ABSTRACT

Landslides are one of the natural disasters that often hit Indonesia,

especially in the highlands, valleys, mountain slopes, and high rainfall. The

occurrence of land shifts and high rainfall are the causes of landslides, when the

land is exposed to high rainfall intensity, the water will enter the soil adding to the

weight of the soil and the ground slides that cause landslides. Because the landslide

disaster can harm the community such as damage to homes, damage to plantations,

damage to livestock and resulting in considerable casualties.

Tests carried out on an avalanche prototype. Avalanche simulation is

carried out by carrying out a push and splash of water on the ground which results

in a moving sistem or device that will read the ground shift with sensors MPU-6050

and YL-69. For monitoring, data that is read by the sistem will automatically be

sent to the IoT ANTARES platform. And sending alert notifications sent via text

message with the GSM SIM 800L module to the monitoring person's cellphone.

The results of the test are used as a parameter of the success of the sistem,

with the test results the sistem is functioning very well. The reading of soil shift and

soil moisture is quite good and sending data to ANTARES is very good. For alert

notifications with the GSM SIM 800L module it works quite well. This sistem can

be applied to every village that has steep slopes.

Keywords: landslide, MPU-6050, YL-69, ANTARES, SIM8000L