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- Year long transit hub for ore from nickel mines currently in operation
- Hunting and fishing area for Inuit communities
- A sensitive ecosystem



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Why Salluit and Kangiqsujaq?

- Similar fjords
- Control sites: to compare observations from Deception Bay
- Community involvement



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When observing sea ice, we pay attention to :

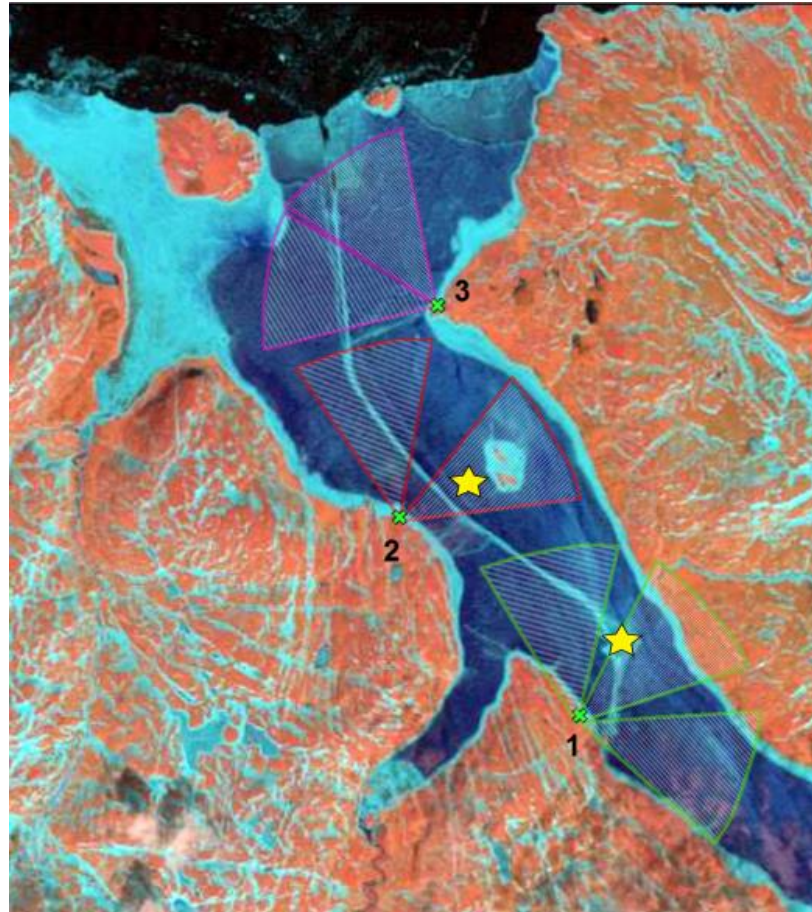
- Seasonal evolution
- Dynamic events
- Events related to ice travel and subsistence activities
- Historical changes
- Providing information to the communities



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Equipment in Deception Bay

Cameras (5)



Sonars (2)

