Wind Tunnel Test to Reproduce Track Surfaces Flow When Shinkansen Trains Pass for Ballast and Ballast Screen Scattering

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Air flow is induced on track surfaces when Shinkansen trains pass. To prevent ballast scattering due to the air flow, measures such as ballast screens are taken on track surfaces. However, considering the extension of Shinkansen lines and speed up in the future, it is necessary to improve current measures to prevent ballast scattering and to develop new ballast screens. Therefore, in this study, we developed the wind tunnel test method that can be used for research on measures to prevent ballast scattering and studied the scattering phenomenon of objects.