

Abstract:

Flood frequency analysis is the statistical method of flood estimation which relates flood magnitude to the frequency of return period. The objective of flood frequency analysis is to establish a flood magnitude-return period relation by statistical analysis of measured streamflow data and to summarize it in a simple mathematical form using as few parameters as possible [1]. A procedure commonly used in flood frequency analysis consists of three important steps: (i) selection of the probability function to be fitted; (ii) estimation of its parameter, and (iii) testing its goodness-of-fit to the empirical distribution.