



Air-Sea Turbulent Fluxes and Upper-Ocean Currents During the TURBORADAR-TURBIDENT Experiments

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Current velocities in the upper ocean layer and air-sea turbulent fluxes, acquired in the context of the TURBORADAR-TURBIDENT coupled projects, are analyzed as a function of environmental conditions. Three surveys were conducted in September 2017, May, and October 2018 in the Northwestern Mediterranean. A research vessel "Europe" (Ifremer-Genavir N/O) and a fleet of three drifting, wave-following experimental platforms (KOURSK, OCARINA and PICCOLO) measured current velocity profiles, near surface atmospheric turbulence, wave characteristics, radiation fluxes, and wind profile in the first meter above the sea surface. After documenting the conditions encountered during the surveys as viewed by the different instruments, the presentation will focus on the interplay between the wind, waves and surface current for a steady and two unsteady cases: with increasing wind and waves conditions and with the wind direction change by 180° in six hours.