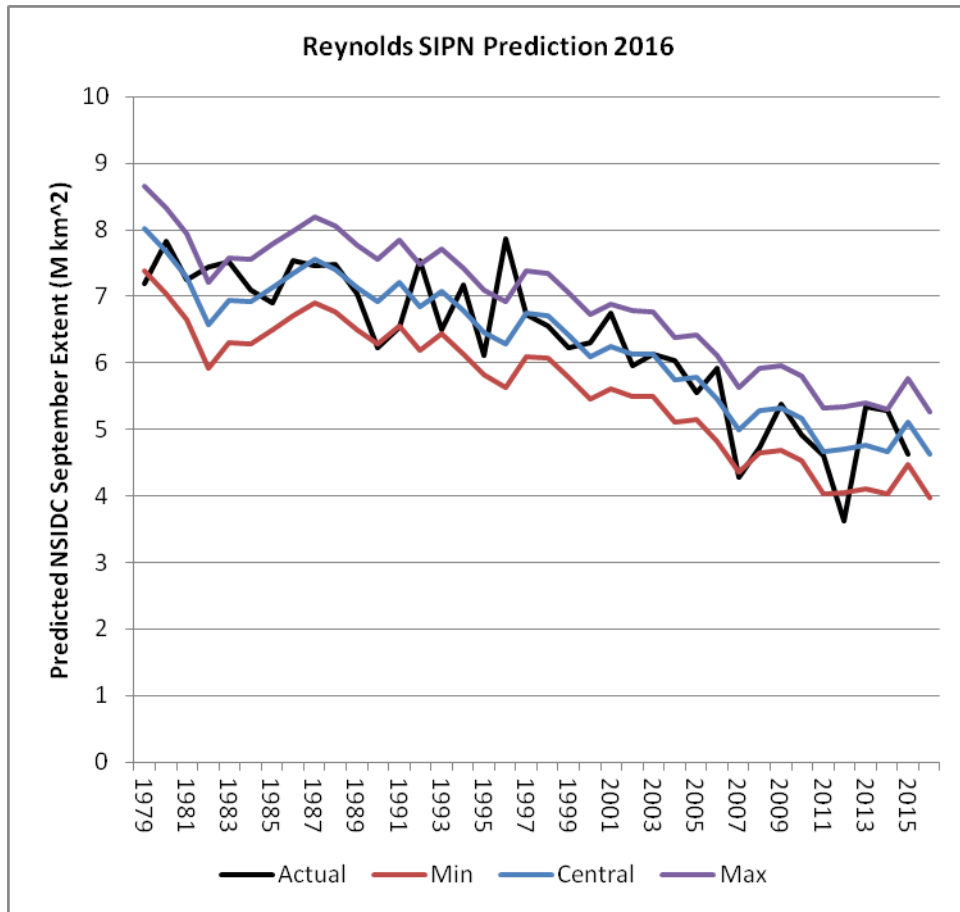


Pan-Arctic Contribution.

1. Chris Reynolds.
2. Solo effort, I'm an engineer by profession, studying and blogging on Arctic sea ice loss as an amateur. Blog: <http://dosbat.blogspot.co.uk/>
3. Do you want your contribution to be included in subsequent reports in the 2016 season?
No, I only want to participate this time. The prediction was made on 4 May 2016 and is not intended to be updated.
4. April gridded PIOMAS data is used to calculate the April volume for the Arctic Ocean including Kara, Barents, Greenland Sea and the Canadian Arctic Archipelago. This is then used together with September extent for each year, 1979 to 2015, and a relationship between April volume and September thickness is calculated. The prediction is then based upon April volume for the current year.
5. Type of Outlook method: Statistical
6. No sea ice concentration used. NSIDC product G02135 used for September extent. https://nsidc.org/data/seaice_index/archives.html
7. PIOMAS monthly average gridded grid box effective thickness (heff), obtained from the PIOMAS data site. http://psc.apl.washington.edu/zhang/IDAO/data_piomas.html
8. No model used (by myself)
9. Prediction of September pan-Arctic extent: 4.0 to 5.3 million km², central value 4.6 ±0.6 million km².
10. Prediction of the week that the minimum daily extent will occur: No prediction.
11. April gridded PIOMAS data is used to calculate the April volume for the Arctic Ocean including Kara, Barents, Greenland Sea and the Canadian Arctic Archipelago. This is then regressed against September extent for each year, 1979 to 2015, and a relating equation is derived. The hindcast errors are calculated and the standard deviation of hindcast errors is multiplied by a coverage factor $k=1.2$, chosen such that the hindcasts are then about 80% successful. This is then used to set the upper and lower bounds of prediction (±0.6 million km²). The coverage factor is then applied and the resulting hindcasts and 2016 prediction are shown in the following graph.



A spreadsheet is provided for completeness.