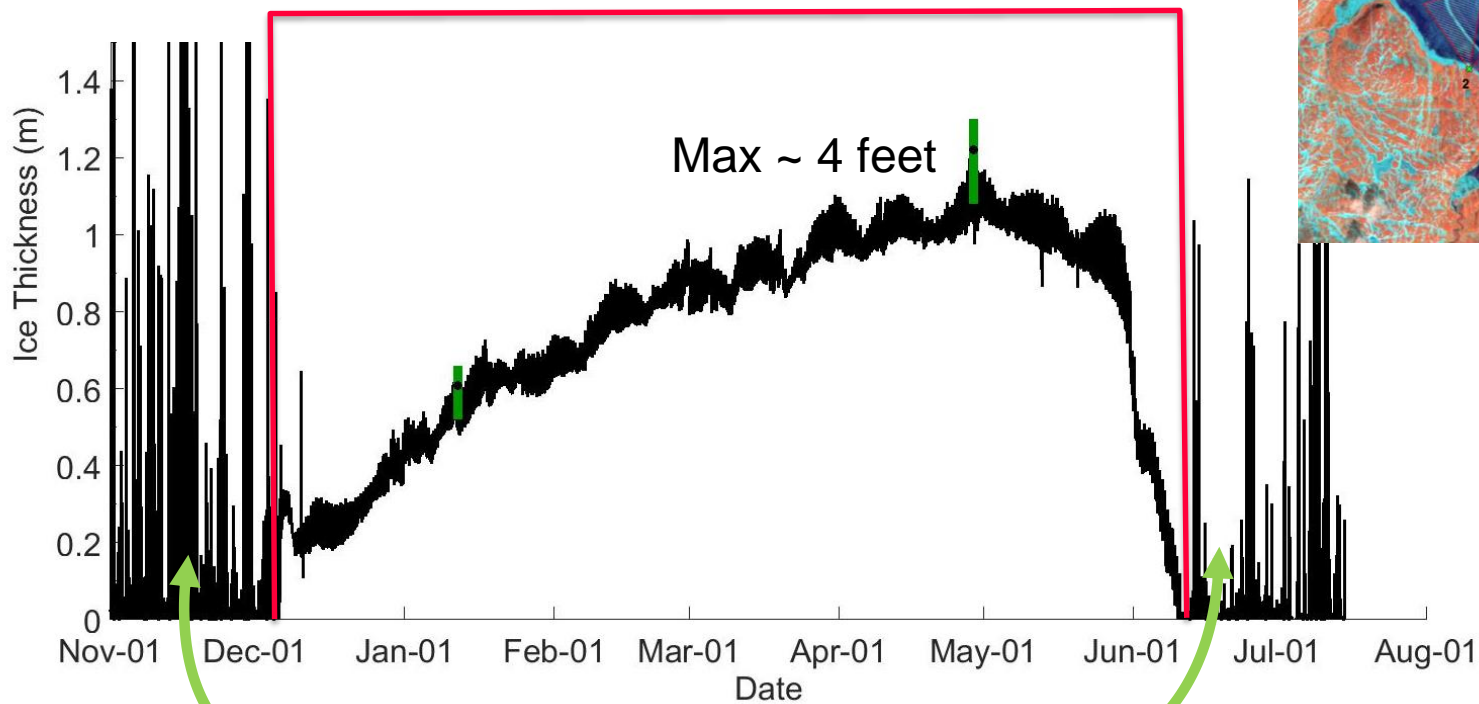


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Sonar near Moosehead Island

Ice Thickness during the 2016-2017 season in Deception Bay

Frozen from December 6th 2016 to June 11th 2017



Ice floating in the bay

Identifying Freeze-Up (and Break-Up) with Cameras

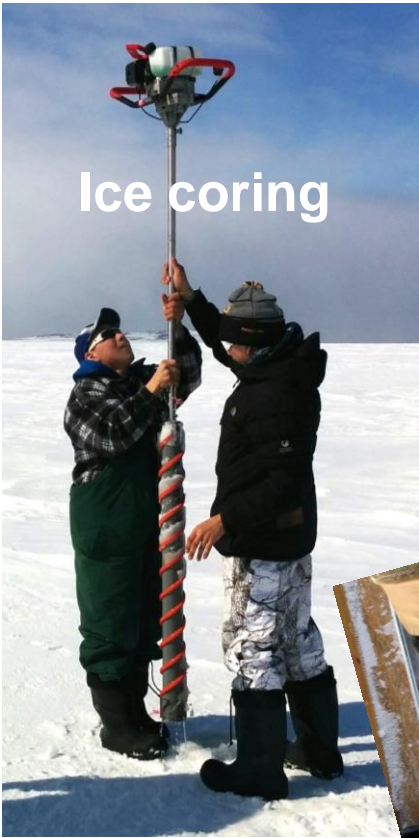


The freeze-up north-east of Moosehead Island took 10 days longer in 2015-2016 (26 days) compared to 2016-2017 (16 days).

