

Sea Ice Outlook  
2020 August Report  
Individual Outlook

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**Name of contributor or name of contributing organization:**

METNO SPARSE (Wang et al.)

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

**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.**

Keguang Wang, Caixin Wang, Jens Debernard (Norwegian Meteorological Institute)  
Mats Granskog, Sebastian Gerland (Norwegian Polar Institute)  
Sarah Keeley (ECMWF)

**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 August report only.

**What is the type of your Outlook projection?**

Dynamic Model

**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.**

**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.**

We use initial ocean and sea ice data from the analysis of NEMO operational result, use the forcing data from the SEAS5 atmospheric seasonal forecast, and the initial ice concentration is assimilated with amsr2 from University of Bremen. With these configuration, we use the METROMS model to make the prediction.

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

The method is a dynamic coupled ocean-sea ice model. The initial field is from NEMO operational data, with assimilation of AMSR2 ice concentration. The atmospheric forcing is from the ECMWF SEAS5 product.

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

AMSR2 ice concentration from University of Bremen.

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

ice thickness is from NEMO analysis on 5 August 2020.

**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).**