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Tuesday, October 9
Poster Session 2
10:30–12:30

Poster 241

OPTICAL WATER TYPE GUIDED APPROACH FOR INLAND WATERS OAS ALGORITHMS

The availability of free remote sensing data with good spectral, spatial and temporal resolution of inland and coastal waters has generated wide interest in how to use remote sensing capabilities to monitor water quality. These waters are optically complex and influenced by colour dissolved organic matter, phytoplankton and an amount of suspended sediments. Also, remote sensing products quality have large variation according to water characteristics and algorithms used. Therefore, the remote sensing of optically complex waters is more challenging, and standards products often fail. In this study, we use optical water type classification based on reflectance spectra to divide waters into 5 types: Clear, Moderate, Turbid, Very turbid and Brown. Classification shows, different optical water type is associated with different specific bio-optical condition and each water type has different reflectance spectrum. Furthermore, we investigate Chl-a, TSM and CDOM published algorithms and tested against pre-classified in situ measured data. Finally, we present for each optical water type best algorithms and results are also applied on Sentinel-3 and Sentinel-2 data.

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