



European Supersites for Atmospheric Aerosol Research (EUSAAR): a new FP6 Integrated Infrastructure Initiative

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The objective of the project EUSAAR is the integration of measurements of atmospheric aerosol properties performed in a distributed network of 20 high quality European ground-based stations (Supersites). This integration contributes to a sustainable and reliable operational service in support of policy issues on air quality, long-range transport of pollutants and climate change. The project will be coordinated by CNRS in Clermont-Ferrand (Networking activity N1) and activity leaders are world-recognized experts in the field of aerosol research.

The lack of coordination programs for non-regulated measurements of aerosol properties is considered a major gap in Earth Observation that urgently needs to be filled. The objective of the networking activities is to ensure most efficient use of available

resources by 1- harmonization and validation of current measurement of particle optical, physical and chemical properties performed at Supersites as these are critical to ensure their scientific value (N2, N3, N4); 2- centralization of the validated measurements in a common data base accessible to all users (N5); and 3- spreading good practices and disseminate information on new protocols and inter-calibration procedures both within and outside the project.

Trans-National Access (TA1-TA11) is provided for 11 Supersites with long record of international access and outstanding instrumentation for atmospheric research and highly relevant long-term monitoring data series

The joint research activities have the common objectives to develop affordable and sustainable solutions to improve monitoring strategies and products that will advance up-to-date data reporting across Europe. This concerns retrieval of the aerosol column through a novel technology (JRA1), development of a new generation of humidity-controlled aerosol instruments (JRA2) and new methodologies for real-time acquisition and diffusion of aerosol parameters (JRA3).

A major concern of EUSAAR is that networking and joint research activities consolidate current observation effort across Europe to ensure its continuation beyond the frame of the project.