

## عنوان مقاله:

A First-Order Centered Adams-Moulton Shock Capturing Model for shallow water flows

## محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

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## نویسندگان:

s.mehrab amiri - *ph.d student*

ali mahdavi - *ph.D student*

nasser talebbeydokhti

a hossein baghlani

## خلاصه مقاله:

From the numerical point of view, modeling flow discontinuities often poses severe challenges. In this way a number of techniques like artificial viscosity (particularly for finite difference methods), shock fitting and etc. have been proposed. These techniques usually require ad-hoc terms which need to be adjusted through calibration. In this study an efficient numerical model based on shallow water equation is developed. The model uses first order centered (FORCE) scheme in combination with surface gradient method (SGM) for spatial discretization and Adams-Moulton algorithm for time integration. The model contains no ad hoc terms. Through several classical examples, it is shown that the model is capable of capturing flow discontinuities. Furthermore the model can simulate dry bed conditions

## کلمات کلیدی:

Flow discontinuities, First -order centered scheme, Adams-Moulton algorithm

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/166339>

