

**Characteristics of Wind Velocity Distribution over Embankment in Turbulent  
Boundary Layer Obtained by Wind Tunnel Experiment**

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To investigate the safety of railway vehicles running under windy conditions, it is important to evaluate the relationship between the velocity of the wind over the railway structures and the velocity of upstream wind undisturbed by them. Therefore, the authors carried out the measurement of the wind velocity distribution over a single track embankment by 1/40th scale wind tunnel experiments where the embankment heights and the wind directions were varied. The ratio of mean velocity over the embankment of 8-m height to the velocity of upstream wind undisturbed at the level of center of a vehicle body reached a maximum value of about 1.25 at the wind direction angle of 70 degree.