SEA ICE PREDICTION NETWORK (SIPN)
Template for Pan-Arctic Sea Ice Outlook Core Contributions
June 2017 Report

*REQUIRED

1. *Name of Contributor or name of Contributing Organization and associated contributors as you would like your contribution to be labeled in the report (e.g., Smith, or ARCUS (Wiggins et al.)).

    NMEFC of China (Li & Li)--- Chunhua Li, Ming Li /National Marine Environmental Forecasting Center(NMEFC),China

2. * Contributions submitted by a person or group not affiliated with a research organization, please self-identify here:
    _____ Yes, this contribution is from "Citizen Scientists."

3. * Do you want your contribution to be included in subsequent reports in the 2017 season?
    ___✓___ Yes, use this contribution for all of the 2017 SIO reports (this contribution will be superseded if you submit a later one).
    _____ No, I/we plan to submit separate contributions for subsequent reports.
    _____ No, I only want to participate this time.

4. *"Executive summary" of your Outlook contribution: in a few sentences (using 300 words or less) describe how and why your contribution was formulated. To the extent possible, use non-technical language.

    We predict the September monthly average sea ice extent of Arctic by statistic method and based on monthly sea ice concentration and extent from National Snow and Ice Data Center. The result shows that the Sep. ice extent will be less slightly in 2017 than in 2016.

5. *Type of Outlook method:
    ___dynamic model _✓_statistical ___heuristic ____mixed or other (specify)

6. *Dataset of initial Sea Ice Concentration (SIC) used (include name and date; e.g., "NASA Team, May 2016"):

    Sea Ice Index - Daily and monthly sea ice concentration and extent from National Snow and Ice Data Center.

7. Dataset of initial Sea Ice Thickness (SIT) used (include name and date):

8. If you use a dynamical model, please specify:

    a) Model name:

    b) Information about components, for example:

c) Number of ensemble members and how they are generated:

d) For models lacking an atmosphere or ocean component, please describe the forcing:

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%.)

   4.69million square kilometers

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).

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.

   A simple statistical model is used to predict September monthly Arctic sea ice extent. We find that the sea ice extent of September is well related with the sea ice extent of Jan. to Apr. in the same year, and the ice decreasing trend during Jan. to Apr. of 2017 is similar to the trend of 2016, so we assume that the ice extent will decreasing with the same rate of 2016 .Combined the multiple regression method and optimal climate normal method, the predicted September sea ice extent in 2017 is 4.69 million square kilometers.

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).