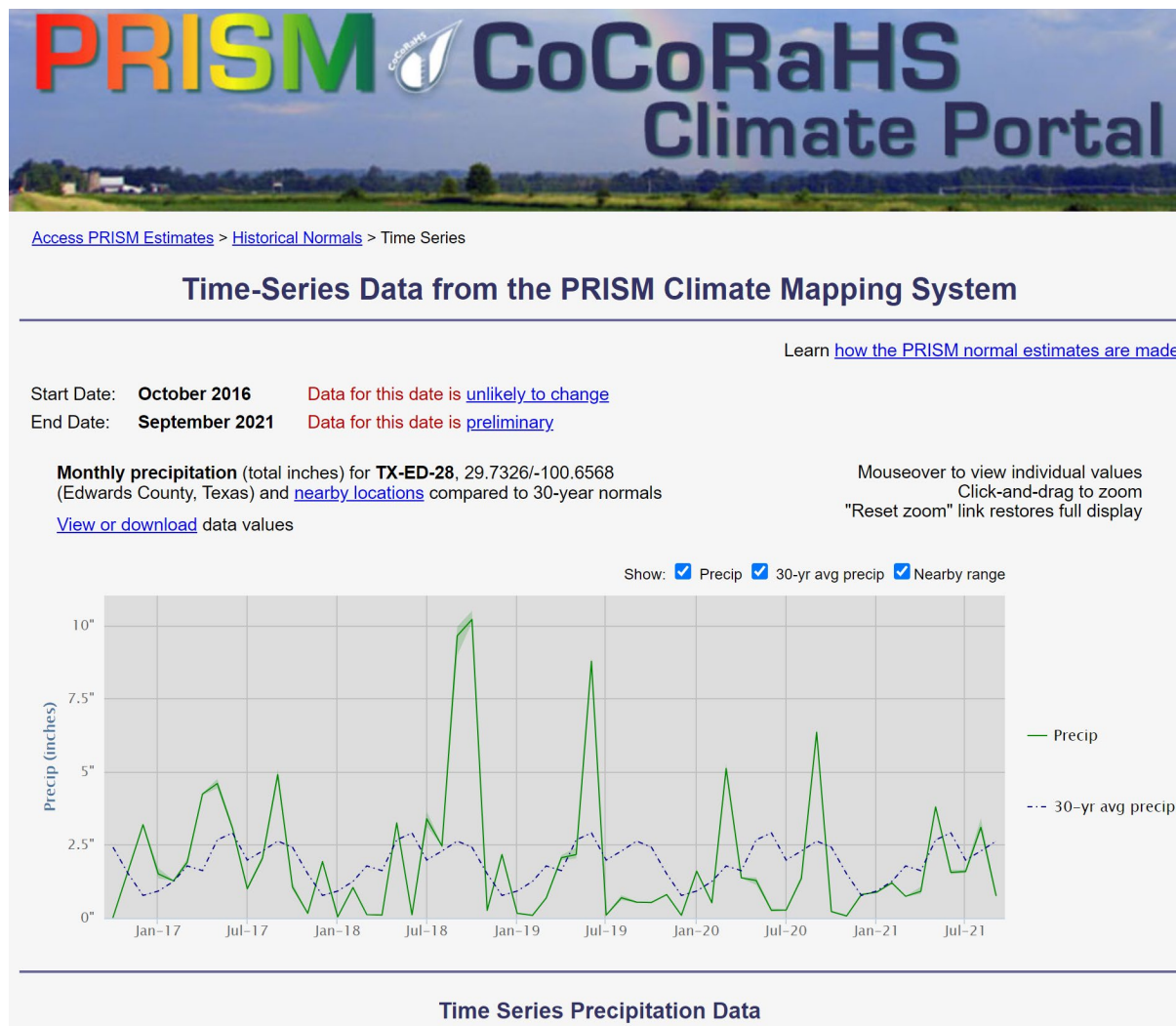
This graph shows monthly precipitation for the station compared to 30-year average for that month starting in October 2016 and ending in September 2021.