Name of Contributor of Name of Contributing Organization:

Rob Dekker

Is this contribution from a person or group not affiliated with a research organization?

Yes this contribution is from a Citizen Scientist"es this contributi"""es this contribution "

Name and organization for all contributors. Indicate primary contact and total number of people who may have contributed to your Outlook, even if not included on the author list.

Individual.

Do you want your June contribution to be automatically included in subsequent reports? (If yes, you may still update your contribution via a form like this one.)

Yes automatically include my contributions in July and August 2017

What is the type of you outlook projection?

Statistical

Starting in 2017 we are accepting both pan-Arctic and pan-Antarctic sea ice extent (either one or both) of the September monthly mean. As in 2016, we are also collecting Alaskan regional sea ice extent. 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%.

a) Pan-Arctic September extent prediction in million square kilometers.

5.4

b) same as in (a) but for pan-Antarctic. If your method differs substantially from that for the Arctic, please enter it as a separate submission.

c) same as in (b) but for the Alaskan region. Please also tell us the maximum possible extent if every ocean cell in your region were ice covered.

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

This prediction is based on the state of land snow cover, ice area, and ice concentration. This year May

showed a very significant land snow anomaly (more that 4 million km^2 more snow cover than last year) which largely dominates my high prediction. The method does not have much skill (460 k km^2 SD compared to 550 k km^2 for a linear trend) and I expect my numbers based on June numbers to be more accurate.

Brief explanation of Outlook method (using 300 words or less).

Using linear regression of a formula that includes 'land snow cover', ice 'area' and ice concentration as variables, regressed over the 1992-2015 period.

Tell us the dataset used for your initial Sea Ice Concentration (SIC). Include name and date (e.g., "NASA Team, May 2017"). We also encourage you to submit initial fields to the dropbox, see https://www.arcus.org/sipn/sea-ice-outlook/2017/june/call in the section on "Submitting Figures and Gridded Data of Full Spatial Fields (Optional) of Forecasts and Initial Conditions" for detailed instructions. Required if sea Ice concentration is used.

Using Rutgers Snow Lab for 'land snow cover', NSIDC monthly data for ice 'area' and 'extent'

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

If you use a dynamic model, please specify the name of the model as a whole and each component including version numbers and how the component is initialized:

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).

Standard Deviation of the prediction is 460 k km^2.

b) Brief explanation/assessment of basis for the uncertainty estimate (1-2 sentences).

Uncertainty obtained by linear regression over the 1992-2015 period.

c) same as in (b) but for the Alaskan region. Please also tell us the maximum possible extent if every ocean cell in your region were ice covered. See https://www.arcus.org/sipn/sea-ice-outlook/2017/june/call in the section on "Instructions for Submitting an Alaskan Regional Outlook" for detailed instructions.

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).