



Thinning that starts at the terminus of Greenland outlet glaciers, where the ice meets the ocean, can spread into the interior over different distances, depending on the shape of the bed under each glacier (a). Glaciers in the mountains of East Greenland flow over steep drops in the bed called “knickpoints,” which prevent thinning from spreading far into the interior (c). Glaciers in the gentle topography of the Northwest don’t have steep knickpoints and can let thinning spread as far as the center of the ice sheet (b), meaning these glaciers can contribute over a longer time to sea-level rise.

Significance: Outlet glaciers in Northwest Greenland will discharge ice over a longer timespan than glaciers in the Southeast, helping to contextualize recent observations that the Northwest is the only region with increasing ice discharge. Ice discharge in the Northwest will continue to increase in the future, even without additional forcing. We highlight the importance of correctly modeling the smaller, often overlooked glaciers to better constrain sea-level rise projections.

Felikson, D., G. A. Catania, T. C. Bartholomaus, M. Morlighem, & B. P. Y. Noël (2020). Steep glacier bed knickpoints mitigate inland thinning in Greenland. *Geophysical Research Letters*, 48, e2020GL090112, doi: [10.1029/2020GL090112](https://doi.org/10.1029/2020GL090112).

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