

Central Alaska Network

National Park Service
U.S. Department of the Interior

Alaska Region
Inventory & Monitoring Program



Denali NP & PRES • Wrangell-St. Elias NP & PRES • Yukon-Charley Rivers N PRES

Summer 2018

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

Eagle Summer Weather 2018

The summer of 2018 was a little cooler and a lot wetter than normal. The average summer temperature was 56.6°F, 0.7°F cooler than normal. A total of 11.01 inches of rain fell between June 1 and August 31, which is 183% of normal and the wettest in 82 summers of nearly complete observations. Despite the overall wet summer, a hot and dry spell at the end of July allowed a few lightning caused fires to start and grow before rains returned the first week of August (see Figures 1 and 2; Table 1, and 2).

June was cooler than normal with a monthly average temperature of 56.4°F, which is 1.5°F colder than normal. The high temperature for the month was 91°F recorded on June 22, a record for the day. There was also a record daily low temperature of 33°F on June 15. June was wetter than normal overall, with 1.94 inches (118% of normal). Most of the rain came June 5-15 and June 22-23.

July was a little warmer than normal and wet. The monthly average temperature was 1.0°F warmer than normal at 61.4°F. The high temperature for the month was 92°F on July 24, another daily record. Precipitation was recorded on 15 days. The most rain fell between July 12 and 18 with a 7-day total of 2.56 inches. The total rainfall for the month was 3.79 inches; normal is 2.43 inches.

The temperatures for August were also cooler than normal. The average monthly temperature of 52.0°F was 1.6°F below the 1981-2010 normal. August was wet, with measurable precipitation recorded on 23 days totaling 5.28 inches. It was the wettest August in 82 years of nearly complete observations.

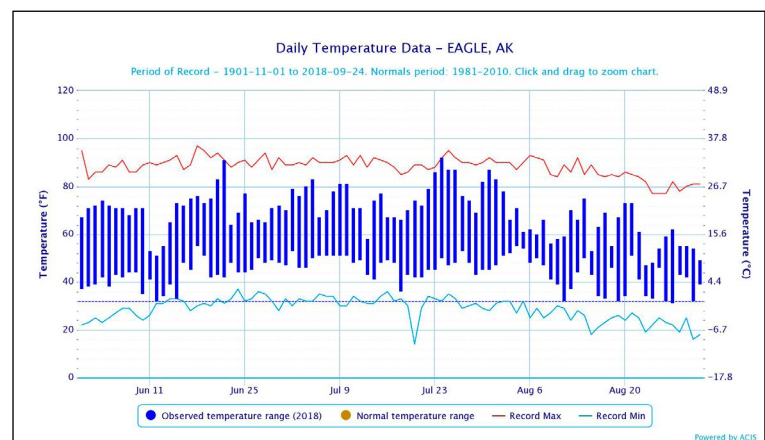


Figure 1. Summer 2018 daily temperatures at Eagle showing record maximum (red), record minimum (blue), and observed range (blue bars).

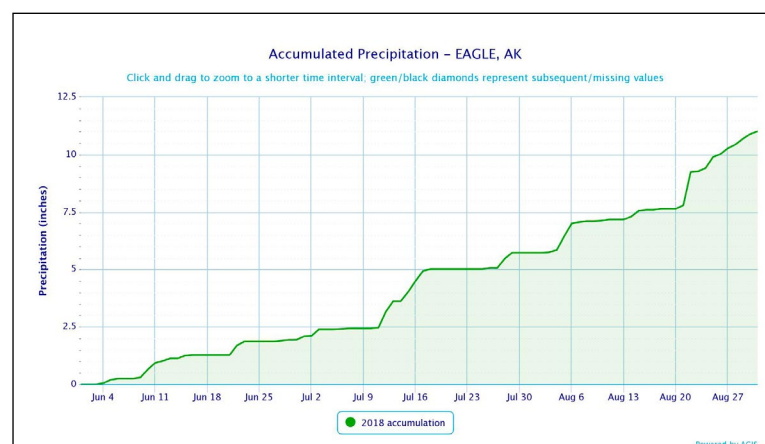


Figure 2. Summer 2018 accumulated precipitation at Eagle.

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

Summer 2018	Average Monthly Temp (°F)	1981-2010 Normal (°F)	Departure from Normal (°F)	Monthly High (°F / Date)	Monthly Low (°F / Date)
June	56.4	57.9	-1.5	91 / June 22	32 / June 12
July	61.4	60.4	+1.0	92 / July 24	36 / July 18
August	52.0	53.6	-1.6	83 / Aug 1	31 / Aug 27

Summer Season Temperature Departure from Normal: -0.7°F.

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

Summer 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
June	1.94	1.64	+0.30	0.42 / June 22	14
July	3.79	2.43	+1.36	0.70 / July 12	15
August	5.28*	1.92	+3.36	1.45 / Aug 22	23

Summer Season Precipitation Departure from Normal: +5.02 inches (183% of normal); Wettest August on record.

Summer Temperatures in Yukon-Charley Rivers

The 2018 summer temperatures at Coal Creek and Eagle are quite similar, which is to be expected given that they are both located near the Yukon River at approximately the same elevation (Eagle 850' and Coal Creek 870'). The new climate divisions place Coal Creek and Eagle right along the boundary of the Northeast Interior and Southeast Interior climate divisions, while the Upper Charley site is entirely within the Southeast Interior climate zone. The Northeast Interior climate division has the most continental climate in the state (farthest from ocean influences) with the lowest precipitation totals and the largest seasonal temperature range. However, the temperature comparison between the park sites is influenced more by elevation than distance to the coast. The Upper Charley site is located in the mountains at an elevation of 3,654'; the summer seasonal temperature is,

on average, about 7°F cooler than at either Coal Creek or Eagle (Figure 3).

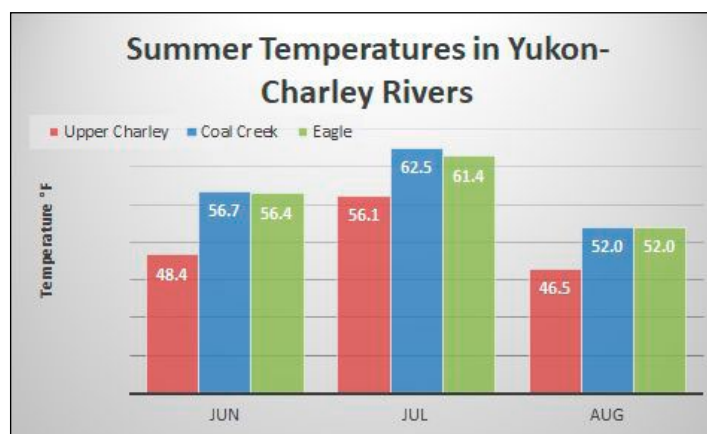


Figure 3. 2018 Average summer temperatures in YUCH.

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

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[Current weather in YUCH](#)

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

