

**Methods to Evaluate Predicted Rainfall to Prevent Underestimation of
Inundation Prediction in Small-scaled Rivers**

Takaaki FUKUHARA Kazuya TAKAMI Yasushi KAMATA

We are now studying a train disaster prevention system to prevent flooding disasters of the small scale rivers. In this system, we input the amount of synthetic precipitation obtained by radar as the past rainfall, and the blending predicted precipitation obtained by combination of the numerical meteorological simulation and the nowcast as the future precipitation. We have studied the input rainfall to prevent underestimating the immersion depth predicted by calculation by considering the difference of precipitation amount, which are caused by falling of raindrops or by displacement of precipitation area. As a result, we found out that it is necessary to input the synthetic rainfall obtained two minutes before the measurement time concerned as the past precipitation amount, and the maximum value of predicted precipitation amount of blending in the area within the radius of 1 km ~ 5 km from the measurement point concerned as the future precipitation amount.