



Examination on accuracy of the radar rainfall estimated by using Korean dual-pol radar rainfall estimation algorithm

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Weather Radar Center (WRC) in Korea Meteorological Administration (KMA) have tried to improve the accuracy of the radar rainfall. WRC introduced Radar-AWS Rainrate (RAR) algorithm in 2001 to quantitatively improve the accuracy of the radar rainfall. Whereafter, RAR algorithm have been advanced and still used to estimate the radar rainfall. WRC has developed Korean dual-pol radar rainfall estimation algorithm from 2014 when the project of constructing the dual-pol radar network was initiated. WRC therefore suggested first Korean dual-pol radar rainfall estimation equations ($R(Z)$, $R(Z, ZDR)$, $R(ZDR, KDP)$, and $R(KDP)$) in 2014 and developed the equations in 2015. Since WRC just suggested each equation, it needs to algorithmize the equations. This study suggested Korean dual-pol radar rainfall estimation algorithm and examined on the accuracy of the radar rainfall estimated by the algorithm. The radar measurements obtained by dual-pol radars (BRI, BSL, and SBS) which were introduced in 2015 were used.