

## NON-STATIONARY MODEL IN FLOOD FREQUENCY ANALYSIS

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**Background.** Muhammad Fadhil Bin Marsani recently joined the School of Mathematical Sciences, Universiti Sains Malaysia as a faculty member. He obtained his BSc (Hons) (Mathematics and Economics) from Universiti Sains Malaysia in 2013 and MSc (Statistics) from Universiti Kebangsaan Malaysia back in 2015. Recently, he received his Ph.D. from Universiti Teknologi Malaysia in 2021. He is interested in exploring the non-stationary factor in flood frequency analysis. He is currently doing research on streamflow estimation at an ungauged basin.

**Abstract.** Floods are among the most destructive natural disasters, which are highly complex to model. The research on the advancement of flood prediction models contributed to risk reduction, policy suggestion, minimization of the loss of human life, and reduced property damage associated with the flood. Ignoring the non-stationary behavior in flood series will result in a substantial bias in floods quantile. Hence, the non-stationary flood frequency analysis appeared to be an appropriate option to maintain the independent and identically distributed (IID) assumptions in sample observation. This talk will briefly introduce the flood frequency analysis and discuss the nonstationary effects on flood estimation.

Date: 13 October 2021 (Wednesday)

Time: 2:30-3:30 PM (Malaysia time)

Link: <https://bit.ly/3Florkm> (Via Webex)

