

Interactive comment on “Validation of a modified AVHRR aerosol optical depth retrieval algorithm over Central Europe” by M. Riffler et al.

Anonymous Referee #2

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The revised version is improved: statements concerning the new version of the inversion scheme, compared to papers previously published by some of the co-authors, are provided.

I recommend the publication after the concern below is addressed.

Assuming the MODIS AOT's are the reference, results (Fig. 5) over the Po river valley are somehow disappointing and not very appealing for the next processing of the AVHRR archive. The authors point out the results of the regression analysis (table 4) for explaining the observed underestimates (by almost a factor 2). In figs. 2 and 3, the comparisons with the ISPRA AERONET site (that is close to the Po River Valley) don't display such tendencies. A deeper analysis is required : impacts of cloud screening, sampling biases (temporal and spatial) have to be discussed. The reader needs to be

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convinced that the present method will provide reliable and usable aerosol climatology over the last 20 Years.

Interactive comment on Atmos. Meas. Tech. Discuss., 3, 785, 2010.