Under the Big Sky e-Letter
May 2020

A Peak Inside:

Join CoCoRaHS :

NWS Glasgow is looking for new CoCoRaHS volunteers.

Check out the CoCoRaHS webpage and tap the join button on the upper right. It is as easy as that!

CoCoRaHS observers report daily precipitation such as rain, hail, or snow from all across the country. The data are used by meteorologists, insurance adjusters, mosquito control, and even by those in academia.

Participating in the CoCoRaHS program is a great way to make a difference in your community. And the best part is that you only need a couple of things to get started such as a 4 inch rain gauge and a ruler or yardstick. Why not give it a try today?

30 Day Percent of Normal Precipitation (Montana)

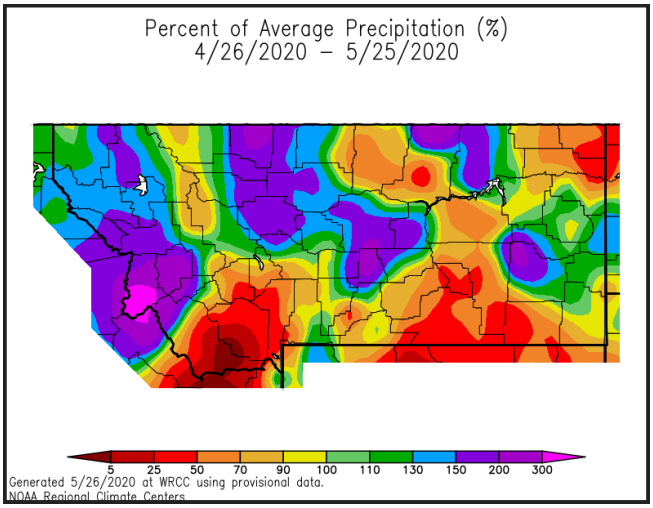

Figure 1: 30-day percent of normal precipitation across Montana.

30 Day Temperature Anomalies (Montana)

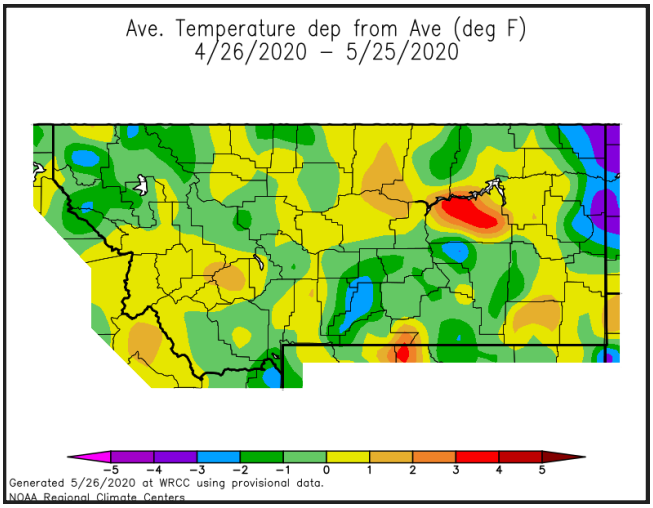

Figure 2: 30-day temperature anomalies across Montana.

Summary: Much of southern Montana saw precipitation that ranged below normal over the last 30 days. Portions of western and North Central Montana were largely wetter than normal. The rest of the state had more variability in above or below normal precipitation depending upon location. Temperatures, meanwhile, were colder than normal in the northeast, but ranged near normal to slightly below normal elsewhere.

Severe Weather Event on 5/20/2020

Severe weather season is off to a busy start this year across NE Montana. Thunderstorms erupted during the evening hours as a slow moving low pressure system tracked through the area. The storms brought numerous heavy rain and damaging wind reports to the area. For example, these storms downed at least 100 three phase power poles between Flowing Wells and Circle along Highway 200 according to McCone Electric Cooperative reports. The NWS Damage survey noted that there were some poles west of Brockway by about 3 miles that were snapped higher up the pole. Here, straight line winds were estimated between 105 and 110 mph. Property damage was also evident here such as a home nearby with half of a roof pulled up and blown north of the property.

