



Weather & Climate Summary Bering Land Bridge National Preserve Spring 2018

Nome Spring Weather 2018

Highlights: An abundance of snow in March leading to the 2nd snowiest season on record for Nome; record low sea ice extent in the Bering Sea; warmer than normal temperatures in March and April.

It was the 2nd snowiest March on record in Nome. A total of 34 inches of snow was recorded for the month! Normal is 8.9 inches. Between March 17th and 23rd over 19 inches of snow fell during a couple of storms. On March 22nd the snow depth at the airport was 67 inches. The water equivalent of all of that snow was 2.48 inches, 382% of normal. March started out much warmer than normal, cooled off mid-month, and warmed back up at the end of the month. The average temperature in March was 17.0°F compared to a normal of 10.3°F.

April temperatures remained on the warm side. Almost every day in April was warmer than normal. The average temperature for the month was 26.3°F, which is 5.8°F warmer than the 1981-2010 normal. The April snowfall total was 8.5 inches; normal is 7.5 inches.

May temperatures were just below normal and precipitation was only 50% of normal. The average monthly temperature was 36.3°F, -0.5°F cooler than normal. Total precipitation (melted snow and rain) was 0.42 inches; there was only 0.4 inches of snowfall (normal is 2.3 inches). The melt-out date was ~ May 9, after that several days of “trace” amounts of snow were recorded, but the 9th was the last day with > 1 inch on the ground.

The cumulative snowfall for the 2017-18 season (July 1 – June 30) was 116.2 inches; the long-term average is 75.4 inches. Only the 1994-1995 season was snowier with 129.4 inches.

The average spring temperature at Nome was 26.5°F which is 4.0°F warmer than the 1981-2010 normal. It was the 11th warmest spring on record (1907-2018). The total spring precipitation (melted snow + rain) was 3.82 inches, 168% of normal. It was the 11th wettest spring (tied with 2004) (Figures 1 and 2; Table 1, 2, and 3).

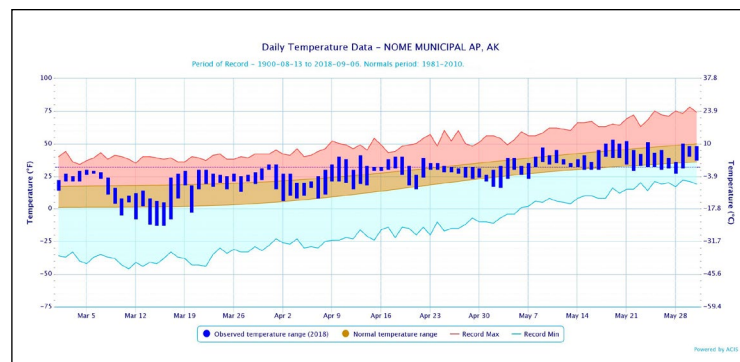


Figure 1. Spring 2018 daily temperatures at Nome showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars).

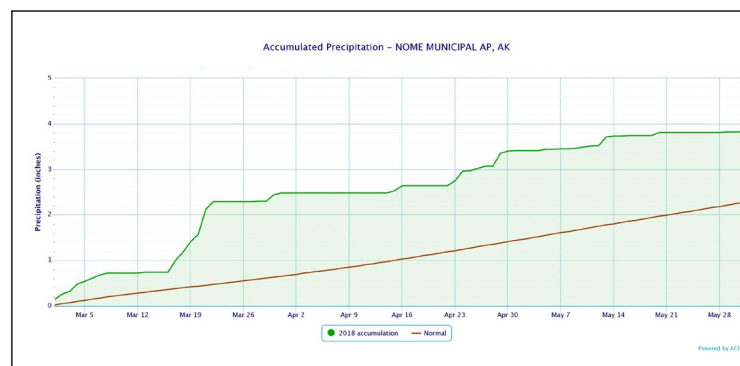


Figure 2. Spring 2018 accumulated precipitation at Nome (green) compared to normal (brown line).

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

Spring 2018	Average Monthly Temp (°F)	1981-2010 Normal (°F)	Departure from Normal (°F)	Monthly High (°F / Date)	Monthly Low (°F / Date)
March	17.0	10.3	+6.7	34 / Mar 31	-13 / Mar 15, 16
April	26.3	20.5	+5.8	41 / Apr 13	6 / Apr 2
May	36.3	36.8	-0.5	53 / May 19	16 / May 3

Spring Season Temperature Departure from Normal: +4.0°F.

