

Activities of Ocean Satellite Remote Sensing Applications in South Korea: 1) Ship Identification, 2) Oil Spill Monitoring, and 3) Sea Ice and Fog Detection

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In the present article, we introduce the applications of ocean satellite remote sensing in South Korea, especially on ship, oil spill, sea ice and sea fog detection.

In the case of oil spill accident at sea, information concerning the movement of spilled oil is important in making response strategies. Aircrafts and the satellites have been utilized for monitoring of spilled oil. For the purpose an operation system using satellite data is under construction. In addition, this paper presents the preliminary technique to design an integrated system for ships recognition by Synthetic Aperture Radar (SAR) and Automatic Identification System (AIS).

Geostationary Ocean Color Imager(GOCI), as the world's first sensor to observe the ocean in geostationary orbit, has been developed with eight VIS/NIR bands, two mega pixel CMOS detector array. The GOCI has acquired 16 slot images in 2,500km x 2,500km area centered at 36°N and 130°E during 30 minutes. KOSC(Korea Ocean Satellite Center) distributes the GOCI data 8 times to user at 1-hour intervals during the daytime in near-real time according to the distribution policy. We will give a brief introduction for ocean application such as sea fog detection and extraction of typhoon parameters.