April 2013 Weather Summary

Although the below-normal temperatures experienced in March continued into April, the previous precipitation pattern ceased, resulting in little new rain or snow in the Kenai Fjords area. Measurable precipitation was recorded at the Seward airport on only two of the thirty days. Despite very little new precipitation, 50 inches of snow remained on the ground in the Exit Glacier area at the end of the month, the likely result of cool temperatures that impeded snowmelt. Daylight continued to lengthen as Seward gained 3 hours and 33 minutes of daylight over the course of the month.

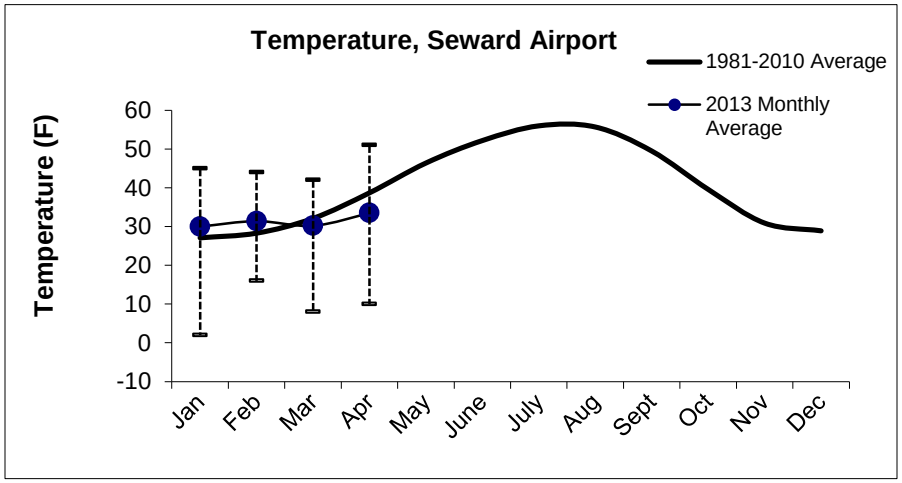
As recorded at the Seward airport, total precipitation for the month was 0.69 inches (15% of normal), 3.83 inches below the 30-year average (1981-2010) for the month. The monthly average temperature for April was 33.5 degrees F; 5.2 degrees F below the 30-year average. April 8th was the windiest day of the month reported at the Seward airport with sustained winds of 23.5 mph and a 5-second wind gust of 47 mph.

Also of note:

- The National Weather Service Climate Prediction Center's three month weather outlook (May-June-July) favors normal temperatures and normal precipitation for the Kenai Fjords area.
- New research from the *Proceedings of the National Academy of Sciences* indicates that Pacific Ocean purple sea urchins may be able to adapt well to ocean acidification through genetic change.
- The journal *Nature Climate Change* published new research indicating that reductions in methane, tropospheric ozone, hydrofluorocarbons, and black carbon may slow climate change-induced sea level rise.
- A new study published in the journal *Nature Climate Change* describes how dust particles and other aerosols may contribute to amplified climate change in polar regions.
- A new report was released as part of the National Adaptation Forum that provides an overview of activities being implemented to help communities prepare for climate change and identifies needs, challenges and potential actions that communities can take now.
- Researchers at Purdue University have identified sunlit snow as the major source of atmospheric bromine in the Arctic (the key to unique chemical reactions that purge pollutants and destroy ozone) indicating that the loss of sea ice will disrupt the balance of atmospheric chemistry in high latitudes.
- The Study for Environmental Arctic Change has produced their first report of the 2013 Sea Ice Walrus Outlook (SIWO).
- 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.*

