



Iceberg Count per 35 Square Km Grid Cell 2002-2021

Description: The following map shows an intermediate step of the constraints analysis undertaken by the Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador to identify the focus area to be considered in the remainder of the assessment. It depicts parts of the Study Area set out in the Regional Assessment (RA) Agreement where icebergs could be present.

To develop this map, the Committee overlaid the Study Area with a grid comprised of 35 km² hexagons, which was selected by the Committee to represent a possible size of a wind farm within the Study Area. A point in polygon analysis was completed using the International Ice Patrol (IIP) Iceberg Sightings Database, Version 1, which shows records of iceberg locations for the period of 2002 – 2021. All hexagons that had at least one medium to very large iceberg (as defined in the 2005 Canadian Ice Service Manual) present during the 20-year period covered by the database were identified and are shown in blue. The IIP Iceberg Sighting Database does not include records of the tracks taken by individual icebergs. Thus, this map is not a complete picture of all areas where icebergs were present.

Among other experts, the Committee consulted the Meteorological Service of Canada (MSC) during our work to identify a focus area (October 17, 2023). MSC noted that data on iceberg occurrence in the region is based on opportunistic surveying and, therefore, does not provide a scientific basis to support notable change in icebergs over the next ten to twenty years. They also indicated there is a history of icebergs in parts of the focus area (e.g., northern boundary of the West Coast) and the focus area boundary could be adjusted accordingly. MSC recommended, that depending on our risk tolerance, we plan for extremes. The Committee assumed any areas where icebergs have been recorded between 2002-2021 could also be impacted by icebergs in the foreseeable future and that a precautionary approach should be applied when considering offshore wind development in those areas.

This map was included in presentations the Committee delivered during engagement sessions about the focus area. These were held in September and November 2023.

References

International Ice Patrol. (1995). International Ice Patrol (IIP) Iceberg Sightings Database, Version 1, 2002-2021. [Dataset]. Boulder, Colorado USA.
National Snow and Ice Data Center. <https://doi.org/10.7265/N56Q1V5R>. Date Accessed 10-31-2023.