

# **YOPP-SH Session 1, 26 January 2022, 5:02- 6:10 pm EST (2202-2310 UTC) and Session 2, 27 January 2022, 9:05-10:15 am EST(1405-1510 UTC)**

**Present Session 1:** David Bromwich, Jeff Wilson, Vicki Heinrich, Adriana Gullisano, Simon Alexander, Matthew Lazzara, Inga Smith, Jonathan Wille, Raul Cordero, Michelle Hollister, Irina Gorodetskaya, Jordan Powers, Daniela Liggett, Anastasiia Chyhareva, Penny Rowe, Svitlana Krakovska

**Present Session 2:** David Bromwich, Vito Vitale, Denys Pishniak, Sang-Jong Park, Jonathan Wille, Nadine Hillenbrand, Tracy Moffat-Griffin, Steve Colwell, Francois Massonnet, Paola Rodriguez Imazio, Jun Inoue, Eric Bazile, Marcello Vichi, Anastasiia Chyhareva, Adriana Gulisano, Anzhelika Hanchuk, Irina Gorodetskaya

**Minutes from notes taken by Jeff Wilson, Nadine Hillenbrand, and Blake Murray.**

**Apologies:** Jorge Carrasco

## [Important Dates](#)

International Conference on Southern Hemisphere Meteorology: 7 – 11 Feb (YOPP-SH on 10 Feb) NZ time.

SOP: 15 Apr – 15 Jul (May extend due to South Africans being at the Weddell Sea marginal ice zone mid-July to mid-August)

Workshop on Antarctic Meteorology and Climate (WAMC): 4 - 5 Aug in Madison, WI

YOPP-SH Meeting: 6 Aug in Madison, WI following WAMC

AMS Collective Conference week after workshop, Aug 8-12

YOPP Final Summit in Montreal: 29 Aug – 1 Sept

## [Key Aspects That Came Up in the Sessions](#)

- First priority is to get forecasting teams organized and practicing the forecasts for the TOPs. Need well defined procedures for making the go/no go decision and communicating with the radiosonde sites to launch the balloons.
- Sydney, Australia maybe an additional midlatitude site for the TOPs going from 2/day to 4/day.
- No cloud water sondes will be launched from Vernadsky.
- The Special Observing Period will likely be extended until the end of August to accommodate the cruise to the marginal ice zone of the Weddell Sea, mid-July to mid-August. Needs final discussion. Feb. 9: PPP Steering Group in favor of this approach.
- August will be a very busy month for meetings: WAMC-YOPP-SH 4-6, SCAR Open Science Conference 1-10, AMS Polar Meteorology and Oceanography 8-12, YOPP Final Summit Aug 29-Sept 1, and WWRP Open Science Conference in late August. YOPP Summer School may also be in the week before the Final Summit.

Latest updates on YOPP-SH Meetings.

## International Conference on Southern Hemisphere Meteorology and Oceanography. Now entirely virtual.

Omicron has arrived in New Zealand and so the conference organisers have decided to take the conference fully online. Presentations must be pre-recorded in case of IT glitches. Presentations to be deleted after the event. Sessions will be recorded. The YOPP Session is in the late evening for David and so he is getting Vicki to co-chair. They are having to do some training for chairs in this online environment. Offering 50% refund on conference fees if people wish not to participate. It will be very intense as the virtual conference is 8 hours a day for five days with the second week a bit more relaxed. The second week was always virtual. Was to be at the University of Canterbury in Christchurch. **YOPP-SH has three sessions on Feb 10** (NZ time). Jeff asked if people could make notes on what has worked well and what has not worked so well in case the YOPP Final Summit has to go online.

**Daniela Liggett:** There will be pre-recorded presentations. Will be present for the presentations however there is not much time for discussion during the conference. For the WMO SERA conference, an abstract for YOPP-SH has been submitted and Daniela will report the outcome and if a few words about PPP and/or YOPP-SH should be made during the presentation (if the abstract is accepted).

## Workshop on Antarctic Meteorology and Climate (WAMC) 4 and 5 August in Madison and YOPP-SH, 6 August 2022.

**Matthew Lazzara** briefed the YOPP-SH on the following meetings: WAMC - hybrid but with only 25 to 35 people in-situ. Change in accommodation that is being offered on campus. A day is being added for the YOPP-SH meeting on the Saturday given the Final Summit has been deferred. The University of Wisconsin has now taken over registration etc and so Matthew will probably have to charge a modest fee to cover the Administration fees. There should be a Zoom option. There will be other AMS meetings in the week after this on Polar Met, Satellite Met and Cloud and Physics. A YOPP session has been proposed by David for Polar Meteorology and Oceanography meeting and is intended to be the venue for presentation of YOPP-SH research results. Matt would like to see the discussion on networks etc at the WAMC/YOPP-SH meetings. The AMS meetings are expected to be in-person but could go hybrid or even fully online at the last moment. Abstracts for AMS meetings due April 14 while WAMC/YOPP-SH will be later.

