

## ***Update on Solar and Ice***

*By Joseph D'Aleo*

### ***THE SUN***

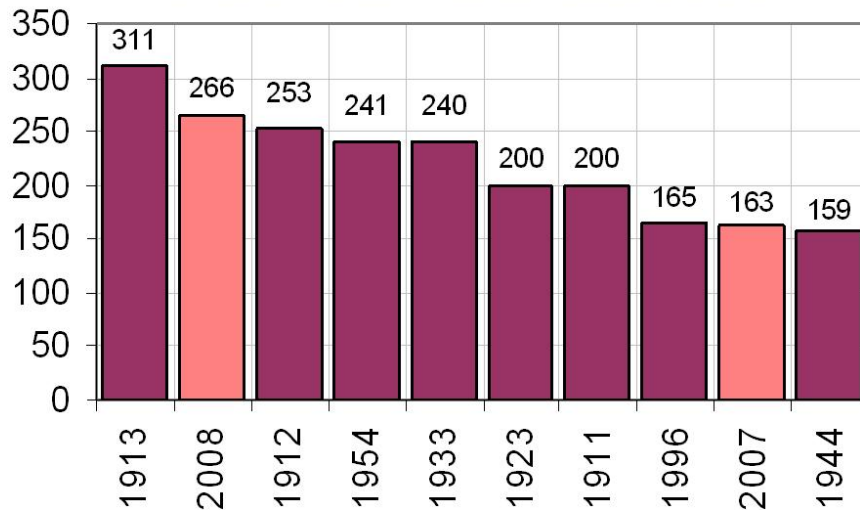
The sun remains in a deep slumber. The current string of spotless days is 38 days long by some accounts.



Today we are 15 days into April without a sunspot and with 603 sunspotless day this cycle minimum, 92 already this year. 2009 at this rate, is likely to enter the top 10 years the last century along with 2007 (9th) and 2008 (2nd) this summer.

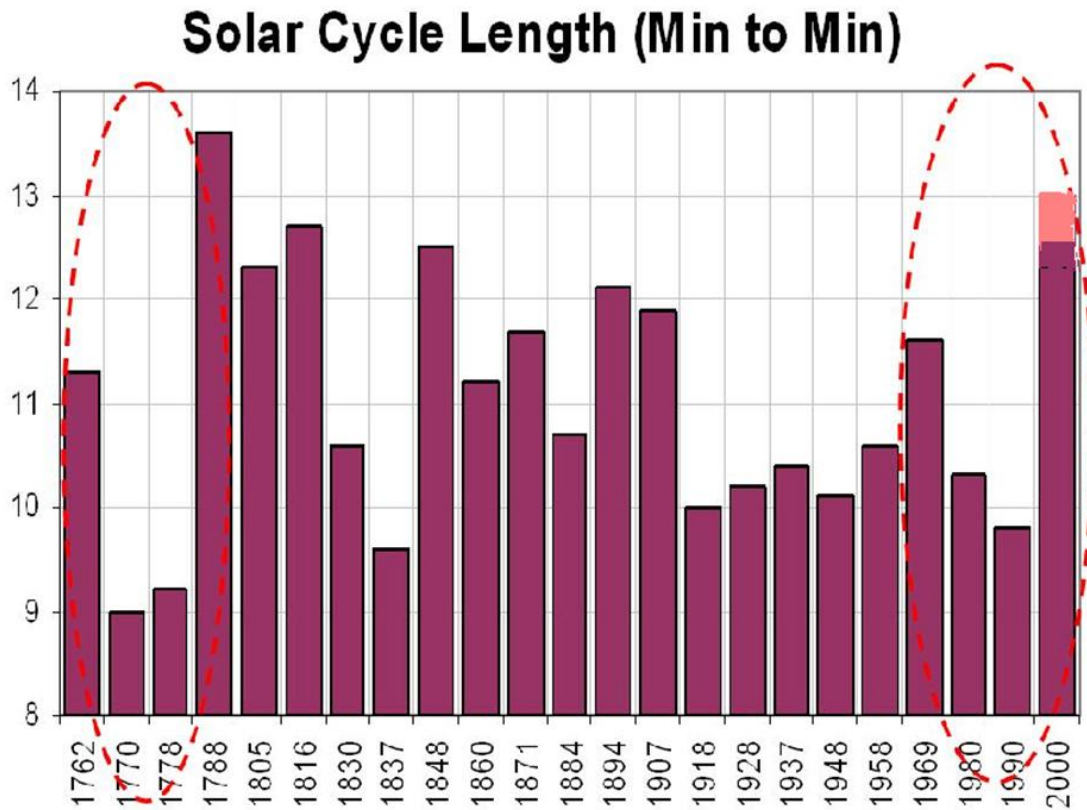
### **Sunspotless Days (SIDC) Since 1901**

