APRIL 2023 Newsletter

HARMONIA
International network for harmonization of atmospheric aerosol retrievals from ground based photometers

Aerosol measurement homogenization

Working Group 1 is planning to homogenize existing aerosol optical properties' datasets from different networks

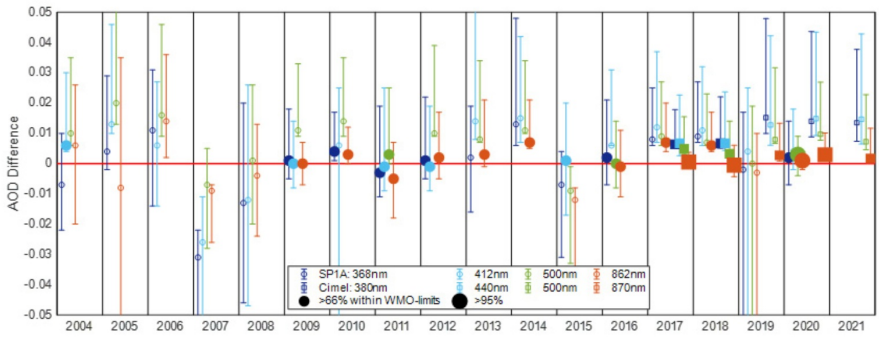
The first action of WG1 is to report an overview of existing and foreseen campaigns or experiments needed for AOD measurements (either in day or night time). The past campaigns are nocturnal AOD (Izaña 2017), QUATRAM (Davos and Rome, 2017, 2018, 2019 and 2021), ANACC (Ny-Ålesund, 2020), SCILLA (Lindenberg 2020), WMO/FRC-V (Davos 2021) and EMPIR-MAPP (Izaña 2022).
We will report on the data collection and analysis of the data/measurements, and tabulate how these campaigns report differences between instruments and methods (bias, spreads, standard deviations) when there are engaged in different tasks (diurnal or nocturnal) and conditions (winter, summer, arctic, mid-latitude, mountains, sub-tropical, urban environment).

More on WG1

Long-term observations of aerosol optical depth and their

relation to in-situ aerosol properties in the Svalbard region

The second report of (SESS) is focusing on almost 20 years of AOD data on 2 sites in Svalbard and links to in situ measurements. They indicate that number and intensity of Arctic haze episodes occurring in late winter and spring have decreased consistently and significantly in the last 20 years, while pollution events in summer/early autumn, caused by boreal biomass burning, are on the rise, though not as consistently. Comparison between in-situ measurements indicate that most (more than 65%) of the episodes with high aerosol load are not captured by surface measurements.



Yearly median AOD difference at four wavelengths for the SP1A (open circles) and CIMEL (open squares). The error bars represent the 5th and 95th percentile of the differences observed with in the year. The small and big filled circles and squares indicate datasets with agreement within the WMO uncertainty limit to better than 66% and 95%, respectively. Red line: zero difference level.

Full Report

AGORA Aerosol Training Course

Characterization of atmospheric aerosol using in-situ and remote sensing techniques course will take place at Granada, Spain, 12-17 June.
The training course is intended mainly for researchers and technicians from the atmospheric field. Trainees must have previous knowledge on aerosol sciences, at least in one of the aerosol measurement techniques. They could be advanced masters students, doctoral students, early-career

scientists, or technicians. Good communication skills in English are required.

Apply

GAWTEC 41 AEROSOLS

GAWTEC 41 is going to focus on Aerosols (physical properties, sampling) and Aerosol optical depth (measurements) and will be held from October 16th – 27th, 2023. Lab courses on measurement techniques as well as seminars on data evaluation and quality assurance will be offered. The session will also offer instruction on the analysis and integration of measurement data for generating products of relevance to society.

Apply

Hands-on training on aerosol lidar measurement quality assurance procedures and tools

Three days training session on aerosol lidar measurements, quality assurance and ATLAS tool. It will take place at Ilfov, Romania, 27-29 of June 2023, organised by ACTRIS and PROBE cost action.
Registration by 2 May 2023 and the workshop is free of charge. Travel grants are available.

Apply

Upcoming Conferences

Several conferences will be held the next few months , with deadlines for abstract submission in the following weeks. HARMONIA will be represented in all of them.

The 2023 EMS Annual Meeting is planned at the University of Economics in Bratislava & online from 4 to 8 September 2023.
Abstract submission deadline: 18 April

More Info

European Lidar Conference (ELC), which will take place in Cluj-Napoca (Romania) from the 13th to the 15th of September 2023, hosted by Babeș-Bolyai University.
Abstract submission deadline: 30 May

More Info

Job Vacancies

PMOD/WRC, Switzerland is looking for **scientist or technical engineer,** who will help in the calibration and characterisation of our radiometric instruments and facilities as well as the calibration of customer instruments. Furthermore, she/he will have the opportunity to participate in three international research projects within the European Partnership on Metrology which will start in 2023.

More Info

Open **postdoc** position on mineral dust modeling at Karlsruhe Institute of Technology (KIT), Germany.

More Info

PhD position in the department Remote Sensing of Atmospheric Processes, Leibniz Institute for Tropospheric Research, Germany. The institue is looking for a motivated and committed graduate student to work on the topic

Construction of an optical setup
for investigations of the polarizing properties of atmospheric mineral dust

More Info

HARMONIA
COST action

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.