Colorado State University, Fort Collins, CO Weather Station Monthly Summary Report

Month: April Year: 2022



Temperature:

Mean T_{max} was 65.2°F which is 2.7° above the 1991-2020 normal for the month. This is the 20th warmest (86th percentile) in the 134-year record (1889-2022). The last April this warm or warmer was 2012 with 69.9°F.

Mean T_{min} was 34.6°F which is 0.8° below the 1991-2020 normal for the month. This is the 89th coolest (66th percentile) in the 134-year record (1889-2022), tied with 1940. The last April this cool or cooler was 2021 with 32.4°F.

Mean T_{mean} was 49.9°F which is 0.9° above the 1991-2020 the normal for the month. This is the 24th warmest (82nd percentile) in the 134-year record (1889-2022), tied with 1889. The last April this warm or warmer was 2019 with 50.2°F.

The maximum daily temperature for the month was 86°F and occurred on April 22, 2022.

The minimum daily temperature for the month was 12°F and occurred on April 13, 2022.



Figure 1: April temperature time series.

Misc. Temperature (record status, thresholds, etc.):

Maximum Temperature Record:

March 22, 2022: The maximum daily temperature for the day of 86°F beat the old record of 84°F set in 1989.

Precipitation and Snowfall:

Total monthly precipitation was 0.11" which is 1.99" below the 1991-2020 normal for the month (5% of normal). This ranks as the 3^{rd} driest in the 134-year record (1889-2022). The driest April on record was 1908 with a 0.05" and the second driest on record was 1925 with 0.10" of precipitation.

Water Year 2022 precipitation through April totaled 3.92" which is 2.83" below the 1991-2020 normal (58% of normal). This ranks as 22nd driest start to a water year (16th percentile) in the 133-year record (1890-2022). The last water year to start this dry or drier was 2002 with 3.61" of precipitation through April.

Total monthly snowfall for April was 0". Normal snowfall in April is 6.2". This was the 14th April with no snowfall, the last was 1992. 2006 and 2012 saw a trace of snowfall.

Seasonal Snowfall for the 2022 snow season totaled 44.1" through April. This is 5.7" below the 1991-2020 normal (89% of normal). This ranks as the 62nd least snowy through April (46th percentile). The last season with this little snowfall was the 2018 snow season with 35" of snow through April.

April had 2 days with measurable precipitation (≥ 0.01 ") and 3 days with a trace of precipitation (≤ 0.01 ").



Figure 2: April precipitation (left) and snowfall (right) time series.

Misc. Precipitation (predominant type, record status, etc.):

No precipitation or snowfall records for April 2022

Days with Snow Depth ≥ 1 inch

April had 0 days with 1" of snow or greater on the ground. This compares to a normal of 2 days in April.

This season has seen 55 days with 1" of snow or greater on the ground through the end of April. This compares to a normal of 44 days.

The highest one-day precipitation total for April 2022 was 0.09" falling on April 10th.



Figure 3: Daily Data for April 2022. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

Wind:

In April 2022 there were 24 days with maximum wind gusts ≥ 20 mph, 11 days ≥ 30 mph, and 3 days ≥ 40 mph.

The maximum daily wind gust for the month was 43 mph and occurred on April 22, 2022, at 1:06 PM MST from 130° (SE).



Figure 4: Number of days with wind gusts over 35 mph at the campus weather station. This graph illustrates just how windy it was this month having 7 days with gusts over 35 mph while we usually see no days or 1 day in April. This is from the automated data at the weather station going back to 1996. The wind data is collected from an anemometer mounted on a 10-meter tower at the weather station. This year is particularly amazing given how much trees and buildings on campus and around the weather station have grown.

Pan Evaporation:

Pan evaporation for April 2022 totaled 6.44". This is 1.73" above the normal for the month (137% of normal).

Additional graphs on following page!



Figure 5: April (top) and water year to date (bottom) precipitation and temperature data plot. Each dot plots monthly average temperature and precipitation at Fort Collins for the period of record. From left to right, monthly precipitation is shown on the x-axis, where the wettest years are plotted furthest to the right. Dot sizes are proportional to precipitation amounts. From bottom to top on the y-axis, average monthly temperature is shown, where the warmest years are plotted towards the top. The dots are also color coded with darker colors indicating higher temperatures. The horizonal and vertical dotted lines indicate the 1991-2020 normals. April shows up slightly warmer and much drier than normal. The water year through April shows up slightly warmer and quite a bit drier than normal.

