



Contribution ID: 14

Type: **Presentation**

Modelling Greenland in a warmer world

Friday, 25 March 2022 14:40 (20 minutes)

During the last interglacial (130.000-110.000 years ago), the climate in Green-land was warmer than today. Modelling has shown a large span of ice sheet mass losses in Greenland, and it is unclear how far back the ice sheet retreated in the North. At present, Eemian ice is widespread along the margin in Northern Greenland suggesting that the Greenland mass loss was less in the North than inferred from models. Using the ice flow modelling tool PISM I aim to map the present extent of Eemian ice and compare with the findings of Eemian ice with in the present day ice sheet, as well as determining how large of an impact ice in Canada has had on the ice extend. This will help to constrain the Eemian mass loss in NorthernGreenland, and thereby to predict its future evolution and contribution to sea level risein a warmer climate.

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Field of study

Earth & Climate Physics

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Session Classification: Student talks