*A total of over 564 so far this transition 23 to 24*



If it stays quiet the rest of this month, the minimum can be no earlier than November 2008, at least a 12.5 year cycle length. I believe January 2009 is a better shot to be the solar minimum as sunspot number would have to be below 0.5 in June 2008 to prevent the running mean (13 month) from blipping up then. April needs only to stay below 3.2 and May 3.4 to get us to January.

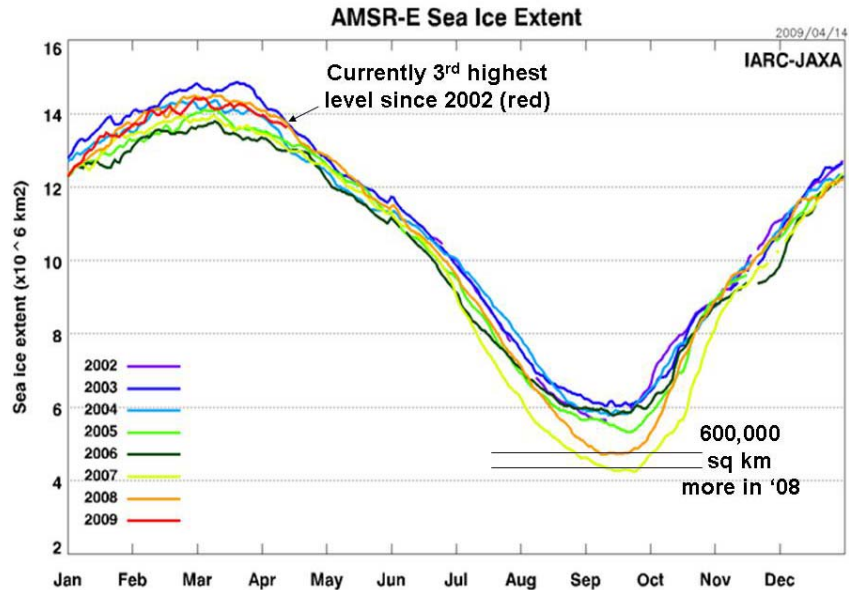
This would be very like cycles 1 to 4 in the late 1700s and early 1800s, preceding the Dalton Minimum.



That was a cold era, the age of Dickens and the children playing in the snow in London, much like this past winter.

