



LEO Alaska Webinar Spring 2023 Climate Review and Summer 2023 Outlook

Rick Thoman

Alaska Center for Climate Assessment and Policy
University of Alaska Fairbanks



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rthoman@alaska.edu

Spring 2023 Alaska Weather & Climate Highlights

Utqiagvik daily record high temperatures
March 7 (31F) and May 14 (40F)

Kotzebue March repeated blizzards → state disaster declaration

Tanana April average temperature 14.6F, lowest since 1924.

Nome April 8: -30F, tied all-time monthly low temperature

Circle City May 13: severe ice jam flooding

Glennallen May 30-31 extreme 2 to 4 inches rainfall

Bethel May 18: Kuskokwim River break-up, latest since 2013

Haines 45 inches of snow first half of March

Sea Ice persisted near St. Matthew Island through May first time since 2013

Anchorage record deep mid-April snowpack

Cold Bay March 5th 2.98 inches rain, all-time March record

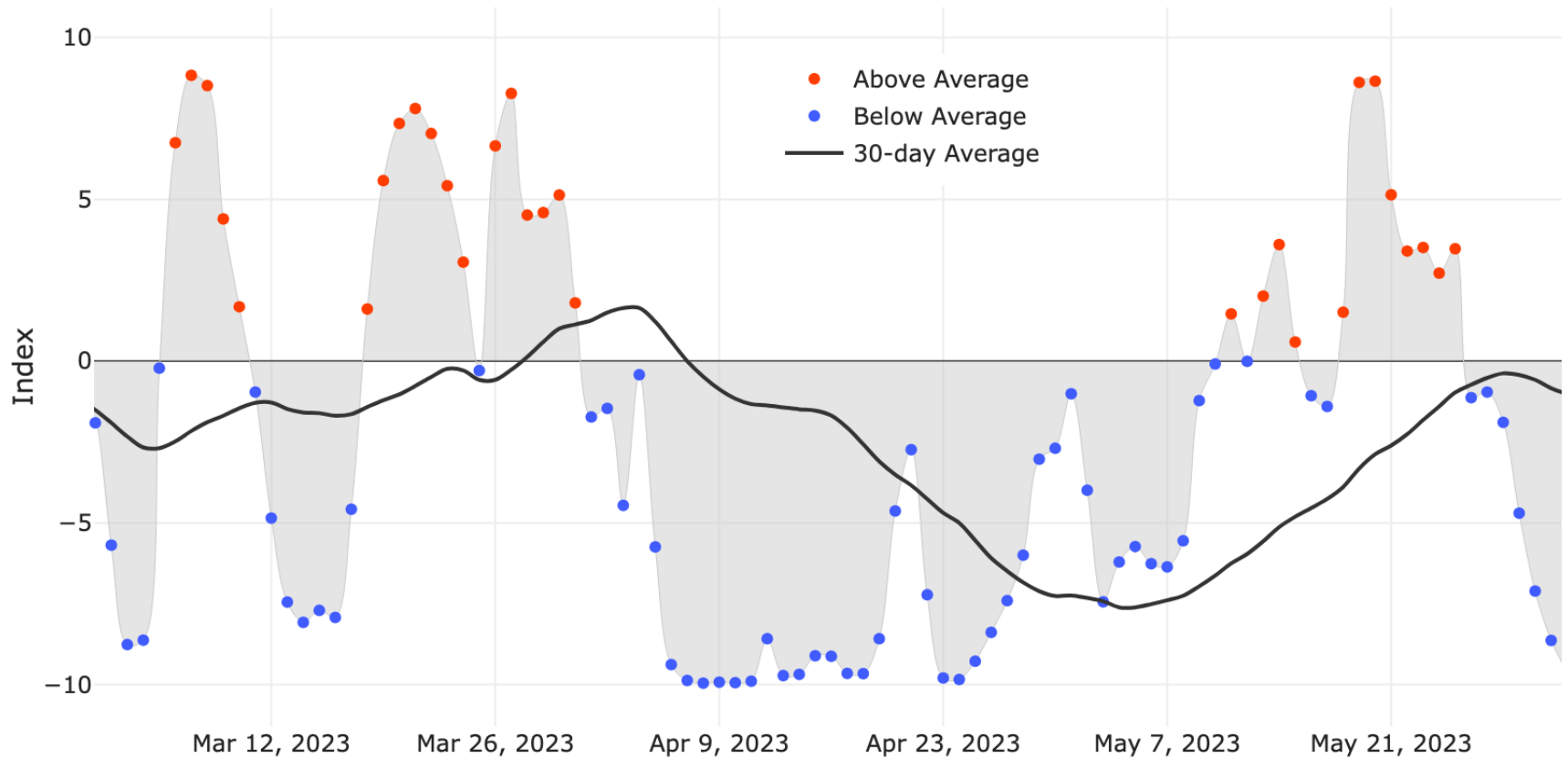
Kodiak April rainfall 1.91", lowest since 2002

