Development of Heat Wave Indices for Korean Peninsula

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Abstract

The drought is one of the extreme natural disasters observed in any climate zone and it is due to the deficiency in moisture. The flash drought is identified recently as a subdivision of drought and it is an extreme event distinguished by sudden onset and rapid intensification of drought conditions with severe impacts. The main cause for the flash drought is coupled situation due to precipitation deficit and high evapotranspiration. Hence, heat waves plays major role in identification of flash drought. Therefore, this study focused on identifying changes in distribution of heat waves for Korean Peninsula. The daily maximum and minimum temperature data were used in this study. The heat wave, heat wave intensity and heat wave intensity index were derived. The results of the study would be an input for the future studies on identification of flash drought in Korean Peninsula.

Keywords: Flash drought, Heat wave, Korean Peninsula

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