Arctic Network

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Alaska Region Inventory & Monitoring Program

Summer 2024



Weather & Climate Summary Bering Land Bridge National Preserve Summer 2024

Nome Summer Weather Summary 2024

Overall, the summer season in Nome was cooler than normal and much wetter than normal. An incredible amount of rain fell in July and August with a summer rainfall total of 12.9 inches, which is 196% of normal! It was the third wettest summer on record. The average temperature for the summer season was 0.8°F cooler than the 1991-2020 normal. June was warmer than normal, while July and August were cooler than normal (Table 1 and 2, Figures 1 and 2).

June

June was warmer and drier than normal. It was the only summer month that was warm and dry. The average monthly temperature was 1.7°F warmer than normal at 50.0°F. On June 10 the high temperature was 77°F, a new daily record. June temperatures were at or just above normal for most of the month. There were only three days with measurable precipitation in June. The monthly total was 0.21 inches, normal is 0.99 inches.

July

July was cooler and much wetter than normal. It was still summer on July 1, but that all changed on July 2 when the high temperature dropped 19°F and it started raining. A total of 2.51 inches of rain fell between July 2-3 which is more than the normal monthly amount. The total rainfall for July was 6.16 inches, 262% of normal. Most of the rain fell during the first two weeks of the month. Overall, the month was cooler than normal with an average temperature of 49.9°F, normal is 52.0°F. There were three days during the month where the high temperature was >70°F (on July 1, 22, and 24). Tors near Serpentine Hot Springs in Bering Land Bridge National Preserve. NPS Photo Ken Hill

August

The cool, wet conditions continued into August. During the first week of the month 3.1 inches of rain fell in Nome, including a new 24-hour record of 1.23 inches on August 3rd. A total of 6.94 inches of rain fell in August, the second month in a row with twice as much rain as normal. It was the 7th wettest August on record. The average monthly temperature ended up 2.1°F cooler than normal. The daily highs never reached 60°F in August.

Table 1. Nome summer 2024 average monthly temperatures compared to the 1991-2020 normal.

Summer 2024	Average Monthly Temp (°F)	1991- 2020 Normal (°F)	Departure from Normal (°F)
June	50.0	48.3	+1.7
July	49.9	52	-2.1
August	48.1	50.2	-2.1

Summer temperature departure from normal: -0.8°F

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

Summer 2024	Total Monthly Precip. (in.)	1991- 2020 Normal (in.)	Departure from Normal (in.)
June	0.21	0.99	-0.78
July	6.16	2.35	+3.81
August	6.49	3.22	+3.27

Summer precipitation departure from normal: +6.30 in. (196% of normal).



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





Cool, Wet Summer in Northwest Alaska

Rainy July and August

It was a wet summer across the Seward Peninsula with most of the region ranking among the top 10 wettest summers on record since 1940. The graphic below (Figure 3) shows the statewide precipitation ranking with dark blue shading equal to the wettest summer on record and dark greens in the top 10. Notice how almost all of northwest Alaska was much wetter than normal this past summer.



Figure 3. Statewide precipitation ranking map for June - August 2024 (back to 1940). Map courtesy of Brian Brettschneider using ERA5 reanalysis data. Dark blue shading indicates the wettest summer on record.

Cool summer at Serpentine Hot Springs

The summer season temperatures at Serpentine Hot Springs average around 50.3°F. This summer was the coolest summer to date, 2°F cooler than average with records back to 2012 (Figure 4). 2019 was the warmest summer to date. Four of the coolest summers have occurred in the past five years (with 13 years on record).



Figure 4. Summer season average temperatures at Serpentine Hot Springs.

The summer rainfall total at the Serpentine site was 6.18 inches, less than half of what fell in Nome. Similar rainfall totals were recorded at the Quartz Creek climate station 30 miles south of Serpentine.

Windy Summer

Summer of 2024 was the windiest on record for most of Alaska, particularly for the western part of the state including Bering Land Bridge NP. Check out Richard James' <u>Deep Cold:</u> <u>Alaska Weather & Climate: Summer Climate Anomalies</u> blog for more details.

Current Weather

We monitor weather and climate in Bering Land Bridge National Preserve to help understand seasonal weather patterns and shifting climate averages (Figure 5). <u>Click here</u> for current weather in Bering Land Bridge National Preserve.



Figure 5. Arctic Inventory and Monitoring Network climate stations in Bering Land Bridge National Preserve.

More Information

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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>