Colorado State University, Fort Collins, CO Weather Station

Monthly Summary Report

Month: February

Year: 2021



-10 degrees F at the weather station on the morning of February 15^{th} .

Temperature:

Mean T_{max} was 38.1°F which is 8.4° below the 1981-2010 normal for the month. This is the 20^{th} coldest in the 133-year record (1889-2021). The last February this cold or colder was 1978 with 37.1°F.

Mean T_{min} was 14.8°F which is 6.1° below the 1981-2010 normal for the month. This is the 37th coldest in the 133-year record (1889-2021), tied with 1965. The last February this cold or colder was 1989 with 10.3°F.

Mean T_{mean} was 26.5°F which is 7.2° below the 1981-2010 the normal for the month. This is the 27^{th} coldest in the 133-year record (1889-2021). The last February this cold or colder was 1989 with 21.5°F.

Winter (December-February) mean temperature was 30.7°F which is 1.0° below the 1981-2010 normal for the season. This is the 87th coldest in the 132-year record (1890-2021), tied with 1890. The last winter season this cold or colder was 2014 with 29.9°F.

The maximum daily temperature for the month was 62°F and occurred on February 2, 2021.

The minimum daily temperature for the month was -11°F and occurred on February 15, 2021.

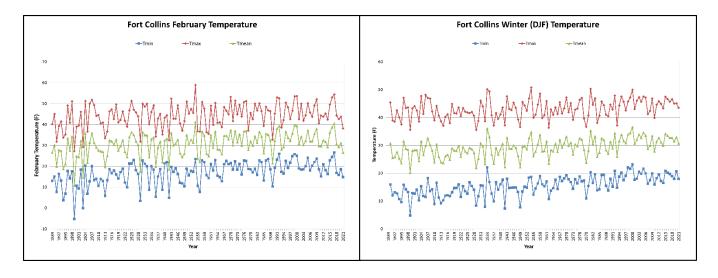


Figure 1: February (left) and winter (right) temperature time series.

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

Coldest Maximum Temperature:

February 13, 2021: The maximum temperature of $+6^{\circ}F$ set a new record coldest maximum temperature for the day. The previous record of $+8^{\circ}F$ was set in 1895 and 1903.

February 14, 2021: The maximum temperature of $+2^{\circ}F$ set a new record coldest maximum temperature for the day. The previous record of $+7^{\circ}F$ was set in 1900.

Freezing streak:

Between February 8 and 15 the temperature failed to get above the freezing mark. This 8 consecutive day streak of freezing is the 12th longest such streak. The last time we had a streak at least this long was 1985, when January 30 to February 7 (9 consecutive days) the temperature failed to get above freezing.

February 2021 was the coldest month seen at the Fort Collins Weather Station since December 2009, where the mean temperature was 24°F.

Precipitation and Snowfall:

Total monthly precipitation was 0.81" which is 0.41" above the 1981-2010 normal for the month (203% of normal). This ranks as the 26th wettest in the 133-year record (1889-2021). The last February this wet or wetter was 2016 with 1.01" of precipitation.

Water Year 2021 precipitation through February totaled 3.39" which is 0.18" above the 1981-2010 normal (106% of normal). This ranks as the 55th wettest start to a water year in the 132-year record (1890-2021), tied with 1915 and 1942. The last water year this wet or wetter through February was 2020 with 3.99" of precipitation.

Winter precipitation (December-February) totaled 1.61" which is 0.31" above the normal (124% of normal) for the season. This ranks as the 42nd wettest winter in the 132-year record (1890-2021). The last winter this wet or wetter was 2017 with 1.93" of precipitation.

Total monthly snowfall for February was 10.1" which is 3.2" above the 1981-2010 normal for the month (146% of normal). This ranks as the 39th snowiest February in the 133-year record (1889-2021). The last February with this much snowfall or more was 2020 with 14.1" of snowfall.

Seasonal Snowfall for the 2021 snow season totaled 43.5" through February. This is 7.2" above the 1981-2010 normal (120% of normal). This ranks as the 23rd snowiest start to a snow season. The last season to start with this much snow or more was the 2020 snow season with 51.2" of snow.

February had 7 days with measurable precipitation (≥ 0.01 ") and 8 days with measurable snowfall (≥ 0.1 ").

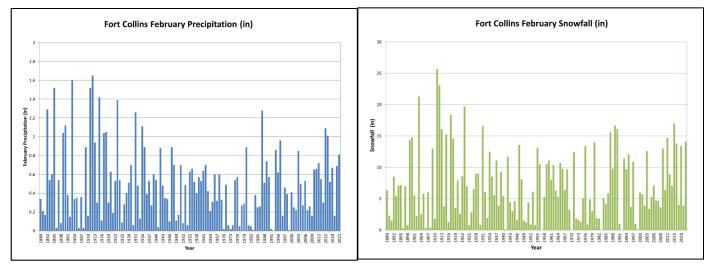


Figure 2: February precipitation (left) and snowfall (right) time series.

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

No precipitation records this February.

Days with Snow Depth ≥ 1 inch

February had 11 days with 1" of snow or greater on the ground. This compares to a normal of 8 days in February.

This season has seen 41 days with 1" of snow or greater on the ground through the end of February. This compares to a normal of 39 days.

The highest one-day precipitation total for February 2021 was 0.24" falling on February 25th. The highest one-day snowfall total for the month was 2.1" on February 25th.

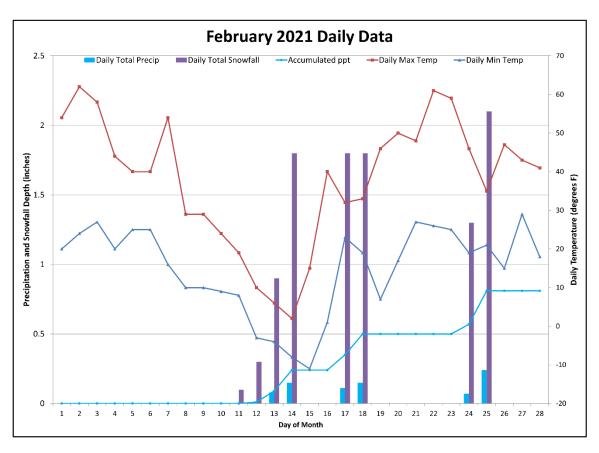


Figure 3: Daily Data for February 2021. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

Wind:

In February 2021 there were 12 days with maximum wind gusts \geq 20 mph and 4 days \geq 30 mph.

The maximum daily wind gust for the month was 33 mph and occurred on February 7, 2021 at 4:15 PM MST from 300° (NW).

Additional graphs on next page!

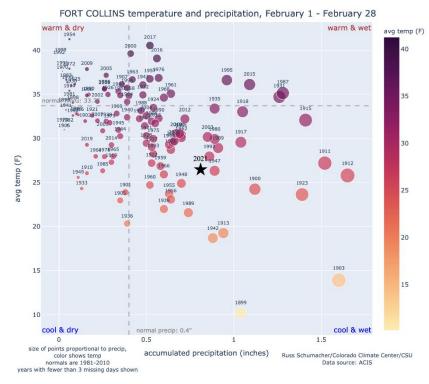


Figure 4: February (top) and winter season (bottom) precipitation and temperature data plot. Each dot plots monthly average temperature and precipitation at Fort Collins for the period of record. From left to right, monthly precipitation is shown on the x-axis, where the wettest years are plotted furthest 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 1981-2010 normals. Both February and winter 2021 show up slight cooler and wetter than average.

