

Alaska Statewide Climate Summary

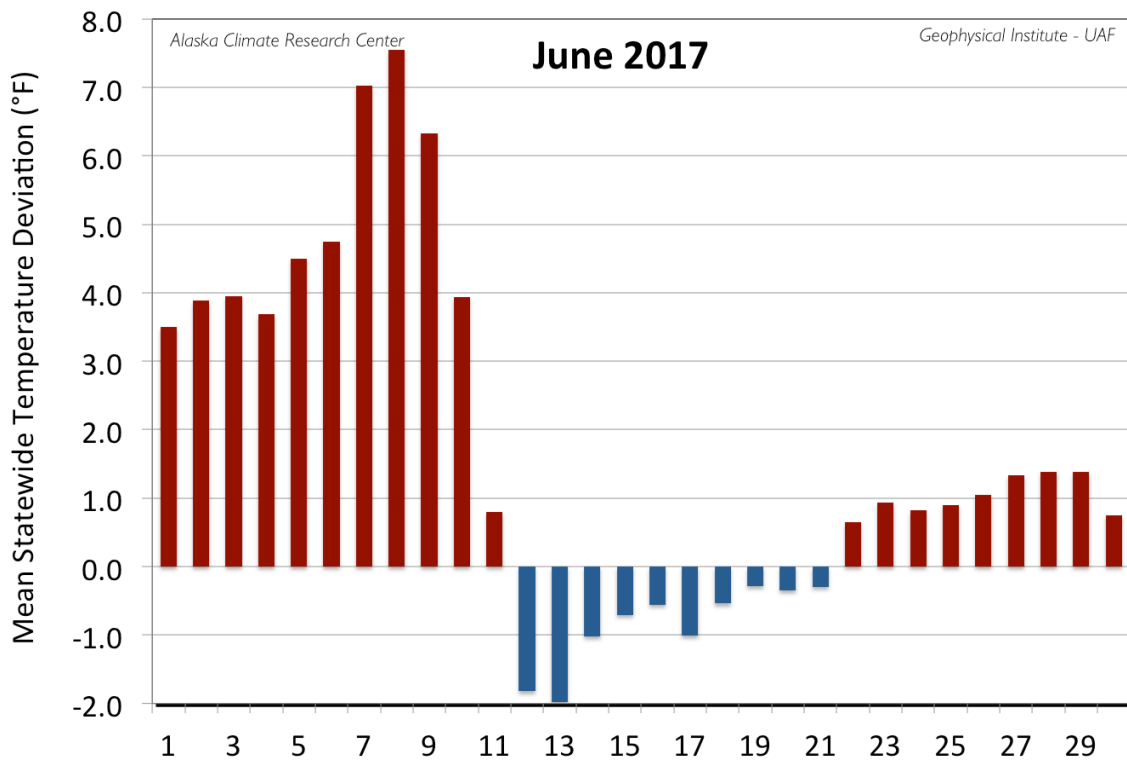
June 2017

Temperature

June 2017 marks 18 months out of the last 20 months with mean statewide temperatures at or above normal. The mean monthly temperature for June 2017 was above normal with the mean temperature of all First Order Stations at 53.5°F, 1.8°F above the normal of 51.7°F. This is 0.6°F below the June 2016 mean of 54.1°F. Calculating the mean daily temperatures of the First Order Stations, the first eleven days of the month were above the 30-year normal, followed by ten days of below normal temperatures, then the month ended with nine more days above normal. The greatest positive deviation occurred on the 8th with 7.5°F above normal, and the greatest negative deviation occurred on the 13th at -2.0°F. (see Figure). Monthly mean temperatures were above normal for 16 of the 19 of the First Order Stations (see table). Kotzebue held the spot with the greatest positive deviation in June with 5.4°F above its normal of 45.7°F. The other stations with deviations greater than or equal to 3°F were Nome (4.9°F), St. Paul Island (3.2°F) and Bethel (3.0°F). Note that all these stations are located in western Alaska. Juneau was the station reporting the greatest below normal mean temperature with 53.3°F, 1.3°F below its June normal of 54.6°F.

