

Pan-Arctic Outlook: Liljegren, The Blackboard

1. Extent Projection: 4.57 million square kilometers September NH sea ice extent minimum.
2. Method Technique: Statistical. Projection based on JAXA extent on July 28, 2011
3. Rational: Because it accounts for the ice melt during the early summer, the most recent extent reported by JAXA should contain predictive value for short-term projections. Based on this notion, I computed the best fit linear model to predict NH sea ice extent for a given year as a function of the JAXA ice extent reported on July 28 of the corresponding year. I then used this model along with the ice extent value reported by JAXA on July 28, 2011 to create my best estimate of the September NH ice extent. Uncertainty intervals were estimated based on the magnitude of the residuals to the fit and the uncertainty in the two fitting parameters in the best fit model. The method is discussed at [My ARCUS Forecast](#).
4. Executive Summary: This projection is based on the observed correlation between JAXA extent on July 28, 2011 and September NH ice extent values since 2002.
5. Forecast Skill: $\pm 95\%$ uncertainty range 3.62 to 5.51 million square kilometers.

Outlook submission deadline: 29 July 2011. All Outlooks should be sent to: Helen Wiggins, ARCUS Email: helen@arcus.org.

Submitted by Lucia Liljegren