



## **ASCAT data assimilation for numerical weather prediction**

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In numerical weather prediction (NWP) system, the real-time observation data helps to correct initial fields from model first guess and improve forecast ability. For atmosphere, various types of data observed from satellite, radio sonde, wind-profiler, etc. have been assimilated into numerical model. However, land surface observation is relatively limited and only a few observation components have been exploited in operational system. In Korea Meteorological Administration (KMA), global NWP system has utilized soil moisture and snow cover observation data for land surface data assimilation. In this research, we perform spin-up simulation to stabilize soil moisture in land surface model and investigate the impact of initialization using NASA's Land Information System and ASCAT observation data.