Environment Canada Environnement Canada

Annual Arctic Ice Atlas

Winter 2014

By

Canadian Ice Service
Le service canadien des glaces

Canada

Foreword

The 2014 Annual Arctic Ice Atlas is part of a continuing series, prepared each year by the Canadian Ice Service since 1990. This collection of atlases documents Canadian Arctic winter sea ice conditions to provide a comparison from year to year. In each atlas, ice formation during the freeze-up period is first described. This is then followed by graphical depictions of the winter ice conditions, primarily based on synthetic aperture radar (SAR) data.

The SAR data used in the compilation of the image mosaics in this year's atlas came from the RADARSAT-2 satellite. The data were captured by the Prince Albert (Saskatchewan) and Gatineau (Quebec) receiving stations, between January 31st and February 9th, 2014.

In this atlas the Arctic is divided up into five main regions and four larger-scale snapshot regions. All of the regions have a SAR image mosaic, but three of the main regions (the Eastern Arctic, the Western Arctic, and Hudson Bay) also include an analysis of the data. The ice analyses were created by Environment Canada's Canadian Ice Service (CIS) personnel, who used additional supporting information (including meteorological summaries, ice thickness reports and NOAA AVHRR imagery) in their preparation. An explanation of the nomenclature on the analysis charts can be found on the Sea Ice Symbols page. A more detailed explanation of the terminologies used is available in the Revised Ninth Edition of MANICE (Manual of Standard Procedures for Observing and Reporting Ice Conditions), prepared by Environment Canada's Meteorological Service.

For most regions, the SAR image mosaic is a composite of satellite images captured over several days. The period over which the data were acquired is noted on each page. Basic geographic annotation is provided on the mosaics as a reference. During the image production, the raw data were radiometrically adjusted and enhanced. The overlapping orbits were then digitally seamed together to give a balanced and finished picture. For the main regions, although the SAR data were captured at a resolution of 50 metres pixel^{-1}, the data were analyzed at approximately 100 metres pixel^{-1} and the published image mosaics were resampled to approximately 500 metres pixel^{-1}. For the snapshot regions, the SAR data were captured at a resolution of approximately 25 metres pixel^{-1} and the published images were resampled to approximately 150 metres pixel^{-1}.

The successful completion of this project was made possible with the able assistance of many people. The following contributions should be noted:

- Project Manager: Steve McCourt (CIS)
- RADARSAT SAR data acquisition: MDA, Céline Fabi and Kathy Clevers (CIS)
- Mosaic production: Aaron Root (CIS-COOP)
- Image analysis: Véronique Pinard, Ginette Leger and Stephanie Tremblay-Therrien
- Freeze-up and Winter summary: Trudy Wohlleben (CIS)

Freeze-up

Hudson Bay and Approaches

Air Temperatures

During the freeze-up period, mean air temperatures fell from near and slightly above normal in October to below normal across the region in December. In December, mean air temperatures were lowest (down to 6-7°C *below* the 1981-2010 normal) over James Bay and southern Hudson Bay, along the Labrador Coast in the Goose Bay area and over the Cumberland Peninsula of Baffin Island. In January, however, mean air temperatures over the region returned to near-normal and above normal. The greatest positive anomalies in January averaged more than 7°C *above* the 1981-2010 normal, and were located along the southeastern-most extreme of the Ward Hall and Cumberland Peninsulas of Baffin Island.

Ice Conditions Summary

Ice formation and growth in the region was not significantly different from normal this past autumn and winter. Although periods occurred when the progression during freeze-up was 1-2 weeks ahead or behind climatology in certain places due to air temperatures changing from above to below then back to above normal, for the most part ice extents, concentrations and thicknesses (stage of development) were close to normal.

Freeze-up: October to December

At the beginning of October, following the summer melt season, all parts of the region were free of sea ice. New ice formation then began near-normally in the second half of October, along the southern shores of Foxe Basin, along the northwest coast of Hudson Bay, along the coasts of Southampton Island, and within the inlets of southern Baffin Island.

In November, however, the progression of thickening and southeastward expansion of the ice in Hudson Bay, Foxe Channel, western Hudson Strait, Cumberland Sound, Frobisher Bay and Davis Strait slowed, lagging the 1981-2010 climatological normal by 1-2 weeks. As a result, Foxe Basin only became 100% ice covered toward the end of the month (2 weeks later than normal). Cumberland Sound also only became ice covered toward the end of the month (1 week later than normal).

Ice development (extent, concentration and stage) then recovered to near-normal by early December, due to colder than normal temperatures, and was even 2 weeks ahead of normal by the middle of the month over central and southeastern Hudson Bay, in Ungava Bay and over eastern Hudson Strait. In early December, the ice in Foxe Basin was transitioning normally from grey-white to mostly thin first-year ice, and fast ice development along its coasts was proceeding normally. Measured ice thicknesses at Hall Beach were in the medium first year ice stage as per normal for the beginning of

December and were approximately 18 cm thicker than average. Northwestern Hudson Bay was covered in primarily grey-white ice as per normal, with some areas already transitioning to thin first-year ice (1-2 weeks early). Southwestern Hudson Bay and the western and southern shores of James Bay were lined with grey ice, and Hudson Strait and southern Ungava Bay contained a mix of new and grey ice. The pack ice from Davis Strait had rounded southern Baffin Island as per normal, mainly in the grey-white stage except at its southern margins where grey ice prevailed. However, the stage of ice development in Frobisher Bay (mainly new ice) and in Cumberland Sound (grey ice) was 1-2 weeks behind normal, and by the middle of December, fast ice thicknesses in Iqaluit were running approximately 10 cm thinner than normal. Although coastal fast ice development was approximately 1 week behind along the southeast Baffin Island shores in early December, elsewhere in Hudson Bay and Hudson Strait it was fairly normal at this time, with ice thicknesses at Coral Harbour approaching the medium first year ice stage as per normal.

Along the Labrador coast, contrary to conditions in Hudson Bay and Davis Strait, ice development in the first part of December was 1-2 weeks slower than normal, primarily due to strong winds associated with the frequent passage of storms. However, towards the middle of the month, colder than normal temperatures and frequent offshore winds allowed the development of the ice to recover, so that ice extents, concentrations and stage of development were near-normal by the end of the month. Fast ice extents within and around the coastal fiords of Labrador were also near-normal by the end of the month.

Winter: January

In January, ice extents were near-normal everywhere, except: 1) along the margins of the ice pack in Davis Strait and in the north Labrador Sea, where concentrations / extents were somewhat less than normal (the result of easterly wind events and warm temperatures); and 2) along the ice pack margin in the middle-south Labrador Sea, where slightly greater than normal extents were observed due to frequent periods of offshore winds.

By the first week of January, Hudson Bay and Hudson Strait were 100% ice covered as per normal, mainly covered in thin first-year ice except for a region of medium first-year ice in central Hudson Bay. Foxe Basin was covered in a mix of thin and medium first-year ice as per normal. The ice pack in Davis Strait was primarily composed of thin first-year ice and the ice along the Labrador coast mainly consisted of a mix of grey and grey-white ice as per normal. Due to the colder than normal air temperatures in December, measured fast ice thicknesses in Iqaluit and in Coral Harbour had reached the medium first-year ice stage as per normal and both were approximately 10 cm greater than normal. Measured fast ice thicknesses in Hall Beach were already reaching the thick first-year ice stage, 1-2 weeks ahead of normal.

Ice thicknesses then remained close to normal throughout the month in most areas, except along the Labrador coast. By the end of January, ice had thickened to primarily medium first-year ice in central Hudson Bay, in Hudson Strait and in Davis Strait (except for

normal shore leads containing grey-white ice along the northwestern shore of Hudson Bay, and the north and south coasts of Hudson Strait). Along the Labrador coast, while much of the ice near the eastern margin of the pack had thickened normally to thin first year ice, frequent offshore wind events had produced wide areas of thinner-than-normal grey and grey-white ice along the shore.

In January, old ice concentrations were near to just slightly greater than normal in the Davis Strait area. By the end of January, 2 tenths of old ice were rounding Cape Dyer and a trace of old ice was just entering north Labrador Sea.

Eastern Arctic

Air Temperatures

North of 75°N, mean air temperatures remained near-normal throughout the freeze-up and winter periods, from September through January, except in Smith Sound where temperatures averaged 7-10°C above normal in January. South of 75°N, mean air temperatures fell from 2-5°C *above* the 1981-2010 normal at the start of the freeze-up period in October to 2-5°C *below* normal nearly everywhere across the region in November and December. In January, mean air temperatures south of 75°N then returned to above normal across most of the region, averaging up to 5°C above normal in Foxe Basin and 5-10°C above normal in Davis Strait and eastern Baffin Bay.

