

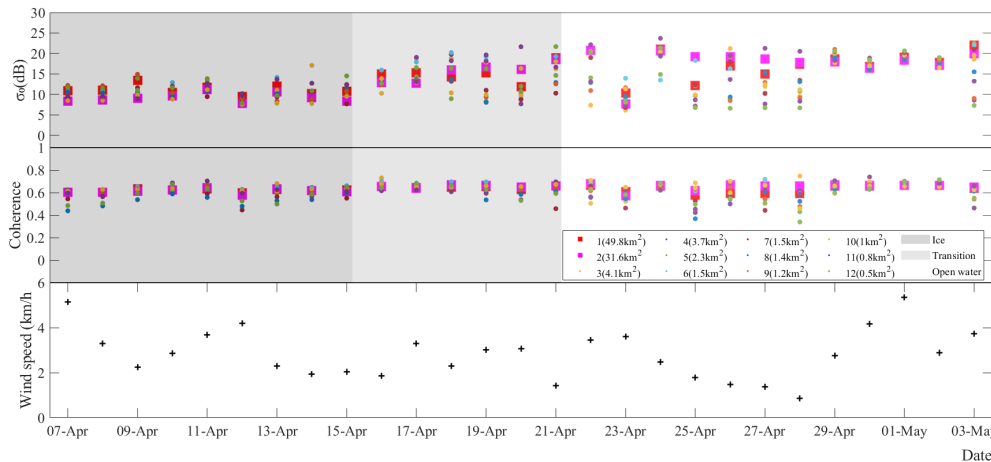
Lake Ice and SWOT: a challenge and an opportunity

Melanie Trudel

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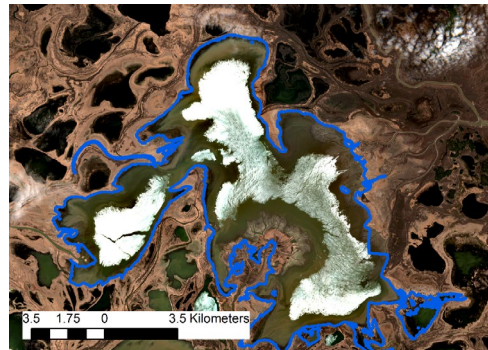
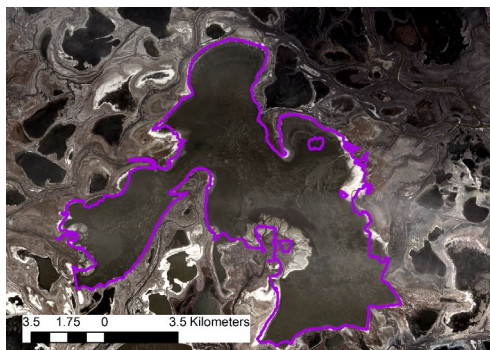


Lake ice varies in time and space, which must be taken into account in the dynamic ice flag.



There is a decrease in σ_0 , but not in coherence with the presence of lake ice.

σ_0 is also affected by the angle of incidence, making lake ice discrimination based on σ_0 more complex.

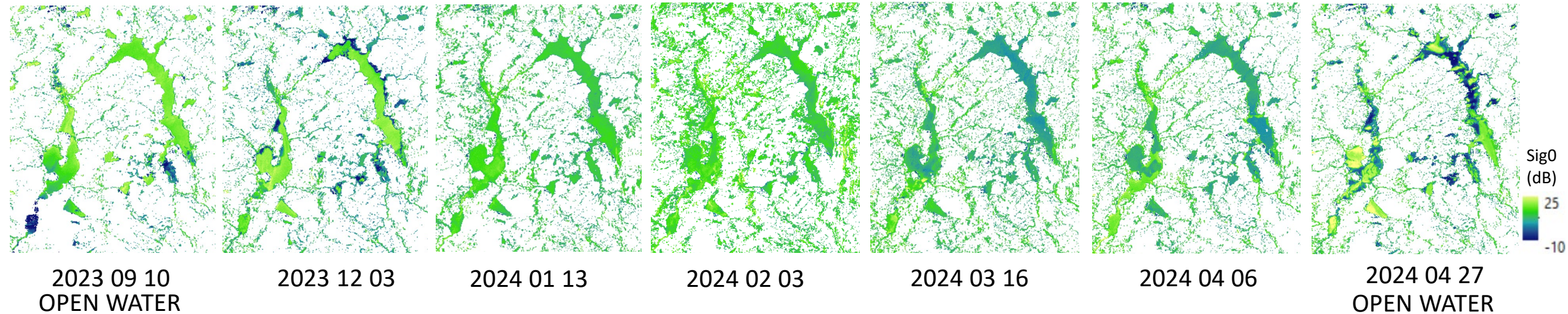


Lake ice is often flagged as darkwater. The edge of lakes can be affected by darkwater (and then the water extent), especially for lakes partially covered by ice during the ice cover formation period.

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We can investigate lake ice dynamic with SWOT

Pass 270



In some situation, SWOT wse is comparable to observed wse

