

ABSTRACTION

Acoustic signal is a sound signal from sound source tools. One of the tool is Side Scan Sonar. This tool can detect and interpret sea floor by shooting sound to the sea floor and waiting for reflection sound. On the strength of the reflection time, Side Scan Sonar will record the reflection signal.

In this final task, writer do analyses and some mathematics calculation for determine thing which hit by the acoustic signal. From this way, made a program which is can detect and calculate acoustic signal directly. The data is taken from P3GL, Bandung, West Java. The sea signal will read with Seisee program and will processing with MATLAB 7.9.0. In this case of research is applying for Maluku Sea Line 7, Line 9, Line 13, Line 16 dan Line 17.

Detection's program of this signal is purpose for help ordinary people, geology's students, and P3GL official for analyses things in sea floor and public interest (e.g. for building fiber optic in the sea floor, sea floor exploitation, etc).

The calculation result from reflection coefficient and acoustic impedance of Maluku Sea, found that the clay is dominate all of sea floor, then sands, and the least is limestone.

Keyword: Side Scan Sonar, Detection Program, sea floor, P3GL, North Moluca Sea.