

## **A Statistical Method to Predict the Shape and Scale of an Embankment Collapse under the Rainfall**

Tomoyasu SUGIYAMA      Taiki MORI  
Osamu NUNOKAWA      Naoyuki OTA

Regarding embankment collapses due to heavy rainfalls, there are various shapes and scales. Therefore, it is essential to predict the shape and scale of the embankment collapse to determine effective countermeasures. In addition, a result of a prediction of the shape and scale of an embankment collapse is applicable to a risk evaluation model, which determines priorities and methods for investments of disaster prevention for existing railroad slopes. Accordingly, we analyzed previous data of the embankment collapses, and developed a method capable of predicting the shape and scale of the embankment collapse from various embankment conditions.