

Warm ocean is eroding West Antarctic Ice Sheet

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Satellite radar measurements show that ice shelves in Pine Island Bay have thinned by up to 5.5 m yr⁻¹ over the past decade. The pattern of shelf thinning mirrors that of their grounded tributaries - the Pine Island, Thwaites and Smith glaciers - and ocean currents on average 0.5 °C warmer than freezing appear to be the source. The synchronised imbalance of the inland glaciers is the result of reduced lateral and basal tractions, and the drawdown of grounded ice shows that Antarctica is more sensitive to changing climates than was previously considered.