



Western Arctic Parklands Winter 2015-2016

Kotzebue Winter Weather

Overall, December was 0.4°F cooler than normal for the month. Despite warm temperatures the last week of the month (including a record breaking daily high temperature of 37°F on December 30), subzero temperatures December 3-12 and again December 20-25 kept the monthly average near normal. Most precipitation came during a warm, windy, and wet storm totaling 0.32 inches December 28-30. The total precipitation for the month was 0.46 inches, 61% of average.

With an average monthly temperature 16.1°F warmer than normal, January was the 4th warmest on record. All but two days in January were warmer than normal. Monthly precipitation totaled 0.38 inches; normal is 0.62 inches. Total snowfall for the month was 5.9 inches, over half of which came during the last week of January. Monthly snowfall ended up at 65% of normal.

February was also very warm compared to normal. It was the third warmest February on record. Although no temperature records were broken and the freezing threshold was not exceeded, relentless warmer-than-normal temperatures persisted for the entire month of February. All but one day was warmer than normal. The average monthly temperature of 10.7°F was 11.5°F warmer than normal. Precipitation was recorded on 8 days in February, totaling 0.34 inches. Normal is 0.66 inches.

The average winter temperature at Kotzebue was 8.6° F which is 9.0° F warmer than the 1981-2010 normal. The 2015-2016 winter ranks as the 2nd warmest winter on record. The total winter precipitation was 1.18 inches, 58% of normal. The winter of 2015-2016 ranked as the 35th driest winter on record. (Figures 1 and 2; Table 1, 2, and 3).

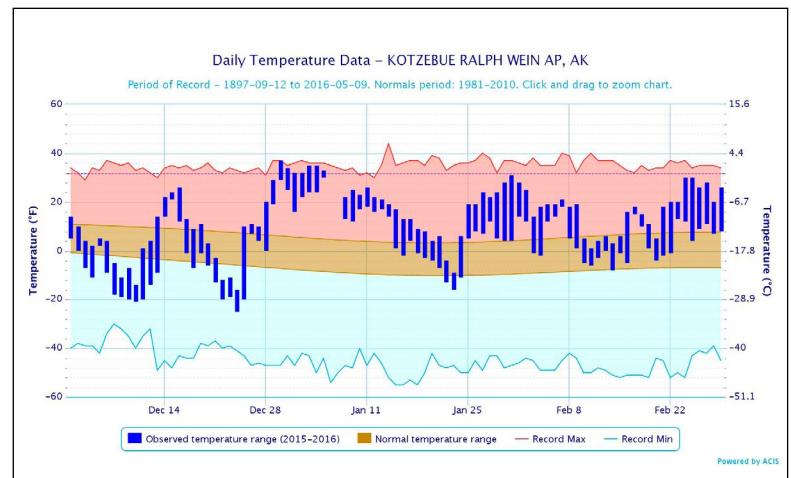


Figure 1. Winter 2015-2016 daily temperatures at Kotzebue showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars).

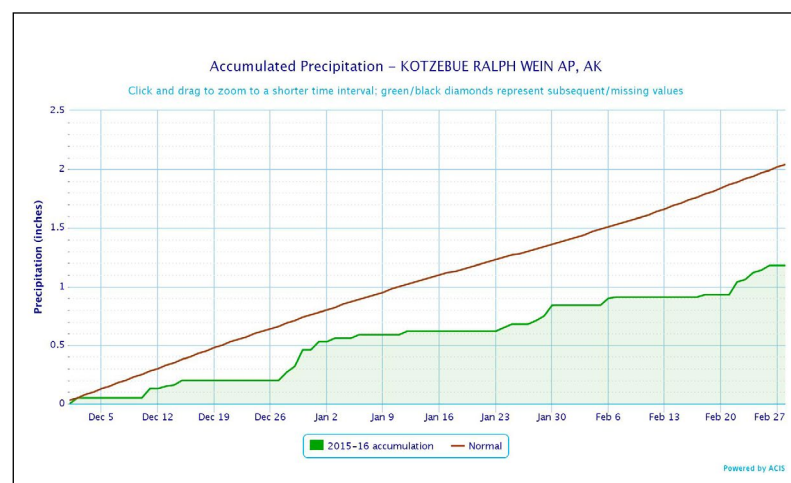


Figure 2. 2015-2016 (green) accumulated precipitation at Kotzebue compared to normal (brown line).

Table 1. Kotzebue Temperature: Winter 2015-2016 average monthly temperatures compared to the 1981-2010 normal.

Winter 2015-2016	Average Monthly Temp °F	1981-2010 Normal °F	Departure from Normal °F	Monthly High °F / Date	Monthly Low °F / Date
December	1.9	2.3	-0.4	37 / Dec. 30	-25 / Dec.24
January	13.3	-2.8	+16.1	35 / Jan. 3 & 4	-16 / Jan. 23
February	10.6	-0.8	+11.4	30 / Feb. 24 & 25	-8 / Feb. 14

Winter Season Temperature Departure from Normal: +8.6°F

Table 2. Kotzebue Precipitation: Winter 2015-2016 monthly precipitation totals compared to normal.

Winter 2015-2016	Total Monthly Precip. in.	1981-2010 Normal in.	Departure from Normal in.	Greatest 24 -hr. total in. / Date	# Days with >=0.01 in. water
December	0.46	0.76	-0.30	0.14 / Dec. 30	8
January	0.38	0.62	-0.24	0.09 / Jan. 30	9
February	0.34	0.66	-0.32	0.11 / Feb. 22	8

Winter Season Precipitation Departure from Normal: -1.14 inches (61% of normal)

Table 3. Kotzebue Snowfall: Winter 2015-2016 monthly snowfall totals compared to normal.

Winter 2015-2016	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.
December	10.5	11.5	-1.0	3.2 / Dec. 10	32
January	5.9	9.1	-3.2	1.4 / Jan. 30	37.9
February	7.5	9.6	-2.1	2.4 / Feb. 22	45.4

NPS Climate Monitoring Stations

NPS climate stations in the Western Arctic (WEAR) Parklands complement the long-term record from the National Weather Service station in Kotzebue. Twelve NPS stations from Cape Krusenstern to Kobuk Valley to Howard Pass record hourly measurements of air temperature, relative humidity, wind speed/direction, solar radiation, snow depth, and soil temperature. Near real-time observations are available through the National Weather service at this [hyperlink](#).

Featured Station: Kugururok

The Kugururok climate station is located 100 miles northeast of Kotzebue, about 30 miles upriver from the confluence of the Kugururok and Noatak Rivers at an elevation of 1020 feet. Cottonwood and poplar inhabit the river valley below the climate station. Archaeological sites have also been documented in the Kugururok valley. Since installation in July 2014, temperatures have ranged from -22.9°F to +79.6°F.

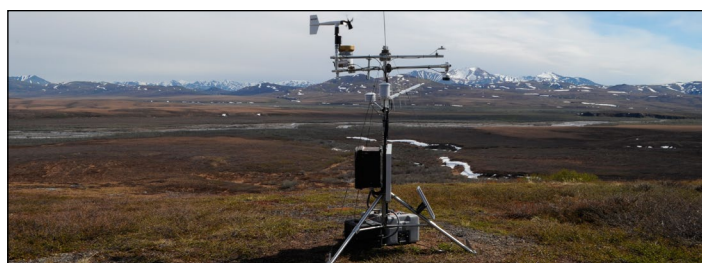


Figure 3. NPS Climate stations in Western Arctic Parklands.

More Information

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[Current weather in WEAR](#)