The YOPP-SH meeting on the Saturday at the Pyle Centre will be an early debrief of the SOP activities, and it will also be hybrid. Matthew would like to know from David if the YOPP-SH meeting should be formally rolled into the WAMC meeting. David said this would make sense.

There will be funding for early career scientists/students that should be able to bring the costs down to a small amount for them.

**Steve Colwell:** Clash of WAMC/AMS meeting with the SCAR Open Science Conference, which is 1-10 Aug. But it is virtual now, so technically you could do both.

## YOPP-Final Summit: Delayed until late August 2022.

**Jeff Wilson** provided an update on the YOPP Final Summit now scheduled for Monday 29 August to Thursday 1 September. At this stage we are still not sure if the YOPP Final Summit School will proceed due to a question of availability of the facilities. A decision is expected in the next few weeks.

The YOPP Final Summit will now be a full hybrid meeting with options for remote participation and presentation, virtual posters and meetings with sponsors. Vicki noted that software such as gathertown seem to work well. The changed dates have allowed an adjustment to the program and increase in presentation time slots. The next key date for hybrid vs fully online will be in May when the WMO Meeting Form to get approval to use funds for travel must be authorised.

## Update on plans for the winter 2022 TOPs. Any impact of Covid-19? What do we still need to do to prepare for the TOPs?

**Inga Smith**— planning to send down a mass ice balance monitor. Two stations were in Antarctica last year and one broke, however, the traditional stations are still working and so far, have provided the best data. The stations are being shipped down in the next couple of weeks (from time of these sessions) and should be there near end of June. Working to fix a severed cable on snow sensor in time for SOP. The data may not become available until late in the SOP due to the time it takes to deploy. This will give point measurements on the fast ice.

**Irina Gorodetskaya**-The Antarctic Peninsula activities at Escudero on King George Island are well developed with people starting to depart for the winter season and late summer work. Much of the equipment is already at the station but there have been some delays in shipping, preparation of equipment and getting radiosondes on station. COVID continues to be a major problem for departing crew. Irina has circulated a URL for access to the ECMWF data portal for monitoring the weather to forecast for the TOP events. Also, we will use AMPS. The focus will be on atmospheric rivers, but it is easy to broaden. Have set up a SLACK channel to help with coordination for the SOPs – contact Irina to join. Irina will be back from Escudero around 28 February. **David** noted that in March we will need to set up the contact lists etc to trigger the extra sondes etc. **Adriana** would like a slack invitation from Irina to join the channel. **Jonathan** working with Irina but focussing on East Antarctica for the rivers. He is in the process of making contact with the French, the Australians and the New Zealanders. David requested Jonathan to coordinate with David and Art Cayette as well so there is a single team for forecast decisions for East Antarctica combined with the Ross Sea.

ECMWF forecast data portal for YOPP-SH is open to everyone. Right now, it has been only set up for four stations. ECMWF data access to easy charts and also real time data. There has been interest but not much input, if anyone would like to add parameters that would be appreciated.

Details for the ECMWF site are: <https://ecmwf.int/>  
Username: yopp\_web  
Pwd: 7QKA^cUq

**David** – been using windy.com and AMPS to start preparing forecasts for Davis, McMurdo, and Palmer. Will look at the ECMWF site in the near future. David has an undergraduate student (Blake Murray) working on the forecasts as well as assisting with other YOPP-SH tasks. He is hoping that Art Cayette will be working again to work on the forecasts when he gets back from Antarctica (**confirmed Feb. 9**).

**Matthew** For SOP, building a page to use during SOP, but next meeting it should be done. A link is provided to allow for real time access to data during the SOP ( <https://amrc.ssec.wisc.edu/data/yopp-sh.html> ). In addition, almost ready to have data repository at Madison College/University of Wisconsin-Madison which seems to be the best course of action for easier access.

**Simon Alexander** – equipment being sent to Davis and expected to arrive in late February and operational by 1 Apr. There are engineers at Davis currently to install precipitation measuring equipment. Talking to Michelle and Irina about radiosonde launches. Australian Antarctic Division doing all they can to keep COVID out of the stations.

**Michelle Hollister**- Australian Bureau of Meteorology staff and equipment already at stations. The Hobart forecasting group will be routinely monitoring and contributing to the forecasting effort during the standard working week and will come in on weekends as required.

