

1 Q. **Fuel Oil Storage Facility:** With reference to Section 3, page 8 of the July 2011 Hydro
2 report, since 1980, in what years has tanker supply to Holyrood been delayed by ice
3 blockage in Conception Bay?

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6 A. The extent of the annual ice coverage and concentration along the Southern
7 Labrador and Eastern Newfoundland coasts vary, but generally, in most years since
8 1980, there has been some ice in or near Conception Bay. The ice coverage and
9 concentration in any given year depend on a number of meteorological and
10 oceanographic factors. Refer to Attachments 1 and 2 for charts depicting the
11 frequency and concentration (when present) of sea ice in March/April for Eastern
12 Canada during the period 1981 to 2010. These charts are taken from Environment
13 Canada's East Coast 1981-2010 Sea Ice Climate Atlas. Environment Canada reports
14 that the areas of Southern Labrador and Eastern Newfoundland experienced above
15 average ice conditions from 1980/1981 to 1994/1995. During the period of
16 1995/1996 to 2009/2010, the same areas experienced below average ice
17 conditions. Attachment 3 contains a chart which depicts the historical total
18 accumulated ice coverage for the East Coast for the period 1981-2010.

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20 Hydro does not have specific records to document significant ice blockages that
21 have affected tanker traffic in Conception Bay. However, in March of 1983 a
22 demurrage charge was incurred which is indicative of a delay in docking a vessel.
23 This occurred during a peak ice period depicted in Attachment 3 (1983-1985). The
24 extent and concentration of the ice coverage is further substantiated by the
25 following photos overlooking Conception Bay and the area just outside the St.
26 John's Narrows taken during the February/March period of 1983.

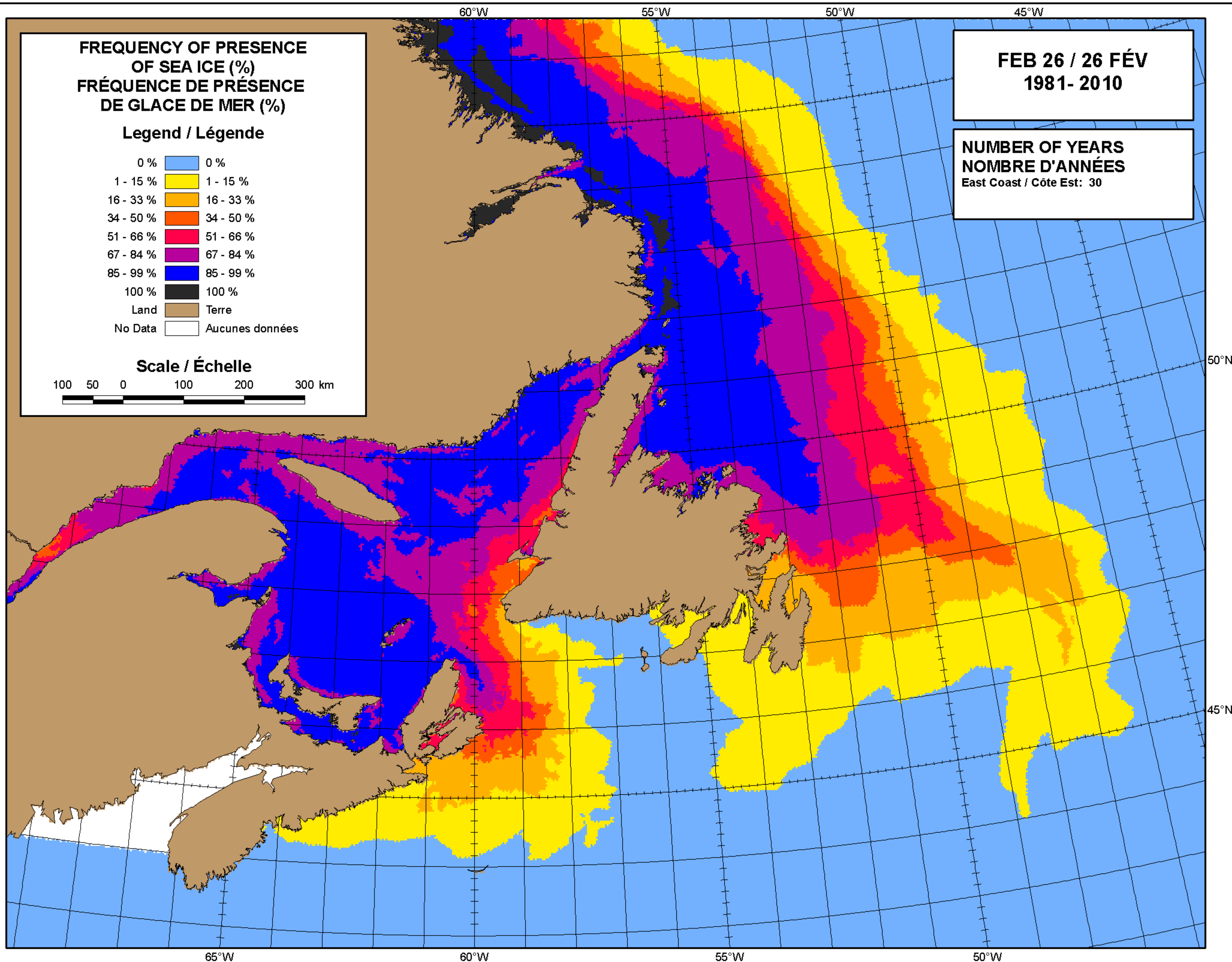


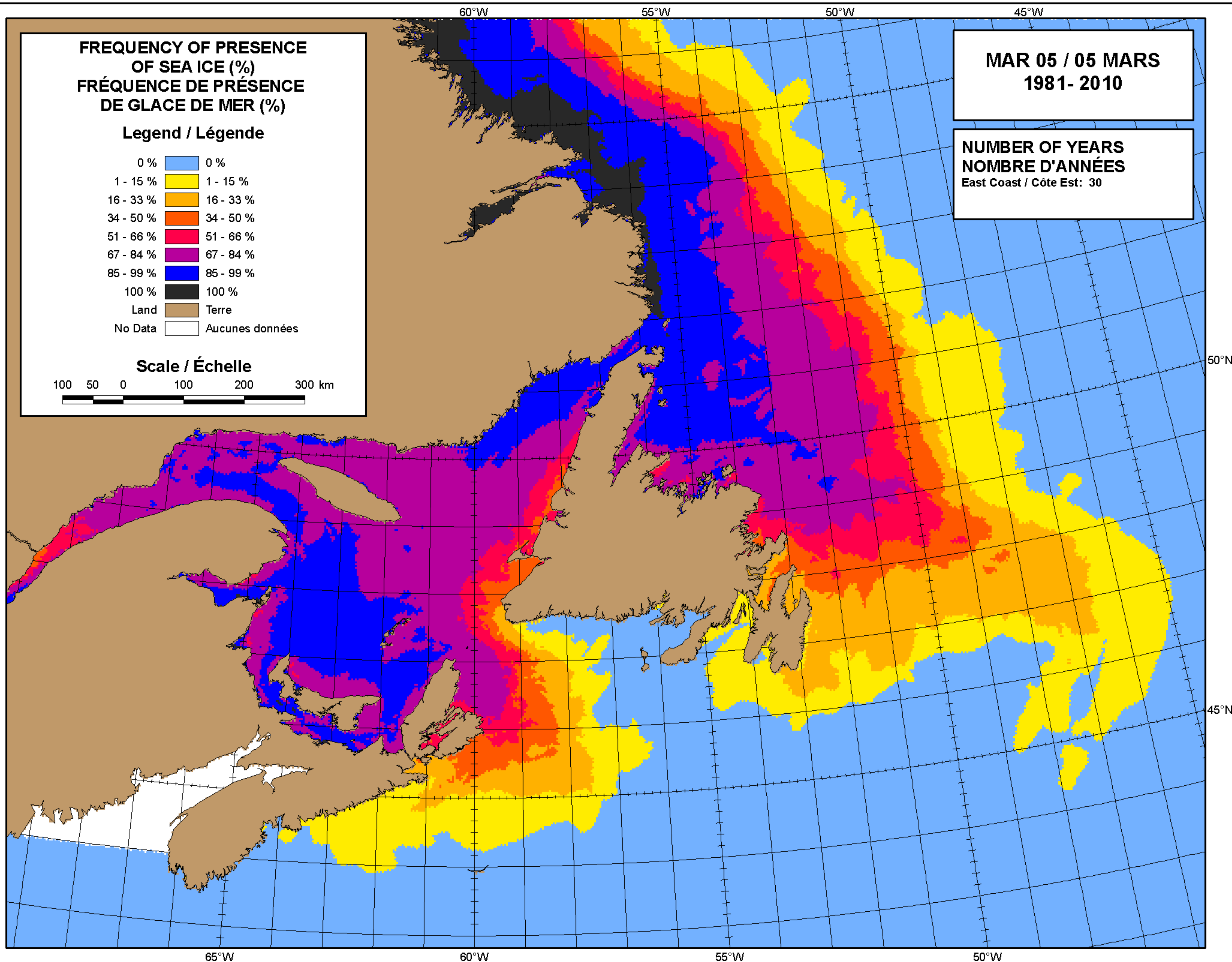
Conception Bay Ice Blockage - Photo #1 February/March 1983

