Abstract

Oil Spill is one of the most critical issues for the marine environment. The most important thing to minimize the influence is how to find spilled oil area when it occurred. Satellite remote sensing is suitable for use of the disaster surveillance because a periodically wide area can be observed. Especially SAR (Synthetic Aperture Radar) can observe the object regardless of day and night, without being influenced by clouds. It is desirable to perform spilled oil are extraction from the SAR imagery automatically, although a visual decipherment technique is main under the present circumstances. In order to solve this problem, the possibility of automatic extraction of spilled oil area in the multi-resolution Wavelet analysis was examined. By applying the multi-resolution Wavelet analysis to SAR imagery, we found the possibility of the detection of spilled oil area. It is possible for automatic recognition of spilled oil area without human interpretation if this technique is established.