Ice Conditions Summary

Because of the survival of significant amounts of first-year ice in the Eastern Arctic during the 2013 melt season (second-year ice as of October 1st), new ice formation began early in many areas, during the month of September. From October onwards, however, ice formation and growth in the region were not significantly different from normal. Although periods occurred when the progression during freeze-up was 1-2 weeks behind climatology in certain places due to periods of above normal air temperatures, for the most part ice extents, concentrations and thicknesses (stage of development) were close to normal. The progression of fast ice development within the Archipelago and Nares Strait was near-normal during the freeze-up season, with all areas consolidating within plus or minus a week of their normal dates.

Freeze-up: September to December

At the end of the 2013 melt season, ice concentrations in the Eastern Arctic were greater than normal in many areas. Old ice concentrations were greater than normal in Penny Strait, Queens Channel and Wellington Channel due to a large influx of the Arctic Ocean pack ice into the Prince Gustaf Adolf Sea and Maclean Strait during the melt season. Second-year ice concentrations were greater than normal in southern Gulf of Boothia, Pelly Bay, Committee Bay, northwestern Foxe Basin, Barrow Strait, Eureka Sound, Greely Fiord, Norwegian Bay, Jones Sound and in Nares Strait.

In September, freeze-up began earlier than normal north of 75°N and also in Barrow Strait, western Lancaster Sound, Committee Bay and Pelly Bay. In these regions, new and young ice developed at a rate that was 2 weeks ahead of climatology. This occurred mainly because large quantities of surviving first-year ice (soon to become second-year ice) served to precondition the water in these areas.

In October, this accelerated ice expansion then slowed due to the development of warmer than normal air temperatures south of 75°N. By the first week of October, ice extents at the leading edge of the developing pack were only slightly greater than normal in northwestern Baffin Bay, Admiralty Inlet and northwestern Foxe Basin. Ice

concentrations were normal everywhere except slightly less than normal in southwest Gulf of Boothia. Ice thicknesses were near-normal with grey-white ice prevailing north of 77°N, grey ice prevailing in Lancaster and Jones Sounds, and a mix of new and grey ice prevailing south of these areas. Fast ice development in the first half of October was near-normal in Eureka and Nansen Sounds. Fast ice thicknesses in Eureka reached the first-year ice stage in the first half of October, with measured thicknesses around 10cm greater than normal.

Near the middle of October, the development of the ice in northern Baffin Bay then became 1-2 weeks behind normal. By November, the expansion of the ice into central Baffin Bay and Davis Strait became 1-2 weeks behind normal along the entire margin of the advancing ice pack. The expansion of ice into Foxe Basin also became 2 weeks behind normal during the month of November. Fast ice formation and thicknesses north of 75°N and in Pond Inlet, Admiralty Inlet and Pelly Bay remained near-normal, however, due to the early start in ice formation in these areas.

Ice extents and concentrations then returned to near-normal across the region in December, due to the colder than normal temperatures south of 75°N that developed in November and continued through December. The stage of development, however, continued to lag in places due to the slow-down in ice growth in October / November.

By early December, the ice among the Queen Elizabeth Islands north of 75°N, in the fiords of Nares Strait and in eastern Kane Basin was fast as per normal and had reached the medium first year ice stage (except in Jones Sound where thin first year ice still prevailed as per normal). However, measured fast ice thicknesses in Eureka (96 cm) were now around 10 cm less than normal, and by the end of December fast ice areas north of 77°N were still in the medium first-year ice stage when thick first year ice should have been developing at that time. By the end of December, the ice in Jones Sound had thickened to medium first year as per normal.

In early December, within the Archipelago south of 75°N, thin first year ice covered Barrow Strait and Lancaster Sound, the Gulf of Boothia and northern Foxe Basin as per normal. By the end of December, the ice in these areas had thickened normally to the medium first-year stage, except for Foxe Basin where ice does not normally reach the medium first-year ice stage until early January.

In early December, although ice cover in Baffin Bay / Davis Strait was near-normal and west-central Baffin Bay was primarily covered in thin first-year ice, the zones of grey and grey-white ice in northern Baffin Bay (the North Open Water polynya) and along the pack margins in eastern Baffin Bay and in southern Baffin Bay / Davis Strait were much more extensive than normal due to the late expansion of the ice into these areas. Multi-year ice concentrations in west-central Baffin Bay, on the other hand, were slightly greater than normal, with pockets of up to 2 tenths concentration embedded within the advancing pack. Fast ice areas along the east coast of Baffin Island were less extensive than normal at this time, and were still mainly restricted to the interiors of the coastal bays and fiords. By the end of December, all areas were covered in thin first-year ice as

per normal and medium first year ice was developing in western Baffin Bay as expected. The extent of the fast ice along the east coast of Baffin Island had become near-normal; however ice thicknesses in the southern fiords were still in the thin first-year ice stage when they should normally have reached the medium first-year ice stage by that time.

Winter: January

In January, above normal air temperatures resulted in some less than normal ice extents along the margin of the ice pack in eastern Baffin Bay and in southeastern Davis Strait. Ice thickening was also slower than normal in some areas due to the warmer temperatures (and also the slowdown in ice development earlier in the season). Fast ice in Eureka only reached the thick first-year ice stage by the second week of January, 2 weeks later than normal. On a different note, in the first week of January, a large pocket of greater than normal concentrations of multi-year ice (4 to 6 tenths) exited from the south end of Nares Strait, spreading southward to 73°N by the end of the month.

By the end of January, while thick first year ice had developed normally in Nares Strait and in the Queen Elizabeth Islands north of 75°N, and also in the fast ice in Pond Inlet and Admiralty Bay, medium first year ice prevailed elsewhere – including in areas where thick first-year ice should also have been developing (i.e. in the Gulf of Boothia and in parts of northwest Baffin Bay). By the last week of January, fast ice had formed in Barrow Strait (earlier than normal) and in sections of Nares Strait (normal).

Western Arctic

Air Temperatures

Over the Beaufort Sea, mean air temperatures were largely above normal throughout the freeze-up and winter periods. At the beginning of the freeze-up period in October, temperatures were more than 8°C above the 1981-2010 normal everywhere. From November through January, mean air temperatures remained around 5°C above normal along the Alaskan Coast and northwards, but fell temporarily in western sections to near-normal values in December and part of January. Over the Archipelago, mean air temperatures were above normal in October (as much as 2-6°C above normal over and south of Parry Channel), but then became near-normal for the rest of the freeze-up and January winter period.

Ice Conditions Summary

Although new ice began forming around 2 weeks early in many parts of the Western Arctic in September due to greater concentrations of old ice and the survival of significant amounts of first-year ice at the end of the melt season, subsequent ice formation, expansion, thickening and consolidation then slowed to become 2-4 weeks later than normal in many areas due to above normal air temperatures (particularly in October). By January, in the Beaufort Sea, where above normal air temperatures persisted through the freeze-up and winter periods, first-year ice thicknesses had only just reached the medium stage by the first week. First-year ice thicknesses did not then transition to the thick first-year ice stage within the multi-year ice pack as per normal and the seasonal ice remained in the medium first-year stage everywhere throughout the month. Within the Archipelago, however, where air temperatures had reverted to near-normal values, first-year ice thicknesses were near-normal in January, transitioning from medium to thick first-year ice everywhere as expected.

Freeze-up: September to December

At the end of the 2013 melt season, the regional-average ice cover in the Western Arctic was near-normal. In the Archipelago, large influxes of old ice into the Prince Gustaf Adolf Sea and southwards during melt season, as well as the survival of significant amounts of first-year ice (soon to become second-year ice), resulted in greater than normal ice concentrations in some areas (Byam Martin Channel, Peel Sound, Queens Channel, Wellington Channel, Norwegian Bay). In the southern Beaufort Sea, there was a greater than normal southerly extent of the multi-year ice pack at the end of the melt-season (due to extended periods of northerly winds) which also included a significant fraction of surviving first-year ice (soon to become second-year ice). The Northwest Passage (northern route) was closed to most shipping (except icebreakers) in 2013, primarily due to normal ice concentrations (greater than 9 tenths) in M'Clure Strait and to areas of 6 tenths and greater old ice concentrations in central Viscount Melville Sound.

In September, in the Archipelago north of Parry Channel, new ice started forming in the first week of the month in many areas, 1-2 weeks ahead of climatology. In Parry Channel and southwards, new ice formation began in Barrow Strait and Peel Sound around mid-September, also 1-2 weeks early. In the Beaufort Sea, there was an early start in new ice formation along parts of the southern margin of the Beaufort Sea ice pack and along the Alaskan Coast in the second half of the month (2-3 weeks early). The early formation of new ice in September may have been due to the survival of significant amounts of old and first-year ice (soon to become second-year ice) in many areas. Melt water deriving from this ice may have served to precondition waters within the Archipelago, near the Beaufort Sea ice pack margin and near the Alaskan Coast.