Sitka May 18: 82F tied monthly record high temperature



Alaska Daily Temperature Index

Alaska Statewide Temperature Index
March 1 to May 31, 2023

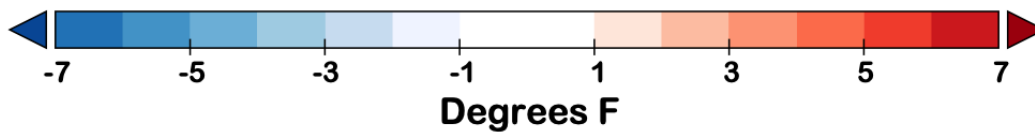
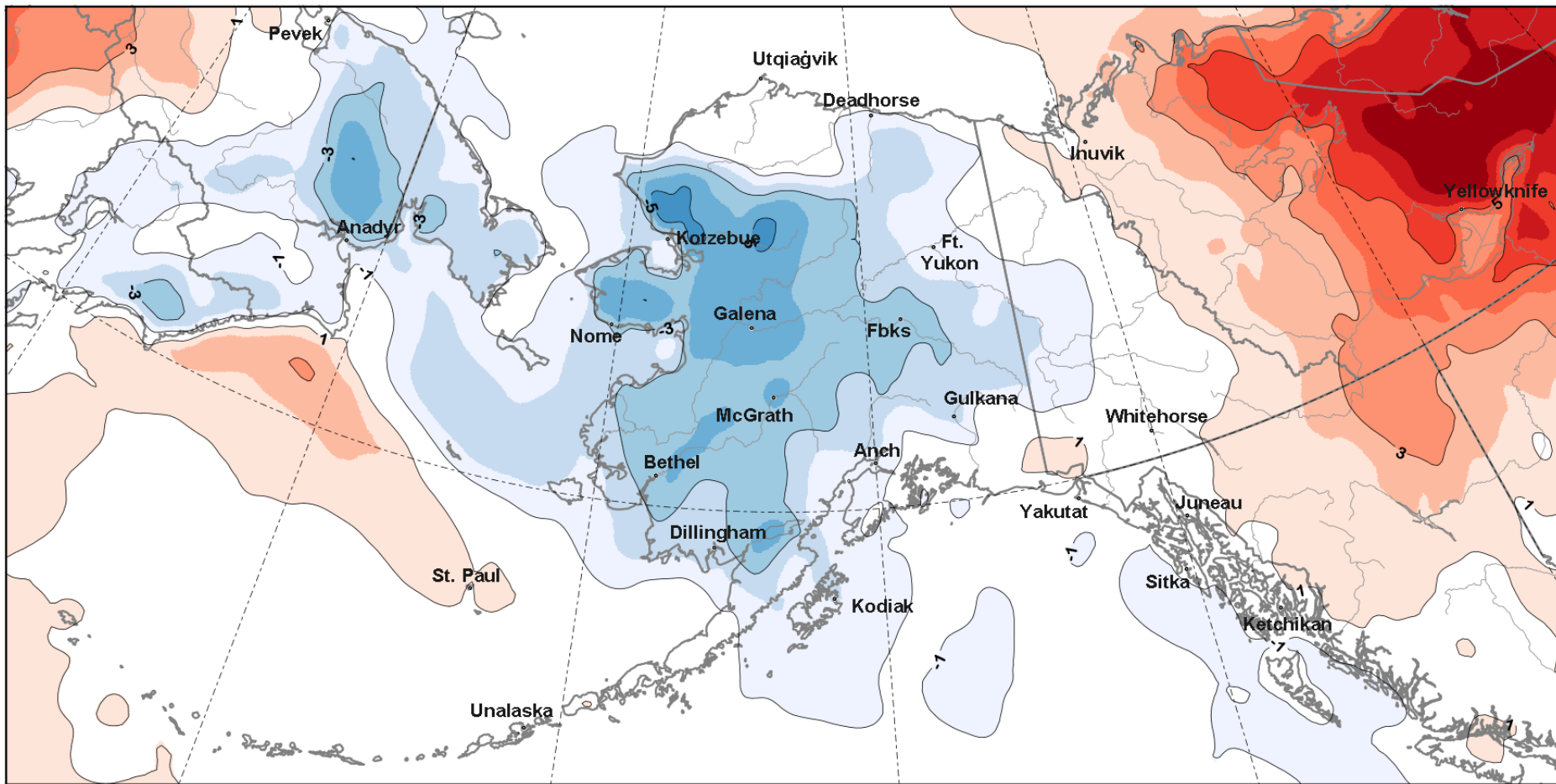


Online: <http://accap.uaf.edu/tools/statewide-temperature-index>



Average Temperature: Departure from Normal

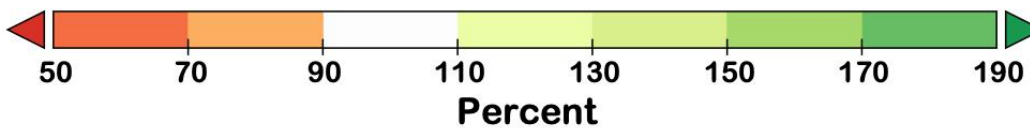
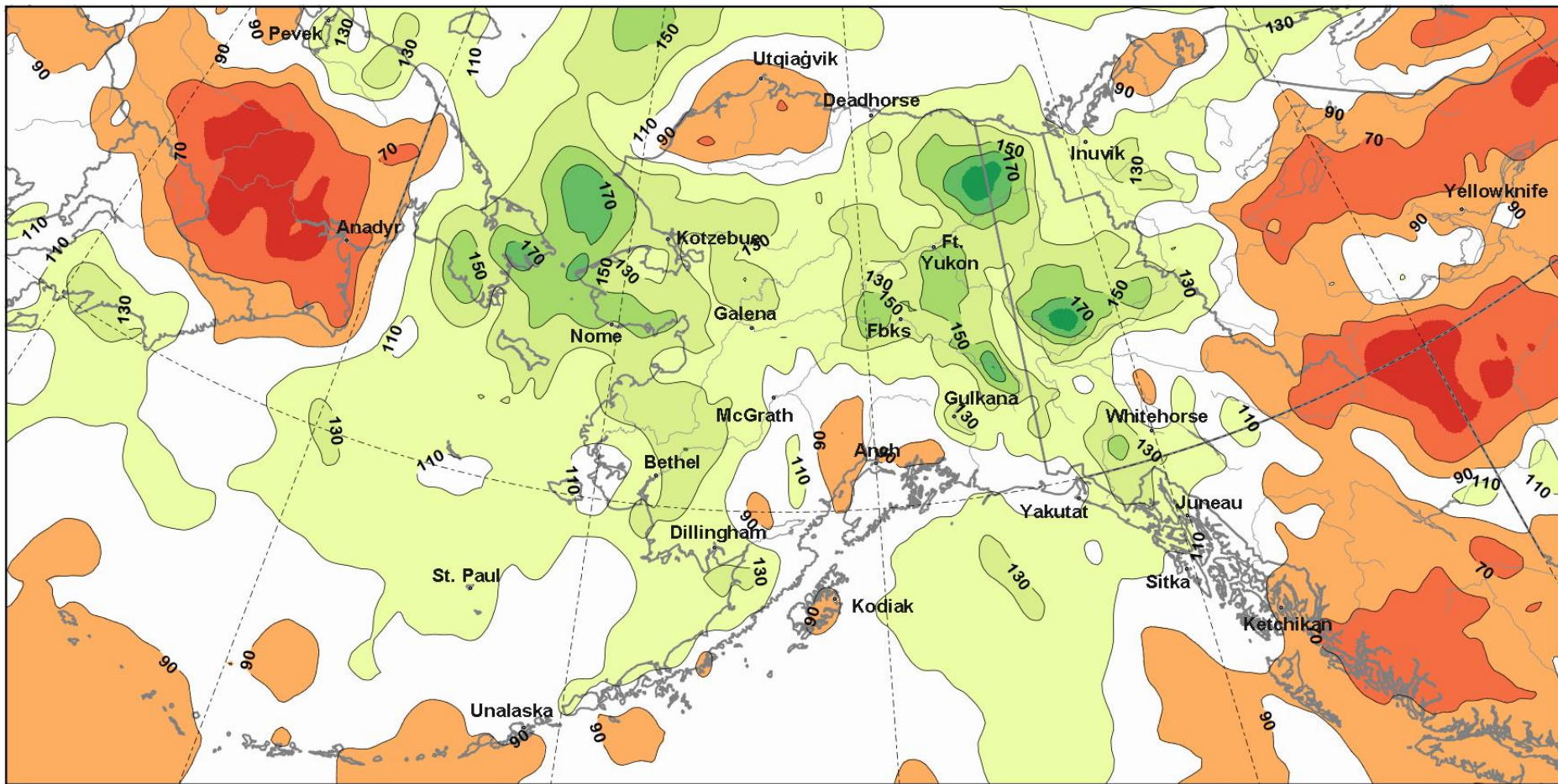
Spring (March through May) 2023



