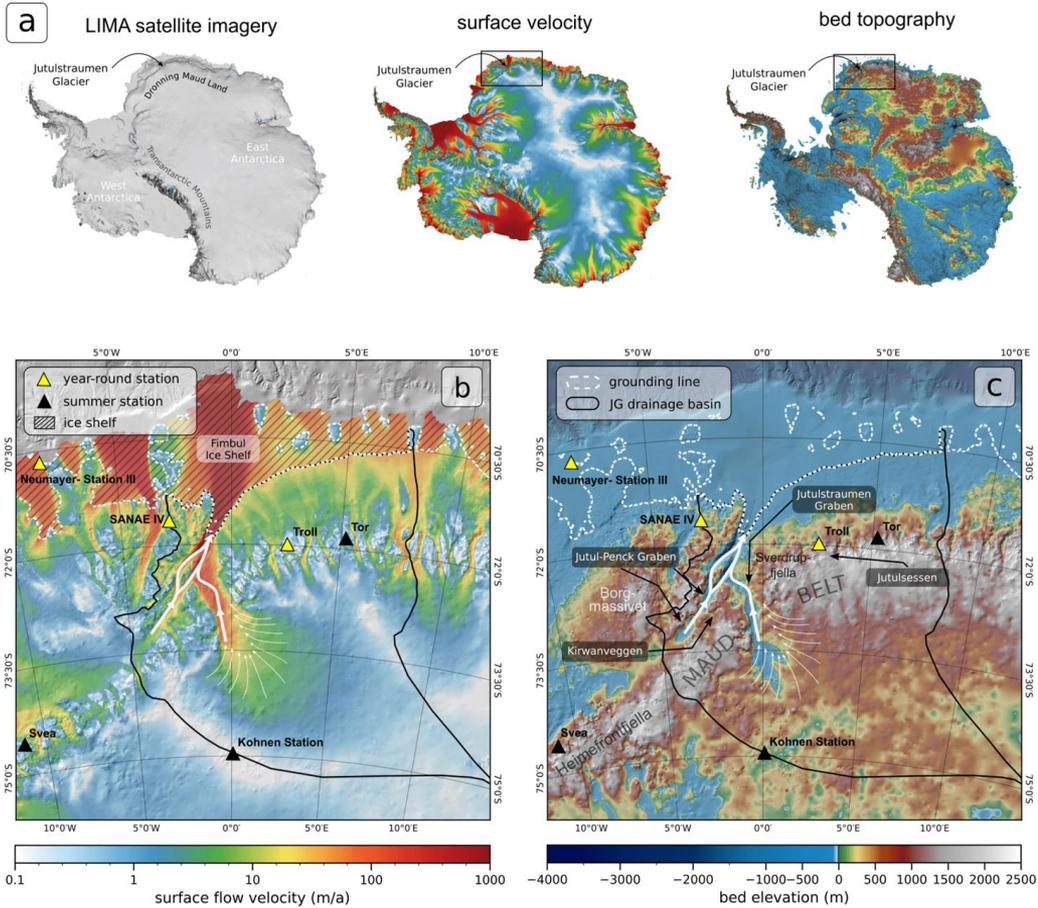


Ice-flow history and observations from the ice base of Jutulstraumen drainage basin (Antarctica)

