NASA in situ data needs to support the operational calibration and validation of ocean color satellite data products

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ABSTRACT

Calibrating ocean color satellite instruments and validating their data products requires temporal and spatial abundances of high quality in situ oceanographic data. The Consortium for Ocean Leadership Ocean Observing Initiative (OOI) is currently implementing a distributed array of in-water sensors that could provide a significant contribution to future ocean color activities. This workshop will scope the optimal way to use and possibly supplement the planned OOI infrastructure to maximize its utility and relevance for calibration and validation activities that support existing and planned NASA ocean color missions. Here, I present the current state of the art of NASA validation of ocean color data products, with attention to autonomous time-series (e.g., the AERONET-OC network of above-water radiometers), and outline NASA needs for data quality assurance metrics and adherence to community-vetted data collection protocols.