

Maritime Aerosol Network as a component of AERONET - an international collaborative effort

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Aerosol optical depth is an atmospheric optical parameter critical for various applications ranging from Earth radiative balance computations to ocean color studies, from understanding of global aerosol distribution to aerosol remote sensing from space and global aerosol transport modelling. Maritime Aerosol Network (MAN) is a component of AERONET and deploys a hand-held sunphotometer (Microtops II) for optical depth measurements aboard ships of opportunity. Data collection over World Oceans, spanning now for almost 15 years, has been successful because of close collaboration among various government institutions and universities in the US, UK, Germany, Poland, Canada, Russia, Saudi Arabia, Italy, South Africa, Namibia, Australia, and New Zealand. Current data archive consists of almost 600 cruises completed and overall over 6500 days of measurements are available. MAN provides instruments, calibration and processing. The major advantage of our activity is the fact that hand-held sunphotometer calibration and processing are tied to the AERONET standard. The data are in a public web-based archive and available for the scientific community at large. The collected data make an important contribution, enhance our knowledge and help better understand aerosol optical properties over the oceans. In this paper we will show the progress of the network, data usage for various applications and present opportunities for collaboration.

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