

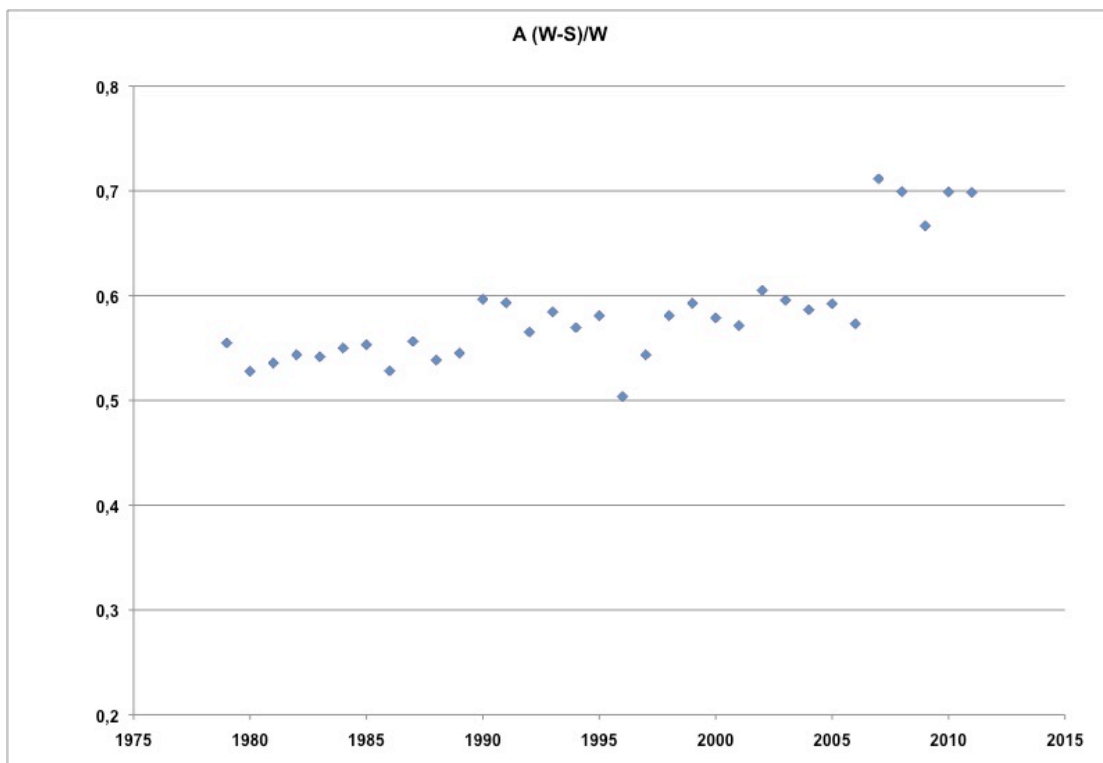
2012 PAN-ARCTIC OUTLOOK

Estimate of Minimum Arctic Sea Ice Area/Extent

June Report based on May Data

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I have studied the evolution of the sea ice area and extent for all years with satellite information. I have looked if there are simple relationships between the winter and summer values and how there is a memory over several seasons. In this note I use only a single ratio value, that is the ratio between the winter maximum and autumn minimum area/extents. The following figure shows how large a fraction of the winter maximum area disappears during the melting season.



The data are all taken from the <http://arctic-roos.org/observations/satellite-data/sea-ice/ice-area-and-extent-in-arctic> site.

We see a linear increase from 1979 to 2006 results caused by a larger decadal decrease in summer values than for the winter values. The data increase from about 0,52 to about 0.6 over the period. With the record low value of sea ice minimum in 2007 the ratio jumped to about 0.7. We clearly see that, in spite of large variations in both winter and summer values, that the ratio remains stable at this high value. *This clearly indicates a shift in standard, perhaps a new paradigm.*

The maximum value of the sea ice area/extent for 2012 is very close to the 2010 values. This indicates that the minimum values will be very close to the 2010 measurements.

Predictions 2012:

Area = 4.1 million square kilometres

Extent = 5.6 million square kilometres