The bay was frozen two weeks earlier in 2015-2016 compared to 2016-2017, and the ice lasted until 9 days later.

The ice cover lasted three weeks and half longer in 2015-2016 (31 weeks), compared to 2016-2017 (27 weeks and 2 days).

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Ice monitoring in January and February 2018

1. Is the snow flat or uneven ? 2. Is the ice smooth or broken ?



3. How thick is the snow ? The ice ?



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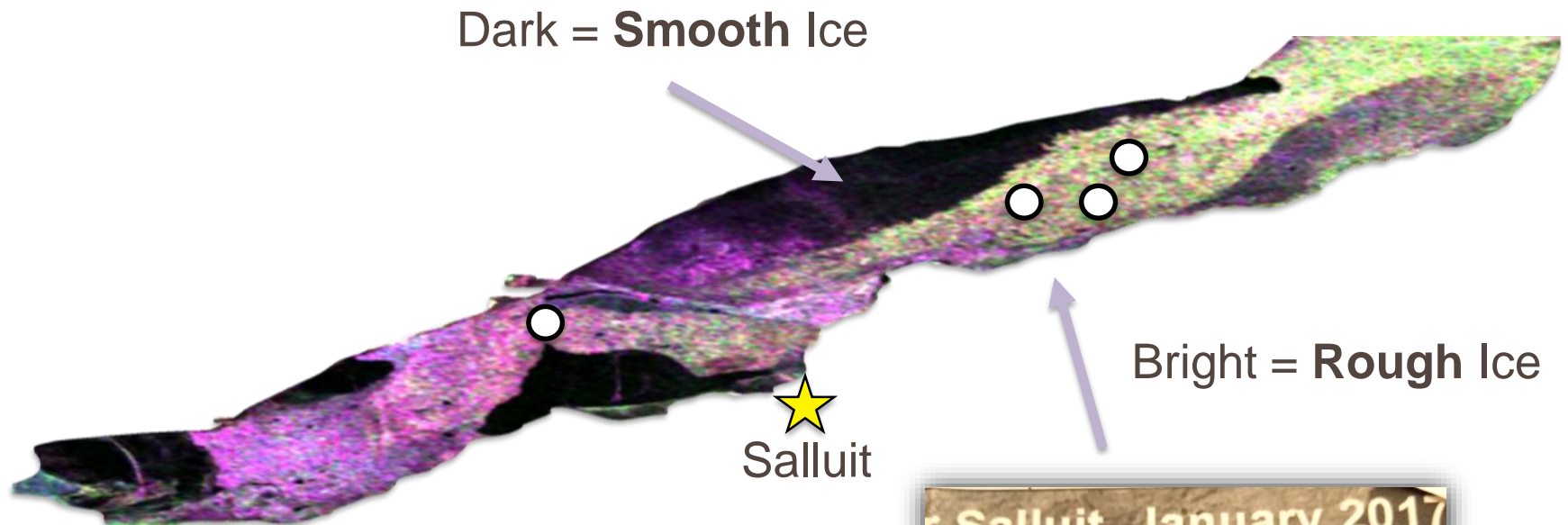
Ice monitoring in January and February 2018

	Average snow thickness	Average ice thickness
Salluit January 30th 2018	2'' (6 cm)	2'8'' (81 cm)
Deception Bay February 1st-2nd 2018	3'' (8 cm)	2'9'' (83 cm)
Kangiqsujuaq January 27th-28th 2018	3'' (8 cm)	2'4'' (71 cm)

The average snow thickness was roughly the same in all the bays, but the distribution is different.

In Salluit the snow was even. In Deception Bay and Kangiqsujuaq, some areas had more or less snow than others.

