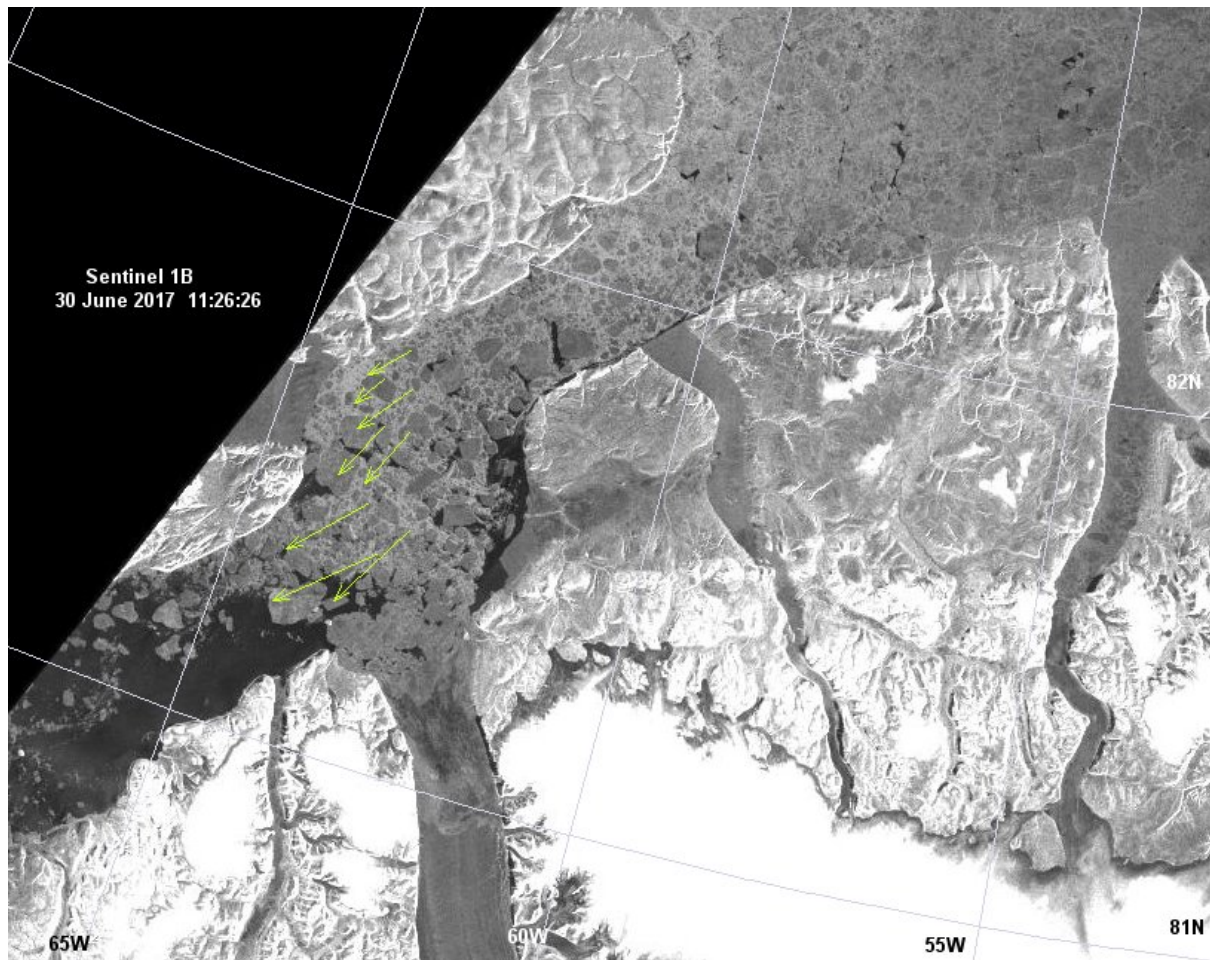


**2017 Sea Ice Outlook
July Report
Regional Outlook
Gudmandsen**

Lincoln Sea and Nares Strait



This radar scene of 30 June 2017 presenting the northern part of the Nares Strait with the Lincoln Sea to the North serves as an example of the drift of ice encountered during the month of June 2017. After the break-down of the arch in the Lincoln Sea by mid-May ice ‘waiting’ in the Lincoln Sea passed through the Nares Strait into the Baffin Bay followed by ice entering the Lincoln Sea from north with the larger part coming from west along the coast of Ellesmere Island.

The drift in the Nares Strait is modulated by the rather strong winds encountered in the Strait. The present case is subject to a northern wind of 12 to 17 m/s that gave a drift of floes measured at 0.34 km/h to 0.81 km/h in the Hall Basin and passing into the Kennedy Channel. It followed a longer period, 23 to 28 June, with southern winds reaching 10-15 m/s. These wind data are recordings made on Hans Island (80.83°N, 66:46°W), the small white dot seen in the lower left corner of the scene.

We expect that this drift pattern will continue during July subject to lower winds and increasing surface melting of the floes so that multiyear floes at low ice concentration by 1 August will be present in the Smith Sound supplemented by growlers released from the Humboldt Gletscher into the Kane Basin.

The radar scene requires a comment. We note that there is no surface melt on the many independent ice caps in the areas north and west of the Greenland Ice Cap and that the melt band on the slope of the Ice Cap is shorter than normal (observed on the eastern side of Petermann Gletscher). This is unusual. Normally, melting begins by early to mid-June. The Summit Camp on the top of the Greenland Ice Cap reports that with daily air temperatures varying regularly between -10°C and -25°C there is no surface melt at the altitude of the camp, 3200 m a.s.l. We may therefore conclude that this special weather phenomenon extends even to the very north of Greenland. However, we find that this does not influence the situation in the central Nares Strait. Average weekly air temperatures measured on Hans Island in the three last weeks of June are nearly the same this year as those measured in 2016, $+2.5^{\circ}\text{C}$ to $+4.7^{\circ}\text{C}$ in 2016 and $+3.7^{\circ}\text{C}$ to $+5.6^{\circ}\text{C}$ in 2017.