

Predicting Method of Train Delay and Train Congestion Using Neural Network

Daisuke TATSUI Kosuke NAKABASAMI Taketoshi KUNIMATSU

When train delay occurs, train dispatchers conduct railway traffic arrangement while predicting transport status several tens of minutes later based on their experience. Therefore, there are possibilities that train delay increases if they predict the status incorrectly. In order to support dispatchers' decision making, we devised a predicting method based on the neural network, which predicts changes of train delay and train occupancy rate based on the data in the past. Then, we applied our method to an actual commuter line in the peak hour under the conditions that there are no sudden accidents, and verified its accuracy.