

PolarPredictNews

Newsletter #05

Jan. 2018



Canadian Autonomous Arctic Aerosol Lidar (CAAAL) at the Igaluit
ECCC supersite (photo courtesy of Daniel Coulombe, see story #01)

Dear Colleagues,

Welcome to the first PolarPredictNews in 2018! This year will be critical for the observational component of YOPP, with two Arctic Special Observing Periods (SOPs), and the Antarctic SOP commencing on 16 November. With the Arctic winter SOP starting in less than two weeks, on 1 February, it will be interesting to see how forecasts perform with a significantly enhanced conventional observing system in the Arctic.

In this issue, Barbara Casati and Gunilla Svensson make the case for multivariate, high-frequency observations from supersites that will be matched by corresponding analysis and forecast data. A great concept, and I look forward to seeing the insight gained in terms of process understanding, model evaluation, and forecast verification. The data will be made available in 2018, so stay tuned.

One of the latest YOPP-endorsed projects is the community effort Sea Ice Prediction Network (SIPN)-South is the Southern Hemisphere counterpart of the well-known Arctic SIPN. I encourage the community to strongly engage here to establish a baseline of skill for the Antarctic.

I would like to close on a more personal matter. Winfried Hoke who made excellent contributions to the planning of YOPP during the last two years left the International Coordination Office on 17 January. Thank you, Winfried; and all the best for your career!

Happy reading,
Thomas Jung

The Year of Polar Prediction (YOPP) is a major international activity that has been initiated by World Meteorological Organization's World Weather Research Programme (WWRP) as a key component of the Polar Prediction Project (PPP). It takes place from mid-2017 to mid-2019. The overarching goal of YOPP is to significantly advance our environmental prediction capabilities for the polar regions and beyond. As an internationally coordinated period of intensive observing, modelling, prediction, verification, user-engagement, and education activities which involves various stakeholders, the YOPP contributes to the knowledge base needed to manage the opportunities and risks that come with polar climate change.

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01 Supersite Multi-Variate High-Frequency Observations: An Opportunity for Model

- 02 **Process Evaluation** | (by Barbara Casati, / Environmental and Climate Change Canada and Gunilla Svensson, University of Stockholm, Sweden) **How good is environmental prediction in the polar regions? Are there certain meteorological situations when Numerical Weather Prediction (NWP) systems perform systematically well? Are there specific weather phenomena which instead are**

not well represented by our numerical models? Is this linked to the physical processes in the atmosphere, land, sea-ice or ocean components, or is it due to the coupling at the interfaces? These are some of the questions that will be addressed through coordinated process-based evaluations using high-frequency multi-variate observations at polar so-called supersites during the Year of Polar Prediction (YOPP). The

Polar Prediction Project Steering Group has identified a number of key Arctic and Antarctic observatories with multiple systems deployed for long-term monitoring. These supersites have suites of instruments, using both direct and remote techniques (such as lidars, radars, ceilometers, radiometers), that provide detailed measurements that characterize the vertical column of the atmosphere as well as the surface conditions and energy fluxes. These observations extend far beyond the traditional synoptic surface and upper-air observations.

High Frequency NWP Vertical Profiles

Some model centres (such as the European Centre of Medium-Range Weather Forecasts ECMWF and Environment and Climate Change Canada ECCC) have already agreed to support this process-based analysis by providing NWP model output at high frequency (on the order



Arctic and Antarctic YOPP Supersites (marked with 'S'). The kml file including additional activities to be carried out during YOPP (extra radiosondes, buoy deployments, and aircraft campaigns) can be downloaded from [here](#) (Figure: Google Earth). All placemarks are based on information provided to the Polar Prediction Project Coordination Office and may contain errors. For any changes or amendments contact office@polarprediction.net.



Barbara Casati (left) is leading the YOPP Verification Task Team. Gunilla Svensson (right, YOPP Modelling Task Team) is advising the Verification team on supersite output from the modelling perspective.

of model time-step) on model levels to enable comparison with the multitude of available observations. More model centres are most welcome to join the activity with regional or global NWP or climate model output. The

high frequency dataset enables process-based analysis investigating: the representation of cloud micro- and macro-physics; the representation of aerosols and hydrometeors microphysics; the closure of the radiation, turbulence and energy budgets; the representation of the energy and momentum fluxes.

