

ABSTRACT

The geographical condition of Indonesia, which is between the meeting point of 3 (three) major tectonic plates in the world, makes Indonesia prone to disasters, one of which is a tsunami. To reduce the impact of the tsunami disaster, an early warning system is needed. One alternative to the tsunami early warning system is to use UWSN (Underwater Wireless Sensor Network). The combination of UWSN (Underwater Wireless Sensor Network) and SLAM (Simultaneous Localization And Mapping) is able to make a tsunami early detection system. Mapping and localization are applied to know create or update and determine and track robot position simultaneously. The data exchange is supported by UWSN (Underwater Wireless Sensor Network).

Keywords: Tsunami, Underwater Wireless Sensor Network, Simultaneous Localization And Mapping, Robot Operating System.