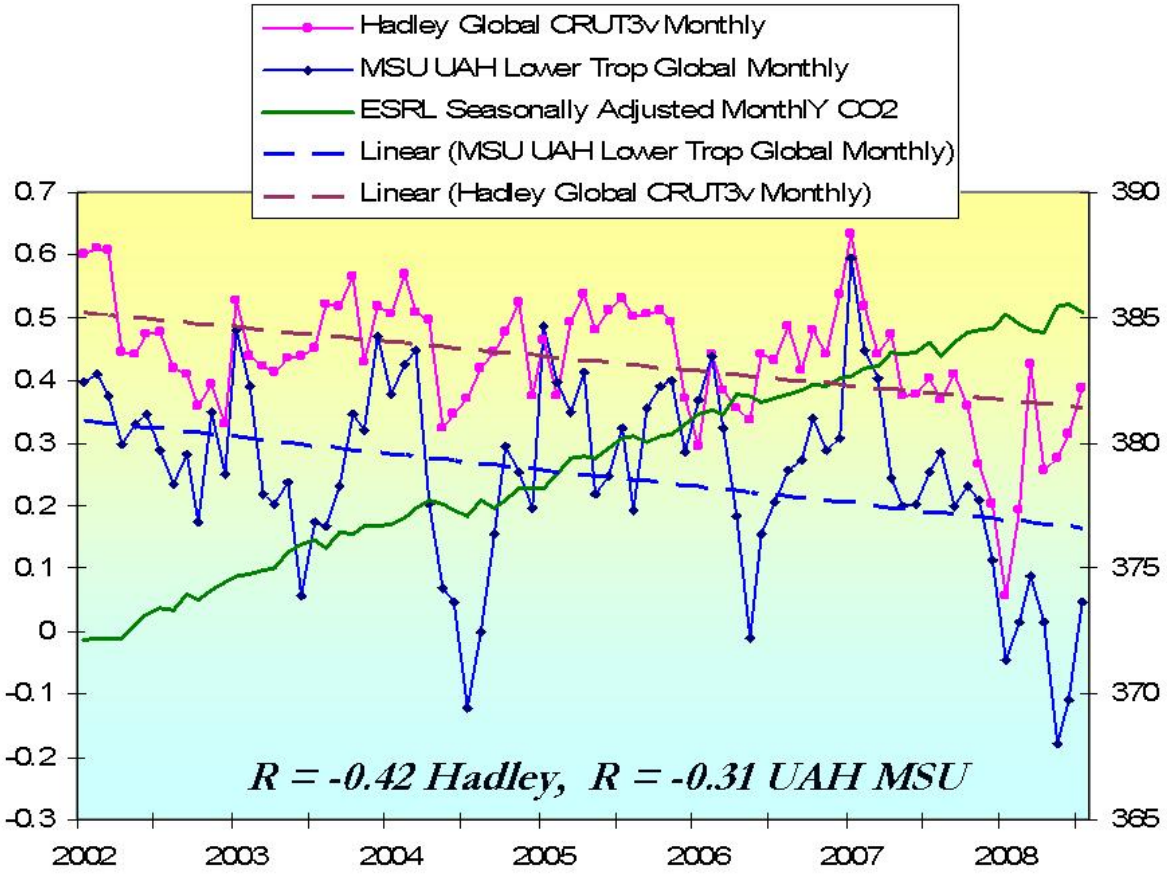
ARCTIC ICE IN THE NEWS

By Joseph D'Aleo, CCM, AMS Fellow

You knew it was coming. The alarmists and media have been frustrated in their efforts to report global warming evidence as nature has refused to cooperate. Temperatures have been declining for going on 7 years (accelerated this year) even as CO2 increased 3.5%.



After a record low arctic ice extent last year, a cold winter brought Total Northern Hemisphere snow and ice cover to record high levels in January and arctic ice back to near normal. Snow and cold were replacing heat and drought in the news. They had to resort to blaming snowmelt and spring rain flooding and spring tornadoes and the annual western wildfires on global warming.

This summer, the media had to search for stories like a cracks in a Greenland glacier and the Wilkins Ice Sheet (ignoring experts stating that such cracks were not unusual) and a NSDIC press release that predicted arctic ice this summer might approach or exceed the record set last year because so much of the ice that formed was first year ice after the unusual wind patterns last summer dumped more than normal ice into the Atlantic. First year ice would be thinner and more easily melted.

