

Circumpolar One Health Spring 2024 Climate Review Summer 2024 Climate Outlook

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Spring 2024 Alaska Highlights

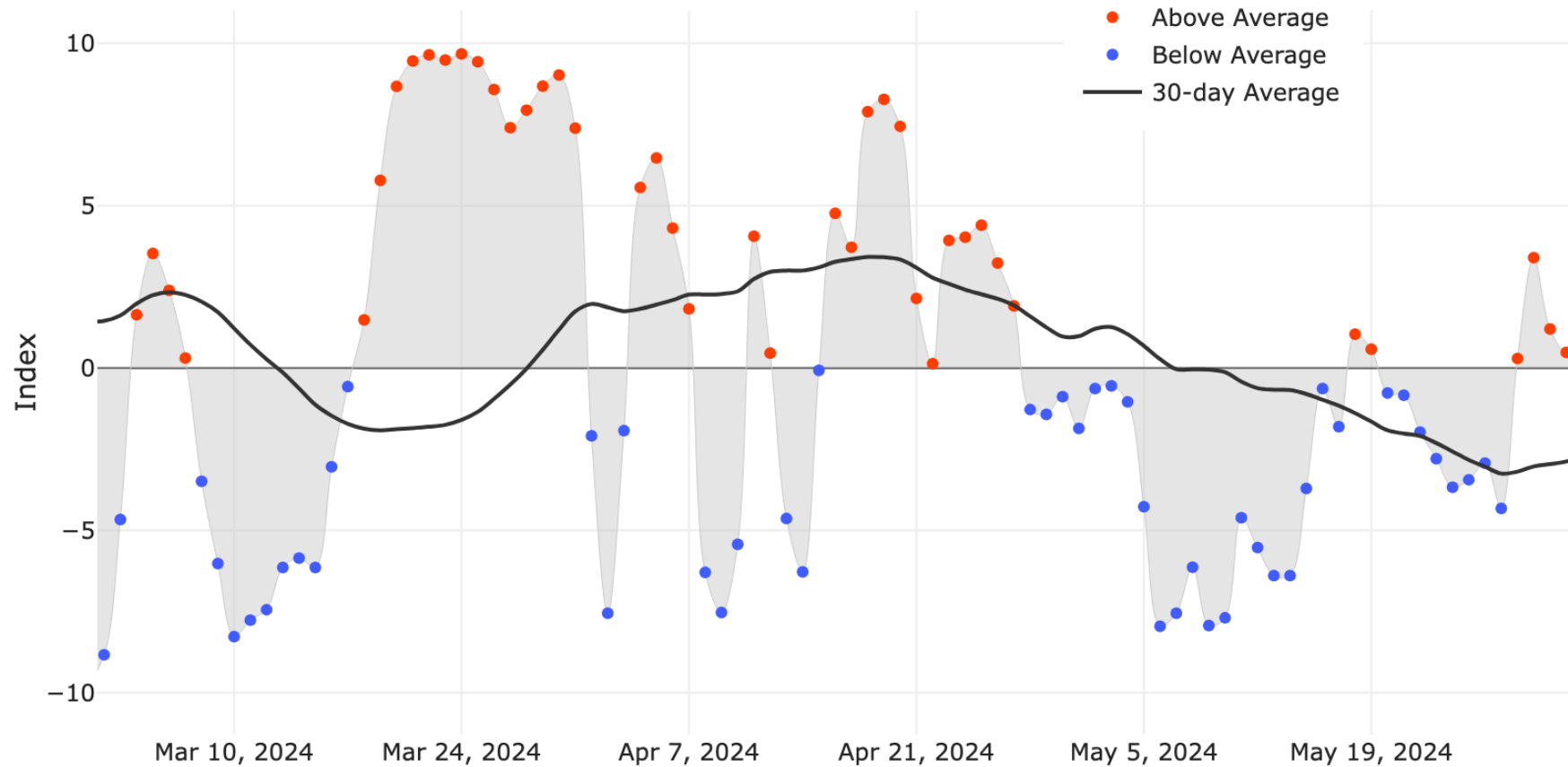
- Western Alaska
 - More than half a dozen storms late March to mid-April
 - Excessive snow some areas
- North Slope
 - March: Lowest temperatures of the season, early April also very cold
- YK Delta
 - Early to mid-May: significant ice jam and snow melt flooding
- Yukon River
 - Early to mid-May: generally mild break-up