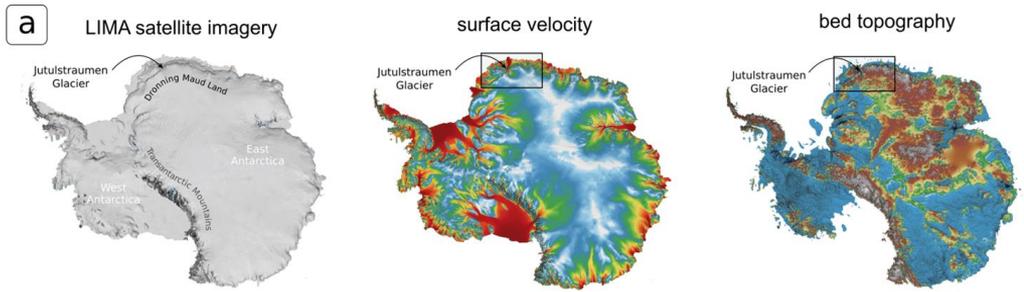


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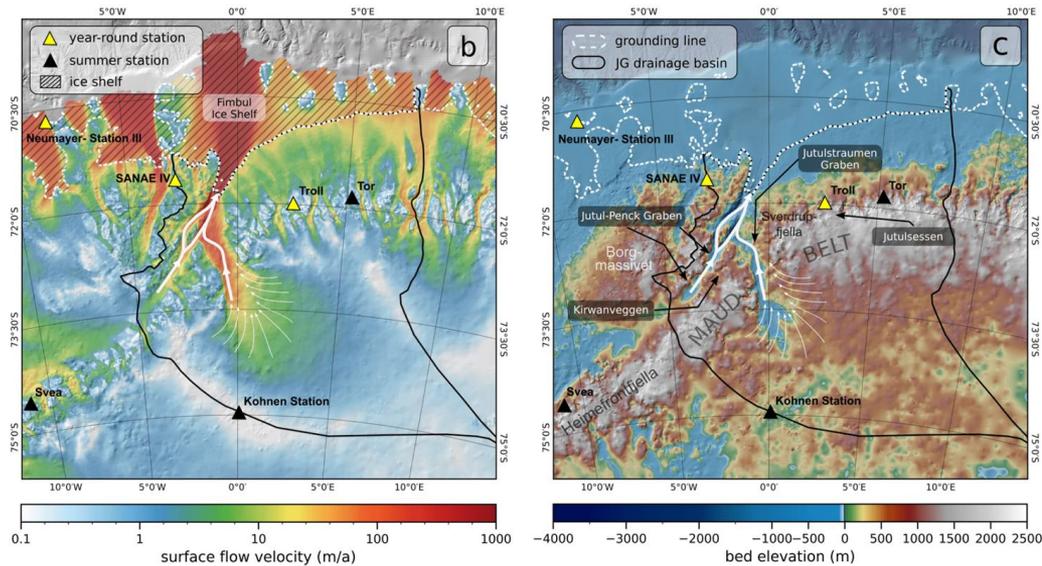
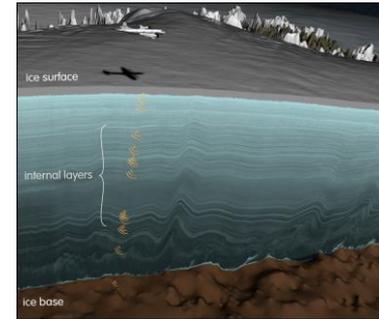
Study region and data