In October, ice growth then slowed in all areas due to the development of warmer than normal air temperatures. The effects of this slow-down in ice development then persisted through the rest of the freeze-up season. In the Archipelago north of Parry Channel, ice growth slowed to near-normal in October while fast ice formation in November occurred slightly later than normal in places. North of Parry Channel, ice thickening from young to predominantly thin first-year ice took place in the third week of October (1 week late) and from thin to medium first-year ice in the last week of November (1-2 weeks late). Fast ice formed 1 week later than normal in Maclean Strait and Penny Channel and 2 weeks later than normal in the Prince Gustaf Adolf Sea to Byam Martin Channel corridor. In Parry Channel and southwards, ice expansion into M'Clintock Channel, Larsen Sound and western Parry Channel in the first half of October was 2-3 weeks slower than normal, and ice expansion into the southern waterways of the Northwest Passage in the second half of October was 3-4 weeks slower than normal. From the end of October through November, ice thickening from young ice to thin first-year ice in these areas then lagged climatology by 1-2 weeks. Fast ice finally covered Coronation Gulf by the last week of November (1 week late) but had yet to extend into Queen Maud Gulf (contrary to normal) or yet to completely cover Rae Strait. Fast ice thicknesses measured in Cambridge Bay during November were in the thin first-year stage but were around 10 cm less than normal. In the Beaufort Sea, in spite of the very early formation of fast ice in Dease Inlet near Point Barrow in the first week of October (3 weeks early), ice formation and expansion in the southern Beaufort Sea during October was 3 weeks slower than normal due to persistently above normal air temperatures in the region. Ice thickening from grey and grey-white ice to predominantly thin first-year ice then lagged climatology by 3 to 4 weeks, and did not occur until the very end of November. The development of a significant coastal zone of fast ice was similarly 4 weeks late, and did not occur until the last week of November.

In December, as temperatures reverted to near-normal in the Archipelago, fast ice coverage and the stage of development of the seasonal ice cover (medium first-year ice) were near-normal north of Parry Channel by the beginning of the month. In Parry Channel and southwards, thin first year ice prevailed nearly everywhere as per normal (except only developing a week later in Amundsen Gulf), and by the second week of December medium first-year ice began to prevail in Larsen Sound and northwards as per normal. Fast ice development south of Parry Channel continued at a pace that was 1-2 weeks slower than normal however, finally covering the area from southern Viscount

Melville Sound southwards by the third week of December (except for Amundsen Gulf). Nevertheless, measured fast ice thicknesses in Cambridge Bay caught up to and surpassed climatological ice thicknesses during this month. In the southern Beaufort Sea, where warmer than normal air temperatures persisted in western sections, thin first-year ice finally prevailed everywhere by the second week of December, 4-5 weeks later than normal. At the same time, on the other hand, medium first-year ice was beginning to develop within and along the southwestern margins of the multi-year ice pack as per normal.

Winter: January

By the beginning of January, due to the near and slightly below normal air temperatures that had developed in the Archipelago, fast ice coverage and the stage of development of the seasonal ice (predominantly medium first-year ice) in this area were near-normal. Fast ice had developed in western Parry Channel by this time as per normal. Measured fast ice thicknesses in Cambridge Bay had just reached the thick first-year ice stage (1 week ahead of normal). Measured fast ice thicknesses in Cambridge Bay then continued to be around 10 cm greater than normal throughout the remainder of the month. By the end of the month, the ice cover in the Archipelago was predominantly in the thick first-year ice stage everywhere as per normal (except for western Coronation Gulf and Amundsen Gulf which were still in the medium first-year ice stage as per normal).

By January, in the Beaufort Sea, the first-year ice cover had reached the medium first-year ice stage nearly everywhere as per normal (except within some shore leads and within some large fractures in the multi-year ice pack). By the end of the month, however, possibly due to the warmer than normal air temperatures in western sections, ice thicknesses had yet to reach the thick first-year ice stage within the multi-year pack, and remained in the medium first-year ice stage. Multi-year ice concentrations at the southern margin of the pack, which had been above normal at the end of the melt season, and which continued to be above normal throughout the freeze-up period, were still above normal in January, especially in southwestern sections (in spite of the warmer than normal air temperatures in those areas).

REGIONAL ICE ANALYSIS
ANALYSE REGIONALE DE GLACE

Eastern Arctic
Arctique de l'Est

03 FEB/FEV 2014 CCA

CCA 1615Z
25 JUL/JUI 2014

CANADIAN ICE SERVICE | SERVICE CANADIEN DES GLACES
GL

TEMPERATURE (°C) (Past 7 days)
TEMPERATURE (°C) (7 derniers jours)

	MEAN MOYENNE	NORMAL NORMALE
Eureka	-35.4	-38.1
Resolute	-25.2	-32.9
Clyde	-17.8	-29.1
Hall Beach	-23.6	-32.6

EUREKA
THULE
RESOLUTE
NANISIVIK
POND INLET
CLYDE
HALL BEACH

110W 100W 90W 80W 70W 60W 50W 80N 75N 70N 65N 90W 85W 80W 75W 70W 65W 60W

WMO Colour Code - Concentration

Ice Free Libre de glace	7-8/10
< 1/10	9-10/10
1-3/10	New Ice Nouvelle glace
4-6/10	Nilas/Grey Ice Nilas/glace grise

Fast Ice
Banquise c ôtière
Ice Shelf
Plateau de glace
Undefined
Indéterminé 6e

Code de couleurs de l'OMM - Concentration

REGIONAL ICE ANALYSIS
ANALYSE REGIONALE DE GLACE

Western Arctic
Arctique de l'Ouest

03 FEB/FEV 2014

CANADIAN ICE SERVICE
SERVICE CANADIEN DES GLACES

VP

160W 155W 150W 145W 140W 135W 130W 125W 120W 115W 110W 105W 100W 95W

80N 75N 70N

POINT BARROW
TUKTOYAKTUK
INUVIK
RESOLUTE
CAMBRIDGE BAY
KUGLUKTUK

TEMPERATURE (°C) (Past 7 days) / TEMPERATURE (°C) (7 derniers jours)	MEAN MOYENNE	NORMAL NORMALE
Point Barrow	-13.6	-26.1
Inuvik	-15	-27.3
Kugluktuk	-19.2	-28.5
Cambridge Bay	-23.1	-33.3

WMO Colour Code - Concentration

- Ice Free / Libre de glace
- < 1/10
- 1-3/10
- 4-6/10
- 7-8/10
- 9-10/10

Code de couleurs de l'OMM - Concentration

- New Ice / Nouvelle glace
- Nilas/Grey Ice / Nilas/glace grise
- Fast Ice / Banquise côtière
- Ice Shelf / Plateau de glace
- Undefined / Indéterminée

REGIONAL ICE ANALYSIS
ANALYSE REGIONALE DE GLACE

Hudson Bay
Baie d'Hudson

03 FEB/FEV 2014

CANADIAN ICE SERVICE
SERVICE CANADIEN DES GLACES
STT

CORAL HARBOUR
CHURCHILL
INUKJUAK
MOOSONEE
IQALUIT
KUUJJUAQ
NAIN

90W 80W 75W 70W 65W 60W 60N 65N

TEMPERATURE (°C) (Past 7 days) / TEMPERATURE (°C) (7 derniers jours)	MEAN MOYENNE	NORMAL NORMALE
Iqaluit	-19.0	-27.6
Coral Harbour	-20.3	-30.0
Churchill	-22.3	-26.2
Moosonee	-19.4	-19.2
Inukjuak	-20.0	-25.8
Kuujjuaq	-21.9	-24.2
Nain	-19.7	-19.4

WMO Colour Code - Concentration

Code de couleurs de l'OMM - Concentration

- Ice Free / Libre de glace
- < 1/10
- 1-3/10
- 4-6/10
- 7-8/10
- 9-10/10
- Fast Ice / Banquise côtière
- ? ? Undefined / Indéterminée
- New Ice / Nouvelle glace
- Nilas/Grey Ice / Nilas/glace grise