Key Arctic and Antarctic Supersites

The Arctic supersites include the International Arctic Systems for Observing the Atmosphere ([IASOA](#)) stations at Barrow, Oliktok Point, Eureka, Alert, Summit, Ny-Ålesund, Pallas-Sodankylä, Tiksi, Cherskii, Cape Baranova, as well as the ECCO sites Iqaluit (see title picture) and Whitehorse. The Antarctic supersites include Alexander Tall Tower, Casey, Davis, Dome-C, Dumont D'Urville, Halley IV, Jang Bogo, King George Island, Georg Von Neumayer, Mawson, Syowa, Amundsen-Scott South Pole, Byrd, Rothera, Vostok, McMurdo, Troll (see also [here](#)). These sites span the diversity in climatology and topography found in the polar areas and thus represent a variety of challenges for NWP systems. The list is quite long and participating model centres may choose to provide output for all or a limited set depending on resources and interest.

Ocean and Sea-Ice Supersites

Similar output, with the addition of sea-ice and ocean variables, is planned for locations over the Arctic Ocean to study the vertical columns of the atmosphere and ocean

including the coupling at the sea-ice covered surface. Proposed locations for this are within the Surface Heat Budget of the Arctic Ocean (SHEBA) campaign area, where it is interesting to compare today's conditions with those that occurred during the 1997/1998 SHEBA experiment. To have a suite of forecasts for the upcoming [MOSAic drifting observatory](#) in real time is challenging, and a pilot test for this will be the 2018 summer expedition with the Swedish icebreaker Oden.

Polar Processes Evaluation

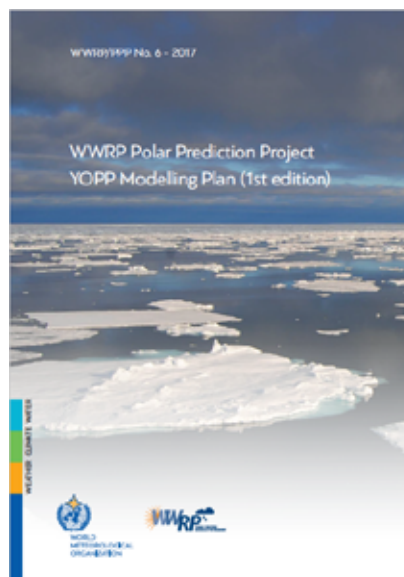
The unique dataset of paired model output and multi-variate high-frequency observations at the Arctic and Antarctic supersites is open and available to the whole scientific community. Process-evaluation studies are encouraged to join the ongoing [YOPP Verification activities](#) coordinated by the YOPP Verification Task Team. This process-based evaluation aims to enhance polar prediction through a better understanding on how numerical models represent the physical processes and exchanges occurring between atmosphere-cryosphere-ocean.

Contact: Barbara Casati barbara.casati@canada.ca and Gunilla Svensson gunilla@misu.su.se

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02 YOPP Modelling Plan | The first edition of the YOPP Modelling Plan summarizing plans for modelling work to be carried out as part of the Year of Polar Prediction has been published. Led by WMO consultant and former

Met Office scientist Richard Swinbank, the YOPP Modelling Task Team finalized the first edition of the 'WWRP Polar Prediction Project YOPP Modelling Plan', which is



Another milestone for the Year of Polar Prediction: The YOPP Modelling Plan will help coordinating various modelling experiments.

published as part of the WMO WWRP/PPP series. Following discussions at the YOPP Modelling Planning Workshop held in September 2016 in Reading, UK, it represents a milestone for YOPP as it will help to coordinate different modelling efforts, particularly between YOPP-related research institutes and operational centres. The document outlines plans for a set of reference modelling datasets that will support a range of YOPP scientific investigations, plus plans for modelling experiments that will be carried out during the YOPP Core Phase and Consolidation Phase. All YOPP model experimenters are encouraged to include

