

1. Names of Scientist(s) making the Outlook.

Sheldon Drobot, James Maslanik, Chuck Fowler

2. Estimate of sea ice extent for the month of September 2008 (the value for September 2007 was 4.3 million square kilometers).

Based on data available in early June, our *most likely* solution is 4.40 million square kilometers.

3. Principal Method (numerical model, statistical model, comparison to 2007 weather and satellite data, etc.) Keep this short as it will go into a table.

Probabilistic statistical model

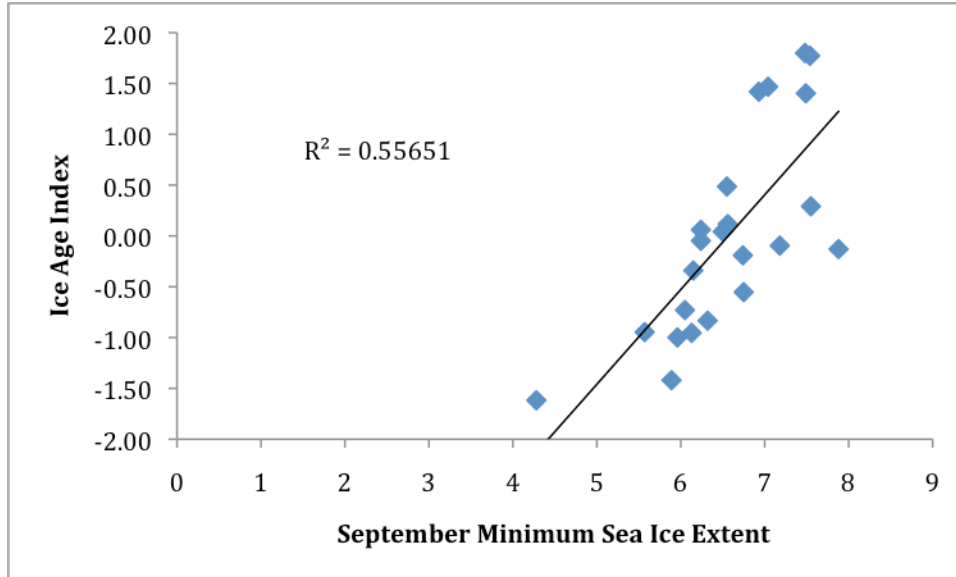
4. A short several sentence summary of your primary physical reasoning behind the estimate provided in #2. Last time I extracted most of this information from your essays, but it is better if you provide this up front.

Our model follows the methods outlined in [Drobot, S.D., 2007: Using remote sensing data to develop seasonal outlooks for Arctic regional sea-ice minimum extent. *Remote Sensing of Environment*, 111, 136-147, doi:10.1016/j.rse.2007.03.024]. For this forecast, we are relying mainly on the spatial pattern of early June sea-ice concentration and an ice-age index [which is based on Figure 2 in Maslanik, J. A., C. Fowler, J. Stroeve, S. Drobot, J. Zwally, D. Yi, and W. Emery, 2007: A younger, thinner Arctic ice cover: Increased potential for rapid, extensive sea-ice loss. *Geophysical Research Letters*, 34, L24501, doi:10.1029/2007GL032043.] Compared to last year, the sea-ice extent is similar, but the ice age data indicates that the ice pack is more vulnerable to loss this year. Air temperatures over the last couple of months have been cooler this year than last year, which helps to explain why our current forecast is slightly higher than the preceding one, which was 3.83 million square kilometers. More details will be online at <http://ccar.colorado.edu/arifs> [note: That will be up next week!]

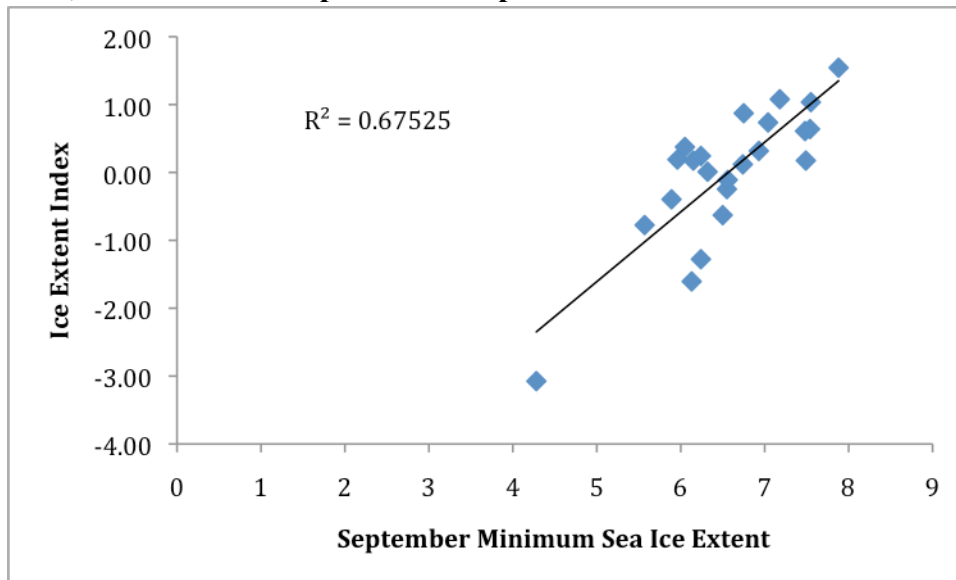
5. Any expanded information with figures which backs up #4.

We can provide these in better formats if requested:

The first image is a scatterplot of the September sea ice extent and the ice age index.



Next, we have a scatterplot of the September sea ice extent and the June ice extent index.



Lastly, since our model is probabilistic, we can provide a probability of setting a new record. We are forecasting a 40% chance of setting a new record this year (down from 59% in the last forecast).

Any information on regional sea ice conditions or outlooks. We still have not done any probabilistic regional forecasts this year.