

August 2013 Weather Summary

August saw Kenai Fjords' temperatures return to normal and provided plenty of rain to ensure that, as is the fate of many good things, the lovely weather of summer 2013 had come to an end. After two months of above-average monthly temperatures, the monthly average temperature for August precisely equaled the 30-year average for the month, calculated from temperatures ranging from 44-69 degrees F at the Seward airport.

Considering the season as a whole, the Kenai Fjords area received more precipitation than normal this summer (see the monthly precipitation graph located in the next section of this report). From May-August the Seward airport recorded a total of 23.76 inches of precipitation, 9.56 inches above normal for these four months combined, amounting to 167% of normal rainfall. These numbers may conflict with the human perception of the fair weather we had this summer but reveal the significance and overall cumulative effect of individual rain events (such as were experienced and discussed in the July 2013 summary), as well as the consistent rain brought on in August when measurable precipitation was recorded on 22 days.

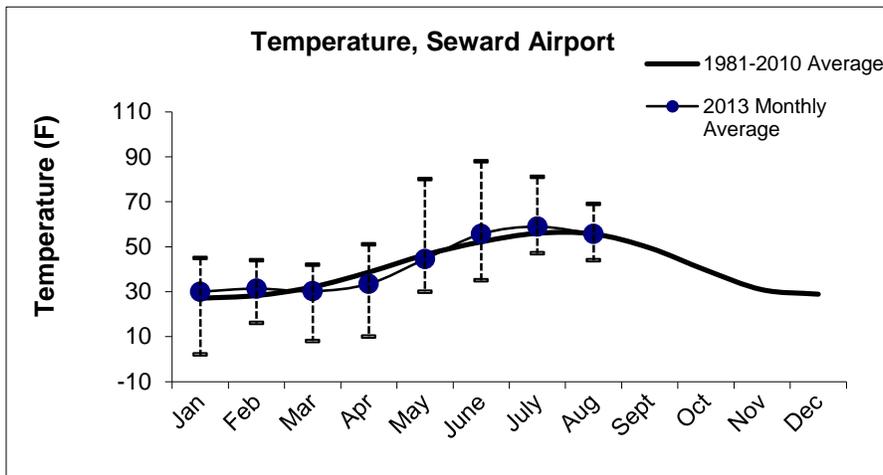
As recorded at the Seward airport, total precipitation for the month was 10.72 inches (191% of normal), 5.11 inches above the 30-year average (1981-2010) for the month. The monthly average temperature for July was 55.7 degrees F; equal to the 30-year average. In general, winds were relatively calm throughout the month with maximum average wind speeds of 13.4 mph and a maximum wind gust of 25 mph, both recorded on August 3rd.

Also of note:

- The [National Weather Service Climate Prediction Center's](#) three month weather outlook (September-October-November) favors normal temperatures and normal precipitation for the Kenai Fjords area, consistent with ENSO neutral conditions.
- [NOAA's 2012 Annual Greenhouse Gas Index](#) indicates that the combined heating effect of human caused emissions with that of existing greenhouse gases in the atmosphere has increased by 32% since 1990.
- NOAA's National Estuarine Research Reserve System, including a reserve located in Alaska's Kachemak Bay, released a report identifying factors that make estuaries and the communities that depend on them susceptible to climate change. [The susceptibility of Alaska's coastal areas was ranked "extremely high."](#)
- The debate is on: *Geophysical Research Letters* published a new study that challenges previous research by questioning the [significance of arctic amplification \(rapid arctic warming\) to mid-latitude weather patterns](#).
- *PLOS ONE* published research studying the [effects of warming Antarctic seas on krill](#), the primary food source for many species of marine life.
- View a year of phenological change (seasonal onset and withdrawal of snow cover followed by green up and senescence) in the arctic through an animation of monthly satellite images, providing [a visual to the seasonal pulse of North America](#).
- Scientists at the Max Planck Institute for Biogeochemistry in Germany identified a positive feedback loop in which the [extreme weather that is believed to be enhanced by climate change makes climate change worse](#).
- NASA's Earth Observatory reports on how scientists used [seismic waves and Landsat imagery to detect and locate a large landslide in Wrangell-St. Elias National Park](#).
- *Science News* published research indicating that [climate change may result in dramatic behavior shifts](#), changing not only where animals live, but how they live.
- The U.S. Department of Agriculture is inviting public comment on the report [Science-Based Methods for Entity-Scale Quantification of Greenhouse Gas Sources and Sinks from Agriculture and Forestry Practices](#) through October 12, 2013.
- NOAA climate services portal serves as a single point-of-entry for NOAA's extensive climate information, data, products, services, and the climate science magazine [ClimateWatch](#).

