

Interactive comment on “Large Asian dust layers continuously reached North America in April 2010” by I. Uno et al.

I. Uno et al.

uno@riam.kyushu-u.ac.jp

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Reply to Reviewer 3 Thank you very much for your kind reviewing of our manuscript. We have revised our manuscript according to your comments and suggestion.

Anonymous Referee #3 Based on the analysis of CALIOP data and global aerosol model, the manuscript revealed that frequent dust emissions occurred in northwestern China because of stronger-than-average near-surface winds, and that strong stable westerly winds carried the Asian dust from northwestern China to the central Pacific Ocean. They found that northern-path dust was trapped and stagnant for a longer time than southern path dust and finally subsided under a high pressure system. They also investigated the complex conditions that resulted in a multi-layered structure of dust over North America. The manuscript is well organized and written. I recommend to

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publish it some technical revisions.

#3-1 1) There should have some explanations in the caption for the numbers of 1,..8 in the Fig 1. So do the Fig. 3.

We added a short description of the numbers shown in Fig. 1 as dust episode numbers. We also added the meaning of the numbers in Fig 3 to the figure caption.

#3-2 2) The quality of Fig. 2 is not so good, it is better to enlarge it. So do Fig. 5 and 6.

The original figures (EPS file) have better quality. When published, the figures will be based on the higher quality EPS files.

#3-3 3) English spelling should also be carefully checked.

Thank you. We carefully checked the English spelling.

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 12251, 2011.