Evaluation of Satellite and Radar Rainfall Product over Seyhan Plain

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Abstract : Rainfall is crucial data source for very different discipline such as agriculture, hydrology and climate. Therefore rain rate should be known well both spatial and temporal for any area. Rainfall is measured by using rain-gauge at meteorological ground stations traditionally for many years. At the present time, rainfall products are acquired from radar and satellite images with a temporal and spatial continuity. In this study, we investigated the accuracy of these rainfall data according to rain-gauge data. For this purpose, we used Adana-Hatay radar hourly total precipitation product (RN1) and Meteosat convective rainfall rate (CRR) product over Seyhan plain. We calculated daily rainfall values from RN1 and CRR hourly precipitation products. We used the data of rainy days of four stations located within range of the radar from October 2013 to November 2015. In the study, we examined two rainfall data over Seyhan plain and the correlation between the raingauge data and two raster rainfall data was observed lowly.

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Keywords : meteosat, radar, rainfall, rain-gauge, Turkey

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