



Weather & Climate Summary Yukon-Charley Rivers National Preserve Fall 2018

Photo: NPS, Ken Hill.

Eagle Fall Weather 2018

Highlights: Long-term climate records from Eagle allow us to put the fall of 2018 into context. Fall temperatures were warmer than normal, the seasonal precipitation total (rain and melted snow) was near normal, and it snowed a bunch in November.

September was cooler than normal in Eagle. The average temperature was 41.0°F compared to a normal of 41.8°F. A total of 1.29 inches of rain fell in September, which is just about normal.

Most locations in Alaska experienced a warm October. Eagle was warmer than normal, but 2018 did not rank in the top ten warmest (it was the 16th warmest). The average monthly temperature was 29.2°F, which is +6.2°F warmer than normal. Two new record high temperatures were recorded during the month on October 17th and 24th. Total snowfall at 4.5 inches was ~40% of normal.

November temperatures remained on the warm side with an average monthly temperature that was +6.6°F warmer than normal at 9.6°F. A total of 24.5 inches of snow fell during the month, twice as much as normal and the 5th snowiest November on record (with 83 years of good observations).

The average fall temperature at Eagle was 26.6°F, which is +4.0°F above the 1981-2010 normal. The total fall precipitation was 3.44 inches, 115% of normal. The snowfall

total for the early season (July 1 to Nov 30) was 29.0 inches; 118% of normal. (Figures 1 and 2; Table 1, 2, and 3).

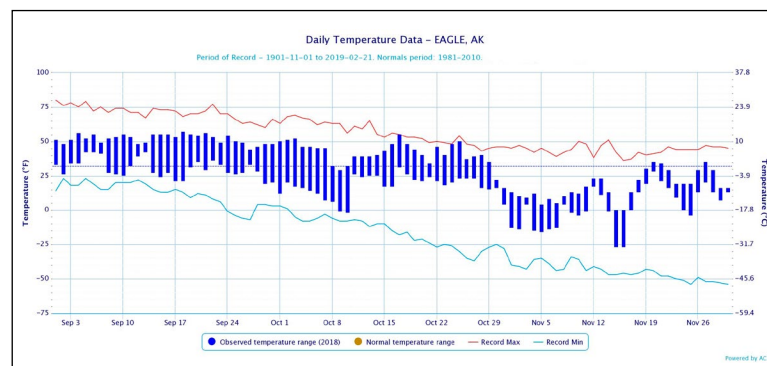


Figure 1. Fall 2018 daily temperatures at Eagle showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars).

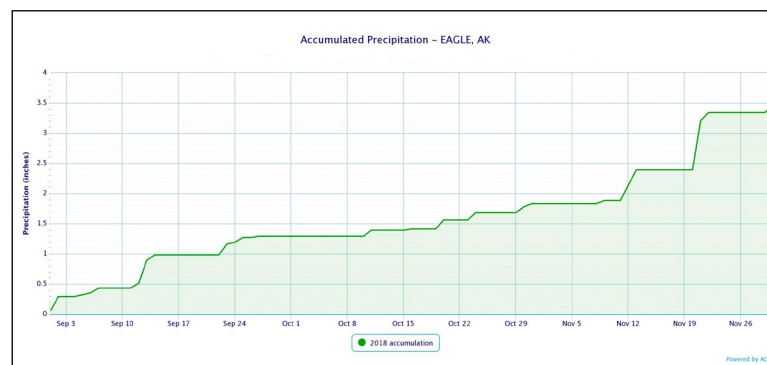


Figure 2. Fall 2018 accumulated precipitation at Eagle.

Table 1. Temperature: Fall 2018 average monthly temperatures compared to the 1981-2010 normal.