May 9 flooding in Bethel neighborhood
Credit: MaryCait Dolan/KYUK

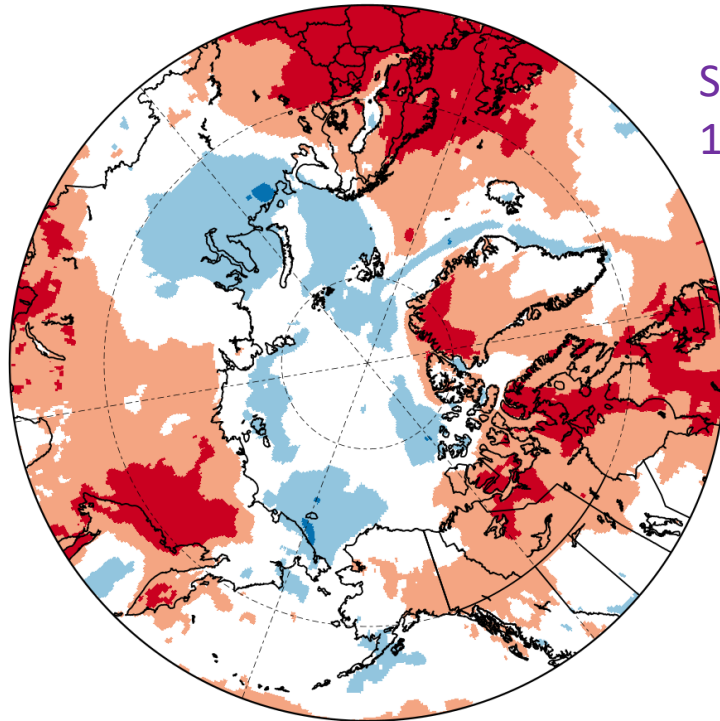
Alaska Daily Temperature Index

Alaska Statewide Temperature Index
March 1 to May 31, 2024

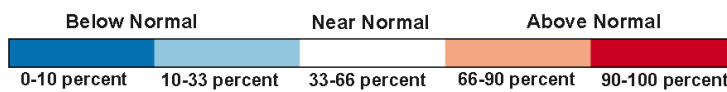


Spring 2024 Temp and Precipitation

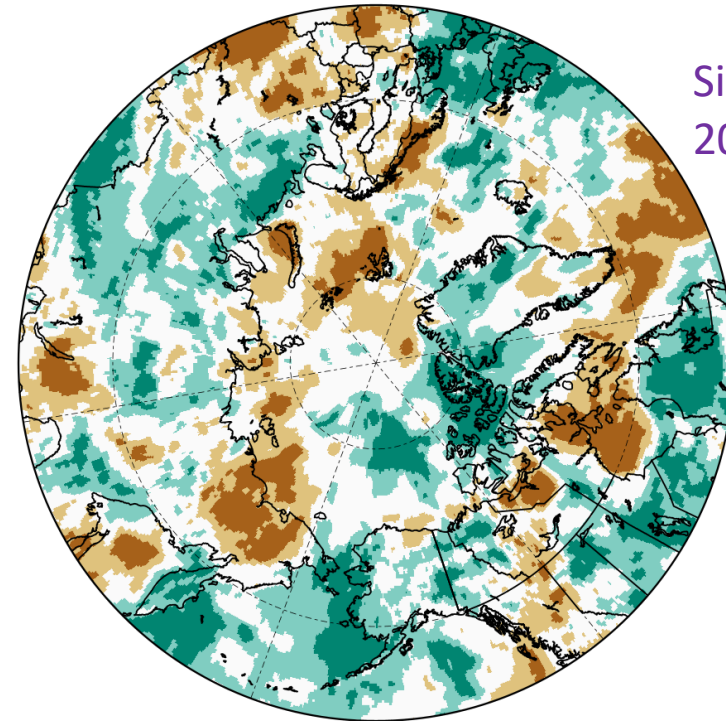
Average Temperature Relative to Normal
March-May 2024



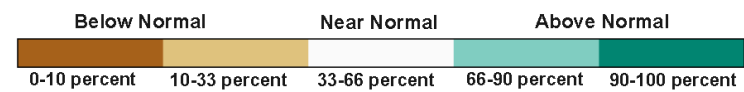
Since 1950:
13th warmest Spring



Total Precipitation Relative to Normal
March-May 2024



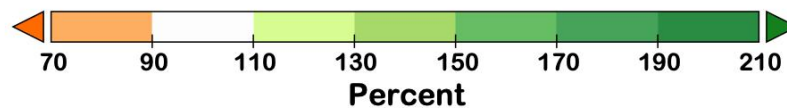
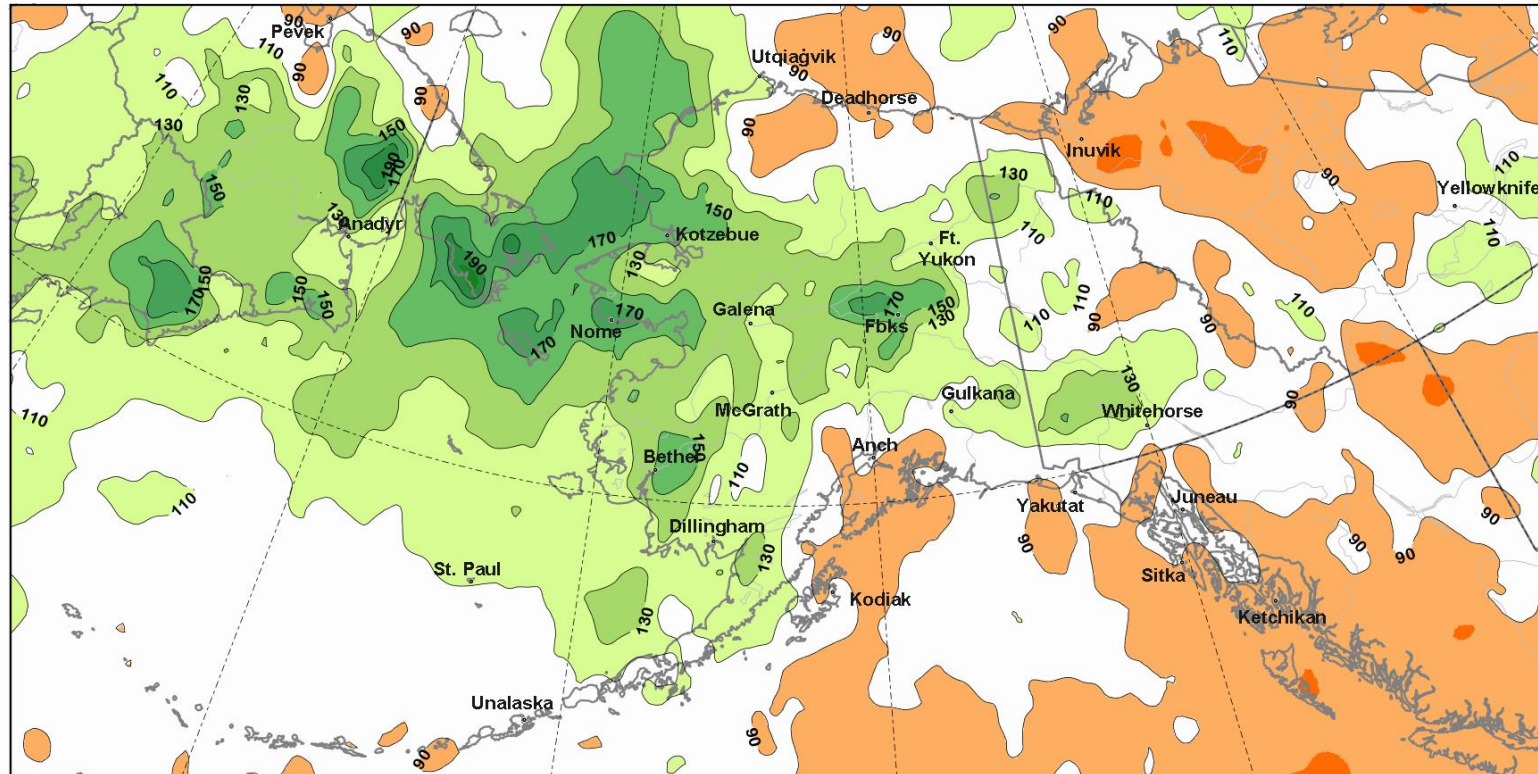
Since 1950:
20th wettest Spring



