



Variability of physical and biochemical properties in the Eastern Levantine Sea from September 2016 to September 2017

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The CINEL experiment took place in the Levantine Basin (Mediterranean Sea), south of Cyprus and off the Israeli coast, between September 2016 and September 2017. Currents and thermohaline properties of the water masses were monitored with mobile autonomous systems: drifters, floats and gliders. Satellite-tracked drifters and Argo floats deployed during 2 different legs of the experiment provided data for one whole year to study the complex circulation features governing the dynamics near the coast and in the open sea. Some of the drifters were captured in semi permanent gyres allowing a deeper knowledge of their dynamics. During the experiment two gliders were operated simultaneously in two different periods: the first one between September and December 2016 and the other between February and March 2017. The physical and biogeochemical parameters sampled by the gliders, show peculiar and interesting features, in particular mesoscale and sub-basin scale eddies were crossed several times. The in-situ observations collected were analysed and interpreted in concert with remote sensing products (altimetry, sea surface temperature, ocean colour). The main focus of the analysis was on the detection and monitoring of strong mesoscale and sub-basin scale features and on their motion and evolution during the period of the experiment.