



## December 2014 Weather Summary

December was another warmer-than-normal month in Kenai Fjords National Park and surrounding areas. As recorded at the Seward airport, the monthly average was 5.8 degrees F above normal, the same temperature departure that was recorded in November. Daily high temperatures were above freezing every day except one and ranged from 31 degrees F (December 26<sup>th</sup>) to 47 degrees F (December 7<sup>th</sup>). Consistent with the average monthly temperature, the average daily high and low temperatures were both above normal, exceeding their respective averages by 5.1 and 6.5 degrees F.

The combination of below-normal monthly precipitation and warmer-than-normal temperatures resulted in little snowfall and no snow accumulation at lower elevations. The existing snow pack near Exit Glacier lost 3.9 inches of snow in December, leaving only 4.8 inches of snow at the Exit Glacier January 1<sup>st</sup> snow survey and no snow on the ground in town. Of the fourteen measurements completed in the last 28 year period of record at Exit Glacier, the 2014-2015 measurement is the lowest January 1<sup>st</sup> snow pack. It is 13.8 inches below the previous lowest measurement of 18.6 inches recorded January 1, 1991. (See graph in the *Snow & Ice* section below.)

As recorded at the Seward airport, the monthly average temperature for December was 34.7 degrees F; 5.8 degrees F above the 30-year normal. The total precipitation was 6.8 inches (71% of normal), 2.74 inches below the 30-year normal (1981-2010) for the month.

Also of note:

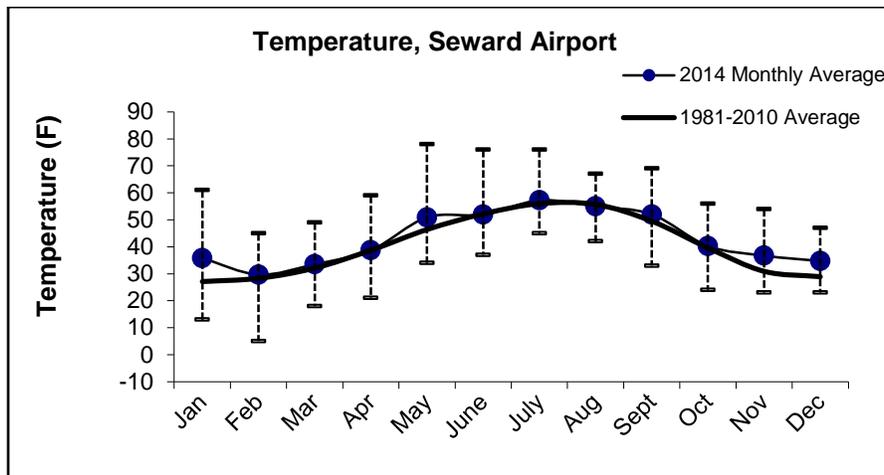
- The [National Weather Service Climate Prediction Center's](#) three month weather outlook (January-February-March) favors above-normal temperatures and above-normal precipitation for the Kenai Fjords area.
- The Institute on the Environment at the University of Minnesota's online environmental magazine, *Ensis*, summarizes numerous changes indicating that ["the Arctic we know is coming to an end...a new and very different Arctic is taking over."](#)
- Defenders of Wildlife compiled key findings from 11 recent reports on climate science, impacts and vulnerability of terrestrial, freshwater and marine wildlife and habitat to [help species and landscapes survive future change on the Chugach and Tongass National Forests.](#)
- A new brochure produced by the U.S. Arctic Research Commission and The Arctic Institute [illustrates the impact of the Arctic on global weather, security, research, health and the environment.](#)
- NOAA's Climate.gov reports that 2014 was the [tenth consecutive year with below average spring snow cover in the Northern Hemisphere.](#)
- NASA's Earth Observatory reports a [5% increase in the amount of solar radiation absorbed by the Arctic during summer](#) months in the 21<sup>st</sup> century resulting from decreased sea ice.
- NOAA climate services portal serves as a [single point-of-entry for NOAA's extensive climate information](#), data, products, and services.



Nunataks make long shadows on the Harding Icefield just after winter solstice. Green and brown hues reveal the lack of snow at lower elevations. Landsat 8 image acquired 12/23/2014.

