



Weather & Climate Summary Western Arctic Parklands Fall 2016

Kotzebue Fall Weather

It was the 3rd warmest fall on record in Kotzebue with a seasonal average temperature of 30.4°F, which is 5.2°F warmer than normal. September rainfall was above normal, but snowfall totals for the fall season were well below normal. A total of 6 inches fell, normal is 17 inches. The precipitation total for the fall was 72% of normal.

September was warmer and wetter than normal. The average monthly temperature was 44.1°F, normal is 42.3°F. The first week of September was much warmer than normal with daily high temperatures reaching into the 60s. A record high temperature of 66°F was recorded on September 2nd. Precipitation was above average for September with most of that falling as rain during the last two weeks of the month. A total of 2.02 inches of precipitation fell during the month, normal is 1.58 inches. Only 0.2 inches of snowfall was recorded.

It was the warmest October on record in Kotzebue. The average monthly temperature of 35.3°F was 11.0°F warmer than the 1981-2010 normal! Seven new record high temperatures were set during the month on October 8, 9, 12, 13, 15, 29, and 31. For the first 13 days of the month the daily minimum temperatures did not drop below freezing. Precipitation for the month was well below normal with 0.30 inches, which is only 30% of normal. Snowfall total was 2.6 inches, normal is 6.1 inches.

The first day of November was another record breaking warm day with a high temperature of 38°F. Temperature remained above normal for the first half of the month, moderated to near normal in mid-month, and ended up colder than normal for the last week. The average temperature for November was 11.8°F, normal is 9.1°F.

Only 2.8 inches (0.1 inches of water equivalent) of snow fell during the month, normal is 10.5 inches (Figures 1 and 2; Tables 1, 2 and 3).

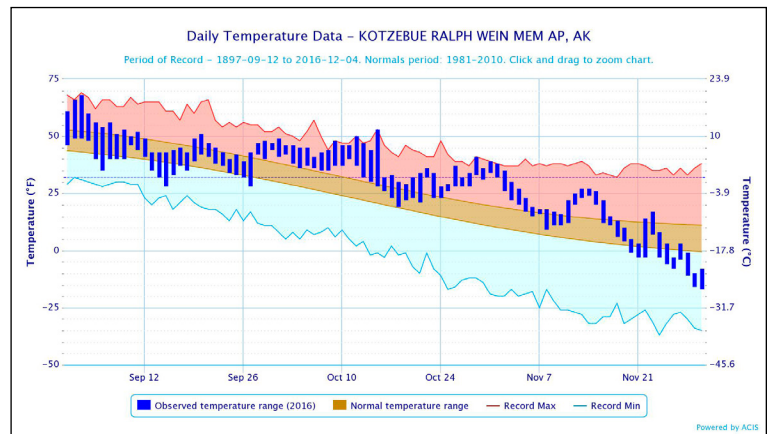


Figure 1. Fall 2016 daily temperatures at Kotzebue showing **record maximum** (red), **record minimum** (blue), **normal** (brown) and **observed** range (blue bars).

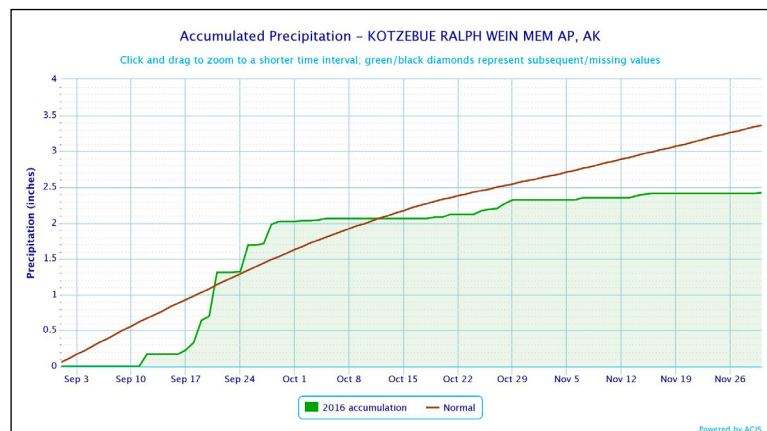


Figure 2. Fall 2016 accumulated precipitation at Kotzebue (green) compared to **normal** (brown line).

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

Fall 2016	Average Monthly Temp °F	1981-2010 Normal °F	Departure from Normal °F	Monthly High °F / Date	Monthly Low °F / Date
September	44.1	42.3	+1.8	68 / Sept. 3	28 / Sept 15 & 27
October	35.3*	24.3	+11.0	53** / Oct. 15	19 / Oct. 18
November	11.8	9.1	+2.7	38** / Nov. 1	-17 / Nov. 30

*Monthly Record High, **Daily Record High; Fall Season Temperature Departure from Normal: +5.2°F

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

Fall 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
September	2.02	1.58	+0.44	0.61 / Sept. 21	11
October	0.30	1.01	-0.71	0.07 / Oct. 28	10
November	0.1	0.77	-0.67	0.03 / Nov. 8 & 14	5

Fall Season Precipitation Departure from Normal: -0.94 inches (72% of normal)

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

Fall 2016	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.
September	0.2	0.8	-0.6	0.2 / Sept. 25	0.2
October	2.6	6.1	-3.5	0.9 / Oct. 25	2.8
November	2.8	10.5	-7.7	0.9 / Nov. 14	5.6

NPS Climate Monitoring Stations

The NPS Arctic Network 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).

Kugururok in October: At 68.3° north latitude the Kugururok climate station in Noatak National Preserve holds the distinction of being the farthest north weather station in the entire NPS. This Arctic site had remarkably warm temperatures for October, as did all of the other NPS sites in the network. The graph above shows the daily high and low temperatures for October 2016. The dots on the graphs represent the normal high and low temperatures for Kotzebue for comparison (Figure 4).

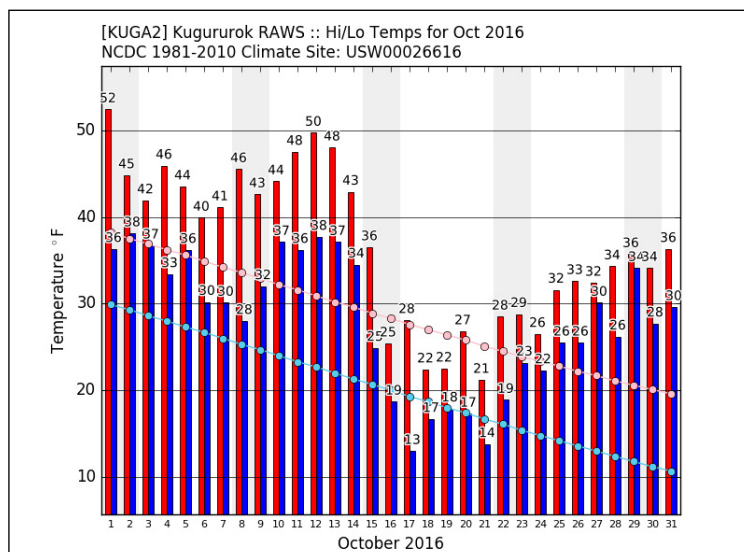


Figure 4. October 2016 temperatures at Kugururok.



Figure 3. NPS Climate stations in Western Arctic Parklands.

More Information

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