aeronetBanizoumbou sun photometer

General information

Dataset name:	aeronetBanizoumbou sun photometer
Created on:	2006-12-04

Contact(s)

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Period

Date begin (yyyy-mm-jj):	1995-10-16
Date end (yyyy-mm-jj):	2005-05-15

Project(s)

OBSERVATORIES > PHOTON AERONET

Data description

Abstract

Sun photometer measurements of the direct (collimated) solar radiation provide information to calculate the columnar aerosol optical depth (AOD). AOD can be used to compute columnar water vapor (Precipitable Water) and estimate the aerosol size using the Angstrom parameter relationship. Two data versions (Versions 1 and 2) and three quality levels (Levels 1.0, 1.5, 2.0) exist for each product. While Levels 1.0 and 1.5 are provided in near real-time, the 12-month or longer delay (due to final calibration and manual inspection) ensures that the highest quality data can be found in Version 2, Level 2.0 data products. Version 2 AOD processing now includes fine and coarse mode AOD as well as fine mode fraction.

Observing strategy

Sun photometer measurements of the direct (collimated) solar radiation provide information to calculate the columnar aerosol optical depth (AOD). AOD can be used to compute columnar water vapor (Precipitable Water) and estimate the aerosol size using the Angstrom parameter relationship. Two data versions (Versions 1 and 2) and three quality levels (Levels 1.0, 1.5, 2.0) exist for each product. While Levels 1.0 and 1.5 are provided in near real-time, the 12-month or longer delay (due to final calibration and manual inspection) ensures that the highest quality data can be found in Version 2, Level 2.0 data products. Version 2 AOD processing now includes fine and coarse mode AOD as well as fine mode fraction.

Instrument information

Sensor

Instrument type:	Photometers
Manufacturer:	Cimel Electronique 172, rue de Charonne 75011 Paris, FRANCE
Model:	Sun Photometer

Geographic information

BANIZOUMBOU

Location name:	BANIZOUMBOU
Plateform type:	GROUND STATIONS
West bounding coordinate (°):	2.665
East bounding coordinate (°):	2.665
North bounding coordinate (°):	13.541
South bounding coordinate (°):	13.541
Altitude min:	250
Altitude max:	250

Measured parameters

Solar Zenith Angle

Parameter name:	Solar Zenith Angle
Parameter keyword:	Atmosphere > Atmospheric Radiation
Unit:	degrees - degrees
Date begin (yyyy-mm-jj):	1995-10-16
Date end (yyyy-mm-jj):	2005-05-15

Water Vapor at 940 nm

Parameter name:	Water Vapor at 940 nm
Parameter keyword:	Atmosphere > Atmospheric Water Vapor > Water Vapor Indicators > Water Vapor
Unit:	grams per square centimeter
Date begin (yyyy-mm-jj):	1995-10-16
Date end (yyyy-mm-jj):	2005-05-15

Aerosol Optical Thickness at 1020 nm

Parameter name:	Aerosol Optical Thickness at 1020 nm
Parameter keyword:	Atmosphere > Aerosols > Aerosol Optical Depth/Thickness
Unit:	no unit
Date begin (yyyy-mm-jj):	1995-10-16
Date end (yyyy-mm-jj):	2005-05-15

Aerosol Optical Thickness at 870 nm

Parameter name:	Aerosol Optical Thickness at 870 nm
Parameter keyword:	Atmosphere > Aerosols > Aerosol Optical Depth/Thickness
Unit:	no unit
Date begin (yyyy-mm-jj):	1995-10-16
Date end (yyyy-mm-jj):	2005-05-15

Aerosol Optical Thickness at 675 nm

Parameter name:	Aerosol Optical Thickness at 675 nm
Parameter keyword:	Atmosphere > Aerosols > Aerosol Optical Depth/Thickness
Unit:	no unit
Date begin (yyyy-mm-jj):	1995-10-16
Date end (yyyy-mm-jj):	2005-05-15

Aerosol Optical Thickness at 440 nm

Parameter name:	Aerosol Optical Thickness at 440 nm
Parameter keyword:	Atmosphere > Aerosols > Aerosol Optical Depth/Thickness
Unit:	no unit
Date begin (yyyy-mm-jj):	1995-10-16
Date end (yyyy-mm-jj):	2005-05-15

Data use information

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establishing and maintaining (site name(s)) sites. Publishing data from "many" sites: A general acknowledgement is typically sufficient and may read: We thank the (PI investigators) and their staff for establishing and maintaining the (#)sites used in this investigation. However if the AERONET data are a principal component of the paper then co-authorship to PIs should be offered.

Original data format(s): ascii text