

CODEBASE:

Processing pipeline has been completed and is a simple way for us to run the freeze-up/break-up (FUBU) dates from the NSIDC-0051 daily Sea Ice Concentration time-series. This code base covers all bases from download, prep, smoothing, FUBU, and plotting to mimick what was done in the paper.

Repository: https://github.com/ua-snap/seaice_noaa_indicators

OUTPUTS:

Study Area:

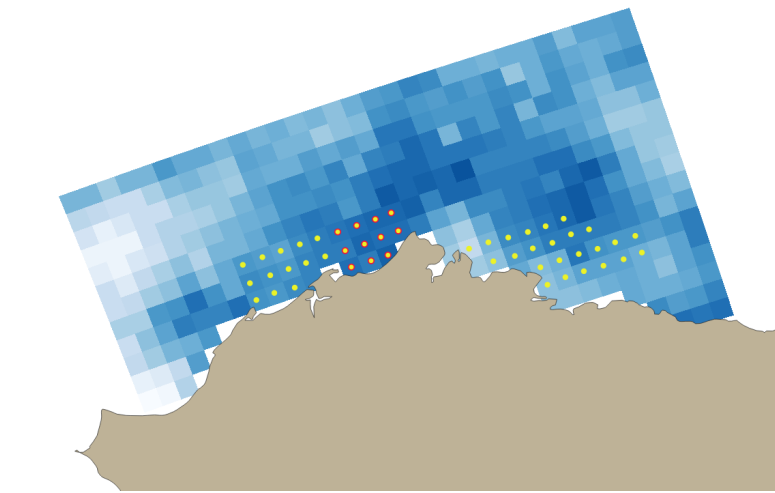


Table 2:

Comparison of sea-ice cycle phenologies for the Chukchi/Beaufort Seas, 1979—2007

	barrow	beaufort	chuckchi	chuckchi-beaufort
freezeup_start	10-18	10-14	10-20	10-16
freezeup_end	11-11	11-01	11-17	11-07
breakup_start	06-12	06-08	05-30	06-05
breakup_end	08-17	08-17	08-05	08-13

Table 3:

Climatological freeze-up and break-up dates with seasonal durations for the Chukchi and Beaufort Sea coastal regions, 1979–2013

	barrow	beaufort	chuckchi	chuckchi-beaufort
freezeup_start	10-07	10-05	10-15	10-08
freezeup_end	11-30	11-16	12-08	11-24
breakup_start	05-06	05-10	05-04	05-08
breakup_end	08-09	08-13	07-28	08-07

Table 4:

Mean freeze-up and break-up dates and trends for the Chukchi and Beaufort Sea coastal regions, 1979–2013

	barrow	beaufort	chuckchi	chuckchi-beaufort
freezeup_start	10-21	10-16	10-24	10-19
freezeup_end	11-12	11-04	11-18	11-09
breakup_start	06-07	06-06	05-27	06-03
breakup_end	08-12	08-12	07-31	08-07