

Alaska Statewide Climate Summary

June 2012

Temperature

A mix of high and low temperatures and precipitation across Alaska marked June 2012. Thirteen of the twenty first order station had below normal temperatures, and a average temperature deviation of all twenty stations from the long-term mean could be calculated as -0.9°F . Having an overall below normal temperature in both May and June terminates the monthly flip flop between below normal temperatures to above normal temperature seen since November 2011. Bettles had the greatest positive deviation with 2.1°F . The stations with the next greatest deviations were Barrow (1.7°F) and Fairbanks (1.2°F). The stations with the largest negative deviation were found along costal Alaska: Juneau (-2.9°F), Homer (-2.8°F), King Salmon (-2.5°F) and Kotzebue (-2.5°F). More details can be seen the table below.

Fairbanks saw its first 80°F day on June 19th, ten days later than normal. Fairbanks has an average of eleven days a year at or above 80°F . With records going back to 1905, there has never been a summer in Fairbanks without at least one 80°F day. Anchorage has its first 70°F day on June 17th.

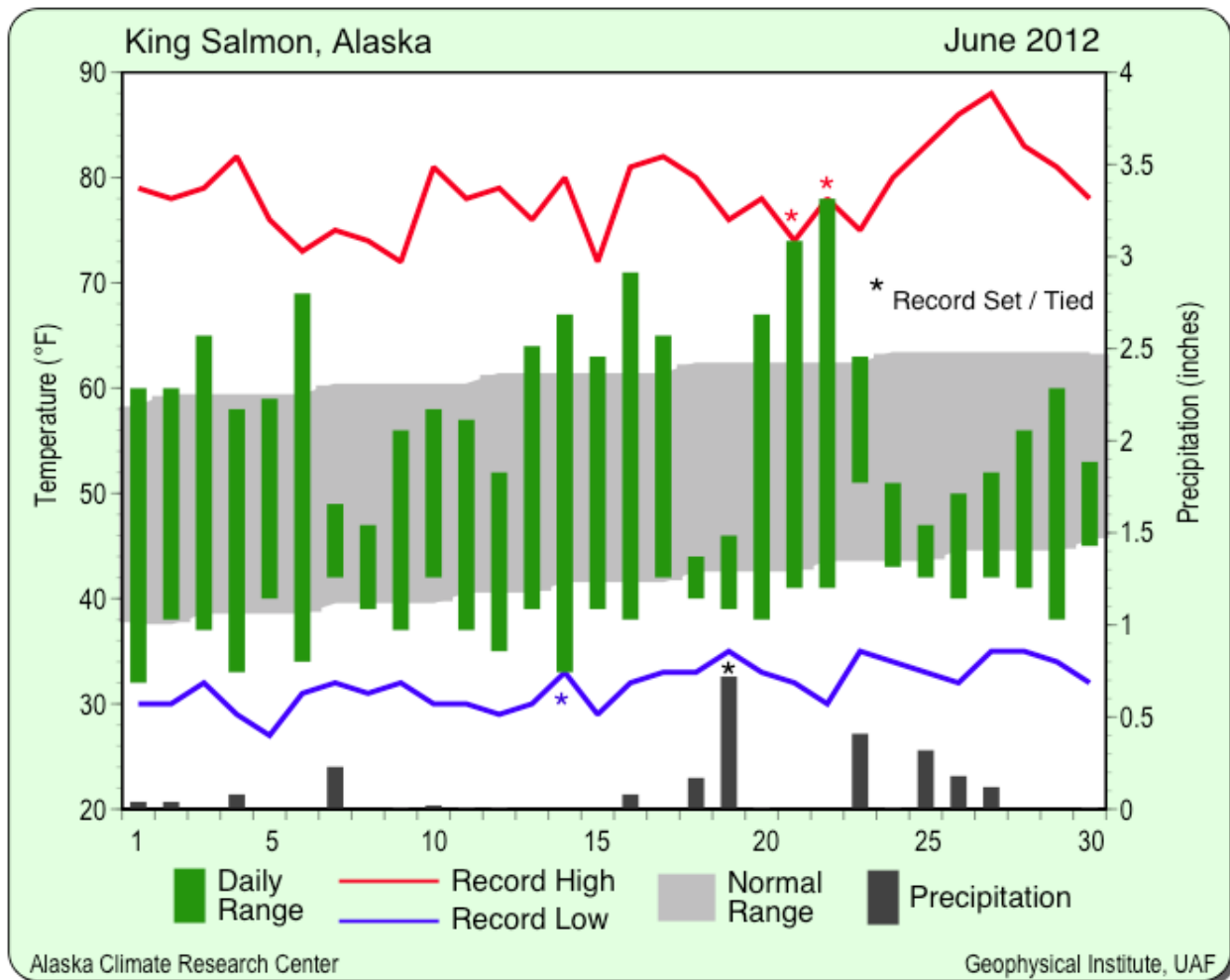
Station	Temperature		
	Observed (°F)	Normal (°F)	Delta (°F)
Anchorage	54.3	55.2	-0.9
Annette	52.9	55.1	-2.2
Barrow	37.3	35.6	1.7
Bethel	51.0	52.5	-1.5
Bettles	60.6	58.5	2.1
Big Delta	57.9	57.6	0.3
Cold Bay	43.9	46.3	-2.4
Fairbanks	61.6	60.4	1.2
Gulkana	52.6	54.4	-1.8

