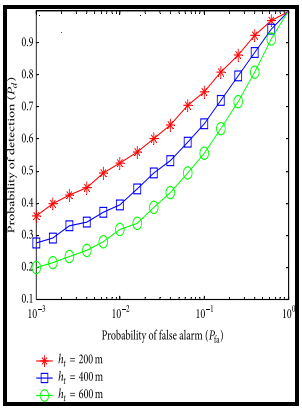
Probability of detecting and tracking radar targets in clutter at low grazing angles

- - Spectral Kurtosis



Description: -
-probability of detecting and tracking radar targets in clutter at low grazing angles
-probability of detecting and tracking radar targets in clutter at low grazing angles
Notes: Thesis(Ph.D.) - Loughborough University of Technology 1982.
This edition was published in 1982

Filesize: 51.107 MB

Tags: #Sea #Clutter

CiteSeerX — ADVANCED SEA CLUTTER MODELS AND THEIR USEFULNESS FOR TARGET DETECTION

The RUBICON system: ,® Provides easily recognizable container tampering evidence at critical points during the container transport process ,® Prevents injecting of drugs, weapons, or stowaways into cargo containers laden with legitimate cargos ,® Gives capability to inspect remotely up to 100% containers ,® Dramatically reduces customs checkpoint overloading ,® Highly increases port security These two projects, Heavy Pass and RUBICON will borrow many of the technologies, techniques and procedures from the project proposed in this HMC"""""s proposal under the DOD SBIR program.

British Library EThOS: The probability of detecting and tracking RADAR targets in clutter at low grazing angles

This leads to high false alarm probability. In another approach, a target is separated from clutter using a range gate or Doppler filtering.

Sea

In a radar example, we show a fused-distribution using a Rayleigh and Pareto model describing the average and heavy tail clutter characteristics.

British Library EThOS: The probability of detecting and tracking RADAR targets in clutter at low grazing angles

The datasets are collected at the same site at different times. What target do we attack in what conditions? More and more, however, target recognition prior to weapon delivery is needed because targets of interest can be moved between the reconnaissance mission and the strike Ballistic Missile Launchers or Sol-Air Defense for example.

Spectral Kurtosis

The above principle is well illustrated by the situation in which a vessel engaged in a search and rescue mission is attempting to locate the echoes of survival craft close to her in clutter conditions.

Radar clutter modeling for change detection, Proceedings of SPIE

Where two transmitters of different powers are available, it may be helpful to select the one having the lower power. However, little data has been collected and analysed from the high grazing angles typically expected with the operation of high altitude airborne platforms.

Moving Target Indicator

This report focuses on understanding the characteristics of sea-spikes as they are often the cause of false detections in a radar processor. Sea clutter echoes may make it impossible to detect some targets, while the presence of others may only be revealed by skilful adjustment of the controls or with the assistance of some form of signal processing. Radar echoes of sea surface show bright and dark stripes alternating with each other.

Spectral Kurtosis

When attempting to identify coastlines. Abstract Knowledge of radar sea-clutter phenomenology allows accurate models to be developed for assessing target detection performance.

Related Books

- Three pictures of W.H. Auden
- Li xing zhi hun - dang dai ke xue zhe xue zhong xin wen ti = The spirit of reason : the central issu
- Des tropes ou Des différens sens dans lesquels on peut prendre un même mot dans une même langue.
- Last days of Jesus - a poem
- Symvolē stē Samiakē vivliographia - autotelē dēmosieumata 1555-1920