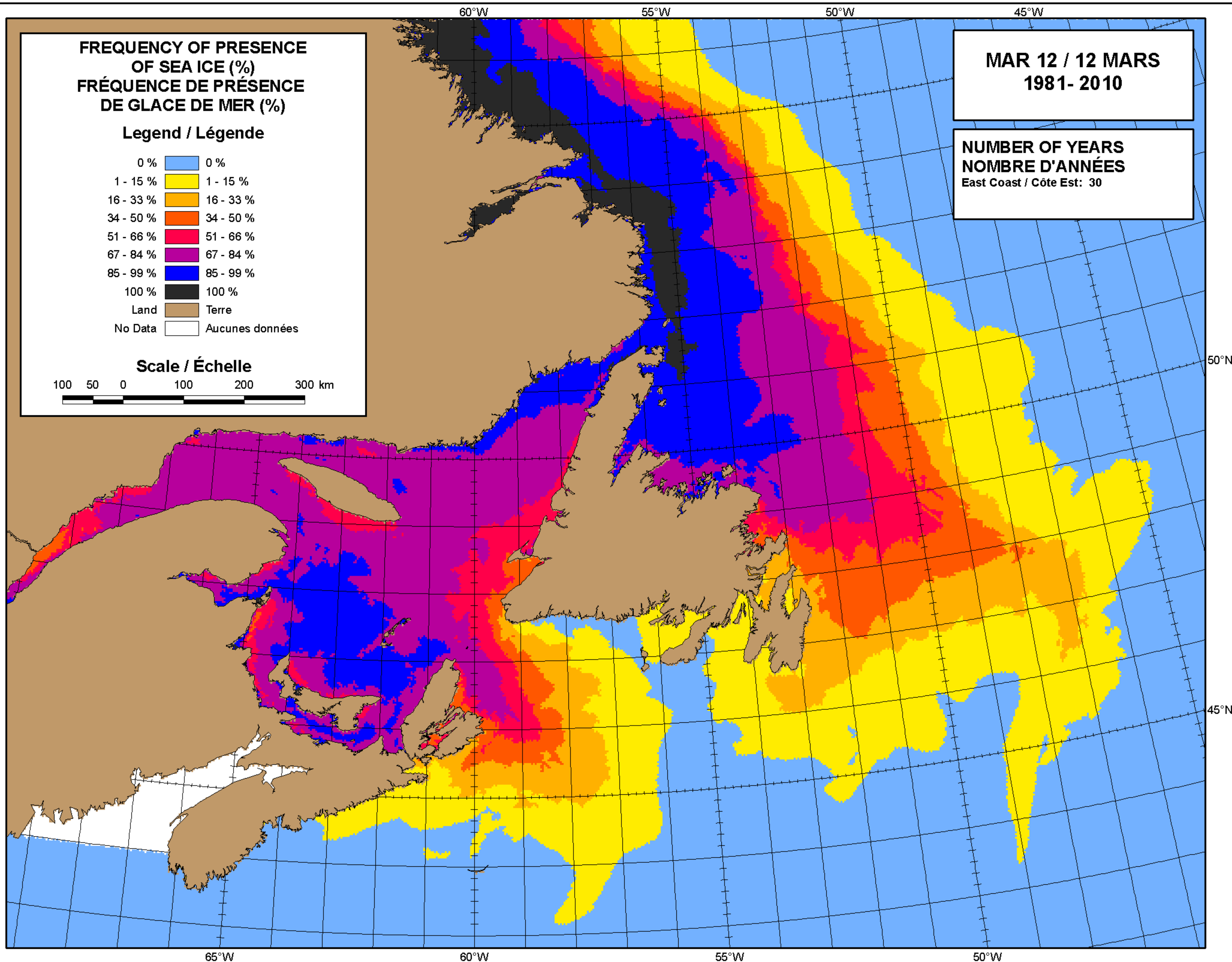


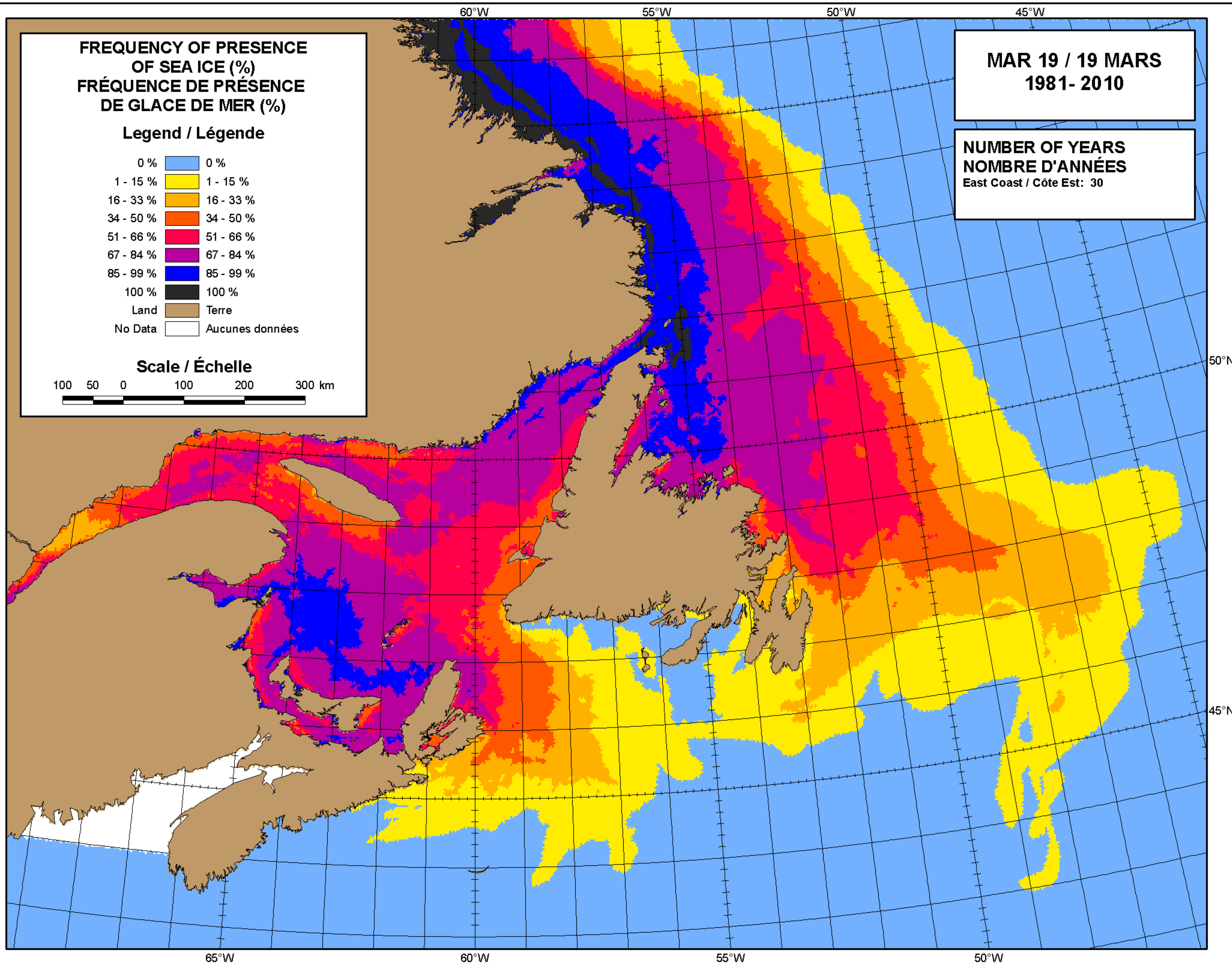
Ice Blockage Outside of St. Johns - Photo #2 February/March 1983

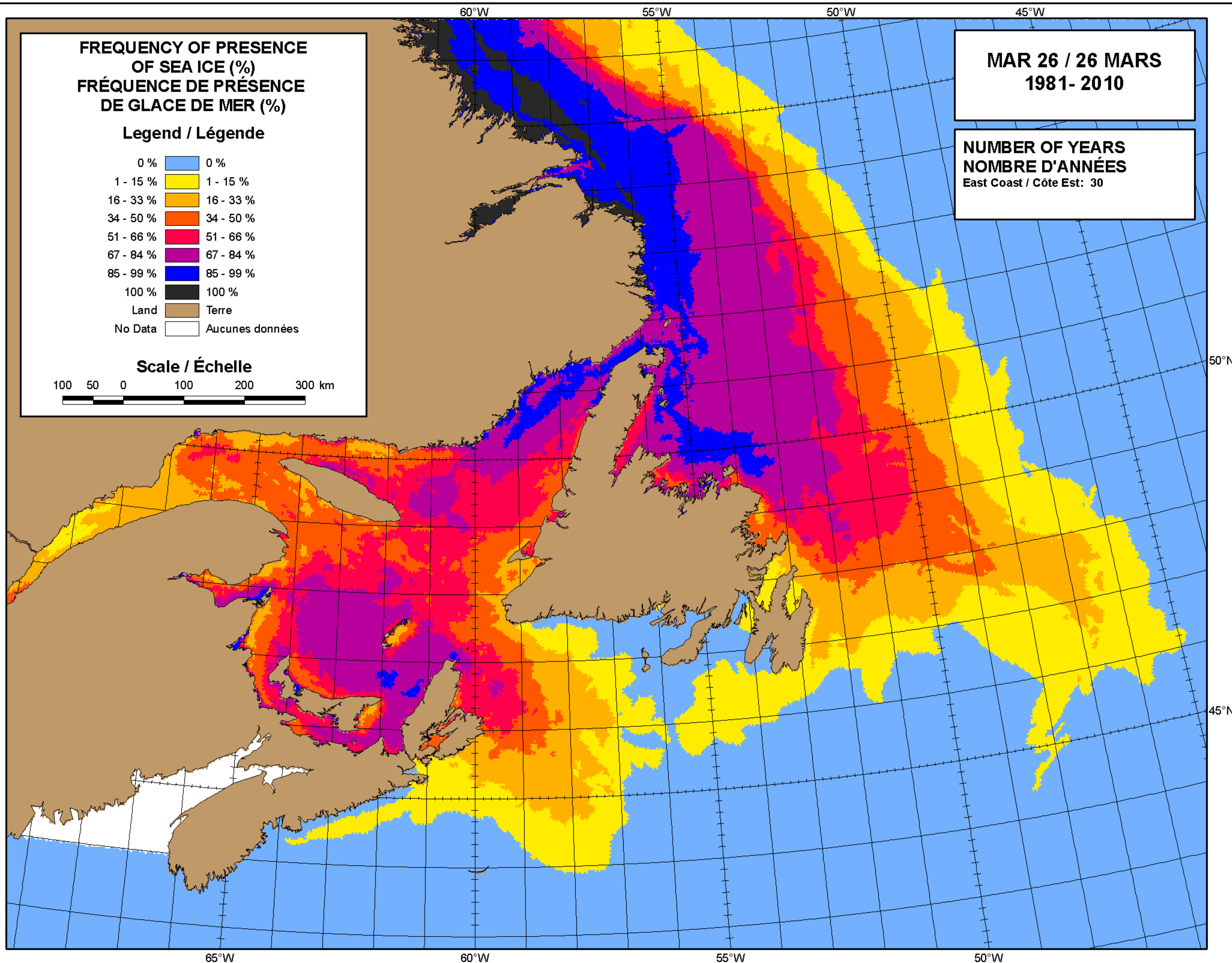
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- 1 With a delivery schedule of twenty-eight (28) days and the unpredictability of ice
 - 2 conditions, Hydro's must be prepared for an ice blockage that would prevent a
 - 3 tanker from entering Conception Bay or the eastern coast of Cape St. Francis.

