Interactive comment on “Enhancement of aerosols in UTLS over the Tibetan Plateau induced by deep convection during the Asian summer monsoon” by Q. S. He et al.

Q. S. He et al.
ccli@pku.edu.cn

Received and published: 11 May 2014

Dear Referee,

Our manuscript acp-2013-860 entitled "Enhancement of aerosols in UTLS over the Tibetan Plateau induced by deep convection during the Asian summer monsoon" has been revised according to your comments. We appreciated your suggestions and endeavor. Two new figures and more statements about the comparison of MPL with CALIOP and the reason of the continuous lidar observation split into two stages were added to the manuscript to support the conclusion. In particularly, the aerosols in UTLS
influenced by Nabro volcano eruption were considered in this study and therefore the title of the manuscript is also changed to "Lidar-observed enhancement of aerosols in UTLS over the Tibetan Plateau during the Asian summer monsoon". Almost all your suggestions have been incorporated into the revised paper with the major revises highlighted. In the following, we will give an item by item response to your comments.

Best wishes. Qianshan He

Interactive comment on “Enhancement of aerosols in UTLS over the Tibetan Plateau induced by deep convection during the Asian summer monsoon” by P. Seifert R: We agree completely with reviewer’s concerns and more new references and briefly introduction about the Nabro aerosol observations have been cited in Section 1. More importantly, we employ lidar ratio of 50 sr to calculate the extinction coefficient of aerosol layer and discuss further the fact that the aerosol layers wore off gradually with the reducing intensity of the Asian monsoon over the Tibetan Plateau at the end of August.

Please also note the supplement to this comment: http://www.atmos-chem-phys-discuss.net/14/C2304/2014/acpd-14-C2304-2014-supplement.pdf

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 3169, 2014.