

The propaganda about the Arctic continues – no sense of history

By Dr. Tim Ball

In an article which appeared in last Sunday's Sacramento Bee paper, among other propaganda, was this assertion, by "Pacific Council on International Policy's Climate Change Adaptation Task Force":

"Scientists, for example, have only recently been able to measure with certainty what has long been more generally known - that the Arctic ice cap was dramatically declining. The thickness of that ice turns out to have shrunk 50 percent during the past 50 years." (H/T L.Cenatto)

It is correct that we have only had reasonably accurate measures of the ice area since 1980. The satellite went up in 1978 but the first two years of data are unreliable as they worked to establish procedures and determine accuracy. Since then various computer models have used different methods to measure and display what is going on. There is still disagreement. Ice thickness was never a measure of the satellite, although they have tried to distinguish between old, young and new ice.

The argument about thinning is rubbish and based on the original ice thickness measurements taken by USS Sargo traversed under the ice in 1960. It followed the surfacing at the North Pole by [USS Nautilus](#) the first nuclear submarine in 1958.

The interest and experiments were driven by the discovery that Soviet submarines were getting into the North Atlantic by transiting under the ice and then passing through the deepest channel out of the Arctic Basin, the East Greenland Channel, thus bypassing the submarine and air barrier set up between Iceland and Scotland. Ironically we now have access to the Russia material but nobody pays much attention, but that has been the course of the climate debate all along ([here](#)).

An [early assessment](#) of the situation was produced by Fritz Koerner.

In 1999, a second transit measured ice thickness again using US submarines. As usual the [New York Times](#) was stoking the warming fires.

"The research involved measurements of sea ice thickness made by upward-looking sonar aboard naval submarines operating under the ice sheet. The first period of data began in 1958 with the first nuclear submarine, the United States' Nautilus, and concluded with a cruise by H.M.S. Sovereign in 1976. The second data set was collected by American vessels from 1993 to 1997. Dr. Rothrock and two colleagues, Y. Yu and G. A. Maykut of the University of Washington, compared data from the two periods at 29 points where the courses of submarines in the 1990's intersected with the courses of those in the earlier period."

This became the main source of the thinning scare. The problems with the research include;

1. The submarines did not follow the same route.
2. They used different measuring equipment; one was a sideways scanning system that determined the bottom of the ice and then they estimated the thickness. The other was a vertical system that determined thickness in a different way.
3. The transits were made in different months and Arctic ice changes are naturally dramatic from month to month. For example, some 65,000 km of ice melts or forms daily.
4. Ice thickness is not just due to atmospheric temperatures but determined by water temperatures among other factors. One of these is the weight of the ice which varies with snowfall that pushes the ice down into the ocean so it melts. The ice thickness is limited by this and the only way you get substantially thicker ice is when the slabs of ice collide and cause massive ridges.
5. The winters in 1960 were naturally much colder and snowier than in 1999 and the warming was not due to CO2 but increased solar activity..

Following the US transits the British Navy did some measures in 2004 ([here](#)).

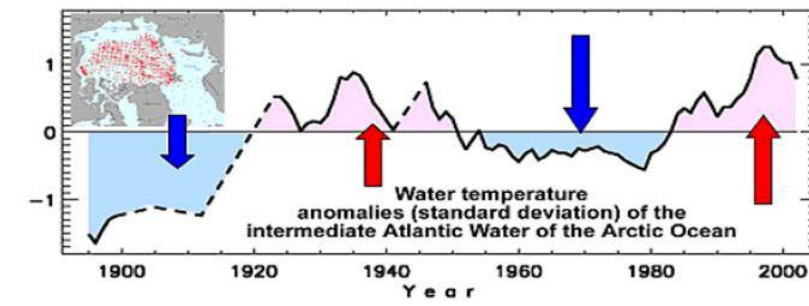
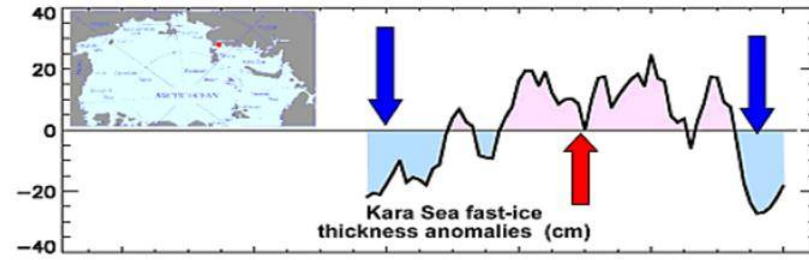
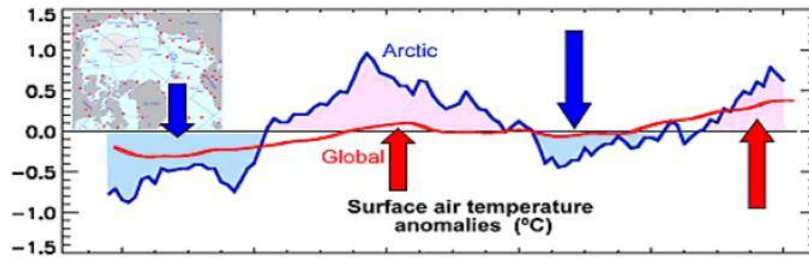
By then the impact of ocean currents and transport of warmer water into and under the ice was being officially acknowledged ([here](#) and [here](#)).

Of course none of what is going on today is outside long term variation in ice cover. Consider [the report](#) from the Royal Society to the Admiralty in 1817.

Ice melting and thinning are more of the out of context exploitation of people's fears and lack of knowledge or understanding. (Icecap Note: Tamino included)

See post [here](#).

Icecap Note: See also [this analysis](#) by the International Arctic Research Center.



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