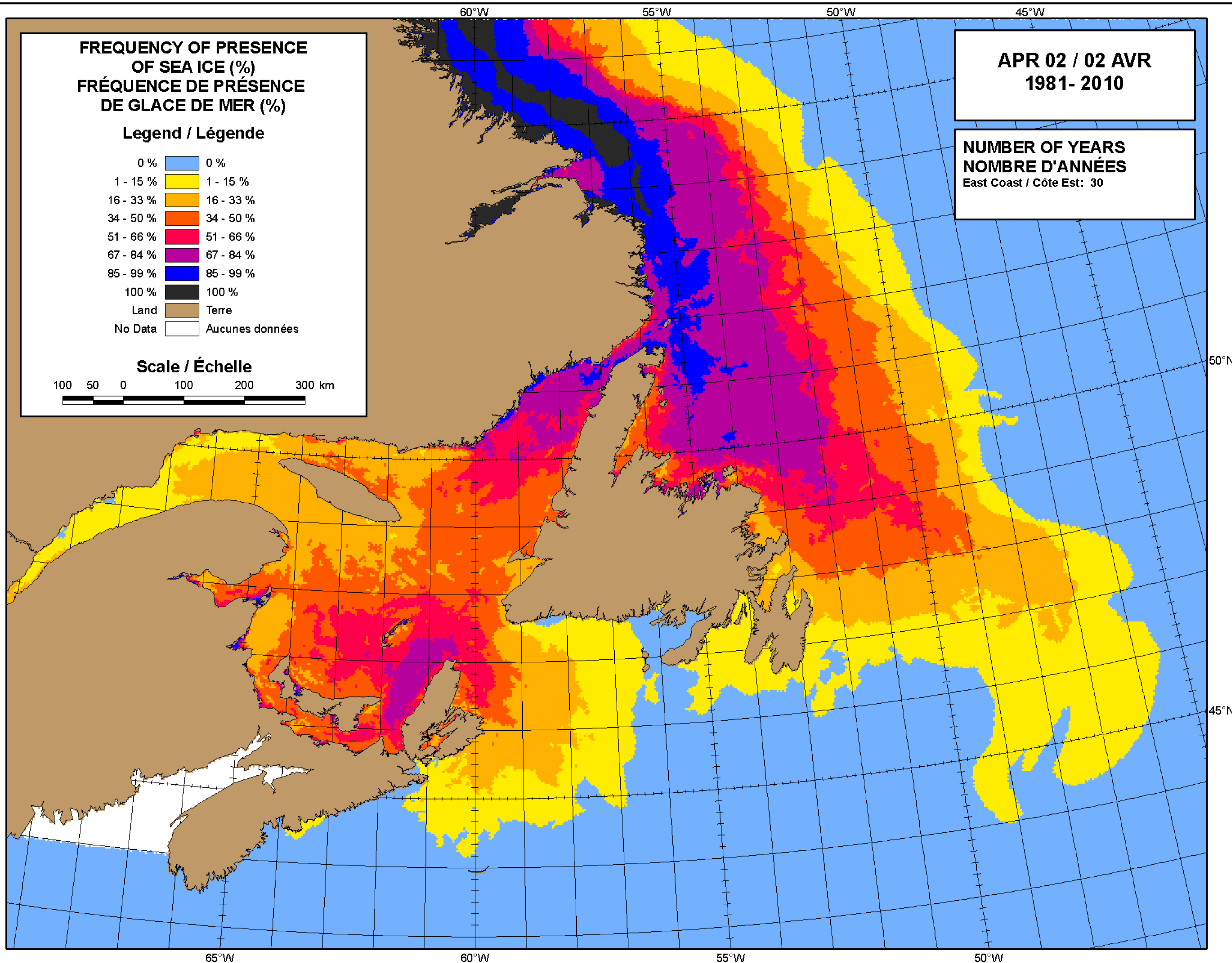


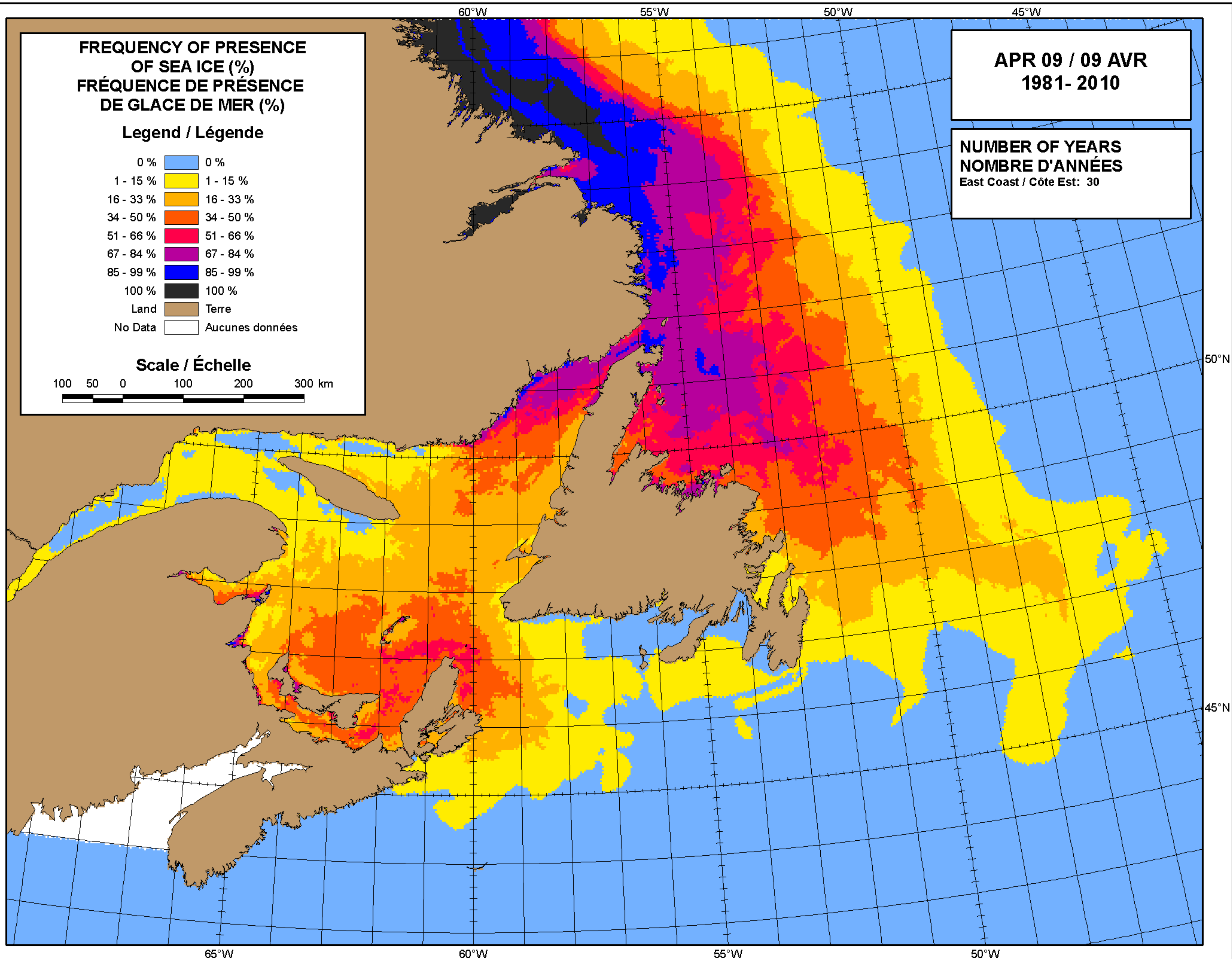


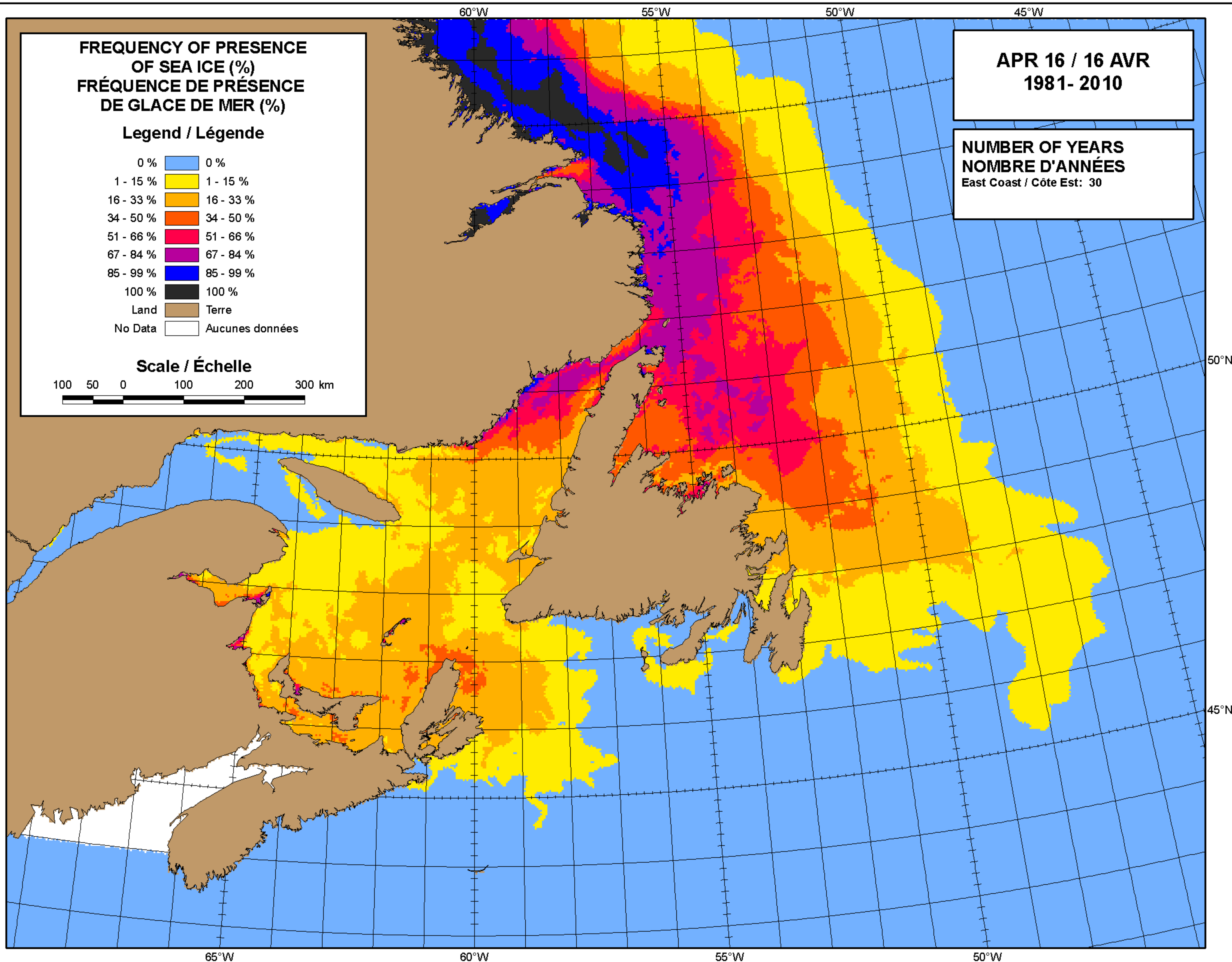


