



Weather & Climate Summary Denali National Park & Preserve Fall 2024

Lynx on tundra in Denali. NPS Photo/Ken Hill

Denali Park Headquarters Fall Season 2024

The 2024 fall season was cooler and wetter than normal at Denali Park Headquarters. The average fall season temperature of 24.3°F was 0.8°F cooler than normal. September was warmer than normal, while October and November were both cooler than normal. The total fall precipitation (rain and melted snow) was 3.94 inches, 115% of normal. Each fall month had more precipitation than normal. The seasonal snowfall total (Sep-Oct-Nov) was 36 inches, normal is 27 inches (Table 1 and 2, Figures 1 and 2).

September

September was wetter and warmer than normal. Temperatures were above normal for most of the first half of the month with overnight lows remaining above freezing. It wasn't until September 22 when the daily minimums were consistently at or below 32°F. The total precipitation for the month was 1.92 inches, which is 110% of normal. There was no measurable snow in September, so all of that precipitation fell as rain.

October

The average temperature for October was 0.8°F cooler than normal. The first half of the month was relatively warm with temperatures dropping below normal during the third week. The coldest period (compared to normal) was October 25 – 28 with daily temperatures averaging 11 degrees colder than normal. The first day of persistent snow cover for the season was on October 9. A total of 17 inches of snow fell during the month, well above the normal 9.4 inches. The water content of the snow was 1.04 inches, 124% of normal.

November

November ended up cooler and snowier than normal. The average monthly temperature was 2.4°F cooler than normal. Daily temperatures fluctuated above and below normal for most of the month, tilting toward cooler than normal for the last half of the month. Thanksgiving weekend had the coldest temperatures compared to normal, with a low of -27°F on November 29. The monthly snowfall total was 19 inches with a water content of 0.98 inches. Normal is 13 inches of snow and 0.84 inches of precipitation (melted snow).

Table 1. Denali Park HQ fall 2024 average monthly temperatures compared to the 1991-2020 normal.

Fall 2024	Average Monthly Temp (°F)	1991-2020 Normal (°F)	Departure from Normal (°F)
September	41.5	40.8	+0.7
October	23.9	24.7	-0.8
November	7.4	9.8	-2.4

Fall Temperature Departure from normal: -0.8°F

Table 2. Denali Park HQ fall 2024 monthly precipitation totals compared to normal.

Fall 2024	Total Monthly Precip. (in.)	1991-2020 Normal (in.)	Departure from Normal (in.)
September	1.92	1.74	+0.18
October	1.04	0.84	+0.20
November	0.98	0.84	+0.14

Fall Precipitation Departure from normal: +0.52 in. (115% of normal).

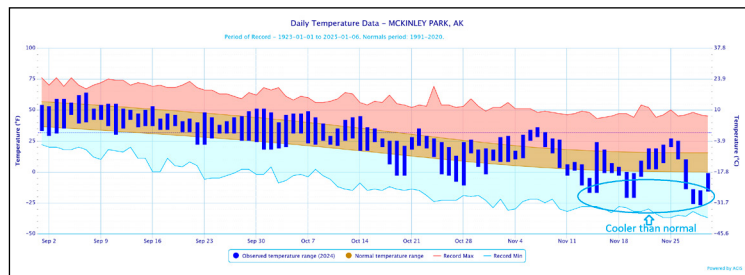


Figure 1. Fall 2024 daily temperatures at Denali Park HQ showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars). <http://xmacis.rcc-acis.org/>

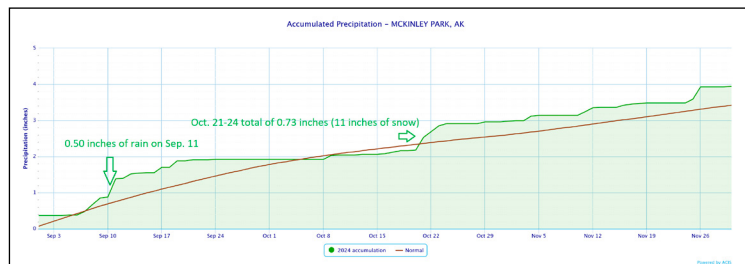


Figure 2. Fall 2024 accumulated precipitation at Denali Park HQ (green) compared to normal (brown line). <http://xmacis.rcc-acis.org/>



Talkeetna Fall Season 2024

The Talkeetna fall season temperature was 0.1°F below the 1991-2020 normal, with a warm September (+2.0° above normal) and a cold November (-2.7°F below normal). The minimum temperature in November was -12°F on the 27th and the 29th, about 16°F colder than the normal daily lows. It was a dry fall season for Talkeetna and most of southcentral Alaska (Figure 3). Talkeetna had a total of 6.18 inches of precipitation measured between September 1 and November 30, which is 68% of normal.

