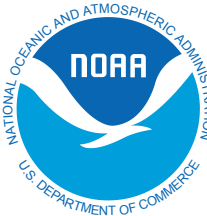


SEPTEMBER–NOVEMBER 2015



## WEATHER AND CLIMATE HIGHLIGHTS

**North Slope:** Temperatures averaged well above normal, though overall this was the coolest autumn since 2011. Due to sharp decline in autumn sea ice coverage in recent years, only one autumn since 2000 has been cooler than long term average.

**Bering Sea:** A strong Bering Sea storm Nov 16–17 brought high water to most coastal communities from Bering Strait south to **Nunivak Island**. At **Scammon Bay** high seas and waves sank 5 boats; 2 others drifted away.

## SOUTHCENTRAL ALASKA

On Nov 9, 1–3" snow and freezing combined with mild road surface temperatures to create a solid ice covering on many **Anchorage** area roads, resulting in multiple minor accidents and forcing closure of **Anchorage** area schools. On Nov 24–25 freezing rain forced closure of most schools in **Mat-Su** school district.



**Unalaska/Dutch Harbor:** Nov 11 storm produced damaging winds, which gusted to 91 mph at **Dutch Harbor** Airport and 93 mph at **Atkutan**. Several buildings had windows blown out and at least one home suffered structural damage. Schools closed due to threat of blowing debris.

## INTERIOR ALASKA

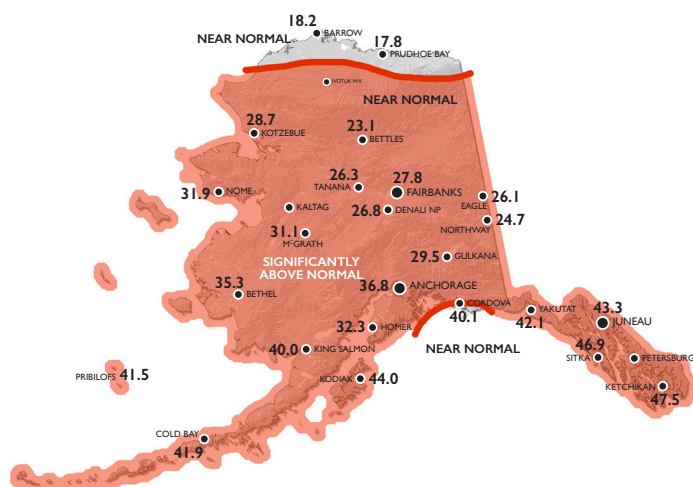
Two significant early-season snowstorms hit the **Fairbanks** area in late September. On Sept 25, 4–9" snow fell at lower elevations but melted before another 8–16" fell Sept 28–30. During the 2<sup>nd</sup> storm, 20,000+ customers lost power for a day or more as snow-laden trees fell into power lines. Power outages were widespread across Fairbanks, including some areas of **North Pole** and south towards **Nenana**. On Sept 30 the University of Alaska Fairbanks cancelled classes and public schools were closed due to poor road conditions and risk of power lines across roadways.

**Denali area:** Heavy snow on south side of Alaska Range closed Parks Highway at times on Nov 25. South of **Cantwell**, 3-4' snow fell over several days, causing snow slides. A weather station near Chulitna River north of **Trapper Creek** received a whopping 97" snow during November:

## SOUTHEAST ALASKA

At **Ketchikan** on Oct 9, 3+” rain fell and winds peaked at 62 mph. Power was knocked out from downed trees on power lines. Winds gusted to 76 mph at **Hydaburg**. Almost 3.5” rain fell in **Haines** area Nov 27–29, with multiple landslides that closed at least one area road for 8 hours. A foot of snow in the **Juneau** area Nov 17–18 caused multiple fender-benders. **Yakutat** received almost 11” snow, and up to 10” snow fell at **Pelican** and **Elfin Cove**.