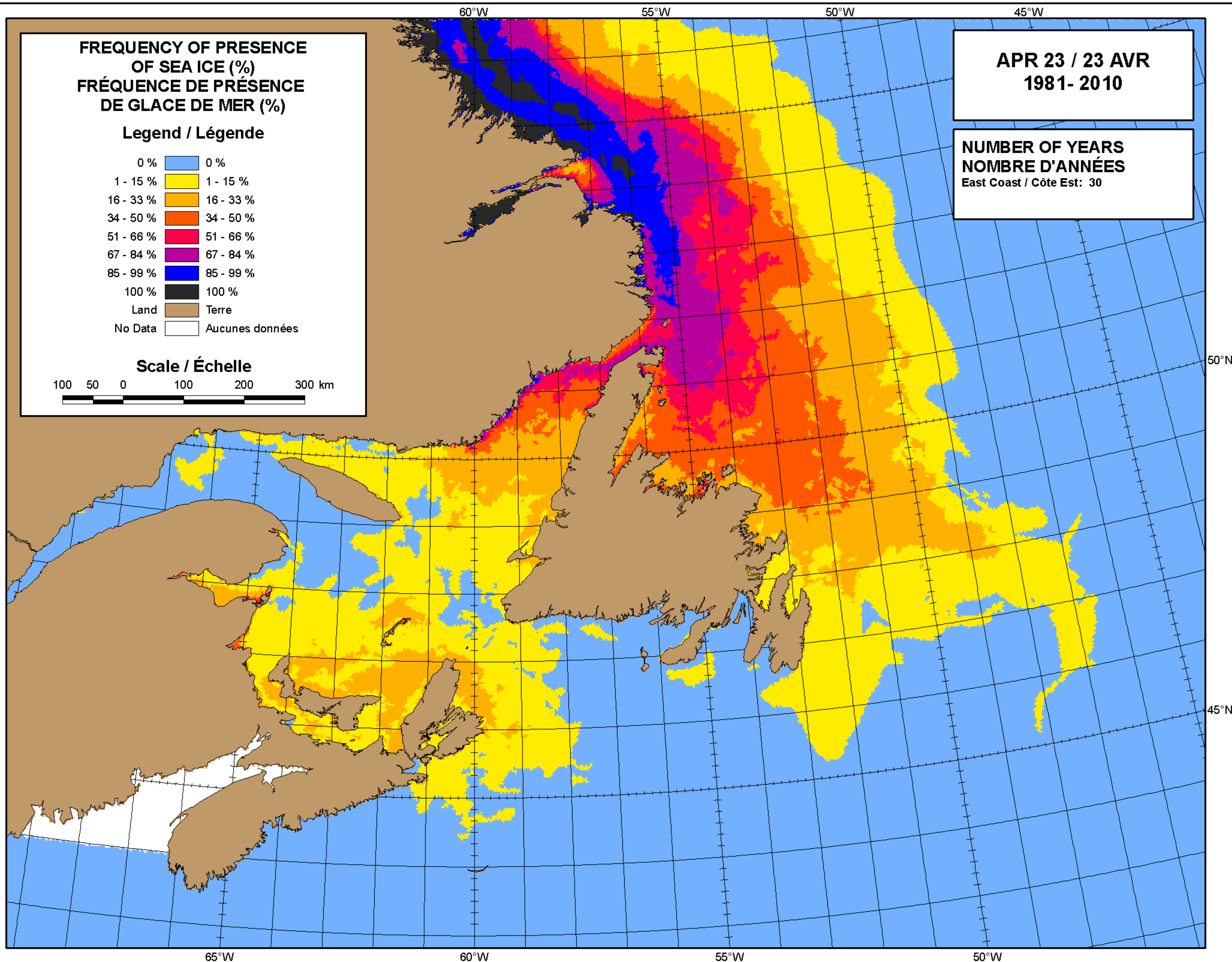


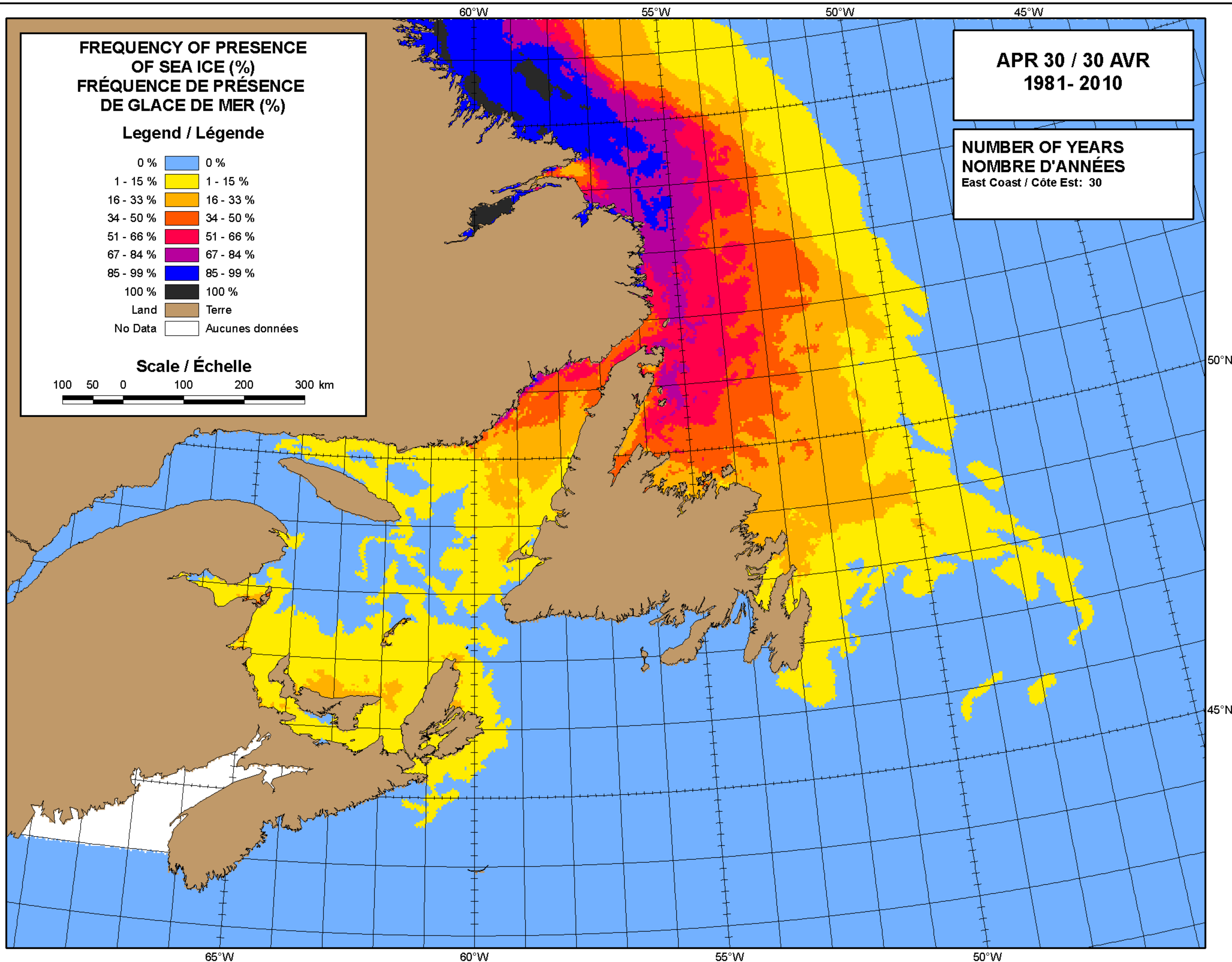


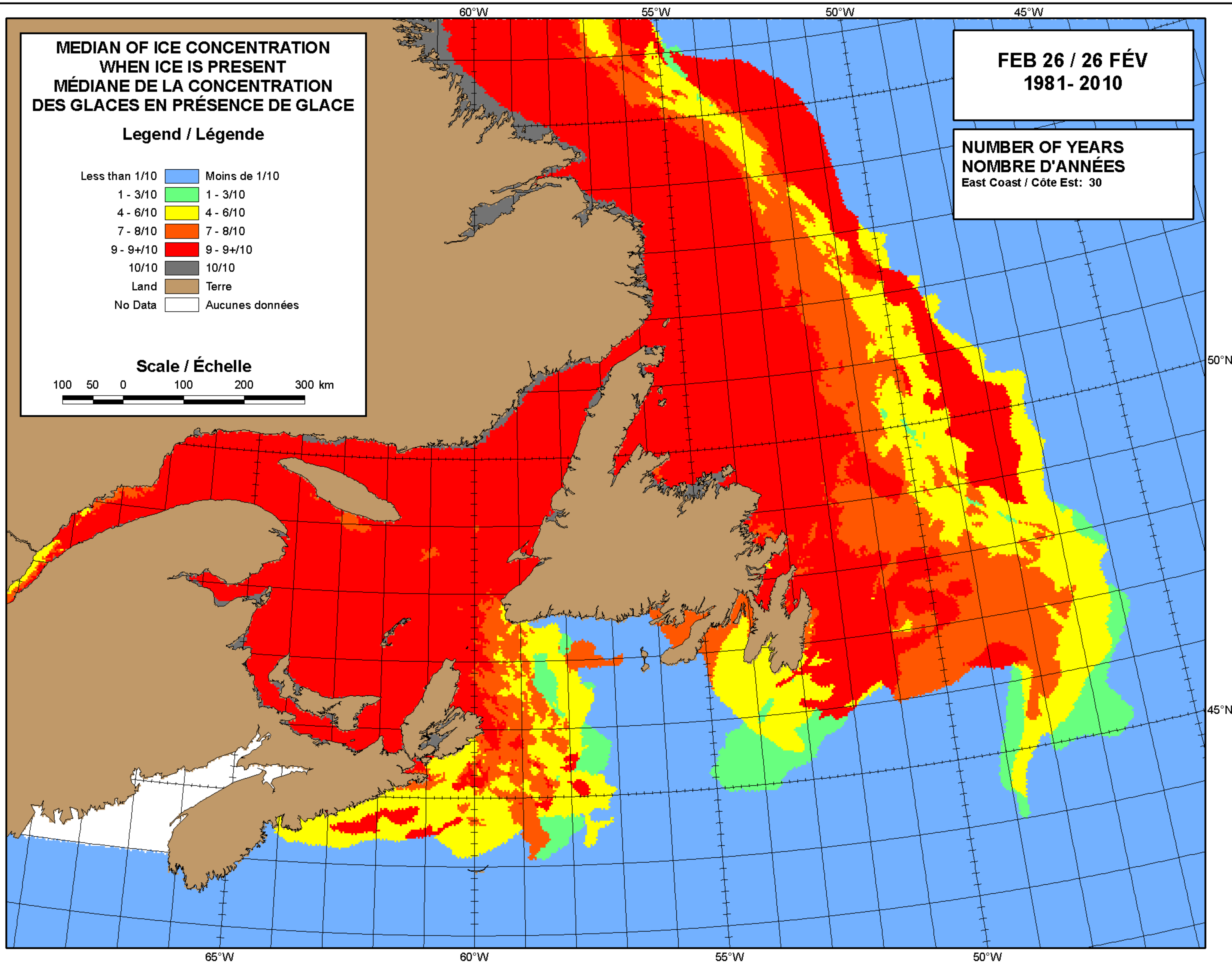