Data: ERA5 courtesy of EMCWF/Copernicus
1991-2020 Baseline

Recent Early Spring Precipitation

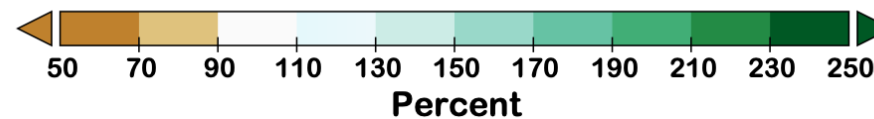
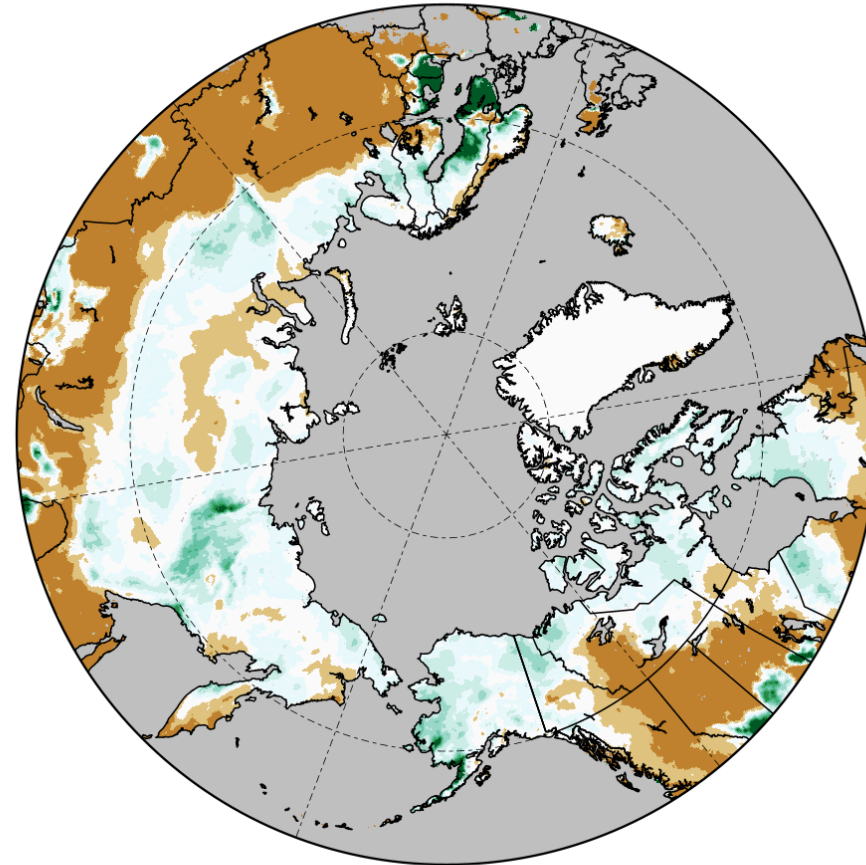
Difference in March-April Precipitation
2018-2024 median compared to 1978-2017 average



Spring 2024 Snowpack

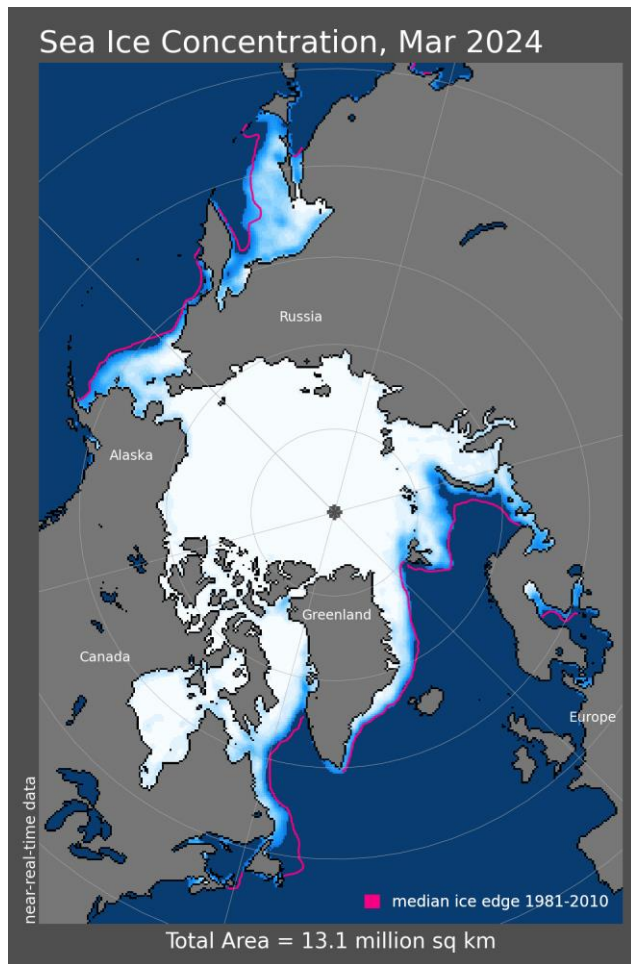
Snow Water Equivalent: Percent of Median

