

## December 2013 Weather Summary

Kenai Fjords' December weather was characterized by cold temperatures and very low precipitation, a continuation of the dry, windy weather experienced in November. The persistence of this weather pattern resulted in a thin, early-season snowpack but good ice development on local waterbodies for winter recreationists to enjoy. As indicated by the 30-year normal (1981-2010), December typically ranks as the second wettest month of the year in Kenai Fjords but, in 2013, it was the second driest month of the year. Measurable precipitation was recorded at the Seward airport on nine days of the month with 80% of total precipitation occurring on two days, December 21<sup>st</sup> and 31<sup>st</sup> ( 0.41 and 0.35 inches, respectively.) Wind speeds were relatively high throughout the month with daily average wind speeds exceeding 15 mph on 11 days of the month.

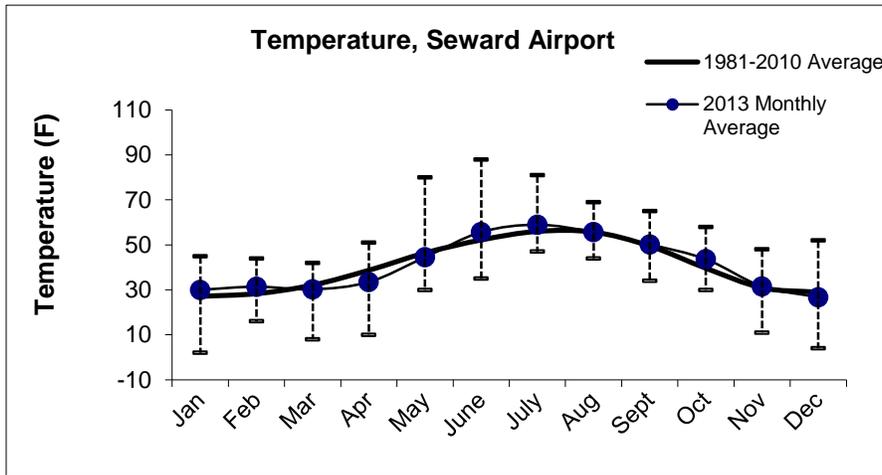
As recorded at the Seward airport, total precipitation was 0.95 inches (10% of normal), 8.59 inches below the 30-year average (1981-2010) for the month. The monthly average temperature for December was 26.7 degrees F; 2.2 degrees F below the 30-year average. In general, winds were active throughout the month with a maximum daily average wind speed of 22.8 mph recorded on December 16<sup>th</sup> and a tie for maximum wind gust of 49 mph, recorded on December 16<sup>th</sup> and December 25<sup>th</sup>.

Also of note:

- The [National Weather Service Climate Prediction Center's](#) three month weather outlook (January-February-March) favors below-normal temperatures and normal precipitation for the Kenai Fjords area.
- [NOAA's 2013 Arctic Report Card reports on several climate change-induced changes to arctic tundra vegetation](#) including increased vegetation productivity (greenness), increased length of growing season, increased number and severity of tundra wildfires, and the expansion of trees and shrubs into northern latitudes in recent decades.
- NOAA's Earth Observatory illustrates arctic water temperature departures from normal in 2013, indicating that [most surface waters, including Alaska's Turnagain Arm, were warmer than average in summer 2013](#).
- Check out the new interactive map created by the Alaska Center for Climate Assessment and Policy (ACCAP), illustrating [Alaska climate and weather highlights for 2013](#).
- The National Research Council published a new book, [Abrupt Impacts of Climate Change: Anticipating Surprises](#), to address the current state of knowledge on potential abrupt changes and to identify important research and monitoring needs.
- The National Wildlife Federation published a report on [climate change impacts to big game and their habitats](#) and identifies actions that can be taken to reduce risks and increase resilience.
- 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](#).