REGIONAL ICE ANALYSIS
ANALYSE REGIONALE DE GLACE

Eastern Arctic
Arctique de l'Est

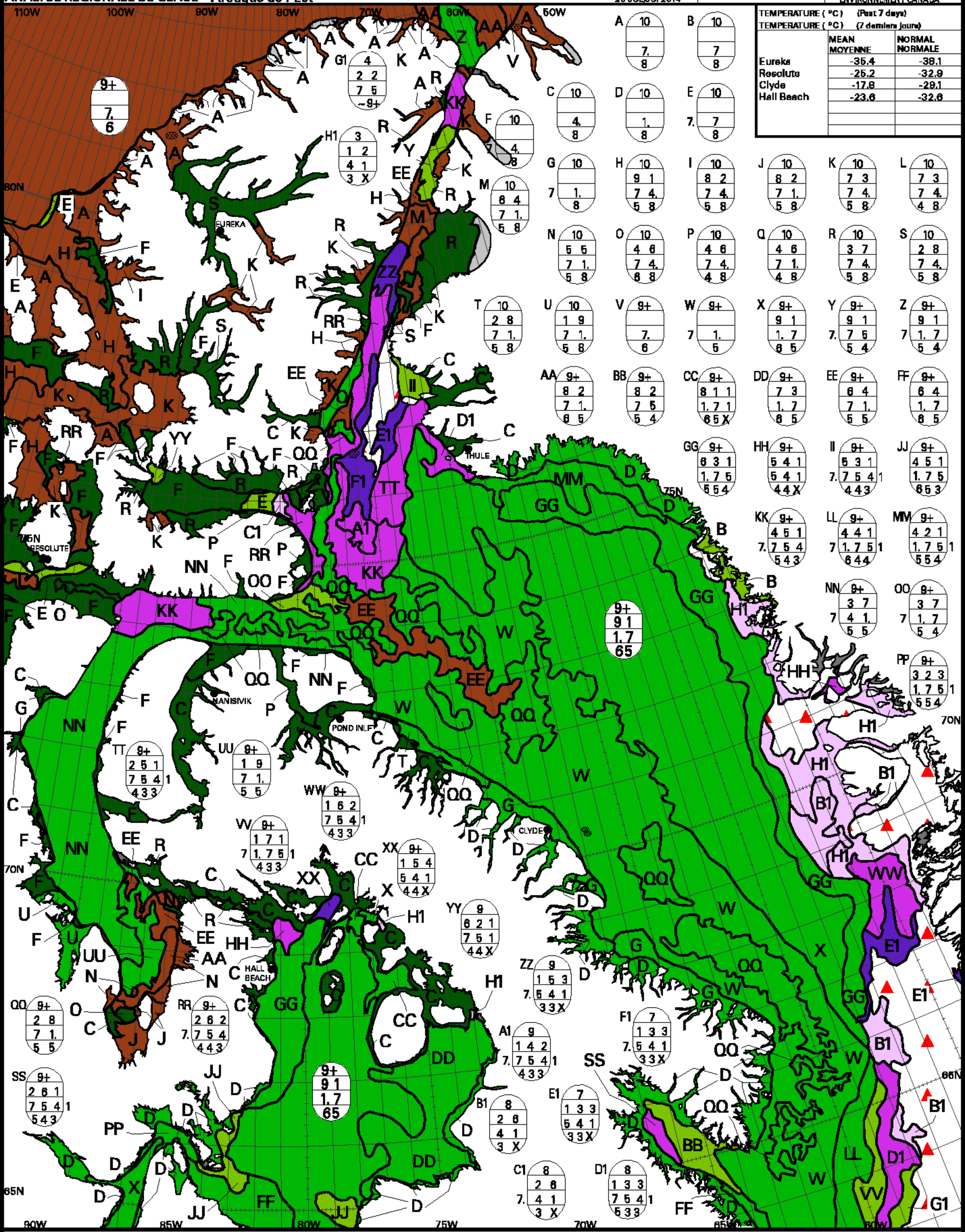
03 FEB/FEV 2014 CCA

CCA 1518Z
25 JUL/JUI 2014

CANADIAN ICE SERVICE | SERVICE CANADIEN DES GLACES
GL

TEMPERATURE (°C) (Past 7 days)
TEMPERATURE (°C) (7 derniers jours)

	MEAN MOYENNE	NORMAL NORMALE
Eureka	-35.4	-38.1
Resolute	-25.2	-32.9
Clyde	-17.8	-29.1
Hall Beach	-23.6	-32.6



WMO Colour Code - Stage of Development

- Ice Free — Libre de glace
- Open Water — Eau Libre
- Icebergs
- New — Nouvelle
- Grey — Grise
- Grey-white — Blanchâtre
- First-year — Première année

Code de couleurs de l'OMM - Stade de formation

- Thin First-year — Mince de première année
- Medium First-year — Moyenne de première année
- Thick First-year — Epaisse de première année
- Old Ice — Vieille glace
- Second-year — Deuxième année
- Multi-year — Plusieurs années
- Undefined Fast Ice — Indéfini Banquise côtière
- Ice Shelf — Plateau de glace
- Undefined — Indéterminée

REGIONAL ICE ANALYSIS
ANALYSE REGIONALE DE GLACE

Western Arctic
Arctique de l'Ouest

03 FEB/FEV 2014

CANADIAN ICE SERVICE
SERVICE CANADIEN DES GLACES

VP

160W 155W 150W 145W 140W 135W 130W 125W 120W 115W 110W 105W 100W 95W 80N 75N 70N

POINT BARROW
TUKTOYAKTUK
INUVIK
KUGLUKTUK
CAMBRIDGE BAY
RESOLUTE

TEMPERATURE (°C) (Past 7 days) / TEMPERATURE (°C) (7 derniers jours)	MEAN MOYENNE	NORMAL NORMALE
Point Barrow	-13.6	-26.1
Inuvik	-15	-27.3
Kugluktuk	-19.2	-28.5
Cambridge Bay	-23.1	-33.3

