

Interactive comment on “Chemistry and mineralogy of clay minerals in Asian and Saharan dusts and the implications for iron availability” by G. Y. Jeong and E. P. Achterberg

Anonymous Referee #1

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This manuscript reports the results of XRD, TEM and EDXS analyses of samples of Asian and Saharan dust aerosols. Mineralogy and elemental composition of individual particles and their composite grains are reported and the implications for dissolution of iron from Asian and Saharan dust after deposition to the ocean are discussed. The laboratory work appears to be well done and the manuscript is well written. I consider that this will be a useful contribution to the study of the biogeochemical impact of dust on the oceans and I suggest that it is suitable for publication in ACP. I have only a few minor corrections to recommend.

Page 15740, line 18. I think the year of the last dust sample in this should be 2014,
C5055

rather than 2013.

P 15741, lines 8 & 26. The length units here should not be squared (i.e. “3mm x 4mm” and “6 μ m x 6 μ m”).

P 15753, lines 21-22. Please check that all the cited manuscripts are present in the reference list. Two at least (Alastuey et al., 2005 and Klaver et al., 2011) appear not to be.

P 15753, lines 28-. This appears to be a mis-citation. I can find no such information in Baker & Jickells 2006.

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 15735, 2014.