Estimating Rainfall-Runoff Erosivity Factor in Korea

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The USLE and RUSLE are empirically based technologies that compute soil erosion by assigning values to indices that represent the major of climate, soil, topography, and land use(Renard et al., 1996). In Korea, it has been studying soil loss estimation using USLE since late 1970s. For calculating the rainfall-runoff erosivity factor R(one of the most important factors in (R)USLE), continuous records of rainfall measurements at a minute time step for each storm are required more than 20 years. The purpose of this study is to present the more simplified and reasonable estimator of the rainfall-runoff erosivity in Korea using limited data. As a result, new regression equations based on hydrologic homogeneity and the new isoerodent map in Korea are suggested.

Keywords: Rainfall-Runoff Erosivity, Soil Erosion, RUSLE, Isoerodent map

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