April 2024

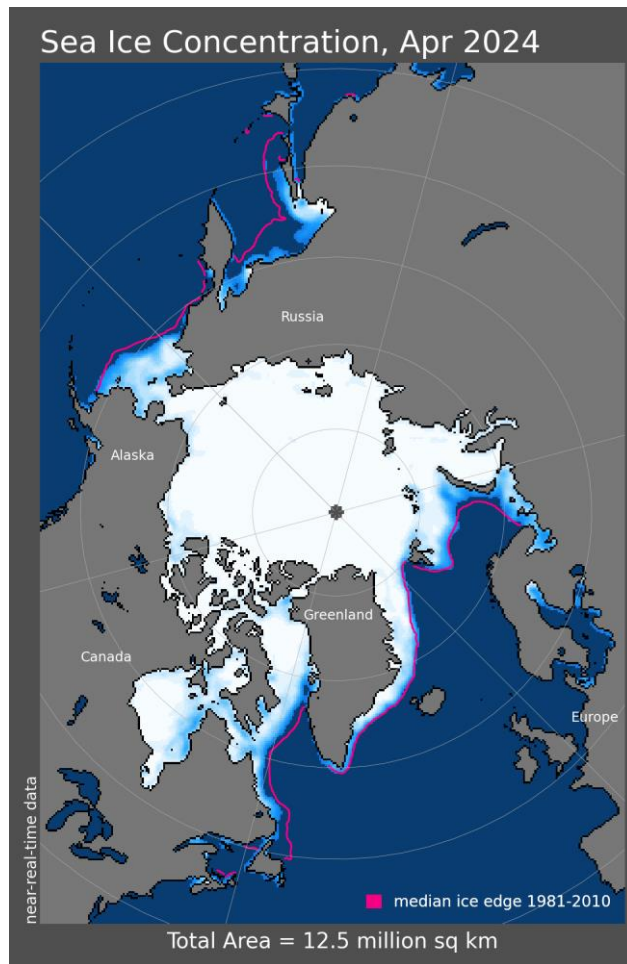


1991-2020 baseline
Source: ERA5 Land

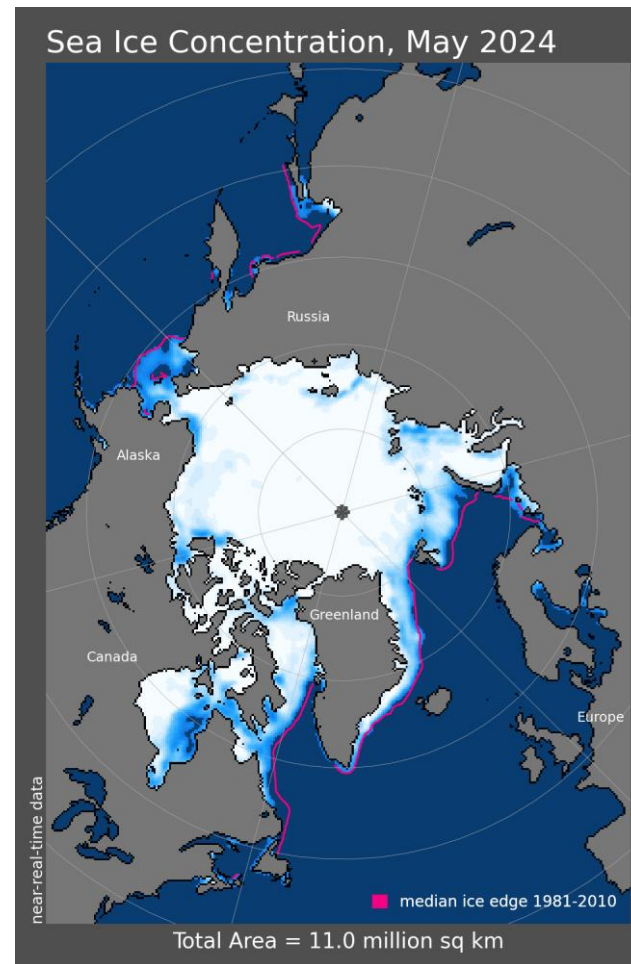
Arctic Sea Ice Extent: Spring 2024



15th lowest



16th lowest

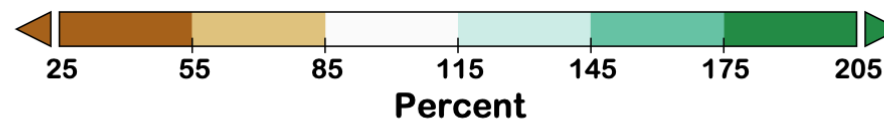
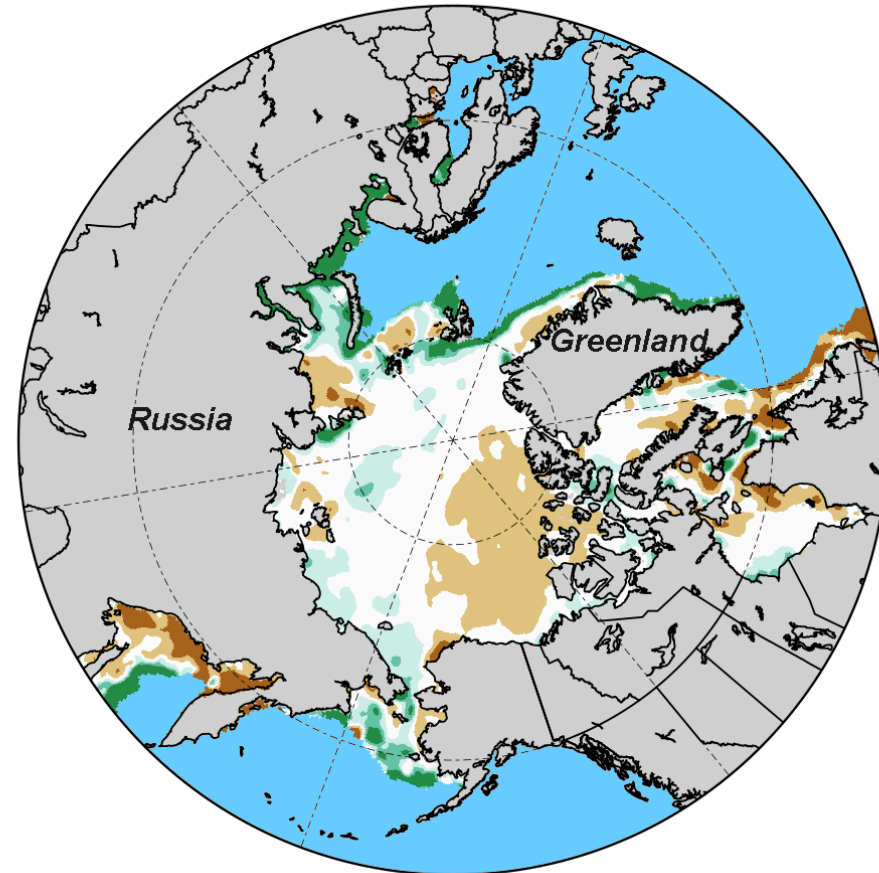


