Photo Credit: Russ Schumacher

ATMOSPHERIC SCIENCE

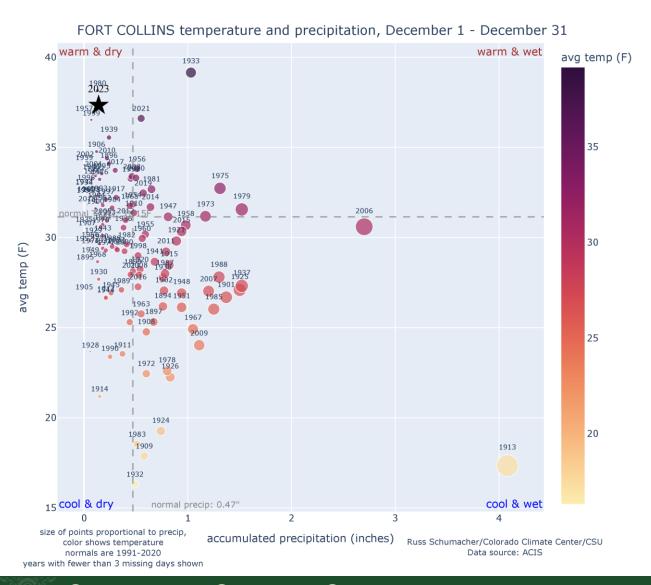
**COLORADO STATE UNIVERSITY** 

Fort Collins Weather Station Monthly Summary

December 2023



### Average December Temperature and Precipitation



The average air temperature for December 2023 was 37.3 °F, 6.2 °F above our 1991-2020 December normal (31.1 °F)

The last warmer December was 1980 (38.5 °F)

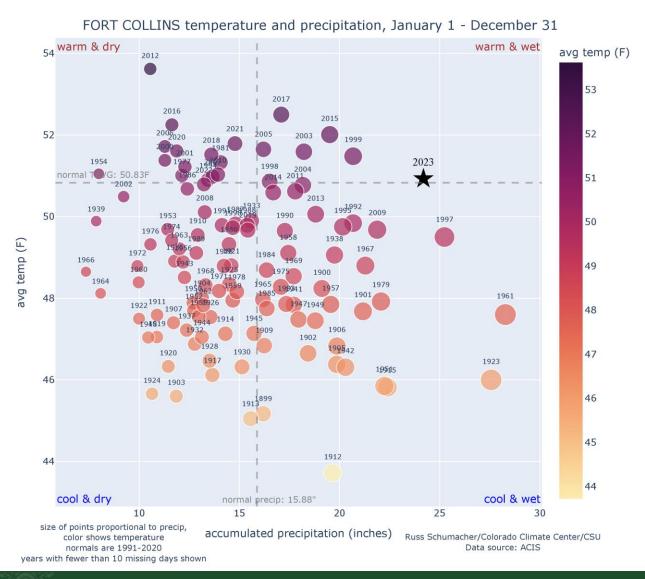
We received 0.14" of precipitation in December 2023, 30% of our 1991-2020 December normal (0.47")

The last drier December was 2018 (0.03").

#### COLORADO CLIMATE CENTER



### Average 2023 Temperature and Precipitation



The average air temperature for 2023 was 50.8 °F. This ties our 1991-2020 normal of 50.8 °F

The last warmer calendar year was 2021 (51.6 °F)

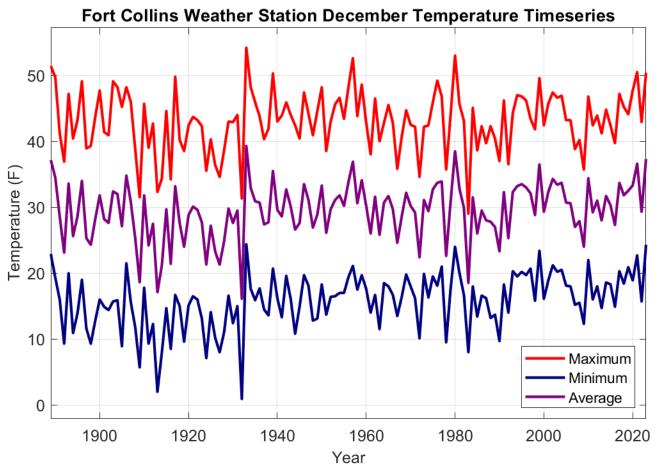
We received 24.36" of precipitation in 2023, 153% of our 1991-2020 normal (15.88").

