

## عنوان مقاله:

Solution of Two-Dimensional Shallow Water Equations by TVD-MacCormack Scheme

## محل انتشار:

هشتمین کنگره بین المللی مهندسی عمران (سال: 1388)

تعداد صفحات اصل مقاله: 8

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## خلاصه مقاله:

In this paper, a TVD-MacCormack scheme for solution of two-dimensional shallow water equations has been presented. The scheme is high-resolution second-order accurate which satisfies the well-known C-property over uneven bed topographies. The scheme is simple, very efficient and shock capturing as well. Although the accuracy is slightly reduced in comparison with other high-resolution schemes, the computational cost is low, since there is no need to compute eigenvalues and corresponding modal matrix. The results of the simulations have been compared with analytical solutions and other numerical methods and show satisfactory agreement.

## کلمات کلیدی:

TVD-MacCormack, C-property, shallow water equations, Depth-averaged flow

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/63087>