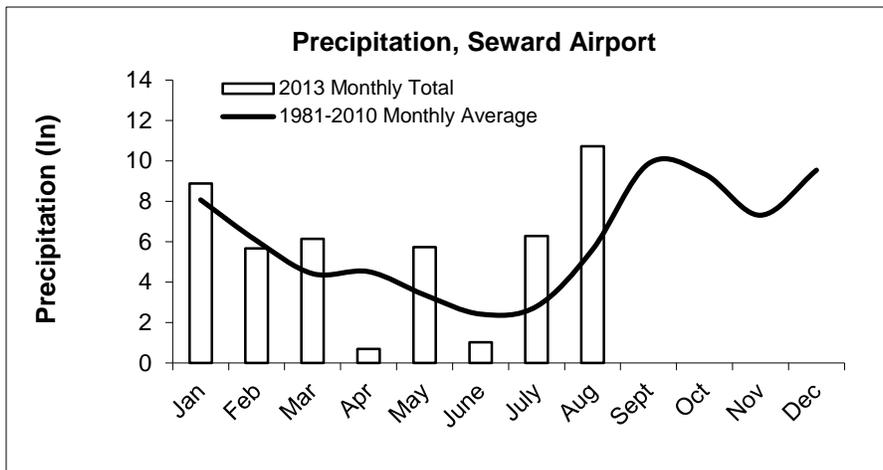
Read more to find out about the local climate for August 2013

Seward Airport Temperature, August 2013 (station 26438)



Monthly and 30-year average temperature (F) at Seward airport. The range of maximum and minimum daily temperatures for each month are shown with a dashed vertical line. August marks the beginning of the descent toward winter as indicated on the monthly average temperature bell curve.

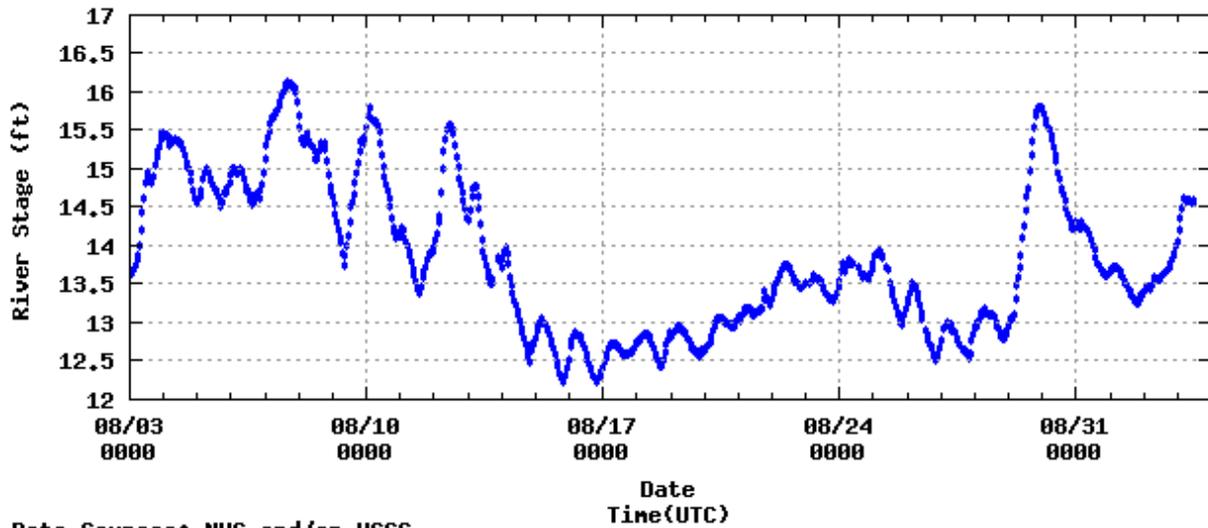
Seward Airport Precipitation, August 2013 (station 26438)



Monthly and 30-year average precipitation (inches) at Seward airport.

Rivers

Station
River:RESURRECTION RIVER Location:Resurrection River at Exit Glacier Bridge
lat:60.20 lon:149.59 Minor FLOOD STAGE: 17.5 feet
Plot created: Tue Sep 3 13:01:18 UTC 2013

