**Figure S1.** 24-hour backward trajectory of air mass reaching all stations. Air mass trajectories are obtained from the NOAA Hybrid Single-Particle Lagrangian Integrated Trajectory Model (HYSPLIT) available at http://ready.arl.noaa.gov/HYSPLIT\_traj.php, constrained by the meteorological model WRF.





Figure S2. Daily aerosol optical depth at 550 nm from MSG/Seviri (03/06, 04/06 and 05/06)

**Figure S3.** Salinity and dissolved trace metals concentration in the subsurface waters plotted against longitude. The dashed lines represent linear regression equations.

