

Valamar Lacroma Dubrovnik Hotel | Dubrovnik, Croatia | October 7–12, 2018 https://oceanopticsconference.org

Monday, October 8 Poster Session 1 16:00–18:00 » Extended Abstract

Poster 240

PAR MEASUREMENTS IN THE GULF OF TRIESTE (NORTHERN ADRIATIC SEA)

PAR (Photosynthetic Active Radiation) vertical profiles that were obtained from casts with the Sea and Sun MSS90 microstructure probe in the southern part of the Gulf of Trieste near buoy Vida were analyzed in the years from 2011 to 2015. PAR fortnightly profiles were explored with the linear fit of decrease with the depth of logarithm of PAR, normalized with its value in the air. The inverse relation between the coefficient of PAR attenuation and the Secchi disk depth was also validated. Also, other relations (e.g. the bi-exponential non-linear decrease of PAR with depth) were explored. Our findings about the attenuation of PAR and the Secchi disk depth are in line with the study conducted decades ago for the north-eastern part of the Gulf of Trieste (Stravisi, 1999). Furthermore, the initial values of PAR profiles measured with the Sea & Sun probe in the air before the cast were validated with the PAR values measured continuously on buoy Vida, about 100 m away from the profiling measurement station.

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