

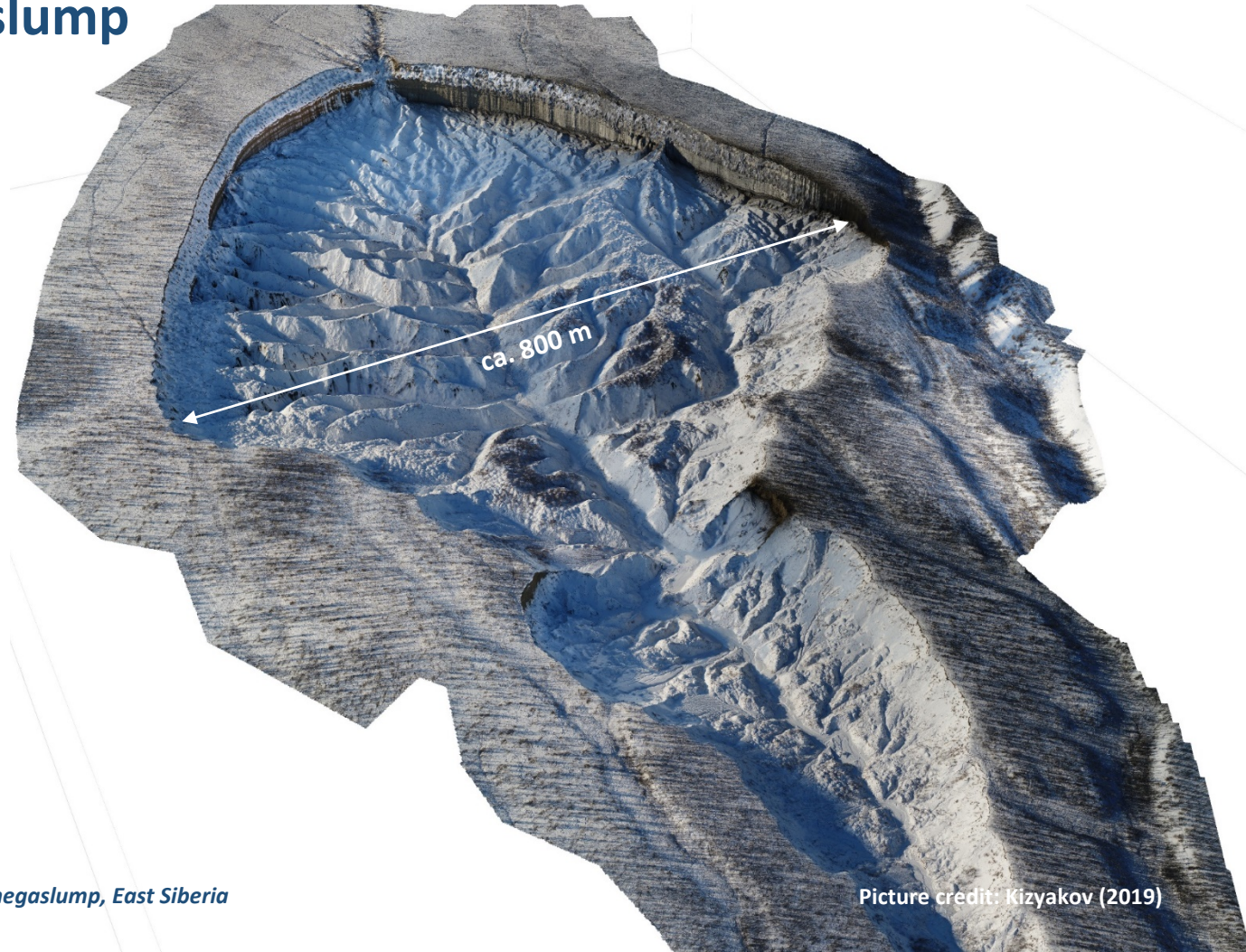
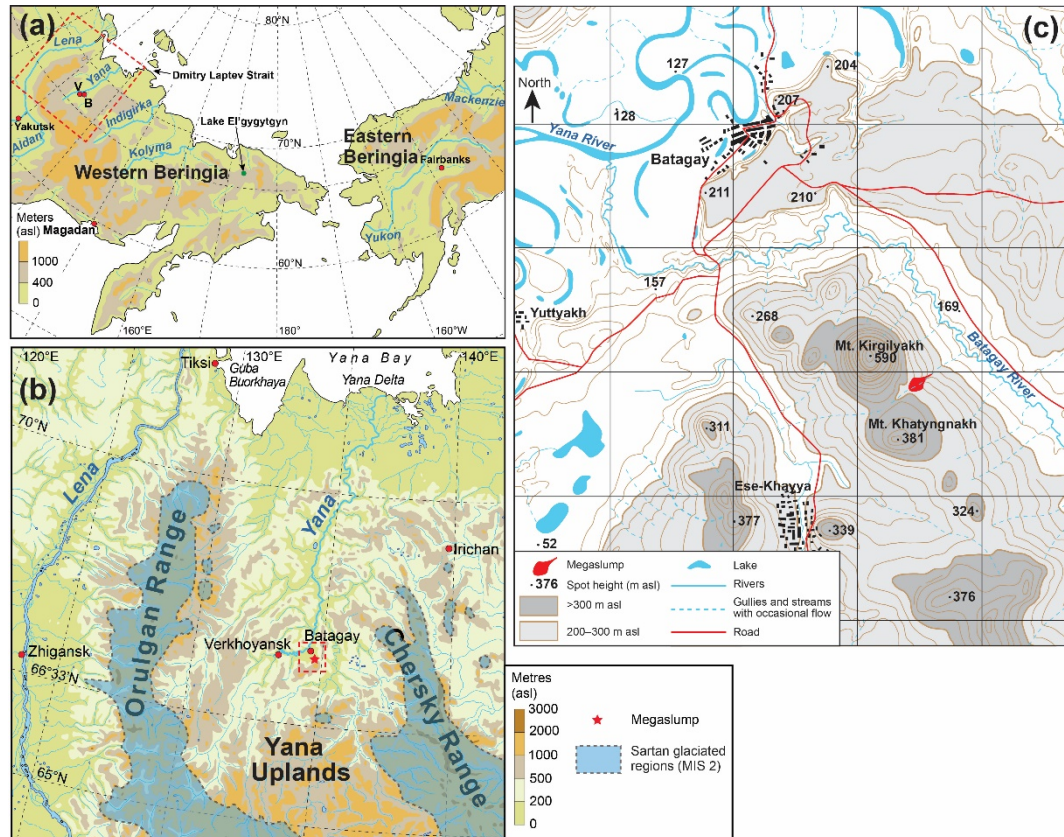
Multi-method dating of ancient permafrost of the Batagay megaslump, East Siberia

