

Evaluation Method of Wind Speed along Railway Lines Considering Decrease by Buildings

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In this study, we develop a method to evaluate the wind speed ratio along railway lines based on an anemometer. In conventional method using airflow analyzed model, not buildings effects but terrain effects to wind speed are taken into account. Therefore, we first compared the wind observation data at AMeDAS with the calculation results of the airflow analysis model to extract building effects that decrease wind speed. We next compared the extracted building effects with buildings information. As a result, we found that it is possible to evaluate building effects using the geometric roughness made from buildings floor and area information.