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

Spring 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
March	2.48	0.65	+1.83	0.55 /	18
April	0.92	0.76	+0.16	0.28	9
May	0.42	0.86	-0.44	0.19 / May 12	12

Spring Season Precipitation Departure from Normal: +1.55 inches (168% of normal).

Table 3. Snowfall: Spring 2018 monthly snowfall totals compared to normal.

Spring 2018	Total Monthly Snowfall (in.)	1981-2010 Normal (in.)	Departure from Normal (in.)	Greatest 24-hr snow-fall total (in. / Date)	Seasonal Cumulative Snowfall (in.)
March	34.0	8.9	+25.1	5.9	107.3
April	8.5	7.5	+1.0	3.1	115.8
May	0.4	2.3	-1.9	0.3 / May 1	116.2

Snow and Ice

The camera at Serpentine Hot Springs provides a glimpse of spring snow conditions in the Preserve. Snow storms come through and deposit snow and the wind scours it away. The photos below are from the climate station in mid-March, the same time period that Nome was receiving tons of snow (Figure 3).

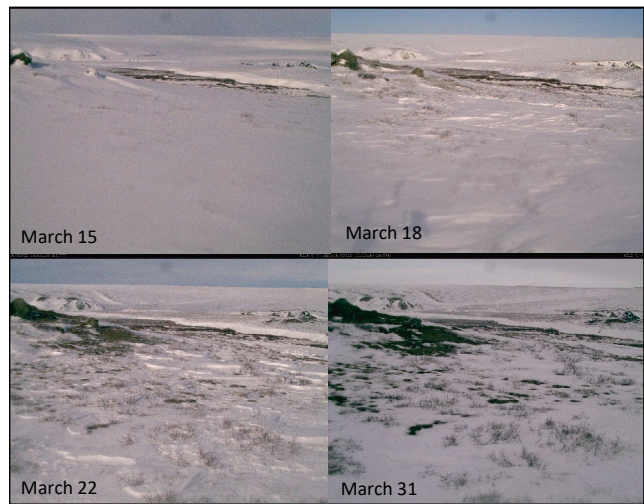


Figure 3. Serpentine Hot Springs images from mid-March 2018.

Where’s the Ice?

John Walsh, the Chief Scientist at the International Arctic Research Center/University of Fairbanks wrote a compelling article in the [Alaska Climate Dispatch](#) on the “remarkable winter of 2017-2018” summarizing the lack of sea ice in the Bering and Chukchi Seas (Figure 4). Walsh refers to the “perfect storm” of several contributing factors including,

1) remnant ocean heat from the “blob” of warm water in the North Pacific in 2014-2016 that led to low ice extent in previous years, 2) warm air temperatures in late 2017, and 3) a stormy fall season with strong southerly flow (that drove ocean currents and ice to the north)

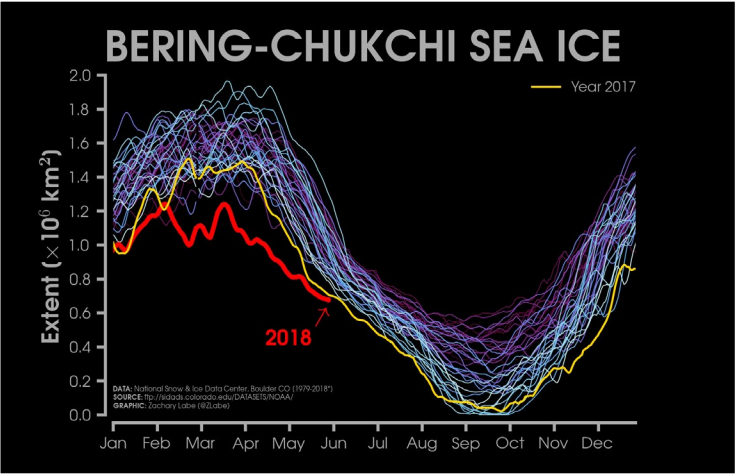


Figure 4. Bering-Chukchi sea ice remained at record low levels through the spring of 2018. Graph courtesy of Zach Labe, University of California-Irvine.

More Information

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[Current Weather in Bering Land Bridge N Pres.](#)
<http://science.nature.nps.gov/im/units/arcn>

