熱赤外画像欠測域海面水温の復元

Recovery of Sea Surface Temperature in Infrared Images Masked by Clouds Using an Objective Analysis

> 久保田 雅久 後藤 隆 Masahisa Kubota Takashi Gotoh

Abstract

The possibility of reconstructing Sea Surface Temperatures (SSTs) when the sea surface is masked by clouds from the satellite sensor in a NOAA/AVHRR image by a successive correction method is investigated. The reconstruction is carried out after adding artificial clouds to a cloud-free image. Two methods of masking SST data by addying artificial clouds to an image are chosen in the present study. In the first method, the shape of an artificial cloud is assumed to be a circle. In the second method, that is assumed by simulating cloudy regions in other images. The resulting SST field detected appears to be similar to the SST field in the original image. Even though the present methodology is quite simple, the results obtained are encouraging.