Homer	47.8	50.6	-2.8
Juneau	51.7	54.6	-2.9
King Salmon	49.0	51.5	-2.5
Kodiak	50.5	49.7	0.8
Kotzebue	43.2	45.7	-2.5
McGrath	58.5	57.4	1.1
Nome	47.9	47.8	0.1
St. Paul Island	40.9	42.4	-1.5
Talkeetna	55.5	57.0	-1.5
Valdez	52.2	53.2	-1.0
Yakutat	48.6	50.8	-2.2

For June, low temperature records were found in the first half of the month in the Bering Sea region. After that, all new records were for high temperatures. The 23rd and 24th saw nice weather break out across the Southeast, and a number of new record highs were set or matched. Both Cold Bay and King Salmon managed to set both warm and cold events during the month.

Date	Temperature Records				
	Station	Element	New Record	Old Record	Year of old Record
06/03/12	Cold Bay	Low Temperature	32	32	2010
06/06/12	Cold Bay	Low Temperature	32	31	1972
06/14/12	King Salmon	Low Temperature	33	34	2002
06/16/12	St. Paul	High Temperature	57	56	2001
06/21/12	Cold Bay	High Temperature	61	61	1983

06/21/12	King Salmon	High Temperature	74	74	1993
06/22/12	King Salmon	High Temperature	78	75	2001
06/23/12	Annette	High Temperature	87	79	1983
06/23/12	Haines Airport	High Temperature	86	84	1997
06/23/12	Gustavus	High Temperature	82	75	1983
06/23/12	Pelican	High Temperature	70	69	2004
06/23/12	Wrangell	High Temperature	84	82	2004
06/23/12	Ketchikan	High Temperature	81	81	2004
06/24/12	Little Port Walter	High Temperature	78	73	1996
06/24/12	Petersburg	High Temperature	74	73	2004
06/26/12	St. Paul	High Temperature	57	56	2001



Daily temperature ranges and precipitation for King Salmon for June 2012. Note the two record highs, record low and record precipitation events.

