

Interactive comment on “Global and regional evaluation of over-land spectral aerosol optical depth retrievals from SeaWiFS” by A. M. Sayer et al.

Anonymous Referee #2

Received and published: 9 May 2012

The manuscript presents a comprehensive evaluation and validation of AOD derived from SeaWifs land retrievals. The paper is well written; the approach is clear and well described. The possible reasons for retrieval biases (e.g., surface, viewing geometry) are investigated. The authors also investigate effects of QA, spatial averaging, dependence on AOD, and temporal dependence to provide users important information on the range of applicability of SeaWifs data on both regional and global scales. Intercomparison with other datasets is also shown. Error estimates are well defined but probably should be moved into the description of the methodology. I highly recommend the paper for publication in AMT.

C905

General comments on a scientific approach:

1. In my opinion paper needs to add some detail regarding the algorithm description. It was not particularly clear how “Deep Blue” was adapted to SeaWifs considering differences in MODIS and SeaWifs sampling and resolution. 2. How was the “Deep Blue” algorithm used to retrieve AOD at 550 and 670 nm? 3. What surface database was used?

Interactive comment on Atmos. Meas. Tech. Discuss., 5, 2169, 2012.

C906