

GENERATION OF A DAILY PRECIPITATION PRODUCT FOR THE CHOQUEYAPU BASIN IN LA PAZ CITY

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ABSTRACT

In this study a daily precipitation product was generated as a result of combining local rain gauges with remote sensing data from 2021 to 2023. Particularly, it was evaluated the GSMaP.v6_NRT_Gauge as satellite-based product. After applying the combination scheme, the acceptable product was obtained at the fifth iteration. The interpolated rain gauge data, used as a control, showed maximum average daily precipitation of 3.84 mm. The northeast part of the basin showed more precipitation than the rest of the catchment. The combined product showed values showed maximum average daily precipitation of 2.36 mm close to the control ones. It was possible to increase the coverage of precipitation data within Choqueyapu basin which can be useful for extreme events analyses to reduce flood inundation effects in La Paz city.

Keywords: Precipitation, GSMaP, Rain Gauge, Choqueyapu Basin.

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