ABSTRACK

Many volcanoes are located in Indonesia because they are located on three large tectonic plates, namely the Pacific, Eurasian, and Indo-Australian. One of the natural phenomena that usually occurs in Indonesia is volcanic eruptions. One of the impacts of volcanic eruptions is the increase in volcanic earthquakes. The signs caused by this volcanic earthquake will trigger the eruption of a volcano that can cause physical and material losses. This study aims to design a system to provide information related to seismic activity in volcanoes. This monitoring system is based on the Internet of Thing using the ThingSpeak platform. Observations of this system were carried out from October 23, 2021 to October 27, 2021. The results of the performance of the data transmission system were 75.6% and information related to the results of vibration measurements found that there were 5 vibrations in one day. From vibration measurements, it is known that when the vibration acceleration value is above 9.8 m/s^2, which is in the range 11 m/s^2 – 23 m/s^2, it can be calculated as one vibration. The more vibrations generated, the more frequent earthquakes occur

Keywords: activity, seismik, volcano, IoT