

عنوان مقاله:

Discharge estimation using Tsallis entropy concept

محل انتشار:

نهمین سمینار بین المللی مهندسی رودخانه (سال: 1391)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

This study proposed a new discharge estimation method using a mean velocity formula derived from 2D velocity formula of Tsallis entropy concept and the river bed shear stress of channel. In particular, we could calculate the mean velocity, which is hardly measurable in flooding natural rivers, in consideration of several factors reflecting basic hydraulic characteristics such as river bed slope, wetted perimeter, width, and water level that are easily obtainable from rivers. This method avoids exposure to hazardous environments and sharply reduces the measurement time and cost. In order to test the proposed method, we used highly reliable flow rate data measured in the four gauged sections in the upper Tiber River basin in Central Italy which were collected from seven flood events from 1984 to 1997. the result showed that the proposed method can estimate flood discharge fast and accurate, in other hand it's parameters can be easily obtained based on hydraulic characteristics

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/186781>

