

Alaska Statewide Climate Summary

April 2018

The following report provides an overview of temperature and precipitation in April 2018 in Alaska based on data from selected weather stations throughout the state. “Departure from normal” refers to the climatological average over the 1981-2010 period.

Temperature

Temperatures were largely above normal in April. The maritime stations on Alaska’s west coast recorded unusually warm temperatures and the southern coastal areas were also largely warmer than normal, whereas the south east and the interior areas were close to normal or slightly cooler than normal. Fairbanks was significantly colder than normal with a mean departure of -1.2 °F. Kotzebue showed a maximum positive departure of +8.0 °F. Observed monthly mean temperatures at the stations, as well as the normal and departures from normal can be found in Table 1. See Figure 1 for the locations of the stations. Figure 2 shows the daily mean temperature deviations for every day of the month at each station. There were a fair number of new daily temperature records. All records were high records, i.e. new high values of a specific parameter (mean, maximum, minimum daily temperature) for the respective time series (Table 2).

Table 1: Mean monthly air temperature, normal (1981-2010) and departure for selected stations throughout the state, April 2018. Rank indicates the rank of the current month by descending mean monthly temperature since the beginning of the respective time series (Start Year).

Station	Observed (°F)	Normal (°F)	Departure (°F)	Rank	Start Year
Anchorage	39.6	36.8	2.8	10	1952
Bethel	32.9	26.9	6.0	16	1924
Bettles	23.2	23.3	-0.1	28	1952
Cold Bay	38.3	34.0	4.3	5	1950
Delta Junction	31.7	32.2	-0.6	41	1918
Fairbanks	31.3	32.6	-1.2	48	1930
Gulkana	32.1	31.9	0.2	38	1908
Homer	40.1	37.0	3.2	8	1933
Juneau	39.9	40.9	-0.9	37	1937
Ketchikan	44.0	42.5	1.6	26	1911
King Salmon	37.3	33.7	3.6	17	1918
Kodiak	41.0	37.6	3.4	7	1931
Kotzebue	21.2	13.3	8.0	12	1898
McGrath	32.9	29.7	3.2	16	1939
Nome	26.2	20.5	5.8	15	1901

St. Paul Island	35.2	29.2	6.0	5	1893
Talkeetna	36.3	35.8	0.4	29	1919
Utqiagvik	6.1	1.8	4.3	15	1902
Yakutat	38.9	37.8	1.1	29	1917

2018-04, Monthly Temperature Departure From Normal (1981-2010)

