Outlook of September 2011 sea ice extent based on NCEP CFSv2

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1 Arctic sea ice extent projection for September 2011
   (5.0±0.46)×10^6 km^2

2 Methods/Techniques
   The outlook is based on a CFSv2 ensemble of 40 members initialized from May 17-26, 2011. The model’s systematic bias has been removed based on its retrospective forecasts for 1982-2010.

3. Rationale
   The CFSv2 has shown long-term decrease of sea ice extent during the past 3 decades, as in the observation.

4. Executive Summary
   The projected Arctic sea ice extent from CPC based on NCEP ensemble mean CFSv2 forecast is 5.0×10^6 km^2 with an estimated error of ±0.46×10^6 km^2.

5. Estimate of Forecast Skill
   The skill estimated as the forecast correlation with observation based on retrospective forecasts for 1982-2010 is 0.78. Forecast uncertainty taken as the RMS error based on 1982-2010 retrospective forecasts is 0.46×10^6 km^2.

6. Spatial maps of sea ice concentration
   The attached maps are CFSv2 forecast sea ice concentration anomalies (upper panel) and total (lower panel).
CFSv2 forecast sea ice concentration anomalies (upper panel) and total (lower panel). The forecast is computed as an ensemble average of 40 forecast runs initialized from May 17-26, 2011.