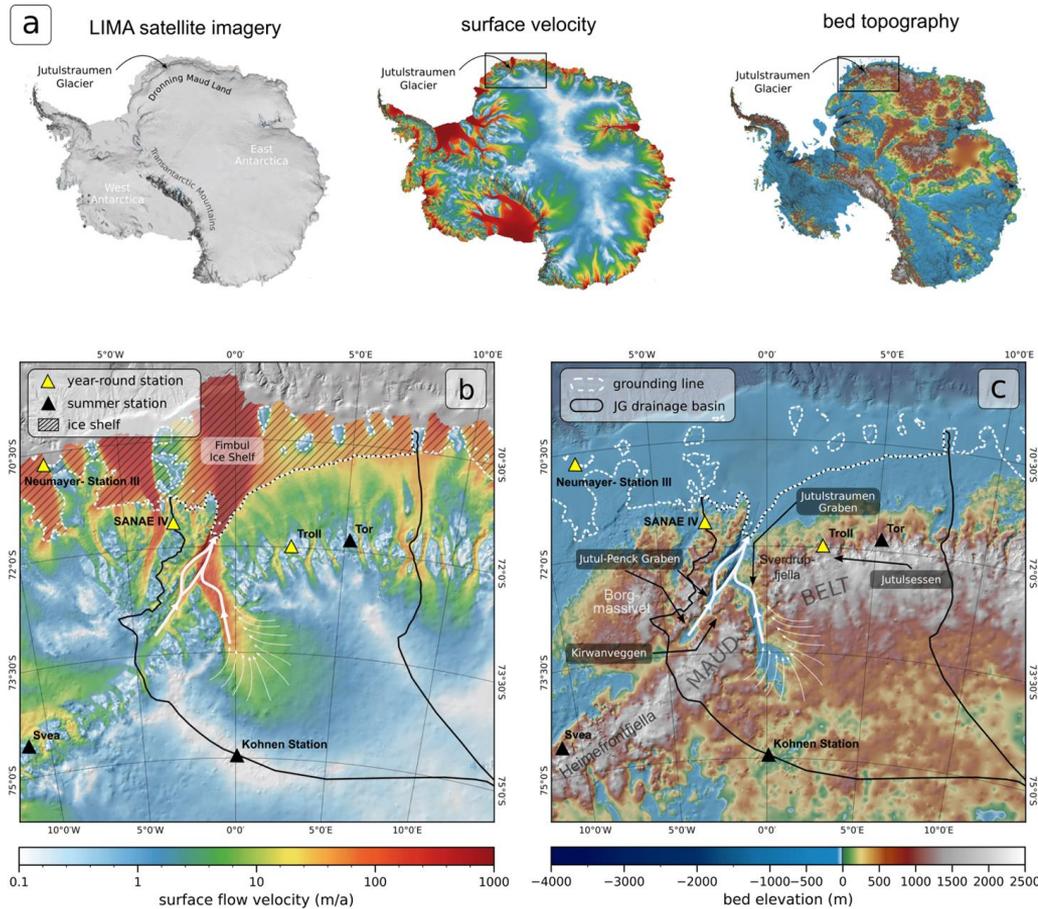
Study region and data



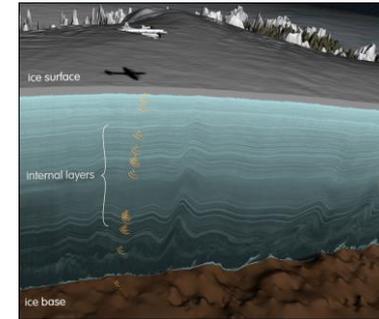
(1) Ice-penetrating radar data



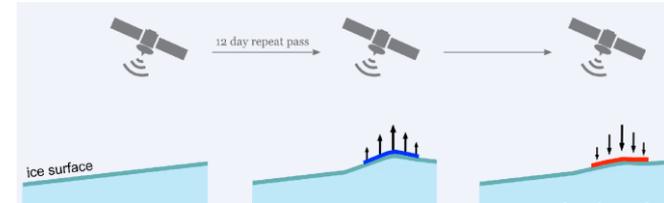
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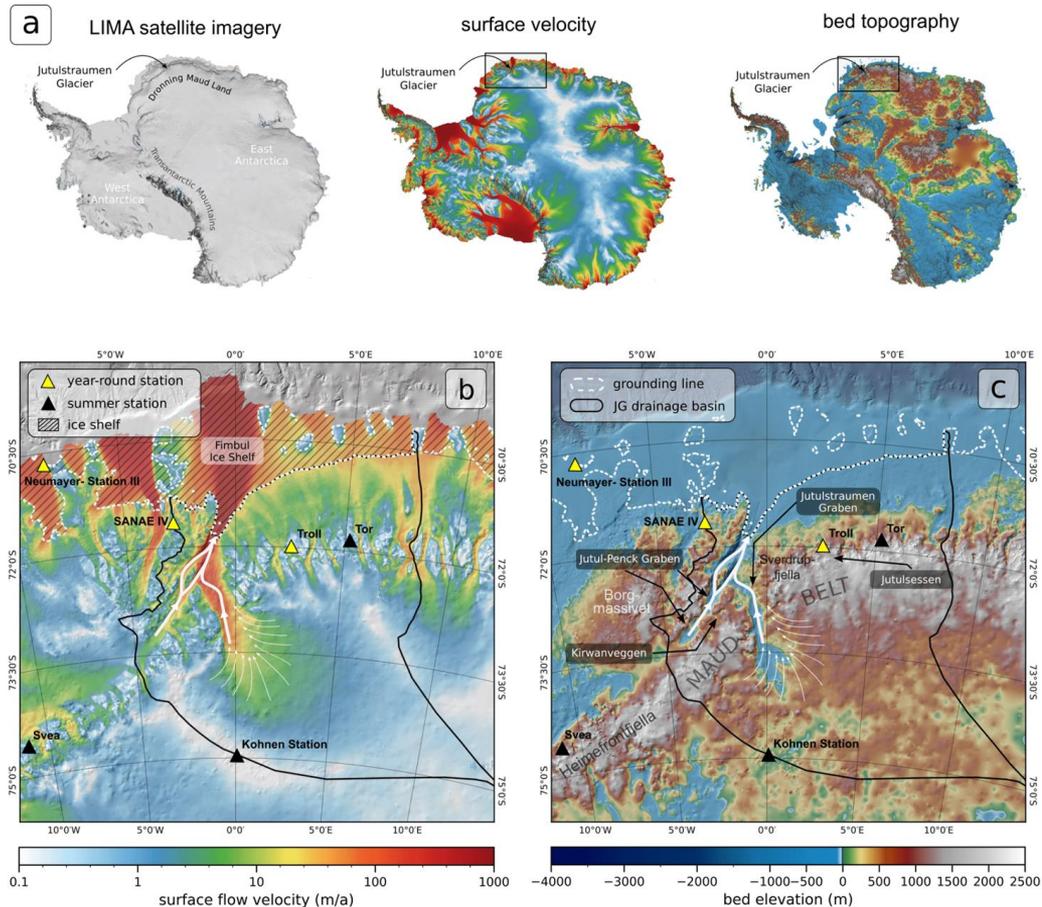
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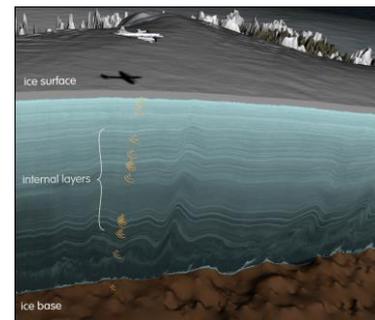
(2) Ice surface displacement (vertical) from DInSAR Sentinel-1 data



