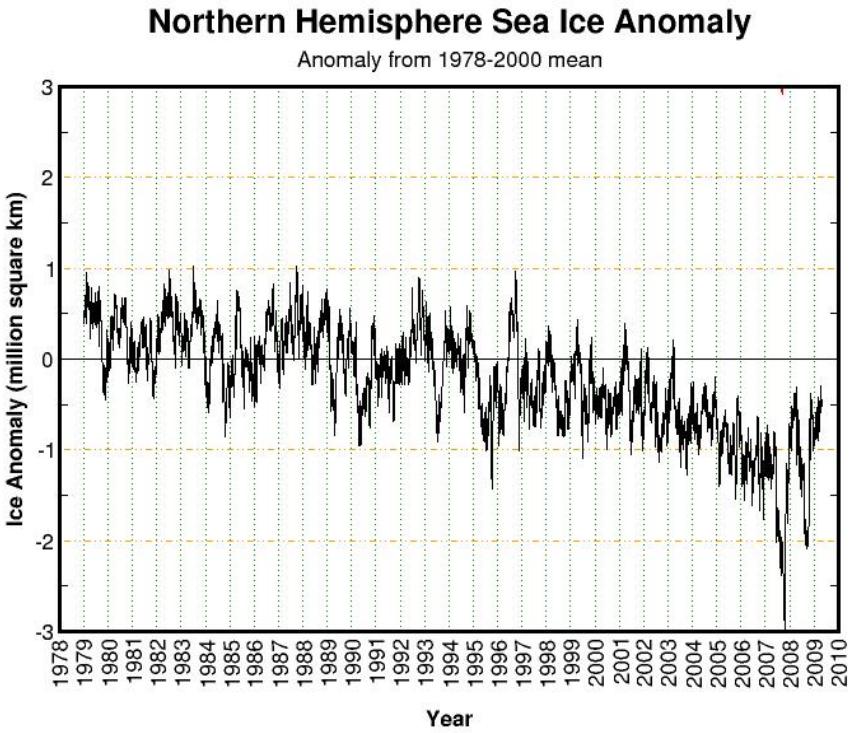
ARCTIC AND ANTARTCIC UPDATE AS OF EARLY MAY

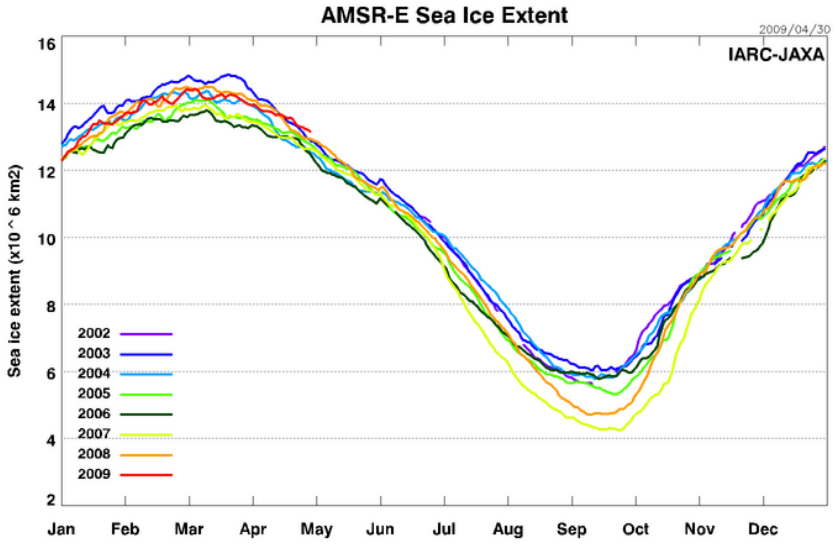
By Joseph D'Aleo

THE ARCTIC

The arctic has recovered from the 2007 minimum the last two years. This can be seen from the University of Illinois Cryosphere.

