



Air Pollution Monitoring from Space in Cyprus - The 'AIRSPACE' Project

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Atmospheric pollution due to particulate matter (PM) is a continuing issue in many parts of Cyprus. The AIRSPACE project aims at developing a novel methodology based on in-situ observations and multi-platform retrievals, as a tool for monitoring air particulate pollution. High quality PM monitoring at a fine spatial and temporal resolution is required by decision making authorities for taking proper measures and to inform the general public. Observations from Lidar and sun-photometer, satellite AOT retrievals and PM₁₀ - PM_{2.5} concentrations are considered. Relations between AOT measured from sun-photometers and Lidar and AOT retrieved from the MODIS sensor are established. A direct comparison between the AOT values retrieved from MODIS and the CIMEL sun-photometer (part of the AERONET NASA Network, which is established at the Cyprus University of Technology) are performed. Finally, the results are coupled with simulations performed by an atmospheric/chemical model (WRFChem), in order to gain in-depth information of the air pollution situation in Cyprus.

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