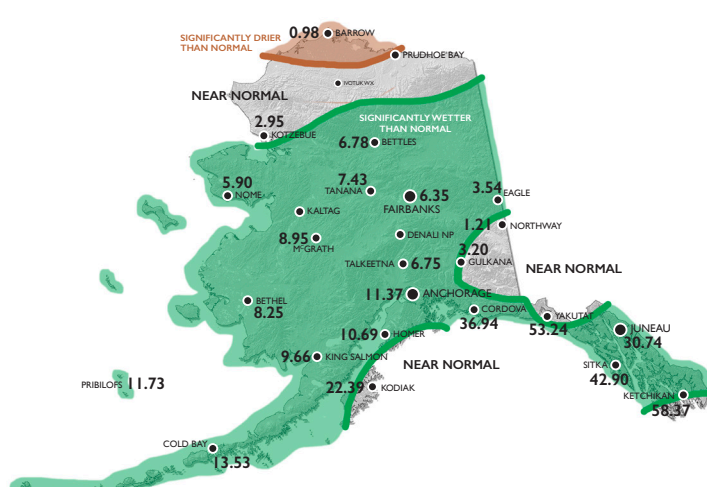
## TEMPERATURE ANOMALIES



“Significantly above/below” = within the warmest/coolest third of values compared to 1981–2010 reference period

Data and analyses are preliminary and subject to revision. Source: NOAA National Centers for Environmental Information.

## PRECIPITATION ANOMALIES

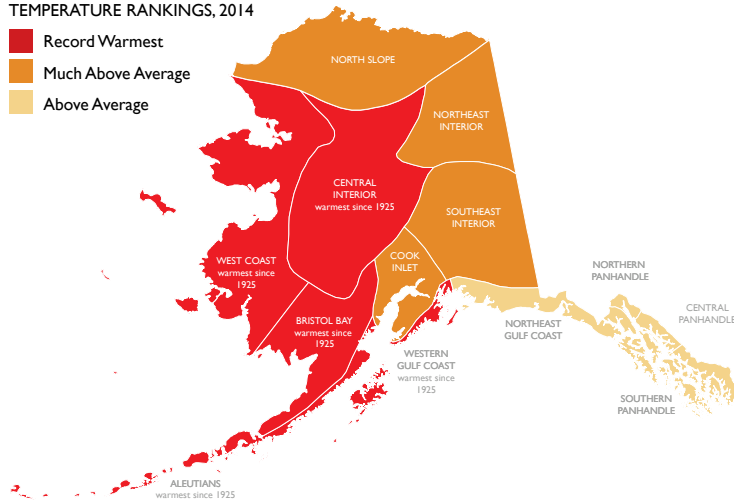


“Significantly wetter/drier” = within the wettest/driest third of values compared to 1981–2010 reference period

# CLIMATE DIVISIONS HIGHLIGHT: TEMPERATURE RANKINGS FOR 2014 AND 2015

## TEMPERATURE RANKINGS, 2014

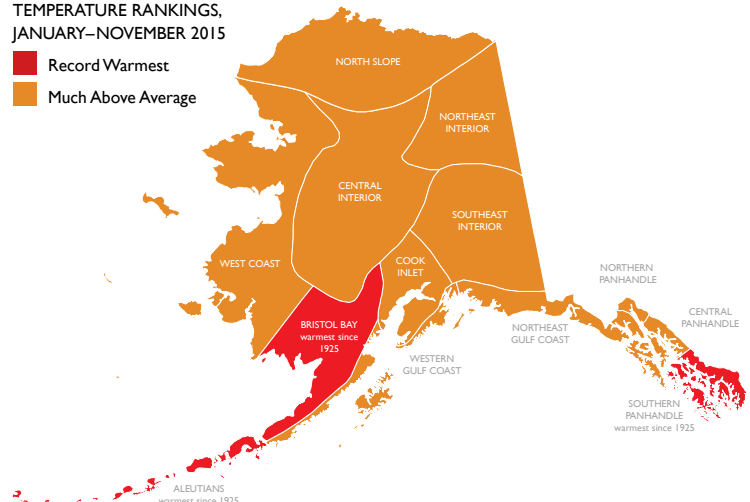
- Record Warmest
- Much Above Average
- Above Average



Based on analysis by the National Centers for Environmental Information, 2014 was the warmest year of record (since 1925) for Alaska as a whole. However, much of the warmth was concentrated in western and northern parts of the state. In fact, the Panhandle, while certainly significantly warmer than average, was not exceptionally warm. 2015 has followed suit, and is on track to be, like 2014, one of the warmest years of record in Alaska.

