

Interactive comment on "Wet and dry deposition of mineral dust particles in Japan: factors related to temporal variation and spatial distribution" *by* K. Osada et al.

Y. Shao (Referee)

yshao@uni-koeln.de

Received and published: 21 October 2013

As already reported in my first review, I believe the paper is an valuable contribution to the aerosol (aeolian dust) research field, because new and comprehensive observational results of dust deposition in Japan, downstream of a large dust source, are reported. The dataset significantly enriches the dust deposition observations, consisting of both dry and wet deposition measurements and covering a period of 3 years. I have suggested for the authors to make the manuscript somewhat shorter by taking out some of the unnecessary and well-known information. The authors appear to have made an effort to improve the manuscript. The references have been checked.

C8262

Again, it is interesting to observe that mismatches between dust frequency and deposition exist, as shown for example in Figure 5. I feel it is important to understand why such these mismatches occur and what they mean, so that reader develop greater confidence on the dataset. The authors do not seem to have responded to my earlier query.

It is in general a nice paper, but the text can be made somewhat better. For example, P3, L23: "have been observed mainly during spring" may be better simply "occur in spring". P3, L24: "Kosa ... 2012) may be better simply: "Kosa events have been studied not only in relation to atmospheric sciences but also to public health (..., 2012)". P3, L27 "were begun" may be better simply "began" etc. The text should be once more polished.

I recommend the paper to be published after minor revision.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 21801, 2013.