ABSTRACT

Trees are one of the living creatures in this world that contribute the most to the survival of other living creatures. Even so, trees are still living things that can be infected by diseases, one of which is porous. The development of technology today can be very useful because it has spread in various fields one of them is detection of porous trees using radar which is one of the latest technologies.

In this research, RCS (Radar Cross Section) analysis will be done on trees using SiversIMA RS3400X radar. The data generated is raw data that will be changed to perform a discrete fourier transformation of the raw data to get the magnitude value and will be classified based on the distance and tree condition scenario.

This research will be able to analysis RCS on trees using SiversIMA RS3400x radar in accordance with the process that has been determined and the final result is the result of system testing of the condition classification of porous and healthy trees at a distance of 90 cm, 100 cm, and 120 cm. This research produces accuracy by 81%

Keywords : tree,SiversIMA,magnitude,RCS