



## **Introduction on the Statistical Postprocessing Guidance for 2018 PyeongChang Olympic Games**

Juntae Choi (1), Manki Kim (1), and Chansoo Kim (2)

(1) Korean Meteorological Administration, Korea, Republic Of (cjt@kma.go.kr), (2) Kongju National University, Korea, Republic Of (chanskim@kongju.ac.kr)

In 2018 the Olympic Games are to be held in PyeongChang, Republic of Korea. Like the cities, Sochi(2014) or Vancouver(2010), hosting winter Olympic games, PyeongChang is also in the very complex mountain region which cause the challenging task to provide credible weather forecast. Korea Meteorological Administration (KMA) launched ICE-POP 2018, one of WMO World Weather Research Programme (WWRP) Research Demonstration Project (RDP) and Forecast Demonstration Project (FDP). The intensive observation and high resolution numerical models have been experimented with international collaboration.

[U+3000] [U+3000] According to final report from the previous similar projects, SNOW-V10 or FROST-2014, the statistical post-process approach was recommended to provide credible forecast at the specific location for outdoor sports game. KMA has prepared statistical guidance with NWP model prediction and the observation installed at the importance locations of venues. For the short and medium range prediction, the traditional MOS was applied. For the up to 24 hour prediction, hourly updated bias correction and best grid selection were experimented. The probabilistic approach with ensemble prediction was also explored to provide impact based forecast to the relative decision makers. The post-process showed significantly positive improvement for the prediction of dry variables.