2013 PAN-ARCTIC OUTLOOK
July Report based on June Data

FaustusNotes (http://faustusnotes.wordpress.com)

EXTENT PROJECTION
4.69 million square kilometres.
No information on age, ice thickness, volume.

METHODS
Statistical

RATIONALE
Prais-Winsten regression using april and may northern hemisphere temperatures, May and June extent and area, June snow cover anomaly, an annual trend, and the extent from September of the previous year. There is no physical rationale for this model, just a prediction based on some variables that seem like they should be highly predictive of the ice extent.

EXECUTIVE SUMMARY
I estimated the extent value using a linear regression model and key measures of temperature, snow cover, area and extent for the current and previous years. This model has some ability to predict the previous two crashes, and suggests a large recovery of the sea ice extent this September.

ESTIMATE OF FORECAST SKILL
Prediction standard error:0.32
95% Confidence Intervals: 4.06 to 5.32 million square kilometres.
My model, run over the years 1979 - 2007, was able to come close to predicting the 2012 record minimum. It seems to be accurate to about 5 years. When run to 2011 it very closely predicted the 2012 crash. However, it is probably prone to significant over-fitting.

More details are available at:
http://faustusnotes.wordpress.com/2013/07/03/predicting-the-2013-september-arctic-sea-ice-extent/