Station	Temperature		
	Observed (°F)	Normal (°F)	Delta (°F)
Anchorage	55.3	55.2	0.1
Annette	55.3	55.1	0.2
Barrow	34.7	35.6	-0.9
Bethel	55.5	52.5	3.0
Bettles	59.9	58.5	1.4
Cold Bay	48.0	46.3	1.7
Delta Junction	59.8	57.6	2.2
Fairbanks	62.8	60.4	2.4
Gulkana	56.2	54.4	1.8
Homer	54.4	50.6	3.8
Juneau	53.3	54.6	-1.3
King Salmon	53.7	51.5	2.2
Kodiak	50.8	49.7	1.1
Kotzebue	51.1	45.7	5.4
McGrath	59.4	57.4	2.0
Nome	52.7	47.8	4.9
St. Paul Island	45.6	42.4	3.2
Talkeetna	56.8	57.0	-0.2
Yakutat	52.0	50.8	1.2

The highest daily maximum temperature of the First Order Stations for June was 90°F reported at Fairbanks on the 9th, a new daily record, breaking the 1957 record of 87°F. This was the second earliest 90°F daily high on record, after the 90°F high on May 28, 1947, as well as the first 90°F in Fairbanks since June 2013. Fairbanks also held the spot for the highest mean temperature for the month at 62.8°F. The lowest temperature of 22°F was observed at Barrow on the 5th, and Barrow also reported the lowest June mean monthly temperature with a value of 34.7°F.



Daily mean temperature deviation from the normal for the mean of the First Order Stations for June 2017.

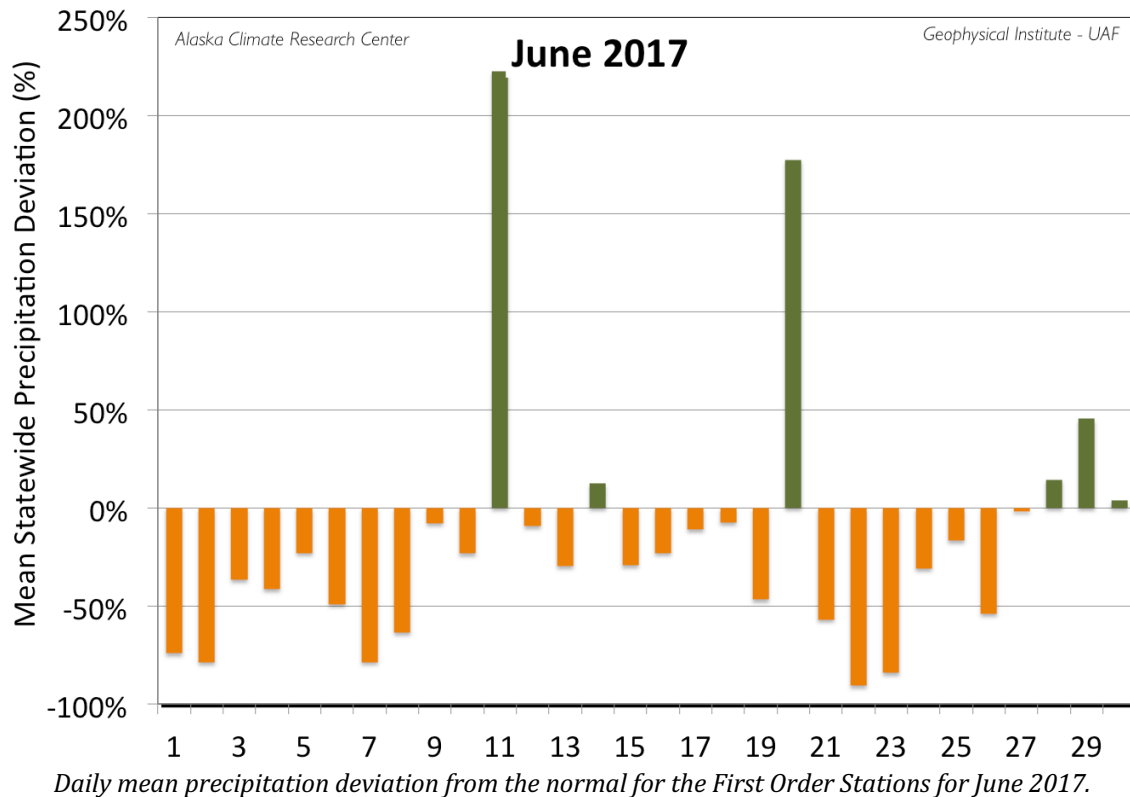
There were a very limited number of new temperature record events this June as delineated in the following table.

Date	Station	Temperature Records			
		Element	New Record	Old Record	Year of old Record
06/02/17	Bethel	High Temperature	76	75	1993
06/06/17	St. Paul	High Temperature	57	55	2016
06/09/17	Delta Junction	High Temperature	88	83	1957
06/09/17	Fairbanks	High Temperature	90	87	1957
06/09/17	Haines Airport	High Temperature	83	82	1946
06/19/17	King Salmon	Low Temperature	34	35	1997

Precipitation

June's precipitation was notably below normal, with the overall precipitation calculated as 17% below the average; this calculation was based on the mean of the deviations in percentage of the First Order Stations. Thirteen of the First Order Stations and 24 days of the month reported below normal values. This is drier than June 2016, which reported a precipitation surplus of 21%. The greatest daily precipitation amount occurred on the 11th. The station reporting the greatest precipitation deviation was King Salmon at 45% above normal with 2.40", 0.75" above its normal of 1.65". The relatively driest station was Gulkana at just 24% of normal.

