Arctic Network

Bering Land Bridge N Pres. • Cape Krusenstern NM Gates of the Arctic NP & Pres. • Kobuk Valley NP • Noatak N Pres. National Park Service U.S. Department of the Interior

Alaska Region Inventory & Monitoring Program





Weather & Climate Summary Bering Land Bridge National Preserve Winter 2024

Nome Winter Weather Summary 2024

Overall, the winter season in Nome was warmer than normal and slightly drier than normal. The average temperature for the winter season was 1.6°F warmer than the 1991-2020 normal. December was cooler than normal, while January and February were warmer than normal. The variability in daily temperatures, especially in January, was impressive. Winter precipitation (melted snow and rain) was 2.82 inches, just shy of normal (Table 1 and 2, Figures 1 and 2).

December

December was cool and dry. The average monthly temperature was 2.1°F cooler than normal at 7.0°F. The coolest temperatures, compared to normal, occurred during the third week of the month. The total precipitation for December was 0.41 inches, which is only 39% of normal.

January

January was warmer and wetter than normal. The first three weeks were warmer than normal, but after January 24 the pattern shifted. During the last week of the month the daily temperatures plummeted, averaging 26°F colder than normal. Even with the cold week, the average monthly temperature ended up 2.9°F warmer than normal. Towards the end of the first week of January, a Bering Sea storm moved in causing blizzard conditions along the west coast of Alaska. Warmer than normal temperatures rose above freezing on several days. A total of 1.43 inches of precipitation (melted snow and rain) fell between January 11-15 during the warm, wet weather pattern. The total precipitation for the month was 1.65 inches, 176% of normal.

Northern Lights near Bering Land Bridge National Preserve. NPS Photo

February

Overall February was warmer and drier than normal. The average monthly temperature ended up 4.1°F warmer than normal. The first few days and the last few days of the month were cold, but mid-February was warm. There were several days where the daily high temperatures reached 32°F, which is well above normal for February high temperatures. February precipitation totaled 0.76 inches, which is 77% of normal.

the 1991-2020 r	normal.		
Winter	Average	1991-	Departure
	Monthly	2020	from Normal

Table 1. Nome winter 2024 average monthly temperatures compared to

2024	Monthly Temp (°F)	2020 Normal (°F)	from Normal (°F)
December	7.0	9.1	-2.1
January	8.5	5.6	+2.9
February	13.1	9.0	+4.1

Winter temperature departure from normal: +1.6°F

Table 2. Nome winter 2024 monthly precipitation totals compared to normal

Winter 2024	Total Monthly Precip. (in.)	1991- 2020 Normal (in.)	Departure from Normal (in.)
December	0.41	1.05	-0.64
January	1.65	0.94	+0.71
February	0.76	0.99	-0.23

Winter precipitation departure from normal: -0.16 in. (95% of normal).



Figure 1. Winter 2024 daily temperatures at Nome showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars). Data from: http://xmacis.rcc-acis.org/.



Figure 2. Winter 2024 accumulated precipitation at Nome (green) compared to normal (brown line). Data from: <u>http://xmacis.rcc-acis.org/</u>

Snowfall

The Pargon Creek Snotel site south of the Preserve had 15 inches of snow on the ground on February 29, right at normal for the site (records back to 2001). Figure 3 shows the statewide snowfall ranking for the December through February winter season. Areas with dark pink shading had the snowiest winter since1940.



Figure 3. Statewide snowfall ranking map (back to 1940) for the 2024 winter season (Dec-Feb). Map courtesy of Brian Brettschneider. Areas in dark pink had the snowiest winter since 1940.

Arctic Network Climate Stations

We monitor weather and climate in Bering Land Bridge National Preserve to help understand seasonal weather patterns and shifting climate averages (Figure 4).



Figure 4. Arctic Inventory and Monitoring Network climate stations in Bering Land Bridge NP.

Winter temperatures at Serpentine Hot Springs are quite variable. Over the past 13 years the winter seasonal temperature has been as cold as -6°F (2012) and as warm as 16°F (2018). Between 2012 and 2019 there was an alarming increase in winter temperatures, but three cooler La Niña years tempered the upward trajectory. With a transition to El Niño, the past two winters have been warmer, but still cooler than the "teenage" warm years (Figure 5).

Daily temperatures during the winter months can also be extremely variable. This January at Serpentine, a high temperature of +35°F was recorded on January 15 and a low temperature of -32°F was recorded on January 31.



Figure 5. Winter season average temperatures at the Serpentine Hot Springs climate station in Bering Land Bridge National Preserve 2012-2024.

More Information

Pam_Sousanes@nps.gov; ph 907-455-0677 Kenneth_Hill@nps.gov; ph 907-455-0678

https://www.nps.gov/im/arcn/climate.htm Latest weather conditions in Bering Land Bridge N.P.

Data disclaimer: Please note that the near-real time data used to generate these reports is subject to change. QA/QC data from the NPS ARCN climate stations are available at <u>NPS Data Store</u>