



Weather & Climate Summary Western Arctic Parklands Spring 2017



Upper Kelly River in Noatak National Preserve, late May 2017, photo by Ken Hill.

Kotzebue Spring Weather

March was cooler and drier than normal. It was 9.0°F cooler than normal with an average monthly temperature of -7.9°F. Only five days of the month were warmer than normal. Precipitation was light in March; only 0.7 inches of snow fell, normal is 5.9 inches. Precipitation (water equivalent) was only 7% of normal for the month.

April temperatures warmed considerably. It was the third warmest April on record following last year's warmest April. The average monthly temperature was 24.3°F, which is 11.0°F warmer than normal. On April 30 it was 49°F; this was the high temperature for the month and the highest temperature ever recorded in the month of April. The dry spring conditions continued. Only 0.05 inches of total precipitation was observed in April, 9% of normal. An additional 1.5 inches of snow fell during the month, normally ~ 5.1 inches of snow falls in April. The snow melted quickly with the warm temperatures. There was 46 inches of snow on the ground on April 1 and by April 30th only 5 inches remained.

May was 2.9°F warmer than normal, with record daily high temperatures of 51°F on May 6th and 54°F on May 12th. May 12th was also the warmest day of the month. The low temperature for the month was 20°F on May 6th. The precipitation total for May was 0.41 inches, right at normal. Most of that measurable precipitation fell as rain; only 0.2 inches of snow was recorded for the month.

Overall, spring 2017 ended up slightly warmer and much drier than normal. March was cold, April was warm, and May was just above normal in terms of temperatures. The

precipitation total for the spring was only 35% of normal. The cumulative snowfall for the 2016-2017 season was just below normal with a total of 53.6 inches (through May 31). Melt-out for spring 2017 was on May 7th, normal is May 22nd (Figures 1 and 2; Tables 1, 2, and 3).

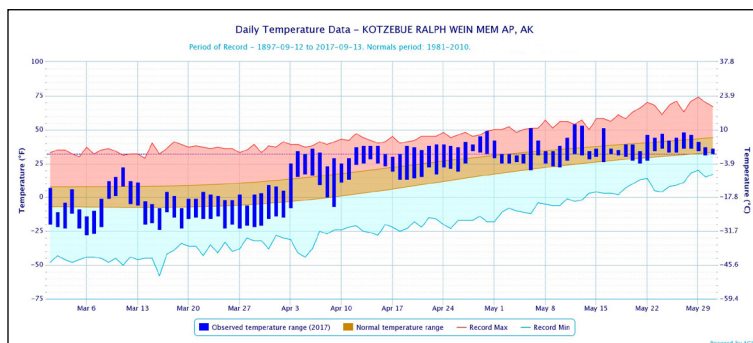


Figure 1. Spring 2017 daily temperatures at Kotzebue showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars).

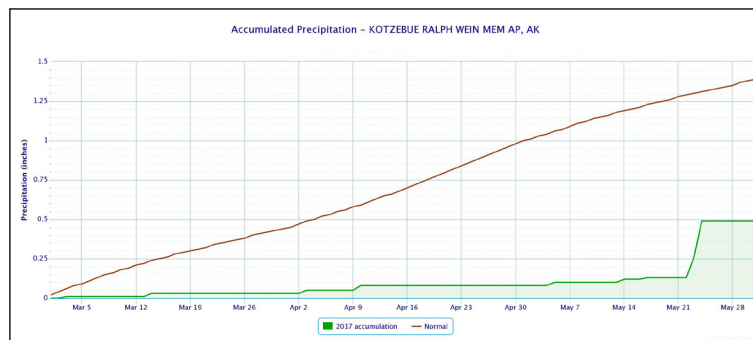


Figure 2. Spring 2017 accumulated precipitation at Kotzebue (green) compared to normal (brown line).

Table 1. Kotzebue Temperature: Spring 2017 average monthly temperatures compared to the 1981-2010 normal.

Spring 2017	Average Monthly Temp °F	1981-2010 Normal °F	Departure from Normal °F	Monthly High °F / Date	Monthly Low °F / Date
March	-7.9	1.1	-9.0	22 / Mar 11	-28 / Mar 6
April	24.3	13.3	+11.0	49* / Apr 30	-15 / Apr 2
May	34.8	31.9	+2.9	54* / May 12	20 / May 6

Spring Season Temperature Departure from Normal: +1.6°F; *Record daily high

Table 2. Kotzebue Precipitation: Spring 2017 monthly precipitation totals compared to normal.

Spring 2017	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	0.03	0.44	-0.41	0.02 / Mar 14	2
April	0.05	0.54	-0.49	0.03 / Apr 10	2
May	0.41	0.41	0.00	0.23 / May 24	5

Spring Season Precipitation Departure from Normal: -0.9 inches (35% of normal)

Table 3. Kotzebue Snowfall: Spring 2017 monthly snowfall totals compared to normal.

Spring 2017	Total Monthly Snowfall in.	1981-2010 Normal in.	Departure from Normal in.	Greatest 24 -hr. snow-fall total in. / Date	Cumulative snowfall since 1-July in.
March	0.7	5.9	-5.2	0.4 / Mar 14	51.9
April	1.5	5.1	-3.6	0.6 / Apr 10	53.4
May	0.2	1.2	-1.0	0.2 / May 5	53.6

Climate Monitoring in the Western Arctic Parklands

NPS climate stations in the Western Arctic Parklands complement the long-term record from the National Weather Service station in Kotzebue. NPS stations are located at Tahinichok and Mt. Noak in Cape Krusenstern; at Asik, Kugururok, Sisiak, Kaluich, Imelyak, and Howard Pass in Noatak, and at Salmon River in Kobuk Valley (Figure 3).



Figure 3. NPS climate stations in Western Arctic Parklands

Spring Season Temperatures in the WEAR Parks

The average spring air temperatures at the NPS climate stations in the WEAR parks were all warmer than the spring season average at Kotzebue (Figure 4). The NPS sites, which are higher in elevation and in some cases quite far from the coast, were

warmer in March by ~8°F. The temperatures start to rise rapidly in the spring as the sun returns to the northern latitudes. The average April temperatures were on average ~20°F warmer than March temperatures, and May temperatures were about 12°F warmer than April temperatures.

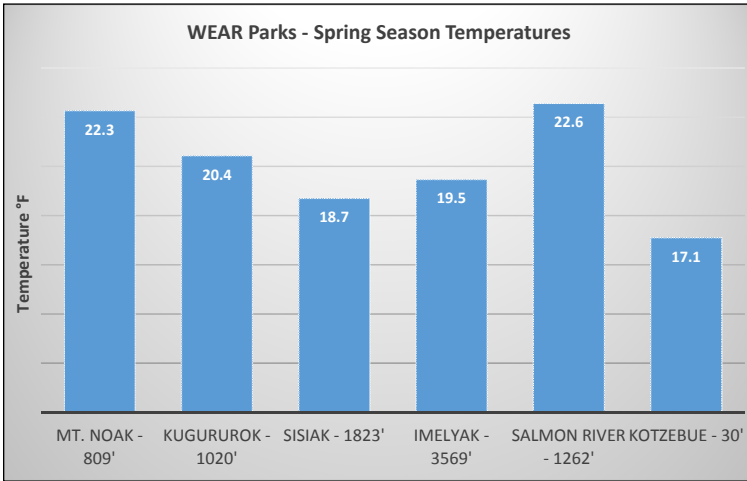


Figure 4. 2017 average spring temperatures in the WEAR parks

More Information

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[Current weather in WEAR](#)