



Interactive comment on “CIAO: the CNR-IMAA advanced observatory for atmospheric research” by F. Madonna et al.

Anonymous Referee #2

Received and published: 1 May 2011

This paper presents a relevant infrastructure (the CIAO observatory) for ground-based observation of the atmosphere, devoted in particular to the measurement of aerosol, water vapor and clouds on a long-term basis permitting to build up a climatology data base of their properties.

The paper is structured in two parts. The first one (sections 2 and 3) presents the instruments and installations constituting the infrastructure, as well as the employed measurement strategies and methodologies aimed to the exploitation of the synergies between the different instruments. The second one (section 4), while still description-oriented, focuses on the example of water vapor measurements through radio soundings, Raman lidar and microwave radiometers, going down to the description of the

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



Kalman-filter algorithm used to merge lidar and radiometer data for enhanced water-vapor profiling.

Although possibly not containing ground-breaking results, the quality of the paper is good, and it certainly includes information that can be used by other researchers to improve their atmospheric measurement techniques.

Before publication as final paper some revisions are however required, in particular concerning the Kalman filter description in section 4.3.

A detailed review report is included as a pdf supplement.

Please also note the supplement to this comment:

<http://www.atmos-meas-tech-discuss.net/3/C3010/2011/amtd-3-C3010-2011-supplement.pdf>

Interactive comment on Atmos. Meas. Tech. Discuss., 3, 5253, 2010.

AMTD

3, C3010–C3011, 2011

Interactive
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

