

Monitoring the **surface soil moisture and temperature** of the Arctic permafrost using passive microwave satellite remote sensing

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Centre Nationale
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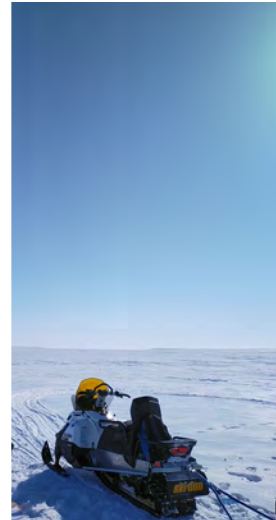
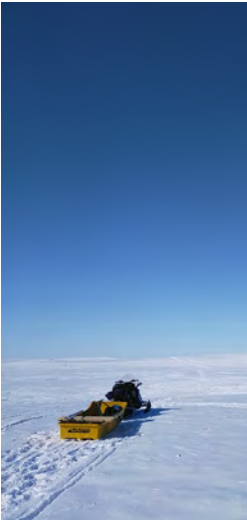


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Context

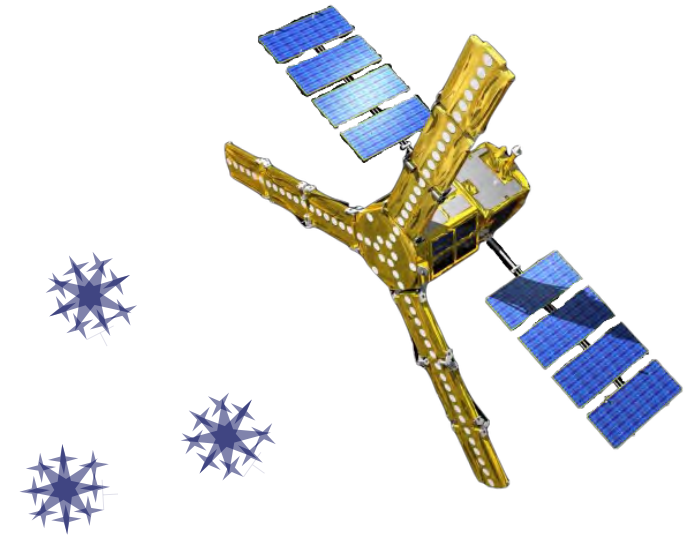
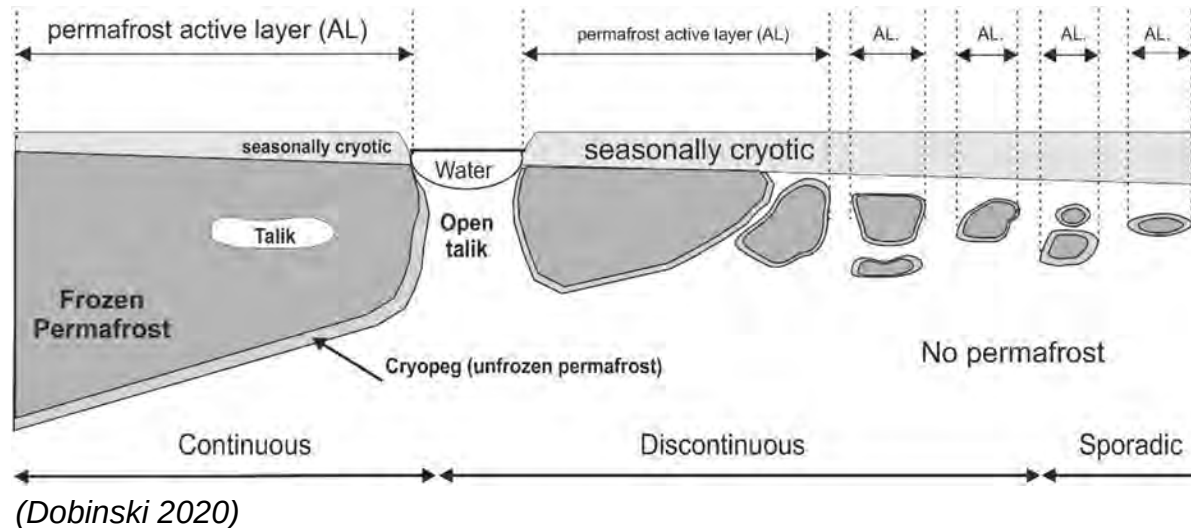
Permafrost

= *pergélisol* (fr)

Key parameters

surface soil moisture (SM)

