

ABSTRACT

THE MODELLING AND NOISE LEVEL ANALYSIS IN ENVIRONMENT OF LAMPUNG UNIVERSITY TOWARDS THE POSITION IN THE FORM OF SOUND TOPOGRAPHY

by

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It has been done to measure the level of noise in Lampung University (Unila) area. The research was carried out with matrix model at the Unila map with 25 points of measurement. The measuring instruments of noise are sound level meter type 4011 Lutron and android smartphone as comparator. The determinations of the coordinate area was carried out with Global Positioning System (GPS) and android smartphone. The coordinate data that was obtained from the measurements of the latitude longitude coordinate afterwards was changed into the Universal Transverse Mercator coordinate (UTM) used the application of Microsoft Excel that was drafted by Steve Dutch from University of Wisconsin-Green Bay. The temperature of the environment of the grating point was measured by thermometer. The whole data was gathered and then convert to the distribution map of noise in form of the map sound topography used Software Golden Surfer. Results of the research showed the noise level in the area still in the safe level according to employment and transmigration ministers regulation in a big manner noise was measured 64-84 dB.

Keywords: *measurement, sound level meters, GPS, android smartphone, sound topography.*