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August Call for Sea Ice Outlook Contributions

August Report

Submission deadline (firm): Tuesday, 12 August 2014.

Send Outlooks to: Kristina Creek at ARCUS (creek@arcus.org (<mailto:creek@arcus.org>))

The Sea Ice Prediction Network (SIPN) announces the call for contributions for the Sea Ice Outlook August report.

The Sea Ice Outlook provides an open process for those interested in Arctic sea ice to share ideas about the September minimum sea ice extent. The monthly reports contain a variety of perspectives—from advanced numerical models to qualitative perspectives from citizen scientists. A post-season report will provide an in-depth analysis of factors driving sea ice extent this summer as well as explore the scientific methods for predicting seasonal ice extent.

For the August Outlook report, we particularly encourage regional Outlooks and spatial forecasts and maps; both regional and pan-Arctic outlooks will be accepted.

We also welcome any field- or ship-based updates on ice conditions in the different regions and input on which observations are most useful for improving models. Sea ice scientists, volunteer observers and oceanographers are collecting observations routinely by ship throughout the Arctic Ocean. Such observations include sea ice morphology (e.g., concentration, ice type, floe

size, thickness, snow, melt pond characteristics, topography), meteorology (surface measurements) and oceanography (temperature, salinity, upper ocean temperature). Which observations are most useful to improving model predictions or validating these models? Are there particular in-situ observations that we should highlight in our efforts to coordinate data collation?

To help with ship-based observations, a SIPN-related effort, IceWatch, provides a framework and a software tool (ASSIST) to help with standardized, ship-based ice observations. Detailed information and data from past and ongoing cruises can be accessed at <http://www.iarc.uaf.edu/en/icewatch> (<http://www.iarc.uaf.edu/en/icewatch>)

We encourage contributions and participation in this program. For further details, please contact Dr. Jennifer Hutchings (jhutchin@coas.oregonstate.edu (<mailto:jhutchin@coas.oregonstate.edu>)).

All Outlook submissions should be sent directly to Kristina Creek at ARCUS (creek@arcus.org (<mailto:creek@arcus.org>)) with the following subject lines, as relevant:

PAN-ARCTIC OUTLOOK - [YOUR LAST NAME/GROUP NAME]

REGIONAL OUTLOOK - [YOUR LAST NAME/GROUP NAME]

OUTLOOK FOR BOTH REGIONAL AND PAN-ARCTIC - [YOUR LAST NAME/GROUP NAME]

An MS Word document is preferred for ease of formatting to PDF files and extracting images for the website--we will not edit your individual submission and will not post your Word documents.

This month's submission guidelines have the following sections:

- Instructions for submitting a Regional Outlook
- Core Requirements for Pan-Arctic Outlook Contributions
- Additional (Optional) Items for Pan-Arctic Outlook Contributions
- Submitting figures and data (optional)

Submission Guidelines

Submitting A Regional Outlook

1. Region of Interest
Please describe the region your Outlook covers; a location map showing your Outlook region is preferred.
2. Sea Ice Parameter
Provide a regional pattern or a single value estimate of phenological stages (i.e., melt onset, freeze onset, break-up and freeze-up dates, length of open water season) or monthly ice concentration, ice area, and ice extent. Please indicate whether you expect ice conditions to be similar, lighter (i.e., lower ice concentrations, earlier melt onset, earlier break-up, later freeze-up), or heavier (i.e., greater ice concentrations, later melt onset, later break-up, earlier freeze-up) than those of summer 2013.
3. Outline of Methods/Techniques
Provide the type of estimate (heuristic, statistical, ice-ocean model, traditional knowledge, etc.) with a brief description of the methodology and a short paragraph describing the physical rationale for the estimate.
4. Estimate of Forecast Skill
If possible, please include any estimates of past forecast skill and probability/uncertainty associated with your prediction.

Core Requirements for Pan-Arctic Outlook Contributions

The following items are required.