1991-2020 Baseline
ERA5 courtesy of ECMWF/Copernicus

Total Precipitation: Percent of Normal

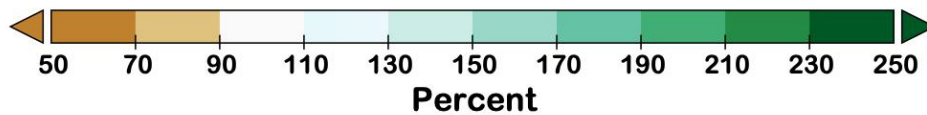
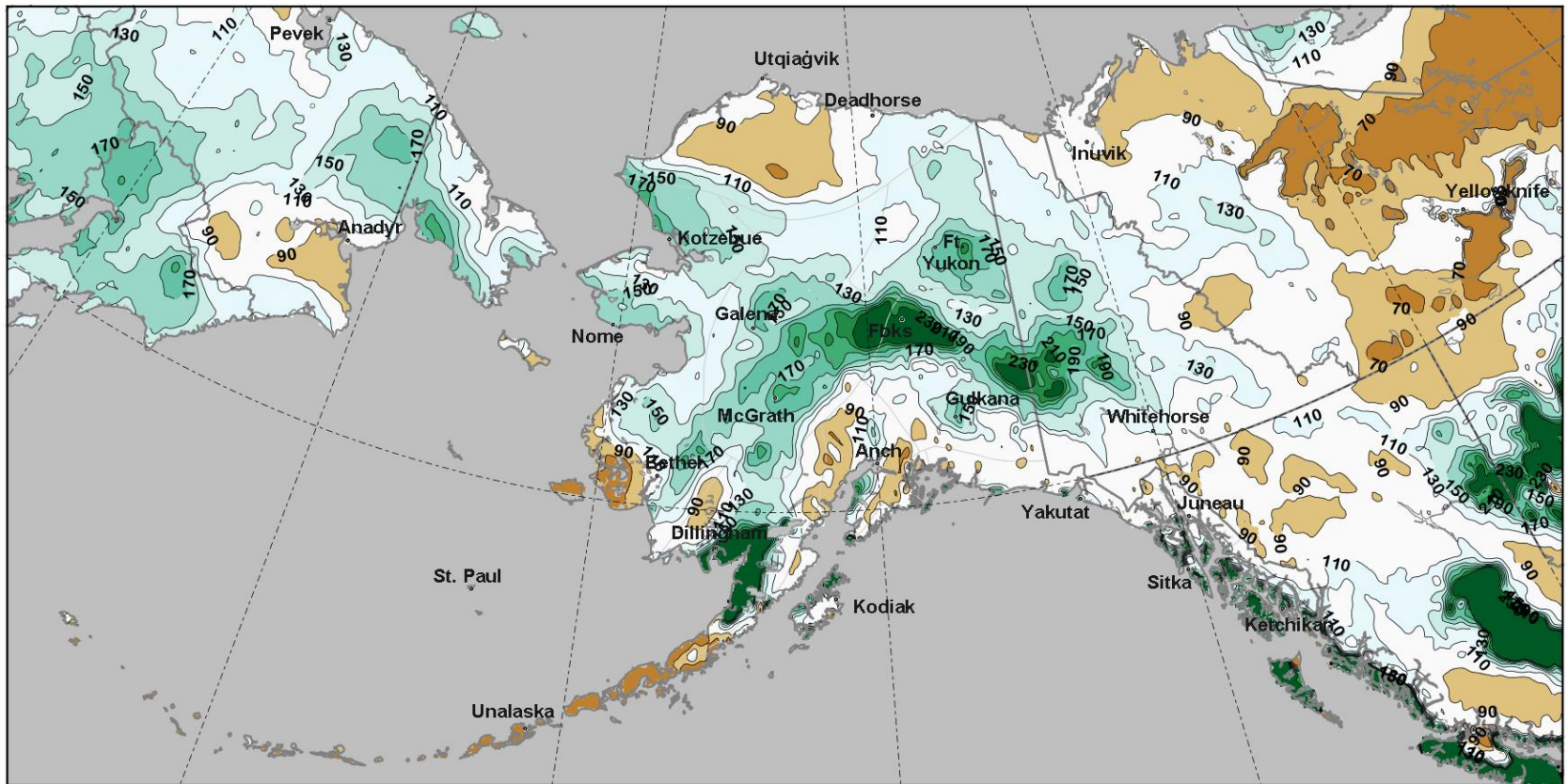
Spring (March through May) 2023