## TEMPERATURE RANKINGS, JANUARY–NOVEMBER 2015

- Record Warmest
- Much Above Average



Here we show the ranks of 13 Alaska climate divisions for 2014 (left) and 2015 through November (right). While final rankings in some regions may change depending on how December turns out, in 2015 warmth is clearly more evenly distributed, with all divisions very likely have a “top 5” ranking. Causes of the warmth are in part due to sustained warmer than average ocean surface temperatures in the seas surrounding Alaska, and to significantly reduced sea ice coverage near Alaska during summer and autumn compared to before the late 1990s.

## REGIONAL HIGHLIGHTS: A YEAR OF EXTREMES

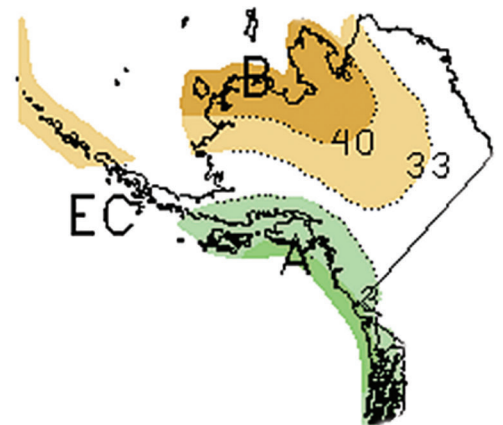
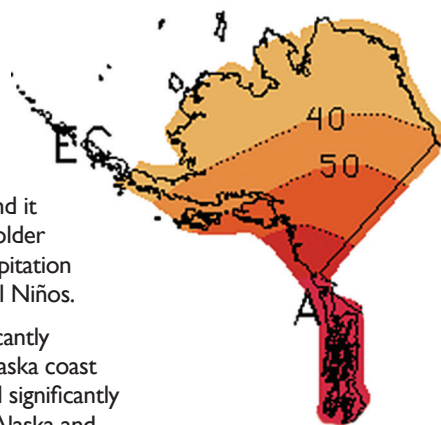
Highlights of 2015 include the very low snow pack in February and March that forced cancellation of the Wold Championship Sled Dog races at Fur Rondy and moved the Iditarod restart to Fairbanks. Low snow cover in Southcentral Alaska and a record warm May in much of the Interior set the stage for an extreme wildfire season. More than 5 million acres burned, much of that in 5 weeks from mid June to late July. Several wildfires destroyed homes and even more forced evacuations. Overall this was the second largest wildfire season since 1950, behind only 2004. Never has so much of Alaska burned in so little time.

Record heavy precipitation and snowfall fell in parts of the Interior in late September; more than 20,000 homes and businesses were without power in the Fairbanks area during the last days of the month, some for up to a week. In October the remains of Hurricane Ocho brushed Southeast Alaska, making this only the third time in the past century that Southeast has been directly impacted by an ex-hurricane. In December one of the deepest storms on record in the North Pacific and Bering Sea produced wind gusts to over 120 mph at Adak, causing considerable property damage.

## REGIONAL OUTLOOKS: JANUARY–MARCH 2016

**TEMPERATURE** Increased chances for significantly warmer than normal temperatures across the state except for western Alaska Peninsula and Aleutians. Highest chances are from Kodiak Island, Anchorage and Fairbanks southeastward, where chances exceed 50%. Over northeast Gulf Coast and in Panhandle chances are over 60%. Remember, this outlook is for temperatures over the full 3 months, and it is entirely possible for there to be several weeks of colder than average weather even during a mild winter. Precipitation outlook is derived from outcomes observed in past El Niños.

**PRECIPITATION** Slightly increased chances of significantly higher than average total precipitation near Gulf of Alaska coast and central and northern Panhandle. Odds tilt toward significantly drier than average across Aleutians, most of western Alaska and central and western Interior. Temperature outlook is derived from a combination of recent moderate and strong El Niños and warmer than average sea surface temperatures.



Three-month outlooks for temperature (left) and precipitation (right) for Alaska. EC=equal chances for A, N, B. A=above, N=normal, B=below. Created 17 Dec 2015, 0.5 month lead, valid Jan-Feb-Mar 2016.

## ALASKA REGION PARTNERS

Alaska Center for Climate Assessment & Policy • Alaska Climate Research Center • Alaska Climate Science Center • Cryosphere Today (University of Illinois)  
NOAA / NWS Weather Forecast Offices in Fairbanks, Anchorage and Juneau • NOAA / NESDIS / NCEI • Scenarios Network for Alaska + Arctic Planning

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DECEMBER 2015  
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