**Anastasiia Chyhareva** – Planned to have 100 standard sondes and looking to get 50 standard sondes in addition. Covid is making it hard to get sondes and people at Vernadsky. Focus on precipitation and atmospheric rivers with Irina. **Do not have supercooled liquid water measuring sondes and will not be able to gather that data.**

**Raul Cordero** – We have been operating since late November at Escudero on King George Island. Sondes are in short supply, so we have not been launching daily in order to save Sondes for the Winter campaign. Otherwise, everything as normal. Sondes for the winter campaign, 100 to be launched from Escudero. If we get the sondes before flights stop then we will have up to 200 sondes in total for the SOP. Raul not sure if there will be sondes from Punta Arenas which would be Vaisala sondes.

**Vicki Heinrich** – is there an exact start date for the SOP? There is a meeting with the on-station managers in February. David noted that the SOP runs from 15 April to 15 July. Vicki expects all sondes (Southern Australia and the Antarctic) would be available. Vicki to check if Sydney can be included at four flights /day.

**Adriana Gulisano** – sondes soon to leave customs and should get to Marambio in February. Station staff are being trained on site at the moment. Mix of weather service and university staff to do the soundings.

**Jordan Powers:** No changes in status, AMPS still providing products. Special plots for atmospheric rivers are available.

**Vito Vitale:** Request there be a document that clearly specifies procedures for forecasting and would like to set up a secure line of communication for no delay.

**Dave:** This task has to be done in the run up to the SOP.

There are four TOPs per region. We need to make good use of all of them and there will be tradeoffs. We have the overarching project which is YOPP-SH. And there are conflicts with goals from everyone and the bigger “enterprise” and there will be have to be some negotiation.

**Steve:** Follow up on Jonathan and Vito: Email list and communications need to be sorted out in about a month, since the start of the SOP will be in about 3 months.

**Eric Bazile:** Nervous about TOP, is it necessary to provide output forecast? Would like further discussion on how to approach TOP. **Done: Online discussion Feb. 2 concerning ways to decrease the output data volume from Arpege forecast model.**

**Marcello Vichi:** Will have a crew on the Agulhas 2 at the Weddell Sea marginal ice zone from 15 Jul – 15 Aug (which is at the end of SOP). Will forecasts be available? **David: We can consider extending the SOP until the end of August to include this unique data set that includes daily radiosonde ascents.** (TOPs still occur between mid-April and mid-July) Irina will be looking into extending the SOP period past Jul 15 for the ECMWF forecast portal.

**Steve Colwell:** Detailed radiosonde data will be available for the SOP on a new site. DOI can make data storage complicated but will explore further. Suggests it may be easier to go with Matthew and UW storage as current storage facility is easy to upload to but can be difficult to retrieve data.

**Matthew** – He expects to have a data repository at Madison College/University of Wisconsin-Madison and they can DOI them etc. Matt happy to hold a copy of the sondes if Steve is DOI'ing but they will not duplicate DOI's. Matthew happy to be the home for the SOP data if there is not another home available.

**Denys Phisniak:** Set up of real time data transfer, however, worried about the large volume of data and that it can clog data lines/slow down real time transfer. Need to talk further about how to access data. Dave: Having data in real time, so people can use it is important. For special datasets with which people do not have widespread familiarity; it is not very useful to do this in real time. It is necessary to talk about the longer term and whether these will be collected at some central location or have a portal with links to the data.

**Sang-Jong Park:** Currently in Chile undergoing quarantine on way to King Sejong Station on King George Island. Going to do radiosonde training before SOP. Jang Bogo Station in Terra Nova Bay has issues with logistics for supercooled liquid water sensors, they are coordinating with Italian teams to figure out issues.

[YOPP-SH status beyond 2022.](#)

**Jeff** provided an update on the formal extension of YOPP-SH beyond the end of 2022. The next World Weather Research Programme (WWRP) Implementation Plan (IP) is being developed and will start on 1 January 2024. PPP is part of the previous plan and so the extension of the YOPP-SH and Model Intercomparison Project work could only be approved until the end of 2023. Chris Davis, Chair of the WWRP Scientific Steering Committee (SSC) has been talking to each of the WWRP Working Groups about their plans and recommendations to go into the next WWRP IP. He will be talking to the PPP-SG before the middle of March with the PPP-SG expected to provide input to the WWRP Open Science Conference in late August where the plan will be further developed.

If the YOPP-SH and MIP work is consistent with the next WWRP IP then it may be possible to extend the formal WMO recognition of this work past the end of 2023. The formal recognition provides pathways for YOPP-SH and MIP to report back to WMO and make recommendations as well as potentially request limited financial support for activities. YOPP-SH is good for another year (2023), or maybe two (2023-2024).

**Vito:** 1) Eduport (?): at the end of summer there was the request from WMO to suggest candidates. Vito does not know the status of the process. It will be in the new WMO with aspects on polar areas. 2) Start discussion about IPY 2032. YOPP can fit very well.

**Dave:** This is an opportunity to provide input on what comes next. IPY was relatively weak in Antarctica and PPP has emphasized Antarctica more via YOPP-SH. Dave hopes in the next IPY Antarctica will be better represented.

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