

OCEAN OPTICS XXIV

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Monday, October 8

Poster Session 1

16:00–18:00

Poster 45

INTEGRATION OF OPTICAL REMOTE SENSING DATA FOR SUSTAINABLE FISHING AND AQUACULTURE ACTIVITIES

Identification of the most favorable areas for fishing and monitoring of aquaculture activities, based on modern techniques, are essential for a sustainable development. Nevertheless, these tasks have become challenging due to fish stocks decreasing trend and intense human pressure on coastal habitats. Earth Observation data can be successfully used to raise the efficiency of fishing and aquaculture efforts. The SkyFISH platform, developed as a CMEMS downstream service, is a dedicated web-based service that can be used by the end-users as a decision support tool for finding the most favorable fishing zones or analyze the suitability of specific areas for aquaculture activities and monitoring of the existing ones. The area of interest covered by the service is the north-western Black Sea basin. SkyFISH takes advantage of the wealth of data delivered under Copernicus program (CMEMS) and other data sources. Analyses of water quality parameters, based on optical remote sensing information, are a core component of the service. Selection of the most appropriate products was essential for insuring the quality of the service. This was performed taking into consideration the characteristics of the area of interest (optical complex waters) and based on validation activities (using in-situ data). Apart from the products ingested in the system as added-value products, development of new ones was also required. Such an example is the regional adapted turbidity product, computed based on a local derived algorithm and which gives a more realistic view compared to the existing general valid algorithms.

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