You may also download a template in MS Word: SIO Panarctic Template August (DOCX - 116 KB) (/files/page/documents/21224/sio_panarctic_template_august.docx)

1. Contributor Name(s)/Group
2. Type of Outlook projection
Numerical (time-stepping) Model___ Statistical___ Heuristic___
If you use a numerical model, please specify:
Model Name _____
Components of the model (please check): Atmosphere___ Ocean___ Ice___ Land___
For a model that lacks an atmosphere and/or ocean component, please specify forcing sources _____
Are you initializing your method with data from May (or earlier), June, or July?: _____
Were there any data assimilated in your initialization process? If so, which field(s) was/were ?
3. September monthly average projection (in million square kilometers)
4. Short explanation of Outlook method (1-3 sentences)
If this is a model contribution, please include method of initialization and variable used. In addition, we encourage you to submit a more detailed Outlook, including discussions of uncertainties/probabilities and any relevant figures, imagery, and references.
5. Projection uncertainty/probability estimate (but only required if available with the method you are using)
6. Short explanation/assessment of basis for the uncertainty estimate in #5 (1-2 sentences; only required if available with the method you are using)
7. "Executive summary" about your Outlook contribution
1-3 sentences, to be used in Outlook summary: say in a few sentences what your Outlook contribution is and why. To the extent possible, use non-technical language.

Additional (Optional) Items for Pan-Arctic Outlook Contributions

These are optional but strongly encouraged, as the additional information will allow the SIPN team to better synthesize the Outlook contributions.

1. Submit a map and/or data field of your predicted September sea ice extent/concentration. See below for further information and guidelines on formats.


2. Hindcast validation statistics for a set period. If your method has been tested in a hindcast mode, please provide summary statistics for whatever period used.
3. Estimate for the week that the minimum daily extent will occur (expressed in date format using Sunday to denote the week: e.g., week of 14 September).

Submitting figures and data (optional)

Email Edward Blanchard-Wrigglesworth at ed@atmos.uw.edu (<mailto:ed@atmos.uw.edu>) to arrange to submit your figures and/or data or for inquiries.


These are optional but strongly encouraged for all participants whose methods provide information at the local scale. We will ask for these items henceforth. If you cannot contribute now, please read on anyway so you can take steps to provide the information in the future.

1. Provide a spatial forecast map for September mean ice extent (e.g., jpg, tiff, pdf). If your method predicts sea ice extent (SIE) directly, average it in time and across ensemble members, if you have them, for September (giving values between 0 and 100% inclusive). If your method predicts sea ice concentration (SIC) directly, please average it in time to make a monthly mean SIC, then convert it to SIE (grid cells with $SIC < 15\%$ are assigned $SIE = 0\%$ and $SIC \geq 15\%$ are assigned $SIE = 100\%$). Finally average across ensemble members, if you have them. We refer to this field as a sea ice probability (SIP).

 Sample of SIP (i.e., ensemble mean SIE) in percent for a random year from CESM1.1.

Sample of SIP (i.e., ensemble mean SIE) in percent for a random year from CESM1.1.

2. Provide a spatial map of the first ice-free date (Julian Day when $SIC < 15\%$ or $SIE = 0\%$) in 2014. Also provide a map of one standard deviation across ensemble members, if you have them. Ideally the date is derived from daily frequency output of SIC. For IFD, identify ocean ($SIC < 15\%$ upon initialization) with the Julian day of the start date (July 1 is day 182) and ice points that always have $SIC > 15\%$ with the end date (Sep 31 is day 273). We refer to this field as ice-free date (IFD).

 Sample of IFD (first ice free date as Julian Day) ensemble mean (left) and std dev (right) for a random year from CESM1.1.

Sample of IFD (first ice free date as Julian Day) ensemble mean (left) and std dev (right) for a random year from CESM1.1.

Use the following naming convention for filenames (for example if your sir name is Smith) and you are forecasting September 2014 using June initial data:

Smith_Sep2014_Junedata_SIP.jpg

Smith_Sep2014_Junedata_IFD.jpg

Smith_Sep2014_Junedata_stdIFD.jpg

Smith_Sep2014_Junedata_README.txt

(http://www.atmos.washington.edu/~bitz/SIPN/Smith_Sep2014_Junedata_README.txt) (explaining how you computed SIP and IFD, follow link for an example)

3. Provide your data for SIP and IFD (maps in #1 and #2 above) in a format with geographic information included or in NetCDF, if possible. We will work with the format provided as long as all relevant grid/projection/data format information is provided. Provide the data on your native grid and, if possible, on a common 1 degree grid.

