



Case study about 2012 heavy rainfall case in Korean peninsula using MPAS and WRF

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In recent years, intensity and frequency of heavy rainfall on the Korean peninsula have been increasing due to global warming. Heavy rainfall is one of the major meteorological phenomena that caused a lot of damage to the Korean Peninsula. In particular, in this study, where heavy rainfall occurred in the southern part of the Korean peninsula, such as the daily rainfall of more than 400mm on Jeju Island on August 23, 2012. We simulated the heavy rainfall on the Korean Peninsula using MPAS (Model for Prediction Across Scale) and meso-scale model WRF (Weather Research and Forecasting model). We used initial condition and boundary condition, in this case study, GFS (Global Forecast System) data. And we compared using simulated result at 10km resolution.