



## **The Framework of the WMO/WWRP FROST-2014 Forecast Verification Setup and Activities**

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The WMO/WWRP heritage to integrate Forecast Demonstration and Research Demonstration Projects (known as FDP and RDP) with the Olympic Games was continued during the 2014 Winter Olympics in Sochi, Russia. This FROST-2014 project (Forecast and Research in the Olympics Sochi Testbed) addressed the local Olympics forecasters with a major challenge to provide accurate and reliable forecasts of high-impact weather events affecting the time and space critical sports activities in a complex terrain. Many international partners from Austria, Canada, Finland, Italy, Norway, Russia, South Korea, and USA contributed to the success of FROST-2014 by running their state-of-the-art deterministic and probabilistic nowcasting and forecasting systems. Consequently, extensive forecast output from these various systems was disseminated in real-time to a common database set up to provide guidance to the local Olympics forecasters in their challenging work as well as to serve as a comprehensive verification data set.

This presentation will give an overview of the various prerequisites and issues that needed to be considered and taken into account in the FROST-2014 verification setup and framework. The Finnish Meteorological Institute adapted its in-house operational verification system for the Sochi environment to perform a comprehensive verification undertaking utilizing c. 30 local surface weather stations located at or close by the individual sports sites. The presentation will also provide a brief introductory foreword of the various verification activities performed by the local Russian FROST-2014 participants focusing on deterministic NWP output, spatial precipitation, different nowcast products, as well as the verification of high-impact weather event forecasts and the official operational forecasts.