

## ***Interactive comment on “On realistic size equivalence and shape of spheroidal Saharan mineral dust particles applied in solar and thermal radiative transfer calculations” by S. Otto et al.***

**Anonymous Referee #2**

Received and published: 11 January 2011

This is certainly a valuable piece of science, well deserving of publication in a leading scientific journal. I strongly urge publication. The points raised by Anonymous Referee #1 are valid and useful. However, the third point, concerning the remote sensing implications of these results, would almost certainly require another paper to do justice.

I noted a number of mostly minor typos: Page 29192, line 2: remove “on”. Page 29195, lines 2/3: ‘frequent’, not ‘frequently’. Page 29194, line 18: ‘Efforts have been made..’, not “done”. Page 29195, line 21: ‘It turned out that the most(?) frequent AR..’ ? Page 29195, line 24: “particles”. Page 29200, line 7: horizontal line, not vertical. Page 29200, line 19: “are free to choose next to  $\lambda$ ”. I am really not sure what this means,

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perhaps some re-phrasing is needed. Page 29201, line 12: ‘optical’. Page 29205, line 1: ‘zenith’. Page 29206, line 10: I am prepared to accept the abbreviation “w.r.t.”, but not at the start of a sentence. Page 29206, line 12: remove the comma. Page 29209, line 4: ‘more realistic’ not ‘rather realistic’? Page 29210, line 2” ‘case’. Page 29211, line 2: ‘Both demonstrate’, not ‘demonstrates’. Page 29211, line 3: add a comma after ‘dust’. Page 29214, lines 24/25: I do not understand ‘the reduction of .. is forced’.

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Interactive comment on Atmos. Chem. Phys. Discuss., 10, 29191, 2010.

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