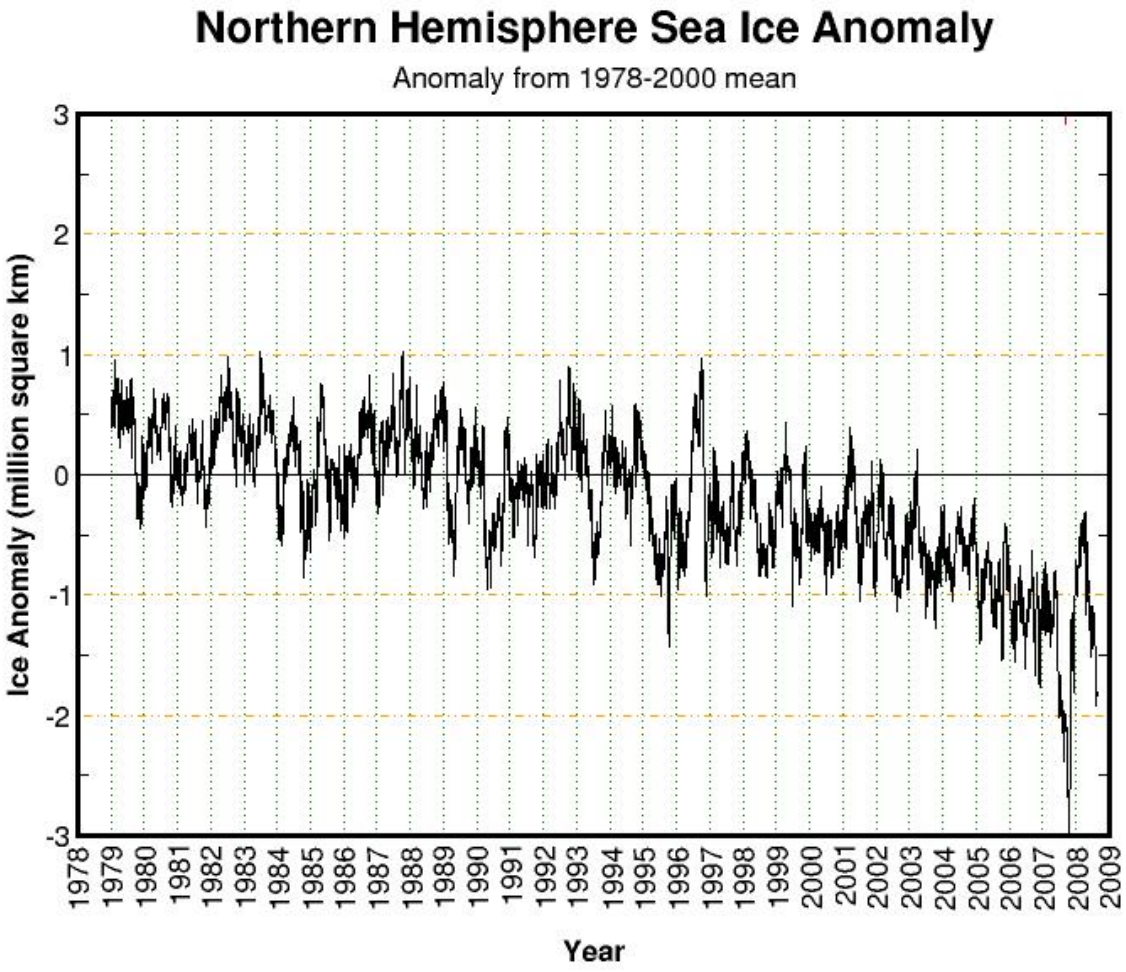
Ironically just last year a NSIDC story correctly summarized the findings of many researchers and peer review papers that natural warming and cooling cycles in the Atlantic and Pacific were the real drivers for the cyclical changes in arctic ice over the centuries (as we have shown most recently here) when a scientist there correctly noted in October 2007:

"One prominent researcher, Igor Polyakov at the University of Fairbanks, Alaska, points out that pulses of unusually warm water have been entering the Arctic Ocean from the Atlantic, which several years later are seen in the ocean north of Siberia. These pulses of water are helping to heat the upper Arctic Ocean, contributing to summer ice melt and helping to reduce winter ice growth. Another scientist, Koji Shimada of the Japan Agency for Marine-Earth Science and Technology, reports evidence of changes in ocean circulation in the Pacific side of the Arctic Ocean. Through a complex interaction with declining sea ice, warm water entering the Arctic Ocean through Bering Strait in summer is being shunted from the Alaskan coast into the Arctic Ocean, where it fosters further ice loss. Many questions still remain to be answered, but these changes in ocean circulation may be important keys for understanding the observed loss of Arctic sea ice."

