

An overview of 2016 WISE Urban Summer Observation Campaign (WUSOC 2016) in the Seoul metropolitan area of South Korea

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The Weather Information Service Engine (WISE), launched project of the Korea Meteorological Administration (KMA), aims to operate the urban meteorological observation network from 2012 to 2019 and to test and operate the application weather service (e.g., flash flood, road weather, city ecology, city microclimate, dispersion of hazardous substance etc.) in 2019 through the development of Advanced Storm-scale Analysis Prediction System(ASAPS) for the production of storm-scale hazard weather monitoring and prediction system.

The WISE institute has completed construction of 31 urban meteorological observation cities in Seoul metropolitan area and has built a real-time test operation and verification system by improving the ASAPS that produces 1 km and 6 hour forecast information based on the 5 km forecast information of KMA.

Field measurements of 2016 WISE Urban Summer Observation Campaign (WUSOC 2016) was conducted in the Seoul metropolitan area of South Korea from August 22 to October 14, 2016.

Involving over 70 researchers from more than 12 environmental and atmospheric science research groups in South Korea, WUSOC2016 focused on special observations, severe rain storm observations using mobile observation car and radiosonde, wind profile observations using Wind Doppler Lidar and radiosonde, etc., around the Seoul metropolitan area.

WUSOC2016 purpose at data quality control, accuracy verification, usability check, and quality improvement of ASAPS at observation stations constructed in WISE. In addition, we intend to contribute to the activation of urban fusion weather research and risk weather research through joint observation and data sharing.