

Pan-Arctic Outlook for September 2012, August Update

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Executive Summary: Using conditions from week 30 of 2012 (ie August 1, 2012), a revised minimum Arctic sea ice extent of 4.03 million km² is projected for the week of September 7, 2012. This is substantially lower than the earlier estimates, reflecting both lower than average sea ice extent used as initial conditions this summer and a persistent downward trend in sea ice extent over the past decade (and longer). The output continues to suggest 2012 will be at or below the previous record minimum September ice extent, recorded in 2007 and repeated in 2011.

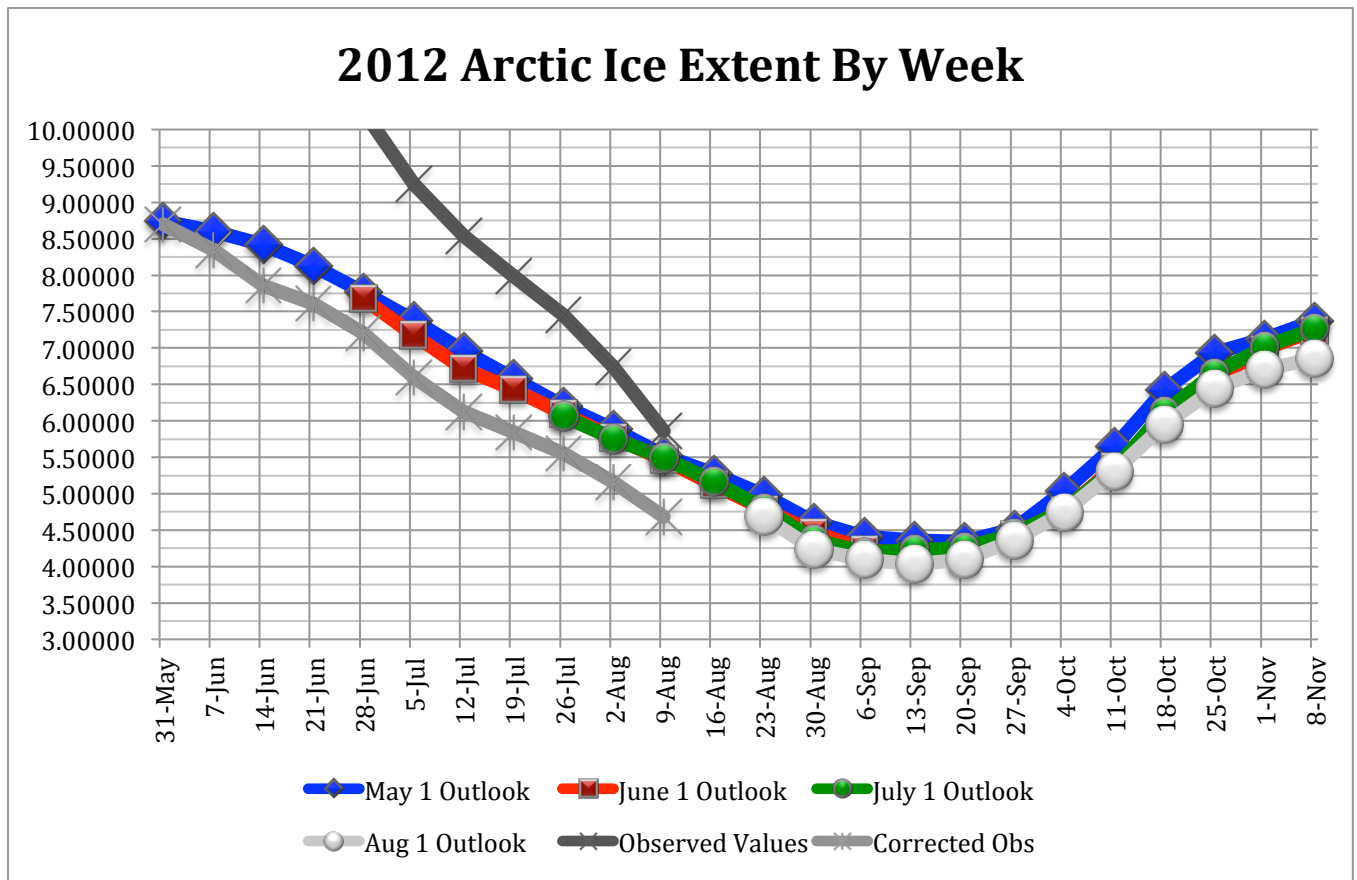


Figure 1: Projected 2012 sea ice extent by week, in millions of square kilometers. The total observed ice extent (SSM/I) and a corrected value (sea ice ice outside the forecast model domain has been removed) for June 1-Aug 9, 2012, are also indicated.