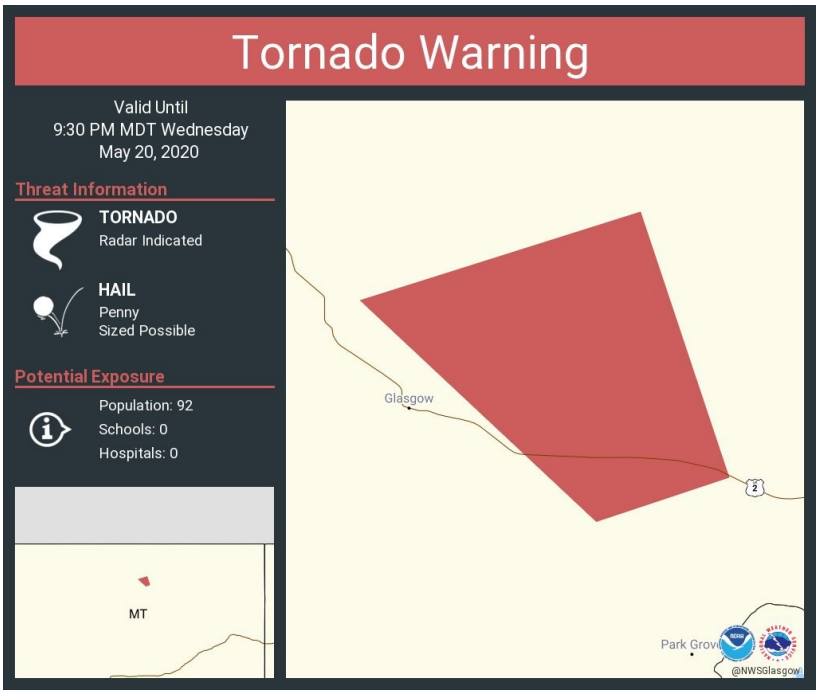

Figure 3: Tornado warning issued on 5/20/2020.

These storms also produced an EF-0 tornado near Whatley, or between Glasgow and Nashua. NWS Glasgow did a damage survey and you can read more about the tornado here.

All told, eight severe thunderstorms, one tornado warning, and one flood advisory were issued between 7:25 pm and 10:30 pm that evening.

Ask A Meteorologist

NWS Glasgow did an "Ask the Meteorologist" feature recently, check it out here. Also, be sure to check out SKYWARN in a Nutshell!

Hydrologic Summary (April 2020) by Greg Forrester, Lead Forecaster at NWS Glasgow:

It was a colder than normal month for temperatures over Northeast Montana. Temperatures averaged between 2 and 6 degrees below normal. Glasgow averaged 41.3 degrees which was 3.6 degrees below normal.

Precipitation was well below normal in most areas for the month. The dry spots were Scobey 4NW with 0.02 inch, Bredette and Malta 7E with 0.07 inch, and Homestead with 0.09 inch. The wet spots were Winnett 12SW with 1.72 inches, Flatwillow with 1.32 inches, and Wibaux with 1.28 inches.

Glasgow had 0.43 inch of precipitation which was 51 percent of normal.

Stream flow on the Milk, Yellowstone, Missouri, and Poplar Rivers was above normal for the entire month.

The Fort Peck Reservoir elevation rose to 2236.3 feet during the month. The reservoir was at 82 percent of capacity and 103 percent of the mean pool.

CPC Three Month Outlook: The Climate Prediction Center released its three month outlook for temperature and precipitation for June 2020 through August 2020 on May 21, 2020. The outlook calls for above normal temperatures to persist over the three month period across the state. Meanwhile, below normal precipitation is favored for most of Montana. The latest outlook in full detail is always available here. In addition, you can check out the Climate Prediction Center Interactive site! You can zoom in on our area, and navigate to see the climate outlook for your specific location. The pie charts on the left hand side can be particularly useful for assessing the outlook at your specific location.

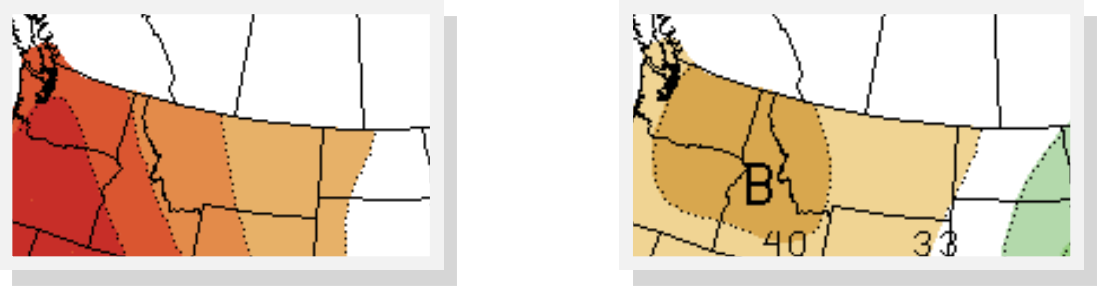

Figure 4: Climate Prediction Center three month temperature (left) and precipitation (right) outlook for June 2020 through August 2020.

