

Impact of every 30-second phased array weather radar data on simulating a torrential rainfall event on July 6, 2018 around Kobe city

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To investigate the impact of every 30-second phased array weather radar (PAWR) observation on a severe rainfall event occurred on July 6, 2018 around Kobe city, we perform 30-second-update 100-m-mesh data assimilation (DA) experiments using the Local Ensemble Transform Kalman Filter (LETKF) with the Scalable Computing for Advanced Laboratory and Environment (SCALE) regional numerical weather prediction model. The analyses show intense rainfalls with detailed structure of active convection, better matching with the PAWR observation compared to a no-DA experiment. The results suggest that the PAWR DA have a potential to improve the numerical simulation for this torrential rainfall event.