ABSTRACT

Corn field fires pose a serious threat to the environment, ecosystems and people. Effective prevention methods are needed to limit the spread of fires and reduce their negative impact. One approach that is gaining popularity is the use of SMS alerts to notify interested parties of the potential expansion of cornfield fires. The purpose of this study was to examine the effectiveness of the warning method via SMS in preventing the expansion of corn field fires. This method involves extensive use of communication technology, by sending short text messages to the relevant parties, i.e. firefighters. These messages contain information about the location, intensity, and approximate movement of the fire, which can enable a quick and appropriate response to a cornfield fire. Therefore, in this case research will be carried out regarding the prevention of the expansion of corn field fires in Indonesia. The data taken is to measure SMS delay, smoke thickness and temperature. Based on the testing experiments, it was found that the average delay was 1.67 seconds. The average temperature is 39.09° Celsius, and the average smoke thickness is 205.06 ADC. So that with this automatic SMS system it can make it easier for the public to anticipate if an expansion of corn field fires occurs. The results of the study show that SMS alerts can provide a significant advantage in efforts to prevent and control corn field fires.