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Dr. Denis Istrati, Dr. Ian Buckle, Dr. Michael Scott
Guest Editors
Journal of Marine Science and Engineering
Special Issue "Performance of Transportation Systems Subjected to Extreme Hydrodynamic Events"
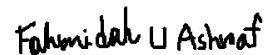
Dear Editors,

Please find the manuscript entitled: "Explaining the Flood Behavior for the Bridge Collapse Sites," which I am submitting for exclusive consideration of publication in Special Issue "Performance of Transportation Systems Subjected to Extreme Hydrodynamic Events", Journal of Marine Science and Engineering, a journal by MDPI.

In this study, annual peak flows of two-hundred and five watersheds, associated with two hundred and ninety-seven collapse sites, are analyzed. Generalized Extreme Value distribution together with other statistical analyses are used to derive and analyze shape parameters of the distributions which represents the extremeness of flood events. Random forest mechanism is employed in order to identify the predictor variables (and the associated importance levels) for the shape parameters. Peak flows are also classified in order to find the extremes, and the associated return periods.

The findings instigate re-visiting the bridge design practices and guidelines, and provide some basis to assess the risk of future collapse.

Thank you for your consideration. Please feel free to contact me by email (fashraf@fsmail.bradley.edu).

Sincerely,

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