

***Interactive comment on “A case study of dust aerosol radiative properties over Lanzhou, China” by L. Zhang et al.***

**Anonymous Referee #2**

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The manuscript investigated the vertical distribution of dust aerosols and their radiative properties using in-site data in the northwest semi-arid area in China. Some valuable and interesting observation results were obtained, and it is helpful to improve the dust aerosols' radiative forcing effects in the climate model. The writing of this manuscript needs to improve in some sections. I suggest accepting this manuscript after a minor revision. The comments are in the following, 1) Please explain how to get rid of the probable existence of other non-dust aerosols from the observation instrument. 2) Give the possible physical mechanisms about the relationship between aerosol extinction coefficient and relative humidity and temperature. 3) What is the physical meaning of the correlation among PM10 concentration, aerosol extinction and scattering coefficient.

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