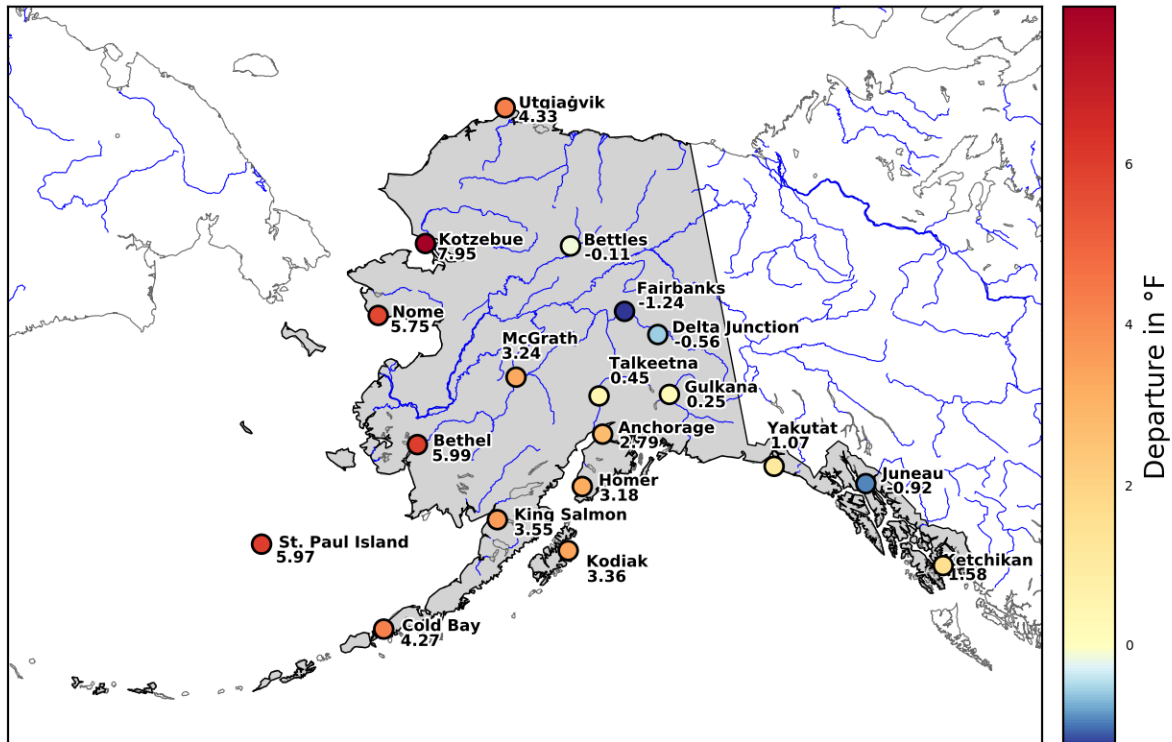


Figure 1: Monthly mean temperature departure from normal, April 2018.