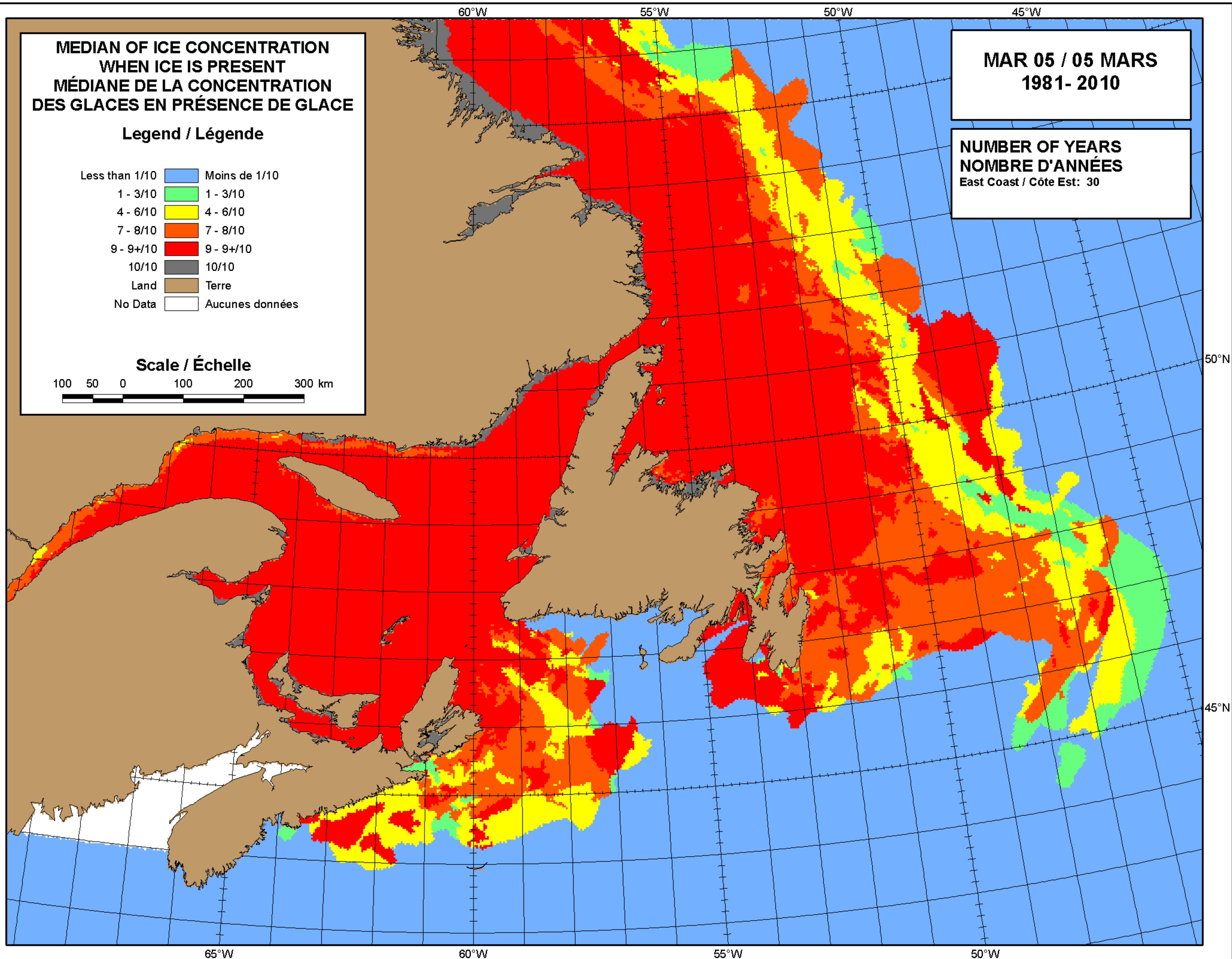


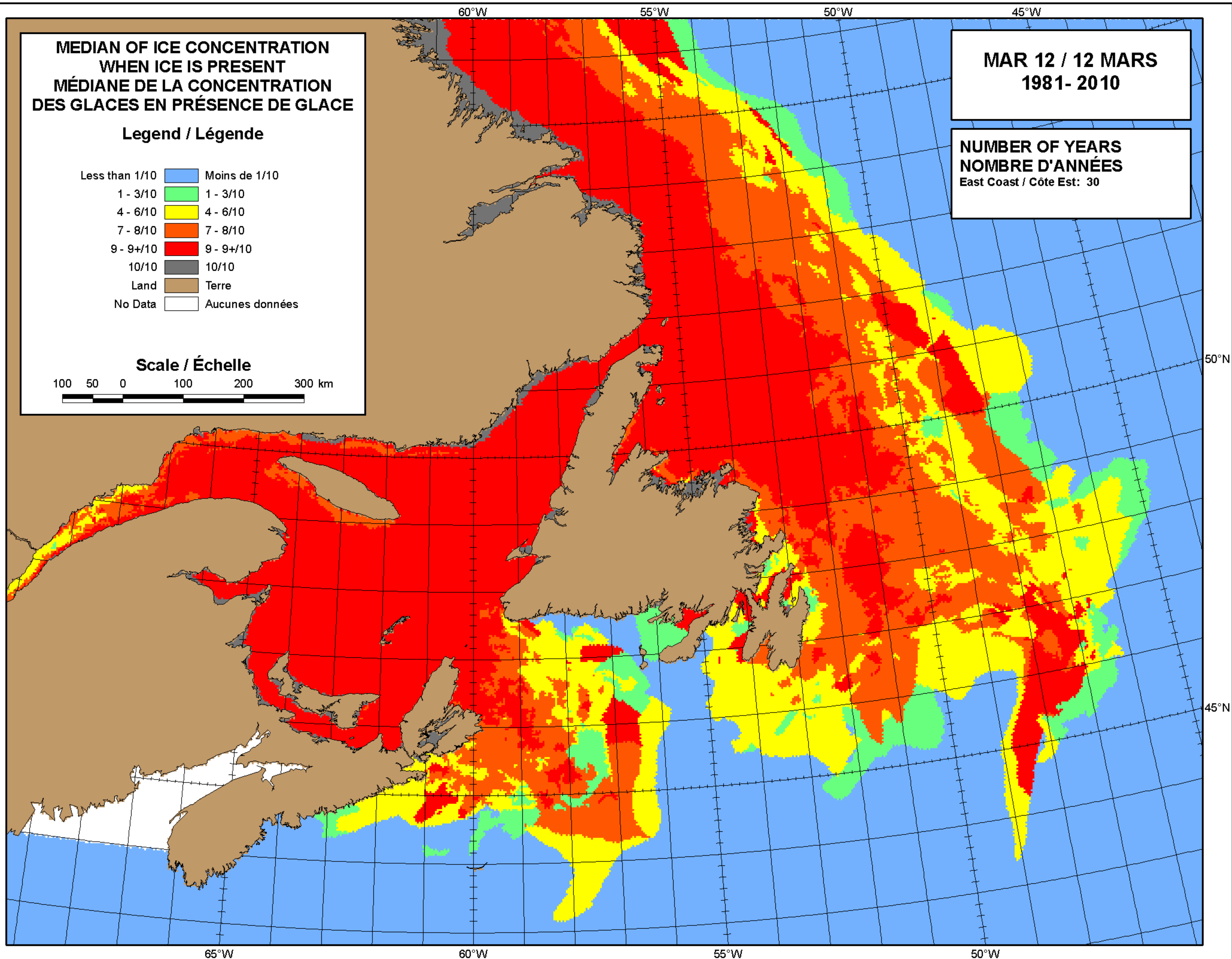


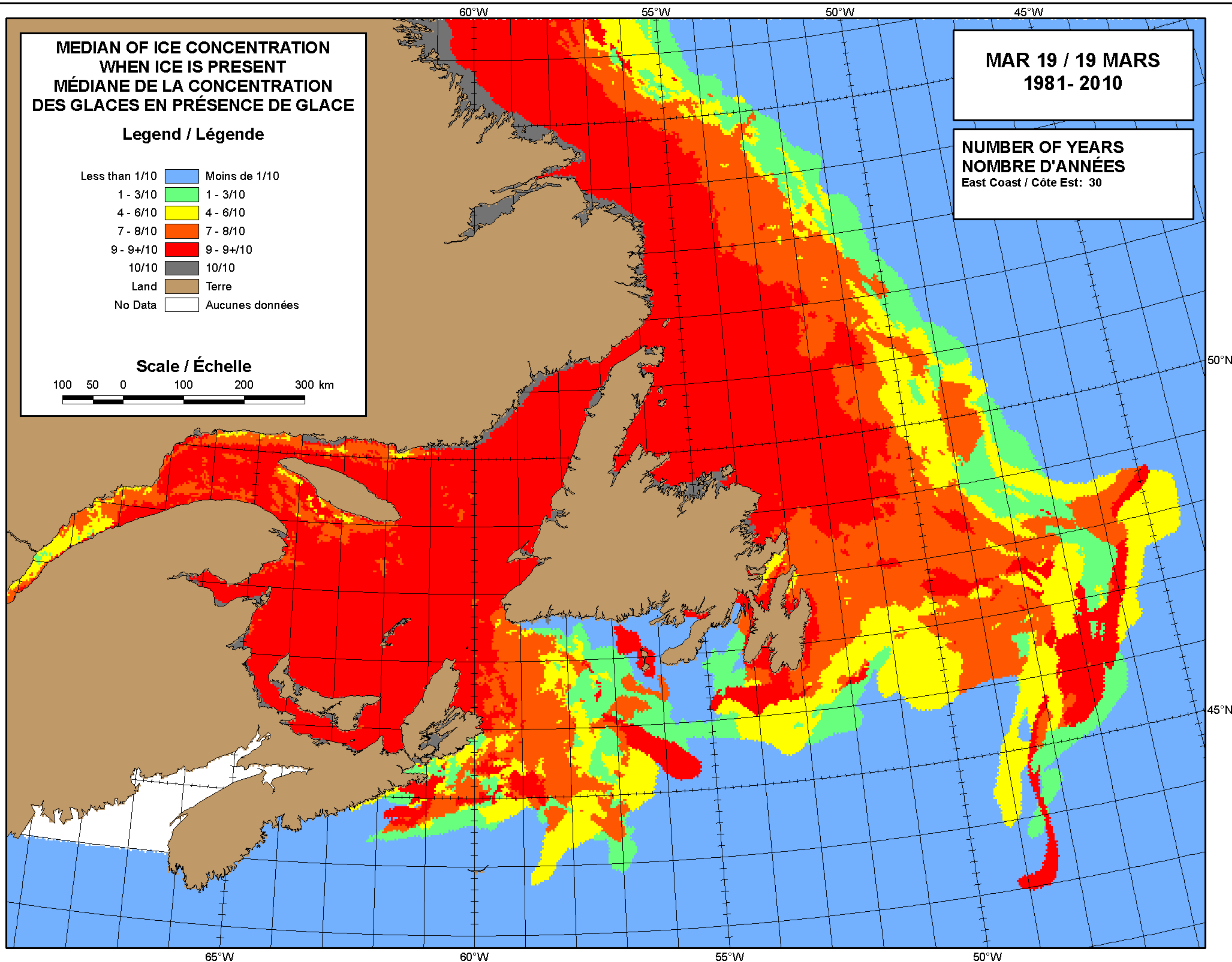