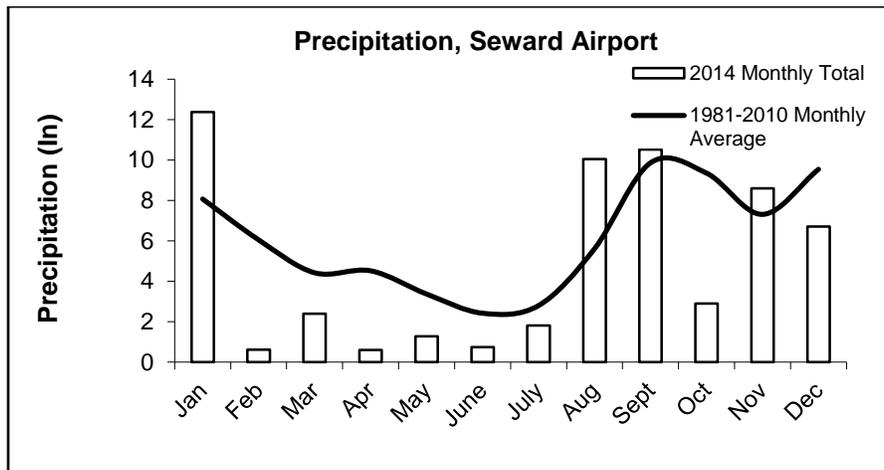
**Read more to find out about the local climate for December 2014**

**Seward Airport Temperature, December 2014** (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 2014** (station 26438)