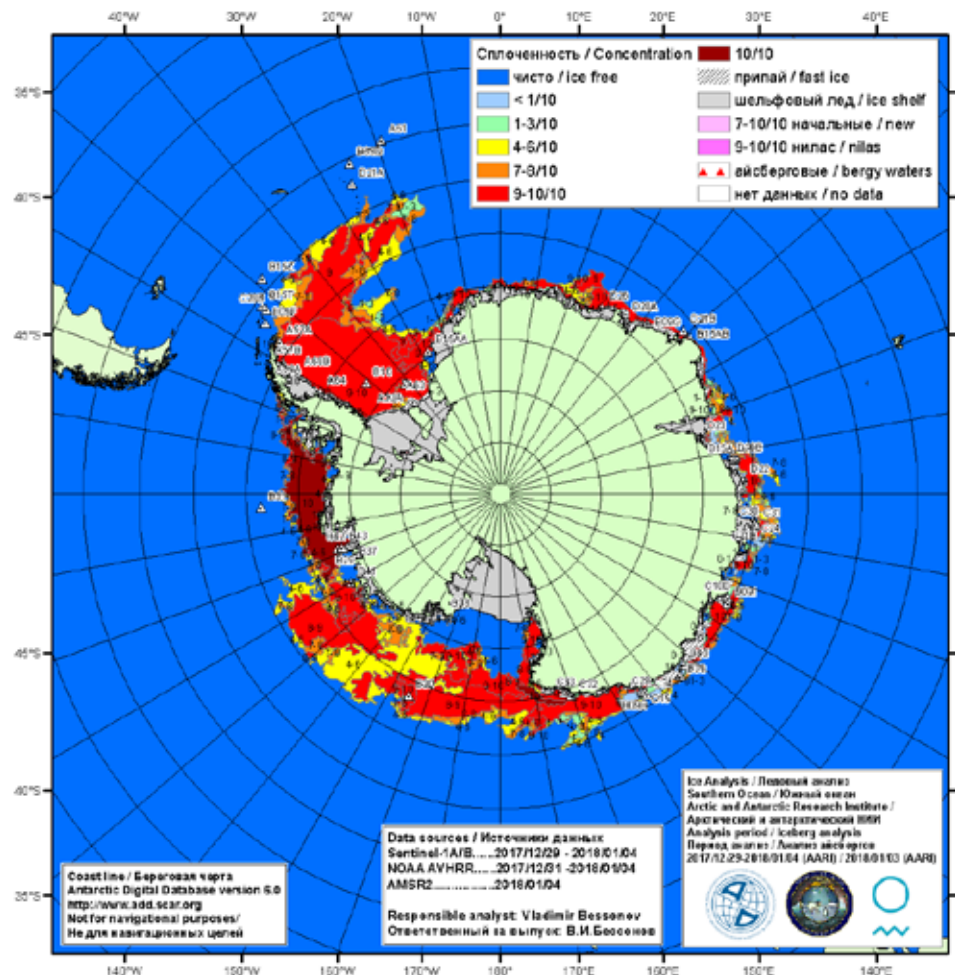
a standard set of model output diagnostics in order to facilitate comparison between different models, and between model output and observations. The model output standards are set out in the supplementary document 'A Common Set of Model Output for YOPP'.

04 / Both documents can be
12 downloaded from the [YOPP Modelling Task Team website](http://www.yopp-modelling-task-team.org).

Contact: Richard Swinbank
richard.swinbank@me.com

03 Sea-Ice Information Services in the World | (by Vasily Smolyanitsky, Arctic and Antarctic Research Institute, Russia) A 2017 update of the World Meteorological Organization (WMO) publication WMO-No. 574 'Sea Ice Information Services in the World' has been released by the Joint World Meteorological Organization/ Intergovernmental Oceanographic Commission Technical Commission for Oceanography and Marine Meteorology (WMO-IOC JCOMM) Expert Team on

Sea Ice (ETSI). This update intends to provide information on best practices in sea-ice services available world-wide to mariner and other users. Formally extending the two WMO publications No. 9, Volume D – Information for Shipping and No. 558 – Manual on Marine Meteorological Services (WMO-No. 558), the document reflects new types of sea-ice and iceberg information. Areas that have seen substantial progress in the updated version are the complementation of classical ice services by sea-ice forecasts based on numerical models and Southern Ocean sea-ice and iceberg analysis, which are reflected by corresponding



Ice and iceberg analysis chart for 29/12/2017-04/01/2018 representing the Russian/Norwegian/USA AARI-NIC-NMI pilot project on integrated sea ice analysis for Antarctic waters. Joint activities include weekly hemispheric sea ice and tabular iceberg analysis (NIC); bi-weekly hemispheric sea ice and weekly tabular iceberg analysis (AARI); and weekly regional Antarctic peninsula sea ice analysis (NMI). Products are available in WMO SIGRID-3 and WMO/IHO S-411 exchange formats at the project website (<http://ice.aari.aq>) and JCOMM Ice Logistics Portal (<http://www.bsis-ice.de/IcePortal/>).

additions to the document by numerous ice services. The document greatly facilitates getting an overview on current sea-ice services - just in time for the Year of Polar Prediction (YOPP) Core Phase. The document and future updates can be obtained [here](#). Additional requests on JCOMM sea-ice regulatory material may be also forwarded to ETSI chair Dr Vasily Smolyanitsky. **Contact:** Vasily Smolyanitsky vms@aari.aq

04 PANGAEA Data Portal Serves as YOPP Data Hub | The World Data Center for Earth and Environmental Science PANGAEA hosted by the German Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research offers to serve as a data hub for the Year of Polar Prediction Data Portal. From now on, YOPP-relevant data can be submitted to the PANGAEA database where it will be flagged as a 'YOPP' data set. Data archived at PANGAEA will then be harvested from the YOPP Data Portal meta database. As the majority of data collected during observational YOPP campaigns as well as by modelling and verification efforts will be stored at national data centres and portals, the YOPP data portal provides metadata and links to respective data sets generated during the Year of Polar Prediction. As a legacy for YOPP, this data portal takes into account the various requirements of end-users working with the YOPP data collection. The YOPP Data Portal is hosted by the Norwegian Meteorological Institute and can be accessed at <http://yopp.met.no/>.



