OceanView Maritime Surveillance System

Vexcel Corporation in cooperation with the Center for Southeastern Tropical Advanced Remote Sensing (CSTARS) of the University of Miami (FL, USA), announced their joint development of the OceanView ocean surveillance system. OceanView provides automatic ship detection from readily available, low-cost satellite imagery for use in law enforcement at sea.

Designed to operate within the processing queue of a satellite ground system, the system assigns a ship probability score to detected maritime objects based on the value of parameters it calculates for each detected object. In the case of Synthetic Aperture Radar (SAR) imagery, parameters include: length, width, heading, radar cross-section (integrated brightness), position (line pixel or latitude/longitude), peak brightness, and ratio of object brightness to mean neighbourhood brightness. Once the results have been reviewed using the OceanView interactive editor, image analysts may then generate and distribute reports in the NATO standard OTH-GOLD format and in the form of a web page with imagery available worldwide from an encrypted web site. The entire process, from data downlink to report generation, requires little human intervention and takes well under an hour for SAR data. Because the operations occur in near real-time, land and sea forces can be immediately mobilised to intercept suspect vessels.