

Assignment and Approach for Developing Natural Disaster Countermeasures

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It is generally said that the climate change is influencing the activity range and intensity of rain. Accordingly, the engineers in charge of disaster prevention must plan various measures in consideration of the future weather condition. This paper shows one of predictions of the future weather based on the Fifth Assessment Report of the IPCC and compares the current maximum hourly rainfall with the predicted value. The comparison between the current and the future weathers confirms that it is necessary for us to develop a disaster prevention technology to be applied to the weather becoming the more intense with the years. Therefore, R.T.R.I. is developing a dynamic hazard mapping system. The evaluation objects of this system are floods, large-scale slope collapse and tornados, and degree of their risk depending on progress of time is displayed on the monitor. Furthermore, it indicates the best stop position of the train based on simulated hazard, and shows some refuge routes for passenger.