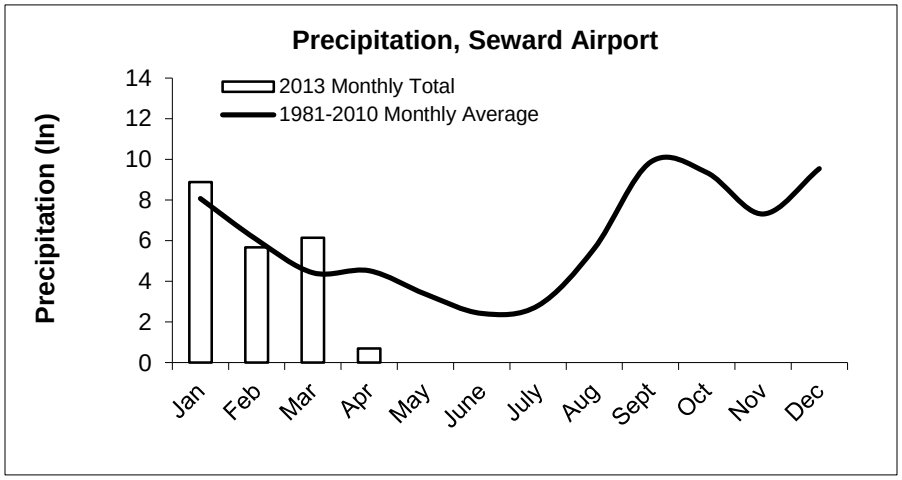
Read more to find out about the local climate for April 2013

Seward Airport Temperature, April 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.

Seward Airport Precipitation, April 2013 (station 26438)

