

Interactive comment on "Forecasting the North African dust outbreak towards Europe in April 2011: a model intercomparison" by N. Huneeus et al.

Anonymous Referee #1

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The manuscript presents a detailed analysis of the performances of 5 dust forecasting models. The performances are evaluated by comparing the model results with ground-based and satellite observations for a dust plume moving from Africa to northern Europe in April 2011. Their differences between models are interpreted in term of emissions and transport. The methodology is correct and clearly described. The interpretation of the comparisons is well done, and right to the point. The manuscript is well written, with proper grammar and no typos. The referencing to previous studies is very good. Most figures are clear but could be improved (cf. comments below). Overall, this is a very well done research with interesting results for the aerosol modeling community. I would recommend publishing the manuscript in its present form, although

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some figures could be improved for clarity.

Improving the figures: Figure 1: You should include "left", "middle" and "right" panel in the figure legend. I could not see any orange but yellow dots Figure 2: I would suggest moving the timeseries of Angstrom in smaller panels under the AOD panels. This would greatly clarify the figure, and the difficulty to distinguish between dotted and solid blue lines. You did not compare Angstrom exponent values anyway. Figure 7: Increase size font of axes Figure 8: What is the grey shading? Figure 11: What are the horizontal lines in the upper left corner of several panels?

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 26661, 2015.