

EGU21-14989

<https://doi.org/10.5194/egusphere-egu21-14989>

EGU General Assembly 2021

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## **How retrogressive thaw slumps change over time - a study from Herschel Island (Canada) using 3D electrical resistivity tomography (ERT)**

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Retrogressive thaw slumps (RTS) are a common thermokarst landform along arctic coastlines with an increasing thermoerosional activity. They underlay a rapid change in topographical as well as internal structures due to various external factors, e.g. changing climate conditions.

In 2011 and 2019 electrical resistivity tomography (ERT) measurements were carried during field campaigns to Herschel Island (Yukon Territory, Canada). Transects crossing Herschel Islands largest slump were performed, as well as quasi 3D-ERT-profiles. For better understanding these changes we compared the datasets focusing on the internal structures just as variations in the topography.

The aim for our study is gaining an impression of structural and topographical changes over several years, leading towards a better comprehension of long-term processes in retrogressive thaw slumps.