An Overview of the EUSAAR I3 Project

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Aerosol monitoring stations in 2005

Aerosol parameters for Air Quality and Climate purposes

	Parameter	Air Quality	Climate	Status
Chemical Properties	Aerosol inorganic composition	yes	yes	Implemented within EMEP (level 1)
	Aerosol organic composition (OC/EC)	yes	yes	Suggested as EMEP level 2
Physical Properties	Aerosol size distribution (dN/dlogD)	yes	yes	Suggested as EMEP level 3
	Aerosol Mass	yes		Implemented within EMEP (level 1)
Optical Properties	Light scattering Coefficient		yes	
	Light absorption coefficient		yes	
	Aerosol Optical depth		yes	Implemented inhomogeneously within AERONET / PHOTON
3D - distribution	Aerosol Vertical profile	yes	yes	Implemented within Earlinet

20 European Aerosol supersites

Name of Infrastructure	Aerosol chemical composition (inorganic)	Aerosol chemical composition (organic)	Aerosol mass	Light scattering coefficient	Absorption coefficient	Aerosol size distribution (10-500 nm)
Puy de Dôme	√	√	√	√	√	√
Junfraujoch	√	√	√	√	√	√
Aspvreten	√	√	√		√	√
JRC-Ispra	√	√	√	√	√	√
Cabauw	√	√	√	√	√	√
Melpitz	√	√	√	√	√	√
Zeppelin	√	√	√	√	√	√
Birkenes	√	√	√			√
Mt. Cimone	√	√	√	⊕	√	⊕
Hyytiälä	√	⊕	√		√	√
Mace Head	√	√	√	√	√	√
Finokalia	√	⊕	√	√	√	
Pallas	√		√	√	√	√
K-puszta	√	√	√	√	√	⊕
Kosetice	√	√	√			⊕
BEO Moussala	√		√	√		⊕
Harwell	√	√	√		√	√
Preila	√		√		√	√
Vavihill	√	√	√		√	√
Montseny	√		√			

4 Major Requirements for Aerosol monitoring in Europe

- **Objective 1**: Ensure measurements and QA/QC of aerosol chemical, optical and physical properties
- **Objective 2**: Ensure dissemination of data and capacity building
- **Objective 3**: Develop future tools for aerosol monitoring and dissemination of information
- **Objective 4**: Ensure trans-national access of research infrastructures

Beyond EUSAAR…
5 years to :

- Implement an efficient and high quality network of stations
- Contribute to cost-effective new tools for atmospheric monitoring
- Develop an efficient synergy with other EU programs (ACCENT, EARLINET, EMEP, EUCAARI) and within individual countries
- Ensure dissemination of data and knowledge outside of the EUSAAR consortium (station operators, users, monitoring programs) **ebas.nilu.no**
- Consolidate current observation efforts across Europe to ensure their continuation beyond the frame of the project

www.eusaar.net

The EUSAAR Consortium

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5. Netherlands Organisation for Applied Scientific Research (TNO)
6. Leibniz Institute for Tropospheric Research (IFT)
7. Norwegian Institute for Air research (NILU)
8. Consiglio Nazionale delle Ricerche (ISAC-CNR)
9. University of Helsinki (UH.DPS)
10. National University of Ireland, Galway (NUIG)
11. University of Crete (UoC)
12. Finnish Meteorological Institute (FMI)
13. University of Veszprém (ACUV)
14. Institute of Chemical Process Fundamentals (ICPF)
15. Ruprecht-Karls-Universitat Heidelberg (UHEI)
16. Institute for Nuclear Research and Nuclear Energy, (INRNE)
17. The University of Birmingham (UB)
18. Institute of Physics (IPL)
19. Lund University (ULUND)
20. Consejo Superior de Investigaciones Científicas, (CSIC-IES)
21. Hoffmann Messtechnik GmbH