Iceberg Outlook | For the Labrador Coast and East Newfoundland Waters

Issued by the United States Coast Guard (USCG) International Ice Patrol (IIP) Valid 3 February 2023 00 UTC

The next Iceberg Outlook will be issued 10 February 2023.

THIS PRODUCT IS NOT FOR NAVIGATION. ALL ICEBERG CONDITIONS GIVEN ARE IIP ESTIMATIONS.

Labrador Coast (north of 52°N):

As of 2 February, sea ice continues to develop and drift south along the Labrador Coast under seasonal belowfreezing surface air temperatures, predominately composed of thin first-year ice north of 57°N and new to graywhite ice south of it within the region. The concentration of this sea ice ranges from 10 to 100 percent with the majority between 90 and 100 percent areal coverageⁱ. IIP estimates that there are one hundred forty-five icebergs between 52°N and 60°N latitude within the sea ice limit along the Labrador Coastⁱⁱ. Over the past week, the sea ice edge along the Labrador Coast expanded eastward, carrying the northeast iceberg limit with it. The forecast eastward passage over this region in the next week of a low-pressure, high-wind atmospheric system may correspond to potential breakup of the ice pack along the Labrador Coast under increased wave actionⁱⁱⁱ. Breakup of the icepack may accelerate the freeing of icebergs into open water. In general, IIP expects an increasing number of icebergs to be carried south into open water and a continued seasonal expansion of the iceberg limit in the next week.

Newfoundland, Strait of Belle Isle, and Gulf of Saint Lawrence (south of 52°N):

New to gray-white ice is developing and drifting south, at mostly 90 percent concentration, along the southern coast of Labrador into the Strait of Belle Isle and the east coast of Newfoundland. IIP estimates that there are three icebergs south of 52°N latitude: two within the Strait of Belle Isle within the sea ice limit and one in open water off the northeast coast of Newfoundland. Aerial reconnaissance conducted by PAL Aerospace on 31 January confirmed the elimination of a second iceberg near the southeastern iceberg limit. As a result, the southeastern iceberg limit contracted slightly westward over the past week, while the southern iceberg limit expanded south with the remaining estimated drifting iceberg. For its second week of production, IIP relied on ship reporting, and aerial and satellite reconnaissance of iceberg locations. A second low-pressure atmospheric system forecast to pass northeast through this region in the next week, coupled with the system to the north, may correspond to enhanced iceberg deterioration in open water. However, the breakup of the ice field to the north may bring an increased number of icebergs into this region over the next week. In general, IIP expects continued seasonal southern expansion of the iceberg limit.

In the Context of 1991 to 2020 Regional Ice Climatology:

As of 29 January, sea ice concentration and regional percentage ice coverage along the Labrador Coast and east Newfoundland are largely below normal for 1991 to 2020. As of the issuing of this product, no icebergs have yet drifted south of 48°N latitude^{iv} in the 2023 Ice Season. On average between 1983 and 2022^v, four icebergs drift south of this latitude by the end of January and twenty-seven icebergs drift south of it by the end of February. IIP expects a later-than-normal seasonal start to icebergs drifting south of 48°N as the Ice Season progresses through winter. As of 3 February, the iceberg limit remains within the 1991 to 2020 early-February extreme and median (see figure). IIP expects the iceberg limit to remain within the median through mid-February.

Current overall estimated iceberg count south of 48°N and extent remain below normal in the region.



ⁱ All sea ice conditions reported are from Environmental Climate Change Canada's Canadian Ice Service East Coast Latest Ice Conditions Ice Products, <u>https://iceweb1.cis.ec.gc.ca/Prod/page2.xhtml?CanID=11091&lang=en</u>.

ⁱⁱⁱ All Meteorological conditions and forecasts reported are from the National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) Ocean Prediction Center (OPC) Products, <u>https://ocean.weather.gov/index.php</u>.

^{iv} IIP considers 48°N to be the latitude south of which icebergs pose a threat to major transatlantic shipping lanes (Report of the International Ice Patrol in the North Atlantic, IIP, 2018, <u>https://navcen.uscg.gov/international-ice-patrol-annual-reports</u>).

^v IIP considers 1983 to present to be its modern reconnaissance era in which IIP has used modern tools of iceberg reconnaissance and tracking (Report of the International Ice Patrol in the North Atlantic, IIP, 2018, <u>https://navcen.uscg.gov/international-ice-patrol-annual-reports</u>).

ⁱⁱ All iceberg conditions reported are from the latest North American Ice Service (NAIS) Iceberg Products, <u>https://navcen.uscg.gov/north-american-ice-service-products</u>.