



REUTERS

04/15/2013

Summer Ice Melt In Antarctica Is At The Highest Point In 1,000 Years, Researchers Say

by James Grubel

CANBERRA (Reuters) - The summer ice melt in parts of Antarctica is at its highest level in 1,000 years, Australian and British researchers reported on Monday, adding new evidence of the impact of global warming on sensitive Antarctic glaciers and ice shelves.

Researchers from the Australian National University and the British Antarctic Survey found data taken from an ice core also shows the summer ice melt has been 10 times more intense over the past 50 years compared with 600 years ago.

"It's definitely evidence that the climate and the environment is changing in this part of Antarctica," lead researcher Nerilie Abram said.

Abram and her team drilled a 364-metre (400-yard) deep ice core on James Ross Island, near the northern tip of the Antarctic Peninsula, to measure historical temperatures and compare them with summer ice melt levels in the area.

They found that, while the temperatures have gradually increased by 1.6 degrees Celsius (2.9 degrees Fahrenheit) over 600 years, the rate of ice melting has been most intense over the past 50 years.

That shows the ice melt can increase dramatically in climate terms once temperatures hit a tipping point.

"Once your climate is at that level where it is starting to go above zero degrees, the amount of melt that will happen is very sensitive to any further increase in temperature you may have," Abram said.

Robert Mulvaney, from the British Antarctic Survey, said the stronger ice melts are likely responsible for faster glacier ice loss and some of the dramatic collapses from the Antarctic ice shelf over the past 50 years.

Their research was published in the Nature Geoscience journal.
