

AERONET/PHOTONS Workshop Agenda

May 10, 2004

9:30am -Begin Workshop

Overview for AERONET Science Steering Committee in plenary (Staff talks)

AERONET overview: Holben 45 min

PHOTONS overview: Goloub 25 min

Collaborator Overviews-10 min each

AEROCAN-O'Neill

China Overview-Fensheng

Australia Overview-Mitchell

AEROSIBNET-Panchenko

AEROIBERIA-TBD

Campaign results-SE Asia: Eck, 30 min

12:00pm – 12:30pm Coffee Break

12:30pm - Resume Review

Marine Aerosol/ - Smirnov 15 min

Algorithm refinements-Smirnov 15 min

Inversion Progress-Dubovik 15 min

Non-Sphericity in inversions-Dubovik 15 min

Polarization-Operational and Research Issues-Vermeulen 20 min

1:50pm - 3:00pm

Welcome Reception and “tapas” at University Cantine.

3:00pm - 4:30pm Lunch

4:30pm – 7:20pm Resume presentations

Data base development, processing and data archive-Slutsker 15 min

Webpage data delivery/ Relational Data base-Giles 25 min

Operational activities- Newcomb/ Blarel/Podvin 20 min

Engineering & Calibration- Sorokine & Damiri 30 min

Added Value:

Solar Flux-Schafer 15 min

Cloud optical Depth from AERONET-Marshak 20 min

Synergism w/ MPLNET-Welton 20 min

BAMGOMAS-Giles 15 min

Wrap up-Charge to the committee-Holben & Tanre 5 min

7:20pm - Adjourn, Bus to Mazagon, INTA and Doñana Camping.

May 11

Research topics: AERONET & the wider view of aerosol collaborative studies (invited and solicited talks, 20 minutes each)

9:30am - 10:10am

- **Global Characterization of aerosol properties-Satellite View**

Yoram Kaufman: Synergetic use of AERONET and MODIS

Didier Tanre: Aerosol remote sensing from AERONET and satellite over west Africa

10:10am - 11:30am

- **Field Campaigns**

Jos Lelieveld: Global air pollution crossroads

Paola Formenti: Observation of aerosols in the Mediterranean basin

Lucas Alados Arboledas: Veleta 2002 Field campaign a general overview

Jim Haywood (presented by P. Formenti): The consistency of AERONET biomass burning aerosol size distributions and optical parameters when compared to in-situ aircraft observations as determined during SAFARI 2000

11:30am - 12:00pm -Coffee Break

12:00pm - 1:10pm

- **Lidar Measurements, Ground and Spaceborne**

Detlef Muller: Raman Lidar observations over a central European EARLINET site

Jens Boesenberg (presented by D. Muller): EARLINET

Jim Spinhirne: Global Aerosol Profiling by Orbital Lidar, GLAS Results and Validation

Chris Cattrall: Use of AERONET retrievals to construct a climatology of aerosol lidar parameters for use in present and future satellite lidar missions

1:10pm – 2:10pm

- **Single Scattering Albedo**

Yevgeny Derimian: Effect of dust composition and contamination by pollution on absorption of sunlight

Thierry Elias: Estimate of the aerosol single scattering albedo at several wavelengths without making assumptions on aerosol microphysics

Greg Schuster: Inferring Absorption from AERONET

2:10pm - 2:30pm

- **Retrieval Techniques and Radiative Forcings**

Frank Wagner: Database constrained inversion

2:30pm - 4:30pm Lunch

4:30pm -6:40pm

- **Modeling Aerosol Properties and Effects**

Toshihiko Takemura: Analysis of climate change by aerosol direct and indirect effects with aerosol transport-radiation model

Mian Chin: Aerosol distributions during ACE-Asia: Results from global model, satellite observations, and sunphotometer measurements

Oleg Dubovik: Retrieving sources of fine aerosols from MODIS/AERONET observation by inverting GOCART model

Alexander De Meijj: A comparison of simulated aerosol optical depth and observed AOD data for Milan Area, June 2001

Ali Omar: Development of global aerosol models using cluster analysis of AERONET measurements

Alma Hodzic: Comparison of pollution aerosol chemistry transport model simulations with lidar and sun photometer observations at Sirta site

