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

Anonymous Referee #3

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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 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 publish it some technical revisions.

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

C4115

- 2) The quality of Fig. 2 is not so good, it is better to enlarge it. So do Fig. 5 and 6.
- 3) English spelling should also be carefully checked.

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