

(/sipn)

July Call for Sea Ice Outlook Contributions

July Call for Sea Ice Outlook Contributions
July Report (Based on May and June data)
Submission Deadline: 6:00 p.m. (AKDT) Monday, 13 July 2020 (Firm)

Dear Community Members,

Your continued participation in the Sea Ice Outlook (SIO) is always much appreciated and is especially valued this year during the COVID-19-related disruptions to our personal and professional lives. The SIPN leadership team extends our wishes for your good health and well-being.

Please follow the submission process guidelines detailed below.

Questions can be directed to: Betsy Turner-Bogren, ARCUS (betsy@arcus.org (mailto:betsy@arcus.org)).

Overview

The Sea Ice Prediction Network-Phase 2 (SIPN2) announces the call for contributions for the 2020 Sea Ice Outlook July report. The Sea Ice Outlook provides an open process for those interested in Arctic sea ice to share ideas. The monthly reports contain a variety of perspectives—from advanced numerical models to qualitative perspectives from citizen scientists. A Post-Season Interim Report, with a focus on performance of Outlooks as compared to sea ice minimum, will be generated at the end of the retreat season. The Post-Season Final Report, which will provide analysis and discussion of factors driving sea ice extent and further explore the scientific methods for predicting seasonal conditions, will be published in early 2021. We encourage all past contributors to submit Outlooks this year and we also hope to see new participants. Please feel free to distribute this call to others who might be interested in participating.

We are again accepting outlooks for pan-Arctic, pan-Antarctic, and Alaskan regional September monthly mean sea ice extent. Estimates of ice retreat and advance, as well as any additional figures and gridded fields, will be accepted for the 2020 July Outlook. We particularly encourage submissions for the Alaska region (i.e., Bering, Chukchi, and Beaufort seas). Submissions that include spatial forecast maps are particularly encouraged. First ice-free dates (IFD) for Hudson Bay will be calculated from the full spatial fields that cover this region. IFD is defined as the first days that Sea Ice Concentration (SIC) drops below 80% and then below 15%. (Note: Outlooks for sea-ice advance dates will be invited for the August SIO report and submitted via the SIPN Data Portal (https://atmos.uw.edu/sipn/).)

For those interested, we invite submissions for Fram Strait, specifically of the September 2020 80% sea ice concentration contour, which offers an opportunity to investigate predictability in the region where the MOSAiC cruise (https://mosaic-expedition.org/) is expected at that time. These forecasts can be submitted via the SIPN Data Portal (https://atmos.uw.edu/sipn/) (see details below under "Submission Process").

Additionally, we encourage submissions to the associated effort of the Sea Ice Drift Forecast Experiment (https://www.polarprediction.net/key-yopp-activities/sea-ice-prediction-and-verification/sea-ice-drift-forecast-experiment) (SIDFEx, 2017-2020, see details below under "Associated Effort - Sea Ice Drift Forecast Experiment").

We strongly encourage all participants whose methods provide information at the local scale to provide full spatial fields via the SIPN Data Portal (https://atmos.uw.edu/sipn/). These submissions will allow us to compute metrics such as sea ice probability and first ice-free day for you, as well as additional regional analysis for the Sea Ice Outlook.

Detailed guidelines for contributions are below. Sea Ice Outlook data resources are available via the National Snow and Ice Data Center (NSIDC) SIPN Data Set webpage (https://nsidc.org/data/sipn/data-sets.html).

SUBMISSION DEADLINE: 6:00 p.m. (AKDT) Monday, 13 July 2020 (Firm).

Contributions received after the deadline may not be fully incorporated into the Outlook report or discussion.

Questions, including how to submit contributions that may not fit into the monthly report format, may be directed to Betsy Turner-Bogren, ARCUS (betsy@arcus.org (mailto:betsy@arcus.org))

TENTATIVE SCHEDULE FOR 2020 SIO MONTHLY AND POST-SEASON REPORTS (62.3 KB) (/files/page/documents/30675/2020_sio_report_schedule.pdf)

Submission Process

New in 2020: this year, a separate submission form will be used for each monthly report (June, July, and August). We will provide the link to each submission form in the corresponding call for contributions. Contributors will still have the option to indicate that they will use the same Outlook for multiple months.