12th lowest

Since 1979

Arctic Sea Ice Thickness: March 2024

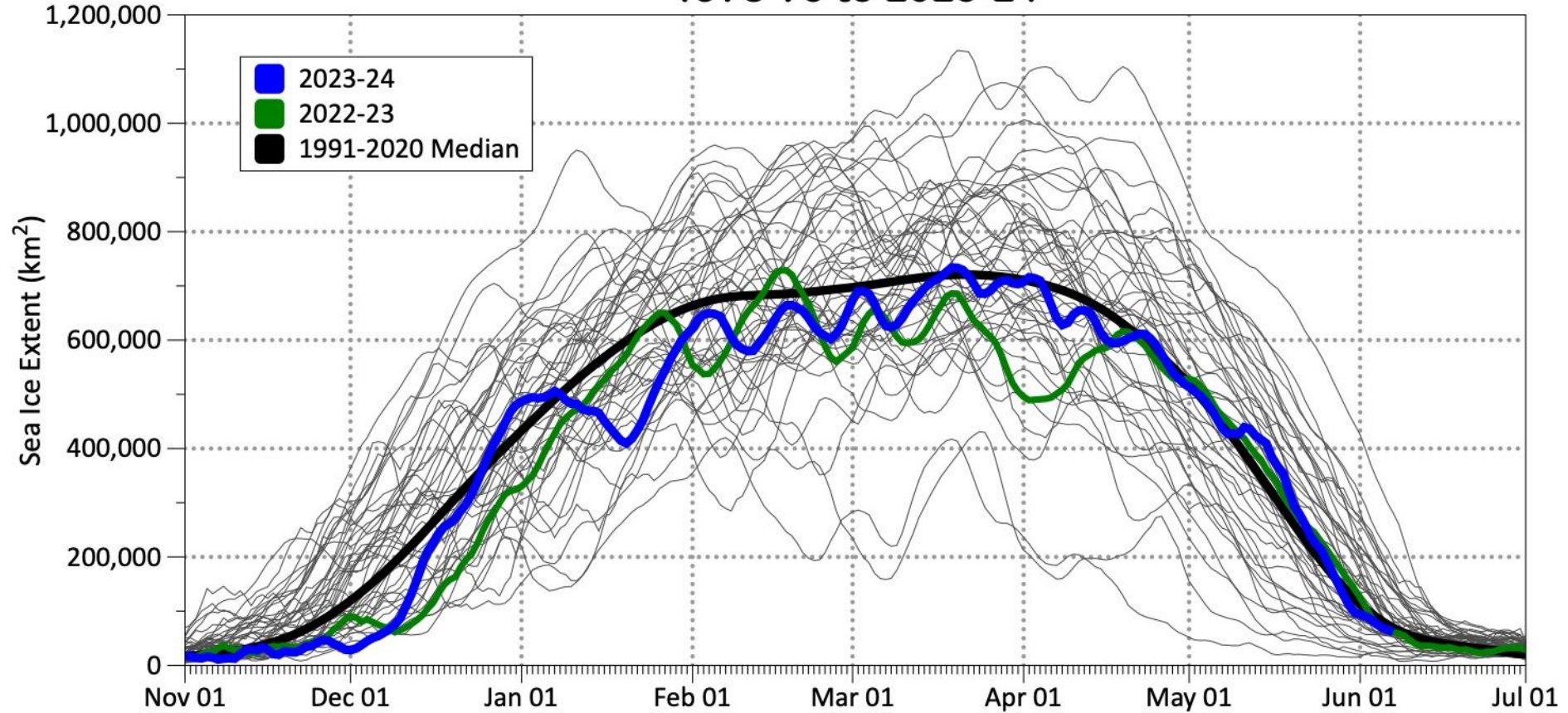
Sea Ice Thickness: Percent of Median
March 15-21, 2024



