

Martin Miles

July 2008 Sea Ice Outlook: Report Based on July Data

Names of Scientist(s) making the Outlook.

**This outlook was produced by Martin Miles**

**Environmental Systems Analysis Research Center (ESARC) and Bjerknes Centre for Climate Research (BCCR)**

Estimate of sea ice extent for the month of September 2008

**4.4 million square kilometers**

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

**Semi-empirical / semi-theoretical (i.e., "seat-of-the-pants")**

A short several sentence summary of your primary physical reasoning behind the estimate provided in #2. We are primarily interested in how you may be using data from July.

**Our latest estimate of 4.4 million square kilometers, is an upward adjustment of 0.6 million square from our original estimate of 3.8 in the May outlook. (Did not participate in June.) As we stated in the May outlook, the single most important additional information that would improve the prediction is the expected predominant mode(s) of atmospheric-circulation variability in the Arctic in June–September 2008. It happened that the atmospheric-circulation patterns in June–July were generally favorable for preservation of sea ice, at least compared to the same period in summer 2007. Assuming the patterns in August–September are neutral, then our expectation is that sea-ice decreases may yet approach the record minimum in 2007, the reason being the susceptibility of the predominantly first-year ice cover – as reasoned in our May outlook contribution – and the large areas of reduced sea-ice concentration evident in the late July AMSR-E image data.**