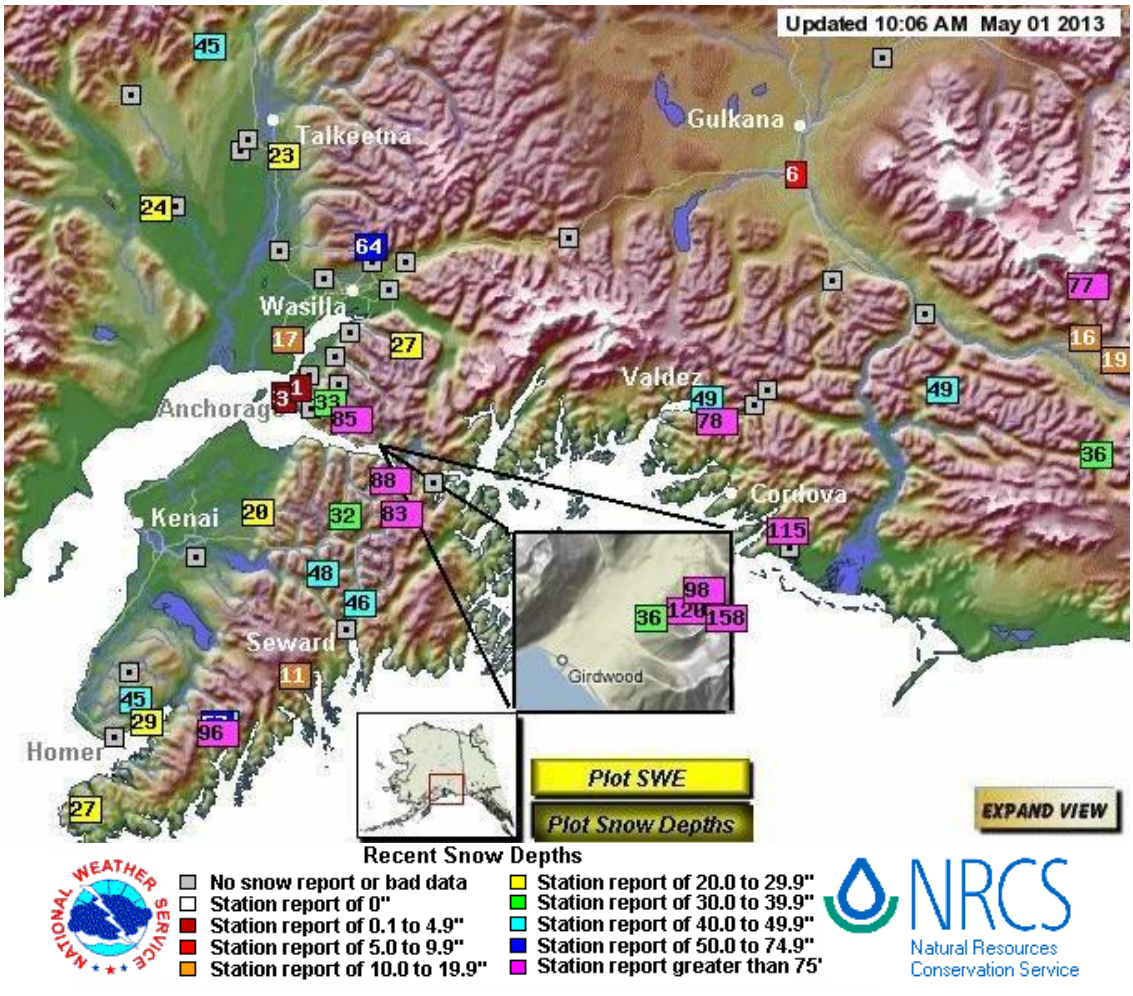


Monthly and 30-year average precipitation (inches) at Seward airport.

Rivers

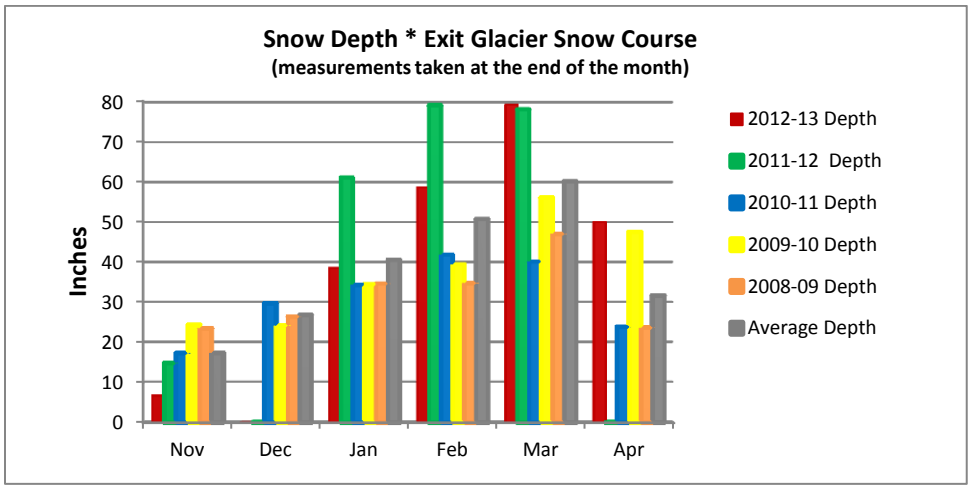
Resurrection River *at Exit Glacier Bridge is monitored by the Alaska-Pacific River Forecast Center: http://water.weather.gov/ahps2/index.php?wfo=pafc. Resurrection River is currently below the flood action stage.*
Exit Creek *water level (stage height) data is not collected in the winter.*

