

1.34 PRELIMINARY RESULT OF ICE-POP 2018: SNOW MICROPHYSICAL CHARACTERISTICS BY DIFFERENT TYPES OF SNOW HABIT

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The ICE-POP 2018 (International Collaborative Experiments for Pyeongchang 2018 Olympic & Paralympic winter games) project was held from November 2017 to March 2018. The project is aimed at understanding the winter precipitation process over complex terrain at Pyeongchang region using intensive observational networks. Various snow microphysical instruments from USA, Switzerland, Spain, Taiwan, and so on were installed at 19 sites around Pyeongchang region.

In particular, 2DVD (2D-Video distrometer), MASC (Multi-Angle Snowflake Camera), PARSIVEL (PARTical Size VELOCITY), Pluvio, Geonor, POSS (Precipitation Occurrence Sensor System), VertiX (Vertically pointing X-band radar), WProf (W-band Profiler radar), MRR (Micro Rain Radar), Doppler Lidar and other instruments were installed in the main supersite of this project, MayHills Supersite (MHS). 2DVD, MASC, PARSIVEL and Pluvio were inside Double Fence Intercomparison Reference to improve the accuracy of snow measurement. MASC provides full information about snow habit, and distrometers give snow microphysical characteristics such as particle size distribution and its moments at ground. High-resolution profiling radars show detailed feature of vertical structure.

In this study, we will focus on snow habit linked with vertical structure of precipitation using the dataset from MHS site. We will present different snow habits determined by MASC (Praz et al., 2017) in terms of microphysical properties of snowflake at ground and vertical structure.