

Forget WAIS, Totten is submarine too

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The Totten Glacier (TG) in East Antarctica drains an ice volume greater than the entire West Antarctic Ice Sheet and is grounded, on average, 325 m below sea level. Despite recent increases in snow accumulation, the TG is losing mass due to an ice dynamic perturbation affecting its $\sim 70,000 \text{ km}^2$ central trunk. Since 1992, the TG has lost 10 ± 2 Gigatons of ice each year. The trigger for ice drawdown occurred ~ 200 years ago and predates the onset of global climate warming, suggesting that the retreat of other Antarctic glaciers may share similarly distant origins.