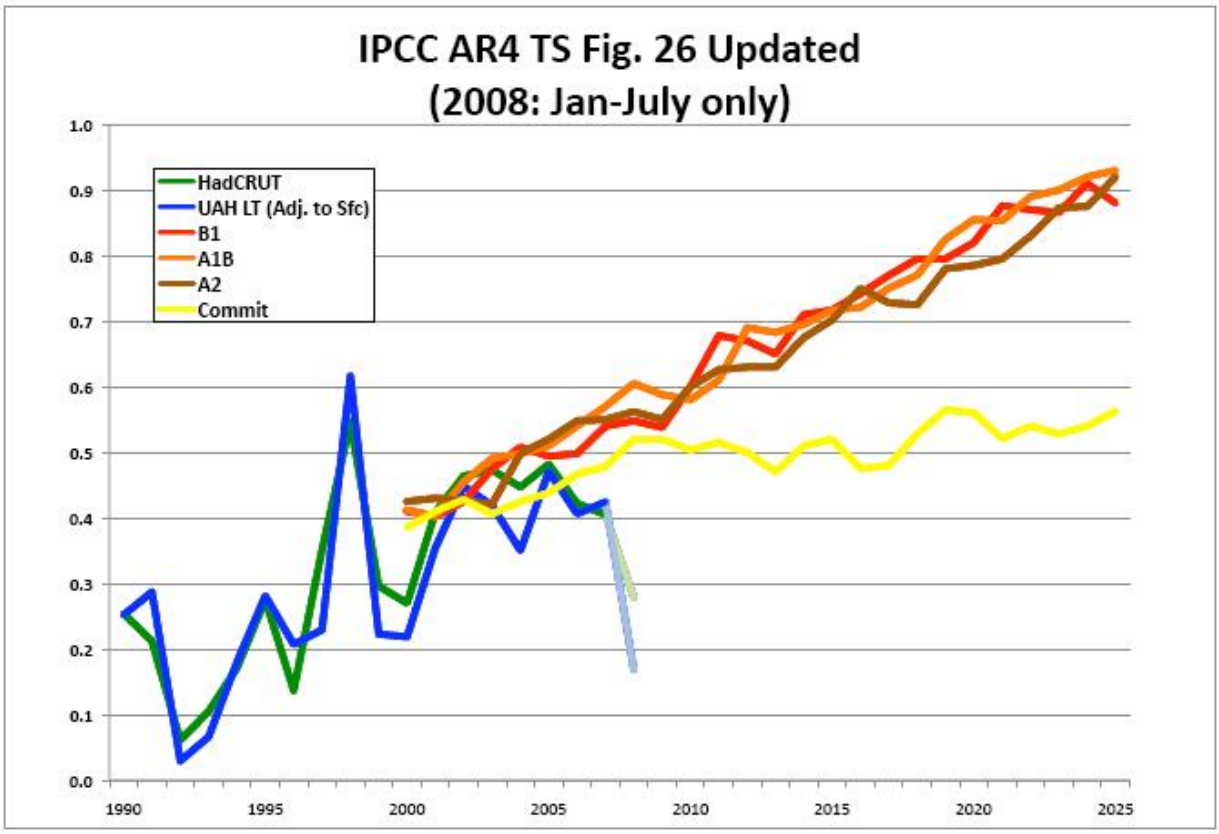
This year that scientist was replaced by senior scientist Mark Serreze who predicted the ice might disappear and attributed the loss to global warming. This week he wrote and the media gladly reported the ice had diminished rapidly this month and now moved 2008 past 2005 into 2nd place behind 2007 in the record since it began in 1979.

The AP's Seth Borenstein gleefully wrote: "More ominous signs Wednesday have scientists saying that a global warming "tipping point" in the Arctic seems to be happening before their eyes: Sea ice in the Arctic Ocean is at its second lowest level in about 30 years. Arctic ice always melts in summer and refreezes in winter. But over the years, more of the ice is lost to the sea with less of it recovered in winter. While ice reflects the sun's heat, the open ocean absorbs more heat and the melting accelerates warming in other parts of the world. Sea ice also serves as primary habitat for threatened polar bears. "We could very well be in that quick slide downward in terms of passing a tipping point," said senior scientist Mark Serreze at the data center in Boulder, Colo. "It's tipping now. We're seeing it happen now." Within "five to less than 10 years," the Arctic could be free of sea ice in the summer, said NASA ice scientist Jay Zwally. "It also means that climate warming is also coming larger and faster than the models are predicting and nobody's really taken into account that change yet," “Borenstein wrote.