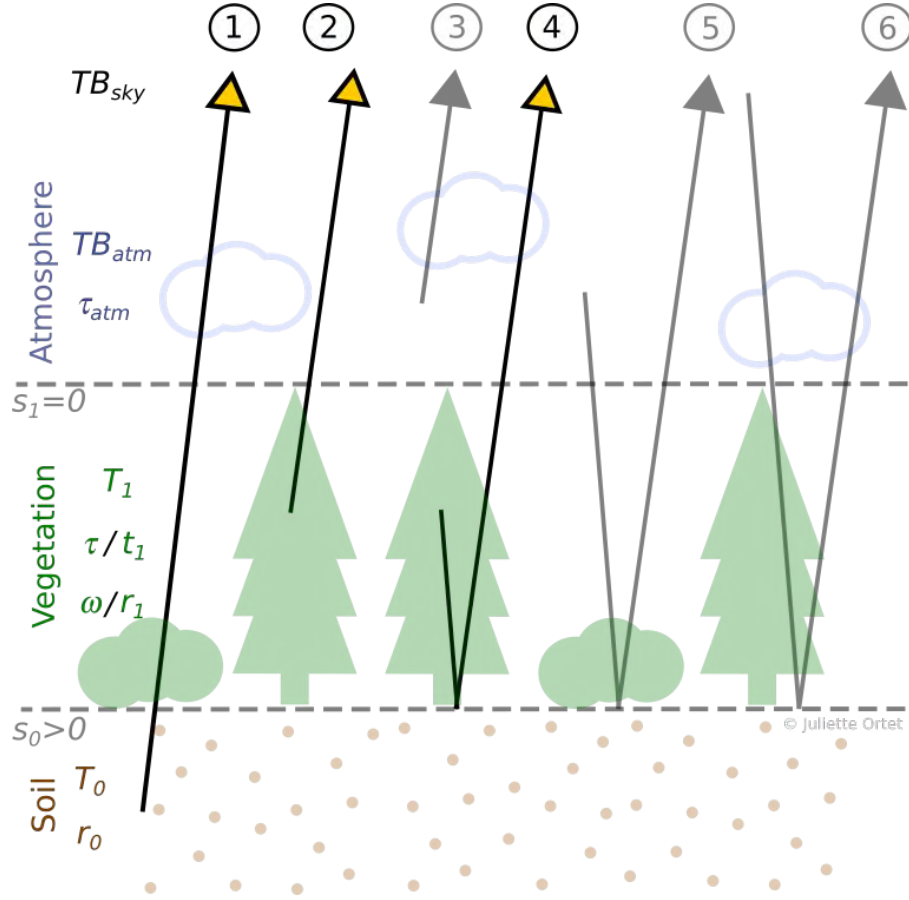
+ temperature (T_{soil})