Merged SMOS/CryoSat-2
2011-2023 baseline
Data courtesy Alfred Wegener Institute

Bering Sea Ice Extent

Bering Sea Daily Ice Extent
1978-79 to 2023-24



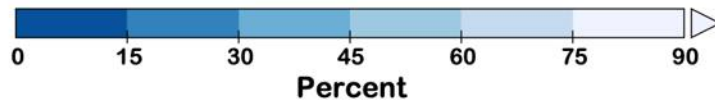
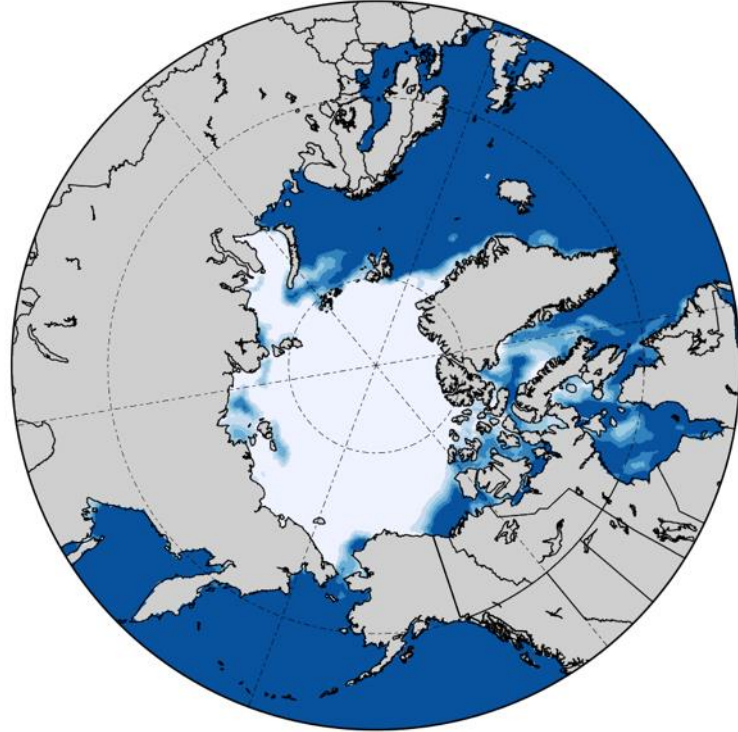
Spring 2024 Outlooks

- Arctic Sea Ice Experimental Outlook
 - NOAA/Climate Prediction Center
- Arctic Outlooks
 - Copernicus Climate Change Service
- Alaska Outlooks
 - NOAA/Climate Prediction Center

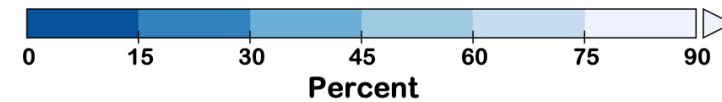
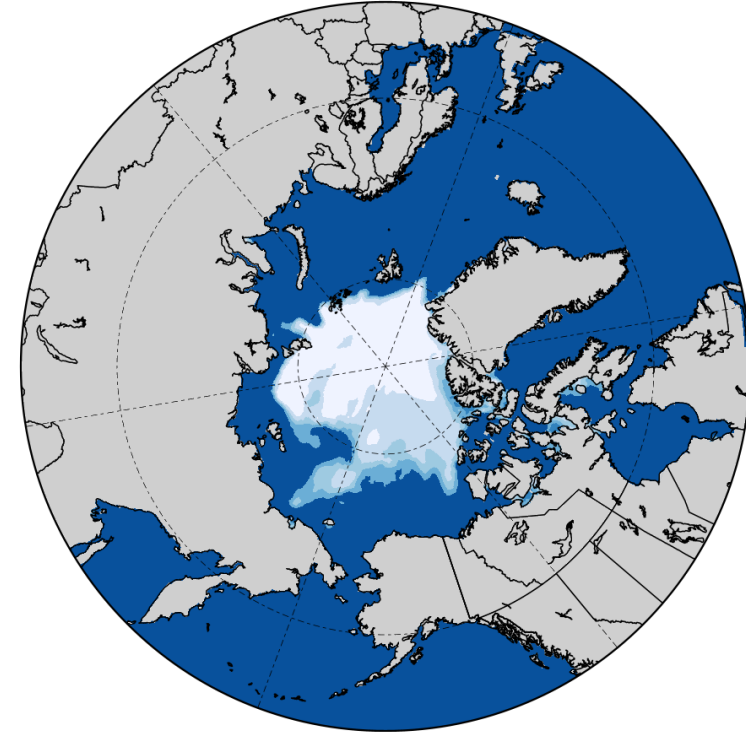


Sea Ice Outlook: Summer 2024

Average Sea Ice Concentration
June 2024



Average Sea Ice Concentration
August 2024

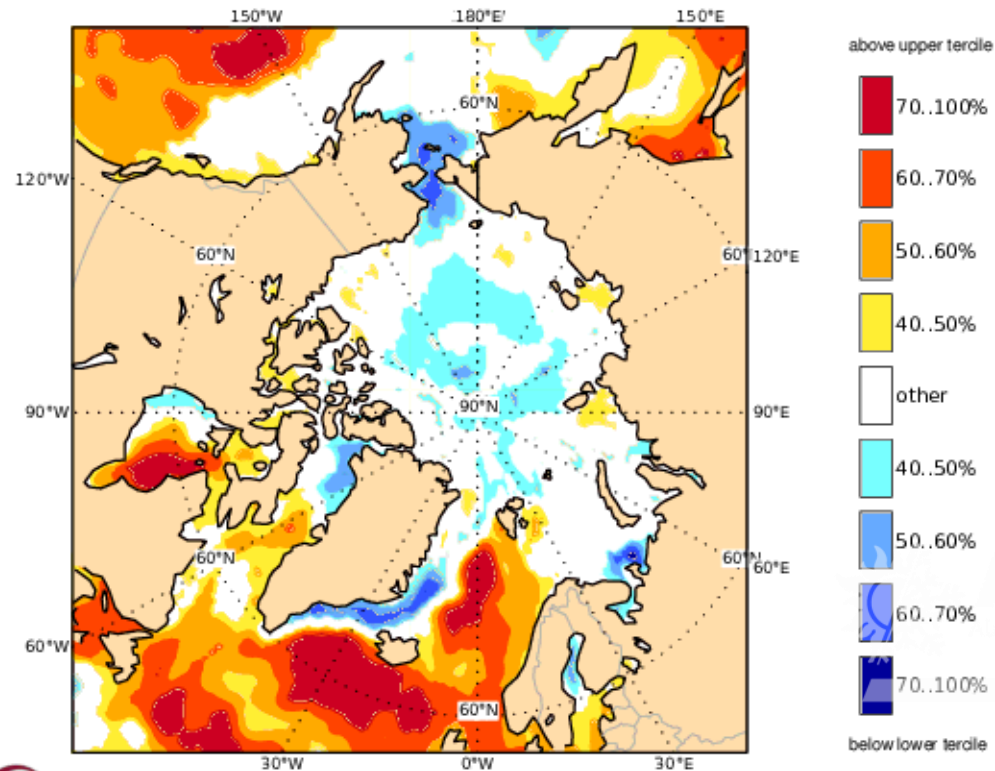


Data: NOAA/Climate Prediction Center Exp. Sea Ice Outlook
Outlook produced from late May 2024 data

