

# aeronetNesZiona sun photometer

## General information

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Dataset name: aeronetNesZiona sun photometer  
Created on: 2006-12-05

### Contact(s)

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### Period

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Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

### Project(s)

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OBSERVATORIES > PHOTON AERONET

## Data description

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### Abstract

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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

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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

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### Sensor

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

## Geographic information

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### NES ZIONA

Location name:	NES ZIONA
Platform type:	GROUND STATIONS
West bounding coordinate (°):	34.789
East bounding coordinate (°):	34.789
North bounding coordinate (°):	31.922
South bounding coordinate (°):	31.922
Altitude min:	40
Altitude max:	40

## Measured parameters

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### Aerosol Optical Thickness at 1640 nm

Parameter name:	Aerosol Optical Thickness at 1640 nm
Parameter keyword:	Atmosphere > Aerosols > Aerosol Optical Depth/Thickness
Unit:	no unit
Date begin (yyyy-mm-jj):	2000-02-24
Date end (yyyy-mm-jj):	2006-01-17

### 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):	2000-02-24
Date end (yyyy-mm-jj):	2006-01-17

### Aerosol Optical Thickness at 870 nm

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Parameter name: Aerosol Optical Thickness at 870 nm  
Parameter keyword: Atmosphere > Aerosols > Aerosol Optical Depth/Thickness  
Unit: no unit  
Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

### Aerosol Optical Thickness at 675 nm

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Parameter name: Aerosol Optical Thickness at 675 nm  
Parameter keyword: Atmosphere > Aerosols > Aerosol Optical Depth/Thickness  
Unit: no unit  
Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

### Aerosol Optical Thickness at 500 nm

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Parameter name: Aerosol Optical Thickness at 500 nm  
Parameter keyword: Atmosphere > Aerosols > Aerosol Optical Depth/Thickness  
Unit: no unit  
Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

### Aerosol Optical Thickness at 440 nm

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Parameter name: Aerosol Optical Thickness at 440 nm  
Parameter keyword: Atmosphere > Aerosols > Aerosol Optical Depth/Thickness  
Unit: no unit  
Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

### Aerosol Optical Thickness at 380 nm

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Parameter name: Aerosol Optical Thickness at 380 nm  
Parameter keyword: Atmosphere > Aerosols > Aerosol Optical Depth/Thickness  
Unit: no unit  
Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

### Aerosol Optical Thickness at 340 nm

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Parameter name: Aerosol Optical Thickness at 340 nm  
Parameter keyword: Atmosphere > Aerosols > Aerosol Optical Depth/Thickness  
Unit: no unit  
Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

## Water Vapor at 940 nm

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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): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

## Solar Zenith Angle

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Parameter name: Solar Zenith Angle  
Parameter keyword: Atmosphere > Atmospheric Radiation  
Unit: degrees - degrees  
Date begin (yyyy-mm-jj): 2000-02-24  
Date end (yyyy-mm-jj): 2006-01-17

## Data use information

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Database: AMMA database  
Original data format(s): ascii text