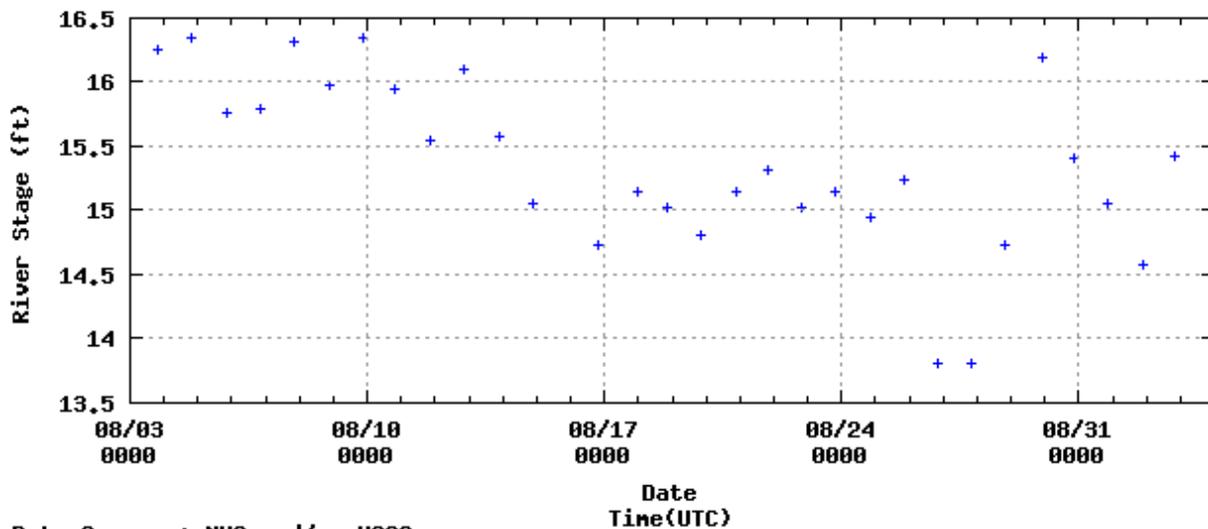


Data Sources: NWS and/or USGS

*Resurrection River at Exit Glacier Bridge is monitored by the Alaska-Pacific River Forecast Center:
<http://water.weather.gov/ahps2/index.php?wfo=pafc>*

Station
River:EXIT GLACIER STREAM Location:Exit Glacier nr Visitors Center
lat:60.19 lon:149.62 Minor FLOOD STAGE:Not Available
Plot created: Tue Sep 3 13:00:27 UTC 2013

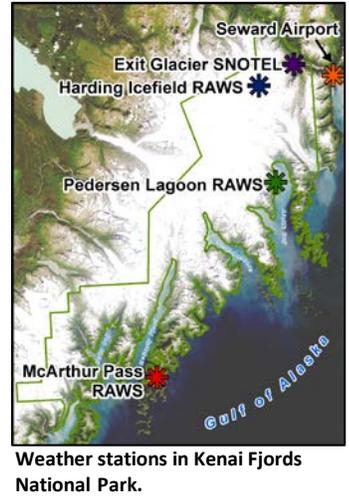
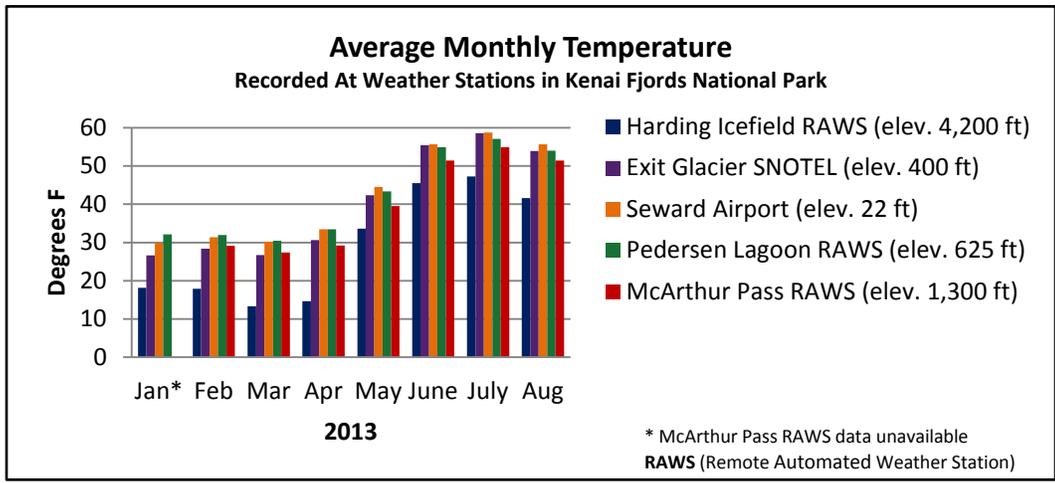
River Stage Legend
Observed Stage +



Data Sources: NWS and/or USGS

Exit Creek water level (stage height) data is only collected during the summer, beginning in May.

Average monthly temperatures reported at stations in Kenai Fjords National Park



Kenai Fjords National Park is situated in a transition zone between a warmer and wetter maritime climate and a cooler and drier interior climate. The data collected by these weather stations demonstrate the variability of climate due to differences in elevation and maritime influences in this relatively small region.

Weather Station data (map of [some] stations [Western Region Climate Center](#) or [MesoWest](#))

- [Seward Airport](#)
- [Grouse Crk Divide](#)
- [Exit Glacier SNOTEL](#)
- [McArthur Pass](#)
- [Pilot Rock](#)

- [Seward Hwy MP#12](#)
- [Exit Glacier](#)
- [Harding Icefield](#)
- [Nuka Glacier](#)
- [Buoy 76-Cape Cleare](#)

- [Pedersen Lagoon](#)

Weather Forecasts

- [Seward Summary](#)
- [Marine Forecast](#)
- [Surface Map](#)

- [Graphical Forecast](#)
- [4-8 Day Forecast](#)