

## YOPP-SH teleconferences 9 June 2020

Call #1 -13UTC via GoToMeeting. Started 1306 UTC

Call #2 – 21UTC via Zoom. Started 2105 UTC.

**Present#1:** David Bromwich, Kirstin Werner, Jeff Wilson, Steve Colwell, Matthew Lazzara, Clare Eayrs, Victoria Heinrich, Sergi Gonzalez, Naohiko Hirasawa, Phil Reid, Irina Gorodetskaya, Jun Inoue, Marie-Laure Roussel, Sang-Jong Park, Jordan Powers, Christophe Genthon, Vito Vitale, Siri Jodha Khalsa, Eric Bazile, Adriana Maria Gulisano, Natalie Maksimova.

**Present#2:** David Bromwich, Jeff Wilson, Inga Smith, Jorge Carrasco, Daniela Liggett, Lynne Talley.

Introductions by all participants during each session.

### Letter from David and Thomas to institutes and Met Services about Targeted Observation Periods (TOPs) in April-July 2022.

Phil Reid provided some feedback to David Bromwich, primarily moving text around. The first letter will be from Thomas Jung and David Bromwich to stakeholders, and a similar one from WMO to the Permanent Representatives will then follow in due course. David is aiming to have the letter from him and Thomas sent as soon as possible. As countries are planning their 2021/22 seasons now, the WMO letter should also go soon. As the WMO letter only is sent to the Permanent Representatives, the letter to stakeholders should be used to alert all other groups.

Daniela Liggett was concerned about the timing of the letter(s) because of cancellation of activities for the upcoming season (2020/21), see below for details. She wondered whether they would consider things given the pressure of dealing with the issues. The other option is to add an acknowledgement of COVID-19 and the difficulties this will cause to planning.

YOPPSiteMIP was dropped from the letter as it is not very developed for the Southern Hemisphere at the present time. Siri Jodha Khalsa encouraged David Bromwich to consider including the YOPPSiteMIP information because of the potential benefits they would get from using the yet to be established MODF file creation. David Bromwich emphasised that we need a SH YOPPSiteMIP champion to push this. Kirstin Werner supported Siri Jodha's point of view. Siri Jodha reported that the python code for the MOSAiC MODF files has been written and shown to work. The extension to do the YOPP SOP-NH data is underway. There will be an online workshop in fall that shows how to create the data files. Eric Bazile will discuss with Christophe Genthon to see if something can be done for the SH, i.e., identifying a YOPPSiteMIP-SH champion. Vito Vitale was also interested, but noted that people and resources are needed.

Irina Gorodetskaya will contact Gunilla Svensson regarding her experience with atmospheric rivers in the NH TOP and how the YOPPSiteMIP helped with this and how they did the forecasting etc. for the TOP (Irina has offered to participate in the forecasting for the SH TOP).

Sang-Jong Park would like to see some coordination on activities between the neighbouring stations (Italian, French and Korean).

#### **Action Items:**

1. Kirstin to request Nanette to advise her when the formal WMO letter has gone out and to whom it has been sent.
2. Kirstin to then advise the YOPP-SH that the letter has been sent to the WMO Permanent Representatives.
3. Eric Bazile and Christophe Genthon to discuss options for getting some SH observational data into MODF format. They will let David know the outcome of their discussions regarding identifying a champion for YOPPsiteMIP in the Southern Hemisphere in the next few weeks.
4. Irina Gorodetskaya to contact Gunilla Svenson to learn from her experience on forecasting for the NH TOP.
5. Matthew Lazzara to talk to Irina Gorodetskaya offline about the Antarctic Microwave Rain Radar (MRR) network and the potential for the University of Wisconsin's SSEC to host the data sets.
6. Vito Vitale to contact the French and KOPRI/Sang-Jong Park to coordinate TOP efforts for the Ross Sea and Antarctic Peninsula. Argentines to be entrained as well.

#### **List of stakeholder contacts needed**

David Bromwich has requested the YOPP-SH to let Kirstin Werner know to whom the David/Thomas letter should be sent to. Steve Colwell/Vito Vitale suggested that the letter could be sent to COMNAP requesting them to forward to their members. COMNAP is meeting over the next 5 days, starting on June 10.

The stakeholder letters are key to get information out regarding the TOPs. Daniela Liggett thought there was an earlier list that Helge Goessling had. She also suggested that we could use SCAR to circulate. David emphasized that this is the opportunity to ensure that we get letters to the groups we think will really want to participate. Once again, people should advise Kirstin about the contact details.

We should contact the space agencies to advise them of the TOPs and that we may require data at short notice. They may have trial missions that could be of interest to us.

#### **Action Item:**

7. Members to advise Kirstin of stakeholder contacts. Kirstin to also work with Steve Colwell to communicate with COMNAP. **Update:** Email about TOPs went to COMNAP from International Coordination Office on June 10, 2020 at the start of its annual meeting to request participation in the TOPs during late fall-early winter 2022. This will be followed up by a formal letter request.

#### **Spreadsheet of potential YOPP-SH winter TOP contributions**

David Bromwich summarised the information on the spreadsheet. There is an impressive array of possible projects. We can start a separate tab for specialized observations, like cloud radars and lidars, to use in conjunction with YOPPsiteMIP effort. Irina Gorodetskaya is continuing the discussions with other institutions regarding the microwave rain radar (MRR) observations for the Antarctic. Discussions are not finalised yet. Christophe Genthon advised that they were considering putting in a request to SCAR to help structure a database and exchange data.

