

## عنوان مقاله:

(Giuh- Gciuh Comparison for Two Watersheds in Iran (RESEARCH NOTE

## محل انتشار:

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## نویسنده:

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## خلاصه مقاله:

Two representative watersheds, Ammameh and Kasilian, located in Southern and Norten Elborz mountain in Iran respectively were considered. Fourteen events of rainfall-runoff in nonmelting seasons were chosen and their storms and flood hydrographs were gathered from an automatic recording station. Base flow separation was made by recession limb analysis while Philip equation was used for the calculation of effective rainfall. The ordinates of Instantaneous Unit Hydrograph (IUH) was determined by using the GciUH and GIUH theory for each rainfall-runoff event separately. Direct runoff hydrographs were determined by convoluting IUH and effective rainfall hyetograph. Mean flow velocity and kinematic wave parameter were correlated to peak discharge separately. Therefore, these indices were estimated for each rainfall-runoff event, knowing its peak discharge. It is found that GciUH shows a better results for all determination of its value may be the main reason for predicting less accurate results. GciUH, on the other hand has lower sensitivity to kinematic wave parameter variations. Mean while for wide channels, this parameter does not depend on discharge.

## کلمات کلیدی:

IUH, GIUH, GciUH, Flood Forecasting, Representative Watersheds

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1415175>