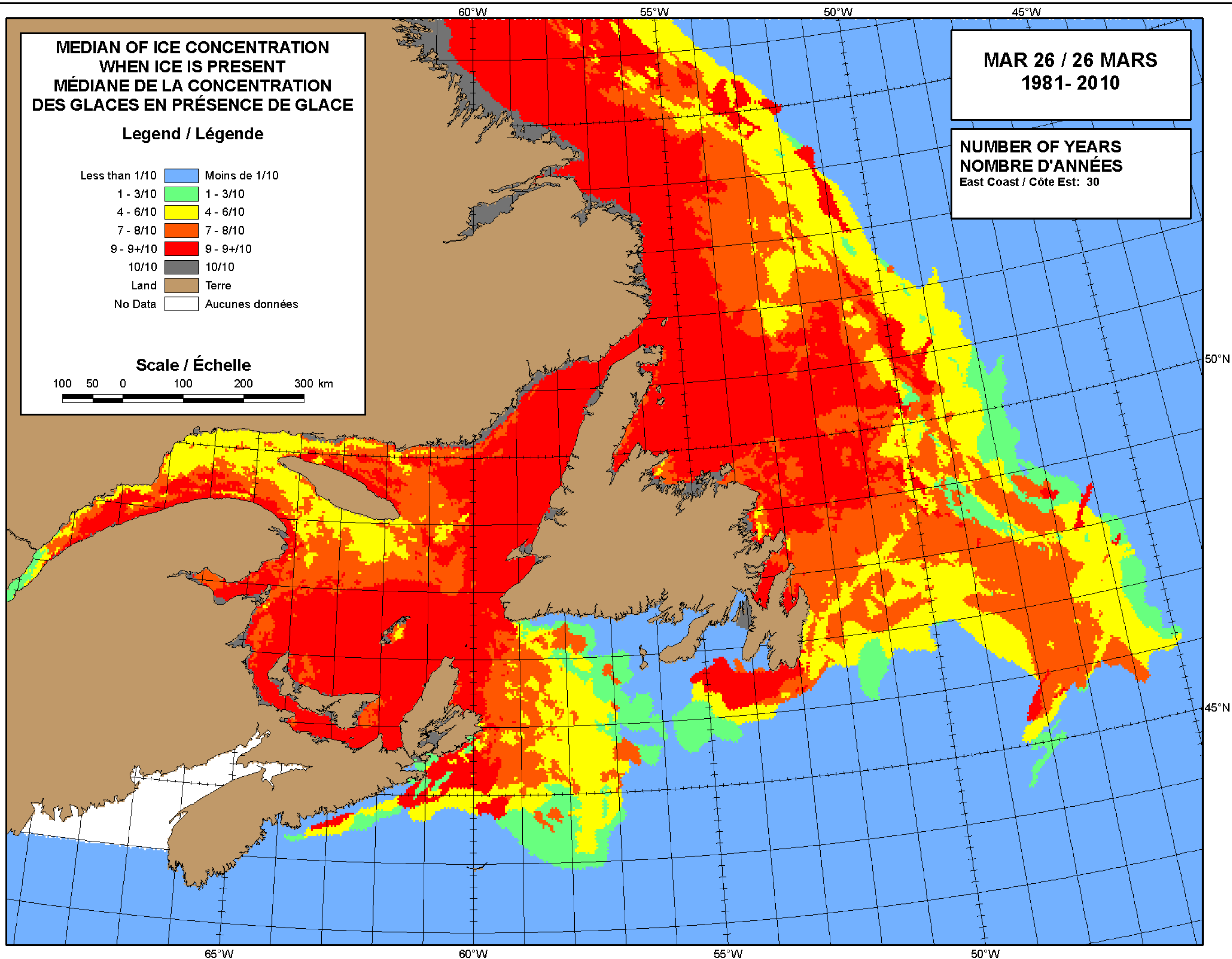


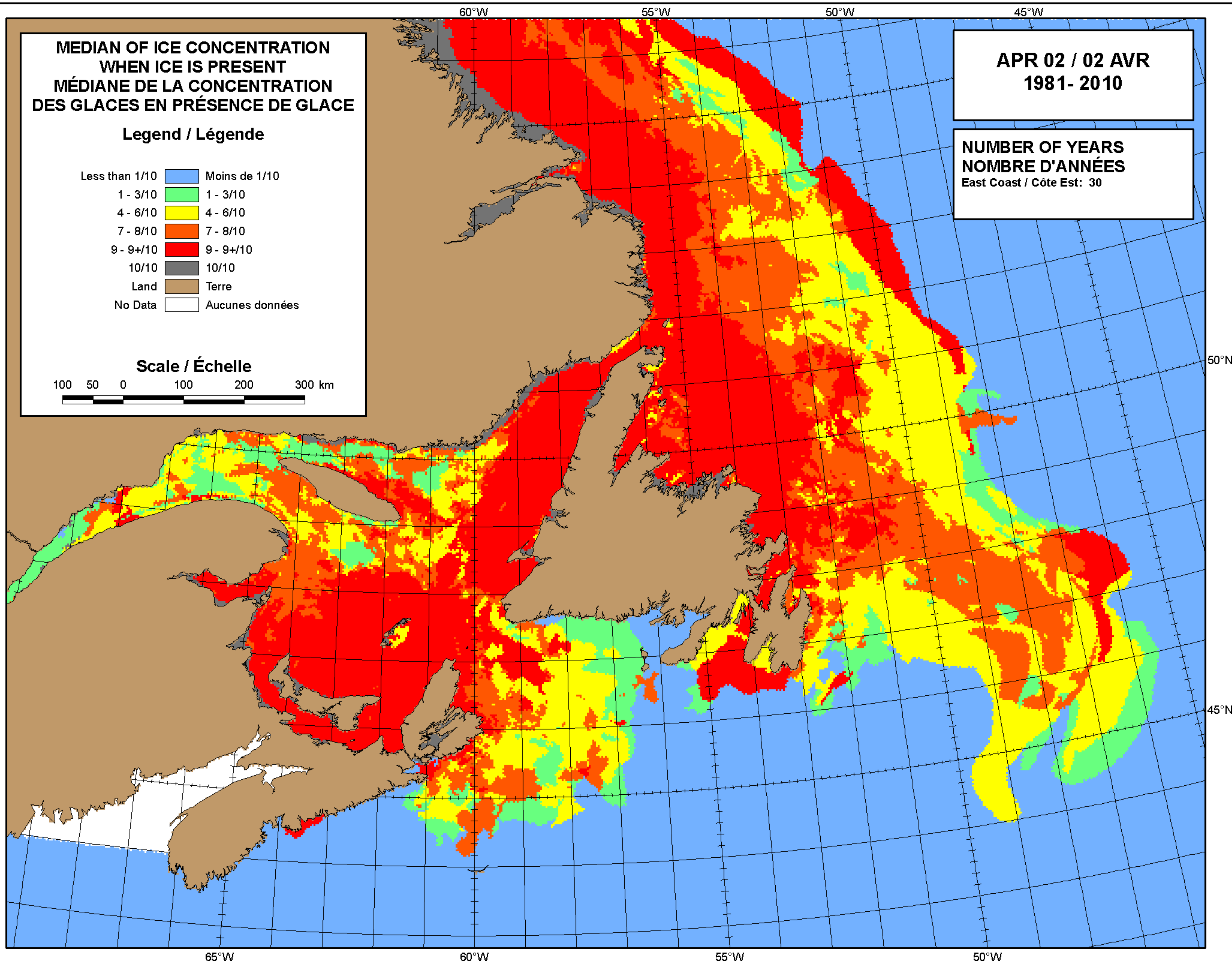


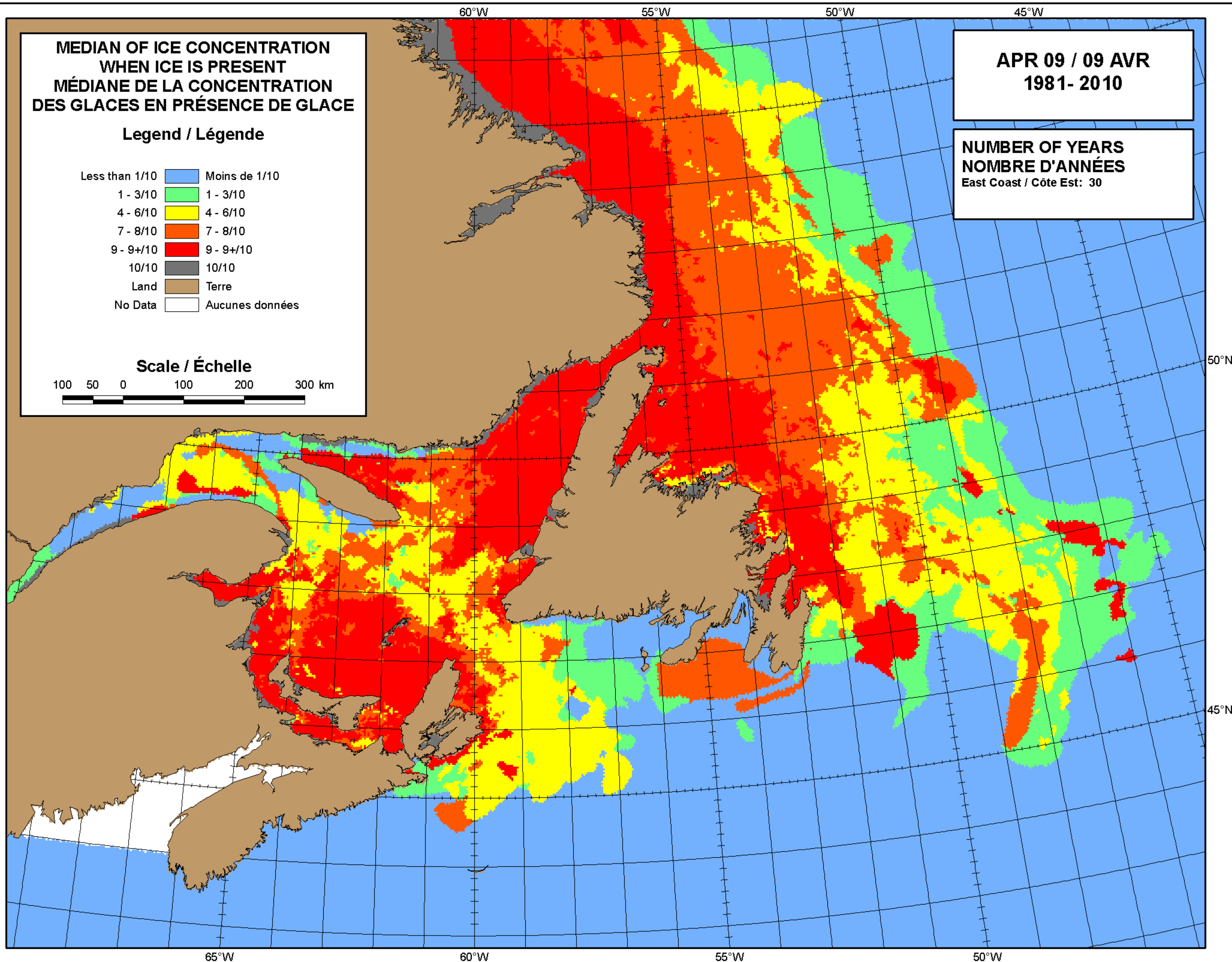


