

## عنوان مقاله:

Numerical Modeling of Dam-Break Flows by Weighted Average Flux Method

## محل انتشار:

اولین کنفرانس بین المللی و سومین کنفرانس ملی سد و نیروگاههای برق آبی (سال: 1390)

تعداد صفحات اصل مقاله: 8

## نویسنده:

Mahnaz Ghaeini-Hessaroeeyeh - Assistant Professor Department of Civil Engineering, Faculty of Engineering, Shahid  
Bahonar University of Kerman

## خلاصه مقاله:

A two-dimensional flow model based on shallow water equations is developed for modeling dam-break flows. The spatial discretisation is obtained by the finite volume cell centered type method, and then the numerical system is solved explicitly. The flux modeling has been deployed by TVD WAF scheme with a second order accuracy both in time and space. The local Riemann problem is solved by the HLLC method in the interface of the cells. The numerical model is verified by comparison of model result and analytical solution. Then the results of numerical model are compared with available experimental data of dam-break in a straight channel over a triangular bottom sill. The results confirm a reasonable performance for the developed model

## کلمات کلیدی:

finite volume method, shallow water equations, dam-break, HLLC method, TVD-WAF method

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/138210>