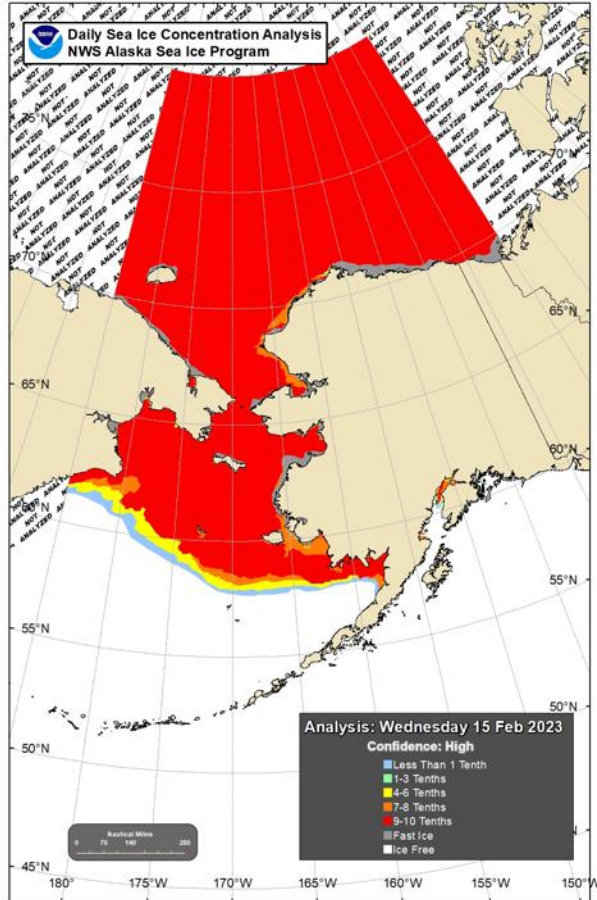
1991-2020 Baseline
ERA5 courtesy of ECMWF/Copernicus

Spring Snowpack

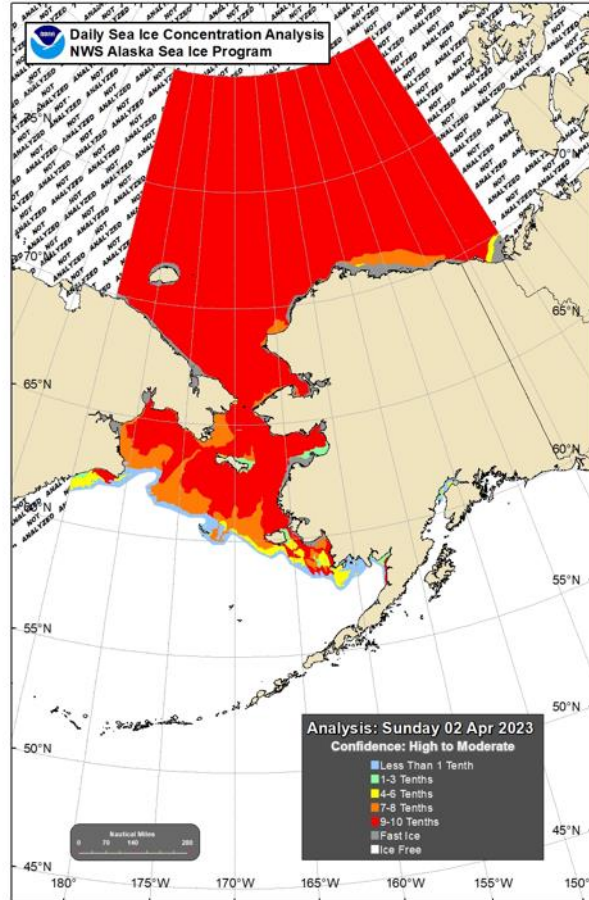
Snowpack: Snow Water Equivalent: Percent of Median
April 2023