Updated U.S. Drought Monitor: The latest U.S. Drought Monitor was released on Thursday May 28, 2020. As of that time, areas of abnormally dry conditions were present across portions of the state (see yellow shaded areas). In addition, a small concentration of moderate drought conditions were present over NW Montana. We'll have to wait and see how this evolves heading into the rest of the warm season with the three month outlook calling for a continuation of below normal precipitation.

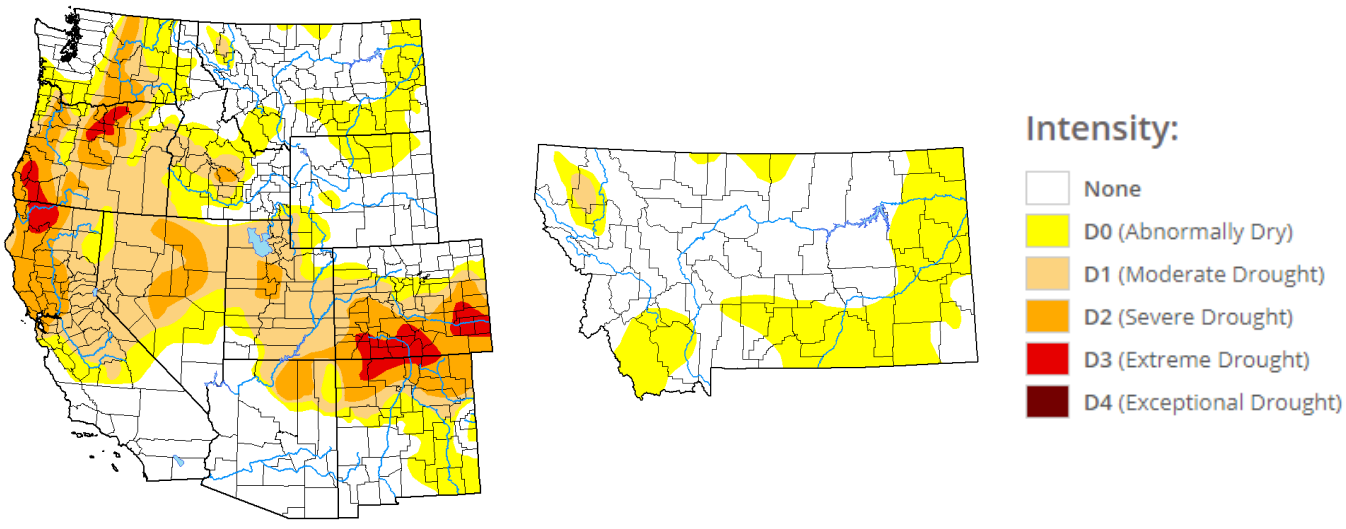

Figure 5: Latest Drought Monitor for the western U.S. (left) and Montana (right) released Thursday May 28, 2020.

U.S. & Global Climate Highlights (April): The U.S. & Global climate highlights for April 2020 have been released. A few points for you to take home are provided below.