**Lynne Talley's overview of physical oceanography efforts relevant to the TOPs:** SOCCOM project has been renewed for another four years. Expect 150-250

biogeochemical floats to be deployed by the vessels *Palmer* and *Investigator* with perhaps 140 floats being operational during the TOPs in 2022. There is a lot of work around the Thwaites Glacier, the *Palmer* has been down there for two months. *Palmer* will be deploying floats in the Weddell and Ross Seas in 2021. Lynne said there was a group in the UK who is doing a lot of work in the Weddell Sea with an emphasis on the Marginal Ice Zone.

Inga Smith advised that there may be NZ oceanographic work in 2022 in the Terra Nova Bay and Ross Sea polynyas.

**Action Item:**

8. Members to review the spreadsheet and add in any missing projects or provide corrections if projects are not correctly represented.

### Summary TOP Project outline

**Action Item:**

9. Members to advise David Bromwich of any changes or additions to the TOP outline

### Status of Antarctic field programs, austral summer 20-21 and later

Adriana Gulisano – Argentina 2020/21 summer campaign should be done with some protocols. They hope to continue the radiosonde flights. Some aircraft flights into the bases occurred this week with no interaction between people to minimise transmission of disease.

Matthew Lazzara – US facing long quarantine to go south (20 days). Matthew not sure if anyone from his group will be going this summer. They should know by the next YOPP-SH telecon. The standard operations should continue, including radiosonde ascents, but only essential activities. Jordan Powers – The on-ice forecasting crew will be one forecaster with four observers. Need to quarantine in New Zealand first. The rest of the support will be from Charleston, South Carolina.

Sang-Jong Park – Both Korean stations will not have air flights via NZ or Chile, icebreaker support only. Limited summer work. Only 18 members on the ships. In summary very limited capacity this summer.

Vito Vitale – Italy awaiting COMNAP meeting outcome to conclude programme. Working with France to maintain Concordia station for the winter. Hoping to use the new Italian ship to offset some of the reduced flights. Decision to be made around the end of June on what will happen over the 2020/21 summer. Won't know about summer fieldwork possibilities until September-October, making it challenging to plan.

Inga Smith – NZ has cancelled the science activities for the coming summer season (2020/21) and are aiming at just keeping the basic measurements and monitoring ongoing. They had not received any formal advice from SCAR or COMNAP.

Irina Gorodetskaya – Chile. Anticipate similar to Argentina but no details known until October or November.

Adriana Gulisano – COVID-19 cases still growing in South America and thus this has big impact on how things will run this coming summer. This is particularly true for Argentina and Chile.

**This all suggests that the 2021/22 field season will be very busy and may impact upon the 2022 TOPs.**

### **APECS Southern Hemisphere Webinar**

Clare Eayrs and Vicki Heinrich are putting together an online workshop for the online SCAR workshop during August 2020. They are looking at doing a YOPP-SH session probably by David Bromwich (overview), Francois Massonnet on SIPN-South, Matthew Lazzara to do a session on Antarctic AWS, and Sergi Gonzalez talking about Windsled expedition. Kirstin looking at doing a live IcePod broadcast. There are a number of other possible sessions that YOPP could contribute towards. David encouraged Clare to use the YOPP-SH mail list and Clare has sent out a summary of the ideas she and Vicki are considering. Matthew can also send out information via an email list SSEC has. Irina Gorodetskaya also has some students who may be interested.

Marilyn Raphael who is a sea-ice modeller and leader of SCAR's ASPECT project was suggested as a participant in the webinar. Lynn Talley/Sarah Gille were also suggested to provide the physical oceanography perspective.

Daniela Liggett reminded people that the presenters may be approached later on to be APECS mentors.

#### **Action Item:**

10. Clare to send to the YOPP-SH a summary of the activities the YOPP Education Task Team are proposing for the online SCAR conference. **Completed.** Members to advise Clare if they can add further activities and to also help Clare promote the online workshop as arrangements firm up.
11. Clare to contact additional people who are interested to contribute to the sessions (e.g. Marilyn Raphael, Lynn Talley/Sarah Gille)

### **YOPP-SH Meeting #6/WAMC June 2021, Byrd Center, Columbus OH**

Planned for 9-10 June 2021. If travel internationally is very limited, a big online component will be developed.

PPP-SERA is scheduled for this meeting. Daniela Liggett may not be allowed to travel in 2021 unless the COVID-19 situation improves dramatically. David Bromwich reminded the group that remote participation can be accommodated. Daniela was concerned that the interactive elements of the PPP-SERA workshop may not translate so well to online.

### **Any other business**

**Polar Prediction Spring School** – Kirstin updated the YOPP-SH on the status and plans for the Polar Prediction Spring School in February-March 2022 in Abisko Sweden, right before the YOPP Final Summit in May 2022 in Montreal, and encouraged them to get students working on the Antarctic to get involved. HALO will be in nearby Kiruna about the same time which might be a good opportunity to look into. Clare will distribute information to YOPP-SH as it becomes available.

**Sang Jong Park:** Just like YOPP-SH SOP1, we need to begin coordination between King Sejong Station (Antarctic Peninsula), Jang-Bogo Station (Terra Nova Bay), Dumont D'urville, and the Italian-French Dome Concordia station.

**BAMS paper on YOPP-SH accepted.** Awaiting for feedback on figures and completion of transfer of copyright forms.

**Monthly meetings** will continue for the time being as there are a number of issues to address.

Meetings closed at 1432UTC and 2200 UTC on 9 June 2020.