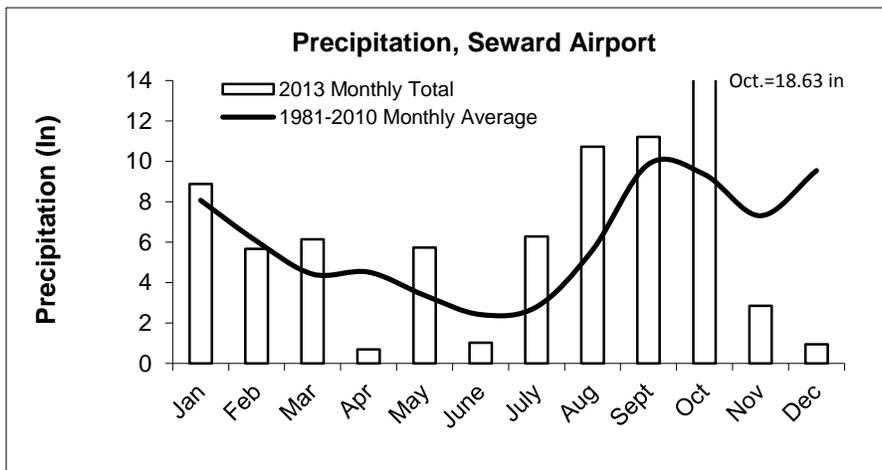
***Read more to find out about the local climate for December 2013***

**Seward Airport Temperature, December 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, December 2013** (station 26438)



Monthly and 30-year average precipitation (inches) at Seward airport. Note how unusually dry December was.

**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>.

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

## Snow & Ice

Note: The map that is typically used to display end-of-month snow depths was unavailable at the time of writing. However, NOAA was able to provide tabular data for January 1<sup>st</sup>. The map format will be back again next month.

Station	Snow Depth (in)	Date	Lat/Lon	Name
INPA2	33	1/1/2014	61 05/149 29	Indian Pass
AYBA2	22	1/1/2014	60 57 33/149 06 29	Alyeska Base
AYMA2	40	1/1 2014	60 57 44/149 05 23	Alyeska Mid
AYTA2	47	1/1/2014	60 57 46/149 04 08	Alyeska Top
TUGA2	30 (suspect)	1/1/2014	60 47/149 11	Turnagain Pass
KMPA2	29	1/1/2014	60 44/150 29	Kenai Moose Pens
SUUA2	19	1/1/2014	60 37/149 32	Summit Creek
GRVA2	21	1/1/2014	60 36/149 04	Grandview
CORA2	17	1/1/2014	60 23 27/149 41 39	Cooper Lake
GCRA2	16	1/1/2014	60 16/149 21	Grouse Creek Divide
EXGA2	16	1/1/2014	60 11 24/149 37 12	Exit Glacier
HRDA2	11	1/1/2014	61 12 36/149 51 16	Harding Ice Field
ARDA2	11 (suspect)	1/1/2014	59 52/151 19	Anchor River Divide
MNCA2	10	1/1/2014	59 44 43/151 15 30	McNeil Canyon
MFBA2	11	1/1/2014	59 46 42/150 45 15	Middle Fork Bradley
KCKA2	11	1/1/2014	59 46 31/159 50 03	Kachemak Creek
NUKA2	11 (suspect)	1/1/2014	59 41/150 42	Nuka Glacier
PGRA2	12	1/1/2014	59 20 08/151 50 50	Port Graham
UPPA2	44	1/1/2014	61 11 28/145 38 53	Upper Tsaina
PAVW	33	1/1/2014	61.13/146.85	Valdez WSO
EYKA2	27	1/1/2014	60 33 52/145 42 48	Mt Eyak
PAMR	14	1/1/2014	61.22/149.85	Merrill Field
HILA2	17	1/1/2014	61 06 58/149 41 08	Anchorage Hillside
PMKA2	14	1/1/2014	61 23 21/150 01 17	Point Mackenzie
MORA2	10	1/1/2014	61 22 40/148 59 48	Moraine
PMLA2	12	1/1/2014	61 35 20/149 05 57	Palmer Job Corps
GLNA2	23	1/1/2014	62 06 31/145 31 58	Glennallen KCAM
PASW	22	1/1/2014	61.97/151.18	Skwentna Airport
TKVA2	24 (suspect)	1/1/2014	62 38/150 46	Tokositna Valley
SUVA2	20	1/1/2014	62 08/150 02 30	SuValley

Snow depths reported across southcentral Alaska on January 1, 2014: [http://aprfc.arh.noaa.gov/sd\\_pafc\\_sites.html](http://aprfc.arh.noaa.gov/sd_pafc_sites.html). Snow is monitored by the Natural Resources Conservation Service: <http://www.ambcs.org/> with most measurements and reporting taking place December to May.

**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](#)