

SEA ICE PREDICTION NETWORK (SIPN)

Template for Pan-Arctic Sea Ice Outlook Core Contributions

June Report (Using May Data)

**Required*

1. *Contributor Name(s)/Group

Andrew Slater

2. *Type of Outlook projection

___model ?___statistical ?___heuristic bit of both

If you use a model, please specify:

Model Name SPIE (I guess?)

Components of the model: Atmosphere___, Ocean___, Ice___, Land___, Coupler___

For non-coupled model: Ice X_, Ocean___, Forcing___

3. *September monthly average projection (in million square kilometers)

4.45 x 10⁶ km²

4. *Short explanation of Outlook method (1-3 sentences)

The result supplied at the start of June is a *quasi-model* estimate – that is, I use information from my system, but it is not strictly a model result and not directly reproducible or verifiable. I have been running my statistical system operationally at 50-day lead time. See the page:

<http://cires.colorado.edu/~aslater/SEAICE/>

which now includes a time series plot (updated daily) and a spatial map. Performance to date in the 2014 melt season has been mixed.

I have run my system at 60, 70, 80 and 90 day lead times for prior years, but am not using such data at this point in time. I do have skill (following the metric of Schroder et al., 2014) at 90-days. I will probably do a straight model result for the July value and certainly for August.

The value of 4.45 x10⁶ km² is based on extrapolation of my current forecast; basically it suggests that 2014 will rank around 3rd lowest in the observational record (unless there is some odd weather event/s). The 4.45 value is simply a reflection of the estimated rank estimated for July 25th.

5. Projection uncertainty/probability estimate (only required if available with the method you are using)

Have not computed such a value for this sort of lead time/method.

6. Short explanation/assessment of basis for the uncertainty estimate in #5 (1-2 sentences)

7. * "Executive summary" about your Outlook contribution
1-3 sentences, to be used in Outlook summary: say in a few sentences what your Outlook contribution is and why. To the extent possible, use non-technical language.

My 50-day forecast (<http://cires.colorado.edu/~aslater/SEAICE/>) issued on June 6th suggests that 2014 will be near the 3rd lowest rank year on record, which is how I came to derive my estimated extent for this long-lead time. The result contains huge uncertainty and should not be considered reliable as this long-lead method has not been verified.