Interactive comment on “Optical, physical and chemical characteristics of Australian Desert dust aerosols: results from a field experiment” by M. Radhi et al.

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Reply to Anonymous Referee #1. In responding to the referees’ reports we have added some material (especially in the Introduction and Discussion), and modified or clarified material in other sections (such as soluble calcium and potassium).

Special Comment: Representativeness of our results. We accept the thrust of these suggestions, and have changed [Page 25096] “signature of Australian soil” to “signature of soil in this region of Australia”, with related changes in the following paragraph, and again on [Page 25101]. We have also added material in the Discussion section to more accurately place our results in their proper context, including relation to ‘generic’ Australian aerosol types identified by Qin and Mitchell, and a comparison with Fe/Al ratios in other locations.

Minor comments: 1. Page 25086: “Co reasonably correlated with Si”: change made (although we believe that most readers would automatically assume this). 2. Page 25088: “NASA’s”: corrected. 3. Page 25089: “true” deleted, and changed to “the effective diameter of an equivalent sphere”. 4. Page 25094: typo corrected. 5. Page 25095: reference added; also the words “(although these conclusions are in dispute)”. 6. Page 25095: The sentence now reads “Given these caveats, and the errors associated with both approaches, we consider the agreement to be as good as could be expected”. 7. Page 25098: The sentence “No trend line is presented in the plots against Si.” has been deleted.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 25085, 2009.