

# Crack in Antarctic glacier to yield huge iceberg

NASA scientists are witnessing the birth of a massive iceberg after discovering a deep rift in Antarctica's Pine Island Glacier. The eventual iceberg would cover about 880 sq km – an area larger than New York City

**Pine Island Glacier (PIG):** Among largest and fastest-moving glaciers in Antarctica, draining around 10% of all ice flowing out of West Antarctic Ice Sheet

After iceberg breaks off, PIG ice shelf will have receded further than at any point since 1940s, when it was first mapped

Westerly winds

ANTARCTIC CIRCLE

EAST ANTARCTICA

South Pole

WEST ANTARCTICA

SOUTHERN OCEAN

1,500 miles

2,400km

PIG ice tongue floats 50km into sea, making it vulnerable to melting

Depth: 60m

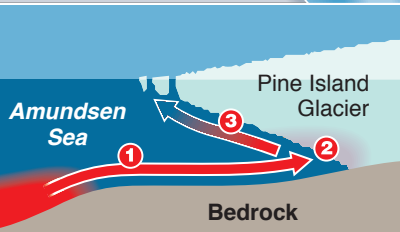
Rift formed late Sep / early Oct

Total length: 30km

Football pitch to scale

ICE LOSS

**1** Gusts of increasingly stronger westerly winds push cold surface waters away from continent, allowing warmer waters to rise



**2** Upwelling warm waters spill along sea floor to where glacier rises from bedrock, causing it to melt

**3** Warm salty waters and fresh glacier water combine – lighter mixture rises along underside of ice shelf, melting more ice as it moves back to ocean

Width: 80m – widening by 2 metres a day