

#15—Harry Stern

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

Harry Stern

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

Estimate: 5.56 million sq km

Standard deviation: 0.22 million sq km

This represents NO CHANGE from my estimate last month, because the estimate is only based on past Septembers.

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.

Statistical. Linear extrapolation of the least squares trend line based on 10 Septembers, 1997-2006.

4. A short several sentence summary of your primary physical reasoning behind the estimate provided in #2.

There is no explicit physical reasoning -- the implicit assumption is that whatever factors drove the sea ice extent to decline approximately linearly during the 10 Septembers 1997-2006, those same factors will continue to operate in September 2008. Note that September 2007 is considered an "outlier" and is not included in the calculation of the trend line that is used for the extrapolation. See #5.

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

This estimate has several related purposes. First, since it is extremely simplistic, it serves as a benchmark against which to gauge the other estimates, all of which are more sophisticated. Second, since it forecasts a linear decline, the degree to which it is wrong is a measure of the degree to which the sea ice extent is not following a linear trend. Third, when it is compared with the actual September 2008 sea ice extent, it will provide a test of the degree to which September 2007 was an outlier or not.

6. Any information on regional sea ice conditions or outlooks.

None.