**The SeaBASS Validation System: Redsigned tools and online resources for ocean color satellite match-ups**

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Based upon the established SeaWiFS Bio-optical Archive and Storage System (SeaBASS), a powerful web-based search engine was redesigned and a series of new tools and online resources were created for enhancing evaluation of ocean color satellite validation results. SeaBASS is NASA’s repository for in situ oceanographic datasets that are used for the continuous ground-truth comparisons necessary to ensure and improve the accuracy of global geophysical measurements made by ocean color satellite sensors. Most SeaBASS architecture was originally built over a decade ago and has now been revamped, including the new interface and features of the validation search engine on the SeaBASS website. The validation search engine allows users to search for coincident satellite-to-in situ measurements or compare satellite-to-satellite measurements at common location. Validation search queries can be performed on a list of standard products (such as Rrs, chlorophyll a concentration, or GIOP products) for any ocean color satellite data maintained by NASA, including SeaWiFS, MODIS Aqua and Terra, MERIS and VIIRS. Additional special data sources have been incorporated into the search engine including multiple AERONET-OC (Aerosol Robotic Network) sites as well as validation results from MOBY (Marine Optical Buoy). Search query results can be downloaded and online tools provide maps, plots and statistics for analysis of results. These new and updated capabilities have greatly increased the power and speed with which SeaBASS users can evaluate a wide set of oceanographic products.

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