Colleagues who would like to upload their YOPP-relevant data to PANGAEA, shall use the link <https://pangaea.de/submit/> for data submission: The word 'YOPP' needs to be stated in the 'label field' of the data submission form in order to have the data flagged as 'YOPP' data set. Please note that PANGAEA does not have any data format templates for data submission. Registration is required to upload

data to PANGAEA. Since well-established in the weather and climate community, the data should preferably be formatted as NetCDF/CF (including ACDD elements) for reuse purposes by the modelling community allowing to reformat into BUFR if needed.

Contact: Amelie Driemel Amelie.Driemel@awi.de (PANGAEA), Øystein Godøy o.godoy@met.no (YOPP Data Archive)

05 Special Issue: Impact of a Rapidly Changing Arctic on Eurasian Climate and Weather | A special issue in the journal **Advances in Atmospheric Sciences** presents new research



efforts towards a predictive understanding of Arctic climate change and its linkage with Eurasian mid-latitude climate and weather. In recent decades, Arctic warming has amplified markedly and sea ice has shrunk drastically, leading to an emergent forcing that possibly drives anomalous atmospheric circulation and weather patterns beyond the Arctic. The special issue 'Impact of a Rapidly Changing Arctic on Eurasian Climate and Weather' presents a selection of new research efforts towards a predictive understanding of Arctic climate change and its linkage with Eurasian mid-latitude climate and weather.

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'Our understanding of Arctic-midlatitude linkages is still at a pre-consensus stage,' says Thomas Jung, chair of the Year of Polar Prediction initiative and professor of climate dynamics at the Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research in Bremerhaven, Germany. He co-authored the [issue's preface](#) as a guest editor. *'...it is important, therefore, to bring together the latest research results.'*

The special issue focuses on understanding how changes in the Arctic influence the mid-latitude

regions of the globe. These areas which include Europe, most of Asia, north Africa, and much of North America sandwich the central tropical region and are capped by the Earth's poles. While the increased near-surface temperature of the Arctic and the significantly decreased sea ice are undisputed facts, the link between such changes and the extreme climate and weather events in the mid-latitudes is still debated.

06 SAVE the DATE - 3rd YOPP in the Southern Hemisphere Meeting | Following the 13th Workshop on Antarctic Meteorology and Climate (16–18 July 2018), the third YOPP in the Southern Hemisphere (YOPP-SH) meeting will be held on 19 July 2018 in Madison, Wisconsin, USA.

During the third YOPP-SH meeting, project investigators and representatives of national agencies active in Antarctica will provide updates on preparations and the status of planning with regards to the Special Observing Period (SOP) in the Southern Hemisphere which takes place during the next austral summer season from 16 November 2018 to 15 February 2019. Enhanced extra routine observations on land but also ship- and airborne by e.g., radiosondes, buoys, automatic weather stations will significantly contribute to improve predictive skill in the Southern Hemisphere high latitudes. The meeting will be hosted by the Antarctic Meteorological Research Center and Automatic Weather Stations Project at the University of Wisconsin-Madison. For more information on the AMC Workshop, please see [here](#). Information on registration for the YOPP-SH workshop will follow soon via the [website](#) and [mailing list](#).

Contact: Kirstin Werner kirstin.werner@awi.de (YOPP office), David Bromwich bromwich@polarmet1.mps.ohio-state.edu

07 MOSAiC Implementation Workshop and Official Start | (by Anja Sommerfeld, Alfred Wegener Institute, Potsdam, Germany) As a major step in further scientific and logistic planning



Large crowd: Group photo of the MOSAiC Implementation Workshop's participants at the Arctic and Antarctic Research Institute in St. Petersburg, Russia (Photo: Vladimir Zamyatin/AARI).

of the Arctic MOSAiC drift experiment, an [Implementation Workshop](#) was held from 13–16 November 2017 at the Arctic and Antarctic Research Institute (AARI) in St. Petersburg, Russia. The International MOSAiC Steering Committee will officially be formed and announced at the launch of the MOSAiC drift experiment that will take place at the Alfred Wegener Institute, research unit Potsdam, in summer 2018. The project's official start will thus be aligned with the Fram expedition that started 125 years ago.