Include latitude (lat) and longitude (lon) grid information in degrees, and for your native grid, include gridcell area (areacello) in square meters. For SIP and IFD, Identify land points in your data field with the identifier -999. Include the std. dev. of IFD (stdIFD) in the same file with IFD.

If you must submit text, please use a column format in the order: lat, lon, areacello (for the file that is on your native grid), and finally the data field. Separate columns with spaces (preferred), commas, or tabs. Do not include any information such as variables names at the beginning. Provide that information in a separate metadata file with all the information needed to understand the file.

For the common grid, please include latitudes 60N, 61N, 62N ... 89N and longitudes 180W, 179W, ... 179E (or 0 to 360E). No need to include areacello for the common grid.

If you provide NetCDF files use the following naming convention (or as necessary for an equivalent set of GeoTIFF files):

Smith_Sep2014_Junedata_SIP_native.nc

(http://www.atmos.washington.edu/~bitz/SIPN/Smith_Sep2014_Junedata_SIP_native.nc) (follow links for an example of each)

Smith_Sep2014_Junedata_IFD_native.nc

(http://www.atmos.washington.edu/~bitz/SIPN/Smith_Sep2014_Junedata_IFD_native.nc)

Smith_Sep2014_Junedata_SIP_common.nc (/files/page/documents/21224/smith_sep2014_junedata_sip_common.nc)

Smith_Sep2014_Junedata_IFD_common.nc (/files/page/documents/21224/smith_sep2014_junedata_ifd_common.nc)

Or if you must use text, please provide all of the following files:

Smith_Sep2014_Junedata_SIP_native.txt

(http://www.atmos.washington.edu/~bitz/SIPN/Smith_Sep2014_Junedata_SIP_native.txt)

Smith_Sep2014_Junedata_SIP_native_meta.txt

(http://www.atmos.washington.edu/~bitz/SIPN/Smith_Sep2014_Junedata_SIP_native_meta.txt)

Smith_Sep2014_Junedata_IFD_native.txt

(http://www.atmos.washington.edu/~bitz/SIPN/Smith_Sep2014_Junedata_IFD_native.txt)

Smith_Sep2014_Junedata_IFD_native_meta.txt

(http://www.atmos.washington.edu/~bitz/SIPN/Smith_Sep2014_Junedata_IFD_native_meta.txt)

Smith_Sep2014_Junedata_SIP_common.txt

Smith_Sep2014_Junedata_SIP_common_meta.txt

Smith_Sep2014_Junedata_IFD_common.txt

Smith_Sep2014_Junedata_IFD_common_meta.txt

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)

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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](http://sipn/sea-ice-outlook/2012/post-season-0))

2012: August Report ([/sipn/sea-ice-outlook/2012/august](http://sipn/sea-ice-outlook/2012/august))

2012: July Report ([/sipn/sea-ice-outlook/2012/july](http://sipn/sea-ice-outlook/2012/july))

2012: June Report ([/sipn/sea-ice-outlook/2012/june](http://sipn/sea-ice-outlook/2012/june))

2011: Post-Season Report ([/sipn/sea-ice-outlook/2012/post-season](http://sipn/sea-ice-outlook/2012/post-season))

2011: September Report ([/sipn/sea-ice-outlook/2011/september](http://sipn/sea-ice-outlook/2011/september))

2011: August Report ([/sipn/sea-ice-outlook/2011/august](http://sipn/sea-ice-outlook/2011/august))

2011: July Report ([/sipn/sea-ice-outlook/2011/july](http://sipn/sea-ice-outlook/2011/july))

2011: June Report ([/sipn/sea-ice-outlook/2011/june](http://sipn/sea-ice-outlook/2011/june))

2010: Post-Season Report ([/sipn/sea-ice-outlook/2010/post-season](http://sipn/sea-ice-outlook/2010/post-season))

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

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

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

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

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

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

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

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

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

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

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

2008: May Report ([/sipn/sea-ice-outlook/2008/may](http://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/>)

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