Climate change has been a worldwide issue. The variability of climate index (i.e. precipitation, temperature, evaporation, etc) influenced by climate change is of increasing concern among many researchers all over the place. The purpose of this study is to analyse the spatial patterns of rainfall erosive index for Han River watershed in Korea. For calculating the rainfall erosive index, the method suggested by Lee et al. (2011), estimated by using monthly rainfall amount and annual precipitation data was adopted to compute annual rainfall erosive index in Korea. Monthly rainfall amount data at 7 weather stations for 30 years (1981-2010) from Korea Meteorological Administration (KMA) were used and spatial analysis using GIS were performed to examine the spatial patterns of rainfall erosive index. The Mann-Kendall test was conducted to analyse spatial patterns and Moran’s I test statistic was used to identify the spatial autocorrelation. The result showed that rainfall erosive index in the middle-western region was apt to be increased, whereas rainfall erosive index in the middle-eastern region relatively decreased. But there was no significant upward trends caused by the increase of local heavy storms.

Keywords : Climate Change, Rainfall Erosive Index, Mann-Kendall test, Moran’s I