

**WMO OMM**

World Meteorological Organization  
Organisation météorologique mondiale  
Organización Meteorológica Mundial  
Всемирная метеорологическая организация  
المنظمة العالمية للأرصاد الجوية  
世界气象组织

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Our ref.: RES/ARE/WWR/YOPP GENEVA, 13 January 2017

Subject: Year of the Polar Prediction (YOPP)

Action required: Indicate participation to YOPP Special Observing Periods (SOPs)

Dear Sir/Madam,

Due to the increasing concerns with regard to the weather and climate of the Polar Regions, the World Meteorological Organization (WMO) has established a ten-year Polar Prediction Project (PPP) under the auspices of the WMO World Weather Research Programme (WWRP). One of the main PPP activities will be the Year of Polar Prediction (YOPP) in order to enable a significant improvement in the environmental prediction capabilities for the Polar Regions, and beyond. The core period of YOPP will entail intensive observation and modelling campaigns, in both the Arctic and the Antarctic, scheduled from mid-2017 to mid-2019. YOPP is a major initiative of the WWRP and it is being planned and coordinated by a Planning Group comprising of the PPP Steering Group, together with the representatives from partners and other initiatives, including the World Climate Research Programme Polar Climate Predictability Initiative (PCPI). For further details please visit the website of the International Coordination Office for Polar Prediction: <http://polarprediction.net>.

I am writing to provide you with the details of the Special Observation Periods (SOPs), which are planned during YOPP, and to request your participation and support.

Three main Special Observation Periods are planned:

- 1 February–31 March 2018 in the Arctic;
- 1 July–30 September 2018 in the Arctic; and
- 16 November 2018 to 15 February 2019 in the Antarctic.

A fourth observing period in the Arctic is also under consideration in winter-spring 2020, to complement the Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAIC)—the first year-round expedition into the central Arctic, that will provide a quantum leap in our understanding of critical Arctic processes, and their representation in weather and climate models.

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6945)

cc: Hydrological Advisers to Permanent Representatives

The purpose of the SOPs is to enhance the routine observations in an attempt to close the gaps in the conventional Arctic and Antarctic observing system for an extended period of time (several weeks). This will allow subsequent forecasting system experiments aimed at optimizing observing systems in the Polar Regions, and provide insight into the impact of better polar observations on forecast skill in lower latitudes. A first step is to ensure that all observations, currently carried out, are shared through the Global Telecommunication System (GTS), to make them accessible to all WMO Members, for assimilation into models and to conduct verification. A second step is to enhance the current observation network by: (a) more frequent observations from existing platforms; and/or (b) adding observations in regions where the observation network is not dense enough—i.e. addressing these gaps.

WMO values your participation in logistical support and enhanced observations of atmospheric, marine or sea-ice conditions through, for example, surface observations, Automatic Weather Stations, AMDAR or flight data, buoys, radiosonde observations, or SYNOP observations during the SOPs. One possibility, that is expected to significantly improve forecast capability, would be to increase the frequency of radiosondes poleward of 60° latitude to up to four times per day, if feasible. Given the importance of buoys in the Polar Regions, we would like to highlight that additional buoy deployment in the Arctic, in autumn 2017 (for the Arctic SOPs in 2018), would be highly desirable.

It would be most valuable if you could let us know by **20 February 2017** how you could contribute to the respective SOPs. This deadline is important to enable conclusive discussions on this topic in the Polar Prediction Project Steering Group meeting in Maryland, shortly thereafter.

In addition, WMO would also appreciate the nomination of a possible contact person in your National Meteorological and Hydrological Service to act as a focal point for the further planning of the SOPs of the Year of Polar Prediction.

Mr Paolo Ruti, Chief of the World Weather Research Programme (e-mail: [pruti@wmo.int](mailto:pruti@wmo.int)) would be pleased to provide any additional information, if needed.

I would like to express my appreciation for your continued support in promoting the Programmes and activities of WMO.

Yours faithfully,

A handwritten signature in blue ink, appearing to be 'P. Taalas', with a stylized flourish at the end.

(P. Taalas)  
Secretary-General