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

Poster 78 IOPS MEASUREMENTS DURING BOUSSOLE MONTHLY CRUISES (NW MEDITERRANEAN SEA)

The BOUSSOLE project has been building a long-term time series of in situ bio-optical measurements in the NW Mediterranean Sea since 2001. The aim is to support vicarious calibration of observations by ocean color remote sensing satellites, validation of the geophysical products derived from these observations, and fundamental research in bio-optics. Data are continuously acquired by a dedicated mooring since September 2003. In addition, since July 2001, monthly servicing cruises to the BOUSSOLE site give complementary measurements to those acquired by the mooring through the collection of optical profiles and CTD casts with water sampling. Operations include discrete sampling for analysis of phytoplankton pigments, total suspended matter, and absorption by phytoplankton, non-algal particles and colored dissolved organic matter. New instrumentation for measurements of inherent optical properties (IOPs) has been added from December 2011. The package includes a hyperspectral absorption meter (Hobilabs a-Sphere), a multispectral backscattering meter (Hobilabs Hydroscat-6) and a multispectral beam transmissometer (Hobilabs Gamma-4). Here we show examples of IOPs time series from data acquired during BOUSSOLE monthly cruises. We also present some aspects of the protocols that have been set up for maintaining and calibrating these instruments in order to improve data quality. Furthermore, an intercomparison of the same variables obtained with different instruments deployed simultaneously during cruises or operating on the mooring is used to quantify uncertainty budgets in IOP measurements.

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