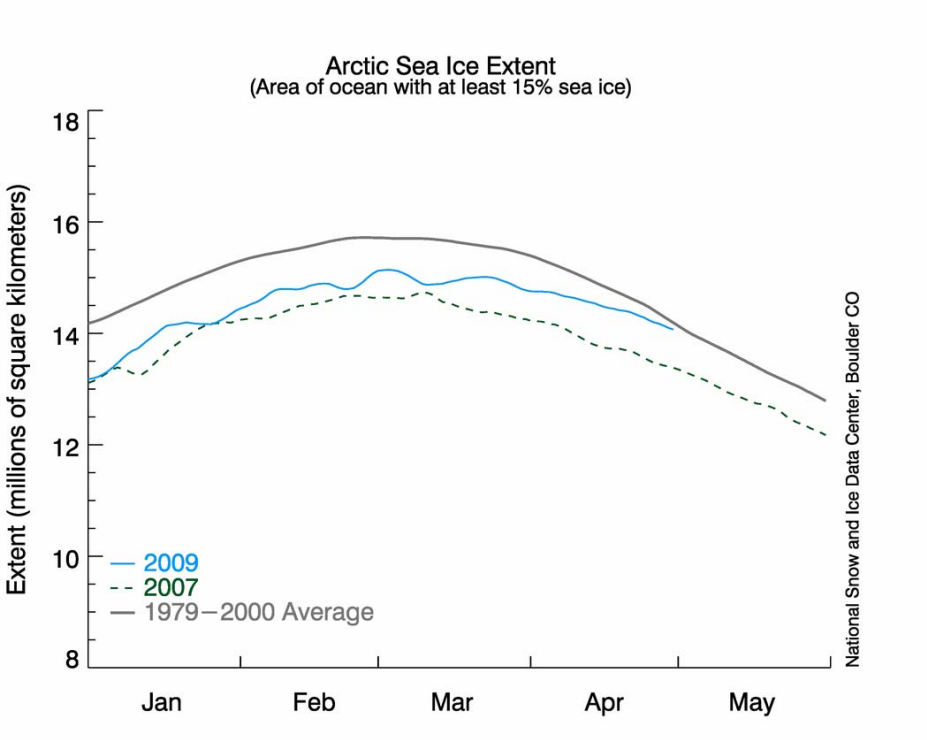


As of early May the value was actually the highest for the date in the 8 years since 2002, we have monitored it with the AMSR-E satellite sensors.



The IARC-JAXA Information System (IJIS) is a geoinformatics facility for satellite image analysis and computational modeling/visualization in support of international collaboration in Arctic and global change research at the International Arctic Research Center in corporation with the Japan Aerospace Exploration Agency (JAXA). Daily plots is shown here.

The amount is actually closing in on the longer term normal for the data as seen from the NSIDC site.



NSIDC relies on NASA-developed methods using passive-microwave data from the Defense Meteorological Satellite Program (DMSP) F13 Special Sensor Microwave/Imager (SSM/I). Daily data plots are available here.

Historically periods of ice thinning and break-up in the arctic have been recorded. As recently as 50 years ago, submarines were able to surface at the South Pole and the so-called Northwest Passage was open. See recent story on open water in the arctic in 1958 and 1959. There's quite an interesting read at *late, great John Daly's website*.

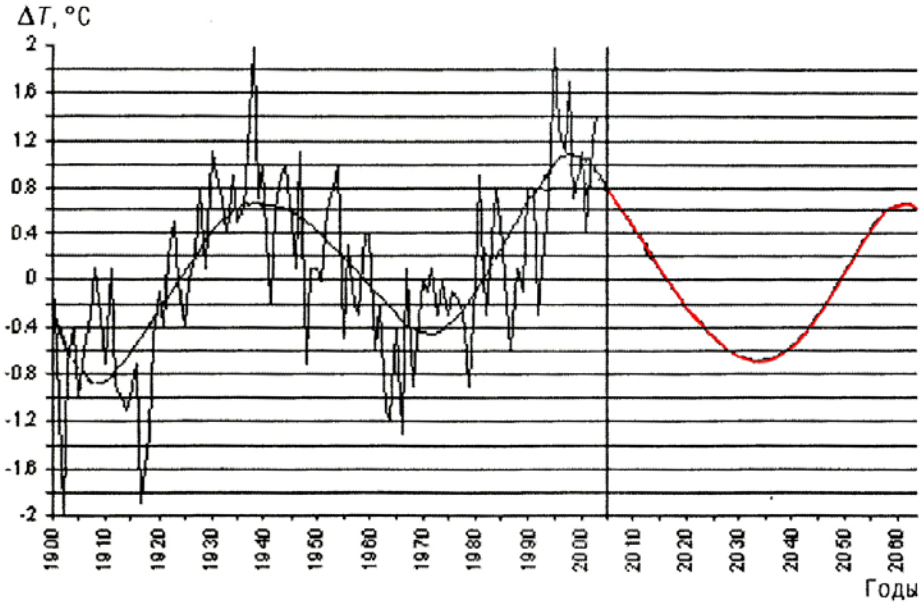
NORTH POLE ICE THICKER THAN REPORTED

And then there is this expedition that has returned surprising results about thickness. The research aircraft Polar 5 "recently undertook an Arctic expedition to measure ice thickness near the pole. **Result: The sea-ice in the surveyed areas is apparently thicker than the researchers had suspected.**

Normally, ice is newly formed after two years, over two meters thick. “Here were Eisdicken (ice thickness) up to four meters,” said a spokesman of Bremerhaven’s Alfred Wegener Institute for Polar and Marine Research.