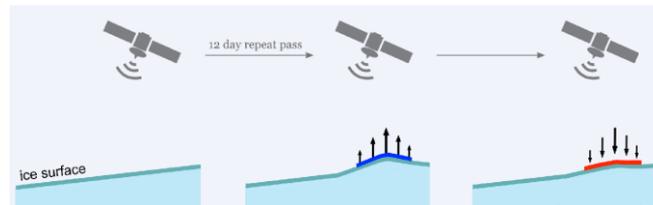
Study region and data



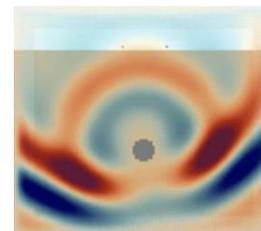
(1) Ice-penetrating radar data



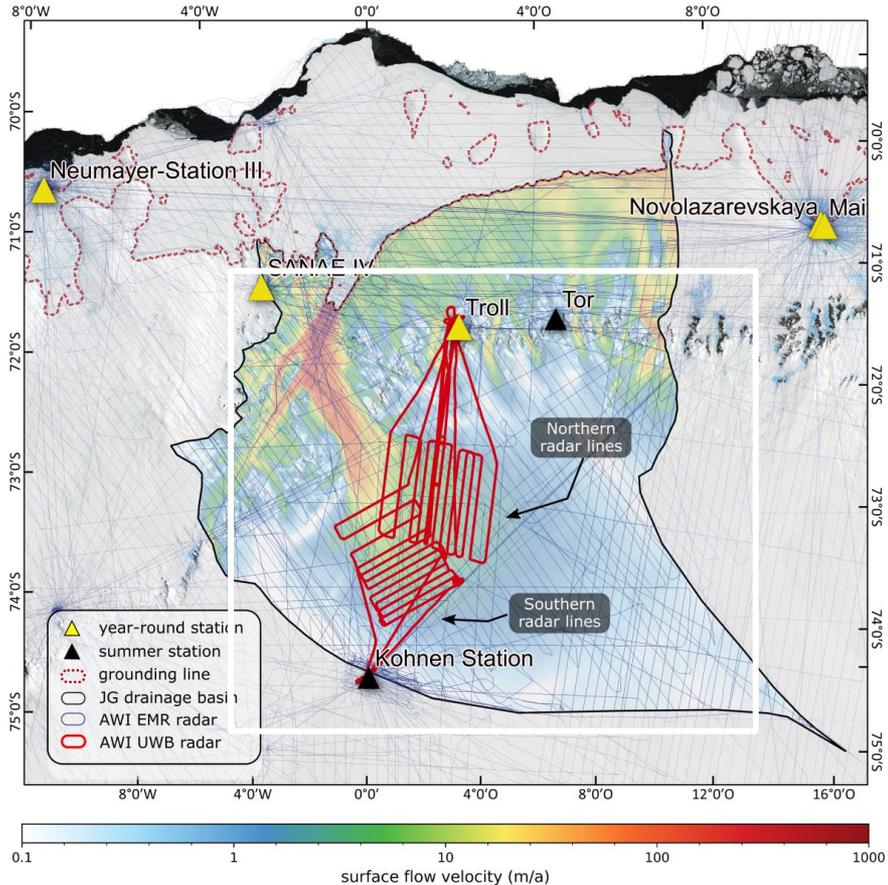
(2) Ice surface displacement (vertical) from DInSAR Sentinel-1 data