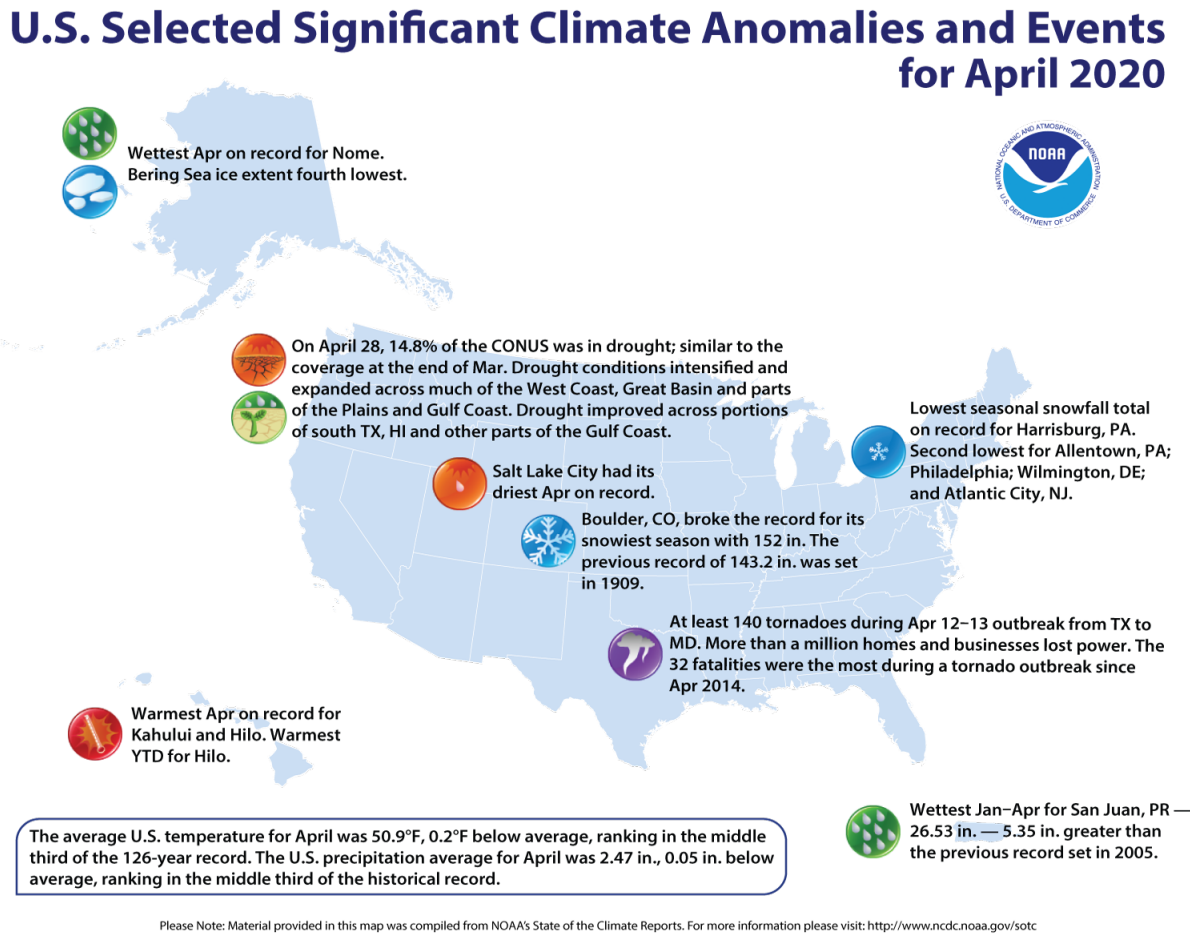

Figure 6: Climate highlights for April 2020, across the U.S.

U.S. Highlights for April 2020

1) The contiguous U.S. average temperature for April 2020 was 50.9 °F, in the middle third of the 126 year record.
2) The average March precipitation total for the contiguous U.S. came in at 2.46 inches. This ranks within the middle third of the existing period of record.
3) According to the U.S. Drought Monitor, 14.8% of the contiguous U.S. was in drought.

Global Highlights for April 2020

1) The February 2020 global land and ocean surface temperature departure from average was the 2nd-warmest on record (topped only by April 2016).
2) The global land only surface temperature departure was the second highest for any April on record.
3) The globally averaged sea surface temperature was the highest for any April on record.
4) ENSO neutral conditions were present during the month of April.

Precipitation Data (April 2020):

Station	Precipitation	Location
BAYM8	0.31	Baylor
BRDM8	0.07	Bredette
BTNM8	M	Brockton 17 N
BKNM8	0.29	Brockton 20 S
BKYM8	0.18	Brockway 3 WSW
BRSM8	M	Brusette
CLLM8	0.94	Carlyle 13 NW
CIRM8	0.36	Circle
CHNM8	0.33	Cohagen
COM8	0.17	Cohagen 22 SE
CNTM8	0.60	Content 3 SSE
CULM8	0.13	Culbertson
DSNM8	0.29	Dodson 11 N
FLTM8	1.32	Flatwillow 4 ENE
FPKM8	0.28	Fort Peck PP
GLAM8	0.37	Glasgow 14 NW
GGWM8	0.43	Glasgow WFO
GGSM8	0.76	Glasgow 46 SW
GNDM8	0.51	Glendive WTP
HRBM8	M	Harb
HINM8	0.33	Hinsdale 4 SW
HNSM8	0.10	Hinsdale 21 SW
HOMM8	0.09	Homestead 5 SE
HOYM8	0.24	Hoyt
JORM8	M	Jordan
LNDM8	0.27	Lindsay
MLAM8	0.65	Malta
MLTM8	0.07	Malta 7 E
MTAM8	0.22	Malta 35 S