WMO Colour Code - Stage of Development

Ice Free
Libre de glace

Open Water
Eau Libre

Icebergs

New
Nouvelle

Grey
Grise

Grey-white
Blanchâtre

First-year
Première année

Code de couleurs de l'OMM - Stade de formation

Thin First-year
Mince de première année

Medium First-year
Moyenne de première année

Thick First-year
Epaisse de première année

Old ice
Vieille glace

Second-year
Deuxième année

Multi-year
Plusieurs années

Undefined Fast Ice
Indéfini Banquise côtière

Ice Shelf
Plateau de glace

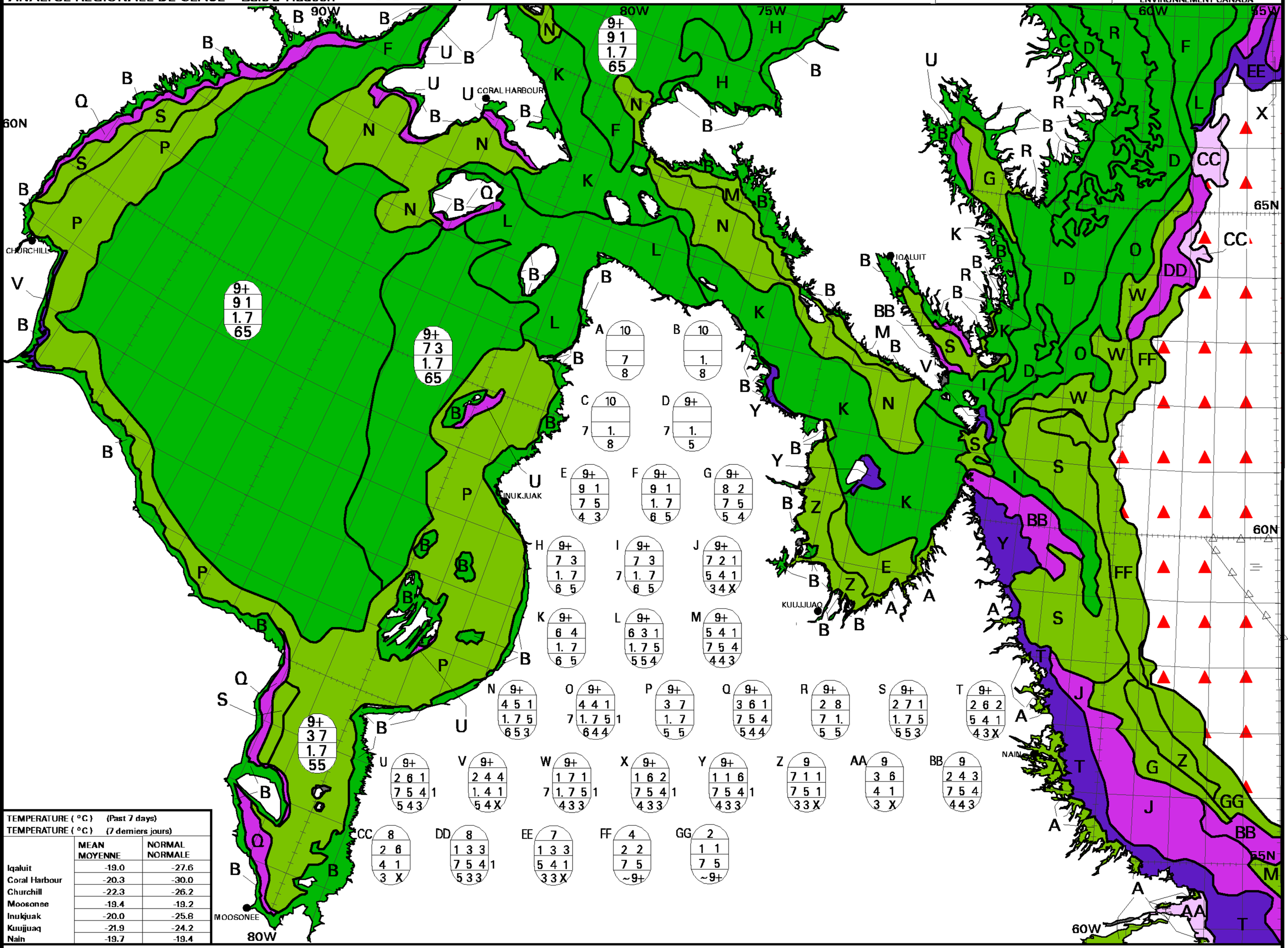
Undefined
Indéterminée

REGIONAL ICE ANALYSIS
ANALYSE REGIONALE DE GLACE

Hudson Bay
Baie d'Hudson

03 FEB/FEV 2014

CANADIAN ICE SERVICE
SERVICE CANADIEN DES GLACES
STT



TEMPERATURE (°C) (Past 7 days)
TEMPERATURE (°C) (7 derniers jours)

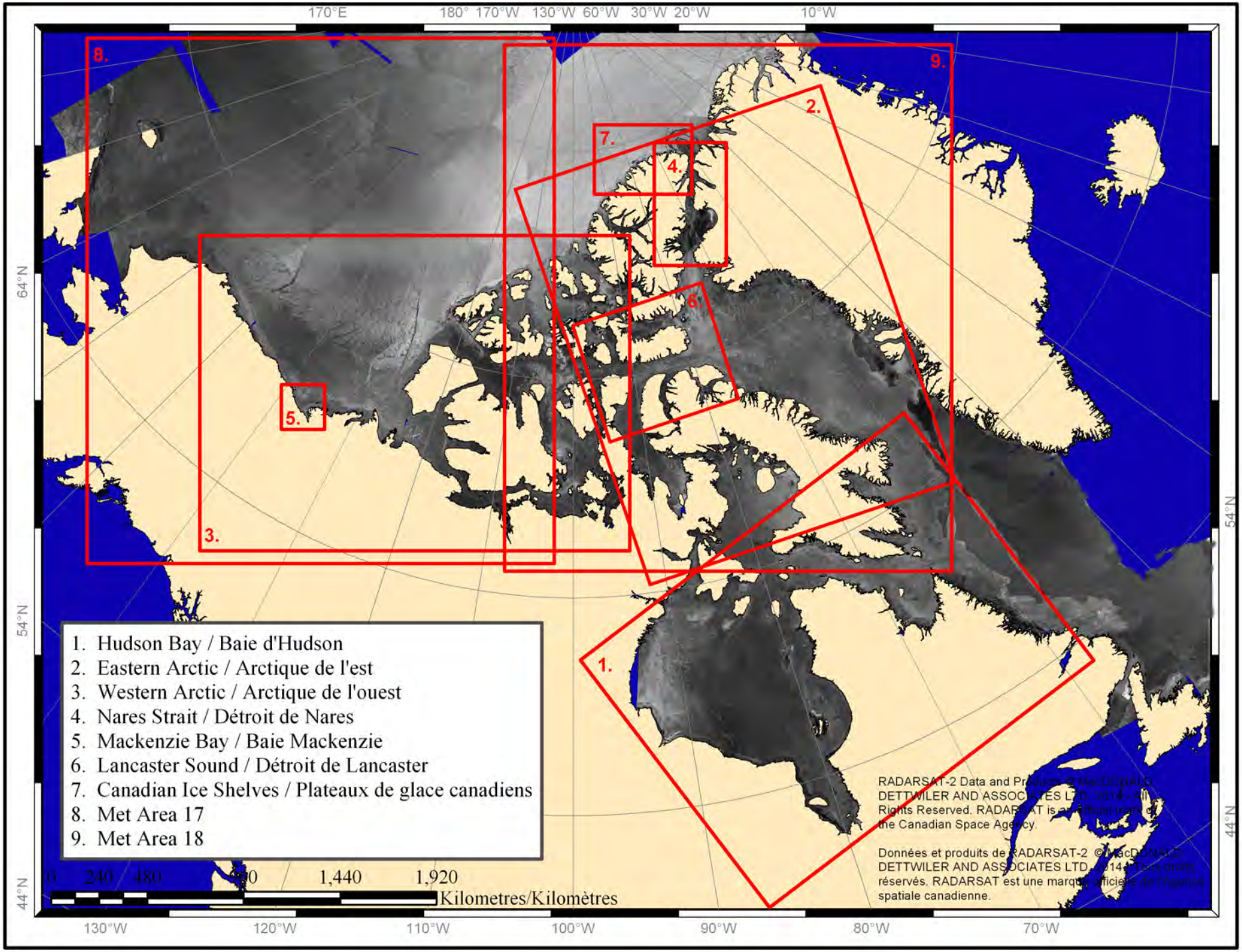
	MEAN MOYENNE	NORMAL NORMALE
Iqaluit	-19.0	-27.6
Coral Harbour	-20.3	-30.0
Churchill	-22.3	-26.2
Moosonee	-19.4	-19.2
Inukjuak	-20.0	-25.8
Kuujjuaq	-21.9	-24.2
Nain	-19.7	-19.4