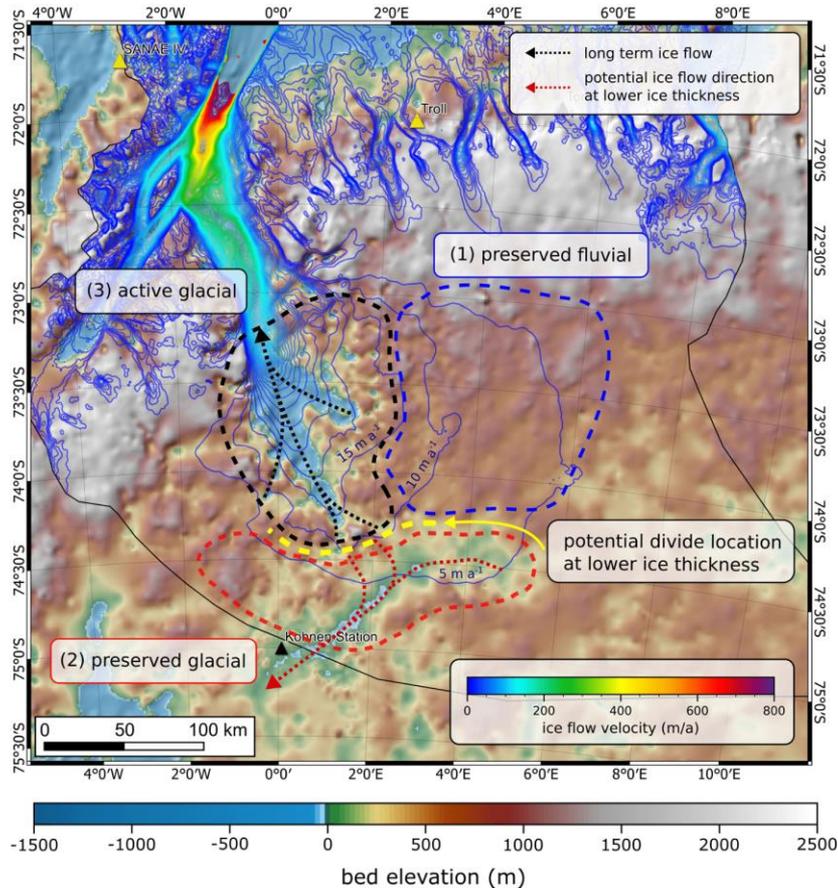
(3) EM waveform modeling with gprMax



Study 1



Valley analysis and landscape interpretation

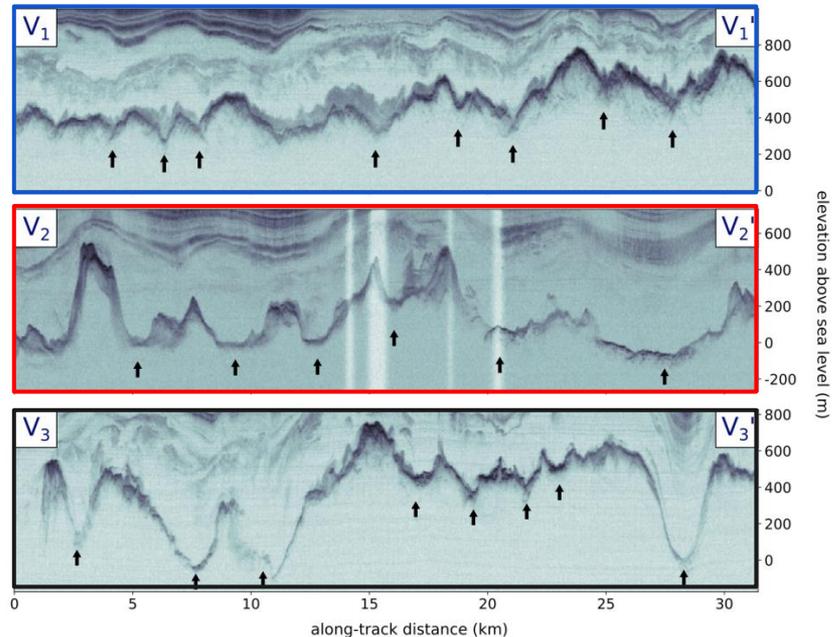


RESEARCH ARTICLE

ESPL WILEY

Preserved landscapes underneath the Antarctic Ice Sheet reveal the geomorphological history of Jutulstraumen Basin

Steven Franke¹ | Hannes Eisermann¹ | Wilfried Jokat^{1,2} |
 Graeme Eagles¹ | Jölund Asseng¹ | Heinrich Miller¹ | Daniel Steinhage¹ |
 Veit Helm¹ | Olaf Eisen^{1,2} | Daniela Jansen¹



