UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

INSPEM WEEKLY SEMINAR

31/2018

Date & Time

21 September 2018 (Friday) @ 3.15 pm

Venue

Al-Farabi Seminar Room, Second Floor, INSPEM

Presenter

Ms. Iszuanie Syafidza Che Ilias

Research Officer
Laboratory of Computational Statistics and Operations Research, INSPEM

Topic

REGIONAL FREQUENCY ANALYSIS BASED ON L-MOMENTS METHOD FOR EXTREME RAINFALL IN PENINSULAR MALAYSIA

Abstract

Extreme rainfall may cause problems to the social, environmental and ecology. In this paper, we focus on regional frequency analysis of extremes rainfall based on 3-hourly rainfall records by TRMM 3B42 and raingauge data between 1998-2012 at 30 stations of Peninsular Malaysia, Malaysia. Based on the L-Moments method, we developed the regional extreme rainfall frequency analysis in measuring discordancy, regional homogeneity and the goodness-of-fit test to identify the best regional parent distribution. The Ward's method is presented to identify the homogenous regions in Peninsular Malaysia and produce 4 acceptably homogeneous regions that had been tested by the method of L-Moments. The results show that the L-Moments method is good in term of performance, simplicity and robustness.