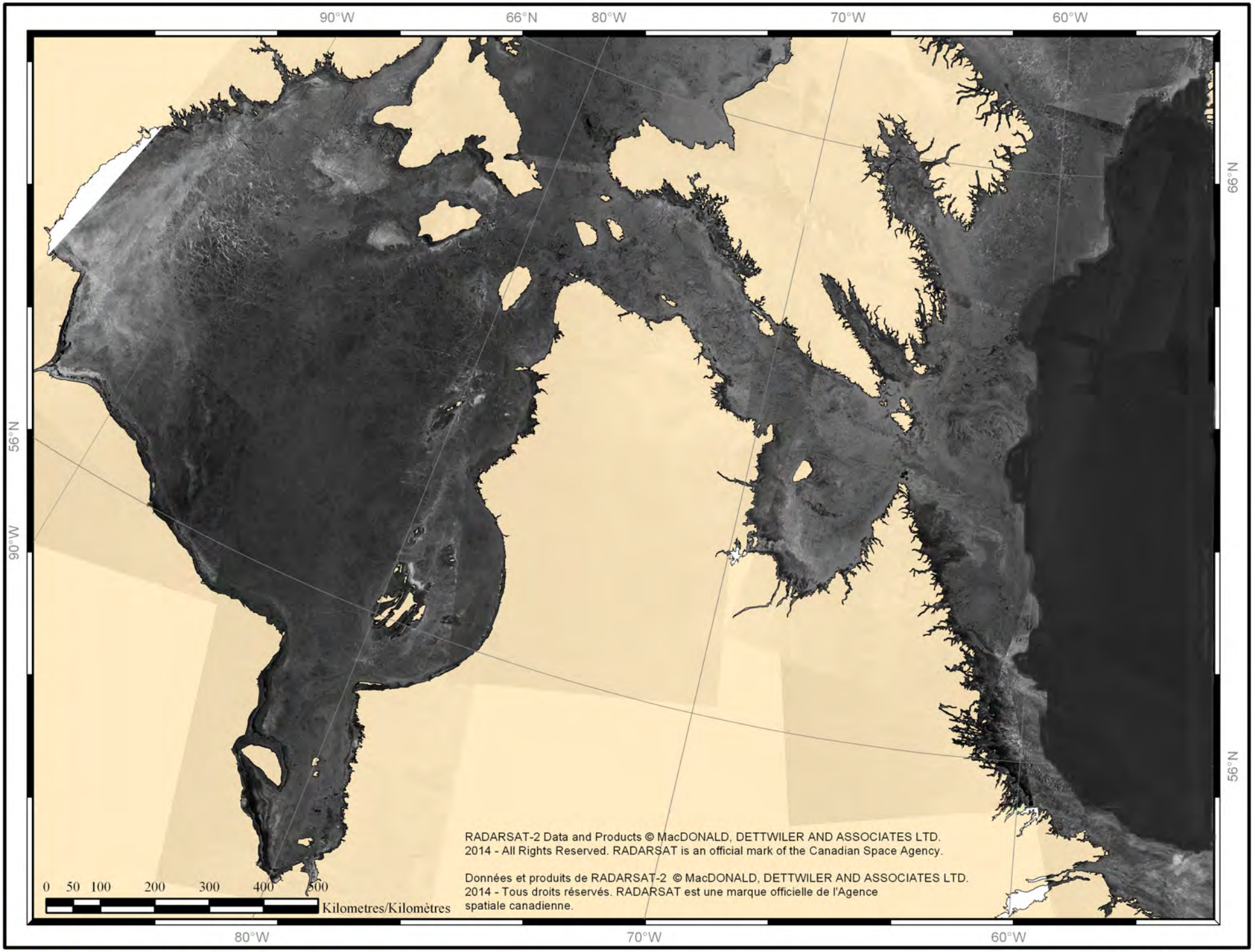
WMO Colour Code - Stage of Development

Code de couleurs de l'OMM - Stade de formation

- Ice Free / Libre de glace
- Open Water / Eau Libre
- Icebergs
- New / Nouvelle
- Grey / Grise
- Grey-white / Blanch âtre
- First-year / Premi ère ann ée
- Thin First-year / Mince de premi ère ann ée
- Medium First-year / Moyenne de premi ère ann ée
- Thick First-year / Epaisse de premi ère ann ée
- Old ice / Vieille glace
- Second-year / Deuxi ème ann ée
- Multi-year / Plusieurs ann ées
- Undefined Fast Ice / Indéfini Banquise c ôtière
- Undefined / Indéterminée

