



World Meteorological Organization
Organisation météorologique mondiale

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Weather • Climate • Water
Temps • Climat • Eau

Our ref.: RES/ARE/WWR

GENEVA, 2 February 2015

Subject: Year Of Polar Prediction (YOPP)

Dear Sir/Madam,

Due to an increasing concern 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). PPP contributes to the Global Integrated Polar Prediction System (GIPPS). One of the main PPP activities will be the Year Of Polar Prediction (YOPP), an intensive observational and modelling campaign in both the Arctic and Antarctic scheduled to take place from mid-2017 to mid-2019. The campaign will be preceded by a planning phase, which has already started, and followed by an intensive analysis period.

I am writing to you to provide you with an update on the progress of preparations for YOPP and to request for your participation in, and support to, YOPP.

The goal of YOPP is to “enable a significant improvement in environmental prediction capabilities for Polar Regions and beyond, by coordinating a period of intensive observing, modelling, verification, user-engagement and education activities”.

YOPP is a major initiative of WWRP and it is being planned and coordinated by a Planning Group comprising the PPP Steering Group together with 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>. Version 1.0 of the YOPP Implementation Plan is available in the documents area at: <http://www.polarprediction.net/documents.html>.

The next major planning event for YOPP will be the YOPP Summit, to be held at ECMWF in Reading, UK, from 8 to 10 July 2015. We hope for broad participation in this event. An organizing committee is being established. Further details will be available in due course. I would be pleased to hear from you if you are interested in being represented at this event.

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6815)

cc: Hydrological Advisers to Permanent Representatives)
Presidents of regional associations) (for information)
Presidents of technical commissions)

In preparation for YOPP and during its field phase, existing and new observations will be collected and made available to the scientific and operational community. YOPP emphasizes the joint use of observations and numerical experimentation to better understand physical processes and their representation in forecast models, potentially enhancing regional and global predictive skill on time scales from days to a season. YOPP will also provide a focus on the coupled atmosphere-ocean-land-sea-ice system.

WMO would value your participation. At this stage in planning for YOPP, all input would be very welcome and could include logistical support, the possibility to provide dedicated observations on atmospheric, marine and sea-ice conditions, participation in modelling, data analysis and research.

In particular, we would appreciate, where relevant, your contribution to the improvement of the existing conventional observing system over and near the Polar Regions, by increasing the frequency of routine synoptic and radiosonde observations during certain special observing periods during YOPP.

As just one example, it would be desirable to be able to increase the frequency of radiosondes polewards of 60 degrees latitude to as many as four per day during intensive observing periods. This could, for instance, be a two-month period during northern summer in 2018, and another during southern summer in 2019.

The impact of additional observations during YOPP will be investigated by carrying out data denial experiments. Previous preliminary research indicates that an increased frequency of routine observations has significant positive impacts on the quality of analysis and thence on forecast skill in Polar Regions and beyond.

Dr Paolo Ruti, Chief of the World Weather Research Programme (e-mail: PRuti@wmo.int), would be pleased to provide further information.

Yours faithfully,



(E. Manaenkova)
for the Secretary-General