

Interactive comment on “Atmospheric processing of iron carried by mineral dust” by S. Nickovic et al.

Anonymous Referee #3

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Review of the paper "Atmospheric processing of iron carried by mineral dust" by S. Nickovic et al.

General comments

The paper addresses a relevant and important issue. In the study, a well established and proven in practice atmospheric model for transport of mineral aerosols is employed, and as a major novelty, a new high-resolution soil mineralogy data were used to calculate the emitted iron fraction in the dust. The enhanced model resolution also contributed to the veracity and credibility of the results. The paper is well organized, and the presentation is clear and concise. In my opinion, the significance of the problem addressed, the methodology and data used, the scientific results and clarity of presentation leave little that one can object to, and without doubt warrant the publication of

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the paper in Atmospheric Chemistry and Physics.

Specific comments

1. Section 2.1 The equations in this section are not reproduced correctly in the PDF format. It appears that parts of the brackets are missing.
2. Section 2.2, Eq. (4) Same as in 1. above.
3. Section 2.3, p. 2701, line 9 Same as in 1. above.
4. Section 2.4, Eqs. (8)-(10) Same as in 1. above
5. Section 3.2, p. 2707, line 1 “for the driving atmospheric model” rather than “for driving the atmospheric model?”

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 2695, 2013.