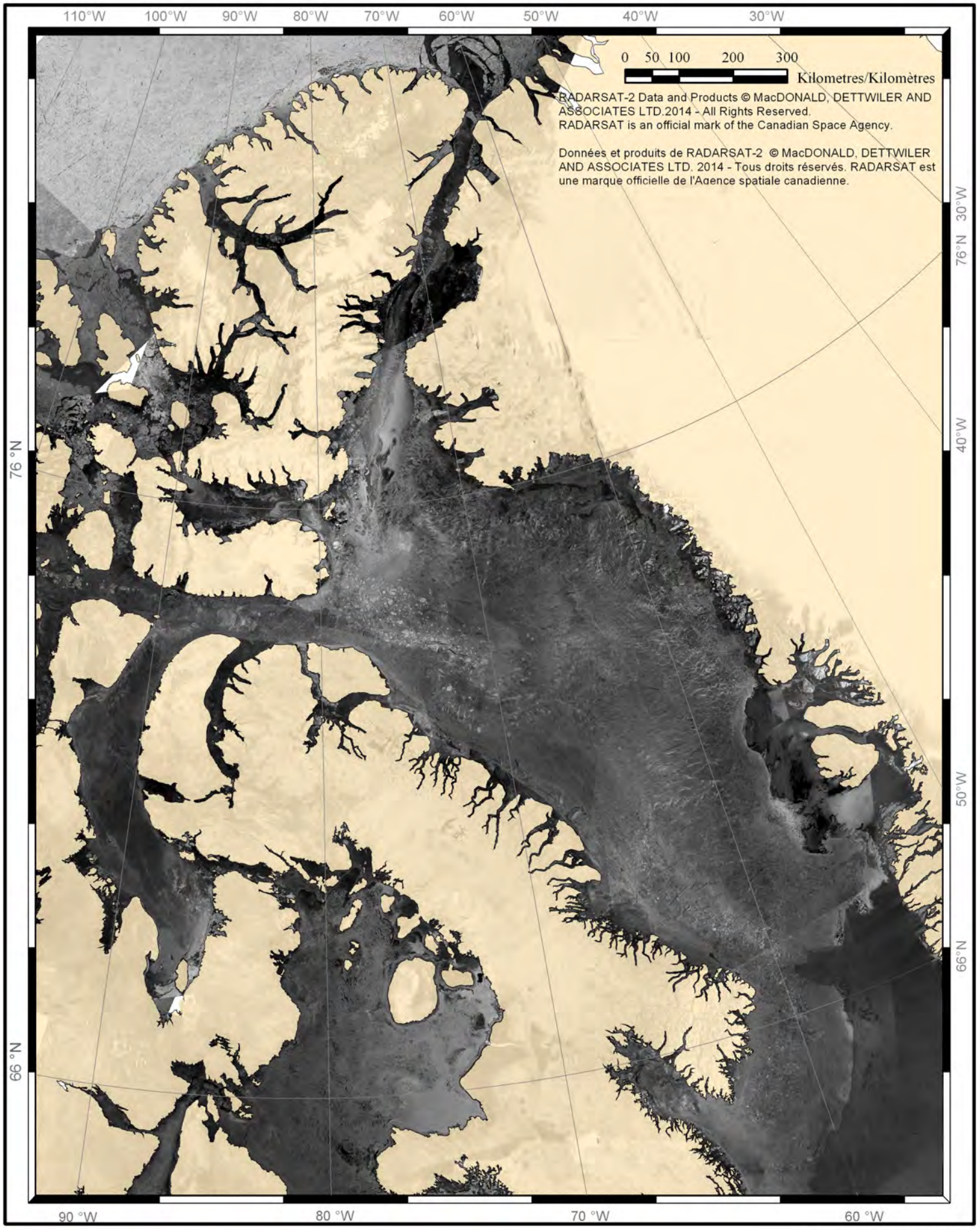
CANADIAN ARCTIC MOSAIC / MOSAÏQUE DE L'ARCTIQUE CANADIEN





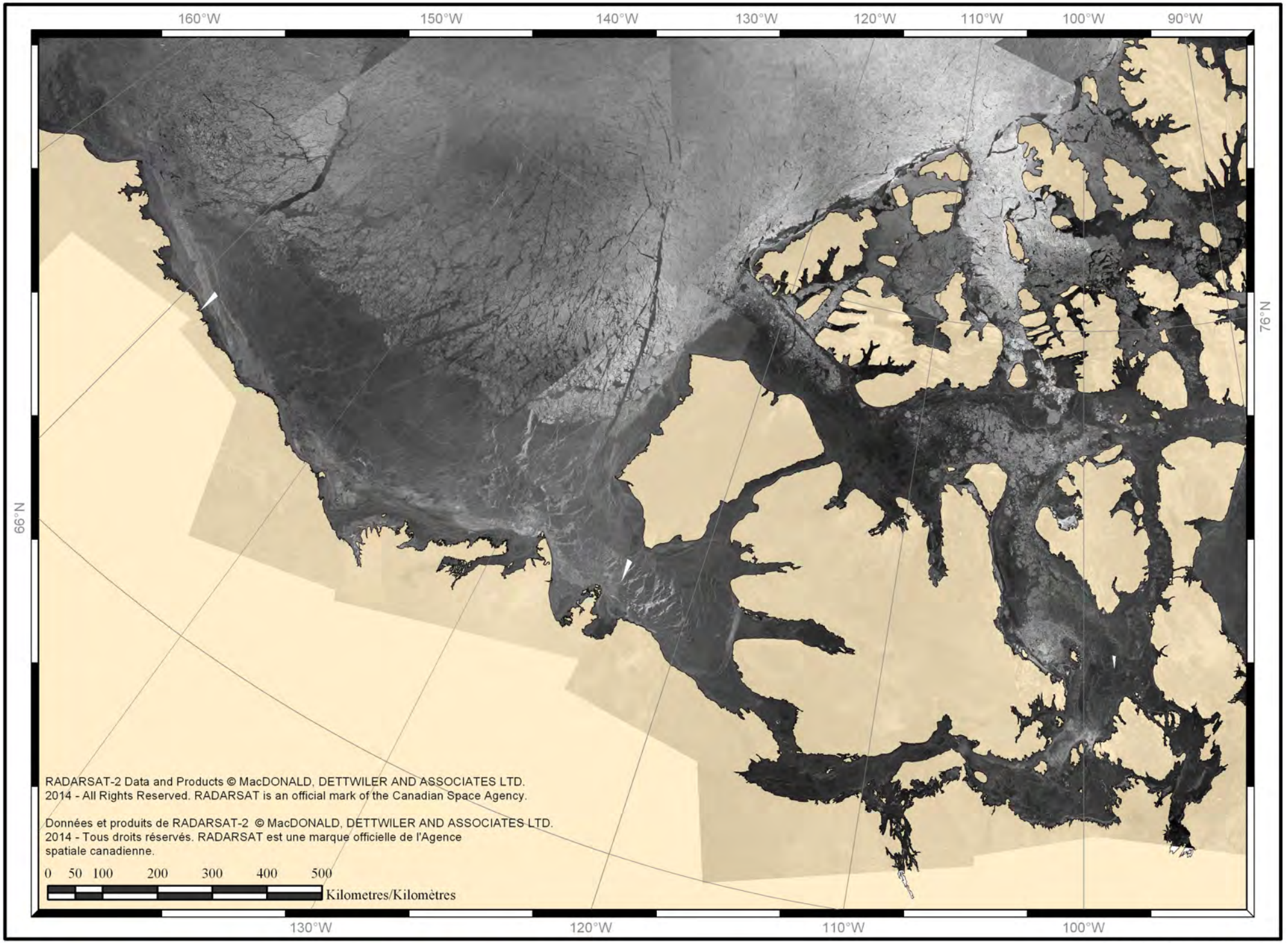
Hudson Bay / Baie d'Hudson

01/31/2014 - 02/08/2014



01/31/2014 - 02/03/2014

Eastern Arctic / Arctique de l'est

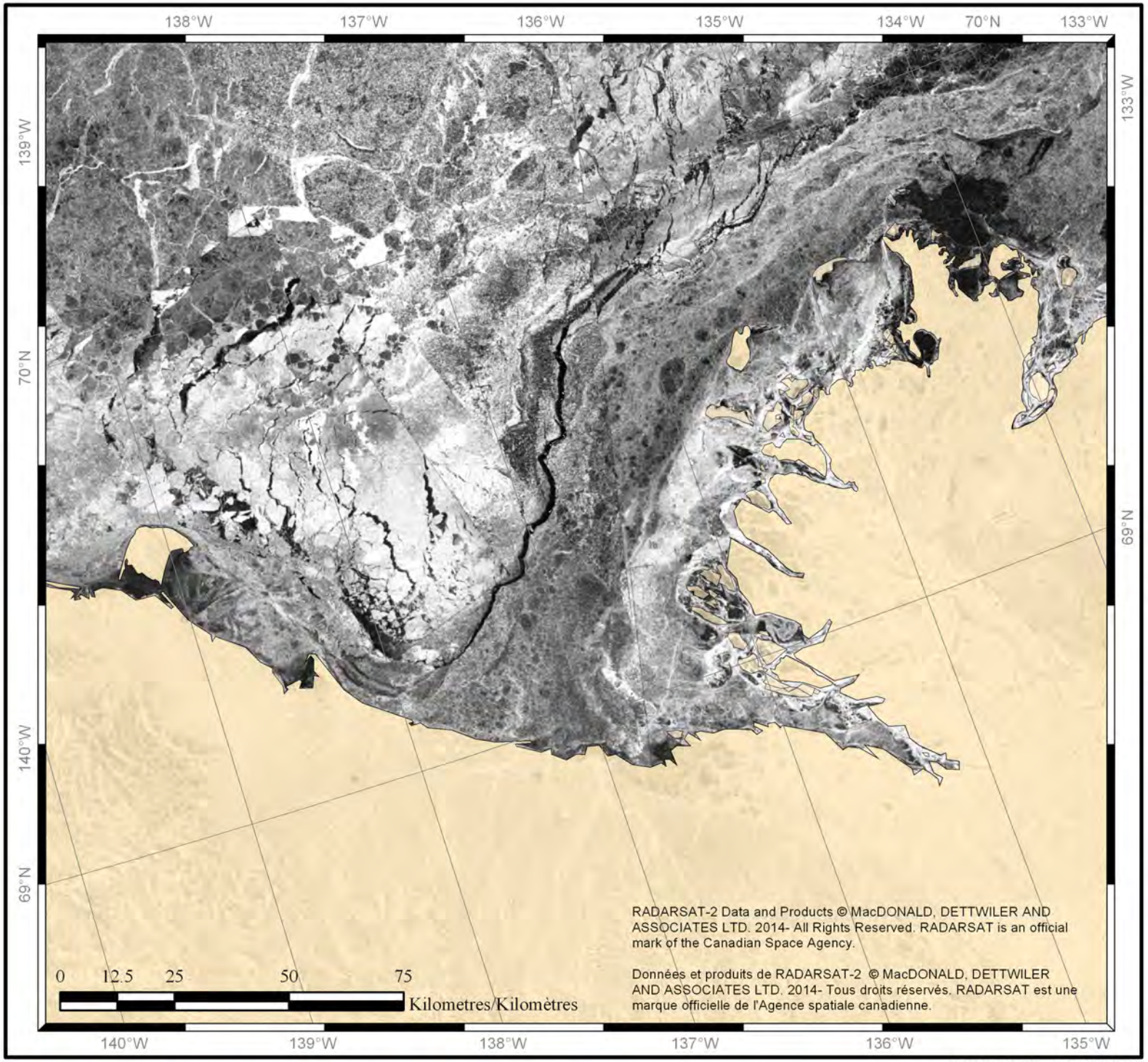


Western Arctic / Arctique de l'ouest

02/01/2014 - 02/03/2014

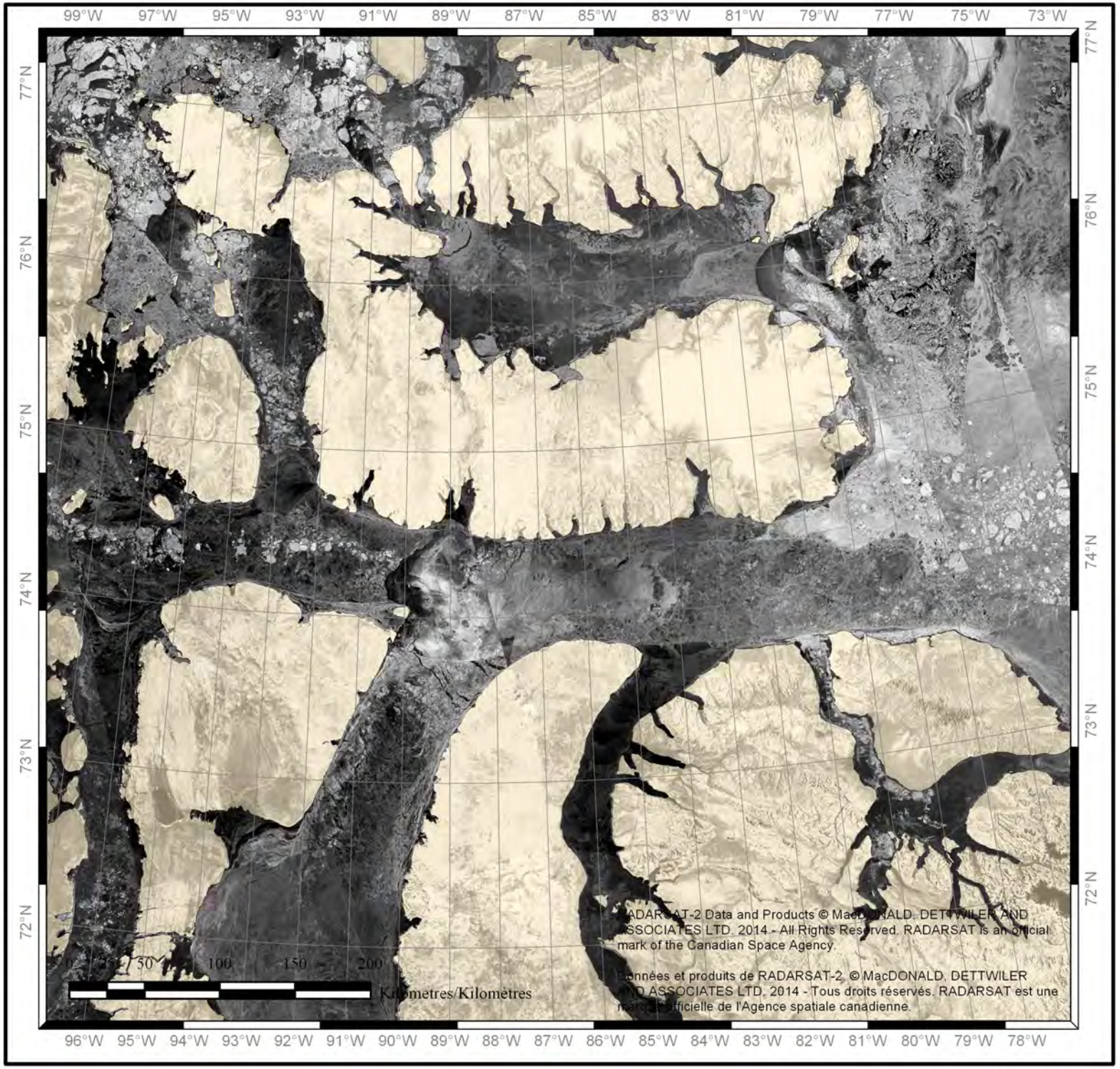
02/03/2014- 02/07/2014

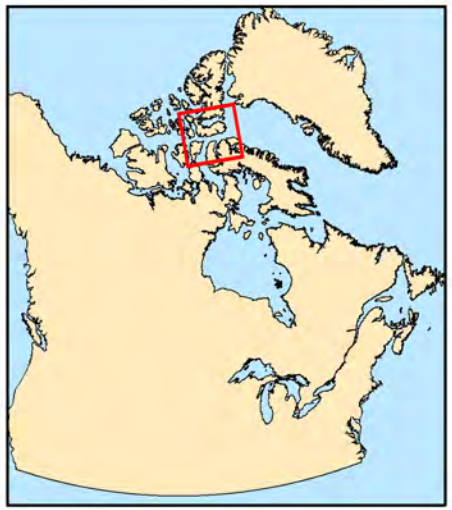
