Telegraph.co.uk

One of Antarctica's largest glaciers 'thinning four times faster than ten years ago'

One of Antarctica's largest glaciers is thinning four times faster than it was ten years ago, researchers have warned.

Aislinn Simpson Published: 8:28AM BST 14 Aug 2009

Satellite measurements of the Pine Island glacier in West Antarctica have revealed that the surface of the ice is dropping at a rate of up to 16 metres a year and since 1994, has lowered by as much as 90 metres.

Fifteen years ago, it was estimated that the rate of ice melt would see the glacier disappear within 600 years. Now, the data suggests it could be gone in little more than 100.



Satellite measurements of the Pine Island glacier in West Antarctica have revealed the surface of the ice is dropping at a rate of up to 16 metres a year and since 1994

Related Articles

Swiss villagers pray for glacier

'I wish environmentalism were as much a part of a woman's gender as shopping is'

Scientists make 'artificial leaf' to generate clean power

Global warming causing birds to shrink

Scientists map Alps-scale mountain range under Antarctic ice

Scientists find bigger than expected polar ice melt

If the Pine Island glacier collapses, it would have major implications for rising sea levels and could be followed by the rapid disintegration of the West Antarctic ice sheet.

Professor Andrew Shepherd of Leeds University, one of the authors of a report in the publication Geophysical Research Letters, said that the melting from the centre of the glacier would add about three centimetres to global sea levels.

"But the ice trapped behind it is about 20-30cm of sea level rise and as soon as we destabilise or remove the middle of the glacier we don't know really know what's going to happen to the ice behind it," he told BBC News.

"This is unprecedented in this area of Antarctica. We've known that it's been out of balance for some time, but nothing in the natural world is lost at an accelerating exponential rate like this glacier."

The alarming revelations came as scientists working in the Arctic reported evidence of a dramatic change in the levels of sea ice and large cracks appearing in the large Petermann glacier.

One of Antarctica's largest glaciers 'thinning four times faster than ten years ago' - Telegraph

Professor Jason Box of Ohio State University, who is on-board a Greenpeace vessel studying the northwestern part of Greenland, said he and his team found much less sea ice than expected in the Nares Strait between Greenland and Canada.

The team set up time lapse cameras to monitor the Petermann glacier and what they saw led them to fear that a major part of it could break off imminently.

"The science community has been surprised by how sensitive these large glaciers are to climate warming," Professor Box told BBC News. "First it was the glaciers in south Greenland and now as we move further north in Greenland we find retreat at major glaciers. It's like removing a cork from a bottle."

Hot topics

- Fantasy Football
- Swine Flu
- Football
- USPGA
- The Ashes
- Edinburgh Festival 2009
- Weather
- News
- UK News
- World News
- Obituaries
- Travel
- Health
- Jobs
- Sport
- The Ashes
- Football
- Fantasy Football
- Culture
- Motoring
- Dating
- Finance
- Personal Finance
- Markets
- Economics
- Fashion
- Property
- Puzzles
- Comment
- Letters
- My Telegraph
- Blogs
- Technology

One of Antarctica's largest glaciers 'thinning four times faster than ten years ago' - Telegraph

- Gardening
- Offers
- Contact Us
- Privacy Policy
- Advertising
- A to Z
- Announcements
- Marketplace
- Promotions
- RSS feeds
- Widgets
- Mobile
- Epaper
- Reader Prints
- Subscribe
- Syndication

© Copyright of Telegraph Media Group Limited 2009

Terms and Conditions Today's News Archive Style Book Weather