

SEA ICE PREDICTION NETWORK (SIPN)

Template for Pan-Arctic Sea Ice Outlook Core Contributions

July Report (Using June Data)

1. *Contributor Name(s)/Group

Andrew Slater

2. *Type of Outlook projection
___model statistical ___heuristic

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 , Ocean___, Forcing___

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

4.85 ± 0.56 × 10⁶ km²

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

I have extended my model prediction out to a lead time of 90 days. The method is effectively the same as my "standard" 50 day forecast.

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

At 90 days the method does actually have skill, when measured over the period 1995-2013 and applying a similar skill metric to that used in Schroder *et al.* 2014. The skill level is only of order 0.10-0.15, but it is real skill nonetheless. (Compare that to an anomaly persistence forecast which has zero skill at this lead time.)

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

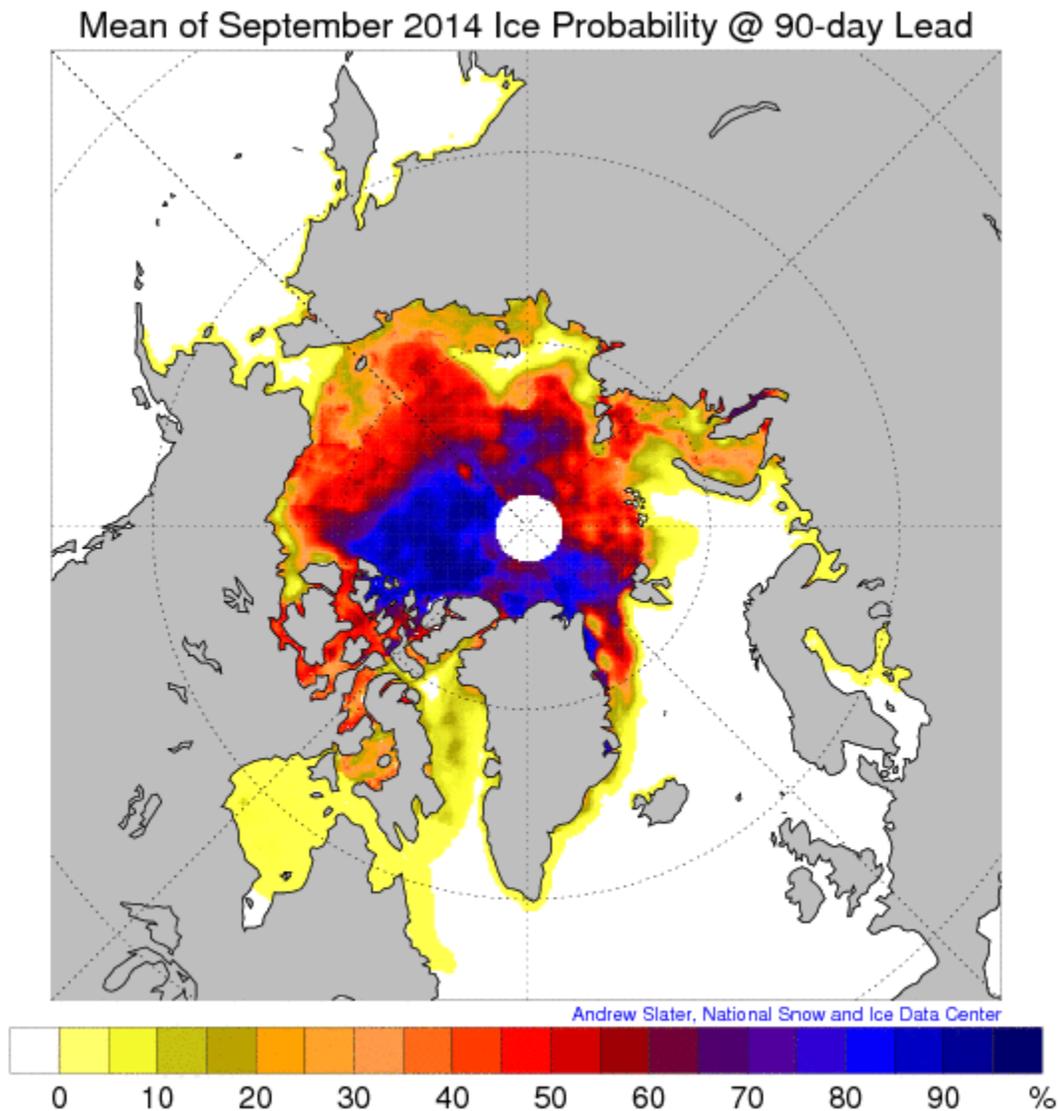
0.56 × 10⁶ km²

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

0.56 × 10⁶ km² is the RMSE of my results for Sept. mean at 90-days over the period 1995-2013. It's quite a large uncertainty, but perhaps expected given the 90-day lead time.

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.

I have extended my forecast method to a 90 day lead time so as to forecast all days in September. The method does have a low level of real skill (taken over 1995-2013). Results contain a large uncertainty at this lead time.



Note for interpreting map: if we assume red represents 50%, only 50% of the region colored red will likely have ice of +15% concentration in it.