



## **Subglacial flood leaves Antarctica**

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Jökulhlaups, or periodic subglacial floods, have been well documented from beneath moderate-sized (~104 km<sup>2</sup>) ice caps in Iceland due to active volcanism there, and present an immediate hazard to nearby communities. In the absence of direct observations, the possibility that far greater outbursts - with the potential to impact patterns of global climate on millennial timescales - may arise from beneath Earth's giant (~106 km<sup>2</sup>) ice sheets has remained speculative. We present evidence from a series of orbiting satellite radar altimeters that a massive subglacial flood left Antarctica via the base of a major outlet glacier in early 2003. Because the discharge was sudden in relation to the period of water build-up, the climate impact of freshwater fluxes from Antarctica ought now to be considered in terms of a rapid periodicity.