SEA ICE PREDICTION NETWORK (SIPN)

Template for Pan-Arctic Sea Ice Outlook Core Contributions
July 2016 Report (Using June Data)

1. *Contributor Name(s)/Group

Andrew Slater

2. *Type of Outlook projection
   ____model _**X**_ statistical ___heuristic

If you use a model, please specify:
Model Name SPIE
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)

4.43 ± 0.75 x 10^6 **km²**

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

I have extended my model prediction out to a lead time of 85 days. The method is effectively the same as my "standard" 50 day forecast.

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

At 85 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.)
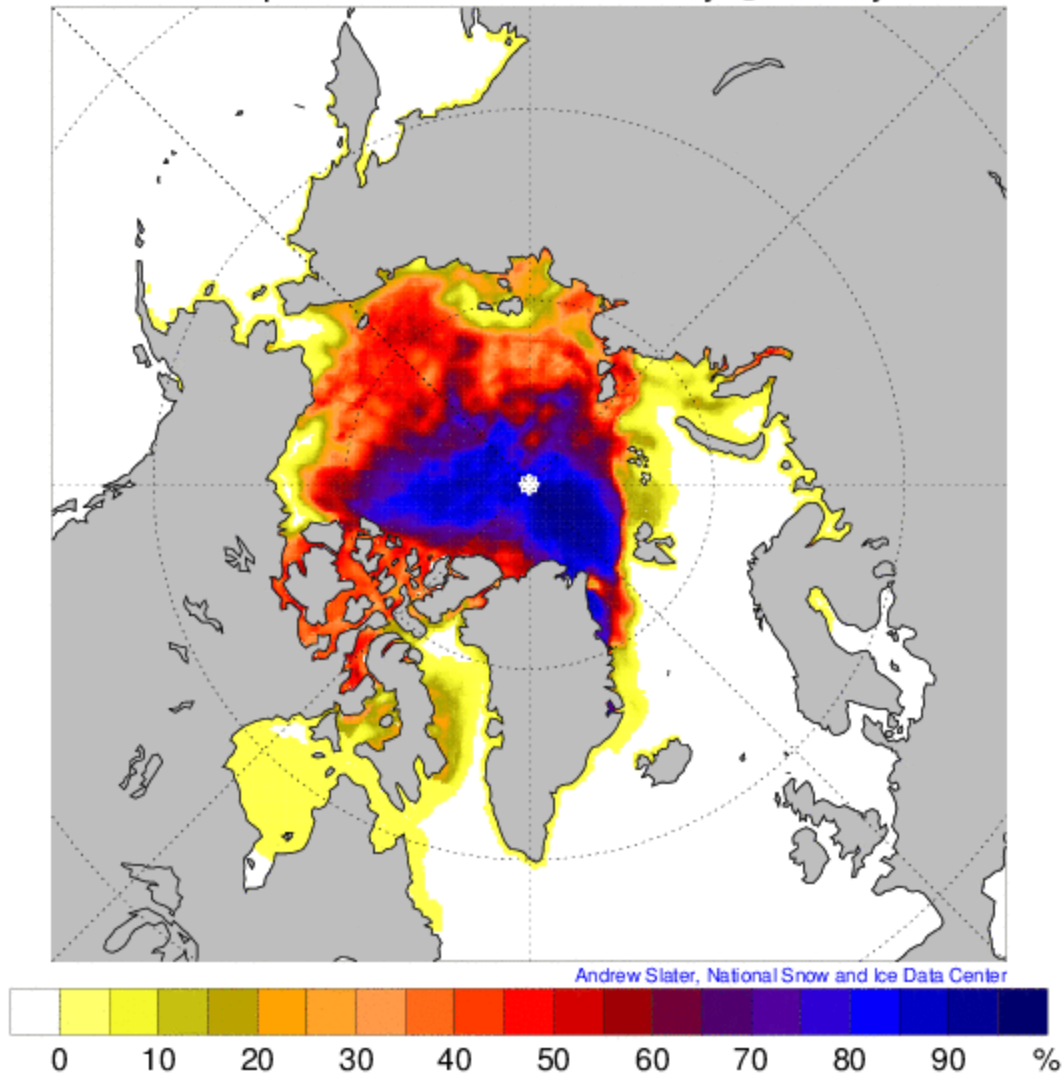
5. Projection uncertainty/probability estimate (only required if available with the method you are using)

0.75 x 10^6 km² (rough estimate)

6. Short explanation/assessment of basis for the uncertainty estimate in #5 (1-2 sentences)
50%

Mean of September 2016 Ice Probability @ 85-day Lead

Andrew Slater, National Snow and Ice Data Center

0	10	20	30	40	50	60	70	80	90	%

7. * "Executive summary" about your Outlook contribution
In a few sentences what your Outlook contribution is and why. To the extent possible, use non-technical language.

It's a very "smooth" or averaged results for much of the Beaufort to Kara Sea – not much discrimination and difficult to tell where the ice will be in September.

I have extended my forecast method to an 85 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.