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Connectivity changes between slopes and Umiujaq River, Nunavik, Canada

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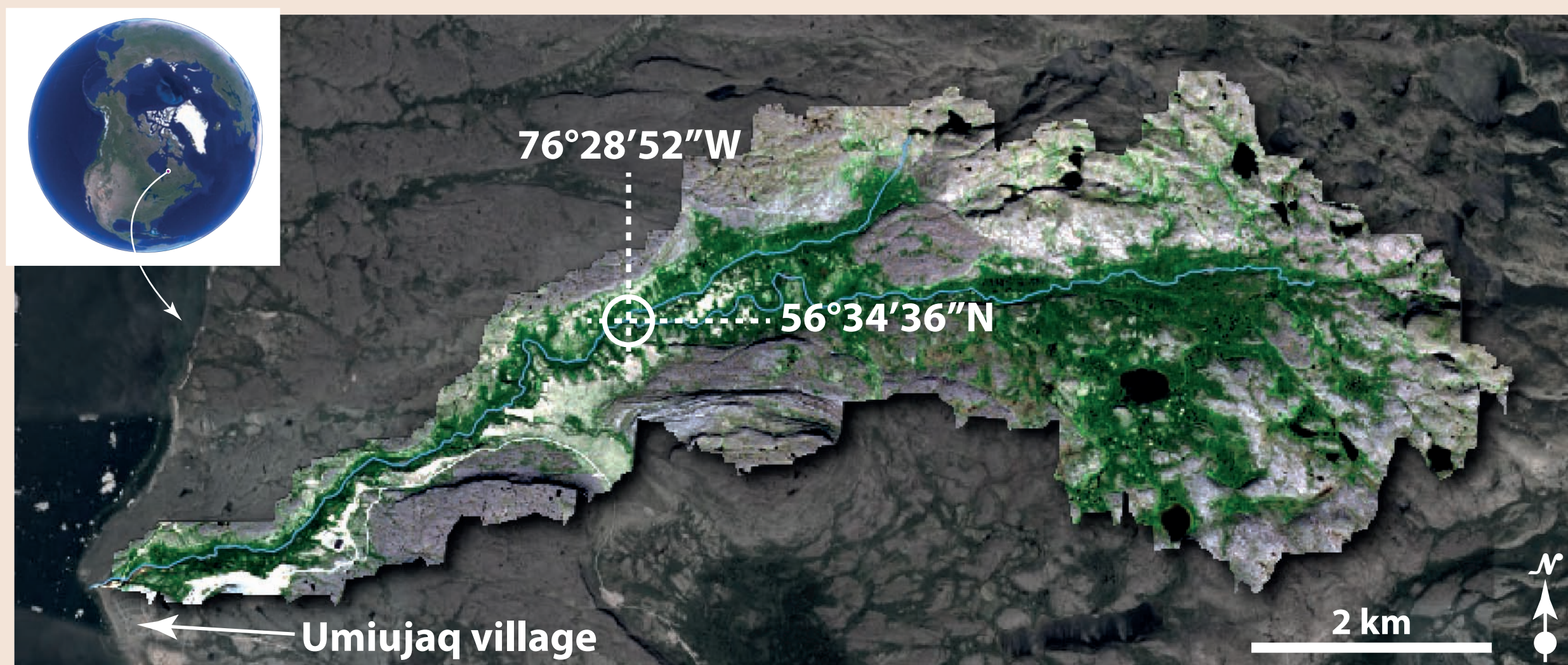
Vincent Filion, Université Laval, Québec, Canada

