ABSTRACT

Flood is one of the natural disasters where exessive water volume soaked the land. The inability of the dams to accomodate the volume of water causes the greater potential of flooding. This study was conducted in a 200x90x50 cms dams prototype made of acrylic. This research combines two information delivery system, that were SMS and Twitter. This experiment was divided into 3 sections. The sections were: 1) measurement of water time testing to reach maximum height for all conditions, 2) the influence of surface area to maximum height of water, and 3) experiment of SMS and Twitter system. The results of this experiment are 4 level conditions that is NORMAL, SIAGA 2, SIAGA 1, and AWAS. Each discharge at each condition is 1.17 liter/second, 1.89 liter/second, 2.58 liter/second, and 4.94 liter/second. While controlling the door of dam purwarupa to the condition that is NORMAL area of 0,24 m^2, SIAGA 2 area of 0,32 m^2, SIAGA 1 area of 0,40 m^2, dan AWAS area of 0,48 m^2. For SMS delay time is 0.125 minutes while Twitter is 0.913 minutes.

Keywords: early warning system, dam prototype