The last wetter calendar year was 1997 (25.23")

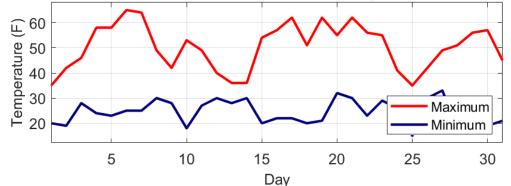
#### COLORADO CLIMATE CENTER



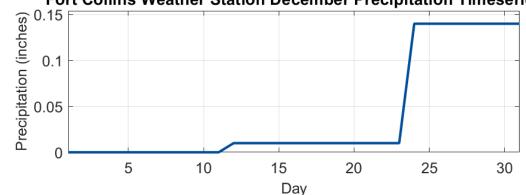
# December 2023 Time Series Graphics



Fort Collins Weather Station December Temperature Timeseries



Fort Collins Weather Station December Precipitation Timeseries



Highest Daily  $T_{max}\!\!:\,65\ ^\circ F$  on December  $6^{th}$ 

Lowest Daily T<sub>min</sub>: 15 °F on December 25<sup>th</sup>

Highest Daily Precipitation: 0.13" on December 24th

Highest Daily Snowfall: T on December 8<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, and 14<sup>th</sup>



## Additional December 2023 Statistics

		1991-2020		Depart from	Depart from POR	Last	
	Observed	Normal	POR Average	Normal	Average	Above	Last Below
Tmean °F	37.3	31.1	29.5	6.2	7.8	1980	2022
Mean(T <sub>max</sub> ) °F	50.4	43.9	43.1	6.5	7.3	2021	2022
Mean(T <sub>min</sub> ) °F	24.3	18.3	15.9	6	8.4	1933	2022
Precipitation "	0.14	0.47	0.47	-0.33	-0.33	2022	2018
Snowfall "	т	7.5	6.7	-7.5	-6.7	2022	1935

	Value	Date
Max(T <sub>max</sub> ) °F	65	6 <sup>th</sup>
Min(T <sub>max</sub> ) °F	35	1 <sup>st</sup> , 25 <sup>th</sup>
Max(T <sub>min</sub> ) °F	33	27 <sup>th</sup>
Min(T <sub>min</sub> ) °F	15	25 <sup>th</sup>
Max(Daily Precip)"	0.26	24 <sup>th</sup>
Max(Daily Snowfall)"	5.3	25 <sup>th</sup>
Peak Wind Gust (mph)	35.0	26 <sup>th</sup>

6
5
2
0
11
305
2127 MST

POR = period of record (1889-2023)



## **Records Broken**

We set a new highest minimum monthly temperature record for December of 15 °F. The previous highest minimum monthly temperature record for December was 13 °F in 1980. This is a full 32 °F warmer than our monthly minimum temperature last December of -17 °F. Our winters are warming due to climate change, but thankfully not at that rate! We'll likely see more cold air in January and February than we did this month.

No daily temperature or precipitation records were broken this month.

Christmas Day is the only day of the year where we have never recorded a daily minimum temperature at or above freezing. The record highest Christmas  $T_{min}$  is 29 °F (2021). Despite the mild weather, that record remained safe as Christmas morning was our coldest morning of the month (15 °F).

We only received a trace of snowfall in December 2023. The last time we received no measurable snowfall in December was 2002. We have seen several Decembers with zero snowfall: 1906, 1907, and 1935. None of these months were missing any data, but traces may not have been counted as carefully.

Despite the recent warm and dry conditions, 2023 was our 4<sup>th</sup> wettest calendar year on record. The only wetter years have been 1923, 1961, and 1997.



# **CONTACT US!**

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