

OCEAN OPTICS XXIV

Valamar Lacroma Dubrovnik Hotel | Dubrovnik, Croatia | October 7–12, 2018

<https://oceanopticsconference.org>

Wednesday, October 10

Poster Session 3

16:00–18:00

Poster 222

MARITIME AEROSOL NETWORK AS A COMPONENT OF AERONET –CURRENT STATUS AND FUTURE CHALLENGES

Maritime Aerosol Network (MAN) as a component of Aerosol Robotic Network (AERONET) started collecting data on aerosol optical properties over World Ocean in October of 2006. Over the years more than 500 cruises were completed and data archive consists of over 6000 days of measurements. MAN deploys handheld sunphotometers and utilizes the calibration procedure and data processing traceable to AERONET. A public domain web-based data archive dedicated to MAN activity can be found at https://aeronet.gsfc.nasa.gov/new_web/maritime_aerosol_network.html. Within MAN framework data acquisition was extended to the areas that previously had very little or no coverage at all and thus provided an important reference point in aerosol optical studies. MAN represents an important strategic sampling initiative and data acquisition from ships of opportunity complements island-based AERONET measurements. The ship-borne aerosol optical depth (AOD) data offer an excellent opportunity for comparison with global aerosol transport models, satellite retrievals and provide useful information on aerosol distribution over the oceans. Data archive can help understanding discrepancies between measurements and/or simulations for particular areas of the World Ocean. The program exemplifies mutually beneficial international, multi-agency effort in atmospheric aerosol optical studies.

Alexander Smirnov, Science Systems and Applications, Inc., Lanham, MD, USA, Alexander.Smirnov-1@nasa.gov,
<https://orcid.org/0000-0002-8208-1304>

Brent Holben, NASA Goddard Space Flight Center, Greenbelt, MD, USA, Brent.N.Holben@nasa.gov

Stefan Kinne, Max Planck Institute for Meteorology, Hamburg, Germany, stefan.kinne@mpimet.mpg.de

Tymon Zielinski, Institute of Oceanology, Sopot, Poland, tymon@iopan.gda.pl

Georgiy Stenchikov, King Abdulla University of Science and Technology, Thuwal, Kingdom of Saudi Arabia,
georgiy.stenchikov@kaust.edu.sa

Tim Smyth, Plymouth Marine Laboratory, Plymouth, UK, TJSM@pml.ac.uk

Vladimir Radionov, Arctic and Antarctic Research Institute, Saint Petersburg, Russia, vradion@aari.ru

Giuseppe Zibordi, European Commission – Joint Research Center, Ispra, Italy, Giuseppe.ZIBORDI@ec.europa.eu

Sergey Sakerin, Institute of Atmospheric Optics, Tomsk, Russia, sms@iao.ru

Norm Nelson, University of California at Santa Barbara, Santa Barbara, CA, USA, norm@eri.ucsb.edu

Emmanuel Boss, University of Maine, Orono, ME, USA, emmanuel.boss@maine.edu

Michael Ondrusek, NOAA Center for Satellite Applications and Research, College Park, MD, USA, michael.ondrusek@noaa.gov

Elizabeth Lobecker, NOAA Office of Ocean Exploration and Research, University of New Hampshire, Durham, NH, USA,
elizabeth.lobecker@noaa.gov

Violeta Slabakova, Institute of Oceanology, Varna, Bulgaria, v.slabakova@io-bas.bg

Mike Harvey, National Institute of Water and Atmospheric Research, Wellington, New Zealand, Mike.Harvey@niwa.co.nz

Robert Frouin, Scripps Institution of Oceanography, La Jolla, CA, USA, rfrouin@ucsd.edu

Stephen Broccardo, North-West University, Potchefstroom, South Africa, sbroccardo@gmail.com

Ilya Slutsker, Science Systems and Applications, Inc., Lanham, MD, USA, Ilya.Slutsker-1@nasa.gov

David Giles, Science Systems and Applications, Inc., Lanham, MD, USA, David.M.Giles@nasa.gov

Norman O'Neill, University of Sherbrooke, Sherbrooke, Quebec, Canada, Norman.T.ONeill@USherbrooke.ca

Thomas Eck, Universities Space Research Association, Columbia, MD, USA, Thomas.F.Eck@nasa.gov