



Global Warming Blamed for Antarctic Ice Shelf Collapse

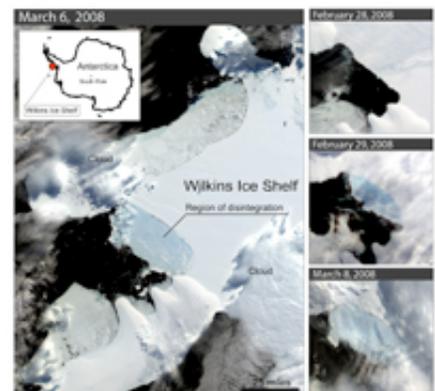
By Rosanne Skirble
Washington, DC
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Satellite images in recent weeks show that a large chunk of an Antarctica ice self has collapsed. Scientists say it is a sign of rapid climate change in a region that has experienced the greatest temperature increases on earth.

The Wilkins Ice Shelf is a large and thick plate of ice on the southwest Antarctic Peninsula. It is one of a string of ice shelves that has collapsed in the region over the last 30 years.

Ted Scambos is a glaciologist with the **National Snow and Ice Data Center at the University of Colorado**, Boulder. He says there was a curious pattern in the Wilkins collapse. "The first iceberg that broke off was perfectly normal, but behind it this area began to slice off long chunks, sort of like long slices of bread basically off of a loaf, so tall and narrow that they actually topple over into the water, and this is really unusual."



These satellite images show the Wilkins Ice Shelf as it began to break up. The large image is from March 6; the images at right, from top to bottom, are from February 28, February 29, and March 8, 2008



The National Snow and Ice Data Center is monitoring 19 ice shelves in Antarctica year round

Scambos says this indicates that the ice shelf is in retreat. He says the shelf – which floats on the ocean but is attached to land – could break up entirely within a few years because of warming in the Antarctic Peninsula. "That pattern is pretty clearly related to global warming and the effects that is having in the Antarctic air circulation pattern."

The collapse of some 400 square kilometers from the 14,000 square kilometer ice sheet won't have any immediate impact. But, Scambos says, understanding the process is key to being able to predict how sea level will change in the future. "These ice shelves that fringe Antarctica actually act to hold back some of the ice that is on the continent and slow down glaciers that

are flowing into the ocean."

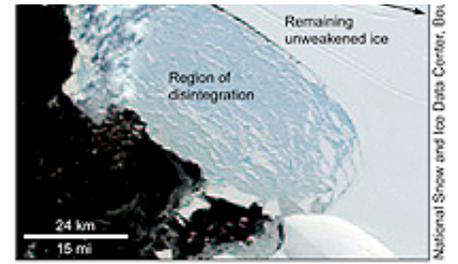
With Antarctic summer coming to a close, Scambos doesn't expect that Wilkins will collapse any further this season. Nonetheless, scientists will continue to monitor the threatened ice shelf as global warming marches southward. "We want to try to



turn around the effects of greenhouse gases over the next two decades before we do have to worry about significant amounts of sea level rise."

The National Snow and Ice Data Center studies both polar regions. Scambos says while the arctic is showing more effects from global warming, the potential for sea level rise from Antarctic melts is far greater.

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During the break-up the Wilkins Ice Shelf broke into a sky-blue pattern of exposed deep glacial ice