

Study about flood forecast technique for small –and medium-sized rivers

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Watershed is made up of many factors that change not only spatially but also temporally such as soil, vegetation, and river channel, and flood runoff phenomenon changes in a complex way when rainfall property and the above factors are combined, which becomes an error cause of flood forecast system. In this study, recognition of rainfall phenomenon, rainfall forecast, and stability assessment of flood forecast system were focused, which would be important under the specific condition of especially small-and-medium-sized rivers. Then, rainfall analysis technique based on recognition of rainfall DAD property was suggested, rainfall forecast model was developed for small-and-medium-sized rivers, fitness assessment technique of runoff analysis model was developed, and efficient forecast accuracy improvement measure based on the conditions, under which flood forecast system for small –and medium-sized rivers was actually set, was suggested.

Keywords: small-and-medium-sized rivers, flood forecast, DAD analysis, rainfall forecast, feedback system