



## **Local simulation of species resolved primary marine organic material at the Cape Verdes**

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In September/October 2017 a measurement campaign took place at the Cape Verde island of Sao Vicente. During that period, several samples of water from the ocean surface, the surface microlayer and the aerosols were collected. These samples have been analyzed for several organic substances, which can be summed into groups of polysaccharides, lipids and proteins. We calculated the emission fluxes of these species groups to the atmosphere based on their concentration in the ocean surface water and the SML using a new source function and simulated their atmospheric dispersion with the regional chemistry and aerosol transport model COSMO-MUSCAT. We will present the results of these simulations in comparison to previous approaches based on chlorophyll-a concentration for primary marine organic material in the atmosphere. The chemical analysis of the aerosol samples is still ongoing. If available, the measurements will be used for model evaluation.