

SEA ICE OUTLOOK
2020 August Report

By UTokyo (Kimura et al.)

Contributor

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Executive summary

Monthly mean ice extent in September will be about 4.32 million square kilometers. Our estimate is based on a statistical way using data from satellite microwave sensor. We used the ice concentration on July 15 and ice age of the day estimated by the backward tracking of sea ice up to 730 days. Predicted ice concentration map from August 1 to September 30 is available in our website: http://ccsr.aori.u-tokyo.ac.jp/~kimura_n/arctic/2020-3e.html

Type of Outlook method:

statistical

Dataset

1. Sea ice concentration on July 15 distributed by ADS/NIPR (<https://ads.nipr.ac.jp>).
2. Daily sea ice velocity of Kimura Dataset (Kimura et al., 2013) for all AMSR-E/AMSR2 years.

Prediction of September pan-Arctic extent as monthly average in million square kilometers.

4.32 million square kilometer

Short explanation of Outlook method.

We predicted the Arctic sea-ice cover from coming August 1 to September 30, using the data from satellite microwave sensors, AMSR-E (2002/03-2010/11) and AMSR2 (2012/13-2019/20). For the prediction, we used the ice concentration on July 15 and ice age of the day estimated by the backward tracking of sea ice up to 730 days. Predicted ice concentration map from August 1 to September 30 is available in our website: http://ccsr.aori.u-tokyo.ac.jp/~kimura_n/arctic/2020-3e.html

Reference

Kimura, N., A. Nishimura, Y. Tanaka and H. Yamaguchi, Influence of winter sea ice motion on summer ice cover in the Arctic, *Polar Research*, 32, 20193, 2013.

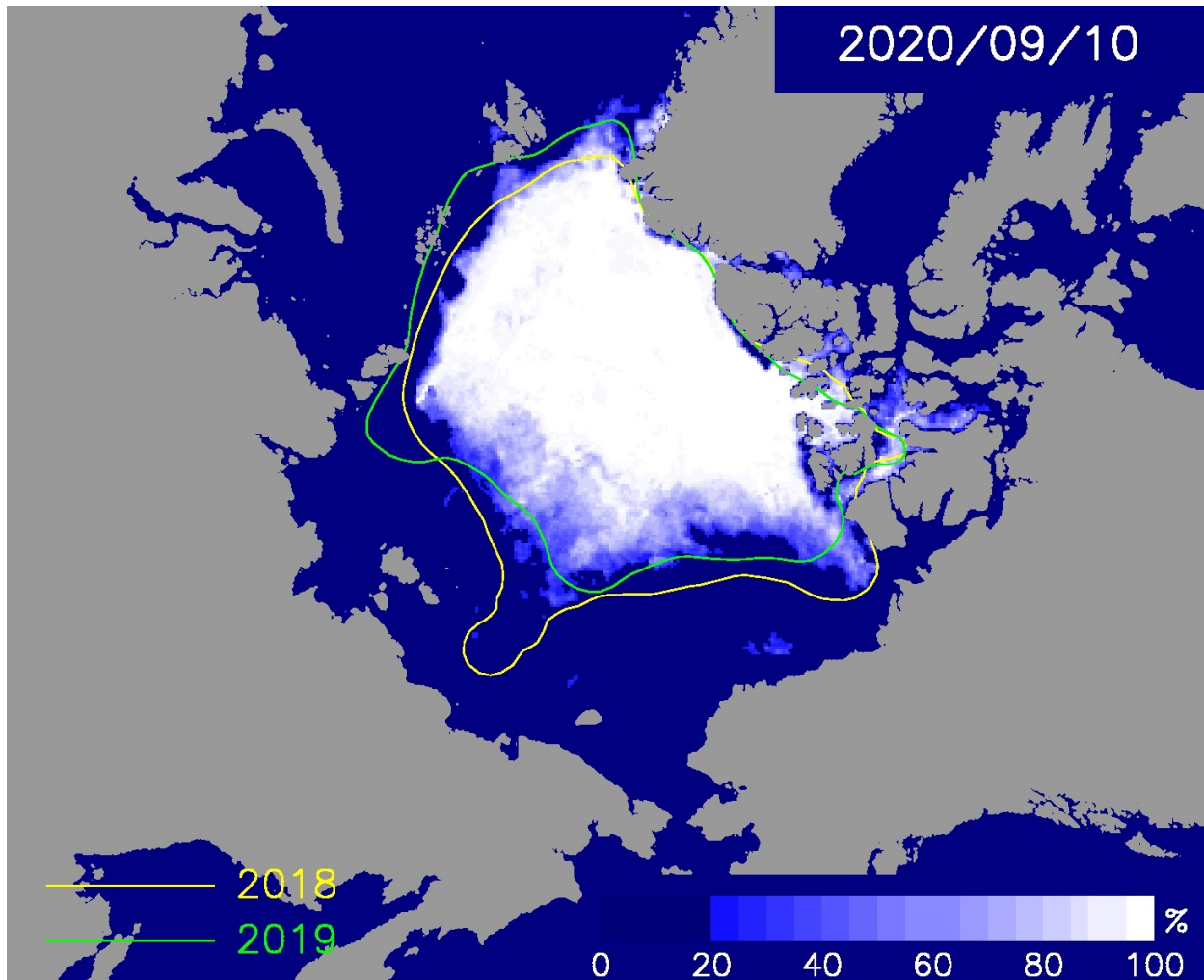


Fig: Predicted monthly mean ice concentration on September 10 2020.