SEA ICE PREDICTION NETWORK (SIPN)

Template for Pan-Arctic Sea Ice Outlook Core Contributions
August Report

1. Contributor Name(s)/Group
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2. Type of Outlook projection

   Numerical (time-stepping) Model___ Statistical_ **x**_ Heuristic___

   Components of the model (please check):
   Atmosphere_**x**_ Ocean___ Ice___ Land___

   Are you initializing your method with data from May (or earlier), June, or July?:
   April and May

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

4. Short explanation of Outlook method (1-3 sentences)
   A linear regression model that only takes the atmospheric total column water vapor in spring (April and May) into account is used. The model is fitted over data from 1979-2013 to predict the 2014 September sea-ice extent. For the predictions we use ERA-Interim.

5. Projection uncertainty/probability estimate (but only required if available with the method you are using)
   ±0.59 million square kilometer

6. Short explanation/assessment of basis for the uncertainty estimate in #5 (1-2 sentences; only required if available with the method you are using)
   The uncertainty estimates are calculated as the 95% confidence interval around the mean September sea-ice extent.

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.
   For the prediction of the September sea-ice extent we use a simple linear regression model that is only based on the atmospheric water vapor in spring (April/May). Thereby we assume that the spring atmospheric conditions, more precisely the greenhouse effect associated with the water vapor in the atmospheric column, are important for the seasonal prediction of the September sea-ice extent.