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

Poster 166

DEVELOPMENT OF ALGORITHMS FOR DETERMINATION OF WATER INHERENT OPTICAL PROPERTIES AND END USERS PRODUCTS FROM SENTINEL 3 OLCI DATA AND VALIDATION USING NORWEGIAN FERRYBOX DATA

To improve the data quality of remote sensing reflectance (Rrs), water inherent optical properties (IOP) and satellite end users products derived from the Sentinel-3 OLCI sensor, a comprehensive method for atmospheric correction and IOP retrieval has been developed based on data from Norwegian fjords and coastal water areas. Special emphasis is placed on accurate retrieval of Rrs values and water IOPs over open ocean as well as over cDOM rich and turbid coastal or inland water. Match-up data obtained from the Norwegian national FerryBox network (NorSOOP) has been used for validation. Along the Norwegian coast, from Bergen to Kirkenes, through the Barents Sea, or the North Sea, the NorSOOP ferries network is covering a large diversity of water types. The FerryBox systems measure core parameters such as salinity, temperature, oxygen, turbidity, cDOM and chlorophyll fluorescence, wind speed and direction, and hyperspectral above water reflectance. The NorSOOP Ferrybox network provides crucial insight into the dynamics of environmental conditions and a large and diverse dataset for remote sensing algorithms validation.

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