Supported by the International Arctic Science Committee (IASC), the workshop aimed at coordinating the various scientific plans on board the German research icebreaker RV Polarstern and the distributed network on ice around the vessel. About 120 participants attended the meeting, representing various research disciplines relevant for studies of the coupled

Arctic climate system but also from logistic units that help to make the MOSAiC expedition happen. Presentations and breakout sessions indicated a strong progress during the last month in all MOSAiC teams. Most of the berths on RV Polarstern are already assigned and therefore the teams are well aware of the scientific work already funded but also of current gaps to be filled within 2018. Resulting from the workshop, an update of the MOSAiC Implementation Plan will be published in February 2018. The next MOSAiC workshop will take place in Potsdam, Germany, from 28 May – 1 June 2018.

Contact: Anja Sommerfeld – MOSAiC Project Manager Anja.Sommerfeld@awi.de

08 Sea Ice Drift Forecast Experiment | (by Helge Goessling, Alfred Wegener Institute, Bremerhaven, Germany) **The Sea Ice Drift Forecast Experiment (SIDFEx), a contribution to YOPP, has been initiated as a community effort to collect and analyze Arctic sea ice drift forecasts at lead times from days to a year.**

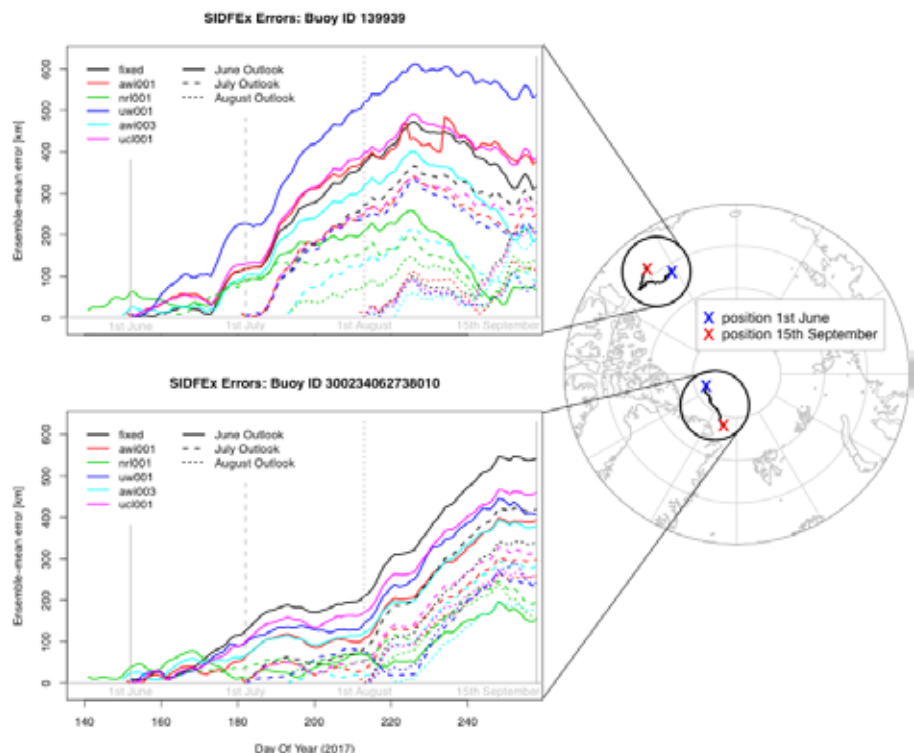
The forecasts are based on arbitrary methods, for a number of sea-ice buoys and, ultimately, for the MOSAiC drift, on a regular basis. So far, six groups have contributed drift forecasts to SIDFEx.

Four groups have derived their seasonal-range forecasts by means of diagnostic tracking based on prediction drift fields of coupled or uncoupled general circulation models; three of these correspond to September sea-ice forecasts that were part of the 2017 Sea Ice Outlook of the Sea Ice Prediction Network (SIPN). In addition, one group has based its forecasts on satellite-derived drift fields of past years

which may serve as a proxy for a climatological reference forecast. All these groups have submitted ensembles of drift trajectories. Moreover, one group submits daily short-term (10-day) deterministic forecasts in near-real-time. We are very grateful to all contributors.

The forecasts are mostly better than a stationary reference where the buoy position is fixed at the initial time, whereas the satellite-based climatological forecasts are more difficult to beat. Some details can be found in the [2017 SIO post-season report](#). We hope that even more groups will contribute to SIDFEx in 2018 and 2019 to allow broader analyses. An exciting upcoming event that might serve as an interesting SIDFEx target is the planned drift of the research icebreaker Oden in the Arctic summer 2018. If you would like to learn more, please contact sidfex@polarprediction.net.