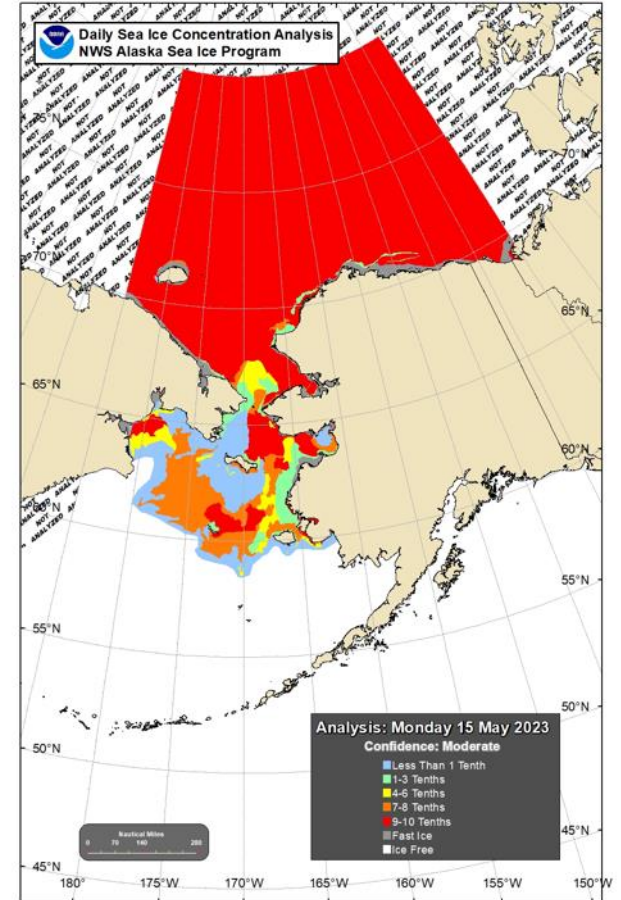
Alaska Ice Extent: Spring 2023



February 15th
Highest extent



April 2nd
Ice in retreat

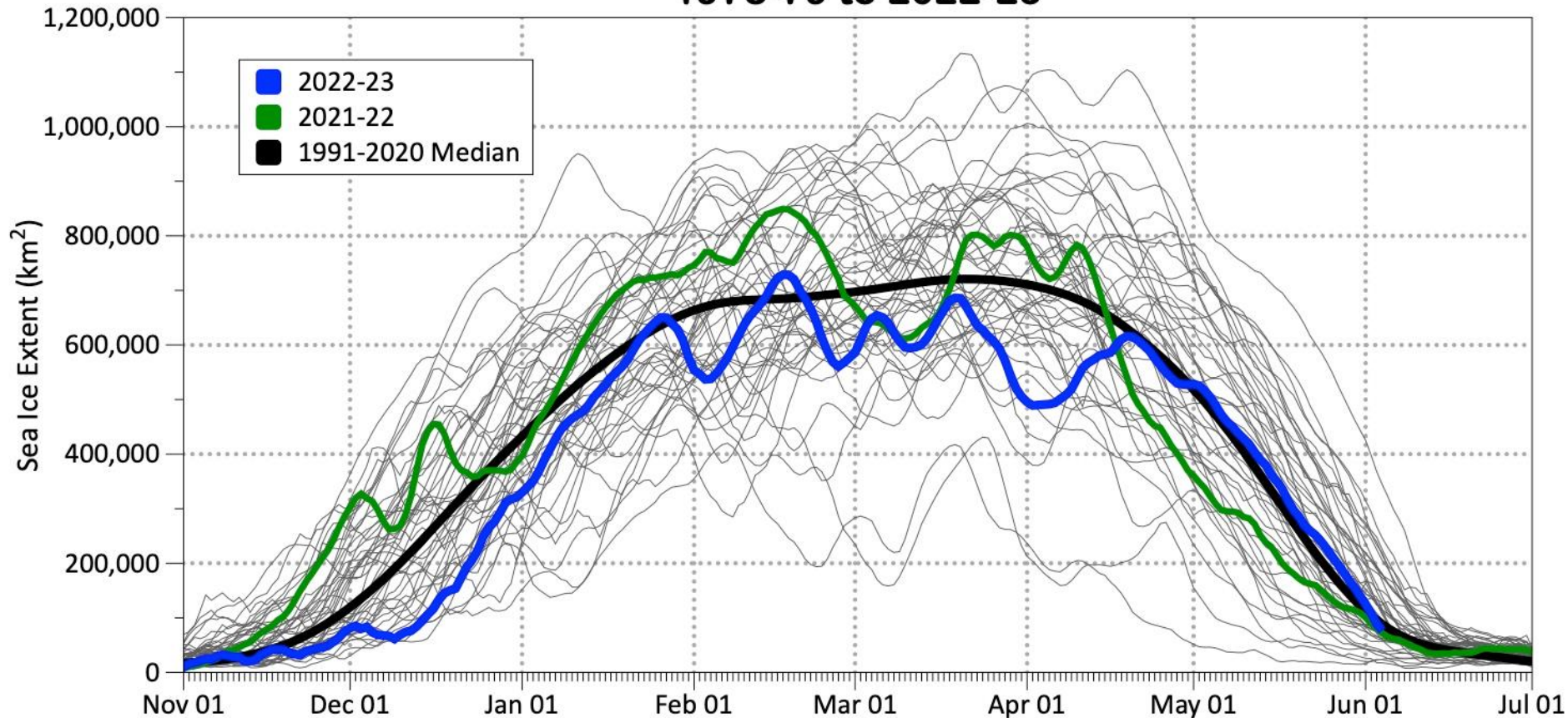


May 15th
"Swiss Cheese" melt



Bering Sea Ice Extent

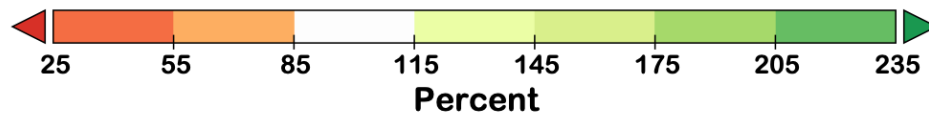
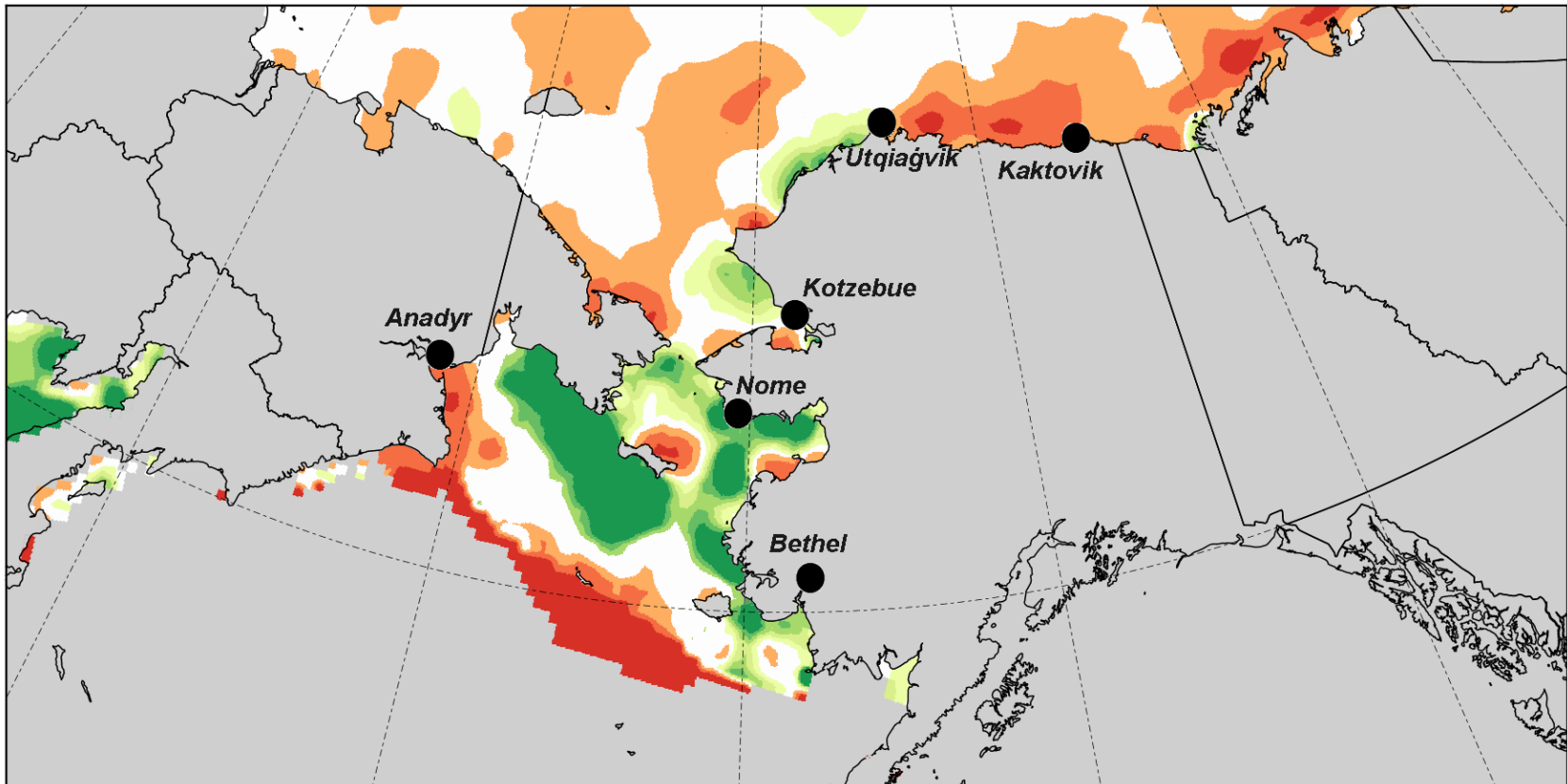
Bering Sea Daily Ice Extent 1978-79 to 2022-23