Station	Precipitation				
	Observed (in)	Normal (in)	Delta (in)	Delta (%)	(%)
Anchorage	0.87	0.97	-0.10	-10%	90%
Annette	6.33	4.88	1.45	30%	130%
Barrow	0.26	0.32	-0.06	-19%	81%
Bethel	1.39	1.72	-0.33	-19%	81%
Bettles	0.43	1.40	-0.97	-69%	31%
Cold Bay	1.94	2.72	-0.78	-29%	71%
Delta Junction	2.06	2.31	-0.25	-11%	89%
Fairbanks	1.73	1.37	0.36	26%	126%
Gulkana	0.34	1.40	-1.06	-76%	24%
Homer	0.46	0.82	-0.36	-44%	56%
Juneau	3.86	3.24	0.62	19%	119%
King Salmon	2.40	1.65	0.75	45%	145%
Kodiak	7.98	5.91	2.07	35%	135%
Kotzebue	0.20	0.58	-0.38	-66%	34%
McGrath	1.23	1.52	-0.29	-19%	81%
Nome	1.18	0.98	0.20	20%	120%
St. Paul Island	0.93	1.35	-0.42	-31%	69%
Talkeetna	0.52	1.92	-1.40	-73%	27%
Yakutat	3.81	6.39	-2.58	-40%	60%



June's highest monthly precipitation total reported for a First Order Station was 7.98" at Kodiak. Kodiak also reported the highest daily total of 2.22" on the 29th, a new daily record, breaking the old record of 1.84" from 1965.

A limited number of daily precipitation records were set this June. Fairbanks on the 11th broke a record set only the pervious year with 1.09", topping the 2016 record of 0.95". King Salmon received the same amount, 1.03" on the 14th, more than doubling the 1978 record of 0.49". The rainfall total of 1.24" in Sitka on the 16th broke the previous record of 1.21" also set in 1978.

Newsworthy Events

On June 1st, the North Robertson fire was reported 30 miles northwest of Tok, at mile 1349 of the Alaska Highway. By the next day over 200 firefighters were onsite, and air tankers were dropping water and retardant as the fire approached nearby structures. The fire was 40% contained on the 5th, and 85% by the 11th. It burned a total of 800 acres. Burn suspensions were initiated for central and eastern Interior Alaska on the 2nd.

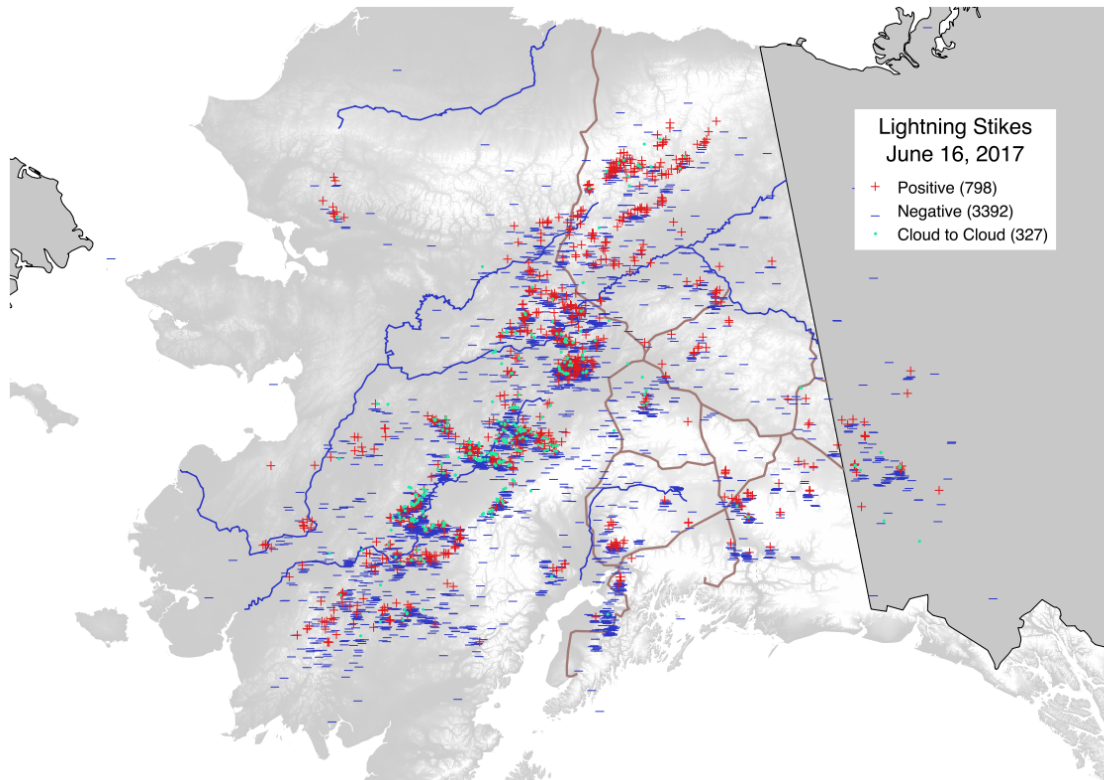
The Bell Creek fire, started by lightning on the 4th, approached the village of Crooked Creek along the Kuskokwim River. Fire crews and takers were dispatched to fight the fire. The fire reached 2,600 acres. The Deadpan's Slough fire also started on the 4th within two miles of the village of Anvik, and was also fought to protect structures.