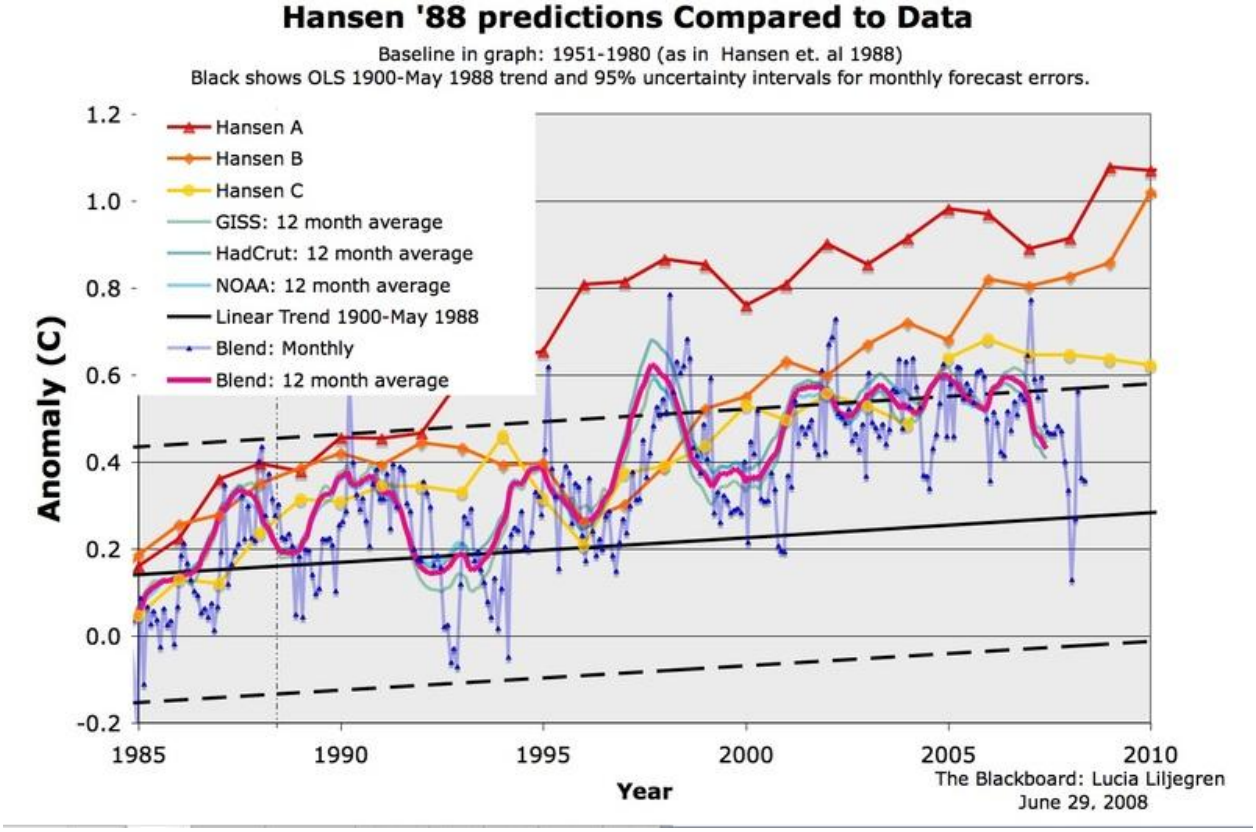
The drop off this month occurred after a breakdown of the spring and summer pattern which caused shifts in the wind flows that broke up more thin ice than normal even though the air was cold. But the sun is vanishing and the air growing colder and the melting is slowing. See this plot from the University of Illinois Cryosphere which monitors arctic ice. Note the blip up at the end indicating a slowing of the melt short of 2007.



And as for the warming coming more quickly than any model see here how the IPCC climate model forecasts from 2006 are performing relative to the actual temperatures. The yellow line makes the assumption that CO2 is not rising.



See how Borensteins idol Hansen' models are doing here.


Hansen '88 predictions Compared to Data
Baseline in graph: 1951-1980 (as in Hansen et. al 1988)
Black shows OLS 1900-May 1988 trend and 95% uncertainty intervals for monthly forecast errors.
Hansen A
Hansen B
Hansen C
GISS: 12 month average
HadCrut: 12 month average
NOAA: 12 month average
Linear Trend 1900-May 1988
Blend: Monthly
Blend: 12 month average
Anomaly (C)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
1985
1990
1995
2000
2005
2010
Year
The Blackboard: Lucia Liljegren
June 29, 2008