Daily mean temperature, departure from normal (1981-2010), 2018-04

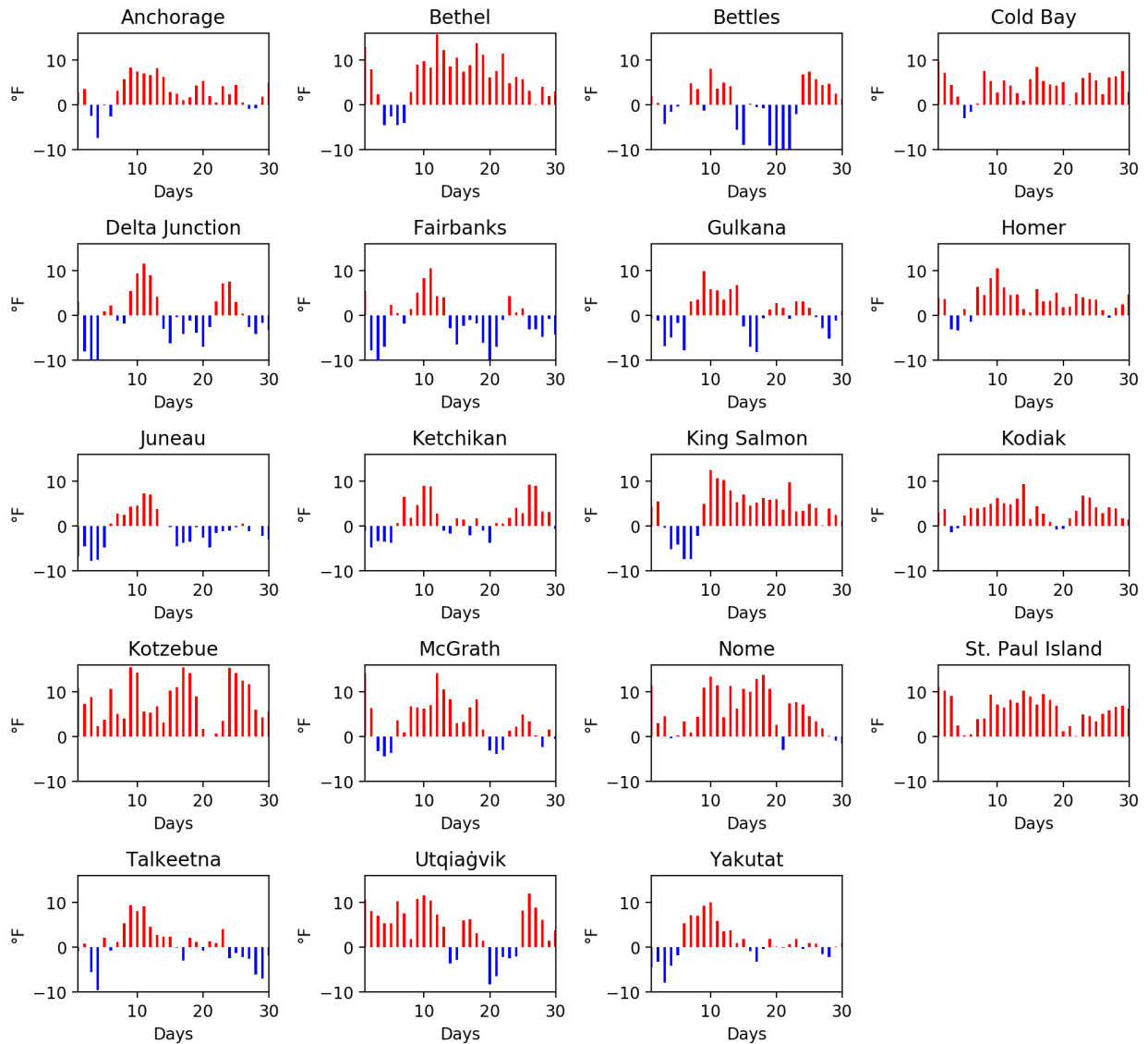


Figure 2: Daily mean temperature departures from normal (1981-2010) for each day in April 2018, at the selected stations.

Table 2: Daily temperature records, April 2018, since the beginning of the respective time series. Mean T = daily mean temperature, Min T = daily minimum temperature, Max T = daily maximum temperature.

Station	Date	Element	New Record	Year of old record	Old record
Anchorage	2018/04/09	Mean T	42.5	1978	41.5
Anchorage	2018/04/30	Min T	43	1979	42
Cold Bay	2018/04/01	Max T	49	2003	47
Cold Bay	2018/04/29	Min T	41	2002	40

Homer	2018/04/10	Mean T	46	1940	44
Homer	2018/04/10	Min T	41	1940	40
Juneau	2018/04/07	Max T	57	1997	56
Ketchikan	2018/04/11	Mean T	50.5	2004	49
King Salmon	2018/04/11	Min T	37	1997	36
Kodiak	2018/04/14	Mean T	46.5	2008	46
Kodiak	2018/04/14	Max T	57	2008	55
McGrath	2018/04/12	Mean T	41.5	2000	40
McGrath	2018/04/12	Max T	54	2017	51
St. Paul Island	2018/04/17	Mean T	39	1978	38
St. Paul Island	2018/04/01	Max T	42	1979	41
St. Paul Island	2018/04/10	Max T	44	1981	41
Yakutat	2018/04/10	Mean T	46.5	1940	44
Yakutat	2018/04/08	Max T	57	1990	56
Yakutat	2018/04/09	Min T	39	1941	38

Precipitation

Precipitation varied strongly throughout the state, which is not unusual. McGrath, Talkeetna, and King Salmon recorded more than 200% of normal precipitation, while Utqiagvik and Gulkana saw very little to no precipitation in the month of April (Table 3, Figure 3). Figure 4 shows the monthly precipitation sums at each station in inches. It can be seen how strongly precipitation varies between stations not only from month to month but also in the climatological mean, due to the diverse climatological conditions that can be found in Alaska.

Snow Fall: Of the 14 selected stations that measure snow fall, only King Salmon and St. Paul Island recorded above average monthly sums with 269 and 113 % of normal, respectively (see Table 4). At stations which recorded above average precipitation but below average snow fall (e.g. McGrath), it can be assumed that precipitation that would normally fall as snow fell as rain.

Table 3: Monthly precipitation sum, normal (1981-2010) and departure expressed as a percentage of the normal (1981-2010) for selected stations throughout the state, April 2018.

