

SEA ICE OUTLOOK

2016 Report

Core Requirements for Pan-Arctic Contributions:

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.)).

Chylek (LANL/EES)

2. *"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.

Consider each individual sea separately, starting with the sea ice state on July 20 2016. Using statistical methods and sea ice data from 2006-2016.

3. *Type of Outlook method:

X statistical

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

http://nsidc.org/data/seaice_index/ July 20, 2016

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%.)

4.38

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.

For each sea determine the average sea ice decrease between July 20 and September average considering 2006-2015 data.. From the "current" state of July 20, 2016 of each sea subtract the average amount with constrain that sea ice extent cannot be negative for any of the seas. Sum over all the seas.

Submitting an Alaskan Regional Outlook (Optional, yet encouraged):

Please submit a total extent for the Alaskan region, defined here as the combination of the Bering, Chukchi, and Beaufort seas. If possible use the definition from the NSIDC Arctic sea ice regional graphs and time series from the mask below, which is on the 25km by 25km polar stereographic projection used for the passive microwave satellite data. The mask, provided as a netcdf file, is available on the SIPN Call for Sea Ice Contributions (<https://www.arcus.org/sipn/sea-ice-outlook/2016/june/call>). For questions about the format or this request, please contact Muyin Wang (muyin.wang@noaa.gov).

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