

Pan-Arctic September 2013 Sea Ice Outlook

Post-season report: a short comment about our contribution

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We participated this year for the first time in the SEARCH Sea Ice Outlook. Our objective was to provide a simple contribution, based on an existing method but with a model which had not been used by past contributors (see any of our summer reports for more details). Our sea ice-ocean model ensemble runs yielded the following estimations for the 2013 September Arctic sea ice extent:

- June report: 5.0 (range from 4.1 to 5.5) million square kilometers;
- July report: 5.0 (range from 4.3 to 5.7) million square kilometers;
- August report: 5.1 (range from 4.4 to 5.7) million square kilometers.

Our June report estimate was already close to the NSIDC value for the observed average September 2013 ice extent (5.35 million square kilometers). It barely increased through the summer season, while the uncertainty range was not much reduced. Given the way we computed this range, it indicates that, according to our forced model, different atmospheric conditions can lead to very different minimum extents, even late in the melting season.

It is worth noting that we have not assessed the skill of this method in predicting past September sea ice extents. In the worst case, the similar estimates from the successive summer reports could be a sign that this method is not sensitive enough to the current year conditions, and that it just produces a minimum extent typical for the last 10 years. Outcomes of future participations in the Sea Ice Outlook will hence be of great interest.