Contact: Helge Goessling helge.goessling@awi.de



SIDFEx errors of ensemble-mean position forecasts (without bias correction) for two IABP buoys. The colors indicate the different forecasts systems of the groups, the line styles (straight, dashed, dotted) the different initialization times. Note that the exact times differ between the groups (Figure courtesy of Helge Goessling).

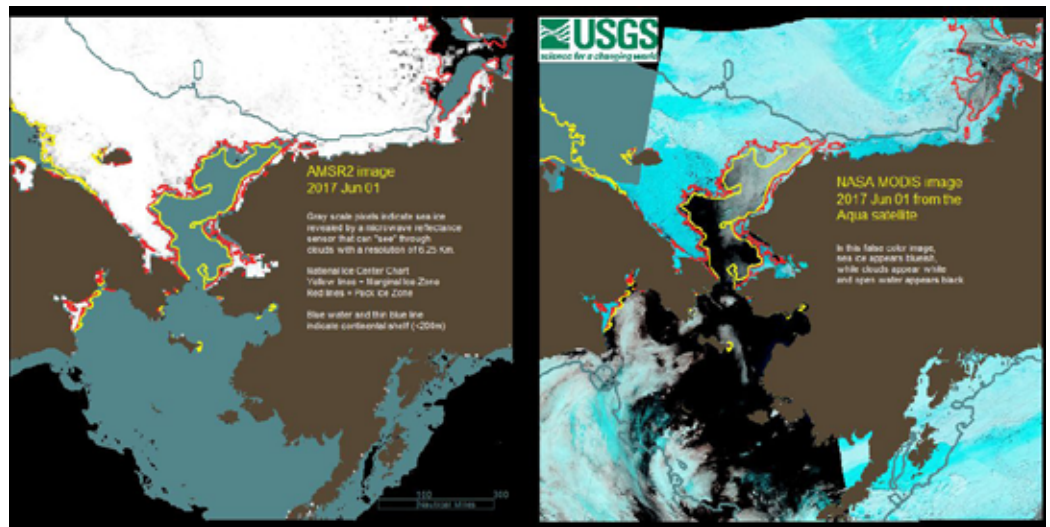
09 IceMail for Alaskan and Russian Far East Waters

| (by Anthony Fischbach, USGS Alaska Science Center) Daily sea ice imagery and charting are required for logistics and navigational planning in Arctic waters, yet access to these data often requires high bandwidth data access and substantial Geographic Information System (GIS) processing. The United States Geological Survey USGS developed a [software script](#)

that provides these data in a format to be accessed through moderate band-width data communications.

08 / The software script acquires, processes and
12 delivers the sea-ice data in a format that may be manipulated by openly available virtual globe software, be visualized by software commonly installed on all smart phones and computers, and may be accessed through moderate band-width data communications available in remote communities and offshore research vessels. The script sends daily or weekly e-mails with attached maps images and virtual globe data files of sea-ice products, including the National Ice Center Marginal Ice Zone chart, and images of the 6.25 km resolution passive microwave reflectance optimized to visualize sea ice. In the emailing, the script provides links to the NASA MODIS imagery corrected to enhance visualization of sea ice, to the National Weather Service sea ice and surface forecast products, to the NOAA NECP forecasted 24 h sea-ice drift map, and to the latest NOAA images from the POES AVHRR satellite. To subscribe to this script, follow one of the links below:

[REQUEST MAPS](#) -- sent each Monday (Each Monday this will send the (~165 Kb) map images,



Sea-ice data for the Alaskan and Russian far East waters provided through IceMail in a format that can be viewed on smart phones and computers even when only moderate band-width data communication is available (Source: USGS). Products are most useful during the Arctic shipping and boating season, when marine vessel operators are making logistic's plans, and coastal communities are boating for subsistence purposes.

which may be viewed on any smart phone or computer).

[REQUEST MAPS](#) -- sent each day (Daily this will send the (~165 Kb) map images, which may be viewed on any smart phone or computer).

[REQUEST MAPS AND DATA](#) -- sent each day (Daily this will send the maps and an extra ~250Kb of data files that may only be viewed in virtual globe software).

Although this script has been for the Alaskan and Russian far eastern Arctic waters, it may be adapted for any Arctic or Antarctic region.

