

# Active volcano threat to Antarctica

While analysing Antarctic water samples, scientists have discovered a substantial volcanic heat source beneath Pine Island Glacier

Cape Horn,  
South America

ICE SHEET

W E S T   A N T A R C T I C A



Pine Island Glacier

Ice sheet  
lifted  
off

BEDROCK

## SUBGLACIAL HEAT SOURCE

Volcanic heat  
flux exiting  
cavity beneath  
Pine Island Ice  
Shelf: **2,500MW**  
(25 times more thermal energy  
than dormant volcano)



Discovery indicates additional  
source of heat to melt ice,  
lubricate its passage toward  
sea, and add to melting from  
warming ocean waters

## Pine Island Glacier

Losing ice mass faster than other  
glaciers in **West Antarctic Ice Shelf**



Two known active volcanoes