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

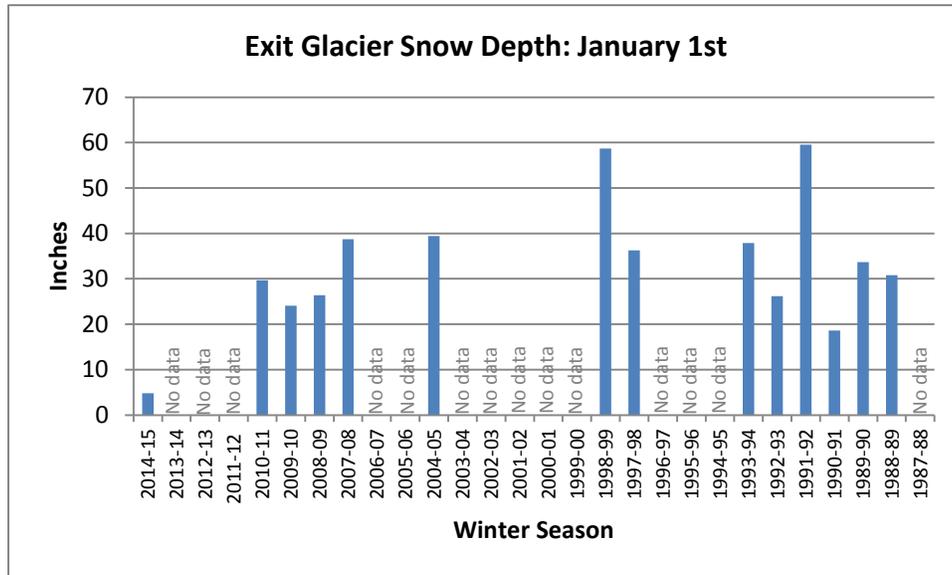
**Rivers**

**Resurrection River** at Exit Glacier Bridge is monitored by the Alaska-Pacific River Forecast Center:

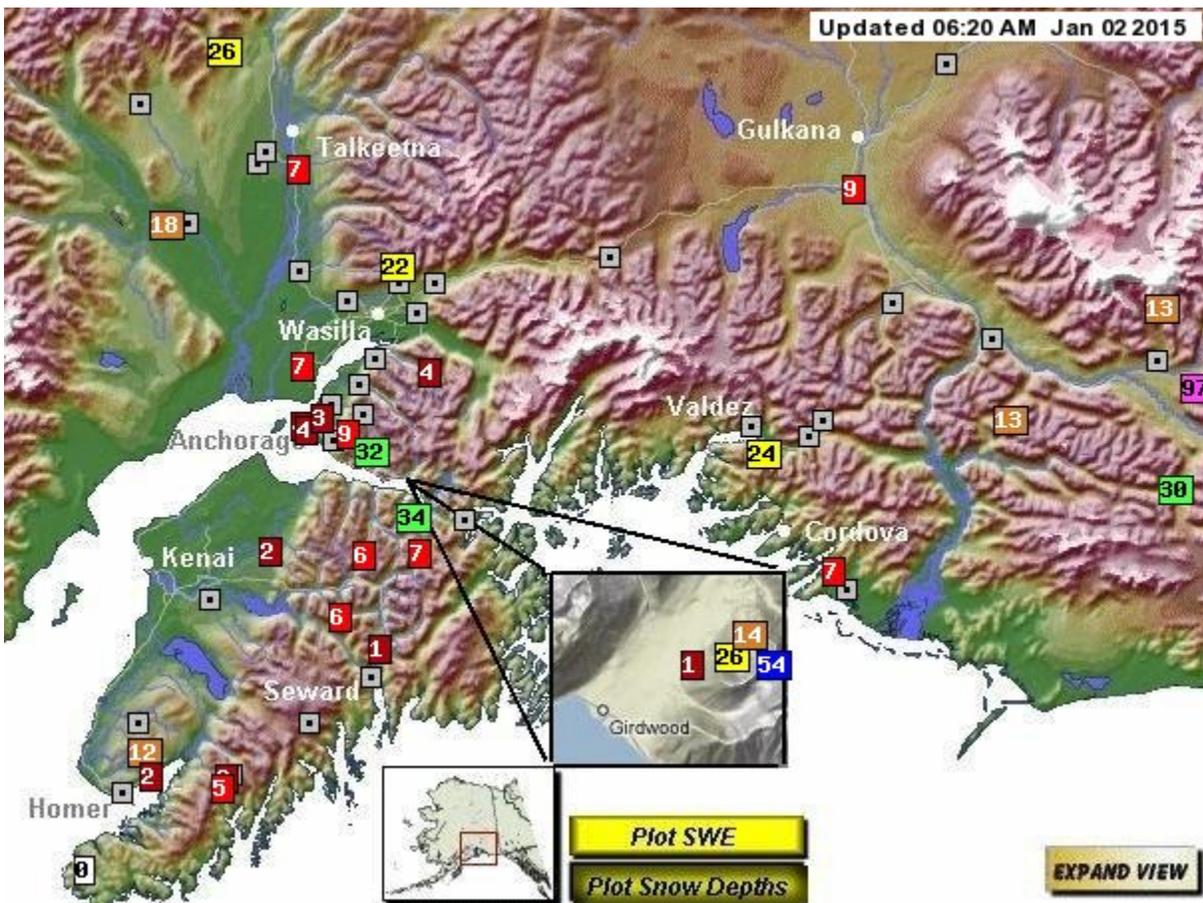
[http://aprfc.arh.noaa.gov/index\\_rivs.php](http://aprfc.arh.noaa.gov/index_rivs.php)

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

**Snow & Ice**



Kenai Fjords National Park staff collaborate with the Natural Resource Conservation Service (<http://www.ambc.org/>) to monitor snow at Exit Glacier with measurements and reporting taking place December to May. Snow is measured within three days of the first of each month. January 1<sup>st</sup> measurements are not mandatory given low staffing during the holidays. Of the 14 measurements completed during the 28 year period of record at Exit Glacier, the 2014-2015 measurement is the lowest January 1<sup>st</sup> snow pack, falling behind the previous lowest measurement of 18.6 inches recorded January 1, 1991 by 13.8 inches.



Snow depths reported across southcentral Alaska on Jan 2<sup>nd</sup>: [http://aprfc.arh.noaa.gov/sd\\_pafc\\_sites.html](http://aprfc.arh.noaa.gov/sd_pafc_sites.html).

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

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

[Seward Hwy MP#12](#)  
[Exit Glacier](#)  
[Harding Icefield](#)  
[Nuka Glacier](#)

[Pedersen Lagoon](#)  
[Buoy 76-Cape Cleare](#)  
[Pilot Rock](#)

**Weather Forecasts**

[Seward Summary](#)  
[Marine Forecast](#)

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

[Surface Map](#)