Contact: Anthony Fischbach afischbach@usgs.gov

10 Subject-Matter Expert for PPP-SERA | PPP's Societal and Economic Research and Applications (PPP-SERA) team is building up as the Chilean meteorologist Jorge Carrasco joins the group as a subject-matter expert. Jorge Carrasco received his PhD in meteorology/atmospheric sciences in 1994 from the Ohio State University in Columbus, OH, USA and added an on-the-job master program on Climate Change and Sustainable Development at the Spanish Vértice Business School in 2017. He had been

affiliated with the Chilean Weather Service for 31 years where he started as a forecaster in 1983 and became Deputy Director from 2007 to 2013. Since 2009, Jorge is teaching Antarctic meteorology and climatology at the Universidad de Magallanes in Punta Arenas where he works as an Associate Researcher in the affiliated Antarctic GAIA Research Center since 2014. Jorge has also been part of Working Group I (Chapter 4) of the Fourth and Fifth IPCC Reports. With his experience as a forecast provider but at the same time relying on good forecast products when he is out in Antarctica, he will be affiliated with PPP-SERA and consulted regularly to strengthen the [PPP-SERA team](#) in the Southern Hemisphere.



New aboard PPP-SERA:
Jorge Carrasco (Photo:
Gaston Torres)



Chair of the Polar Prediction
Project Thomas Jung (Photo:
Martina Buchholz/Alfred
Wegener Institute)

**11 Interview with
PPP Steering
Group Chair
Thomas Jung** | As
the chair of the Polar
Prediction Project
Steering Group,
Thomas Jung who
also is professor for
Physics of the
Climate System
at the University

of Bremen and leads the Climate Dynamics Section at the Alfred Wegener Institute (AWI), Bremerhaven, Germany, is responsible for planning and coordination of the various activities during the Year of Polar Prediction. In an interview, published on the AWI website, he talks about how the weather and climate at the Earth's poles are changing, how accurately weather and sea-ice conditions can be yet forecasted, and which commercial usage interests might arise in a changing polar environment. The interview can be found [here](#). See also the complete focus topic ['Polar Predictions'](#) at the AWI website.

12 YOPP Office News | Thanks to our PPP Steering Group member Qingua Yang and his colleague Qizhen Sun from the Chinese National Marine Environmental Forecasting Center, the **Polar Prediction video animation** is now also available with **Chinese subtitles**.

The video can be viewed on the [YOPP video channel](#).



Observational activities can now also be explored with the **YOPP Observations Layer over time**. The [kml file](#) to be opened e.g., with Google Earth displays information about extra observations such as buoys, automatic weather stations and radiosonde launches during the Special Observing Periods of the Year of Polar Prediction (YOPP SOPs). A newly inserted function allows users to now discover when the different activities actually will take place.

To turn or not to turn: How the right advice enables informed decisions is explained by Jan Lieser and Tomas Remenyi from the Australian Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC). In this [third contribution](#) to the forecast user dialogue platform **Polar Prediction Matters**, the two experts explain how sea-ice services help minimizing the risk for accidents in Antarctic waters.

**13 YOPP-
endorsed! – SIPN
South** | YOPP

endorsement is available for projects, programmes and initiatives but also for institutions and operational centres that contribute to making the Year of Polar Prediction successful. More than sixty projects, programmes and initiatives already received project endorsement from YOPP.



The YOPP-endorsed project 'Sea Ice Prediction Network South' (SIPN South) is

led by the Belgian climate scientist François Massonnet who currently works as a postdoctoral researcher at the Catholic University of Louvain in Belgium. Recently, he and his colleagues had initiated the **SIPN South** initiative which – similar to the SIPN initiative that collects forecast of the September sea-ice minimum in the Arctic on a yearly basis – invites researchers to submit a forecast for the Antarctic sea-ice minimum



François Massonnet leads SIPN South, yet as a climate modeller so far has not been out in the field but for a Svalbard summer school. 'Going to the field would be enlightening!', he says (Photo: private).

with the goal to assess the predictability of circumpolar, regional and local Antarctic sea-ice conditions. The first coordinated sea-ice prediction experiment in the Southern Ocean has just started targeting the current Antarctic summer season's minimum in February 2018.

Dr. Massonnet, what are you going to achieve with SIPN South?

Our goal is to make an initial assessment of the ability to forecast sea ice around Antarctica in summer. Research has indicated that – in theory – summer sea-ice conditions could be predictable a few months ahead but this depends on the region considered, the physical mechanisms involved, the teleconnections at play. Compared to the Arctic, there is less understanding about how sea ice evolves in the Southern Ocean. SIPN South is a first step in coordinating efforts (and more importantly, bringing researchers together) around the same scientific question.

How will SIPN South contribute to making better forecasts in the Antarctic?

SIPN South will not improve the forecasts *per se*, but hopefully its conclusions will guide future research. We can envisage two possibilities: The first (very unlikely) possibility is that the forecasts are very good meaning the observed

conditions lie within the ensemble forecast range, the forecasts are able to display the regional variations in sea-ice area etc. Honestly, I doubt this will happen! If it does, then we can try to understand if the information delivered by the forecasts is useful, and usable, by stakeholders.