Geophysical Research Letters

RESEARCH LETTER

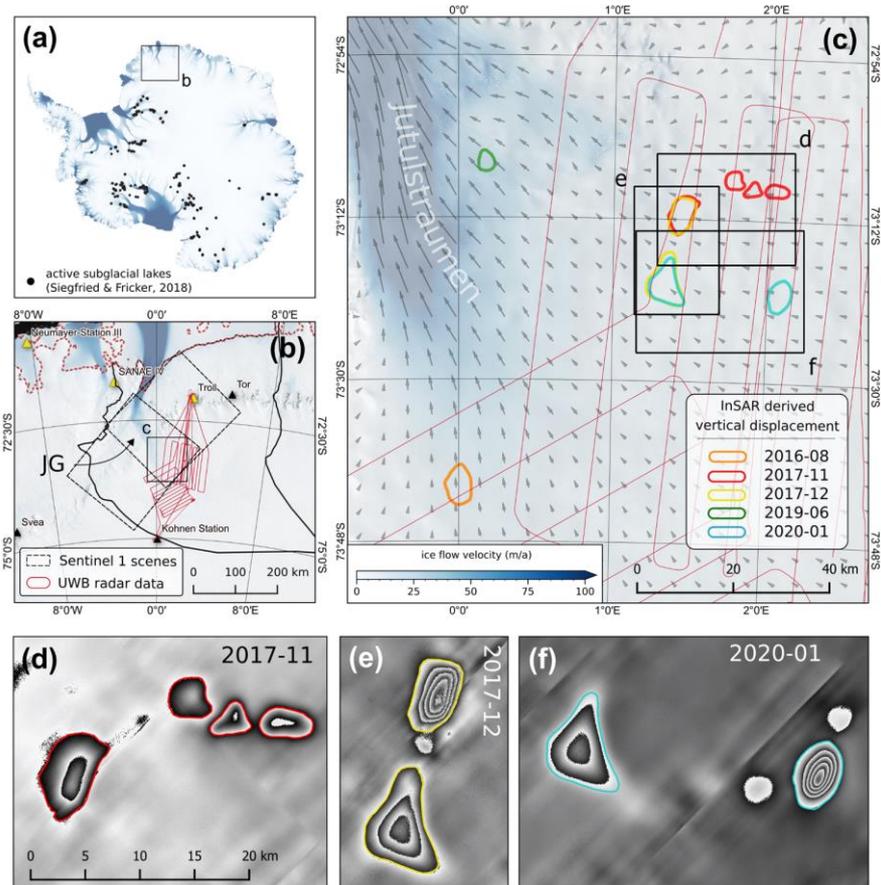
10.1029/2021GL094472

Steven Franke and Niklas Neckel contributed equally to this work.

Evidence of Cascading Subglacial Water Flow at Jutulstraumen Glacier (Antarctica) Derived From Sentinel-1 and ICESat-2 Measurements

Niklas Neckel¹, Steven Franke¹, Veit Helm¹, Reinhard Drews², and Daniela Jansen¹

¹Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany, ²Department of Geosciences, Eberhard Karls University Tübingen, Tübingen, Germany



