

SEA ICE PREDICTION NETWORK (SIPN)
Template for Pan-Arctic Sea Ice Outlook Core Contributions
June 2015 Report

*REQUIRED

1. *Contributor Name(s)/Group – how you would like your contribution to be labeled in the report (e.g., Wiggins et al.)

Kapsch et al.

2. *"Executive summary" about your Outlook contribution (max 300 words)

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.

3. *Type of Outlook projection
___dynamic model _statistical ___heuristic ___mixed or other: (specify)

4. *September monthly average projection

4.1 million square kilometers

5. *Short explanation of Outlook method (max 300 words)

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 1979-2014 to predict the 2015 September sea-ice extent. For the predictions we use ERA-Interim reanalysis as well as ECMWF operational forecasts.

6. Projection uncertainty/probability estimate for September extent (only required if available with the method you are using)

±0.5 million square kilometer

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

The uncertainty estimates are calculated as the 95% confidence interval around the mean September sea-ice extent.