Abstract no. EGU2020-2999

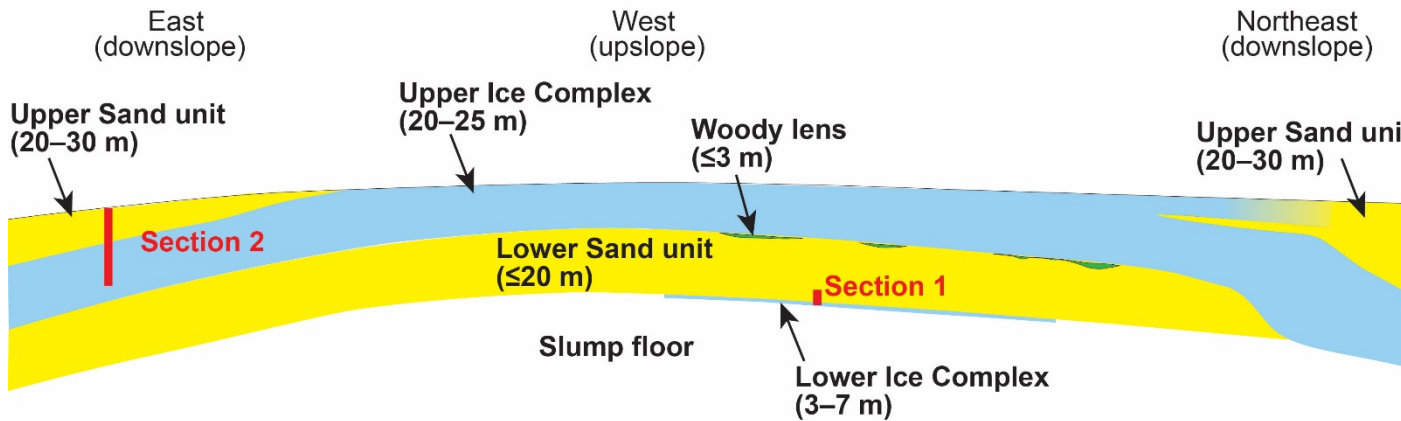
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The (world's largest retrogressive thaw) slump