Nares Strait / Détroit de Nares



02/03/2014 - 02/09/2014

Mackenzie Bay / Baie Mackenzie



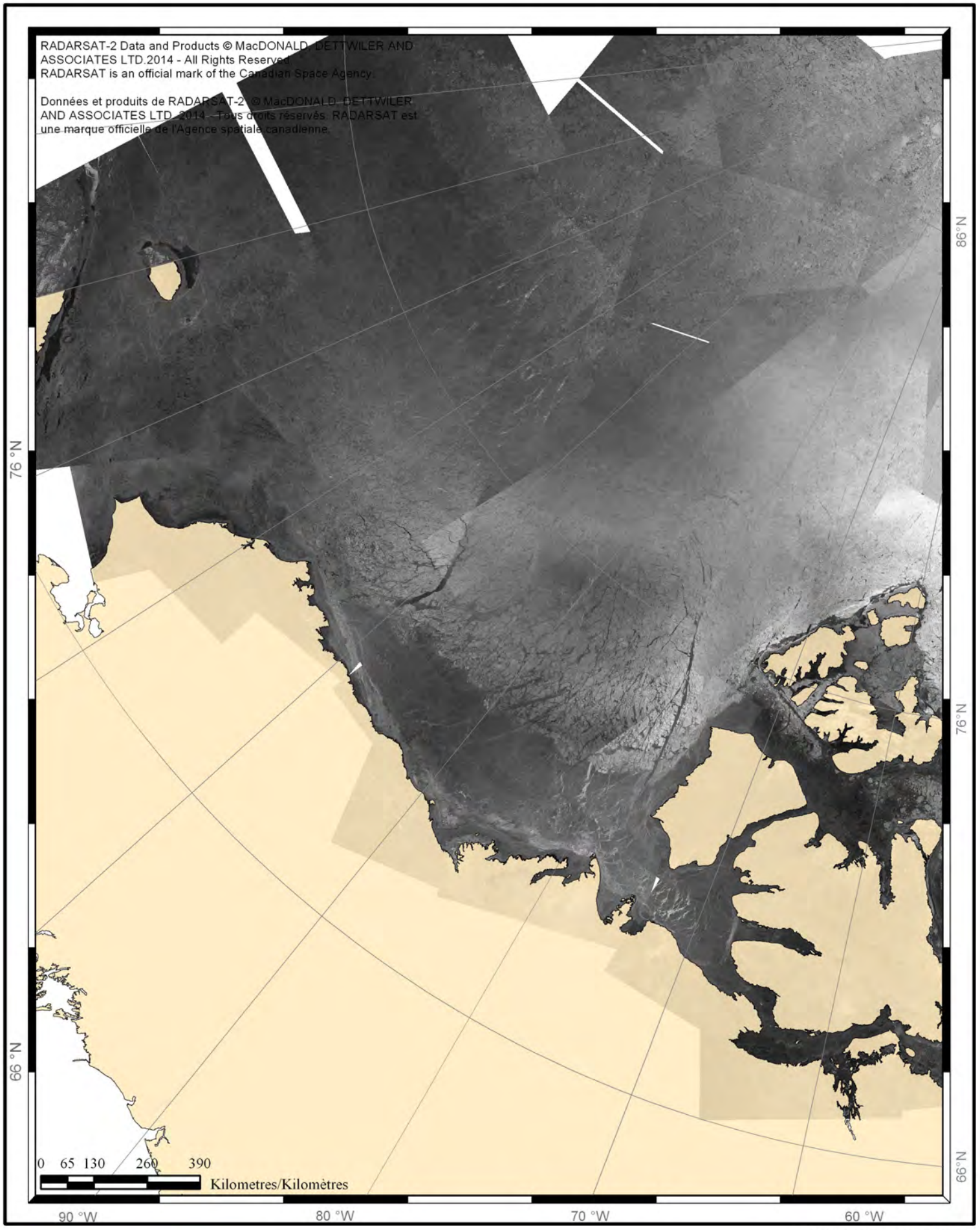


Lancaster Sound / Détroit de Lancaster

02/03/2014 - 02/08/2014

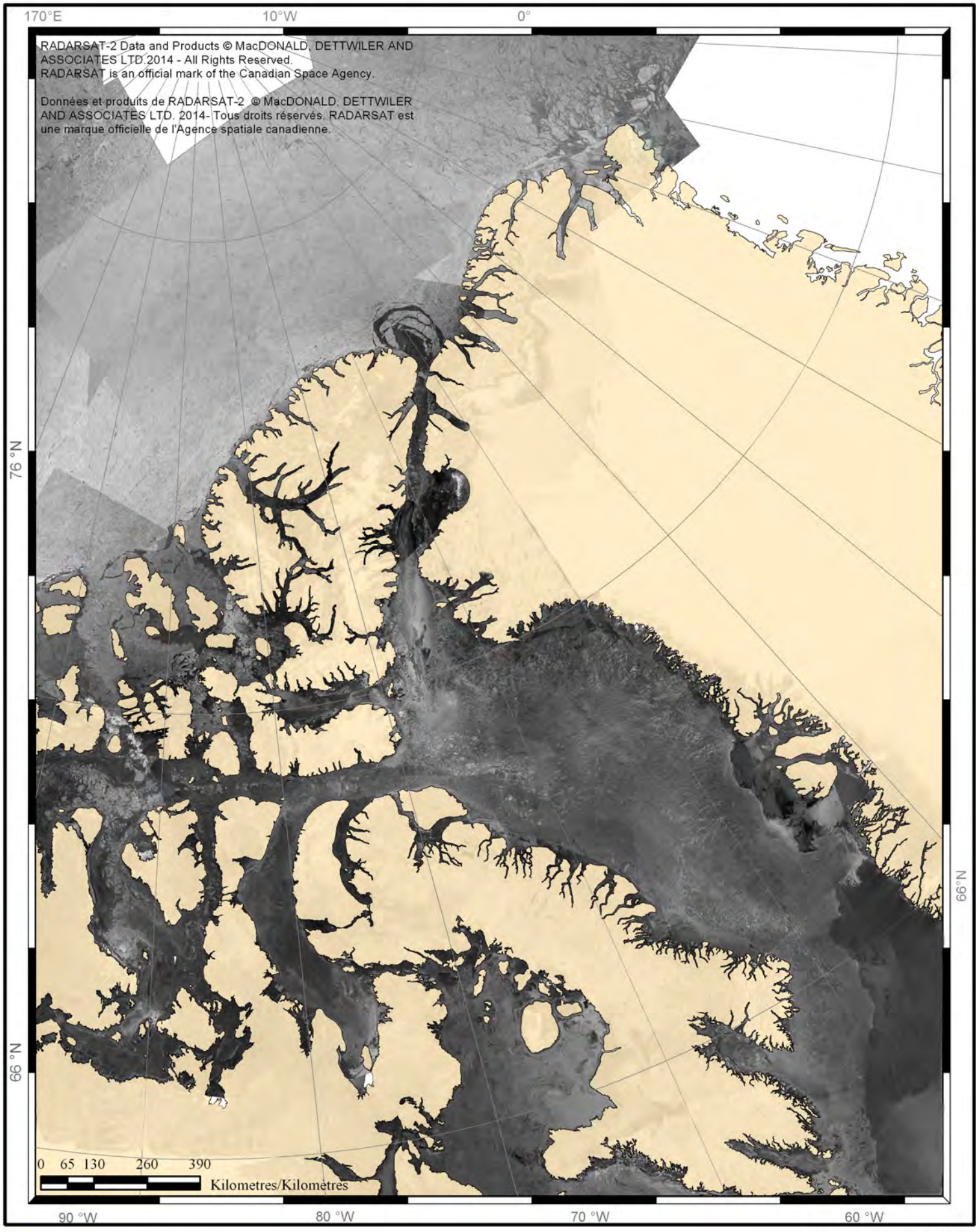
Canadian Ice Shelves / Plateaux de glace canadiens

02/03/2014 - 02/06/2014



02/01/2014 - 02/03/2014

Met Area 17



02/01/2014 - 02/03/2014

Met Area 18

CANADIAN ARCTIC MOSAIC / MOSAÏQUE DE L'ARCTIQUE CANADIEN