Abstract

Shallow Water Equations (SWE) is frequently usevd to depict natural phenomena such as tsunami, stream flow model, and simulated mathematically. The numerical method used is Finite Volume Method (FVM) using collocated explicit Lax-Friedrich (CLF) scheme. Selection of SWE and CLF method to simulate the phemonenon because SWE is ideal for fluid simulation and CLF picked because of it's simplicity in computational. This simulation will depict dam break phenomenon using CLF scheme. With biggest MSE value is 0.002193157 and smallest MSE value is 0.000381774.

Keywords: Shallow Water Equations, Lax-Friedrich, Finite Volume Method, Dam Break