Radiocarbon, luminescence and $^{36}\text{Cl}/\text{Cl}$



The Batagay chronology established so far

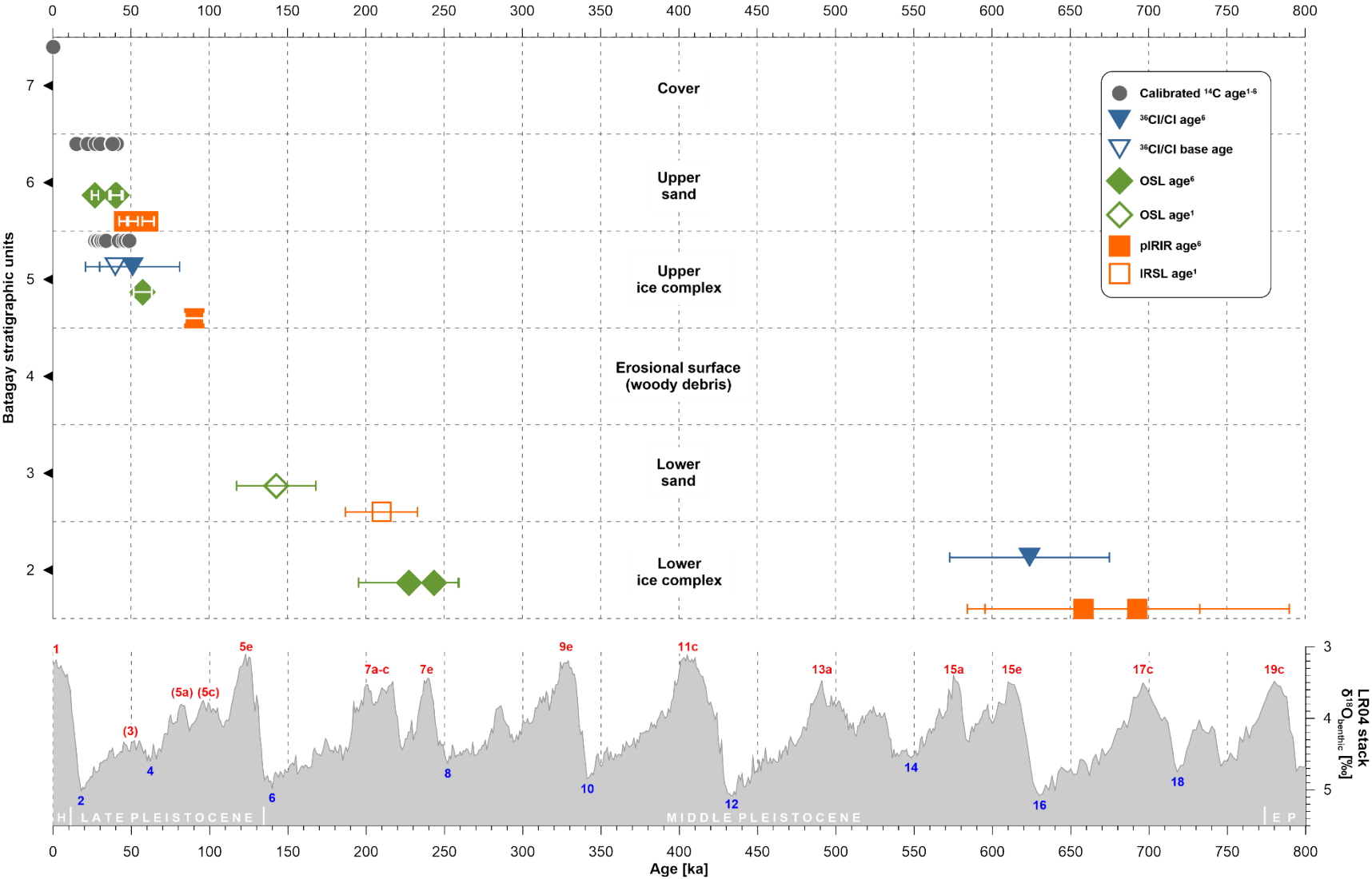
Cover
(MIS 1)

Upper Sand
(MIS 3-2)

Upper Ice Complex
(MIS 4-2)

Lower Sand
(MIS 6)

Lower Ice Complex
(MIS 16)



Available chronostratigraphic data of the Batagay megaslump summarised from

¹Ashastina et al. (2017), ²Murton et al. (2017a), ³Opel et al. (2019),

⁴Vasil'chuk and Vasil'chuk (2019), ⁵Vasil'chuk et al. (2020) and ⁶this study.

