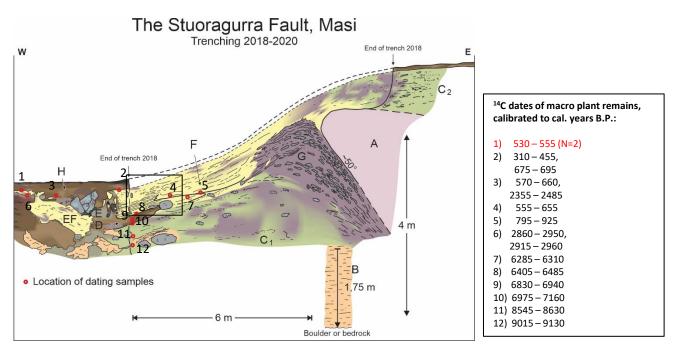




## The Stuoragurra fault at Masi in Northern Norway is less than 600 yrs old

Trenching of the N-S trending fault scarp just north of Masi





Buried peat and deformed sediments, partly injected into the recent peat on top; picture is framed in the profile sketch



**Trenching sites, 1998, 2018-2019:** 1, 2, 3 G = Guovziljohka

**2020:** L = Latnetoaivi M= Máze (Masi) F= Fitnajohka

## Legend of units in section normal to the Stuoragurra fault line, Masi

- A Up-thrown part of bedrock (reverse fault)
- B Glaciolacustrine silty sand (in sub-till position)
- C1 Deformed till, with input of other sediments during deformation
- C2 Till, partially deformed and disrupted towards the tip of unit A
- D Buried and thrusted peat and gyttja
- E Laminated fine to medium sand, with traces of minor disturbances

F – Laminated fine to medium sand, with 2-3 cm thin gyttja layer in lower part, and with flow structures indicating dislocation. Deformation structures indicate push away from the fault line G – Fault breccia, with fine-grained material and clasts from cm to some dm size injected into the original till of units C<sub>1</sub> and C<sub>2</sub> and also into units E and F close to the fault line H – Recent peat and gyttja, with disturbances in lower part

Summary:

- Based on trenching transverse to the fault scarp, observation of sediments and structures, and <sup>14</sup>C-dating of buried organic material, we conclude that the Stuoragurra fault event, accompanied with earthquake of magnitude 7 at Máze (Masi) occurred just before or during the Little Ice Age (LIA, c. 1500-1920 AD).
- A compilation of data collected during fieldwork along the fault complex, and subsequent analyses and interpretations, including georadar profiling and preliminary bothanical studies, are in progress (Olsen et al., in prep.).

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