

عنوان مقاله:

Simulation of Flow Around A Spur Dike Using Shallow Water Equations and Multi-Block Method

محل انتشار:

دهمین کنفرانس دینامیک شاره ها (سال: 1385)

تعداد صفحات اصل مقاله: 10

نویسندگان:

Mohammad Reza Hadian - Assistant professor , Department of Civil Engineering , Faculty of Engineering Yazd University

Amir Reza Zarrati - Associate Professor , Department of Civil and Environmental Engineering Amirkabir University of Technology

خلاصه مقاله:

In the present study a numerical method is developed for solution of shallow water equations for simulating recirculation flow around a spur dike. A Multi- Block method is employed in conjunction with non – orthogonal curvilinear coordinate system, which gives the numerical method the flexibility to tackle flow domains with any complex boundary. The model is based on collocated grid arrangement and the control volume method is used for solution of equations. A SIMPLEC – like algorithm is employed to find the water surface elevation. Predictions of the model are compared with experimental results of another numerical model and good agreement is achieved.

کلمات کلیدی:

Shallow - water , Implicit , Numerical model , Depth correction , Complex geometry , Multi block , Spur dike

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/26425>