Summer 2024 Sea Surface Temperature Outlook

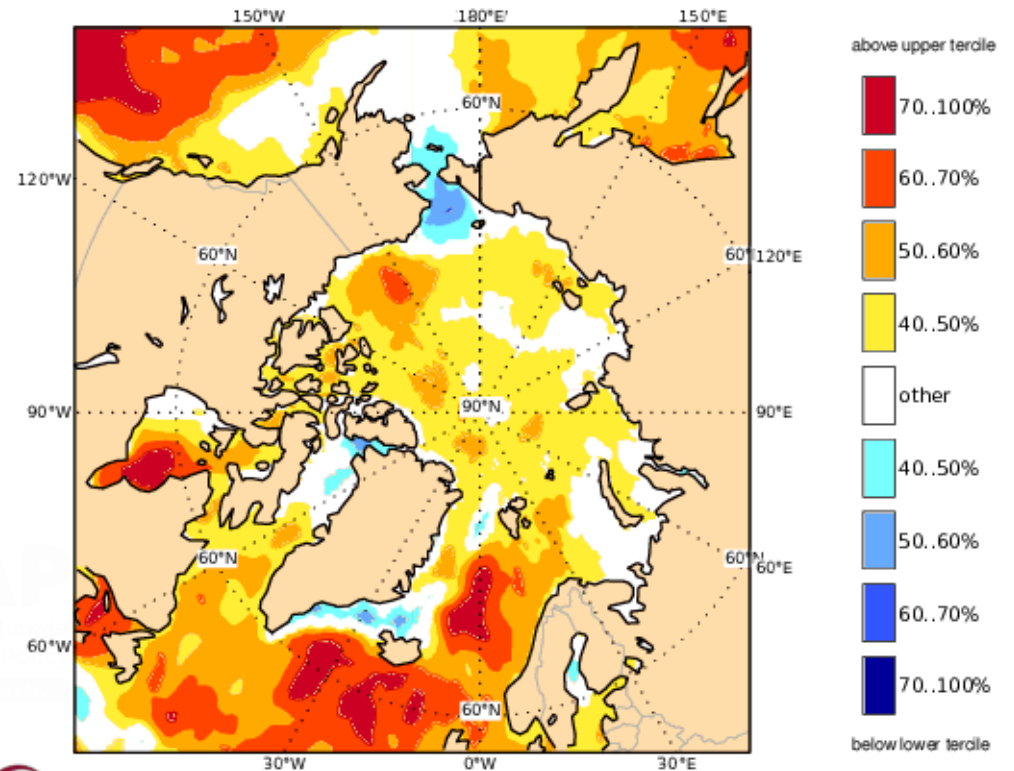
C3S multi-system seasonal forecast
 Prob(most likely category of forecast SST)
 Nominal forecast start: 01/05/24
 Unweighted mean

JUN 2024



C3S multi-system seasonal forecast
 Prob(most likely category of forecast SST)
 Nominal forecast start: 01/05/24
 Unweighted mean

AUG 2024



Summer 2024

Arctic Temperature and Precipitation Outlook

C3S multi-system seasonal forecast

Prob(most likely category of 2m temperature)