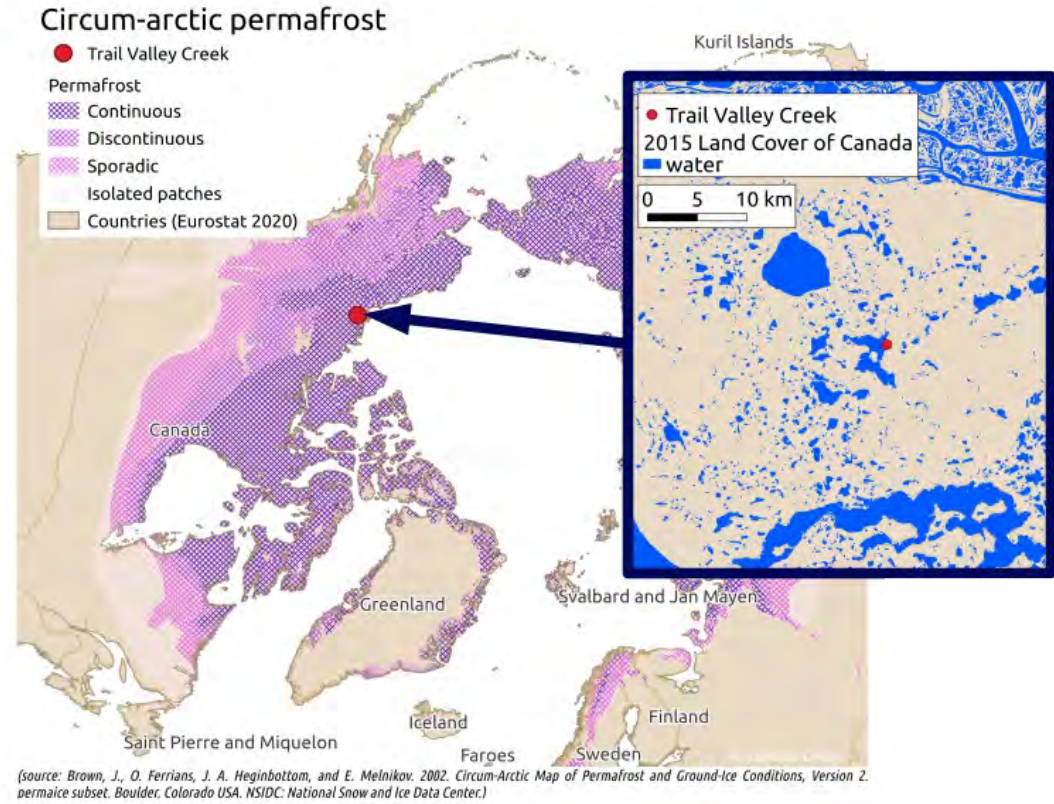
SMOS
Soil Moisture and Ocean Salinity

L band
Frequency = 1,4 GHz
Wavelength = 21 cm

Method

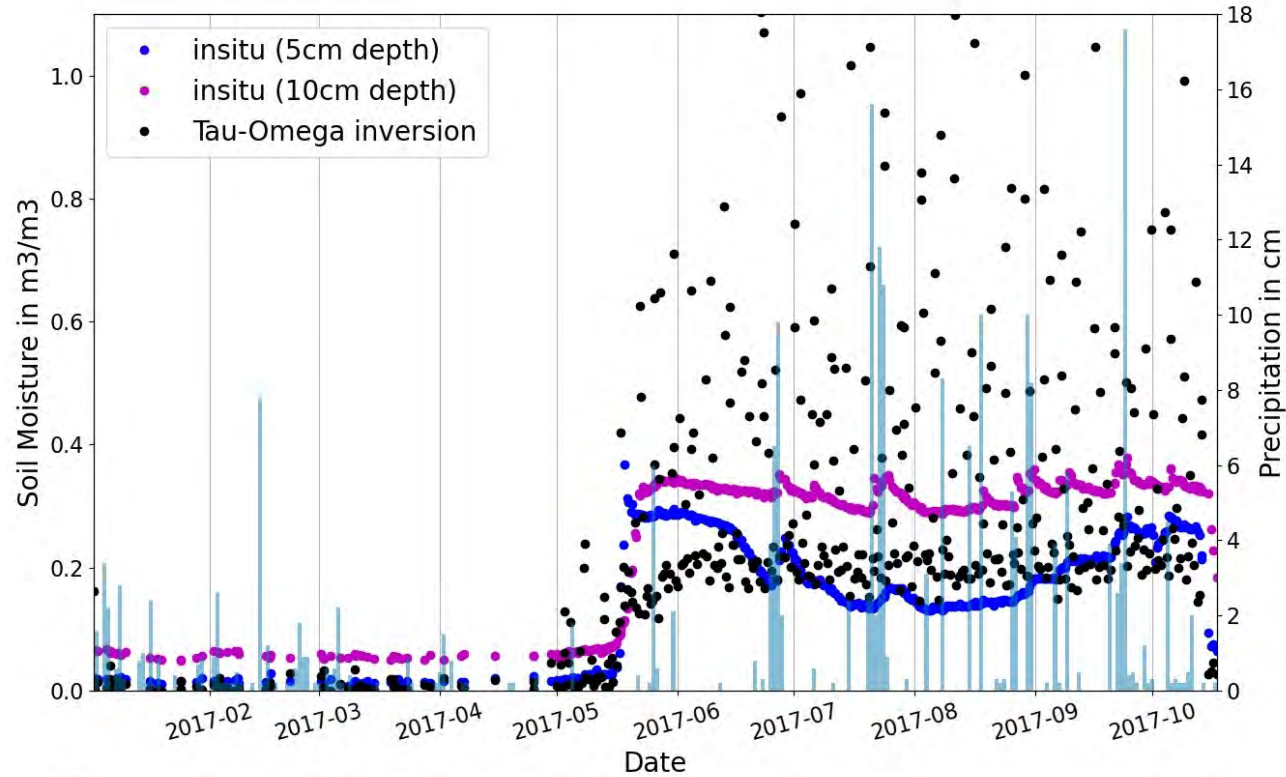


An example of scene modeling: tau-omega



Trail Valley Creek measurement site

Results



See you during the poster session!