



World Meteorological Organization
Organisation météorologique mondiale

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Weather • Climate • Water
Temps • Climat • Eau

Our ref.: CLET/RES/ARE/WWR

GENEVA, 5 November 2012

Subject: THORPEX and its legacy under the WWRP

Dear Sir/Madam,

Under the auspices of the WMO Commission for Atmospheric Sciences (CAS), the World Weather Research Programme (WWRP), including The Observing system Research and Predictability EXperiment (THORPEX), contributes to the implementation of the WMO Strategic Plan, particularly under Expected Result 5: “Enhanced capabilities of Members to contribute to and draw benefits from the global research capacity for weather, climate, water and the related environmental science and technology development”.

The main objectives of the WWRP, including THORPEX, is to improve public safety and economic productivity by accelerating research on the prediction of high-impact weather, and to demonstrate improvements in the prediction of weather, with emphasis on high-impact weather events through the exploitation of advances in scientific understanding.

THORPEX, a ten-year international research programme focusing on high impact weather and its prediction from 1 day to 14 days ahead, will conclude at the end of 2014. THORPEX has made, and continues to make, substantial contributions to fostering cooperation between NMHSs and the academic community, providing new insights into the potential of targeted observations, improved understanding of dynamical process, the development of new data assimilation techniques and the demonstration of the value of large ensemble probability prediction systems. Many of these advances have already been incorporated into the operational systems at numerical modeling centres around the world. In addition, THORPEX has provided a platform to debate and identify new and emerging issues of importance to the development and improvement of weather services on local, national, regional and global scales and how best to push the limits in predictive skill.

This letter is intended to provide you with a holistic view of the THORPEX legacy which will consist of a cluster of 3 projects under the WWRP:

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6672)

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

- A Subseasonal to Seasonal Prediction Research Project focusing on the 14 day to 90 day period, which is a joint project with the World Climate Research Programme (WCRP);
- A Polar Prediction Research Project, which will be carried out in close collaboration with World Climate Research Programme (WCRP);
- A high impact weather prediction research project focused on the hour to 14 day time scale.

Implementation plans have been developed for the Subseasonal to Seasonal Prediction Research Project and the Polar Prediction Research Project and have been approved by the WMO Executive Council at its sixty-fourth session (EC-64) held in Geneva (25 June–3 July 2012). Separate correspondence with information on and requesting your support for projects will be sent in due course.

The third project on high impact weather prediction will be developed over the next year with guidance from the THORPEX International Core Steering Committee (ICSC), WWRP Joint Scientific Committee (JSC), CAS Management Group and in close cooperation with the Commission for Basic Systems (CBS). The project will be considered at CAS-16 in November 2013 and will be presented to EC-66 in 2014 for approval.

The WWRP will continue to work towards promoting seamless prediction systems in close cooperation with WCRP, align research to the needs of Members and users in partnership with CBS, and strive to ensure that research initiatives are carried out efficiently. Changes to the structure of the WWRP are planned to better manage post-THORPEX activities and a new strategic plan will be developed. Each project within the cluster of THORPEX legacy projects will have its own trust fund, allowing Members to target their support according to their specific requirements.

I trust that this summary of THORPEX-related matters is of assistance to you and will enable you to structure your support for the two new initiatives and the third project on high impact weather once it is developed. Please note that the contributions to the THORPEX trust fund will still be required until the end of 2014 in order to ensure the full achievement of the THORPEX activities legacy.

I look forward to your continued support to the WMO Programmes and activities.

Yours faithfully,



(J. Lengoasa)
for the Secretary-General