OCEAN OPTICS XXIV

Valamar Lacroma Dubrovnik Hotel | Dubrovnik, Croatia | October 7–12, 2018

https://oceanopticsconference.org

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

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NASA MULTI-MISSION OCEAN COLOR REPROCESSING 2018.0

The NASA Ocean Biology Processing Group (OBPG) recently reprocessed the multi-mission ocean color time-series from SeaWiFS, MODIS-Aqua, MODIS-Terra, and VIIRS using common algorithms and improved calibration. Calibration changes included updates to the vicarious calibration using the recently improved MOBY straylight characterization and associated reprocessing of the MOBY time-series. Here we present an analysis of the quality and consistency of the resulting satellite ocean color retrievals, including spectral water-leaving reflectance and chlorophyll a concentration. Statistical analysis of satellite retrievals relative to in situ measurements will be presented for each sensor, as well as an assessment of consistency in the global time-series for the overlapping periods of the missions. Results will show that the satellite sensor ocean color data records are highly consistent over the common mission lifespans, and in good agreement with in situ measurements, with a notable reduction in satellite to in situ bias errors due to the vicarious calibration update.

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