

## Estimates of cliff calving rates for present day and glacial configuration of the Antarctic Ice Sheet

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We present a first application of the cliff calving law recently proposed (https://doi.org/10.5194/tc-2018-205) to modern and glacial ice sheet configurations of the Antarctic Ice Sheet. Topography and ice thickness data are used to calculate upper and lower limits on potential cliff calving rates. The upper limit is calculated by assuming current ice thicknesses at the calving front, while the lower limit is calculated by assuming that ice thins to floatation thickness before it reaches the calving front. Largest potential cliff calving rates in the lower limit can be inferred in the deepest submarine troughs and basins: in Pine island and Thwaites glaciers, in the tributary glaciers of the Ronne-Filchner Ice Shelf, and the Wilkes and Aurora basin.