End of March Sea Ice Thickness

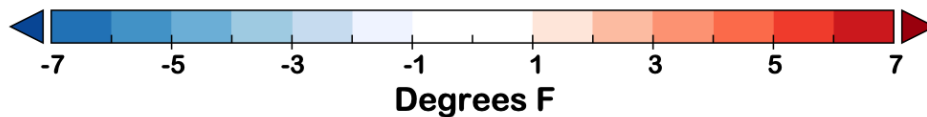
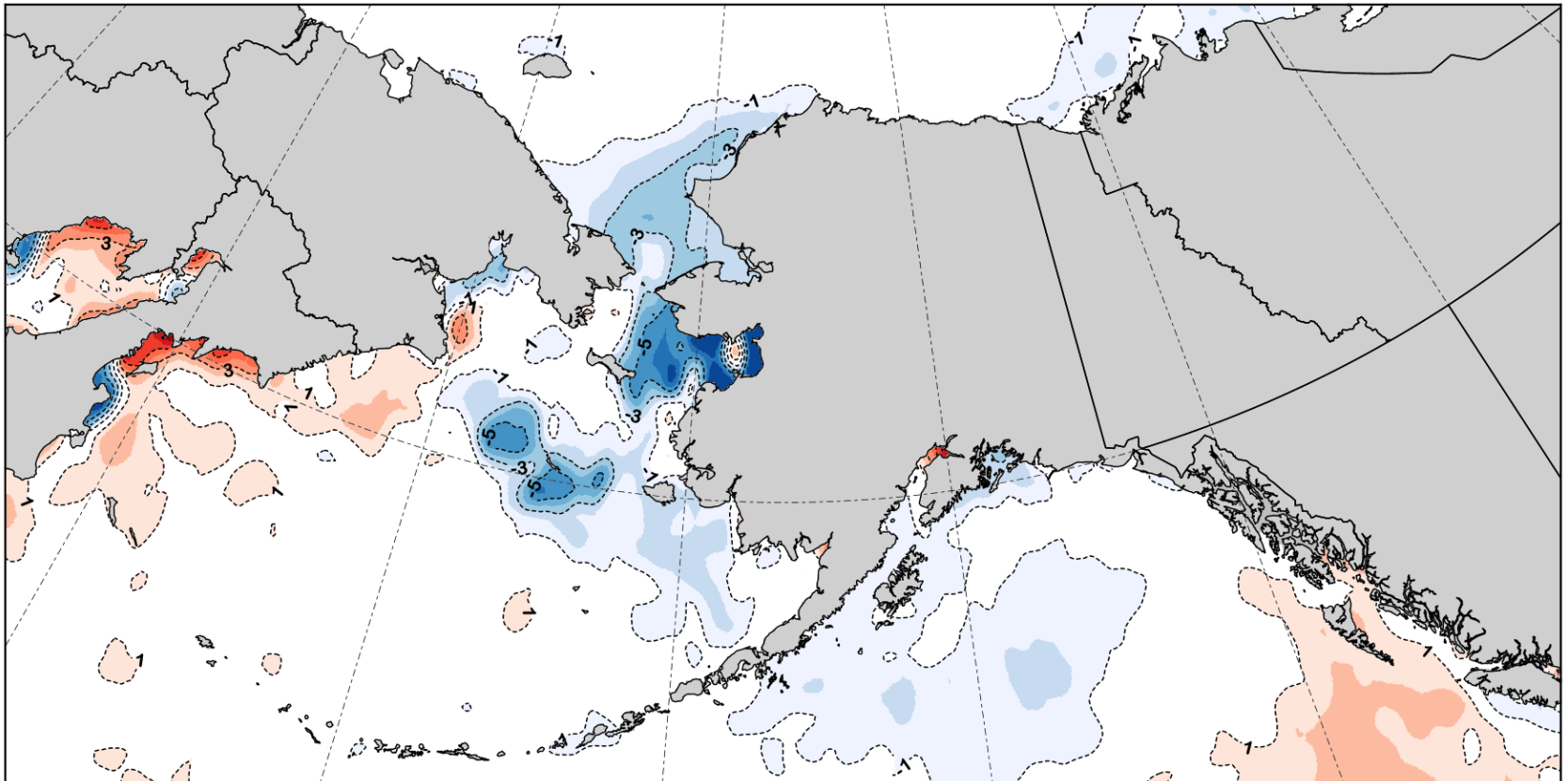
Sea Ice Thickness: Percent of Median