Contributors should use NSIDC's online web form (https://nsidc.org/data/sipn/form-submission) for:

- Required core information for pan-Arctic Outlook projections using dynamical model, statistical, heuristic, and mixed methods.
- Submitting information for pan-Antarctic and/or Alaska regional sea ice extent projections using dynamical model, statistical, heuristic, and mixed methods. (see details below under "Instructions for Submitting an Alaskan Regional Outlook")
- · Submitting additional Outlook report details, including discussions and details related to uncertainties/probabilities.
- Sharing supplemental information (as PDFs less than 20 MB), such as discussion of uncertainties/probabilities, any relevant figures, images, references, or further information about their methods.

Be sure to hit SUBMIT at the bottom of the submission page.

 $You \textit{ will receive confirmation of your submission to the NSDIC online web form \textit{via email.}}\\$

If you are unable to use the online form, please download the submission form below and send the completed form via email to: sio2020@arcus.org (mailto:sio2020@arcus.org).

 $2020 \; SIO \; JULY \; SUBMISSION \; FORM \; (103 \; KB) \; (/files/page/documents/30845/2020_sio_july_submission_form_v2.pdf) \; (/files/page/documents/30845/2020_sio_july_submission_form_v2.pdf) \; (/files/page/documents/30845/2020_sio_july_submission_form_v2.pdf) \; (/files/page/documents/30845/2020_sio_july_submission_form_v2.pdf) \; (/files/page/documents/sio_july_sio_j$

Contributors should use the SIPN Data Portal (https://atmos.uw.edu/sipn/) for:

(Note, password is required, see details below in "Full Field of Sea Ice Forecasts Submission to SIPN Data Portal")

- Submissions of full spatial field sea ice forecasts (full raw fields of sea ice concentration and/or sea ice thickness or postprocessed fields).
- First ice free dates (IFD) for Hudson Bay will be calculated from the full spatial fields that cover this region. IFD defined as the first days that Sea Ice Concentration (SIC) drops below 80% and then below 15%.
- $\bullet~$ Submission of projections of the September 2020 80% sea ice concentration for Fram Strait.

Instructions for Submitting an Alaskan Regional Outlook

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 25 km by 25 km polar stereographic projection used for the passive microwave satellite data. For questions about the format or this request, please contact Julienne Stroeve (stroeve@nsidc.org (mailto:stroeve@nsidc.org)).

The mask is provided as a netcdf file here: NSIDC Regional Mask (NC - 2 MB) (https://www.arcus.org/files/page/documents/28201/sio_mask.nc).

Please enter your submission via the NSIDC's online web form (https://nsidc.org/data/sipn/form-submission) under item 4c.

Also tell us the maximum possible ice extent if every ocean cell in your region were ice covered. For example, if your model uses exactly the same grid as the satellite data, the area would be 4.00 x 10^6 km2. The maximum possible extent is probably much larger than your actual Alaskan Regional Outlook. Be sure to exclude land and islands. Finally, with your entry to item 4c, please include how you defined the Alaskan region: either say NSIDC definition, or if you must use your own definition, describe it. If you skip this step but provide full fields to the SIPN Data Portal (https://atmos.uw.edu/sipn/) (see next section), we'll compute an Alaskan regional outlook for you.

Full Field of Sea Ice Forecasts Submission to SIPN Data Portal

We strongly encourage all participants whose methods provide information at the local scale to provide full spatial fields. Prior to 2018, we asked contributors to email forecast fields of sea ice probability and first ice-free day to us, but now we are requesting full raw fields of sea ice concentration (you may additionally submit post processed fields and/or sea ice thickness) so we can compute these metrics for you, as well as additional regional analysis for the Sea Ice Outlook. The data portal will allow the SIPN community to access the data portal to conduct their own analysis of data that are deemed sharable by the participant who contributed the data.

