Abstract

Early Warning System (Early Warning System) is a series of systems to inform the occurrence of natural events, can be disaster or other natural signs. The community's early warning of disaster is an act of providing information in a language easily digested by the community. This application development research aims to assist the public in estimating the early warning of hot clouds so as to avoid the possibility of hot clouds known. This android-based GIS application is a GIS framework for natural disasters as it is designed to grow as a mapping application of other natural disasters such as erupting volcanoes, floods etc. One of the primary dangers posed by the volcanic activity of Mount Merapi is the rapidly moving pyroclastic flow and consists of hot gas, volcanic ash and rocks. This flow can move quickly down the slopes with very high temperatures. Mount Merapi's natural conditions cause difficulties in visually monitoring of hot clouds, while the use of seismic equipment requires experts to analyze data. This makes it difficult for officers to provide early warning to the community quickly and accurately. The results obtained from this research is an early warning system of geothermal cloud based geo-based geographic information system by utilizing the temperature sensor as a
tool of hot cloud detection. The temperature sensor used in system testing is the infrared temperature sensor by using a microcontroller as an analog to digital signal converter. This system has the facility to set the laying of the sensor, read the temperature on each sensor, and provide a warning of danger in accordance with the limitations that have been determined.

References

3. Grady Booch Rational Santa Clara, California, object-oriented analysis and design.

Index Terms

Computer Science  Security

Keywords

Early warning systems, geographic information systems, hot clouds, android