On the 5th, heavy rainfall was reported across southern portion of the Panhandle with Ketchikan reporting 2.60", 1.64" at Zarembo and 1.27" at Annette. For much of the next week, red flag warnings were issued for the middle and eastern Interior due to continued high temperatures and winds. Heavy lightning strikes in Western Alaska on the 6th started 19 new fires in the Galena zone.

Smoke from the South Fork Salcha, north of the Pogo Mine, reached Fairbanks on the 9th. This fire was not actively fought even though it was within two miles of the road to the Pogo Mine. It ended the month at over 8,000 acres. A small wildfire temporarily closed the Richardson Highway near Fairbanks at mile 308 on the 9th. The fire was fought vigorously with firefighters and multiple aircraft, and listed as out on the 11th at a total of 15 acres. The fire being close to Birth Lake aided in the fighting efforts.

Skagway had a high temperature of 88°F on the 8th, highest temperature in almost eight years. The warm weather increased snowmelt in the mountains, and the Taiya and Chilkat Rivers were running at bankfull levels over the next two days. Needed rainfall moved over the Interior on the 10th and 11th. Some forty-eight hours totals are: 1.73" at Moose Creek Dam near Fairbanks, 1.57" at Little Chena River, 1.41" at Two Rivers, 1.07" at Salcha and 1.04" near Nenana. The high temperatures in the Interior broke on the 13th, with warnings of possible morning frost in low-lying areas on the 13th through the 15th. On the 14th, a low of 28°F was reported at Goldstream Creek, 26°F at Angel Creek and 23°F at Upper Salcha River.

The East Fork fire was started by lightning late on the 15th about five miles north of Sterling on the Kenai Peninsula. More than 80 personal and a tanker staffed the fire by the next day, while smoke from the fire blew into Anchorage. The fire burned about 1,000 acres before being brought under control over the next few days.



Lightning strikes plotted across Alaska on June 16th, 2017. A total of 4517 were recorded. Data courtesy of the Alaska Interagency Coordination Center.

Heavy rains impacted the northern Southeast area on the 17th with 3.06" reported at Snettisham, 1.50" at Eaglecrest and 1.22" at Auke Bay. Two to three inches of snow was reported in the Chilkat Pass on the British Columbia side of the border also on the 17th. More than 1,400 electrical customers were without power for a time near Fairbanks on the 17th due to high winds from thunderstorms.

A thunderstorm dropped more than an inch of hail on the town of Eagle on the 23rd, while 0.66" of rain was also reported. A red flag warning was also issued for the eastern Interior on the 23rd and 24th, as well as flash flood warnings for Tanacross area with up to 2.20" of rain reported southeast of Fairbanks. A red flag warning was again issued for the eastern Interior on the 29th, while smoke from the South Fork fire blew into the Fairbanks area again.

By the end of June there had been 165 human caused fires that burned about 6,000 acres and 90 lightning caused fires that had burned about 183,600 acres. The largest fire at 16,800 acres was the Pitka Fork a limited suppression area in the Southwest.

Please find up to date 2017 fire location data and smoke prediction forecasts at our UAFSMOKE webpage at <http://smoke.arsc.edu/>.

This information consists of preliminary climatological data compiled by the Alaska Climate Research Center, Geophysical Institute, University of Alaska Fairbanks. For more information on weather and climatology, contact the center at 907-474-7885 or visit the center web site at <http://akclimate.org>. Please report any errors to webmaster@akclimate.org. This summary is based on the 19 First Order Stations in Alaska operated by the National Weather Service. Extreme events of other stations are also mentioned.