Abstract

This paper mainly concentrates on the detection of target by modeling sea clutter. This is achieved by detecting the targets from the synthesized samples of the compressed noisy echo signal by fixing the threshold using improved correlation technique. These detected targets may include clutter also. To detect and isolate the sea clutters, two steps are followed. 1) The sea clutter radar cross section (RCS) is calculated for the modeled sea clutter reflectivity ($\sigma_0$) using NRL model at low grazing angles. This RCS calculation was made for different scenarios and is stored as a database. 2) This database is compared with the estimated RCS of the detected targets from synthesized received signal to detect the actual targets. MATLAB is used for coding and simulation.

References

- I. Antipov, Simulation of Sea Clutter Returns,; Defence Science and

Index Terms

Computer Science  Applied Sciences

Keywords
Clutter; Nrl Model; Rcs; Improved Correlation Technique