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

Poster 213

VALIDATION OF MERIS CHLOROPHYLL FOR INLAND US WATERS

Lakes, rivers, and reservoirs are important to society by providing drinking water, recreational opportunities, and critical habitat. As part of the Cyanobacteria Assessment Network (CyAN) project NASA produced the first full MERIS daily time series (2002-2012) for more than 1800 lakes across the US for a variety of products. The historic inland waters dataset allows for the ability to look for changes in the waterbodies over time. Chlorophyll is a proxy for biomass, which can be used as an indicator of ecosystem health and waterbody trophic status and therefore, the validation of the chlorophyll algorithms for inland waters is important. The validation effort looked at a variety of chlorophyll concentration algorithms including the maximum chlorophyll index (MCI), the maximum peak height (MPH), the standard Ocean Color algorithm (OC4), and a chlorophyll estimate based on the Cyanobacteria Index (CI) algorithm. In situ dataset for validation match-ups was from the USGS Field Integrated Exploratory Lakes Database (FIELD). This effort is the first full contiguous US validation for MERIS chlorophyll for lakes and reservoirs.

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