AARI PREDICTS ARCTIC COOLING/ICE RECOVERY TO CONTINUE

The most competent scientific organization, Arctic and Antarctic Research Institute (AARI) in St. Petersburg, Russia published recently 3 books summarizing scientific results of climate changes in the Arctic region for the last century. One of it dedicated to Arctic climate. Based on the results obtained they forecast coming temperature and sea ice cover area changes in the Polar seas for the next 10-20 years.



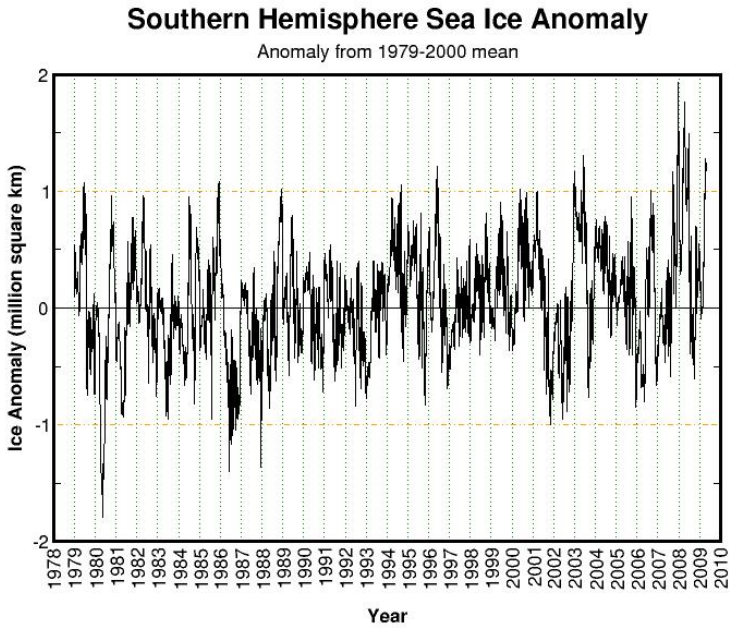
Anomaly of mean annual air surface temperature 1900-2006 in the zone of 70-90 N and its predicted trend (I.E.Frolov et al. Scientific research in Arctic. Vol. 2. Climatic changes in the ice cover of the Eurasian shelf seas. -SPb.: “Nauka”, 2007,158 p).

The authors showed that Arctic climate change is natural in origin and several orders of magnitude greater than the level of anthropogenic impact on the climate. Estimates of possible changes of Arctic air temperature and ice cover propagation area for the 21st century are given on a basis of the revealed stable cyclic oscillations of 10, 20 and 50 to 60 years.

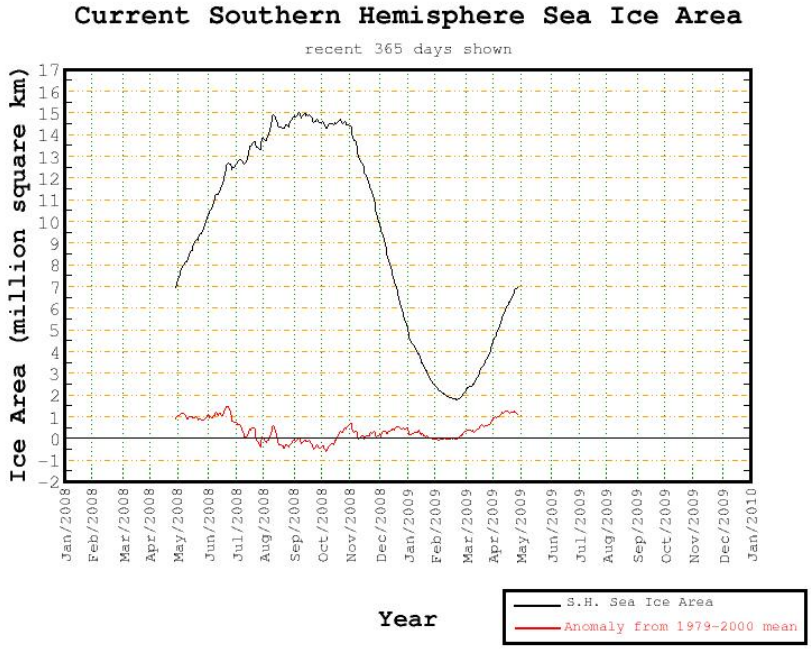
THE ANTARCTIC

Despite recent fractures and calving and current and wind related changes to the Wilkin’s nice sheet near the Antarctic Peninsula in the news since 1999, antarctic ice continues to increase its extent and remains near all time levels. These glacial fed ice sheets have been

changing and moving and grinding and cracking and calving and reforming forever. The Ross Ice Shelf broke up in 2002 but has been rebuilding ever since.