First ice free dates (IFD) for Hudson Bay will be calculated from the full spatial fields that cover this region. (IFD defined as the first days that Sea Ice Concentration (SIC) drops below 80% and then below 15%). For those interested, we invite submission of projections of the September 2020 80% sea ice concentration for Fram Strait, which offers an opportunity to investigate predictability in the region where the MOSAiC cruise is expect at that time. These forecasts can be spatial field forecasts of the region, or you can submit the pan-Arctic field of the September 2020 80% sea ice concentration contour.

Additionally, for 2020, we invite dynamical model contributors to include spatial fields of their forecast's initial conditions, particularly sea ice concentration and sea ice thickness or ice thickness distribution, with the date of initialization documented. If forecasts are produced from multiple initializations, these could be the mean fields across your initializations or you can include each single initialization.

To submit full spatial fields, contact Ed Blanchard (ed@atmos.uw.edu (mailto:ed@atmos.uw.edu)) to get the password for ftp.

To see examples and definitions of the sea ice probability, first ice-free day, and date of ice advance metrics, see Metrics for the Sea Ice Outlook (https://www.atmos.washington.edu/~ed/sio metrics).

For more information, see the SIPN Data Portal (https://atmos.uw.edu/sipn/). If you have any questions/comments regarding this request, please contact Ed Blanchard (ed@atmos.uw.edu (mailto:ed@atmos.uw.edu)).

Associated Effort - Sea Ice Drift Forecast Experiment

Contributions are again also invited to the Sea Ice Drift Forecast Experiment (SIDFEx, 2017-2020), a community effort to collect and analyze Arctic sea-ice drift forecasts at lead times from days to a year. The forecasts target drifting sea-ice buoys and the trans-Arctic MOSAiC drift campaign (https://mosaic-expedition.org/). SIDFEx is aligned with the Sea Ice Outlook such that modelling groups contributing to the Sea Ice Outlook can contribute to SIDFEx relatively easily by computing trajectories for Lagrangian tracers. This year's drift forecasts are of particular interest for the planning of MOSAiC. Results from the last three years have been described briefly in the 2017 (https://www.arcus.org/sipn/sea-ice-outlook/2017/post-season), 2018 (https://www.arcus.org/sipn/sea-ice-outlook/2019/post-season) Sea Ice Outlook Post-Season Reports.

For further Information, see the SIDFEx Homepage (https://www.polarprediction.net/key-yopp-activities/sea-ice-prediction-and-verification/sea-ice-drift-forecast-experiment/).

For details on the design of SIDFEx and how to contribute drift forecasts, please download the following document. Background and Guidelines for SIDFEx Contributions (103.5 KB) (/files/page/documents/30675/sidfex_background_and_guidelines_20190717.pdf)

SIPN

- 2023: September Report (/sipn/sea-ice-outlook/2023/september)

 2023: September Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2023/september/call)

 2023: August Report (/sipn/sea-ice-outlook/2023/august)

 2023: August Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2023/august/call)

 2023: July Report (/sipn/sea-ice-outlook/2023/july)

 2023: July Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2023/july/call)

 2023: June Report (/sipn/sea-ice-outlook/2023/june)

 2023: June Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2023/june/call)

 2022: Post-Season Report (/sipn/sea-ice-outlook/2022/interim-post-season)
- 2022: September Report (/sipn/sea-ice-outlook/2022/september)

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2022: August Report (/sipn/sea-ice-outlook/2022/august)
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2022: June Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2022/june/call)
2021: Post-Season Report (/sipn/sea-ice-outlook/2021/post-season)
2021: September Report (/sipn/sea-ice-outlook/2021/september)
2021: September Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2021/september/call)
2021: August Report (/sipn/sea-ice-outlook/2021/august)
2021: August Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2021/august/call)
2021: July Report (/sipn/sea-ice-outlook/2021/july)
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2021: June Report (/sipn/sea-ice-outlook/2021/june)
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2020: Post-Season Report (/sipn/sea-ice-outlook/2020/post-season)
2020: Interim Post-Season Report (/sipn/sea-ice-outlook/2020/interim-post-season)
2020: August Report (/sipn/sea-ice-outlook/2020/august)
2020: August Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2020/august/call)
2020: July Report (/sipn/sea-ice-outlook/2020/july)
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2020: June Report (/sipn/sea-ice-outlook/2020/june)
2020: June Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2020/june/call)
2019: Post-Season Report (/sipn/sea-ice-outlook/2020/post-season-0)
2019: Interim Post-Season Report (/sipn/sea-ice-outlook/2019/interim-post-season)
2019: August Report (/sipn/sea-ice-outlook/2019/august)
2019: July Report (/sipn/sea-ice-outlook/2019/july)
2019: June Report (/sipn/sea-ice-outlook/2019/june)
2018: Post-Season Report (/sipn/sea-ice-outlook/2018/post-season)
2018: Interim Post-Season Report (/sipn/sea-ice-outlook/2018/interim-post-season)
2018: August Report (/sipn/sea-ice-outlook/2018/august)
2018: July Report (/sipn/sea-ice-outlook/2018/july)
2018: June Report (/sipn/sea-ice-outlook/2018/june)
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2017: Post-Season Report (/sipn/sea-ice-outlook/2017/post-season)

