The Quality Control and Gauge Adjustment of C-band weather RADAR in Southern Thailand

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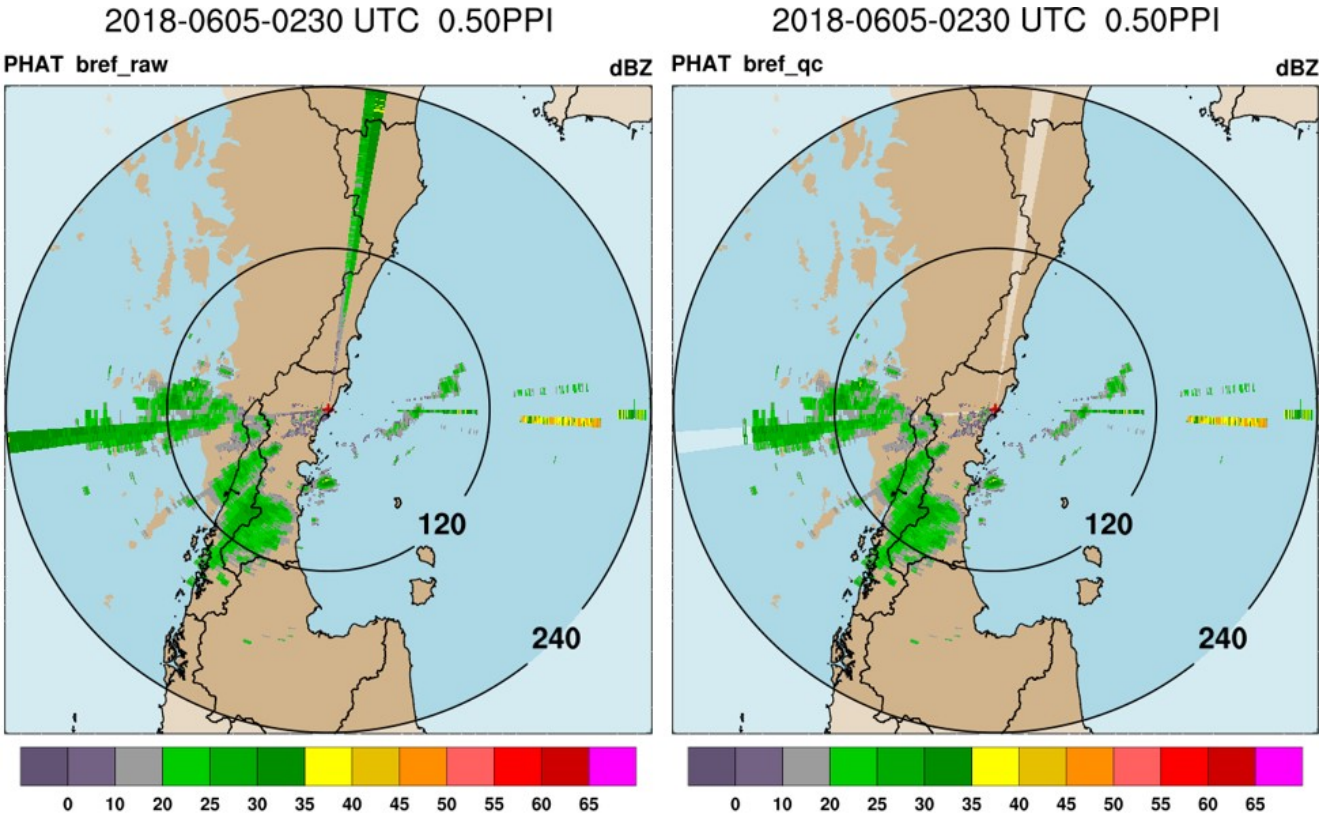
This study focused on investigating the impact of radar quality control (QC) and radar rainfall estimation (QPE) with gauge adjustment from C-band weather radar of DRRAA (Department of Royal Rainmaking and Agricultural Aviation) located in Chumphon province in the southern region of Thailand. The radar reflectivity was checked before deployment to retrieve the rainfall amount with ZR relation. The process consisted of clutter identification and the correction of signal attenuation. Thereafter, the radar reflectivity was converted into rainfall depth over a period of 24 h. An assessment of the accuracy of the radar rainfall estimate over the study area showed an overall underestimation when compared to the rain gauges.

Keywords: Weather RADAR, radar quality control (QC), radar rainfall estimation (QPE)



Reflectivity befor radar QC(left) and after radar QC (right) of Patio weather radar station.