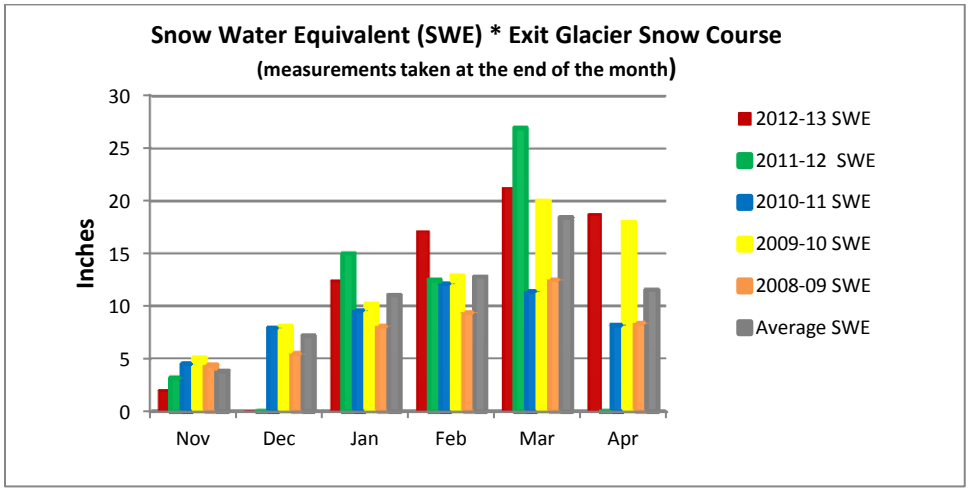
Snow & Ice



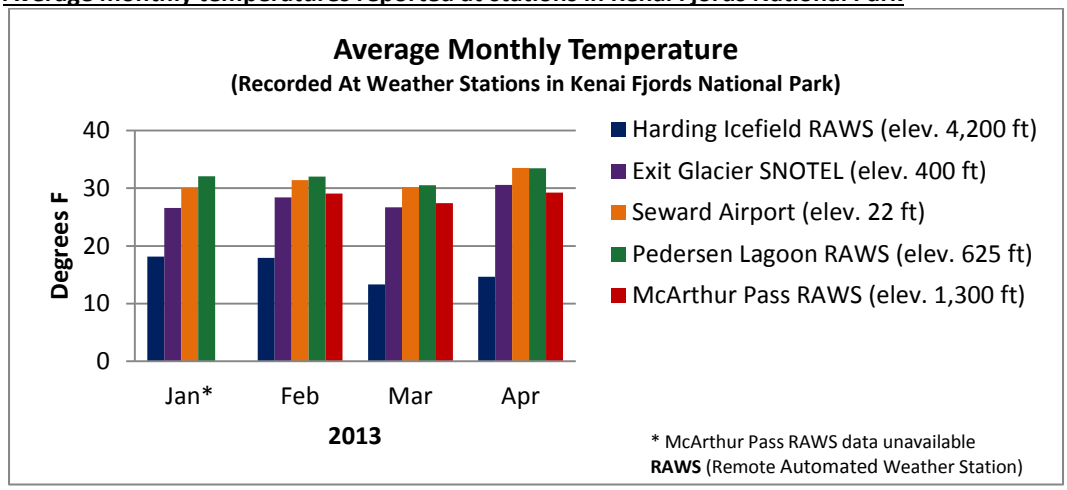
Snow depths reported across southcentral Alaska on May 1st: http://aprfc.arh.noaa.gov/index_snow.php. Snow is monitored by the Natural Resources Conservation Service: http://www.ambcs.org/ with most measurements and reporting taking place December to May.

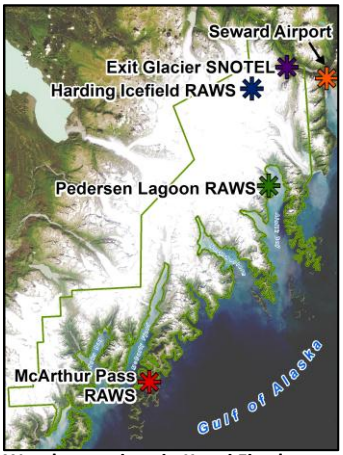
Based on snow course measurements, snow depth at Exit Glacier on May 2nd was 49.9 inches, 10.9 inches more than the average for the past 12 years. Snow water equivalent of this snow pack was 18.7 inches, 3.9 inches more than the 12 year average.





Average monthly temperatures reported at stations in Kenai Fjords National Park





Weather stations in Kenai Fjords National Park.

Kenai Fjords National Park is situated in a transition zone between a warmer, wetter maritime climate and a cooler, 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