

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.

2nd Quarter Spring 2016

Weather & Climate Summary Yukon-Charley Rivers National Preserve Spring 2016

Eagle Spring Weather

March was warmer and wetter than normal. The average temperature for March was 16.5°F compared to a normal of 7.2° F. The low temperature for the month was -11°F on March 2. A warm blast of weather arrived during the last week of the month with temperatures 20°F to 25°F warmer than normal. The high temperature of 52°F on March 30 was the highest temperature recorded for the month and a record for the day. Snowfall was just under normal at 5.0 inches for the month; normal is 6.1 inches. Total precipitation (water equivalent) was 66% of normal.

The warmth persisted into April with temperatures well above normal for the first twelve days of the month. The average temperature for the month was 34.6°F compared to a normal monthly average of 28.9°F. Temperatures climbed above freezing on all but one day of the month. Overall it was the seventh warmest April since records began in 1918. The snow at the station in Eagle was gone by April 11, except for the late spring storm on April 17 which dropped 5 inches of snow. Overall, it was wetter than normal with a total of 6.5 inches of snow (0.51 inches of water content); normal is 3.1 inches of snow (with 0.26 inches of water equivalent).

The spring warmth continued into May; the average monthly temperature was 3.7°F warmer than normal at 49.8°F. There was an exceptionally warm spell mid-month which brought temperatures 10 to 20°F warmer than normal. The month's high temperature of 87°F occurred during this timeframe, a record for the day. The last week brought cool temperatures and even a bit of snow. 0.1 inches of snow was recorded on May 26. The total precipitation for the month was 1.72 inches, 156% of normal.

The average spring temperature at Eagle was 33.6°F, which is 6.2°F warmer than the 1981-2010 normal. It was the 3rd

warmest spring season on record (1918-2016). The total winter precipitation was 2.48 inches, 143% of normal and the 6th wettest on record. The snowfall total for the 2015-2016 season was 61.3 inches; 98% of normal. (Figures 1 and 2; Table 1, 2, and 3).

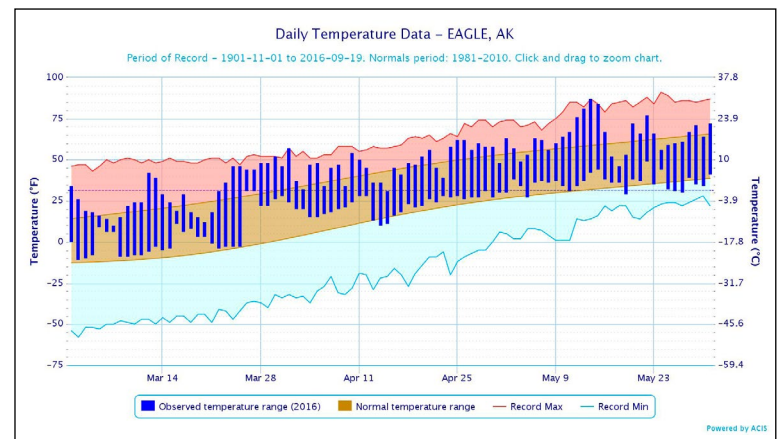


Figure 1. Spring 2016 daily temperatures at Eagle showing **observed** (red), **normal** (blue), **record max** (brown) and **record min** (blue bars).

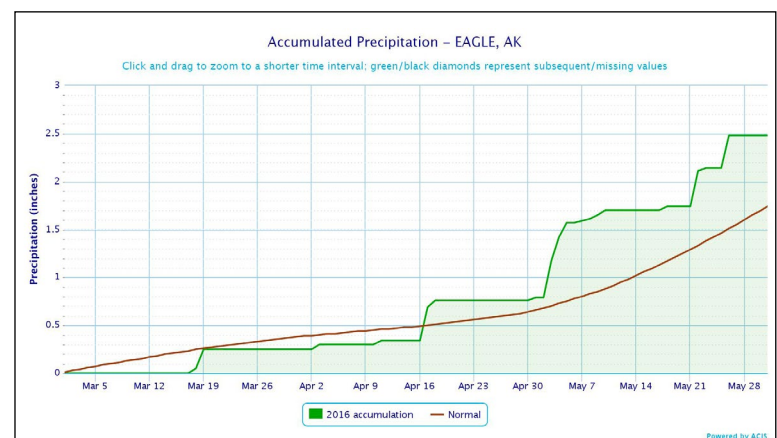


Figure 2. Spring **2016** accumulated precipitation at Eagle (green) compared to **normal** (brown line).

Table 1. Temperature: Spring 2016 average monthly temperatures compared to the 1981-2010 normal.

Spring 2016	Average Monthly Temp °F	1981-2010 Normal °F	Departure from Normal °F	Monthly High °F / Date	Monthly Low °F / Date
March	16.5	7.2	+9.3	52 / March 30*	-11 / March 2
April	34.6	28.9	+5.7	62 / April 25 & 26	10 / April 14
May	49.8	46.1	+3.7	87 / May 14*	27 / May 5

*Record daily highs; Spring Season Temperature Departure from Normal: +6.2°F. *Record daily highs.

Table 2. Precipitation: Spring 2016 monthly precipitation totals compared to normal.

Spring 2016	Total Monthly Precip. in.	1981-2010 Normal in.	Departure from Normal in.	Greatest 24 -hr. total in. / Date	# Days with >=0.01 in. water
March	0.25	0.38	-0.13	0.20 / March 19	2
April	0.51	0.26	+0.25	0.35 / April 17	4
May	1.72	1.10	+0.62	0.38 / May 3	12

Spring Season Precipitation Departure from Normal: +0.74 inches (143% of normal)

Table 3. Snowfall: Spring 2016 monthly snowfall totals compared to normal.

Spring 2016	Total Monthly Snowfall in.	1981-2010 Normal in.	Departure from Normal in.	Greatest 24 -hr. snowfall total in. / Date	Cumulative snowfall since 1-July in.
March	5.0	6.1	-1.1	4.0 / March 19	54.7
April	6.5	3.1	+3.4	5.0 / April 17	61.2
May	0.1	1.0	-0.9	0.1 / May 26	61.3

NPS Climate Monitoring Stations: Yukon-Charley National Preserve

NPS climate stations in Yukon-Charley Rivers complement the long-term record available from the National Weather Service station at Eagle (Figure 3).

Yukon River Breakup 2016

With a breakup date of April 23, it was the earliest breakup on record at Dawson. The next earliest date was April 28 (in 1940). Records at Dawson began in 1896. At Eagle, breakup occurred on April 26th, the second earliest breakup on record. Overall, 2016 was a good example of a benign “thermal breakup”, when the snow melts off the ice, and the remaining ice rots in place. However, one of the few ice jams that formed in 2016 was 10 miles downriver of Eagle at Calico Bluffs. This led to the 3rd highest flood on record at Eagle. The lower river melted out weeks before the upper river and was the earliest breakup on record at most locations.



Figure 4. Breakup at Dawson in 2016. Photo from yukonriverbreakup.com



Figure 3. NPS Climate stations in Yukon-Charley Rivers National Preserve

More Information

Pam Sousanes; pam_sousanes@nps.gov; ph 907-455-0677

Ken Hill; kenneth_hill@nps.gov; ph 907-455-0678

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

[Current Weather in Yukon-Charley Rivers](#)