

Chapter 1

Box finite difference Scheme

1.1 Introduction

The box finite difference scheme is also known as four point implicit scheme or Preissmann scheme [3]. This scheme uses four points to construct the scheme. According to this scheme, the partial derivatives and the variables are approximated as follows [2, 1]

Bibliography

- [1] M. H. Chaudhry. *Open-channel flow*. Springer, New York, 2008.
- [2] Holly F. M. Jr. Cunge, J. A. and A. Verway. *Practical aspects of computational river hydraulics*. Pitman Publishing Limited, London, 1980.
- [3] A. Preissmann. Propagation des intumescences dans les canaux et rivières. In *1st Congr. des. l'Assoc. Francaise de Calcul*, pages 433–442, Association Francaise de Calcul, Grenoble, France, 1961.