



Estimation of Probable Precipitation considering altitude in the Island

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Jeju Island, a volcanic island, is the region that shows the biggest precipitation and has a big elevation-specific deviation of precipitation, but Jeju Island River Maintenance Plan doesn't reflect the characteristics of Jeju Island as it only calculates probable precipitation from four weather stations with elevation less than 100m. Therefore, this study uses AWS(Automatic Weather Station) observational data in four Jeju Island weather stations and other regions to calculate location-specific probable precipitation, review the elevation-probable precipitation correlation in southern and northern regions, and create a probable precipitation map for all regions of Jeju Island, in order to produce better outcomes. This study is expected to be the most basic data to establish a safe Jeju island from flood disaster in preparation for the future climate changes and widely used for Jeju Island Basin Dimension Planning, River Maintenance Plan, Pre-Disaster Impact Review, etc.