Station	Precipitation (in)	Normal (in)	% of normal
Anchorage	0.3	0.5	68.1
Bethel	1.4	0.7	193.2
Bettles	0.6	0.6	106.7
Cold Bay	3.7	2.4	153.3
Delta Junction	0.2	0.2	69.6
Fairbanks	0.2	0.3	48.4
Gulkana	0.0	0.2	0
Homer	0.6	1.1	54.2

Juneau	3.2	2.9	107.1
Ketchikan	13.1	9.4	139.2
King Salmon	2.1	1	212.4
Kodiak	5.6	5.8	96.6
Kotzebue	0.2	0.5	35.2
McGrath	1.6	0.7	217.6
Nome	0.9	0.8	121.1
St. Paul Island	2.1	1.1	194.4
Talkeetna	2.6	1.3	203.1
Utqiagvik	0.0	0.2	12.5
Yakutat	8.0	9.2	86.6

2018-04, Monthly Precipitation, % of Normal (1981-2010)

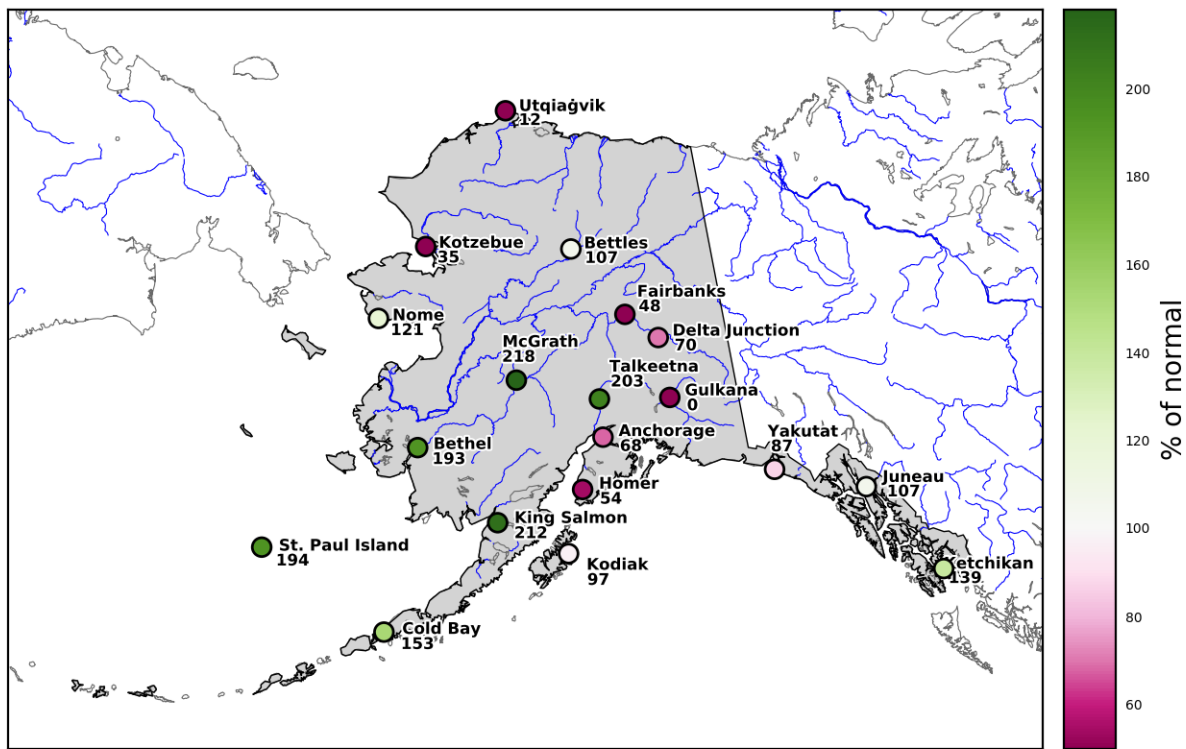


Figure 3: Monthly precipitation sums expressed as percent of normal (1981-2010), April 2018.