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2017: August Report (/sipn/sea-ice-outlook/2017/august)
2017: July Report (/sipn/sea-ice-outlook/2017/july)
2017: June Report (/sipn/sea-ice-outlook/2017/june)
2016: Post-Season Report (/sipn/sea-ice-outlook/2016/post-season)
2016: August Report (/sipn/sea-ice-outlook/2016/august)
2016: July Report (/sipn/sea-ice-outlook/2016/july)
2016: June Report (/sipn/sea-ice-outlook/2016/june)
2015: Post-Season Report (/sipn/sea-ice-outlook/2015/post-season)
2015: DRAFT Post-Season Report (/sipn/sea-ice-outlook/2015/summary-draft)
2015: August Report (/sipn/sea-ice-outlook/2015/august)
2015: July Report (/sipn/sea-ice-outlook/2015/july)
2015: June Report (/sipn/sea-ice-outlook/2015/june)
2014: Post-Season Report (/sipn/sea-ice-outlook/2014/post-season)
2014: DRAFT Post-Season Report (/sipn/sea-ice-outlook/2014/summary-draft)
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2014: August Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2014/august/call)
2014: July Report (/sipn/sea-ice-outlook/2014/july)
2014: July Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2014/july/call)
2014: June Report (/sipn/sea-ice-outlook/2014/june)
2014: June Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2014/june/call)
2013: Post-Season Report (/sipn/sea-ice-outlook/2013/post-season)
2013: July Report (/sipn/sea-ice-outlook/2013/july)
2013: June Report (/sipn/sea-ice-outlook/2013/june)
2012: Post-Season Report (/sipn/sea-ice-outlook/2012/post-season-0)
2012: August Report (/sipn/sea-ice-outlook/2012/august)
2012: July Report (/sipn/sea-ice-outlook/2012/july)
2012: June Report (/sipn/sea-ice-outlook/2012/june)
2011: Post-Season Report (/sipn/sea-ice-outlook/2012/post-season)
2011: September Report (/sipn/sea-ice-outlook/2011/september)
2011: August Report (/sipn/sea-ice-outlook/2011/august)
2011: July Report (/sipn/sea-ice-outlook/2011/july)
2011: June Report (/sipn/sea-ice-outlook/2011/june)
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2010: Post-Season Report (/sipn/sea-ice-outlook/2010/post-season)

2010: August Report (/sipn/sea-ice-outlook/2010/august)

2010: July Report (/sipn/sea-ice-outlook/2010/july)

2010: June Report (/sipn/sea-ice-outlook/2010/june)

2009: Summary Report (/sipn/sea-ice-outlook/2009/post-season)

2009: Early September Update (/sipn/sea-ice-outlook/2009/september)

2009: August Report (/sipn/sea-ice-outlook/2009/august)

2009: July Report (/sipn/sea-ice-outlook/2009/july)

2009: June Report (/sipn/sea-ice-outlook/2009/june)

2008: Summary Report (/sipn/sea-ice-outlook/2008/post-season)

2008: July Report (/sipn/sea-ice-outlook/2008/july)

2008: June Report (/sipn/sea-ice-outlook/2008/june)

2008: May Report (/sipn/sea-ice-outlook/2008/may)

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