Precipitation

Similar to temperature, precipitation was mixed with above normal totals for eleven of the twenty stations. The greatest positive deviations above normal were found in Homer (117%), Juneau (106%) and McGrath (102%). On the other side of the spectrum were Kodiak, with only 14% of the expected value, or 0.80" of the normal of 5.91", Cold Bay with 17% or 0.46 of the normal of 2.72" and St Paul with 19% or 0.26 of the normal of 1.35". As the positive deviations were more numerous, the mean of the twenty stations ended up slightly positive at 5% above normal. As with the temperature, the precipitation deviations for the twenty first order station are given in the table below:

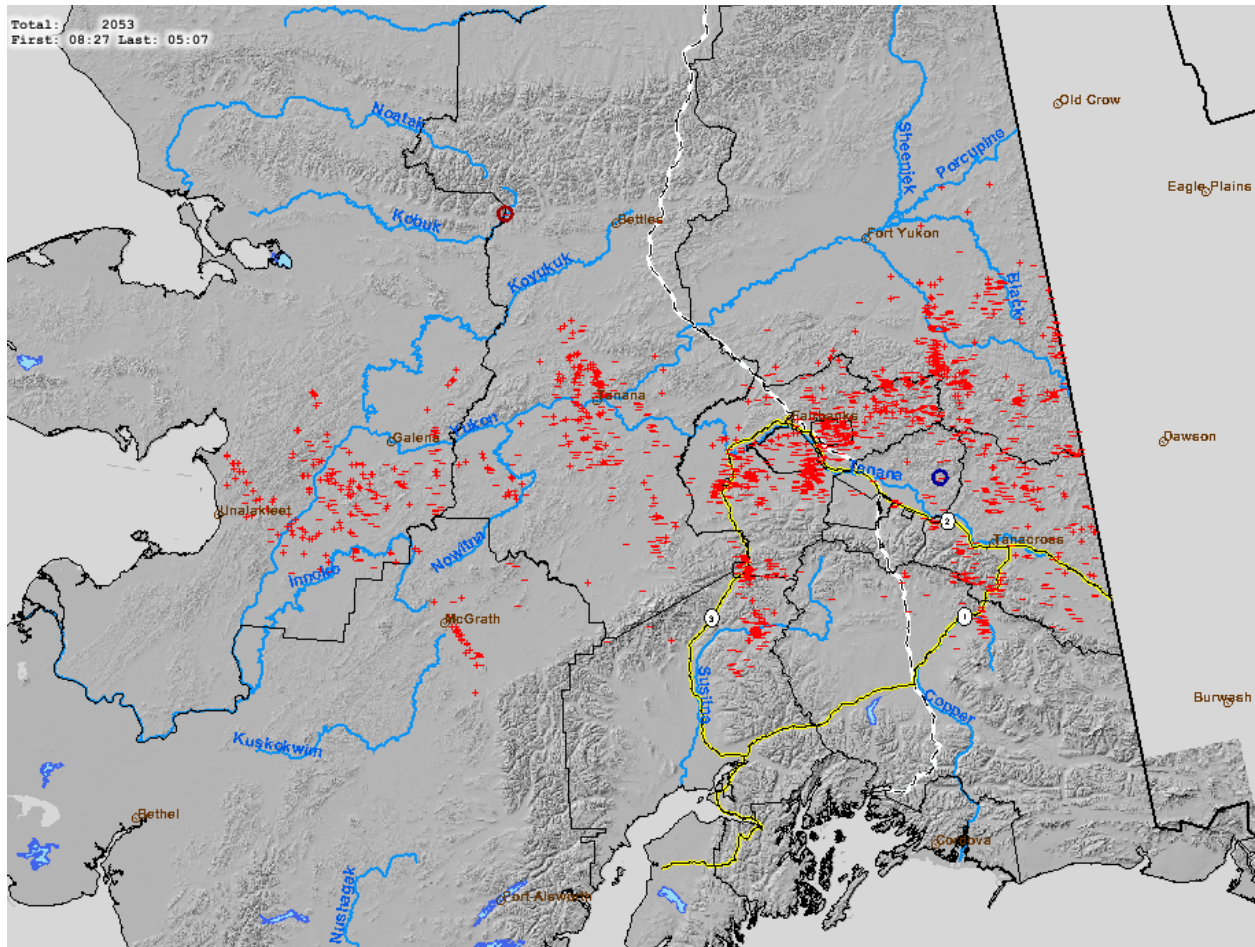
Station	Precipitation				
	Observed (in)	Normal (in)	Delta (in)	(%)	Delta (%)
Anchorage	1.39	0.97	0.42	143%	43%
Annette	8.24	4.88	3.36	169%	69%
Barrow	0.09	0.32	-0.23	28%	-72%
Bethel	2.48	1.72	0.76	144%	44%
Bettles	1.11	1.40	-0.29	79%	-21%
Big Delta	2.06	2.31	-0.25	89%	-11%
Cold Bay	0.46	2.72	-2.26	17%	-83%
Fairbanks	1.39	1.37	0.02	101%	1%
Gulkana	1.63	1.40	0.23	116%	16%
Homer	1.78	0.82	0.96	217%	117%
Juneau	6.69	3.24	3.45	206%	106%
King Salmon	2.47	1.65	0.82	150%	50%
Kodiak	0.80	5.91	-5.11	14%	-86%
Kotzebue	0.20	0.58	-0.38	34%	-66%
McGrath	3.07	1.52	1.55	202%	102%
Nome	0.28	0.98	-0.70	29%	-71%
St. Paul Island	0.26	1.35	-1.09	19%	-81%
Talkeetna	1.87	1.92	-0.05	97%	-3%
Valdez	3.18	2.75	0.43	116%	16%