Najat Bhiry, Université Laval et Centre d'études nordiques, Québec, Canada

Armelle Decaulne, CNRS LETG, Nantes, France



UMIUJAQ WATERSHED: CONTEXT AND OBJECTIVES



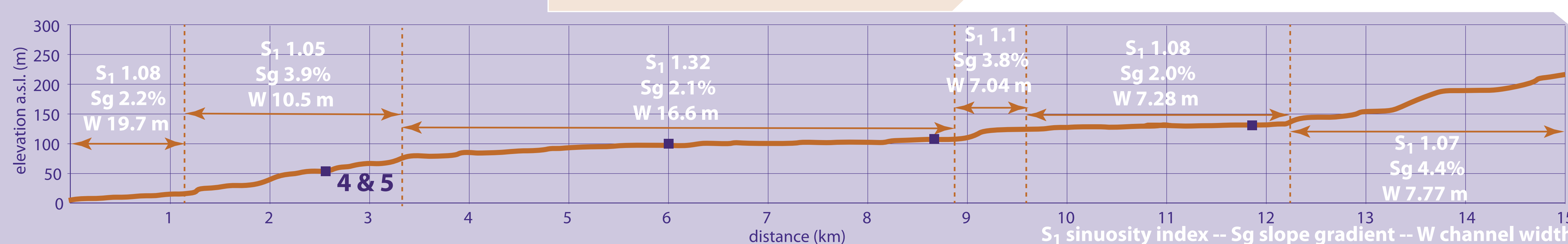
Umiujaq River watershed is located in subarctic Nunavik, on the eastern shore of Hudson Bay. With a surface of 27 km², the watershed drains rocky surfaces as well as sandy sediments from the inherited glacio-fluvio-marine terraces formed at the end of the last glacial period. The village of Umiujaq, and associated infrastructures, develops along the downstream third of the river. We propose a multiscale approach, from the watershed to the site, to explore connectivity dynamics. That documents the potential slopes-to-channel sediment fluxes that might modify the watershed socio-ecosystem.



