## Recent Research on the Prevention Technology against External Natural Disaster

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For the last several decades, the external huge natural disasters, i.e. large earthquakes, extreme meteorological phenomena (short-time heavy rainfall and tornado), volcanic eruptions, have occurred remarkably. Engineers of railway must tackle these external disasters in the future. In this paper, I will show the features and changes of the natural external forces in recent years, and will introduce the recent progress of the study on these external natural disasters. Our new research theme is focused on high developments of disaster prevention and reduction technology for railway of which target is establishment of resilience technology for railway against unknown huge natural disasters. I will indicate the plan of this research theme in this paper.