Supporting Information

Dimethylated sulfur compounds in the Peruvian upwelling system

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Figure: S1–S2

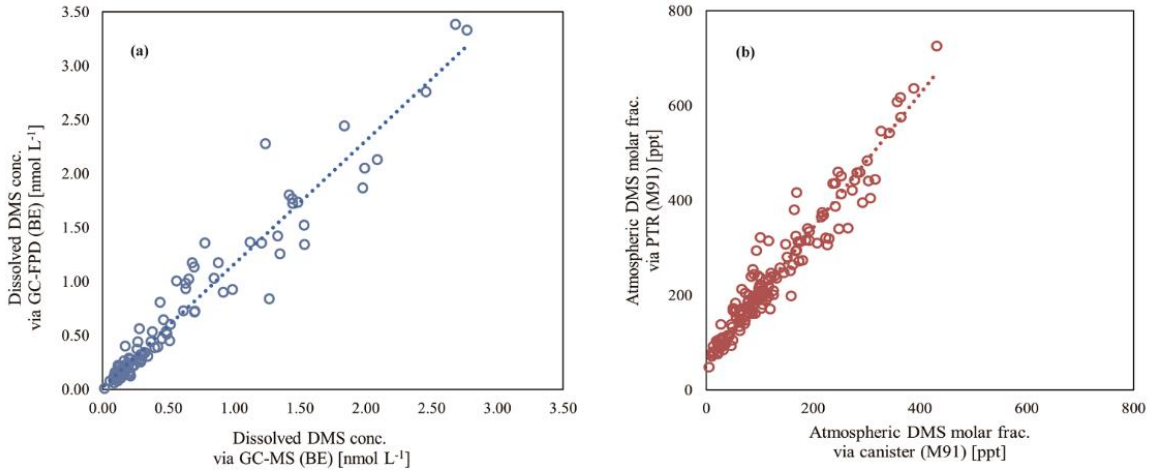
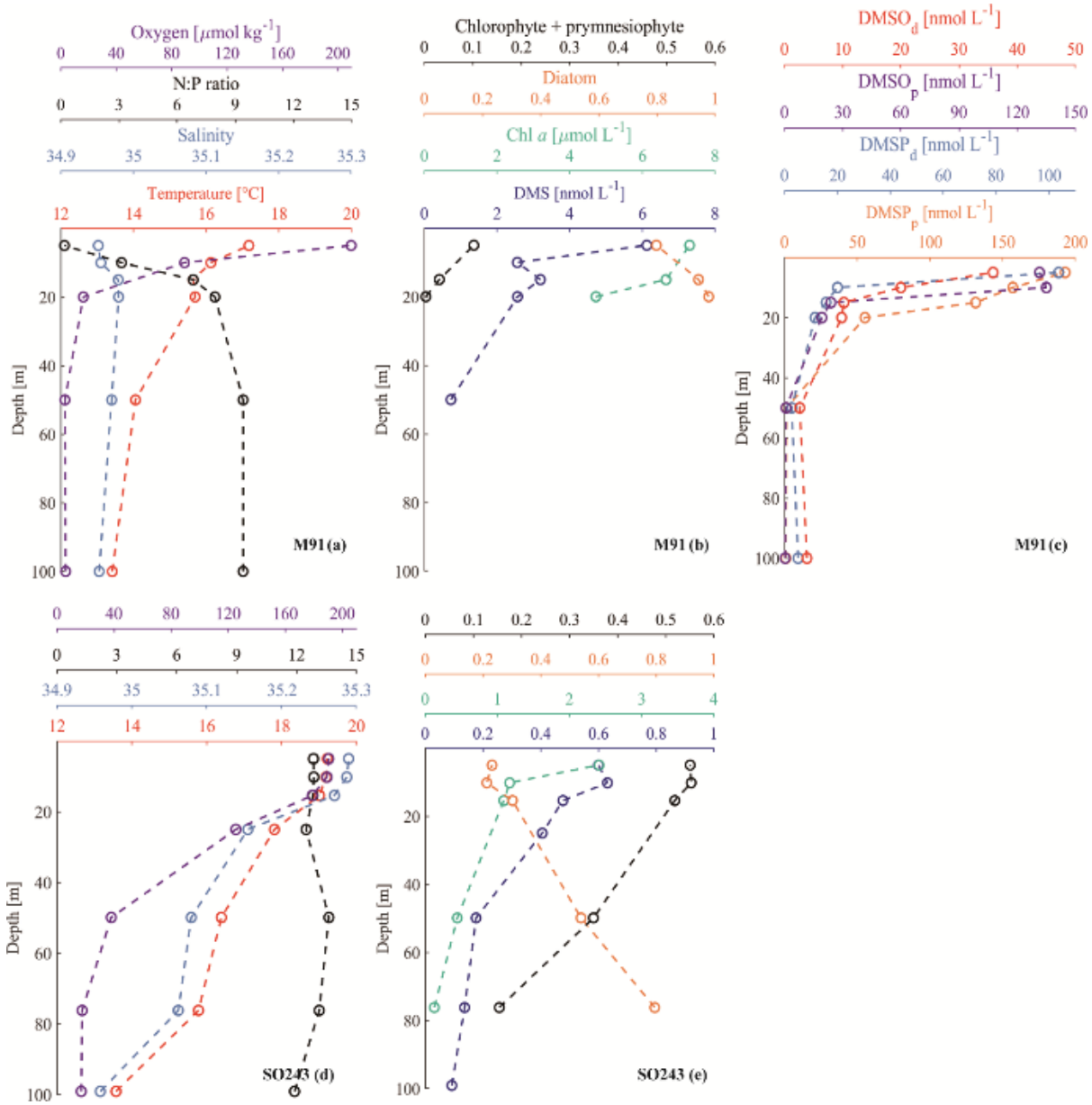


Figure S1: (a): Dissolved DMS conc. via GC-MS (BE) vs. dissolved DMS conc. via GC-FPD (BE): y = 1.14x + 0.02, r^2 = 0.94, n = 121. (b): Atmospheric DMS molar fractions via PTR (M91) vs. atmospheric DMS molar fractions via the canister (M91): y = 1.43x + 59.87, r^2 = 0.93, n = 155. Atmospheric DMS data via PTR were averaged over the filling time of those via the canister and included 2 min prior and 2 minutes post filling.



55 **Figure S2: Selected depth profiles of temperature, salinity, N:P ratio, oxygen, Chl *a*, relative abundance of phytoplankton groups (diatom, sum of chlorophyte and prymnesiophyte) and DMS, as well as other sulfur compounds (only M91) such as $DMSP_p$, $DMSP_d$, $DMSO_p$ and $DMSO_d$ at the geographically similar shelf stations F4 and 11 in December 2012 (a–c) and October 2015 (d and e), respectively.**