Station	Precipitation	Location
MDCM8	M	Medicine Lake 3 SE
MLDM8	M	Mildred 5 N
MSBM8	0.57	Mosby 4 ENE
OPNM8	M	Opheim 10 N
OPMM8	0.11	Opheim 12 SSE
PTYM8	0.31	Plentywood
PTWM8	0.13	Plentywood 1 NE
POGM8	0.67	Port of Morgan
RAYM8	M	Raymond Border Station
SAOM8	0.11	Saco 1 NNW
SMIM8	0.25	St. Marie
SAVM8	0.33	Savage
SCOM8	0.02	Scobey 4 NW
SDYM8	0.14	Sidney
SIDM8	0.11	Sidney 2S
TERM8	0.48	Terry
TYNM8	M	Terry 21 NNW
VIDM8	M	Vida 6 NE
WSBM8	M	Westby
WTRM8	0.12	Whitewater
WHIM8	M	Whitewater 18 NE
WBXM8	1.28	Wibaux 2 E
WTTM8	0.84	Winnett
WNEM8	0.53	Winnett 6 NNE
WNTM8	1.09	Winnett 8 ESE
WITM8	1.72	Winnett 12 SW
WLFM8	0.24	Wolf Point
ZRTM8	1.27	Zortman

Links You May Like:

ENSO Update

Dangerous Humid Heat

NWS Seeks to Improve Weather Resilience within Deaf Community

U.S. Air Pollution Drops

Virtual Testing of New Forecasting Tools

Monthly Trivia: Last time we asked…

What is the difference between a water year and a regular year when it comes to precipitation total?

Answer: Precipitation for the year is ordinarily reported as anything that has occurred since January 1. However, Precipitation for the water year is reported between October 1 and September 30. Generally, much of the precipitation that occurs in the colder months falls as snow or ice, and so doesn't drain until the warmer months occur.

New Question: Since we are in the spirit of severe weather season, this time we are asking: What's the difference between straight line wind damage and tornado damage?

May 2020 Climate Graphs for Glasgow, MT

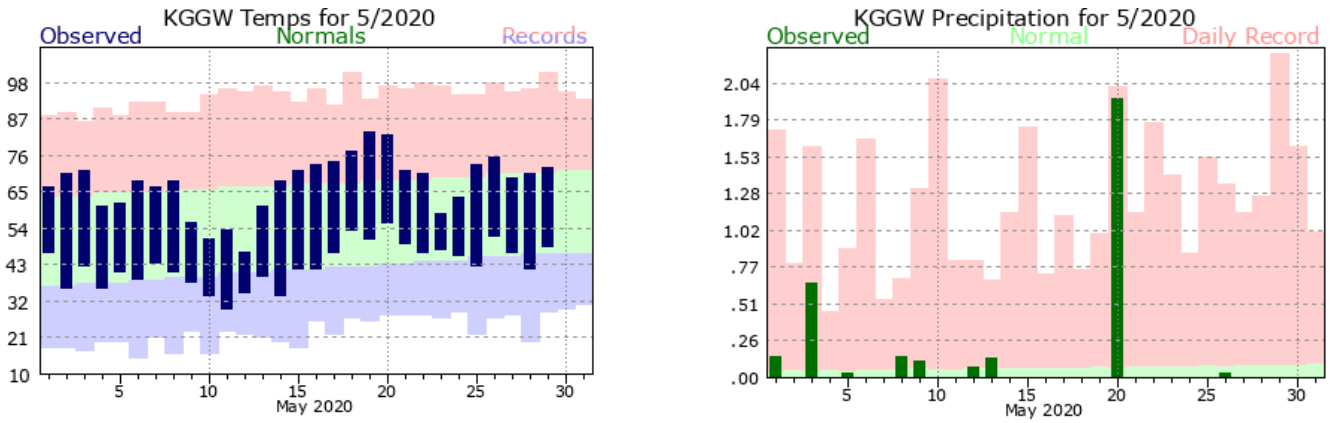

Figure 7: Climate graphs for Glasgow, MT in May 2020: Temperature (left) and precipitation (right).

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