Nominal forecast start: 01/05/24

Unweighted mean

JJA 2024

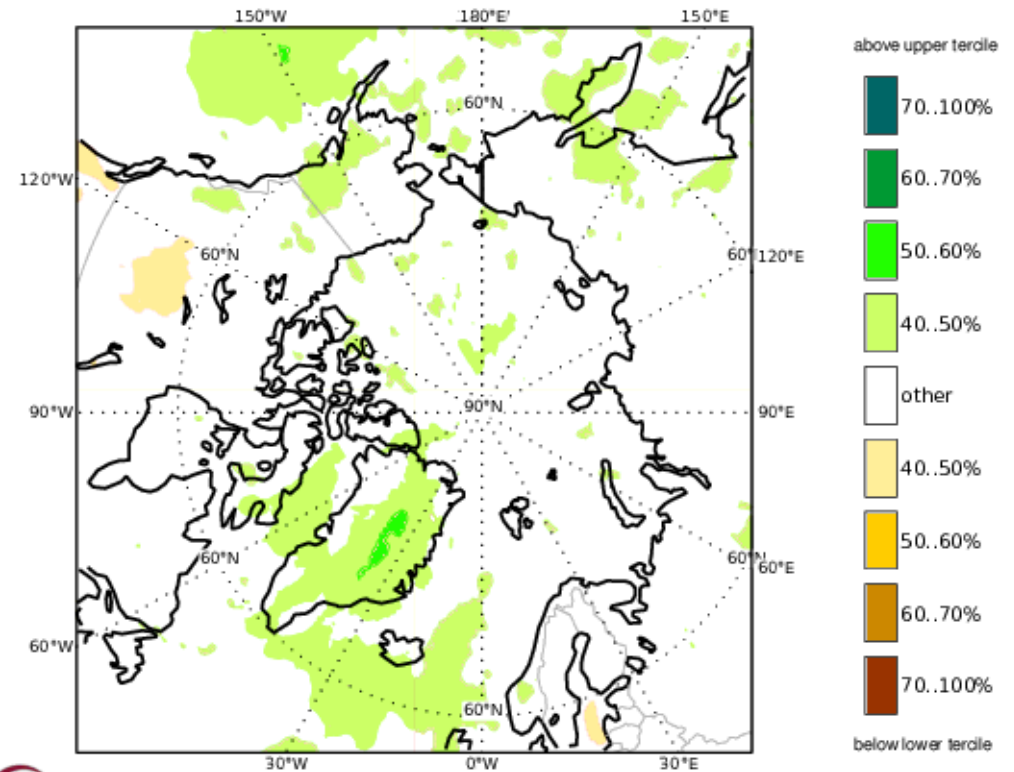
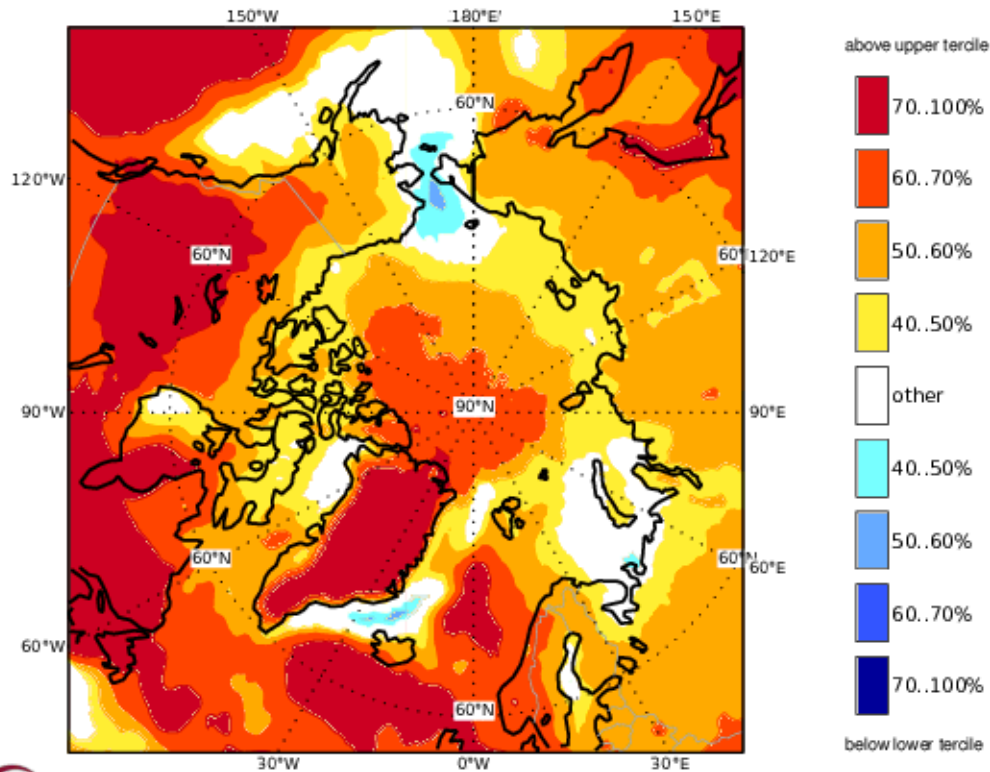
C3S multi-system seasonal forecast

Prob(most likely category of precipitation)

Nominal forecast start: 01/05/24

Unweighted mean

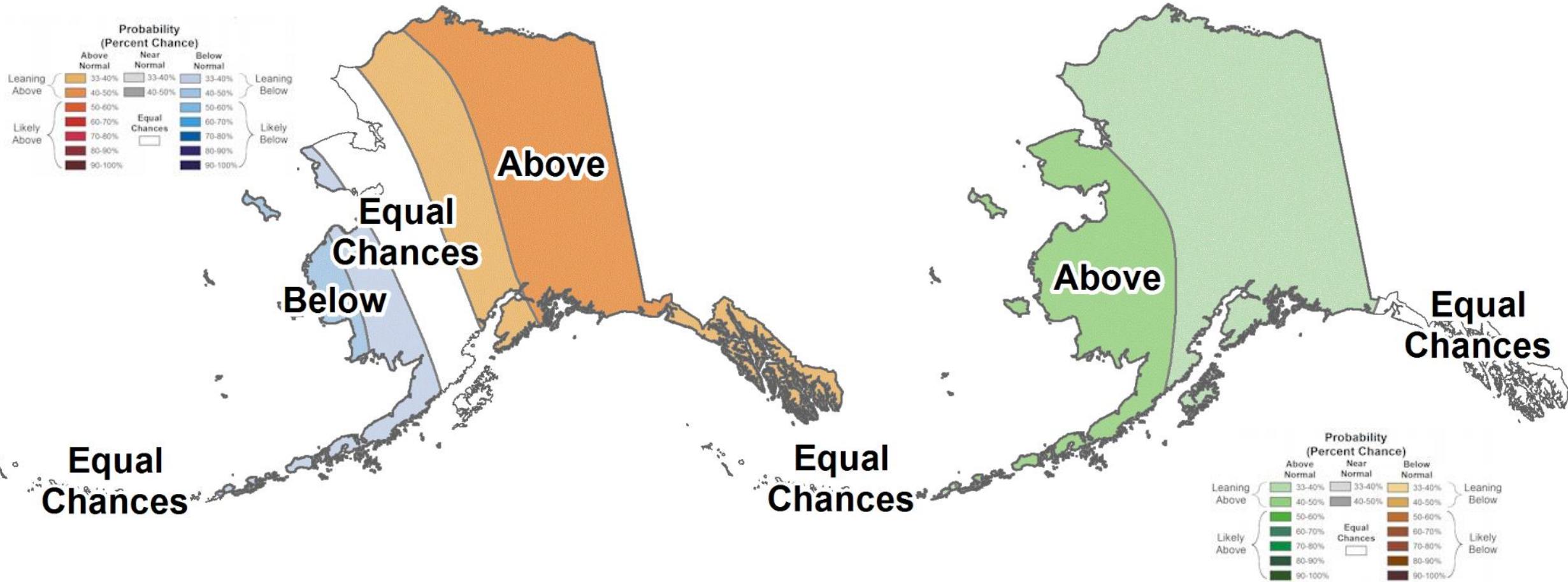
JJA 2024





Summer 2024

Alaska Temperature and Precipitation Outlooks



Outlooks courtesy NOAA/Climate Prediction Center

Thanks very much Questions?



NWS RiverWatch
Circle, Alaska
May 9, 2024