

verno *et al.*, 2014). Peak coccolithophore export production is observed in May (3.5×10^5 coccospheres $m^{-2} day^{-1}$), a secondary peak is observed in September-October. The assemblage is dominated year-round by the cosmopolitan species *E. huxleyi*, followed by the deep-dwelling *F. profunda* and by several minor species (*Syracosphaera* spp., *Rhabdosphaera* spp., *A. robusta*, *G. flabellatus*) which are most abundant during the summer period of upper water column stratification.

NESTOR mooring line (4500m depth) was deployed at the deepest basin of the SE Ionian Sea ($36^{\circ} 2.96$ N, $21^{\circ} 28.93$ E). The mooring line was instrumented with five pairs of sediment traps, set at 700, 1200, 2000, 3200, and 4300m depth. The Ionian Sea displays high seasonal variability with maximum productivity rates observed during the late winter/spring convective mixing period (Stavrakakis *et al.*, 2013). Our coccolithophore flux study from the shallower trap (700 m) for an overall interval between 6/2010 and 8/2012, reveals a peak during late spring- early summer (max. May 2012; 1.43×10^6 coccospheres $m^{-2} day^{-1}$) that is in accordance with the peak of total mass flux. The assemblage is dominated by *E. huxleyi*, followed by *A. robusta*, *Syracosphaera* spp., *H. carteri*, *Umbilicosphaera sibogae*.

A high seasonal pattern characterizes the assemblages; the export production and fluxes are strongly dependent on the nutrient influx, the vertical mixing/ and or intermediate waters upwelling, SST of the water column and the influence of episodic dust input events leading to

enhanced fluxes of lithogenic matter, in a north - south and east - west transient.

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