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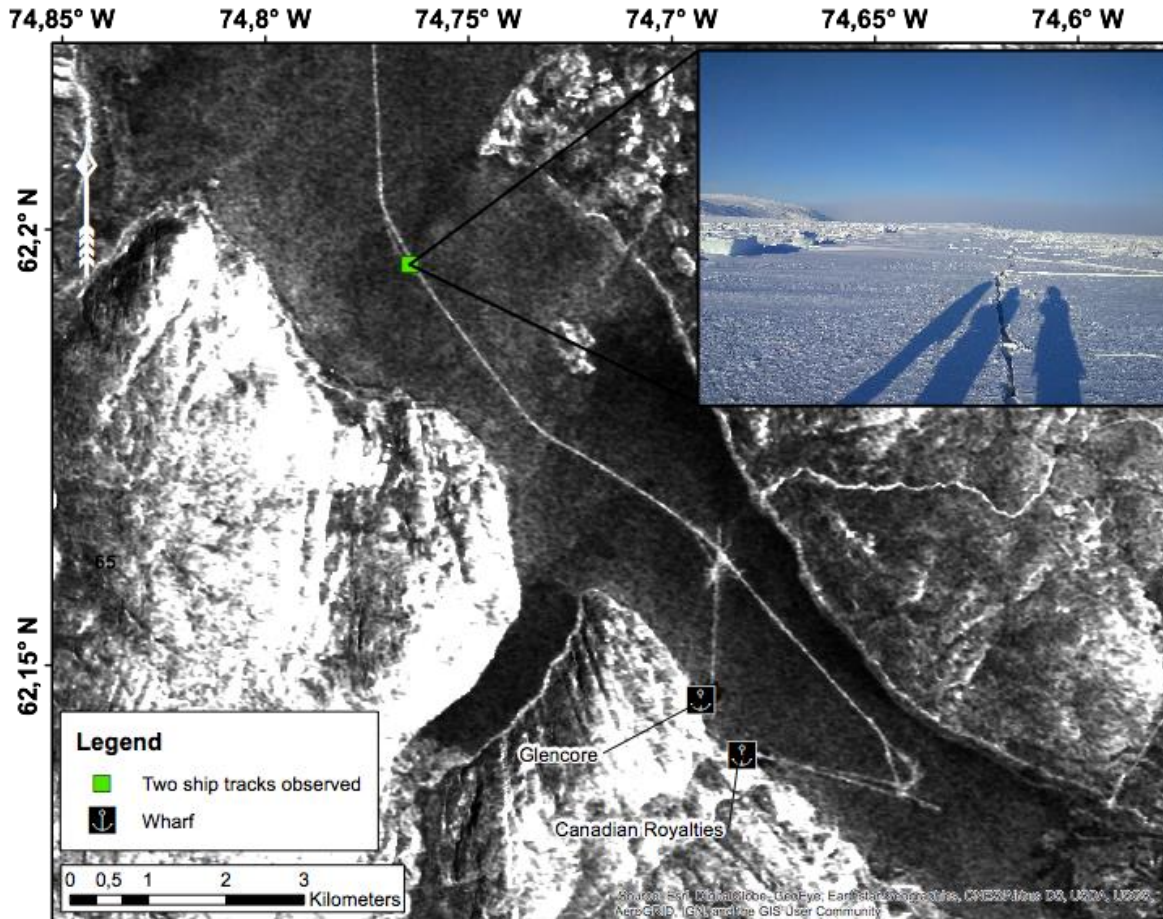


Satellite image taken on
December 13th 2016



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Ship tracks observed this year in Deception Bay



Basemap source : RADARSAT-2 Data and Products © MacDonald, Dettwiler and Associates Ltd. (2012) – All Rights Reserved. RADARSAT is an official trademark of the Canadian Space Agency. Shown : Sigma HH from February 1st 2018.

Measurement details : The work was done on February 2nd 2018 by Juupi Tuniq, Pierre Lebreux, Charlies Ikey, Véronique Gilbert, Valérie Plante Lévesque and Sophie Dufour-Beauséjour.



Δοκιμασίες με το σχολείο Activities with the school

- In the context of the AVATIVUT program (KSB), students from the schools participate in the field work and lab analysis.
- Last April, the team went to talk to the high school students about the research project and explain what we are doing



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- In April 2017, discussions about the results and future work

