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Modelling and Caracterisation of sea salt aerosols during ChArMEx-ADRIMED campaign in Ersa

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During ChArMEx-ADRIMED campaign (June and July 2013), aerosol particles measurements were conducted in Ersa (600 m asl), Cap Corsica. The in-situ instrumentation allowed to characterize sea salt aerosols (SSA) by their physico-chemical and optical properties and their size distribution.
This study concentrates particularly on a period of a few days where the concentration of sea salt aerosols was higher.
The chemistry results indicate that the SSA measured during this period were mostly aged. The comparison of the number size distributions of air masses allow to determine the SSA size mode.
These data are used to evaluate the sea salt aerosol emission scheme implemented in the regional scale Meso-Nh model. A new emission scheme based on available source fonctions is tested for different sea state conditions to evaluate the direct radiative impact of sea salt aerosols over the Mediterranean basin.