

Sea Ice Outlook
2019 August Report
Individual Outlook

Name of contributor or name of contributing organization:

Sanwa School (Lihoshi et al.)

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

X

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.

Arata Iihoshi, Shunsuke Aokihara, Kota Kinoyama, Ryosei Seo, Kazuki Doi, Syun Nakayama, Kyosuke Nawa, Shibuki Hanamido, Togo Fukushima, Hana Ikegami, Sora Kakimoto, Chino Kamihara, Narumi Sugihara, Misuzu Seno, Chihiro Tsuji, Sae Fujioka, Honoka Fujita, Mona Mitsusue, Kotona Mori, Seina Monden and Hirotaka Kobatake (The total number of students is 20.)

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

Include this submission in the July report only.

What is the type of your Outlook projection?

Heuristic

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.

4.4

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 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.

Monthly mean ice extent in September will be about 4.40 million square kilometers. We estimated the minimum ice area through discussion among 20 students based on the ice map from 2004 to 2019.

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

We first estimated total ice area for September of 2004,2006,2008,2010,2012,2014,2016,2018 and 2019 from the ice concentration map, by approximating the ice cover with triangle or trapezoid and so on.

Based on this rough estimation, we discussed a yearly change of the ice area and calculated the ice area of this September.

Tell us the dataset used for your initial Sea Ice Concentration (SIC).

SIC is not used.

Tell us the dataset used for your initial Sea Ice Thickness (SIT) used. Include name and date.

SIT is not used.

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:

[DynamicModelType]

If available from your method.

a) Uncertainty/probability estimates:

Median

Ranges

Standard Deviations

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).