In fact, the extent is running over 1 millions square kilometers (21.7%) above the 30 years average for the date.



This story in the Australian reports on a paper that shows ice is expanding in much of Antarctica, contrary to the widespread public belief that global warming is melting the continental ice cap. The results of ice-core drilling and sea ice monitoring indicate there

is no large-scale melting of ice over most of Antarctica, although experts are concerned at ice losses on the continent's western coast.

Antarctica has 90 per cent of the Earth's ice and 80 per cent of its fresh water. Extensive melting of Antarctic ice sheets would be required to raise sea levels substantially, and ice is melting in parts of west Antarctica. The destabilisation of the Wilkins ice shelf generated international headlines this month. However, the picture is very different in east Antarctica, which includes the territory claimed by Australia.

East Antarctica is four times the size of west Antarctica and parts of it are cooling. The Scientific Committee on Antarctic Research report prepared for last week's meeting of Antarctic Treaty nations in Washington noted the South Pole had shown "significant cooling in recent decades".

Australian Antarctic Division glaciology program head Ian Allison said sea ice losses in west Antarctica over the past 30 years had been more than offset by increases in the Ross Sea region, just one sector of east Antarctica. "Sea ice conditions have remained stable in Antarctica generally," Dr Allison said.

The melting of sea ice—fast ice and pack ice—does not cause sea levels to rise because the ice is in the water. Sea levels may rise with losses from freshwater ice sheets on the polar caps. In Antarctica, these losses are in the form of icebergs calved from ice shelves formed by glacial movements on the mainland.

Dr Allison said there was not any evidence of significant change in the mass of ice shelves in east Antarctica nor any indication that its ice cap was melting. "The only significant calvings in Antarctica have been in the west," he said. And he cautioned that calvings of the magnitude seen recently in west Antarctica might not be unusual. "Ice shelves in general have episodic carvings and there can be large icebergs breaking off—I'm talking 100km or 200km long—every 10 or 20 or 50 years." Ice core drilling in the fast ice off Australia's Davis Station in East Antarctica by the Antarctic Climate and Ecosystems Co-Operative Research Centre shows that last year, the ice had a maximum thickness of 1.89m, its densest in 10 years. The average thickness of the ice at Davis since the 1950s is 1.67m.

A paper to be published soon by the British Antarctic Survey in the journal Geophysical Research Letters is expected to confirm that over the past 30 years, the area of sea ice around the continent has expanded.

See also this story from the Australian where a Russian sea captain says "I see just more and more ice, not less ice."

RUSSIAN sea captain Dimitri Zinchenko has been steering ships through the pack ice of Antarctica for three decades and is waiting to see evidence of the global warming about which he has heard so much. Zinchenko's vessel, the Spirit of Enderby, was commissioned in January last year to retrace the steps of the great Antarctic explorer Ernest Shackleton, marking the century of his Nimrod expedition of 1907-09. Spirit of Enderby was blocked by a wall of pack ice at the entrance to the Ross Sea, about 400km short of Shackleton's base hut at Cape Royds. Zinchenko says it was the first time in 15 years that vessels were unable to penetrate the Ross Sea in January. The experience was consistent with his impression that pack ice is expanding, not contracting, as would be expected in a rapidly warming world. "I see just more and more ice, not less ice."

Rodney Russ, whose New Zealand company Heritage Expeditions has operated tourist expeditions to Antarctica for 20 years, agrees. He says ships regularly used to able to reach the US base of McMurdo in summer, but ice has prevented them from doing so for several years. "Vessels are usually stopped 8km to 14km short of the base. A few years ago, that was often open water," Russ says. "We have experienced quite severe ice conditions over the past decade. I have seen nothing in this region to suggest global warming is having an effect."

Finally see this detailed analysis that puts the Wilkins in perspective to the massive Antarctic ice sheet and this analysis by John McLean showing why the so called Wilkins collapse was another NSIDC, BAS and mainstream media con job.

TOTAL GLOBAL ICE IS UP

The total sea ice globally is running nearly a million square km above the 30 year average at least as of May 1, 2009. See larger image here.