Coastwatch Applications of Synthetic Aperture Radar Imagery

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Abstract

NOAA in partnership with the National Ice Center has constructed a near real-time data delivery system for SAR imagery. One of the principal applications of this imagery is to support the mission of the NOAA CoastWatch program; i.e., to provide near real-time satellite data to environmental resource managers, fishery scientists, and environmental analysts. There are two CoastWatch applications of SAR imagery that are approaching operational status: (1) remote sensing of ice on the Great Lakes and in Alaska coastal waters, and (2) monitoring of the spring ice break-up on Alaskan rivers. The status of these applications will be presented. Also, the development status of other potential applications of SAR data will be summarized, including: (1) high-resolution wind measurement, (2) mapping of oil spills, and (3) fisheries management.