March 25-31, 2023

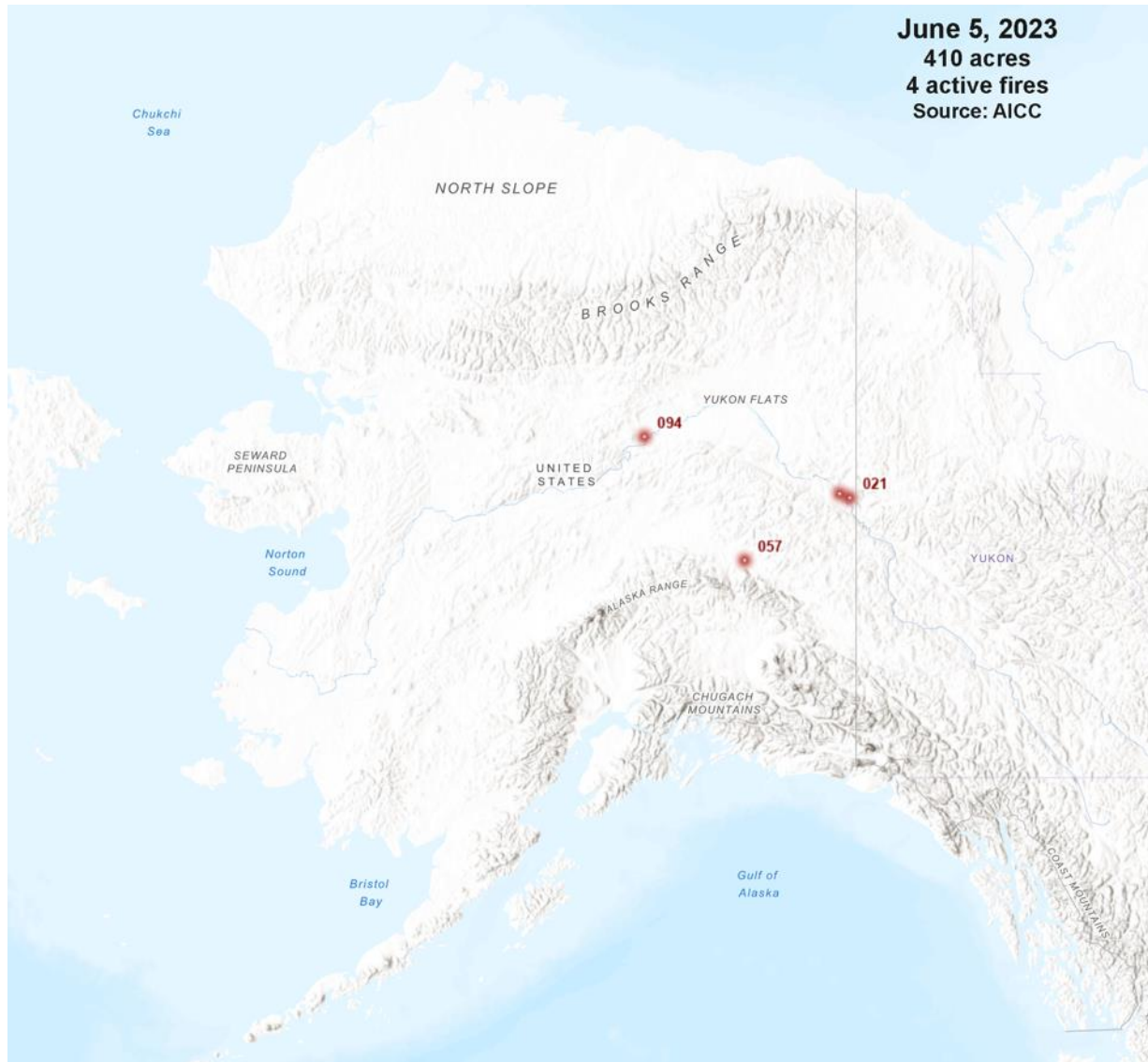


Ocean Surface Temperatures

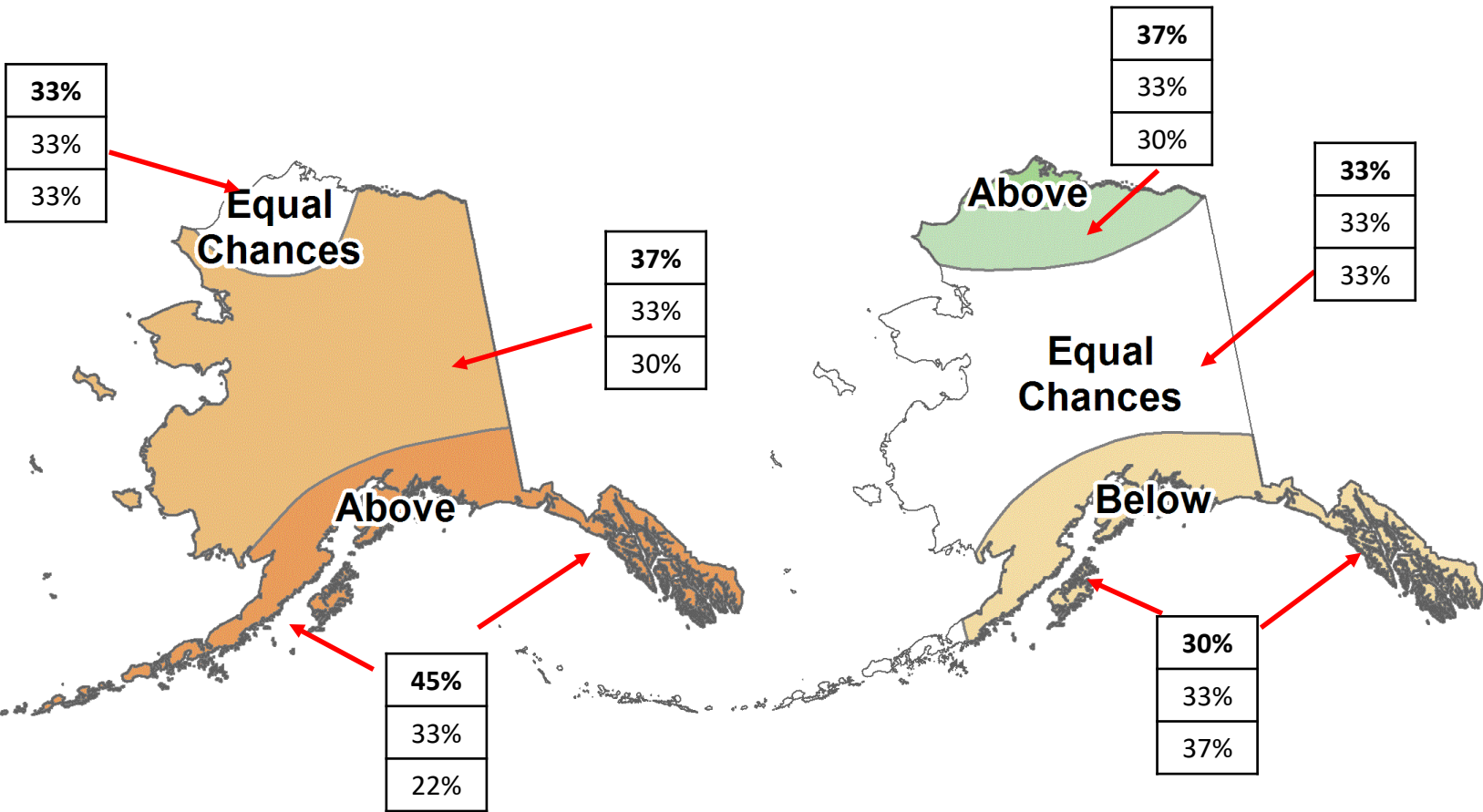
Sea Surface Temperature Departure from Normal
May 29 to June 4, 2023



