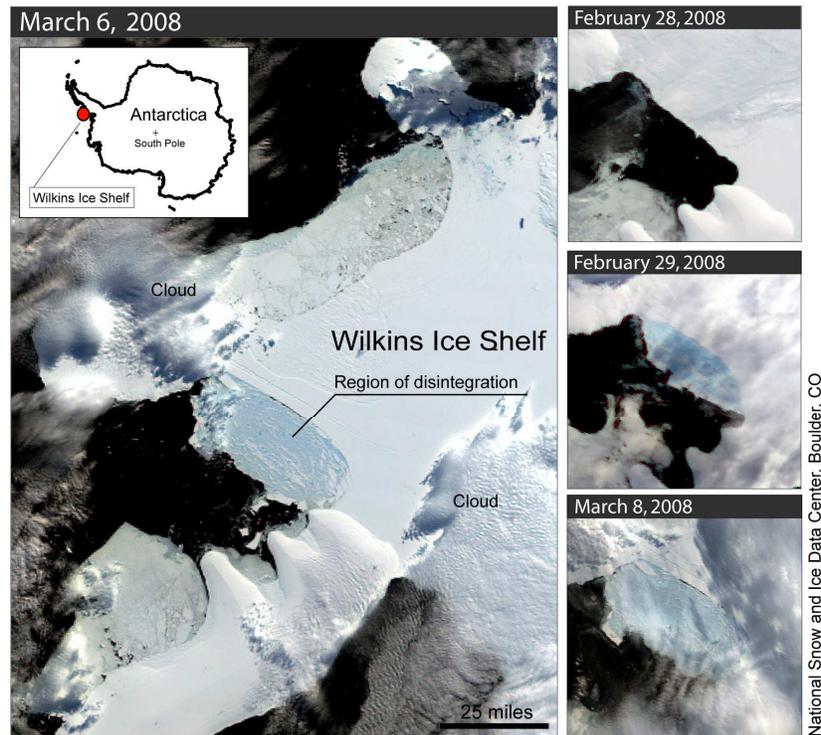


## “Huge Antarctic ice-sheet disintegrates”



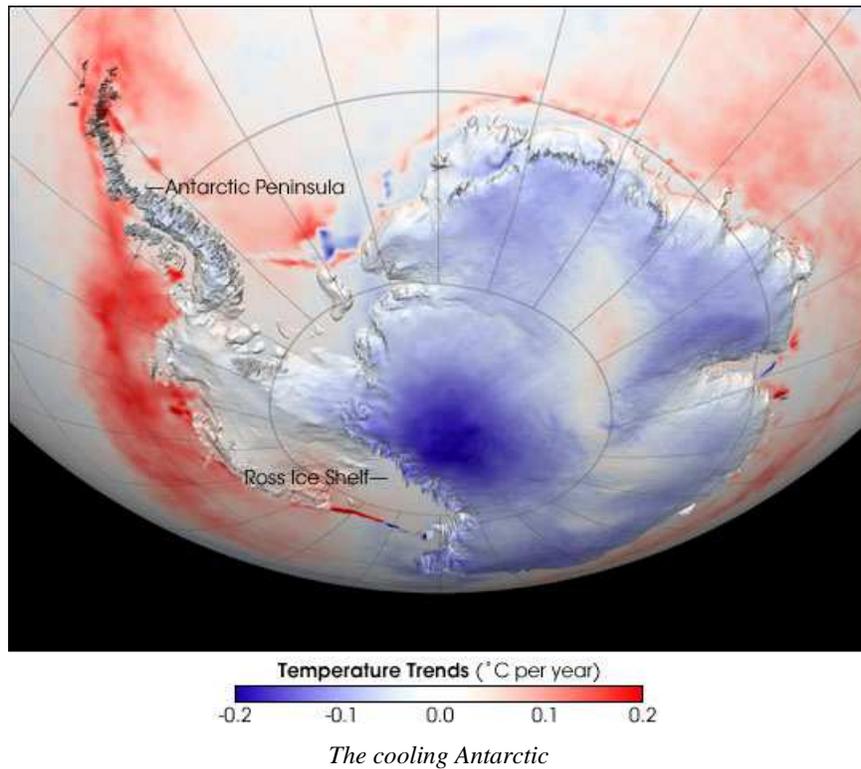
**The scare:** “A 13,680-square-kilometer (5,282-square-mile) ice shelf, part of the Wilkins Ice Shelf, has begun to collapse because of rapid climate change in the fast-warming Antarctic Peninsula. The Wilkins is one of a string of ice shelves that have collapsed in the West Antarctic Peninsula in the past 30 years. The Larsen B became the most well-known of these, disappearing in just over thirty days in 2002. The Prince Gustav Channel, Larsen Inlet, Larsen A, Wordie, Muller, and the Jones Ice Shelf collapses also underscore the unprecedented warming in this region of Antarctica.”

**The truth:** The Wilkins Ice Shelf, like many of the ice shelves surrounding the Antarctic Peninsula, was not there in the mediaeval warm period, and may also have been absent in the Roman warm period and in the 2000-year-long Holocene Climate Optimum, when global temperatures were considerably higher than they are today. Lead Scientist Ted Scambos of the US National Snow and Ice Data Center, who first spotted the disintegration in March, said, “We believe the Wilkins has been in place for at least a few hundred years.” This implies that it has indeed been absent before.

Media reports usually fail to admit that the Antarctic Peninsula represents just 2% of the total Antarctic land mass, and a still smaller proportion of its ice mass. The seven ice shelves that have already disintegrated on the Atlantic Peninsula represent a combined area 1/55 the size of Texas.

