

**A Heavy Rainfall Induced Disaster Mitigation System for Railways Operation by Using
a Precipitation Forecast Data**

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A system to mitigate heavy rainfall related disasters has been newly developed for promoting safety operation of railway. The developed system contains five components; (1) downloading of the precipitation forecast data based on weather radar data from the third party, (2) flood analysis, (3) slope failure analysis, (4) train operation analysis to avoid approaching to the affected area, and (5) mapping and distribution of the result. This system provides railway engineers with heavy rainfall hazards and train operation information in advance of occurrence of the disaster.