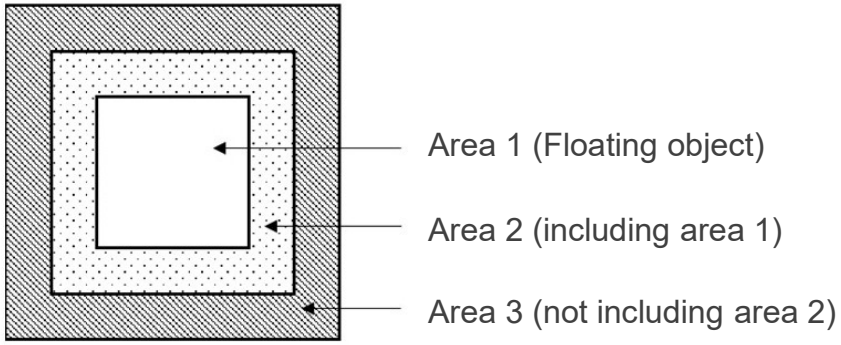
Tohoku Univ. Technology

3-steps analysis to extract accurate spatial information!

Spatial information extraction of floating objects on the sea

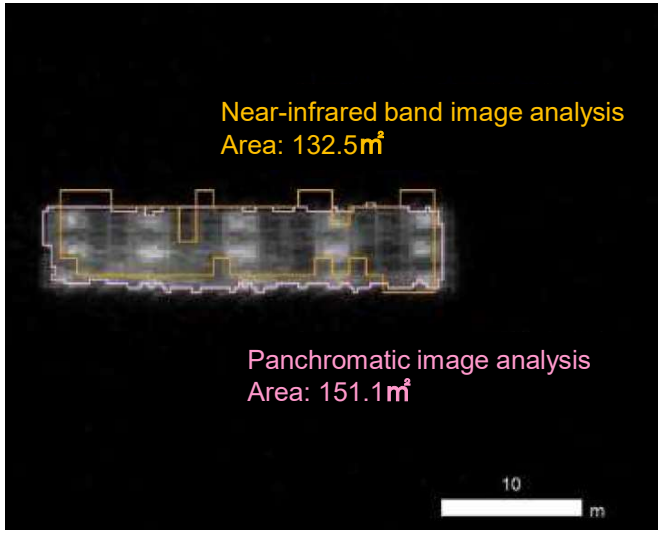


Overview

In general, the near-infrared band (multispectral band) has worse spatial resolution than the panchromatic band, so its data volume is smaller. In the future, artificial satellites will be able to take images of almost the entire Earth once a day, accumulating a huge amount of data. Analyzing all of these images will require an enormous time and an improvement of computer performance.

This invention is about a method which reduces the analysis time and computer processing power by identifying area 1 where objects are floating on sea using the near-infrared band with low data volume, then making object-based analysis by creating panchromatic band images of the neighborhood area 2. In addition, spatial information such as the floating object size, quantity, location, etc. can be extracted with high accuracy.

Features・Outstandings



Pink is the method of this invention. It captures more precisely the contour of the floating object.

Product Application

- ☐ Safety management in ship operation
- ☐ Detection of driftage caused by floods, etc.

Related Works

[1] The Remote Sensing Society of Japan 65th academic lecture thesis collection
http://www.rssj.or.jp/act/conference/65th_autumn

IP Data

IP No.	:	JP2019-162614(application), JP2021-43485(publication)
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