The ice-shelf disintegration is nothing new. Very large icebergs break away from Antarctica all the time, to be replaced again in colder times. Whaling ships’ logs provide some of the earliest climate data available on Antarctica: in those logs, very large icebergs hundreds of miles long have been recorded in previous centuries.

The media usually fail to report that in the past half-century since regular Antarctic-wide temperature records were first kept the Antarctic as a whole has been cooling (Doran *et al.*, 2002).

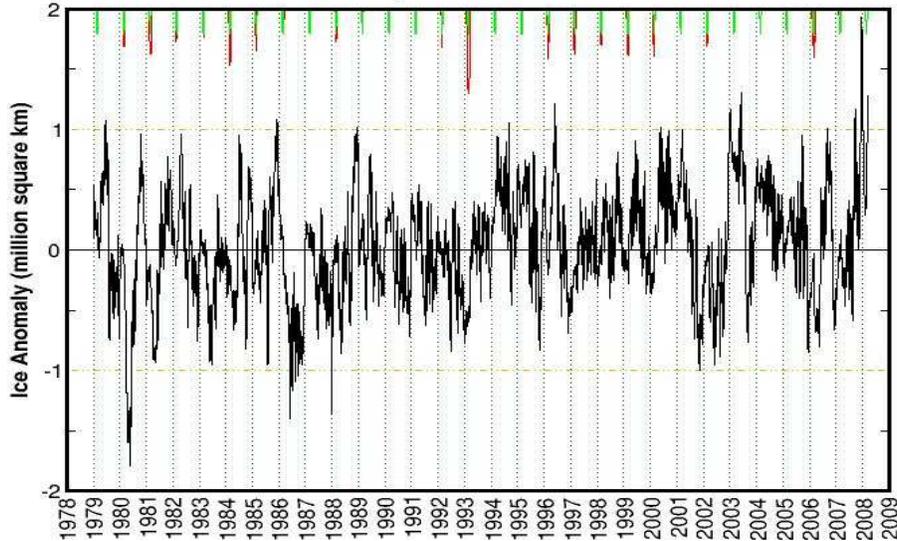


The warming, as the graphic shows, is largely confined to the seas surrounding the Antarctic, and is particularly pronounced in the region of the Antarctic Peninsula. Undersea volcanic activity may be partly to blame. Another factor not usually mentioned in the media is the warming effect of the recently-ended 70-year Solar Grand Maximum, during which the Sun was more active, and for longer, than at almost any similar period in the 11,400 years since the end of the last Ice Age (Usoskin *et al.*, 2003; Hathaway, 2004; Solanki *et al.*, 2005). Multidecadal ocean changes are also a likely factor.

The media are also usually silent about the fact that there has been more sea ice in the Antarctic recently than at any previous time since satellite records were first kept 30 years ago:

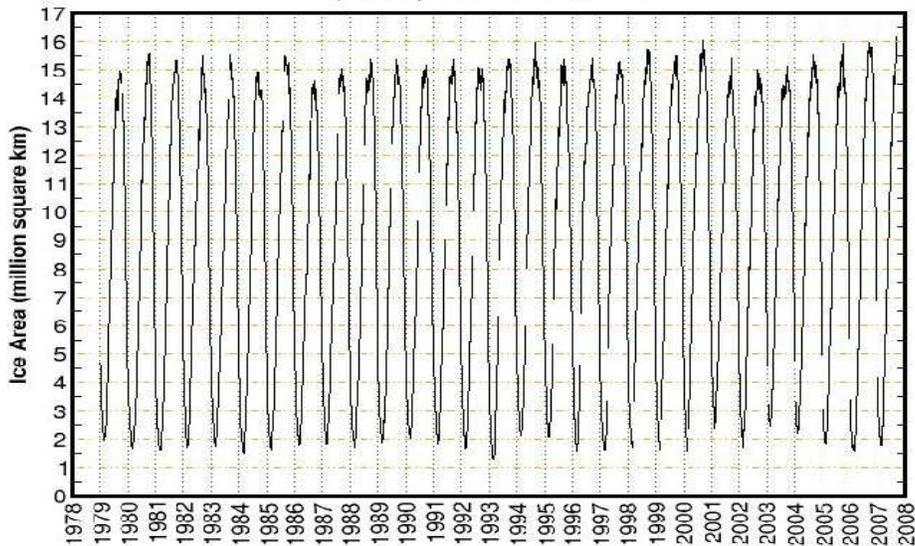
## Southern Hemisphere Sea Ice Anomaly

Anomaly from 1979-2000 mean



## Southern Hemisphere Sea Ice Area

Data provided by NSIDC: NASA SMMR and SSM/I



*Antarctic sea-ice extent is now at record levels. The trend, in keeping with the general cooling of Antarctica over the past half-century, is generally upward.*

**Conclusion:** The media that reported the Wilkins disintegration scare did not give all the facts. There will be no further disintegration until January 2009, if then. Melting ice shelves add not a millimetre to sea level: the ice is already floating. It is doubtful whether anthropogenic effects have more than a minuscule effect on Antarctic ice. Solar, oceanic and volcanic changes are likelier influences. There is more ice in Antarctica than 50 years ago. Moerner (2004) says there is no reason to suppose that sea level will rise this century by much more than the 8 inches observed in the 20<sup>th</sup> century. The IPCC says sea level will only rise by 20ft after several millennia, chiefly through natural causes. **End of scare.**