

**SEA ICE PREDICTION NETWORK (SIPN)**  
**Template for Pan-Arctic Sea Ice Outlook Core Contributions**  
June 2016 Report

**\*REQUIRED**

1. \*Contributor Name(s)/Group – how you would like your contribution to be labeled in the report (e.g., Wiggins et al.)  
Meibing Jin. Labeled as Jin/IARC
2. \*Contributions submitted by a person or group not affiliated with a research organization, please self-identify here:  
\_\_\_\_\_ No
3. \*Do you want your contribution to be included in subsequent reports in the 2016 season?  
\_\_\_ Yes, use this contribution for all of the 2016 SIO reports (this contribution will be superseded if you submit a later one).
4. \*"Executive summary" about your Outlook contribution (max 300 words)  
Say in a few sentences what your Outlook contribution is and why. To the extent possible, use non-technical language.  
A coupled ice-ocean model forecast of the September sea ice extent minimum.
5. \*Type of Outlook projection  
dynamic model

If you use a model, please specify:

Model Name Jin/IARC

Components of the model: Atmosphere\_GFDL\_, Ocean\_POP\_, Ice\_CICE\_, Land\_no\_,  
For models lacking an atmosphere or ocean, please describe the forcing: \_\_\_\_\_

6. • \*Dataset of initial Sea Ice Concentration (SIC) used (include name and date; e.g., "NASA Team, May 2016"):  
  
By model
7. Dataset of initial Sea Ice Thickness (SIT) used (include name and date):  
By model
8. • If you use a dynamical model, please specify:  
a) Model name: POP-CICE  
b) Information about components, for example: ocean model is POP and ice model is CICE
9. \*Prediction of September pan-Arctic extent as monthly average in million square kilometers. (To be consistent with the validating sea ice extent index from NSIDC, if possible, please first compute the average sea ice concentration for the month and then compute the extent as the sum of cell areas > 15%.)

10. Prediction of the week that the minimum daily extent will occur (expressed in date format for the first day of week, taking Sunday as the start of the week (e.g., week of 4 September).

Week of 4 Sept.

11. \*Short explanation of Outlook method (using 300 words or less). In addition, we encourage you to submit a more detailed Outlook, including discussions of uncertainties/probabilities, including any relevant figures, imagery, and references.

The model is initialized with PHC data and runs from 1958-2009 with CORE 2 forcing, 2010-2016 with GFDL IPCC atmospheric model output. Since there is only one run, we can not provide uncertainties.

12. • If available from your method for pan-Arctic extent prediction, please provide:

- a) Uncertainty/probability estimate such as median, ranges, and/or standard deviations (specify what you are providing).
- b) Brief explanation/assessment of basis for the uncertainty estimate (1-2 sentences).
- c) Brief description of any post processing you have done (1-2 sentences).
- d) Raw (and/or post processed) forecasts for this year and retrospective forecasts in an excel spreadsheet with one year on each row and ensemble member number on columns (specifying whether raw or post processed).

None