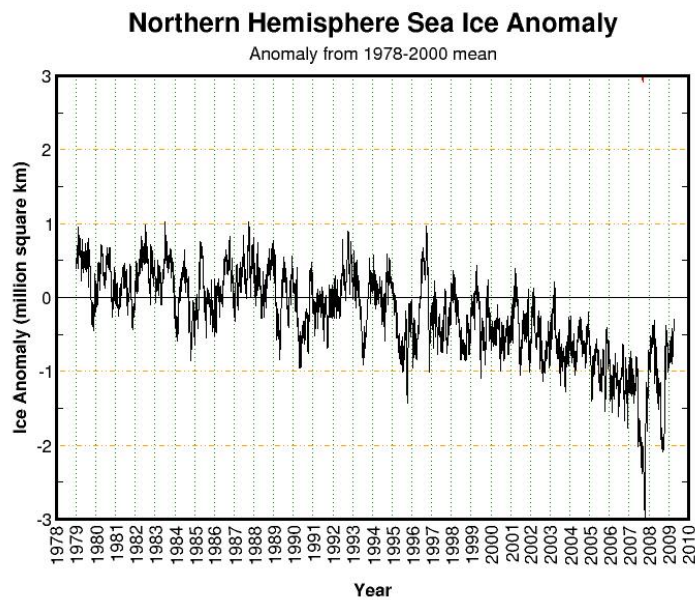
## THE ARCTIC AND ANTARCTIC ICE STORY

As for the ice, we hear in the media the hype about the arctic and Antarctic ice. The arctic ice we are told is more first and second year ice and very vulnerable to a summer melt.



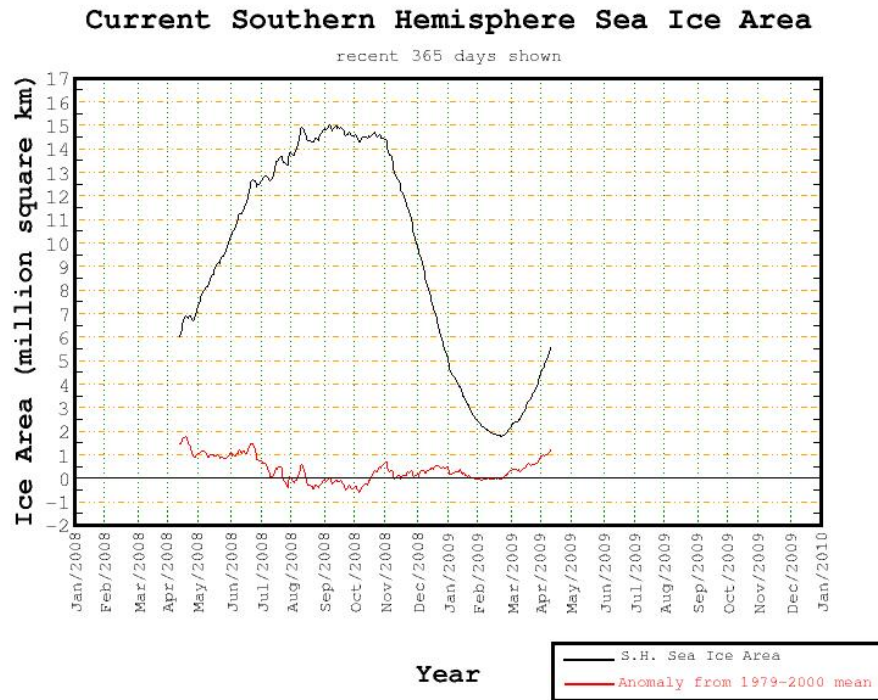
See [http://www.ijis.iarc.uaf.edu/en/home/seaiice\\_extent.htm](http://www.ijis.iarc.uaf.edu/en/home/seaiice_extent.htm) for latest daily plot.

The arctic ice is very 3<sup>rd</sup> highest level since 2002, very close to 2003, in a virtual tie to last winter and the highest year. The anomaly is a relatively small 300,000 square km according to The Cryosphere Today.

