Estimation of the Tolerance of Human Postural Stability to the Train Draft

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In order to study the effects of the train draft on human postural stability, we conducted a wind tunnel experiment. In the experiment, 29 people were exposed to the transient wind similar to the train draft. The experimental results suggested that both wind speed and wind duration affect the postural stability. In this paper, we estimated the tolerance of postural stability to the transient wind based on a statistical model and a physical model, and discussed the validity of those models.