

Title	Description of Version 1.0 of the Aerosol Optical thickness (AOT) data collected using a Cimel CE318-2™ Sun photometer, during the NCAVEO 2006 Experiment.
Document created by	Emma Rockall
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Revision history	First release.
Purpose	To describe the AOT data collection and how to access the data
Data files in the set	cimel_nfc06_20060616.gif cimel_nfc06_20060617.gif
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Terms of use (see NEODC website for the full version)	The data may be used for all non-commercial research/project work undertaken by the NCAVEO network, in particular to learn about cal- val issues. If you wish to use the data set please contact the PI listed above. If you intend to publish a paper or give a presentation based on, or making significant use of these data, please consider including the PI(s) as co-author(s) at an early stage in the process. In all cases where the data are used in a presentation or publication, an acknowledgement must be given: for example, " <i>Data from the NCAVEO 2006 Field Campaign are provided courtesy of NCAVEO via the NERC Earth Observation Data Centre (NEODC).</i> "

The Aerosol Optical Thickness (AOT) data were collected using a Cimel CE318-2™ sun photometer, which is part of AERONET (<http://aeronet.gsfc.nasa.gov>). Measurements were taken every 15 minutes at Chilbolton Facility for Atmospheric and Radio Research.

Accessing the AERONET data

Two example figures are provided for data collected on 16th and 17th of June. The main AOT dataset can be freely downloaded from the AERONET website (<http://aeronet.gsfc.nasa.gov/>) using the following instructions:

- 1) On the main webpage select the 'Download Tool' under 'AERONET DATA ACCESS', 'AEROSOL OPTICAL DEPTH', from the middle left-hand menu.

- 2) Find the Chilbolton site on the world map or in the listings below as 'Chilbolton (51N, 1W)'.
- 3) Define the start and end time of the data download period e.g. 'Start 16 June 2006' and 'End 17 June 2006'.
- 4) Select the data type(s) to download using the corresponding checkboxes and ensure data format is set to all points
- 5) Download the data and accept the terms and conditions of use.

A range of AERONET data types are available for this period:

- Aerosol Optical Depth with precipitable water and Angström Parameter
- Instrument information
- Total Optical Depth with components
- Aerosol Optical Depth Models derived from AOD (Provisional)

The AERONET data are available at different levels of processing. In the above example the downloaded data will be provided as a zip file named '060616_060617_chilbolton' from which files of the different data selected for download can be extracted.

Data Level	Description
Level 1: Raw Data	Cloud screening and calibration may not be applied
Level 1.5: Not Quality Assured	Real time, automatically cloud screened data that may not have final calibration applied.
Level 2: Quality Assured	These data have been pre- and post-field calibrated, automatically cloud cleared and manually inspected.