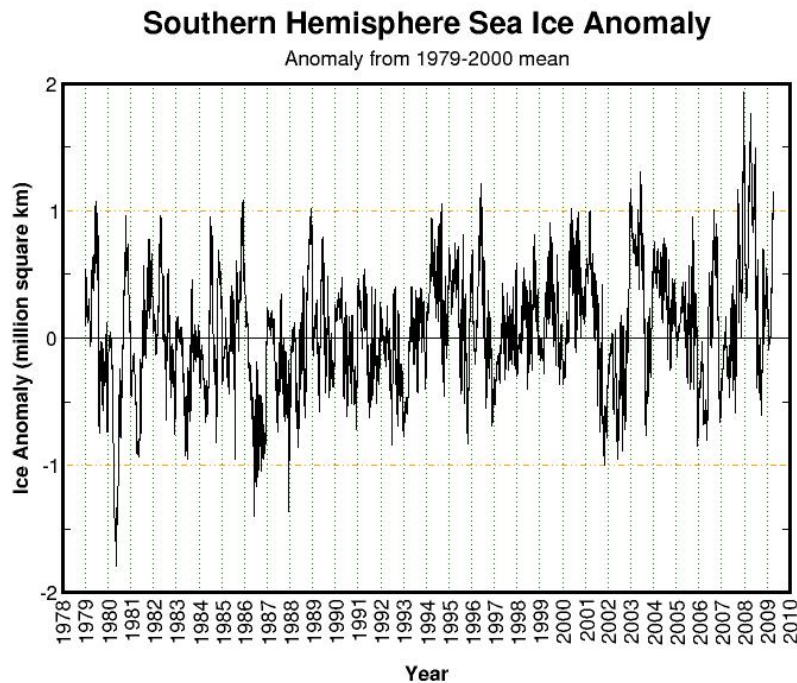


<http://arctic.atmos.uiuc.edu/cryosphere/IMAGES/current.anom.jpg>

There was much attention paid in the media to the crack in the Wilkins Ice sheet bridge. It was not even reflected as a blip on the Southern Hemisphere ice extent, which has grown rapidly as the southern hemisphere winter set in to 1,150,000 square kms above the normal for this date and rising rapidly.

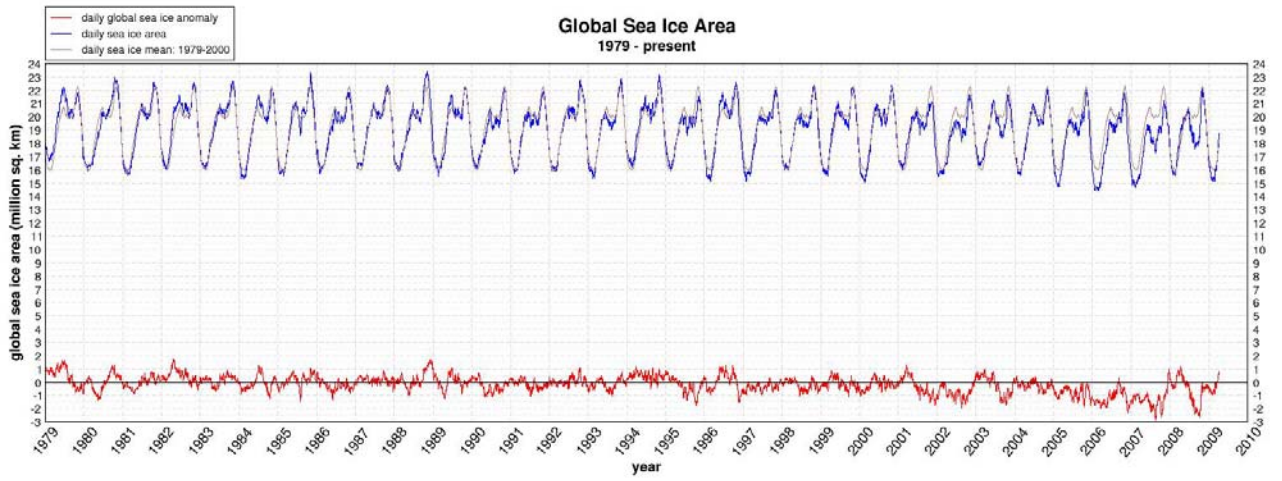


<http://arctic.atmos.uiuc.edu/cryosphere/IMAGES/current.365.south.jpg>



<http://arctic.atmos.uiuc.edu/cryosphere/IMAGES/current.anom.south.jpg>

The net GLOBAL sea ice anomaly is also positive 850,000 square km above the normal.



<http://arctic.atmos.uiuc.edu/cryosphere/IMAGES/global.daily.ice.area.withtrend.jpg>