Thursday, October 11
Poster Session 4
10:30–12:00

Poster 176

OPTICAL DETECTION OF CORAL REEFS

An effective and validated index that is simple to implement would be highly useful for long-term management and monitoring of coral reefs and identifying the location and distribution of the coral reefs are important for exploring their health conditions in the vast shallow coastal water environments. The present work is therefore focused on combining the optical visible remote sensing reflectance bands and coral reef index (CRI) for mapping the coral reefs in the Gulf of Mannar along the coast of Tamil Nadu. In particular, the colour composite image generated using the Landsat 8 OLI bands in the near infrared (865 nm) and shortwave infrared region (1609 nm and 2201 nm) and near-infrared band (865 nm) along with the CRI [(865-1609)/(865+1609)] have been shown to be effective in identifying the location, spatial distribution and health status of coral reefs in the Gulf of Mannar region. Caution should be exercised when interpreting these products as the detected spatial distribution and intensity are dependent on the effect of tidal variation, water turbidity, bottom reflectance and sensor characteristics.

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