(/sipn)

(/sipn)

2021 September Call for Sea Ice Outlook Contributions

September Call for Sea Ice Outlook Contributions
September Report (Based on May, June, July, and August data)
Submission Deadline: 6:00 p.m. (AKDT) Monday, 13 September 2021 (Firm)

Dear Sea Ice Prediction Community Members,

Organizers invite contributions to the new monthly SIO Report for September (based on data through end-of-August). As outlined in our previous monthly calls for contributions, this will be an abbreviated report that will include only the figures of outlooks contributed via the online September 2021 Sea Ice Outlook Submission Form (https://docs.google.com/forms/d/1iYBJHbOQOjaJ7jYnXx5FxWnL2pLMzfIlVfhe3Tlc2bI/closedform). The report will include very limited discussion. **Submissions of spatial fields and supplementary materials are NOT invited for the 2021 September SIO Report.**

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

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 in the SIO.

Please follow the new 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) (https://www.arcus.org/sipn) announces the call for contributions for the 2021 Sea Ice Outlook September 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. Post-Season reports will focus on performance of the Outlooks, analysis and discussion of factors driving sea-ice extent, and scientific methods for predicting seasonal conditions.

For the September report we are accepting:

- Outlooks for pan-Arctic, pan-Antarctic, and Alaskan regional September monthly mean sea-ice extent;
- Uncertainty/probability estimates for pan-Arctic submissions;
- Submissions for the Alaska region (i.e., Bering, Chukchi, and Beaufort seas); and
- Optional submissions of Arctic sea-ice extent anomaly forecasts.
  (See detailed guidelines for contributions under "Submission Process" below.)

For the September report we are NOT Accepting:

- Submissions that include spatial forecast maps;
- Estimates of Ice-Free Dates (IFD) or Ice-Advance Dates (IAD); or
- Any additional figures and gridded fields.

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 September 2021 (Firm)
Contributions received after the deadline may not be fully incorporated into the Outlook report or discussion.

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

Tentative Schedule For 2021 SIO Monthly And Post-Season Reports—Per September (PDF - 38 KB)
(/files/page/documents/32401/2021_sio_tentative_schedule_sept_2021_v2.pdf)

Note: The Sea Ice Drift Forecast Experiment (SIDFEx), an effort associated with the SIO, continues to accept submissions. Please see details below under "Associated Effort – Sea Ice Drift Forecast Experiment".

Submission Process

Use the new September 2021 Sea Ice Outlook Submission Form (https://docs.google.com/forms/d/1iYBJHbOQOjaJ7jYnXx5FxWnL2pLMzfIlVfhe3Tlc2bI/closedform) to submit 2021 September Outlook contributions of pan-Arctic, pan-Antarctic, and Alaskan regional September monthly mean sea-ice extent, related uncertainty/probability estimates, and the optional submissions of sea-ice extent anomaly forecasts. You may edit any field before submitting by simply clicking back to the appropriate page.*An alternative submission form is available to contributors who do not have access to the Google-based form. Please contact Betsy Turner-Bogren, ARCUS (betsy@arcus.org (mailto:betsy@arcus.org)) to receive the alternative form via email.*

Contributors should use the Google-based or alternative form to submit:

- Required core information for pan-Arctic Outlook projections using dynamical model, statistical, heuristic, and mixed methods. To be consistent with observations from the NSIDC Sea Ice Index extent, compute the total extent (sum of cell areas >15%) for each day and then average the extents from each of the days in the month into a monthly average extent.
- 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")
- Additional Outlook report details, including discussions and details related to uncertainties/probabilities. (Uncertainty values are solicited for the pan-Arctic only.)
- Executive summaries describing in plain words your Outlook, contributing factors, and your methodology.
- Pan-Arctic Sea-Ice Extent Anomaly Forecasts (See details below under, "Solicitation of Pan-Arctic Sea-Ice Extent Anomalies")

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

You will receive confirmation of your submission to the form via email.

Solicitation of Pan-Arctic Sea-Ice Extent Anomalies (this is an optional submission)

Input received during the SIO Contributors Forum, held in January 2021, motivated the SIPN2 Project Team to invite pan-Arctic sea-ice extent anomaly forecasts for the 2021 SIO. This is an optional submission and it is recognized that not all SIO contributors will be able to provide anomaly forecasts. The request is motivated by the large spread in SIO predictions of mean September sea-ice extent. Some of this spread likely reflects inter-model biases, i.e., some models consistently overestimate ice extent while others underestimate it (relative to observations). The goal of this activity is to eliminate this source of inter-model prediction spread. The long-term mean is not a well-defined concept in a rapidly changing Arctic. The pan-Arctic sea-ice extent anomaly is the departure of the contributors' September extent Outlook relative to the contributors' baseline trend (e.g., the trend in historical observations, model hindcasts, etc.).

The procedure to calculate the anomaly Outlook is:

- Calculate the linear trend (slope) of your September extent mean values from your baseline period. The linear trend will be different for each contributor due to inter-method/model biases.
- Extrapolate the linear trend to calculate an extrapolated September 2021 extent value.
- Calculate the extent anomaly value by subtracting the September 2021 Outlook extent from the extrapolated September 2021 value.

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 of this request, please contact Julienne Stroeve (Julienne.stroeve@colorado.edu (mailto:Julienne.stroeve@colorado.edu)).

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 Alaskan Regional Outlook submission via the September 2021 Sea Ice Outlook Submission Form (https://docs.google.com/forms/d/1iYBJHbOQOjaJ7jYnXx5FxWnL2pLMzfllVfhe3Tlc2bI/closedform) in the "Outlook Prediction" section.

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, please include how you defined the Alaskan region: either say NSIDC definition, or if you must use your own definition, describe it.

Associated Effort – Sea Ice Drift Forecast Experiment

The Sea Ice Drift Forecast Experiment (SIDFEx), an effort associated with the SIO, continues to accept submissions. SIDFEx is 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. Modelling groups contributing to the Sea Ice Outlook can contribute to SIDFEx relatively easily by computing trajectories for Lagrangian tracers. Forecasts can be submitted through the cloud service of the German Climate Computing Centre (DKRZ) at any time. Results from the last four years have been described briefly in the 2017–2020 Sea Ice Outlook Post-Season Reports (https://www.arcus.org/sipn/sea-ice-outlook/archive).

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 (https://www.arcus.org/files/page/documents/30675/sidfex_background_and_guidelines_20190717.pdf) (103.5 KB).

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)

2022: August Report (/sipn/sea-ice-outlook/2022/august)

2022: July Report (/sipn/sea-ice-outlook/2022/july)

2022: July Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2022/july/call)

2022: June Report (/sipn/sea-ice-outlook/2022/june)

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)

2021: July Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2021/july/call)

2021: June Report (/sipn/sea-ice-outlook/2021/june)

2021: June Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2021/june/call)

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)

2020: July Call for Sea Ice Outlook (/sipn/sea-ice-outlook/2020/july/call)

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)

2017: Post-Season Report (/sipn/sea-ice-outlook/2017/post-season)

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)

2014: August Report (/sipn/sea-ice-outlook/2014/august)

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)

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)

Contact: Betsy Turner-Bogren, betsy@arcus.org

(http://www.nsf.gov/div/index.jsp?div=PLR)

(https://www.onr.navy.mil/)

(http://www.noaa.gov)

(http://www.doe.gov)

(https://nerc.ukri.org)

(http://www.polarprediction.net/yopp-activities/)

This Sea Ice Prediction Network-Phase 2 (SIPN2) website is supported by the National Science Foundation under Grant No. OPP-1748308. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.