Seismology of sea ice

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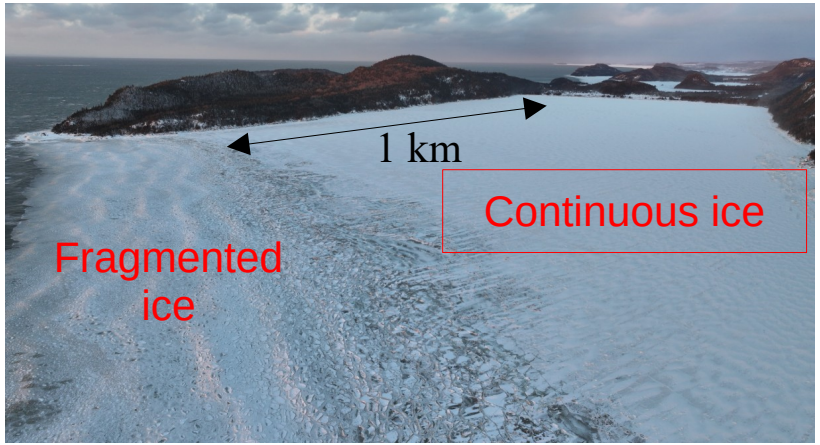
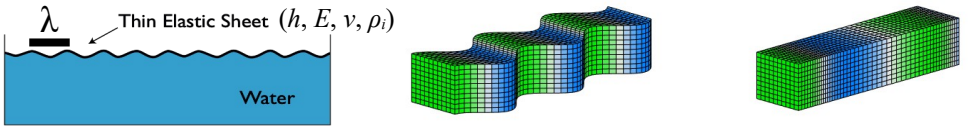
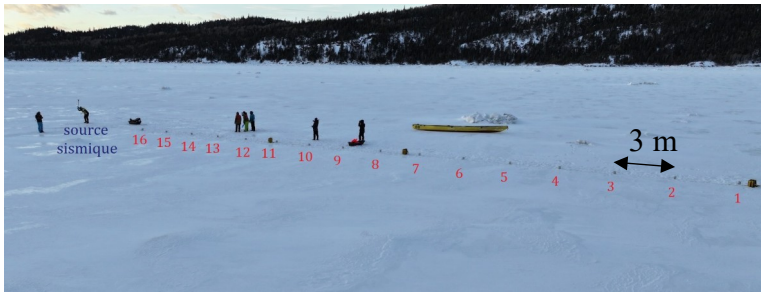


Aerial view of sea ice covering the surface of water, 2025/02/04 in the Ha! Ha! bay, Québec, Canada

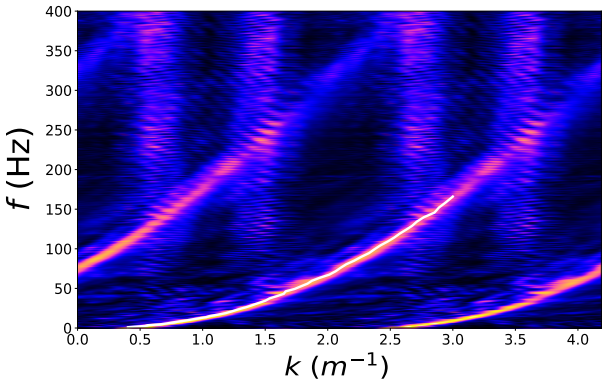


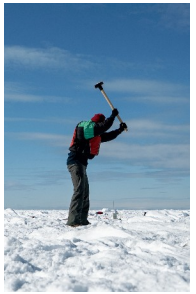
Can we measure the propagation of mechanical waves in sea ice?
What can we infer about ice properties?

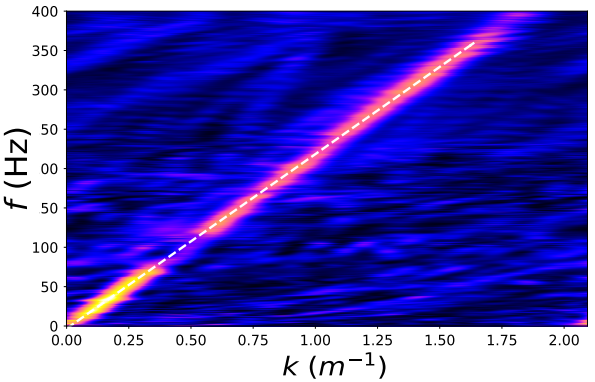


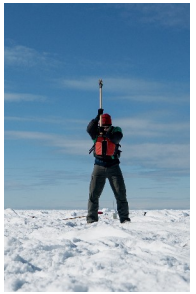
Aerial view of a seismic experiment

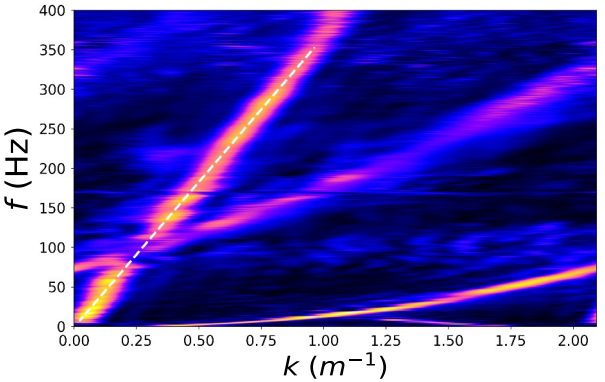
Generate and measure waves in sea ice











$h = 29 \pm 5$ cm, $E = 4.2 \pm 0.6$ GPa,
$\nu = 0.26 \pm 0.05$, $\rho_i = 900 \pm 50$ kg.m^{-3}

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