Current Wildfire Situation



CPC June-August 2023 Outlook



Above%
Normal%
Below%

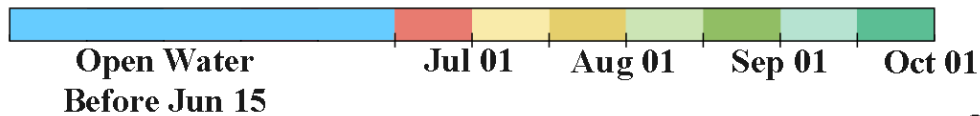
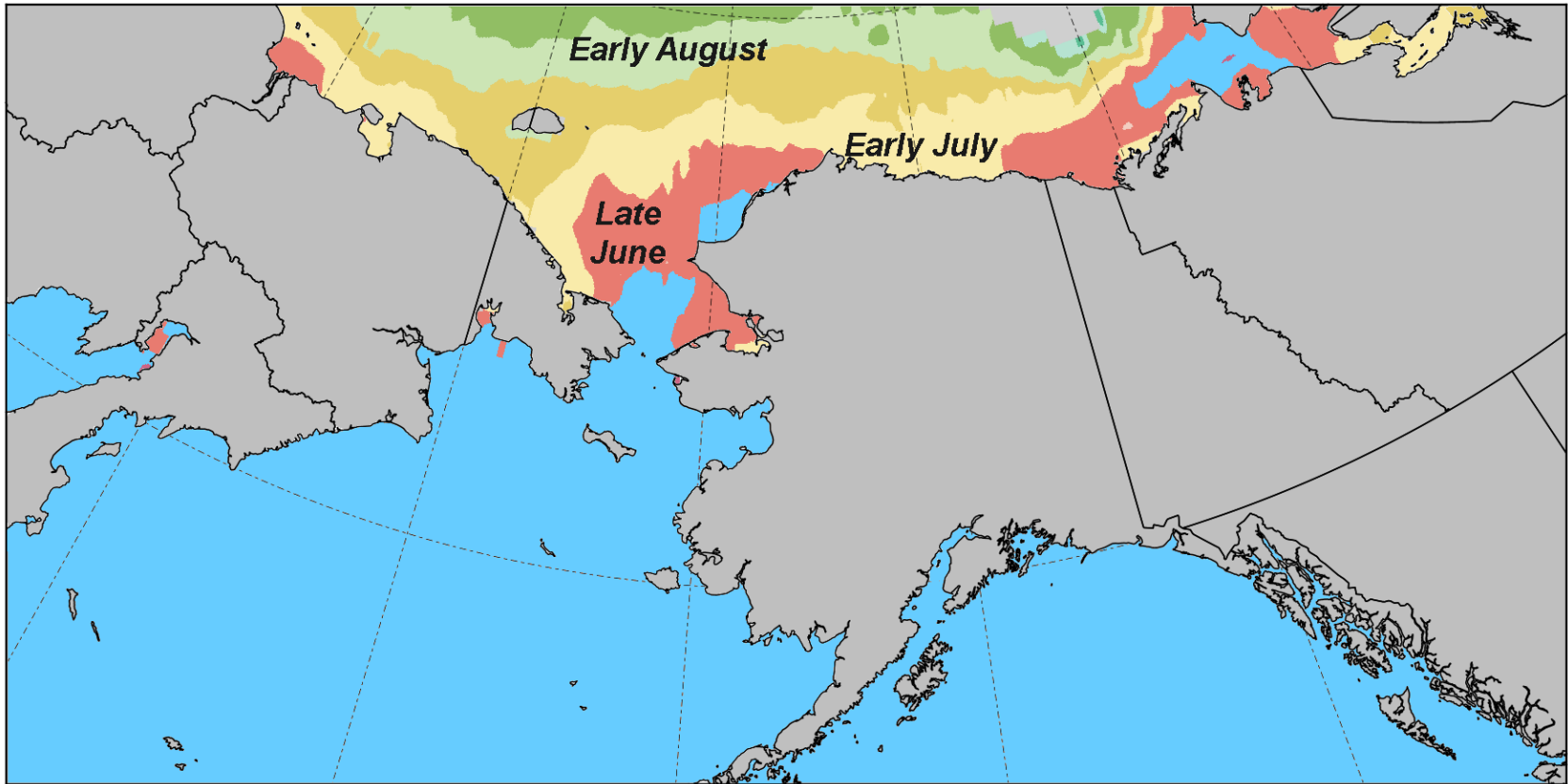
Average Temperature Outlook

Total Precipitation Outlook

Sea Ice Break-up Outlook

First Date Open Water (Sea Ice Concentration 15% or Less)

Spring/Summer 2023



Outlook made in late May
Data: NOAA/GPC Exp. Sea Ice Outlook

Data: NOAA/Climate Prediction Center Exp. Sea Ice Outlook

Thanks very much



Crooked Creek, May 15, 2023
Photo: Alaska DHS & EM