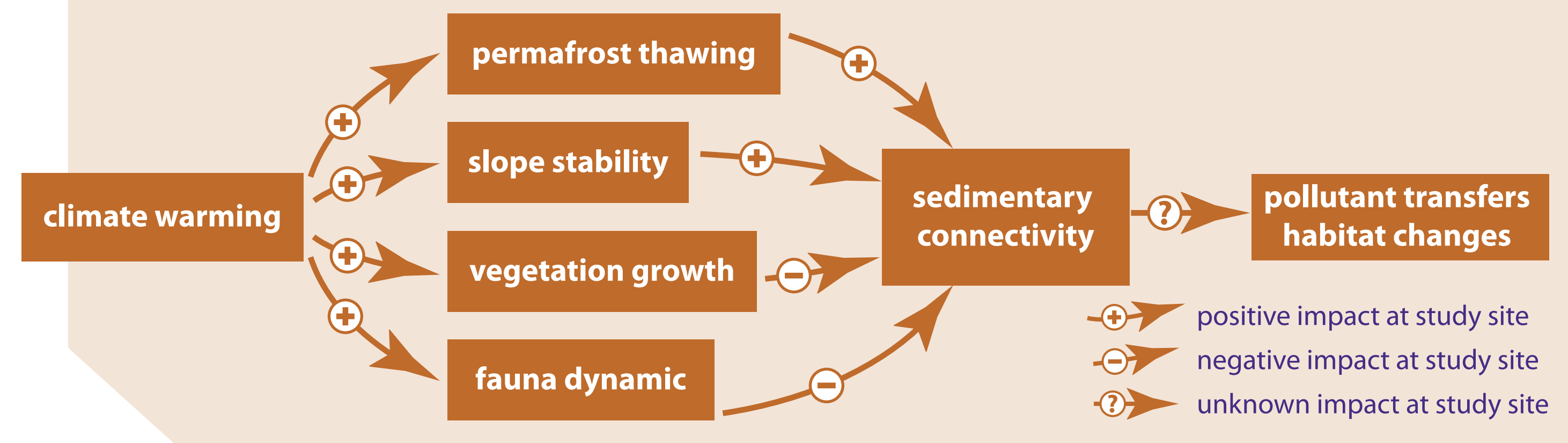
THE WATERSHED SCALE



River long profile

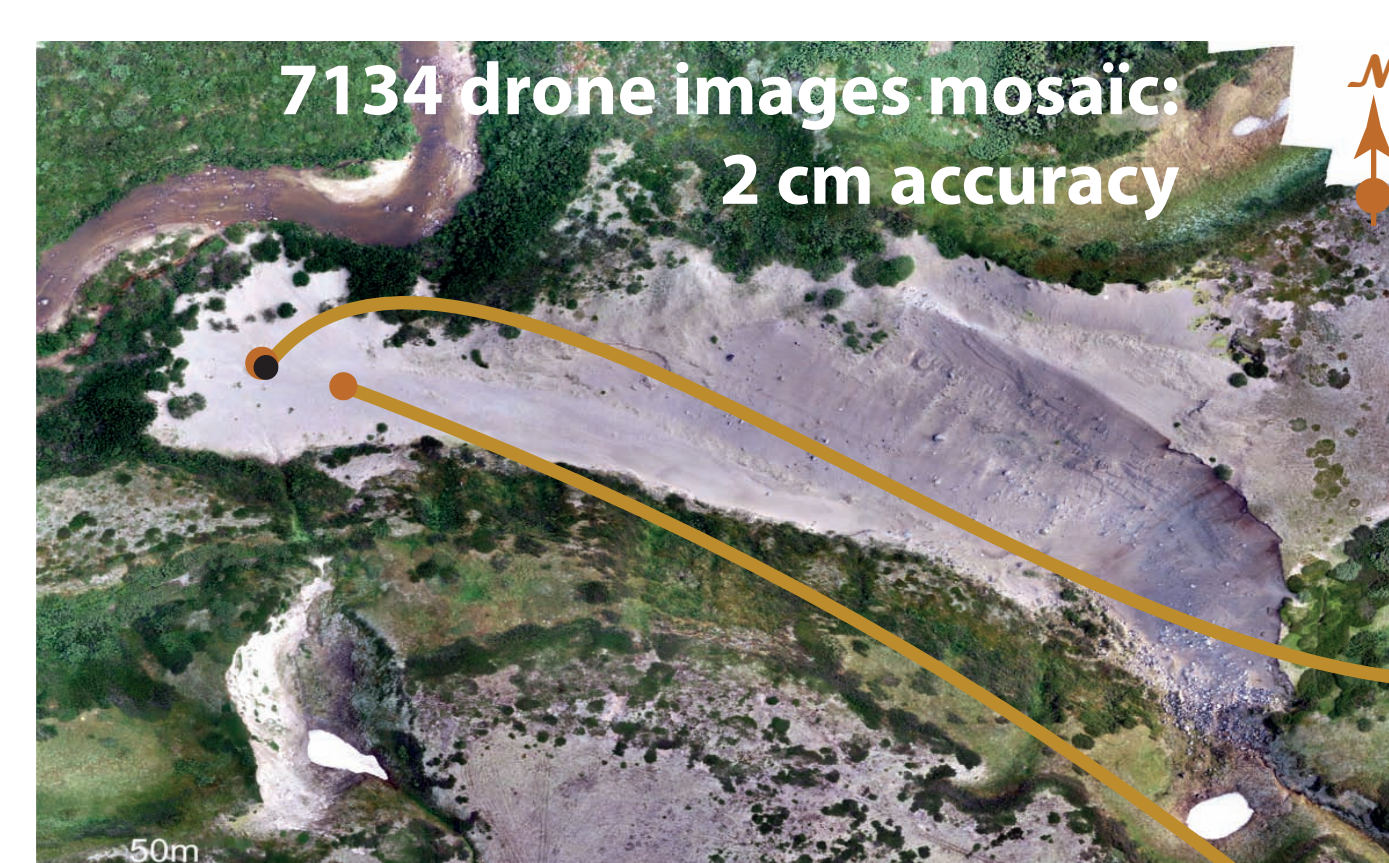


THE SITE SCALE



METHODS & RESULTS ON SITE #3