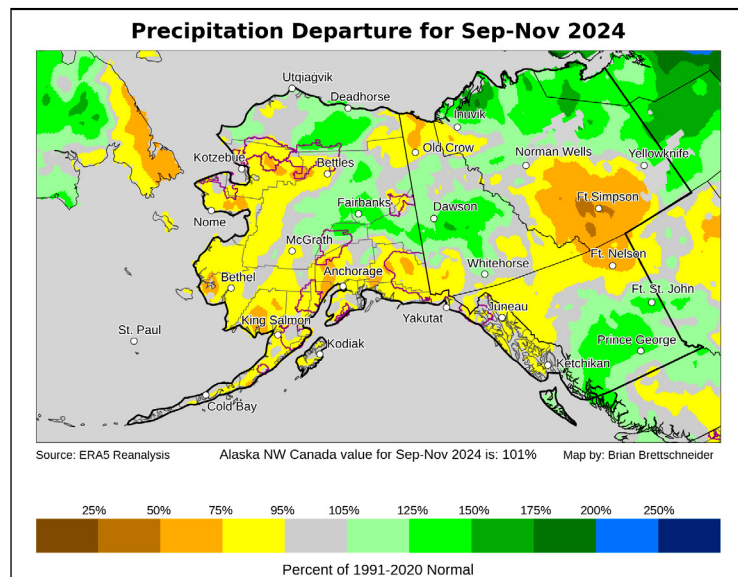


Figure 3. Statewide precipitation departure for the 2024 fall season. Map courtesy of Brian Brettschneider using ERA5 reanalysis data. Yellow and orange shading indicates drier than normal conditions.

Water Year (Oct. 1 - Sep 30) Wrap-Up at Park HQ

The end of September brings the end of the water year which we use to calculate annual precipitation to capture the entire winter season. At Park Headquarters 2024 was drier than normal with a total of 13.13 inches for the year, which is 83% of normal. Winter precipitation and the seasonal snowfall total was just above average with 82 inches for the season (records back to 1925). Spring and summer were much drier than normal.

Warmer Novembers at Eielson Visitor Center

The average fall season temperature at Eielson Visitor Center since 2006 is 25.5°F, which is 1.2°F warmer than the average fall season temperature at park headquarters. The site at Eielson is warmer than park headquarters for most of the cold season due to a persistent winter inversion. Cold air drains downslope and pools in valley bottoms and the higher elevations stay warmer.

At Eielson, the fall season was cooler than average, with a cool September and October. November was about a degree warmer than average for 2024. November temperatures have increased significantly since we installed the station in 2006. The average November temperature was 17.0°F at Eielson this fall, 1.2°F above the site average with 20 years on record (Figure 4). The warmest November was 2015 (30.3°F) and the coolest was 2022 (2.1°F); a striking example of the inherent variability in cold season temperatures.

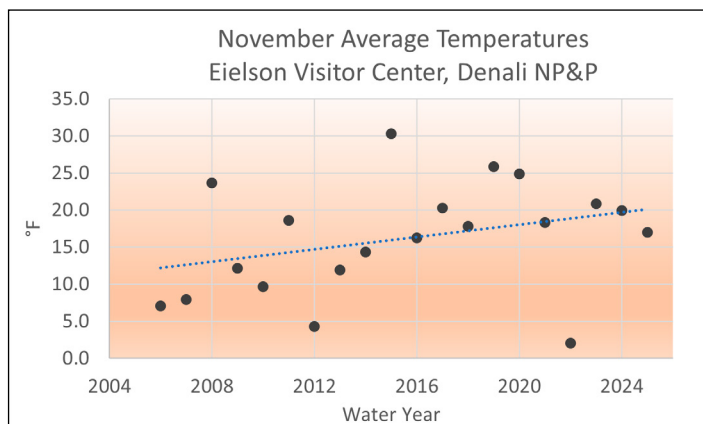
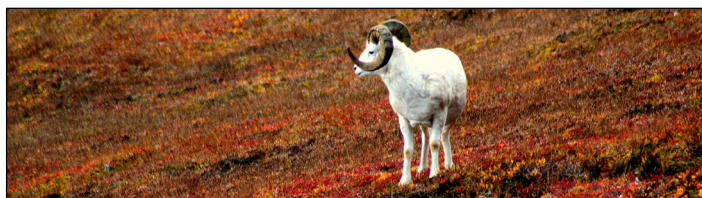


Figure 4. Average temperatures at Eielson Visitor Center, Denali NP&P.



More Information

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Current Weather in Denali

<https://www.nps.gov/im/cakn/climate.htm>

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 CAKN climate stations are available at [NPS Data Store](#)