And what would be the, more likely, second option?

Well, forecasts usually display systematic errors. It might be, for example, that all forecasts predict ice presence in certain regions while there is actually no ice in the observational record. In that case, which is likely because our understanding of the ocean/sea ice/atmosphere system and their interactions is incomplete, we

can attempt to improve them. There is much more to understand from wrong forecasts than from correct ones.

How does SIPN South work?

People or groups submitted in-kind contributions following a protocol documented here: www.elic.ucl.ac.be/users/fmasson/SIPNSouth_2018_call.pdf. The target was to forecast sea-ice conditions during February 2018. There were no restrictions regarding the forecasting method. We will publish an analysis of the prediction per region of the Southern Ocean. After February 2018, we will evaluate the forecasts using two observational references (yes, observations also have their uncertainties...) and publish a report on how the forecasts did the job.

Who is working with you, and where do the funds come from?

At this stage, SIPN South is a non-funded initiative, led by researchers passionate about the Southern Ocean and with interest in environmental prediction. We are seven (Phil Reid, Jan Lieser, Will Hobbs, John Fyfe, Cecilia Bitz and Kazu Kushara and myself) on board, with various expertises and backgrounds. If SIPN South raises sufficient interest in the polar community (which it will do, we hope!) we will organize a workshop next year and bring the project to higher speed.

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The call for contributions for the Antarctic 'Summer 2018' sea ice prediction experiment has just been closed. How many groups did contribute?

For this first exercise we received 13 forecasts, which is great.

Can I access the data somewhere?

We plan to host the forecast results, the analyses and some Antarctic sea-ice news on the SIPN South website (<http://acecrc.org.au/sipn-south/>). Eventually, we plan to make the data available on a shared repository so that anyone can do their own analyses.

What is the most exciting part you like in SIPN-South?

Definitely the community aspect. SIPN South is a chance for people with very different backgrounds (operational forecasting, oceanographers, statisticians, climate modellers, people from the observations) to sit around the same scientific question. In view of the very positive feedback we have received about the project, I have the feeling that SIPN South has awoken genuine interest, and this is really rewarding.

What should the Polar Prediction community keep in mind on SIPN South, and how can everyone stay up-to-date?

People should keep in mind that SIPN South is not a contest about who is making the best forecast, but rather an opportunity to discover how forecast systems can be improved. To stay up-to-date with our activities, follow the [@PolarPrediction](https://twitter.com/PolarPrediction) account on Twitter, visit our website (<http://acecrc.org.au/sipn-south/>) and the YOPP website (<http://www.polarprediction.net/yopp-activities/>) regularly.

14 Upcoming Events

23–25 January 2018

Arctic Frontiers Conference 2018
'The New Arctic in the Global Context' – YOPP Joint Topic with APPLICATE, MOSAiC, Nansen Legacy, N-ICE2015, GreenEdge and BAYSYS, Tromsø, Norway

26 February–02 March 2018

2nd Pan-GASS meeting 'Understanding and Modelling Atmospheric Processes'
Lorne, Victoria, Australia

9 April 2018 (7–8 pm)

EGU Townhall 'Exploiting Arctic observations to improve weather and climate predictions' Jointly organized by APPLICATE and YOPP
European Geosciences Union General Assembly
8–13 April 2018
Vienna, Austria

16–22 April 2018

PPP's Societal and Economic Research and Applications Meeting #04 (PPP-SERA #04)
Wageningen University, The Netherlands

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17–27 April 2018

Polar Prediction School on Weather and Climate Prediction in the Polar Regions ([more info](#))
Abisko Scientific Research Station, Sweden

7–9 May 2018

Polar Prediction Workshop 2018
Montreal, Québec, Canada

15–26 June 2018

POLAR2018 SCAR/IASC Conference Session AC-3 'High-Latitude Boundary Layers and Model Evaluation' co-convened by Ian Renfrew (PPP Steering Group)/Timo Vihma (YOPP project-endorsement)
Davos, Switzerland

19 June 2018

YOPP Side Event at POLAR2018 SCAR/IASC Conference (12.30 – 1.30 pm)
Davos, Switzerland

19 July 2018

Third YOPP in the Southern Hemisphere meeting (YOPP-SH#03) – In conjunction with 13th Antarctic Meteorology and Climate Workshop (16–18 July) Madison, Wisconsin, USA

21-23 January 2019

*Arctic YOPP Science Workshop – Jointly organized with IASC
Finnish Meteorological Institute
Helsinki, Finland*

- 12 Any news or upcoming events to be announced to / the community? Send an email to
12 office@polarprediction.net

The next issue of PolarPredictNews is expected to be out in March 2018.

International Coordination Office
for Polar Prediction

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