기간별 한계강우량 산정을 통한 변화 특성 분석

Analysis of change characteristics through estimating the limit rainfall by period

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Abstract

The frequency and scale of domestic flood damage continues to increase, but the criteria for responding to flood damage have not been established. To this end, research is underway to estimate the amount of rainfall in each region so that it can be used to respond to flood damage. The limit rainfall is defined as the cumulative maximum rainfall for each duration that causes flooding, and this research purpose to improve the threshold rainfall by estimating the damage based on the damage history in units of 5 years and analyzing changes over time.

The limit rainfall based on the damage history was estimated by using the NDMS past damage history of the Ministry of the Interior and Safety and the rainfall minutes data of AWS and ASOS. The period for estimating the limit rainfall is 2013 ~ 2017, 2015 ~ 2019, and the limit rainfall is estimated by analyzing the relationship between the flood damage history and the rainfall event in each period. Considering changes in watershed characteristics and disaster prevention performance, the data were compared using 5-year data. As a result of the analysis, the limit rainfall based on the damage history could be estimated for less than about 10.0% of the administrative dongs nationwide. As a result of comparing the limit rainfall by period, it was confirmed that the area where the limit rainfall has increased or decreased This was analyzed as a change due to rainfall events or urbanization, and it is judged that it will be possible to improve the risk criteria of flooding.

key words: risk criteria, damage history, limit rainfall

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