Analysis of vertical ice-surface displacements

Geophysical Research Letters

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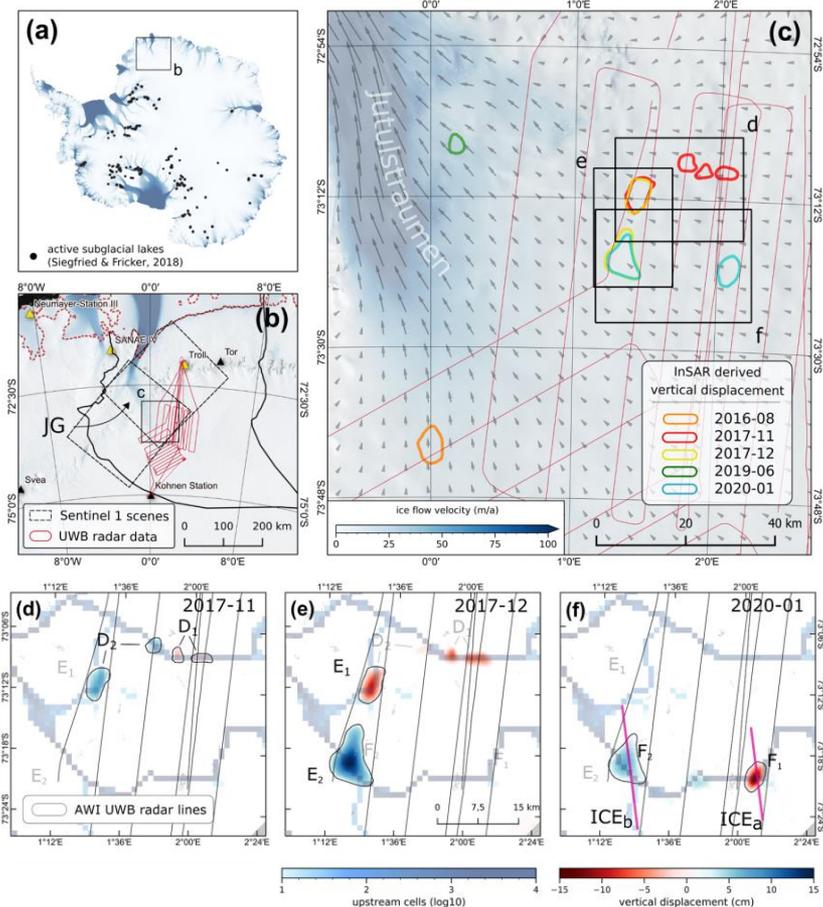
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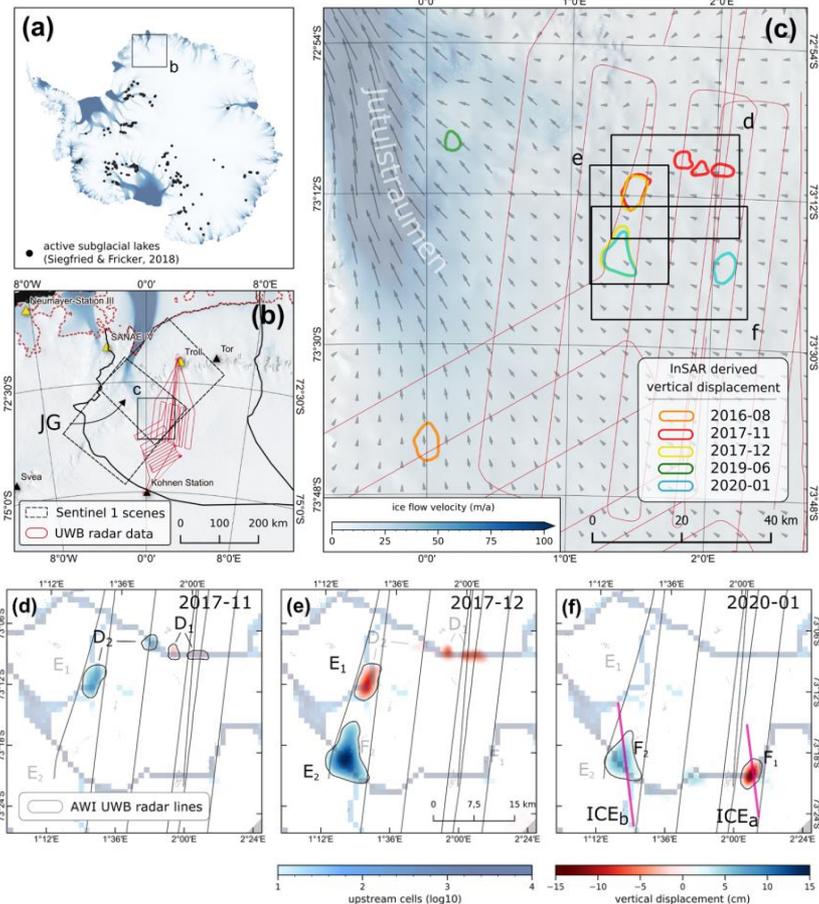
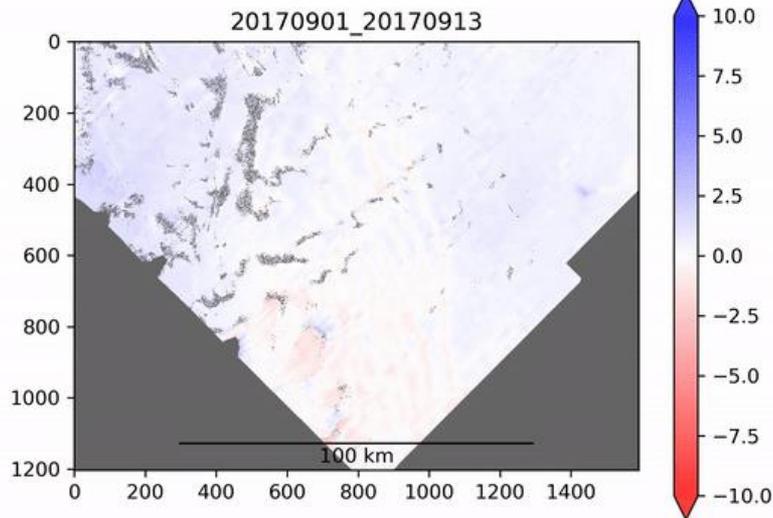
