

**SOLAS Open Science Conference 2009**  
**Discussion Session Report:**  
**Ocean-atmosphere interactions in the Mediterranean Sea**  
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First, two presentations were given in order to present the MERMeX and ChArMEX projects (scheduled for the 2010 to 2020 period over the Mediterranean basin) and related to marine ecosystems and atmospheric composition modification due to the global change and anthropogenic pressure. Others presentations were also given, including the effect of dust deposition and dust sea surface dimming on the net primary production (NPP), the presentation of an original satellite retrieval for estimating UV attenuation,  $K_d(\text{UV})$  as well as CDOM absorbance from ocean-color, the sea-to-air emissions of biogenic marine organic matter and subsequent photochemical oxidation reactions, the effect of solar radiations on the DMS production, as well as the penetration of UV radiations in the Mediterranean Sea. Several discussions highlighted the need to develop long-term measurements of the aerosol deposition over the Mediterranean basin in order to validate outputs from chemical-transport models, including a distinction between the dry and wet deposition. The discussion underlined also the need to conduct “bubble-bursting” observations over this region for investigating the production of secondary organic aerosols and their possible impact on the radiative budget. Finally and due to the strong impact of UV-B, UV-A radiations on marine ecosystems (photo-degradation of the CDOM, carbon cycle, DMS production...), the discussions revealed that few UVR measurements were currently performed over the Mediterranean basin. In that sense, accurate observations of UVR irradiances are clearly needed over this specific region (weak cloudy coverage associated with high doses of UVR compared to oceanic areas located at the same latitude).