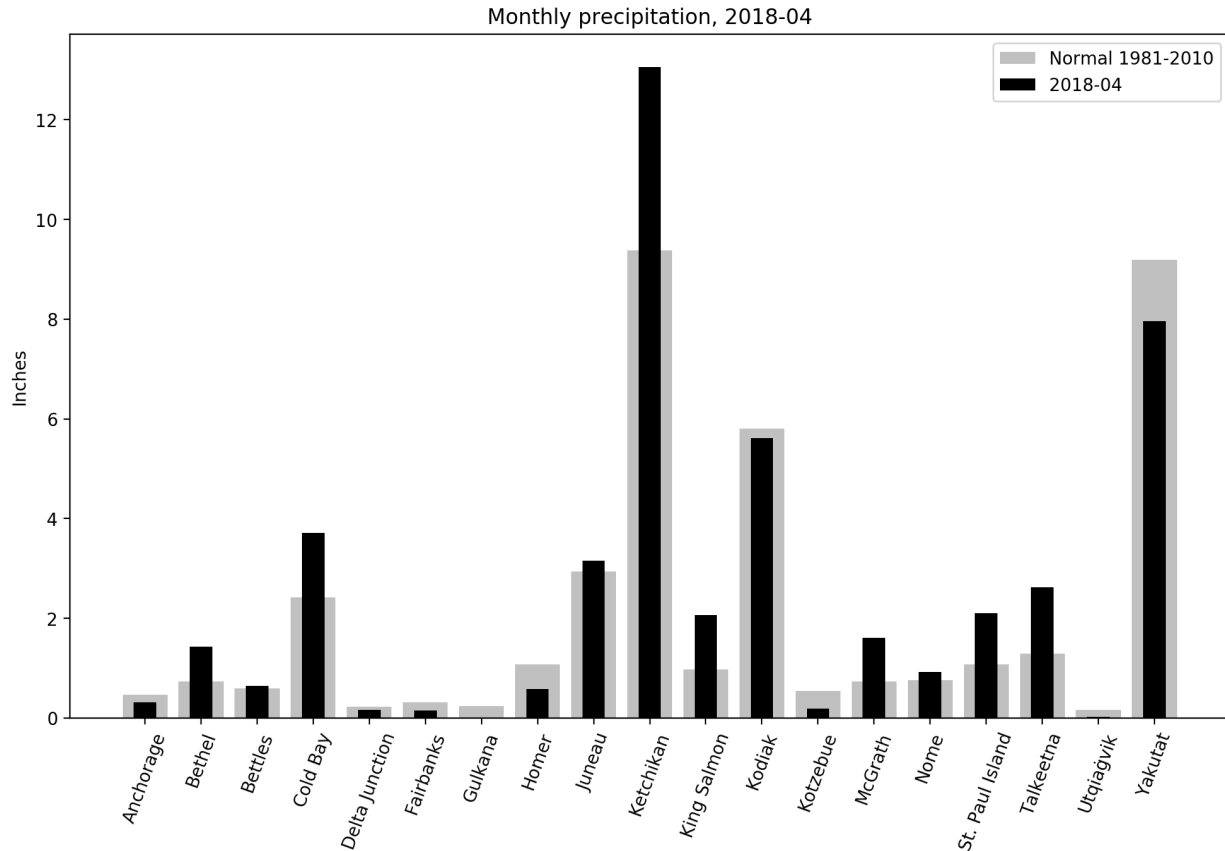


Figure 4: Monthly precipitation sums for April 2018 at the selected stations compared to the normal (1981-2010), in inches.

Table 4: Monthly snow fall sum, normal (1981-2010) and departure expressed as a percentage of the normal (1981-2010) for those stations that measure snow fall, April 2018.

Station	Precipitation (in)	Normal (in)	% of normal
Anchorage	0.0	4.0	0.0
Bethel	3.9	5.7	68.4
Bettles	0.4	6.3	6.3
Cold Bay	0.0	6.6	0.0
Fairbanks	1.8	2.9	62.1
Juneau	0.0	1.1	0.0
King Salmon	10.5	3.9	269.2
Kodiak	0.0	8.0	0.0
Kotzebue	1.0	5.1	19.6
McGrath	2.9	5.1	56.9
Nome	8.5	7.5	113.3
St. Paul Island	0.0	5.7	0.0
Utqiagvik	0.8	3.2	25.0
Yakutat	1.3	10.2	12.7

Newsworthy Events

A storm system brought significant amounts of precipitation to the southern coastal regions from April 4 to April 5 and again during the last week of the month. On both occasions, backcountry avalanche warnings were issued for Thompson pass, the Kenai and Western Chugach Mountains and Turnagain Arm.

The Bering Sea became nearly ice free before the end of April. On April 23, the Bering Sea ice extent fell below 10% of the 1981-2010 average maximum extent, the second earliest date for such a low sea ice extent in the times series (only last year was earlier).