Overview of Ongoing and Planned Coordination Activities for the Year of Polar Prediction

An Update from the International Coordination Office for Polar Prediction (ICO)

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Year of Polar Prediction in the Southern Hemisphere (YOPP-SH)
Planning Meeting (June 6th, 2016)
Goal:

„Enable significant improvement in environmental prediction capabilities for the polar regions and beyond, by coordinating a period of intensive observing, modelling, prediction, verification, user engagement and education activities.“
Year of Polar Prediction

**Preparation Phase** 2013 to mid-2017
- Community engagement
- Alignment with other planned activities
- Development of Implementation Plan
- Preparatory research
- Summer school Workshops
- Fundraising & Resource mobilization

**Core Phase** mid-2017 to mid-2019
- Intensive observing periods & satellite snapshot
- Dedicated model experiments
- Coupled data assimilation
- Research into use & value of forecasts
- Intensive verification effort
- Summer school Workshops

**Consolidation Phase** mid-2019 to 2022
- Data denial experiments
- Model developments
- Dedicated reanalyses
- Operational implementation
- Evaluation of forecast improvements and use
- YOPP publications
- YOPP conference
Year of Polar Prediction

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- YOPP conference

YOPP launch event (May 2017)
PPP/YOPP sub-committees

YOOP Summit, July 2015, WMO Headquarters in Geneva, Switzerland:
- 120 participants (scientists, stakeholders, representatives from operational centers, international bodies, funding agencies) from 20 different nations
- up to 750 people following online at a time

- Sub-committees dealing with different important aspects of YOPP have been established during YOPP Summit.
- Sub-committees organise dedicated workshops and other meetings to prepare for YOPP.
PPP/YOPP organization
PPP Steering Group

Steering Group:

- Thomas Jung (chair)
- Peter Bauer
- David Bromwich
- Matthieu Chevallier
- Jonathan Day
- Jun Inoue
- Christopher Fairall
- Trond Iversen
- Alexander Makshtas
- Brian Mills (stepping down)
- Don Perovich
- Phil Reid
- Ian Renfrew
- Gregory Smith
- Gunilla Svensson
- Mikhail Tolstykh
- Qinghua Yang

New members (pending decision):
- Barbara Casati
- Daniela Liggett
- Jackie Dawson
- Steffen Malskær Olsen

SG7 Meeting, May 2016, Beijing, China
International Coordination Office

Based at Alfred Wegener Institute, Bremerhaven, Germany

Staff:
- Helge Goessling (director)
- Stefanie Klebe (admin)
- Kirstin Werner (project officer)
- Richard Swinbank (WMO consultant)
- Winfried Hoke (YOPP Launch event & stakeholders)

Tasks:
- Support YOPP community
- Information
- Promotion
- Coordination (e.g., of YOPP endorsements)
- Communication (via mailing list, news items, twitter etc.)

http://polarprediction.net
Mailing List

polarprediction@climate-cryosphere.org is a mailing list for anyone interested in polar weather and climate prediction and predictability supported by CliC and PPP. To subscribe please send an e-mail to office@polarprediction.net

Send your message to: polarprediction@climate-cryosphere.org

458 subscribers as of 05th June 2016
YOPP-endorsement process launched

YOPP Endorsement

The steering group of the Polar Prediction Project (PPP) provides endorsement for projects, programmes and initiatives that plan to contribute to the aims of the Year of Polar Prediction (YOPP), as outlined in the YOPP Implementation Plan. [Please note that following the YOPP Summit (13-15 July 2015, Geneva, Switzerland) a revision of the YOPP Implementation Plan is being drafted these weeks.]

Projects seeking endorsement through YOPP may be either funded or in the process of seeking funding.

Benefits
Endorsement will:

- Increase the visibility of the research activities (e.g., listing on website).
- Provide an international framework for your research, which can help to leverage support and funding.
- Contribute to improving the coordination between different activities.

Polarprediction Mailing List
If you wish to subscribe to polarprediction@climate-cryosphere.org, the joint mailing list for polar weather and climate prediction and predictability by CliC and PPP (more than 400 subscribers), please send an e-mail to office@polarprediction.net
Benefits:

- **Visibility** of research activities (e.g., listing on website)
- **International framework** for research (funding)
- **Coordination** between different activities
- **Networking and communication**
- **Awareness of YOPP** beyond scientific community (e.g., stakeholders such as users of prediction services, general public)
Status on YOPP-endorsed projects

Location and numbers

- Total projects: 28 projects
- Both Hemispheres: 11% (6 projects)
- Southern Hemisphere: 54% (15 projects)
- Northern Hemisphere: 36% (10 projects)

6 YOPP endorsed projects funded yet (*YOPP-SH):
- AWARE*, FAMOS (USA)
- MOSAiC (USA/Germany)
- GEO Cold Region* (International/WMO)
- Fichet & Fettweis* (Belgium)
- ACRE* (Australia)
YOPP/PPP-related meetings 2016

- YOPP Planning Meeting, AOS, (Fairbanks, Alaska, March 2016)
- Polar Predictability Workshop 2016 (Palisades, NY, USA, May 2016)
- PPP-SERA subcommittee meeting (Christchurch, New Zealand, April 2016)
- 7th IICWG International Workshop on Sea Ice Data Assimilation and Verification (Frascati, Italy, April 2016)
- Session on Polar Climate Predictability and Prediction, EGU 2016 (Vienna, Austria, April 2016)
- Polar Prediction School (Abisko, Sweden, April 2016)
- YOPP-SH Planning Meeting (Columbus, OH, USA, June 2016)
- YOPP Modelling Planning & Arctic Observations Planning Workshops (Reading, UK, September 2016)
- YOPP Data Planning Workshop (Oslo, Norway, Fall 2016)
Special & Intensive Observing Periods

- Intensive Observing Periods (IOP) as part of the Special Observing Period (SOP)
- IOP: increasing number and frequency of certain types of polar observations e.g., radiosonde launches
  - When?
  - How much e.g., radiosondes per day are possible?

Northern Hemisphere

Southern Hemisphere

YOPP-NH IOPs?

YOPP-NH SOP
06-11/2018 & 01-03/2019

YOPP-SH IOPs?

YOPP-SH SOP
10/2018-03/2019

mid-2017 mid-2018 mid-2019
For Discussion

- Ideas on SOP/IOP: increasing number and frequency of radiosonde launches
  - When?
  - How much e.g., radiosondes/day possible?

- Ideas on YOPP endorsement of projects related to YOPP-SH

- National point of contacts for YOPP-SH

- Next YOPP-SH planning meeting?

- Support from ICO needed?
Status on YOPP-endorsed projects

Field of Study

- Polar to Lower latitude linkages
- Land surface processes
- Sea Ice
- Polar Ocean
- Polar Atmosphere

% Both Hemispheres
% Southern Hemisphere
% Northern Hemisphere

% endorsed projects
Status on YOPP-endorsed projects

Field of Study

- Data archiving
- Data assimilation
- Modelling & forecasting
- Observation
- User aspects & verification

% Both Hemispheres
% Southern Hemisphere
% Northern Hemisphere

% endorsed projects
Status on YOPP endorsed projects

Leading Countries

- **Italy**: 32% (9 projects)
- **USA**: 16% (4.5 projects)
- **Germany**: 13% (3.5 projects)
- **Finland**: 7% (2 projects)
- **UK**: 11% (3 projects)
- **WMO/International**: 4% (1 project)
- **Belgium**: 4% (1 project)
- **Canada**: 4% (1 project)
- **Norway**: 4% (1 project)
- **Australia**: 4% (1 project)
- **Sweden**: 4% (1 project)