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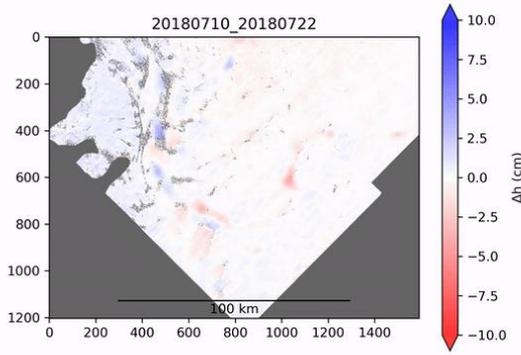
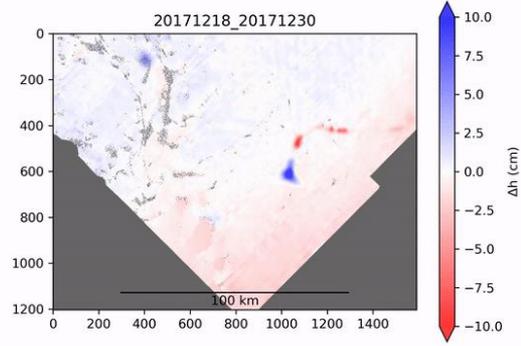
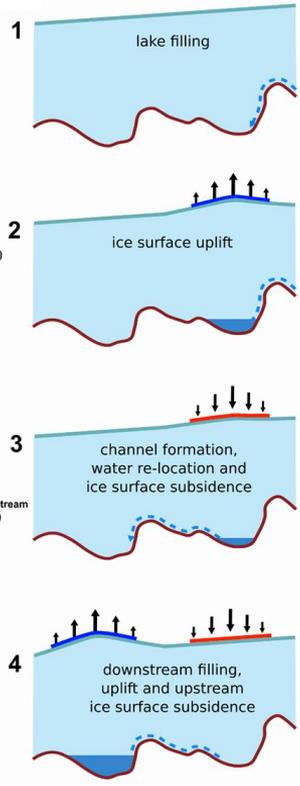
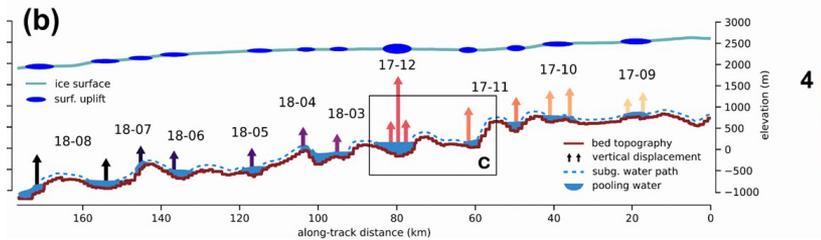
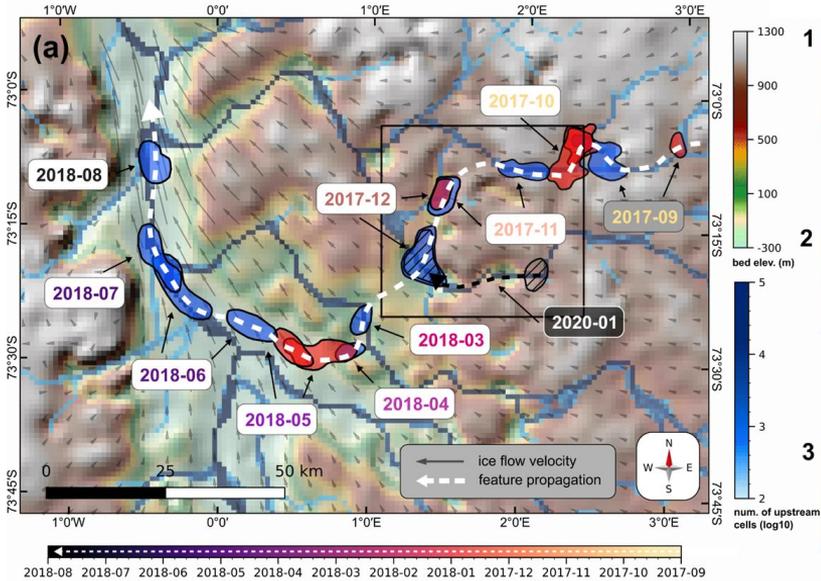
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Analysis of vertical ice-surface displacements



Outlook: EM waveform modeling

