CODAR Vessel Detection Software
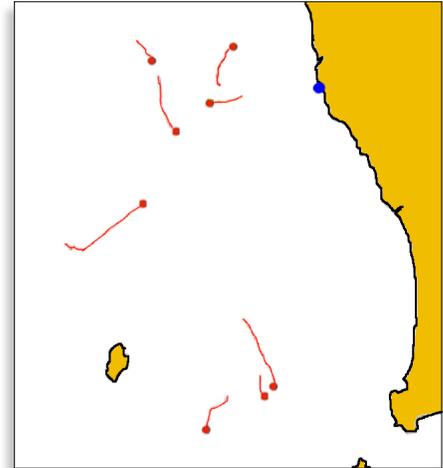CODAR Product Code: SSDA-SHIP

Product Description:

The SeaSonde® vessel detection software processes Doppler echoes from SeaSonde HF radar ocean monitoring system providing detections of vessel echoes. Information provided includes real-time vessel position, speed, estimated radar cross section and a unique identifier for tracking through time. Detections and track updates are output at user-specified intervals, typically every one to four minutes.
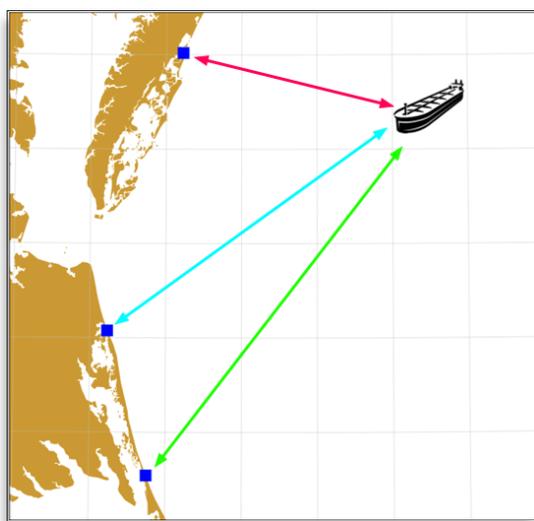
Each software license can run on a single monostatic, bistatic or multistatic radar unit. Multiple licenses can be used to outfit detection capability in numerous radars within a larger network. In a network utilizing SHARE-enabled frequency sharing, each receiving site running the vessel detection software can provide independent monostatic, bistatic or multistatic detections using transmissions originating from itself and/or other nearby SHARE-enabled SeaSonde Remote Units or bistatic transmitters.

With multiple "looks" from different bearings and radial Doppler speeds, multistatic network detections allow for increased vessel position and motion accuracy, larger areas of continuous tracking and increased probability of detection during commingling of vessel and sea echoes or changes in vessel speed and aspect. Due to the HF Doppler processing, multiple vessels can be tracked simultaneously, even when in close proximity. to one another.

Doppler processing allows multiple vessels to be tracked simultaneously even when in close proximity.

Detections are provided in easy-to-parse ASCII files for simple integration into the user's greater maritime domain awareness system. Range of detections depends on a number of factors including vessel size, aspect and behavior, radio noise, ocean conditions and SeaSonde configuration.

Target detections from multiple radar units, especially in a multi-static network environment, provide more accurate detections and increased probability of detection

Compatibility/Requirements:

•This software package is designed to run in parallel with all other SeaSonde software on the SeaSonde Remote Unit computer and does not affect traditional current or wave measurement processing.

•Runs with SeaSonde Radial Suite Release 7 or later.

•Adding SeaSonde vessel detection processing to an existing site may require additional processing power or storage. Please consult with a CODAR technician before installing.

•Vessel detection software can be used at any SeaSonde operating frequency.

•Performance subject to local RF noise conditions.

SSDA-SHIP Includes:

•One single-use software license and activation of the existing onsite USB key.

Note: Software installation & configuration by a trained CODAR technician can be performed under a separate service contract.