



Structural Response in Transient Winds of Hurricane and Non-synoptic Events

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Message from the Guest Editors

Dear Colleagues,

Nonstationary features of extreme winds (e.g., during hurricane or non-synoptic events) and their associated transient aerodynamics present significant importance for the accurate modeling of wind-induced effects on structures; however, they are neither fully understood nor well captured by state-of-the-art analysis procedures. Hence, there is a need to gain a better understanding of the nature of non-synoptic winds and hurricanes (characteristic of wind inputs) and transient wind load effects (from wind inputs to load outputs). In addition, the transient bluff-body aerodynamics may result in some unique structural response features. This Special Issue aims to collect submissions on the recent numerical and experimental advances in nonstationary wind simulation, modeling of transient bluff-body aerodynamics, and analysis of transient wind-induced structural response. Case studies describing applications of novel technologies to the wind-resistance design of structures and bridges are also welcome.

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Message from the Editor-in-Chief

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