Yakutat	7.89	6.39	1.50	123%	23%
---------	------	------	------	------	-----

There were few daily precipitation records this June. The 8th was a wet day across the whole of the Southeast, with a new record set in Skagway of 0.23", 0.13" above the total from way back in 1910. Haines saw a record rainfall on the same day of 0.47", breaking the 1955 record of 0.34". Then on the 19th King Salmon received 0.72", 0.15" above the old record from 1955". In addition, Juneau had the wettest June on record. Rain fell on 28 days of the month for a total of 6.69". This is 3.45" above the normal, and tops the old 1996 record of 6.22". Despite all the rainfall, no new daily records were set at Juneau. Barrow finished its second snowiest winter on record, a record that stretches back to 1920. For the 2011-12 winter, Barrow totaled 76.1". The record is 77.4" from 2008-09, and the normal amount is just 47.6". Barrow's snowfall also beat Fairbanks, where only 65.0" fell for the winter.

Melting snowpack and heavy rains in Yukon Territory resulted in washouts and mudslides along the Alaska Highway and the closure of the road starting on June 8th. The road, closed along more than 100 miles in two stretches, was re-opened to single lane traffic on the 11th. The third week of June saw the Matanuska river surge past its banks as warm weather accelerated the melting of the snowpack. Strong thunderstorms and lightning struck the Interior on several days in June, including a heavy hailstorm on the 4th. One of the storms had winds strong enough to blow off the roof of the North Fork cabin on the Pinnell Mountain trail.

Even though it has been a mild year for wildfires in Alaska up through June, two fires are worth mentioning. On the 20th a wildfire started in the Allakaket dump. The fire quickly spread, but did not threaten the village. Then on the 23rd, lightning strikes south of Nenana and west of the Parks highway started several fires that grew into the Bear Creak Fire (see the map below). Heavy fighting efforts were initiated for both fires.



Lightning strikes across Alaska for June Saturday, June 23rd. There were 1647 negative strikes, and 406 positive strikes. Note the group of strikes west of the Parks Highway and South of Nenana that resulted in the Bear Creek Fires. Map courtesy of the Alaska Interagency Coordination Center.

This information consists of preliminary climatological data compiled by the Alaska Climate Research Center, Geophysical Institute, University of Alaska Fairbanks. This summary is based on the 20 first order stations in Alaska operated by the National Weather Service. Extreme events of other stations are also mentioned. It should be noted that the new climate normals for the time period of 1981-2010 are applied for the calculations of the deviations, and they can be slightly different from the old normals (1971-2000), which were in use until end of July 2011.