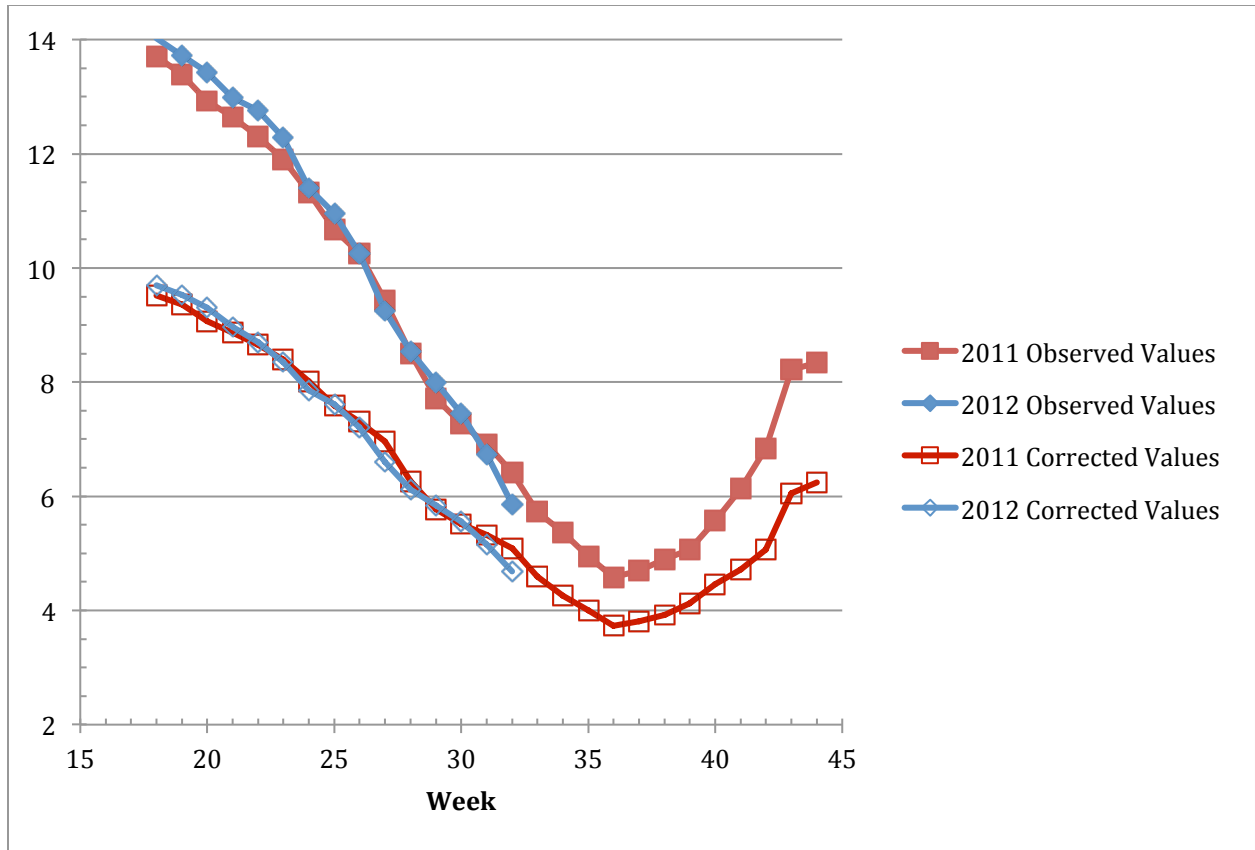


Figure 2: 2011 and 2012 observations. Corrected values, indicating ice observed within the outlook model domain, are also shown. Compared to 2011, the 2012 sea ice conditions are lower.

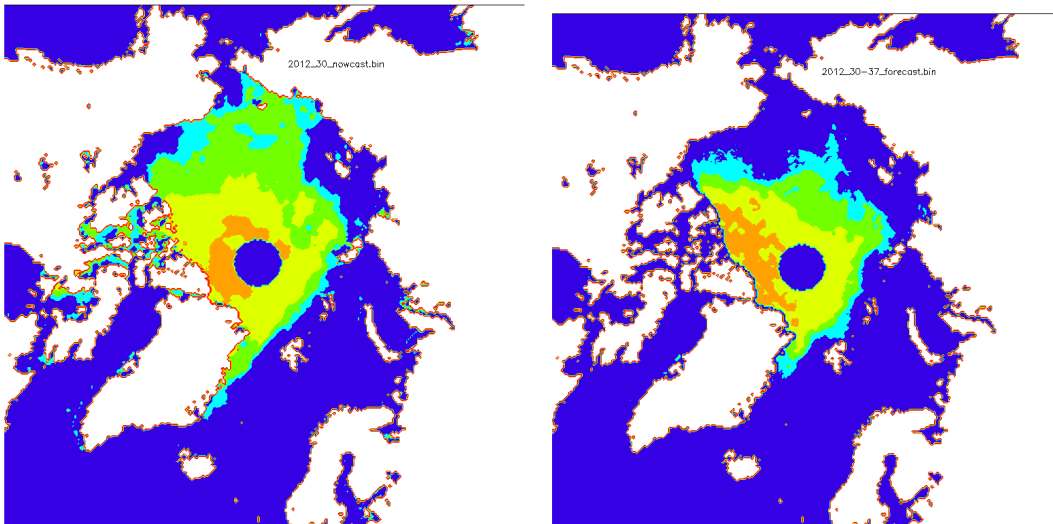


Figure 3: Observed sea ice extent for the week of August 1, 2012 (left). Projected sea ice extent for the week of September 21, 2012 (right).