

Maritime Aerosol Network (MAN)

AERONET MARITIME AEROSOL NETWORK



http://aeronet.gsfc.nasa.gov/new_web/maritime_aerosol_network.html



● completed cruises ● ongoing and planned

Measurements in the Southern Atlantic

Sunphotometer Microtops and GPS

Motivation:

Aerosol radiative effects in the climate studies
Satellite remote sensing (validation and atmospheric correction)
Global aerosol transport model validation
Very few systematic measurements over the oceans
Significant gaps in our knowledge on the global aerosol distribution

Approach:

Reestablished NASA's ship-based optical depth measurement network
Developed an archival system, similar to the AERONET browser
Developed a calibration and measurement protocol
Developed stand alone processing, utilizing AERONET's Version 2 algorithm and quality assurance algorithm
Developed centralized archiving and distribution - public domain web-based access

Collaborators:

USA – Woods Hole Oceanographic Institution; Bigelow Laboratory for Ocean Sciences; University of California at Santa Barbara
UK – Plymouth Marine Lab; University of East Anglia
Germany – Leibniz Institute of Marine Sciences-IFM-GEOMAR (Kiel); Alfred Wegener Institute for Polar and Marine Research – AWI (Bremerhaven)
Poland – Sopot Institute of Oceanology
Russia - Institute of Oceanology (Moscow); Institute of Atmospheric Optics (Tomsk); Arctic and Antarctic Research Institute (St. Petersburg)
France - Laboratoire des Sciences du Climat et de l'Environnement (Gif-sur-Yvette)
New Zealand – National Institute of Water and Atmospheric Research (Wellington)
South Africa – University of Cape Town; University of Johannesburg
Italy – Joint Research Center (Ispra); University of Bari
Norway – Institute of Marine Research (Bergen)