The Batagay megaslump is ...

an exceptional but discontinuous permafrost archive,

second oldest dated permafrost of the Arctic,

proof that old permafrost survived several interglacials,

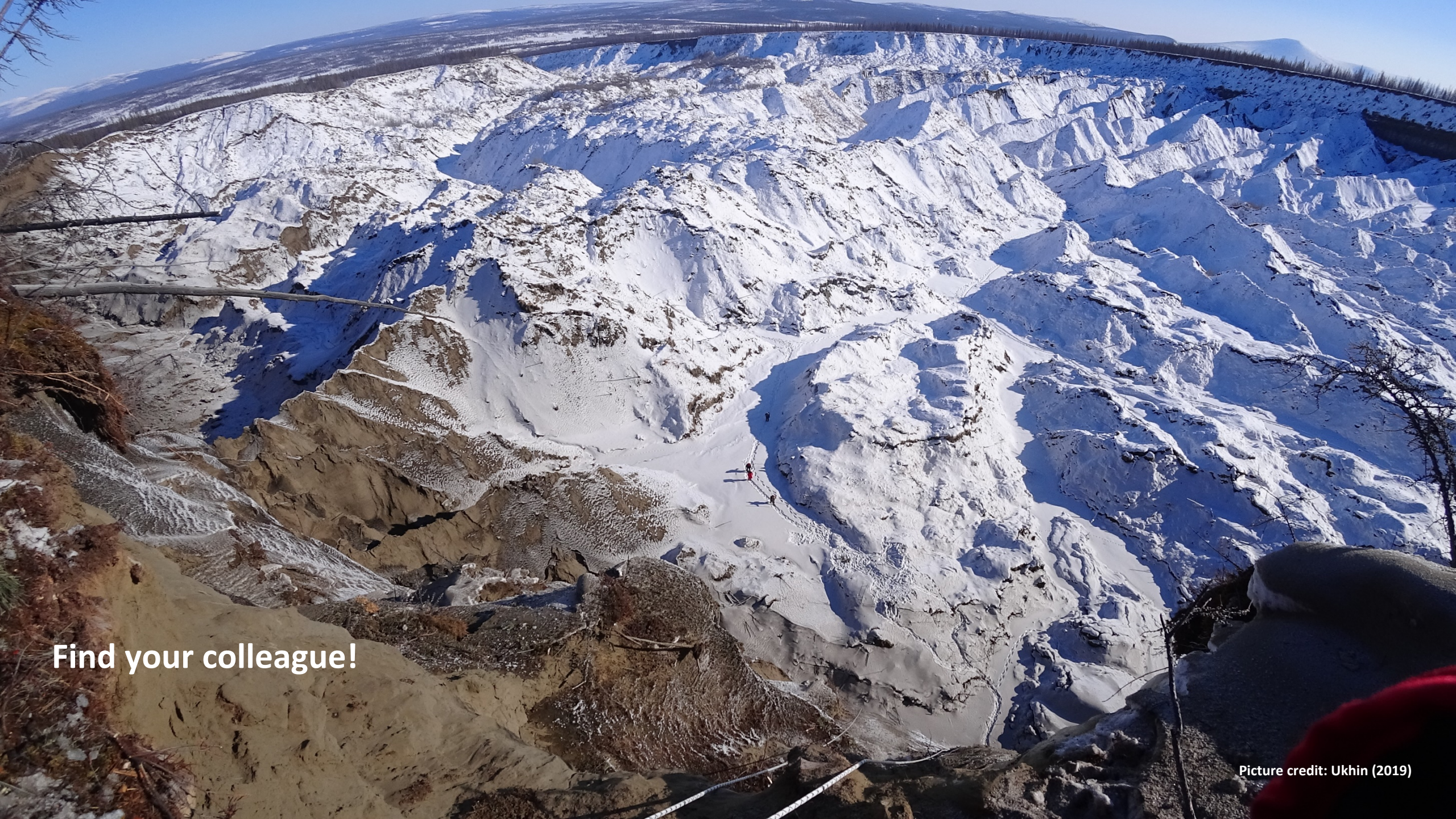
potentially one of the longest terrestrial records
of Pleistocene environments in western Beringia,

a challenge for dating, but promising when methods
are combined,

subject to ongoing international research.



Picture credit: Syromyatnikov (2019)



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