Assessment of empirical conversion methods for producing 1-min integration time rainfall rate in Malaysia (Conference Paper)

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Abstract

This paper presents assessments of empirical conversion methods in obtaining cumulative distribution function of rainfall rate at 1-minute integration time. From collected measured data in Kuala Lumpur, cumulative distributions of rainfall rate at various integration times were compiled. Four conversion methods were selected in the assessment namely: Segal, Burgueño, Ismail et al and Polynomial. The generated 1-minute statistics using the mentioned four empirical conversion methods are then compared with measured statistics, in order to test its validity. Based on the assessment, it can be suggested that the Ismail et al and Polynomial conversion methods seem to be capable of producing rainfall rate statistics at 1-minute integration time with close approximation to the measured values. © 2014 IEEE.

Author keywords

1-minute integration time; conversion method; rainfall rate; statistical distribution; tropical region

Indexed keywords

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