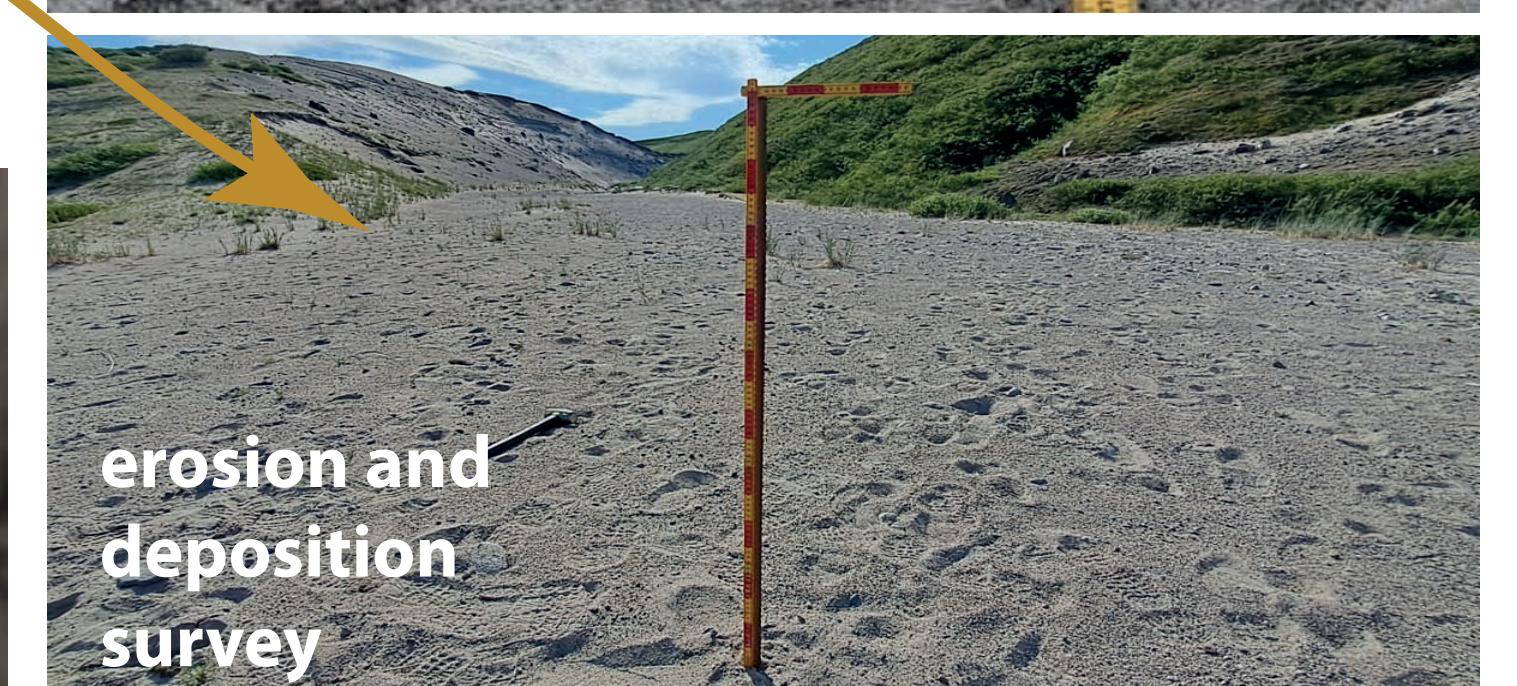
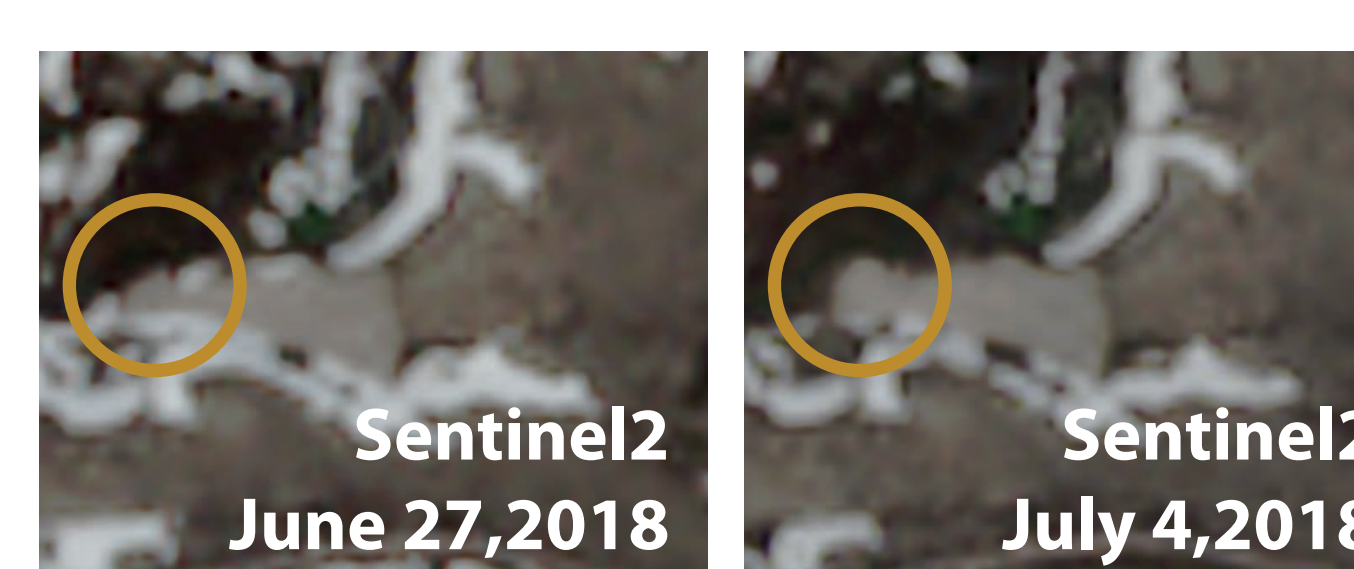
1 Topographic survey



2 Stratigraphic survey



3 Satellite images survey



4 Sediment burial dendrochronologic survey

