New scheme result of adjustment the radar rainfall estimation in Cuba

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A new methodology is presented for calculating daily rainfall amounts from radar, data from meteorological radar of Camagüey and daily rain gauge data from Hydraulic Resources National Institute and Cuban Meteorology Institute are used to create a radar-level resolution grid of rainfall.

After to apply the data quality controls steps and drop the high uncertainties data, three different procedures they are used to select the best factor-of-difference, which are applied simultaneously to three sizes of different grid.

The affectivity of this methodology has been evaluated mainly through the behavior of the Radar/gages ratio, the relative error and the root mean squared errors (RM-SEs), before and after be performed the adjustment. Encouraging results has given this methodology, it has been proven with the information of two experiment periods of the Cuban project of weather Modification.

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1. This methodology is other effort to mitigate the negative effects that take place in the adjustment radar-raingauges, with low density gage and quality of the data also was taken rain gauge data with spatial resolution high across the time in 4 different places to validate the adjustment (we use 20 Fischer digital rain gauge).