

Antarctic glacier thinning at alarming rate

August 14 2009



(PhysOrg.com) -- The thinning of a gigantic glacier in Antarctica is accelerating, scientists warned today.

The Pine Island Glacier in West [Antarctica](#), which is around twice the size of Scotland, is losing ice four times as fast as it was a decade years ago.

The research, published in the journal [Geophysical Research Letters](#), also reveals that ice thinning is now occurring much further inland. At this rate scientists estimate that the main section of the glacier will have disappeared in just 100 years, six times sooner than was previously thought.

The Pine Island Glacier is located within the most inaccessible area of Antarctica - over 1000 km from the nearest research base - and was for many years overlooked. Now, scientists have been able to track the glacier's development using continuous [satellite measurements](#) over the past 15 years.

"Accelerated thinning of the Pine Island Glacier represents perhaps the greatest imbalance in the cryosphere today, and yet we would not have known about it if it weren't for a succession of satellite instruments," says Professor Andrew Shepherd, a co-author of the research from the School of Earth and Environment at the University of Leeds.

"Being able to assemble a continuous record of measurements over the past 15 years has provided us with the remarkable ability to identify both subtle and dramatic changes in ice that were previously hidden," he adds.

Scientists believe that the retreat of [glaciers](#) in this sector of Antarctica is caused by warming of the surrounding oceans, though it is too early to link such a trend to global warming.

The 5,400 km squared region of the Pine Island Glacier affected today is big enough to impact the rate at which sea level rise around the world.

"Because the Pine Island Glacier contains enough ice to almost double the IPCC's best estimate of 21st century [sea level rise](#), the manner in which the glacier will respond to the accelerated thinning is a matter of great concern " says Professor Shepherd.

Source: University of Leeds ([news](#) : [web](#))

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