Fall 2018	Average Monthly Temp (°F)	1981-2010 Normal (°F)	Departure from Normal (°F)	Monthly High (°F / Date)	Monthly Low (°F / Date)
September	41	41.8	-0.8	57 / Sep 18	19 / Sep 29
October	29.2	23.0	+6.2	55* / Oct 17	-2 / Oct 10
November	9.6	3.0	+6.6	35 / Nov 20, 27	-27 / Nov 15, 16

Fall Season Temperature Departure from Normal: +4.0°F; *Daily record high.

Table 2. Precipitation: Fall 2018 monthly precipitation totals compared to normal.

Fall 2018	Total Monthly Precip. (in.)	1981-2010 Normal (in.)	Departure from Normal (in.)	Greatest 24 -hr. total (in. / Date)	# Days with >=0.01 in. water
September	1.29	1.31	-0.02	0.38 / Sep 13	12
October	0.54	0.95	-0.41	0.15 / Oct 20	6
November	1.61	0.73	+0.88	0.82 / Nov 21	6

Fall Season Precipitation Departure from Normal: +0.45 inches (115% of normal).

Table 3. Snowfall: Fall 2018 monthly snowfall totals compared to normal.

Fall 2018	Total Monthly Snowfall (in.)	1981-2010 Normal (in.)	Departure from Normal (in.)	Greatest 24-hr snowfall total (in. / Date)	Cumulative snow-fall since 1-July in.
September	0.0	1.3	-1.3	–	0.0
October	4.5	11.1	-6.6	1.5 / Oct 11	4.5
November	24.5	12.1	+12.4	10.0 / Nov 21	29.0

Fall Temperatures and Snow Depth in Yukon-Charley Rivers National Preserve

2018 was the warmest fall on record at the Upper Charley climate station. The site is located near the southern boundary of the Preserve. At an elevation of 3655’, the site is cooler than the lower valleys in the summer, but often warmer in the winter due to persistent inversions. We have been recording data continuously at this site since 2005. Over the past 14 years there has been a significant increase in the average fall temperatures

(Figure 3). Coal Creek fall temperatures also show a positive increase, although the trend is not significant. The Coal Creek site is a low elevation site (958’) near the Yukon River.

At the end of November there was 11 inches of snow on the ground at the Coal Creek weather station, 10 inches at Upper Charley, and Eagle Airport had 13 inches.

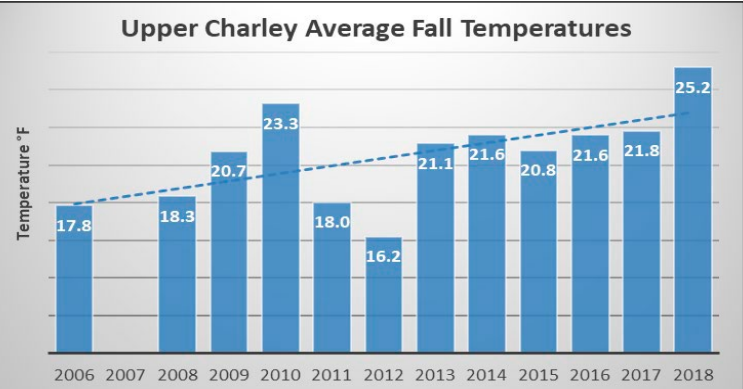


Figure 3. Average fall temperatures at the Upper Charley climate station in Yukon-Charley Rivers NP.



Figure 4. Fall snow scene (Oct. 2016) from the camera at the Upper Charley climate station.

Climate Monitoring in Yukon-Charley Rivers

The NPS climate stations in Yukon-Charley Rivers National Preserve (YUCH) have been in operation for over a decade. The Coal Creek and Upper Charley stations complement long-term records available from the National Weather Service station in Eagle. There is also a fire RAWS that has been in operation for several decades at Ben Creek.

More Information

Pam_Sousanes@nps.gov;
ph 907-455-0677

Kenneth_Hill@nps.gov;
ph 907-455-0678

[Current weather in YUCH](#)

<http://science.nature.nps.gov/im/units/cakn>