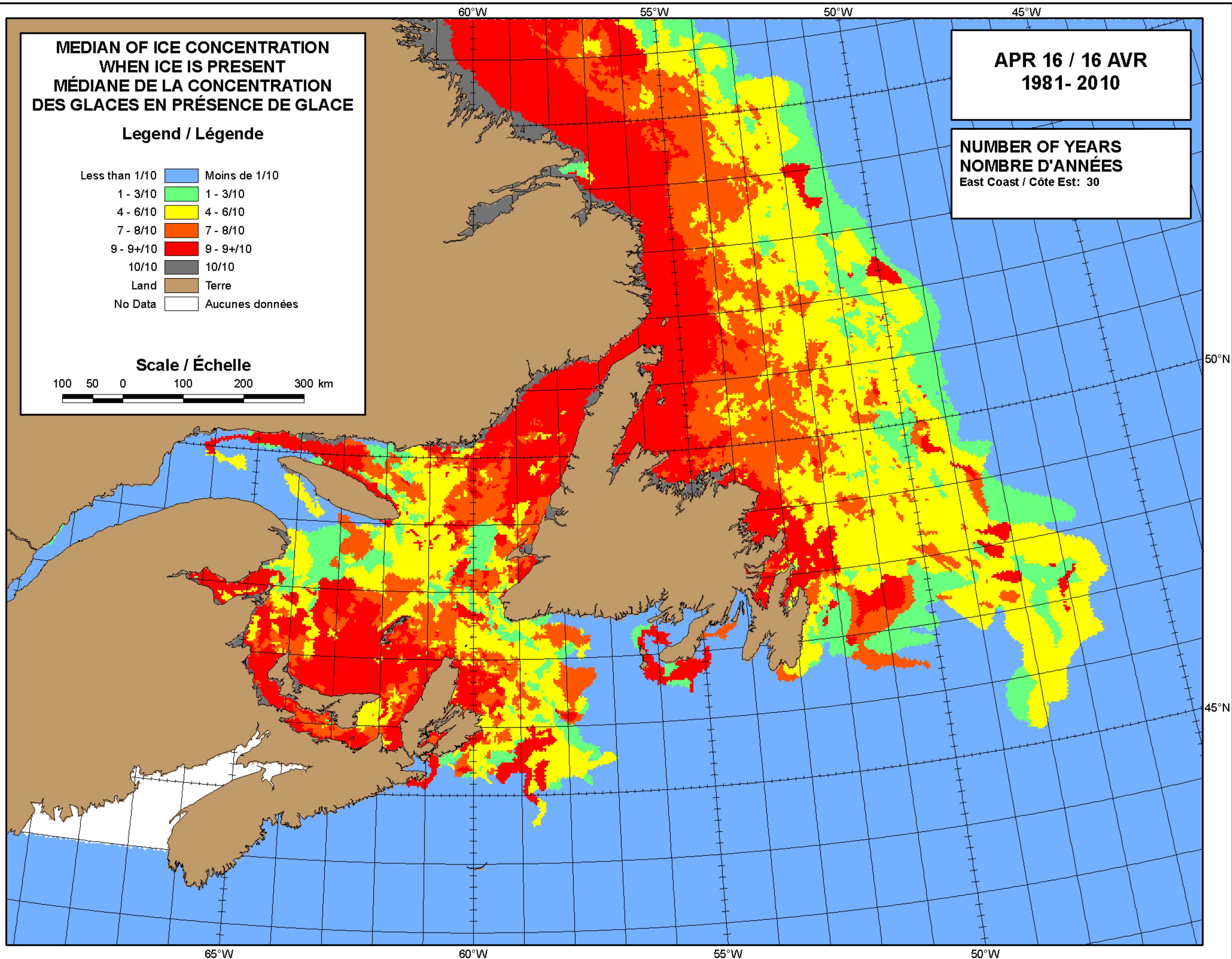


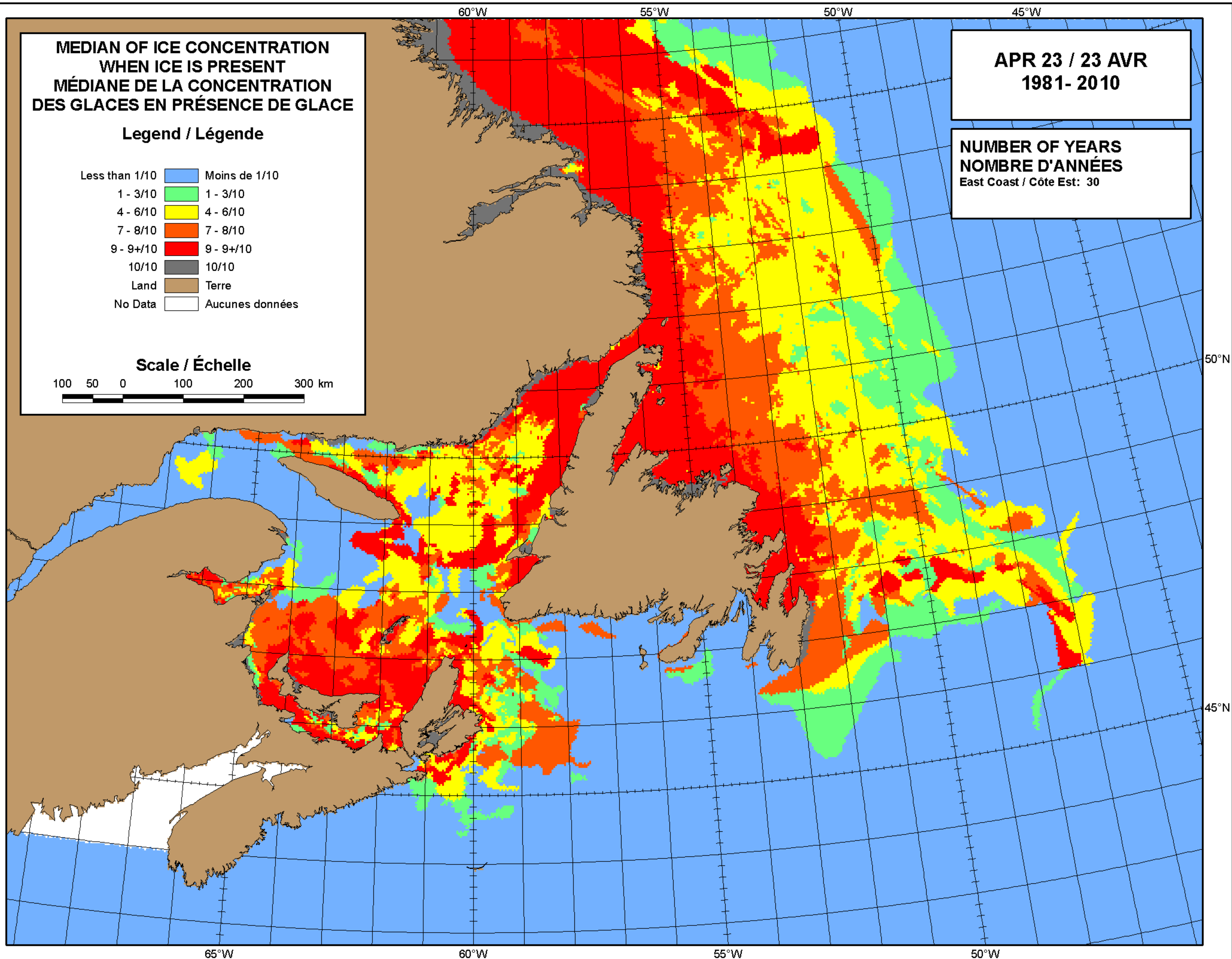


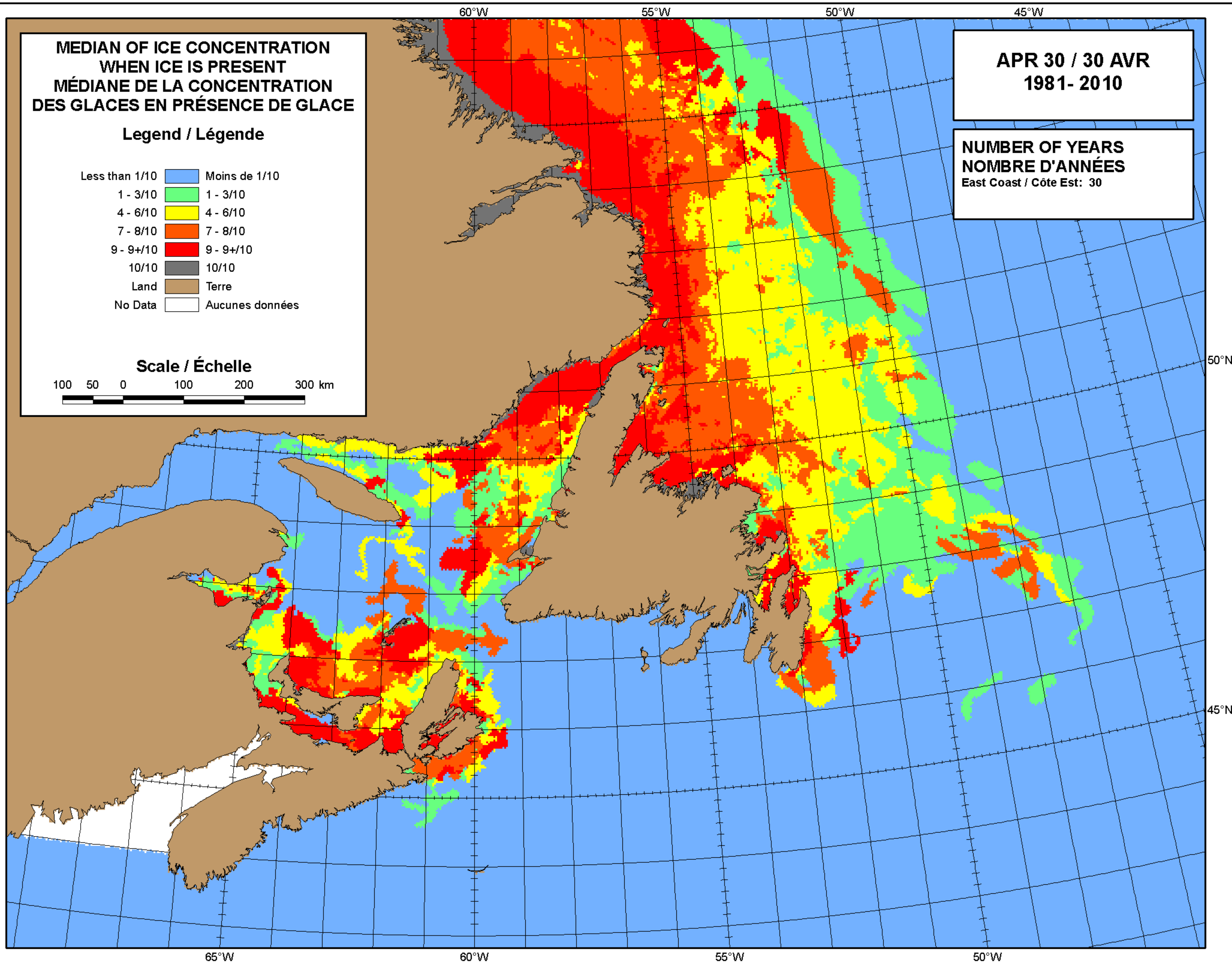












Historical Total Accumulated Ice Coverage 1112 - 0827 / Total accumulé de la couverture des glaces historique 1112 - 0827

