



## **Variability of Extreme Temperatures in South Korea Using Generalized Extreme Value Distributions**

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Seasonal prediction skills of extreme temperature in the Northeast Asian region including China, Korea, and Japan are relatively low using state-of-the-art climate models. It is introduced that parameters of the generalized extreme value distribution for extreme temperatures have significant interannual variability, in particular in summertime using station data in South Korea.

Generally, a distribution for the extreme values of a random variable is fitted to the generalized extreme value distribution (GEV). GEV has three parameters as one of parametric distributions. Those are shape, scale, and location parameters. These distribution parameters have a strong interannual variability due to ENSO (El Nino and Southern Oscillation). This study discusses variability of the distributions for the extreme temperature associated with climate variability such as global warming and ENSO. It would be expected that this study could contribute to a seasonal prediction system for extreme temperatures.