Stefan Kinne: AERONET in the context of aerosol remote sensing from space and aerosol global modeling

6:40pm - 8:00pm

- **AERONET related**

Victor Estelles: Aerosol Optical depth intercomparison between several AERONET and non-AERONET Cimel sunphotometers

Maria Rita Perrone: Results on 3/03 - 3/04 of sunphotometer measurements performed at Lecce

Monica Campanelli: Intercomparison between aerosol characteristics retrieved simultaneously with a cimel and Prede sun sky radiometer in Rome

Nataly Chubarova: The sensitivity of aerosol properties retrievals from AERONET measurements to NO₂ concentration over industrial region of Moscow

**8:00pm - Adjourn, Bus to Mazagon, INTA and Doñana Camping.
Workshop Dinner at Hotel Albaida in Mazagon (BYOE)**

May 12

9:30am - 10:50am

- **AERONET related (continued)**

Norm O'Neil: AEROCAN research activities... several items

Kazuma Aoki: Aerosol Optical Characteristics measured by SKYNET sky radiometer networks

Victoria Cachorro: The PHOTONS-AERONET sites in Spain: Calibration problems and the KCICLO correction-calibration method

10:50am - 12:00pm Workshop Following- (two concurrent sessions)

Session A-Inversions: Dubovik, Vermeulen

- Theoretical Limitations
- Measurement Limitations
- Validation
- New Products (Spheroid, polar, synergism, PP)

Session B-Instruments: Newcomb, Blarel, Sorokine, Podvin, Damiri

- Technical Demonstration in three or more Languages

12:00pm – 12:30pm Coffee Break

12:30pm - 2:30pm: Poster Session

2:30pm – 4:30pm: Lunch

4:30pm - 7:30pm: Poster Session continued and feedback from participants

5:30pm - 7:30pm

AERONET Steering Committee only(Assessment/Recommendations)(INTA)

- Land Community
- Ocean Community
- Aerosol Community
- GCM Community

7:30pm – Visit to Historical Site Muelle de las Carabelas (Start of the first Columbus' Journey to the new continent)

9.30pm – Adjourn, Bus to Mazagon, INTA and Doñana Camping. (Departure Muelle de las Carabelas)

May 13

9:30am - 12:00pm (two concurrent sessions plus Instrument)

Calibration session

- Reference Inst. Langley Calibrations and Field Inst. Intercalibrations (procedures, tracking, data base, in situ vs mtn): Eck, Damiri, Schafer
- Sphere Calibrations (procedures, instrumentation, tracking, data base): Blarel, Sorokine, Damiri
- Cloud Screening/cloud analysis: Smirnov
- Demonstrat: Slutsker

Future Measurements/operations: Holben/Sorokine/CIMEL

- How will AERONET evolve?
- User community requirements

12:00pm – 12:30pm Coffee Break

12:30pm – 2:30pm (two concurrent sessions)

Session A-Developing a network of distributed calibration sites

- Issues and requirements: Sorokine, Mitchell, Damiri, Newcomb
- Unified Relational Database: Giles

Session B-Non-AERONET Collaborations Holben/Goloub/Dutton/Barrie

- Coincident Observations (MPLNET/Earlinet/BSRN/GAW/in situ/airborne)
- Shared Databases

2:30pm - 4:30pm Lunch

4:30pm– 6:00pm (two concurrent sessions)

Utilizing the AERONET Webpage and other AERONET access points

Session A-Operations/and shipping: Newcomb & Blarel, Podvin

Session B-Data download and analysis

- Making sense of the web options: Eck
- Bamgommas: Giles
- Msky: L. Gonzalez

6:00pm – 7:30pm

Data base Archive: Slutsker

AOD algorithms (processing and corrections update: Slutsker/Smirnov)

7:30pm - Adjourn, Bus to Mazagon, INTA and Doñana Camping.

May 14

9:30am – 12:00pm Break out sessions as needed

Wrap up and Adjourn

Note: The **'Instrument set up and field maintenance: Newcomb, Blarel, Sorokine/Podvin & Damiri** is offered on Wednesday and Thursday all day running concurrently with other sessions.