

## ***Interactive comment on “Long range transport and mixing of aerosol sources during the 2013 North American biomass burning episode: analysis of multiple lidar observations in the Western Mediterranean basin” by G. Ancellet et al.***

**Anonymous Referee #1**

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The paper is well written. It needs only minor technical corrections.

p2. L25-35: Refer to more papers on BB in Europe, adding more geographical areas and more recent papers p2. L37, p. 5. L132, etc.: In all manuscript (text, fig, tables) refer ONLY to the well-established lidar ratio  $[(LR)=\alpha(aer)/\beta(aer)]$ , and not to BER, as defined in French manuscripts. p3. In section 2.2, the authors should mention the uncertainties of the parameters retrieved by each instrument (lidar, MODIS etc) and cite the corresponding papers. In addition, how the depolarization ratio is calibrated and retrieved. p6. L165: change from "June 17 to June 25" to the correct "17 to 25

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June 2013"

Also, in all manuscript put the dates in European format "dd mm yyyy" (e.g see p.16, Fig. 9, legend)

p.7, legend Fig. 2.: Again, do not duplicate the month when you refer to the same month period. The correct wording should be "17 to 25 June 2013" p.9, Fig.4. legend: again, in all legends add the year as well. p.10-Fig.5, p.12-Fig. 6, p.13-Fig.7., p.14-Fig.8. p.21-Fig.11, p.22-Fig.12, : legend: again, in all legends add the year as well. p.17., L293, replace "J.Pelon and co-workers" by "Pelon et al. (to be submitted)". p.24., L383, replace "12% while" by "12%, while".

Also, in the References add full information about the forthcoming paper, as follows: "Pelon J., ....., title, Journal (to be submitted)".

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