

ACTRIS Week 2021 – Draft programme of Science Session – Thursday, 28 October 2021, 13:00 – 16:30 CEST

Effects on the atmosphere state of restrictions related to COVID-19

13:00 – 13:15

Stuart K. Grange, James D. Lee, Will S. Drysdale, Alastair C. Lewis, Christoph Hueglin, Lukas Emmenegger, Stefan Reimann, and David C. Carslaw

EMPA, Swiss Federal Laboratories for Materials Science and Technology, Dübendorf, Switzerland

The impact and implications of COVID-19 mobility restrictions on European air quality

13:15 – 13:30

Konstantinos Eleftheriadis¹, Maria I. Gini¹, Evangelia Diapouli¹, Stergios Vratolis¹, Vasiliki Vasilatou¹, Prodromos Fefatzis¹, Manousos I. Manousakas^{1,2}

¹ERL, INRASTES, NCSR Demokritos, 15310 Ag. Paraskevi, Athens, Greece; ²LAC, Paul Scherrer Institute, Villigen PSI, Switzerland

The effect of COVID19 lockdown on urban air quality in Athens observed through aerosol in-situ metrics

13:30 – 13:45

Alessia Sannino¹, Mariagrazia D'Emilio², Pasquale Castellano³, Salvatore Amoruso^{1,4}, Antonella Boselli^{2,3}

¹Dipartimento di Fisica "Ettore Pancini" Università di Napoli Federico II, Complesso Universitario di Monte S. Angelo, I-80126 Napoli, Italy; ²Istituto di Metodologie per l'Analisi Ambientale, Consiglio Nazionale delle Ricerche, I-85050 Tito Scalo-Potenza, Italy; ³ALA Advanced Lidar Applications s.r.l. Corso Meridionale 39, I-80143 Napoli, Italy; ⁴CNR-SPIN, UOS Napoli, Complesso Universitario di Monte S. Angelo, I-80126 Napoli, Italy

Air quality change during the COVID – 19 Pandemic Lockdown: a case study in Naples (Italy)

13:45 – 14:00

A. Tsekeli¹, A. Gialitaki¹, M. Di Paolantonio², D. Dionisi² et al.

¹IAASARS, National Observatory of Athens, Athens, Greece, ²CNR-ISMAR, Rome, Italy and many other EARLINET/ACTRIS institutions

Characterization of the anthropogenic aerosol profiles in Europe, during the COVID-19 EARLINET campaign, in May 2020

Impact of forest fires and other climate related studies

14:00 – 14:15

Kevin Ohneiser¹, Albert Ansmann¹, Bernd Kaifler², Alexandra Chudnovsky³, Boris Barja⁴, Holger Baars¹, Patric Seifert¹, Cristofer Jimenez¹, Martin Radenz¹, Ronny Engelmann¹

¹*Leibniz Institute for Tropospheric Research, Leipzig, Germany;* ²*Deutsches Zentrum für Luft- und Raumfahrt, Institut für Physik der Atmosphäre, Oberpfaffenhofen, Germany;* ³*Tel Aviv University, Porter School of Earth Sciences and Environment, Tel Aviv, Israel;* ⁴*Atmospheric Research Laboratory, University of Magallanes, Punta Arenas, Chile*

Long-term lidar measurements of Australian wildfire smoke layer in the stratosphere over southern South America in 2020-2021: Potential influence on ozone reduction?

14:15 – 14:30

Qiaoyun Hu¹, Philippe Goloub¹, Igor Veselovskii², and Thierry Podvin¹

¹*Univ. Lille, CNRS, UMR 8518 - LOA - Laboratoire d'Optique Atmosphérique, F-59000 Lille, France;* ²*Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia*

The characterization of California smoke plumes over Lille: what can a multi-wavelength Mie-Raman-polarization-fluorescence lidar provide?

14:30 – 15:00 **Break**

15:00 – 15:15

B. T. Brem¹, N. Bukowiecki¹, M. Collaud Coen², M. Steinbacher³, S. Henne³, S. Reimann³, U. Baltensperger¹ and M. Gysel-Berl¹

¹*Laboratory of Atmospheric Chemistry, Paul Scherrer Institute, CH-5232, Villigen PSI, Switzerland;* ²*Federal Office of Meteorology and Climatology, MeteoSwiss, CH-1530 Payerne, Switzerland;* ³*Laboratory for Air Pollution/Environmental Technology, Empa, CH-8600 Dübendorf, Switzerland*

Occurrence and Radiative Properties of Long-range Transported Wildfire Aerosol Plumes Measured at the Jungfraujoch

15:15 – 15:30

Maria Kezoudi¹, Constantina Rousogenous¹, Franco Marengo^{1,2}, Mihalis Vrekoussis^{1,3}, Thorsten Warneke³, Justus Notholt³, Frank Wienhold⁴ and Jean Sciare¹

¹*Climate and Atmosphere Research Center (CARE-C), The Cyprus Institute, Cyprus;* ²*Met Office, United Kingdom;* ³*Institute of Environmental Physics, IUP, University of Bremen, Germany;*

⁴*Institute for Atmospheric and Climate Science (IAC), University of Zurich, Switzerland*

Detection of an elevated smoke layer over Cyprus originated from Eastern Mediterranean wildfires

Other results from ACTRIS activities

15:30 – 15:45

Simone Kotthaus, Martial Haeffelin, Melania VanHove
Institut Pierre Simon Laplace, Paris, France.

Variability of atmospheric boundary layer height across Europe from ground-based remote sensing

15:45 – 16:00

F. Navas-Guzmán^{1,2}, G. Martucci¹, M. Collaud Coen¹, A. Barreto³, J. A. Ruiz-Arias⁴, H. Lyamani⁴, C. Hüglin⁵, D. Pérez-Ramírez², G. Titos², L. Alados-Arboledas², B. T. Brem⁶, M. Gysel-Berl⁶, and A. Haefele¹

¹*Federal Office of Meteorology and Climatology MeteoSwiss, Payerne, 1530, Switzerland;*

²*Andalusian Institute for Earth System Research, University of Granada, Granada, 18006, Spain;*

³*Izaña Atmospheric Research Center, Meteorological State Agency of Spain (AEMET), Spain;*

⁴*Department of Applied Physics I, University of Málaga, Málaga, 29071, Spain; ⁵EMPA, Swiss Federal Laboratories for Materials Science and Technology, Dübendorf, 8600, Switzerland;*

⁶*Laboratory of Atmospheric Chemistry, Paul Scherrer Institute, Villigen, 5232, Switzerland*

Characterization of aerosol hygroscopicity using remote sensing techniques

16:00 – 16:15

A. Barreto¹, R. Román², M. Sicard³, V. Rizi⁴ et al.

¹*Izaña Atmospheric Research Center, Meteorological State Agency of Spain (AEMET), Spain;*

²*Group of Atmospheric Optics (GOA-UVa), Universidad de Valladolid, Valladolid, Spain;*

³*Universitat Politècnica de Catalunya, Barcelona, Spain; ⁴INFN-GSGC L'Aquila and CETEMPS-DSFC, Università degli Studi dell'Aquila, L'Aquila, Italy and other ACTRIS and outside ACTRIS institutions*

Characterization of volcanic aerosols from a synergetic perspective during Cumbre Vieja (La Palma) eruption

16:15 – 16:30

Eleni Marinou¹, Holger Baars², Nikos Siomos¹, Peristera Paschou¹ et al.

¹*NOA, Greece; ²Tropos, Germany, and many other ACTRIS and outside ACTRIS institutions*

ACTRIS contribution on the Joint Aeolus Tropical Atlantic Campaign 2021