Supplementary Figures for "Can MERRA-2 reanalysis data reproduce the three-dimensional evolution characteristics of a typical dust process in east Asia? A case study of the dust event in May 2017"

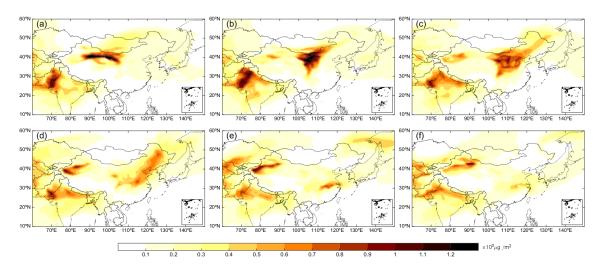


Figure S1. Spatial distribution of the surface mass concentration of dust on 2–7 May 2017. (sub-graph (a) to (f) respectively describe the surface mass concentration of dust on 2–7 May 2017)

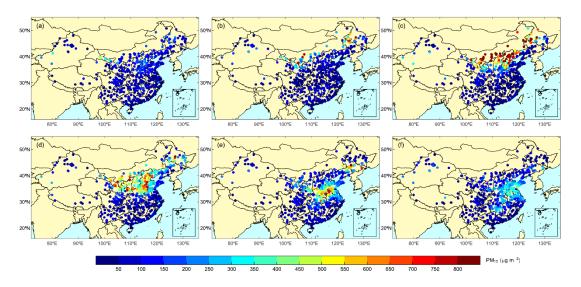


Figure S2. Daily average spatial distribution characteristics of PM₁₀ on 2–7 May 2017 (Beijing time). (sub-graph (a) to (f) respectively describe daily average spatial distribution characteristics of PM₁₀ on 2–7 May 2017)

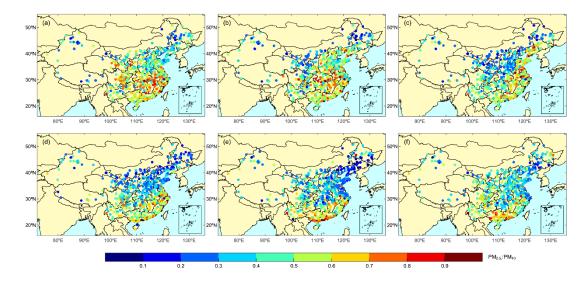


Figure S3. Daily average spatial distribution characteristics of $PM_{2.5}/PM_{10}$ on 2–7 May 2017 (Beijing time). (sub-graph (a) to (f) respectively describe daily average spatial distribution characteristics of $PM_{2.5}/PM_{10}$ on 2–7 May 2017)

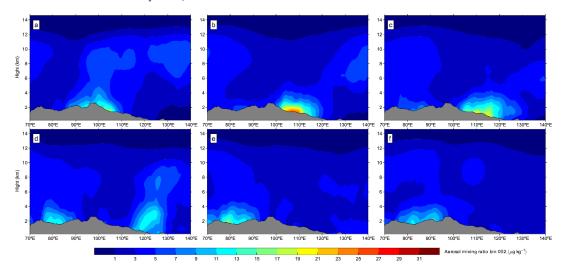


Figure S4. Vertical profile of dust aerosol mixing ratio of bin-001 accumulated in the atmosphere on a single day on 2–7 May 2017. (Beijing time). (sub-graph (a) to (f) respectively describe dust aerosol mixing ratio of bin-001 on 2–7 May 2017)

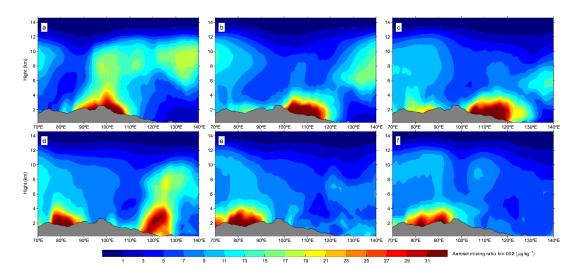


Figure S5. Vertical profile characteristics of dust aerosol mixing ratio of bin-002 accumulated in the atmosphere on a single day on 2–7 May 2017. (sub-graph (a) to (f) respectively describe dust aerosol mixing ratio of bin-002 on 2–7 May 2017)

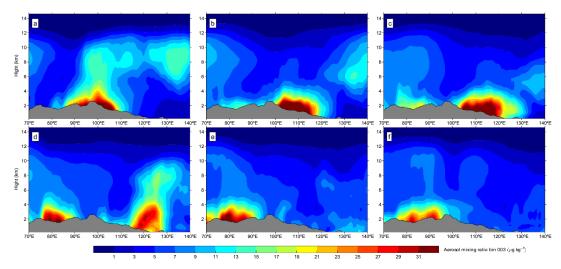


Figure S6. Vertical profile characteristics of dust aerosol mixing ratio of bin-003 accumulated in the atmosphere on a single day on 2–7 May 2017. (sub-graph (a) to (f) respectively describe dust aerosol mixing ratio of bin-003 on 2–7 May 2017)

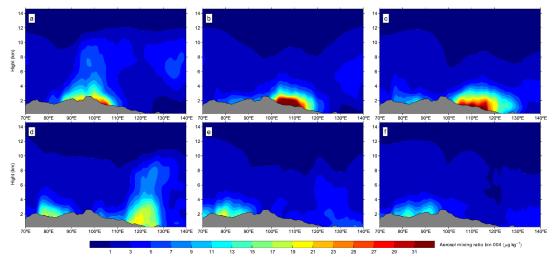


Figure S7. Vertical profile characteristics of dust aerosol mixing ratio of bin-004 accumulated in the atmosphere on a single day on 2–7 May 2017. (sub-graph (a) to (f) respectively describe dust aerosol mixing ratio of bin-004 on 2–7 May 2017)

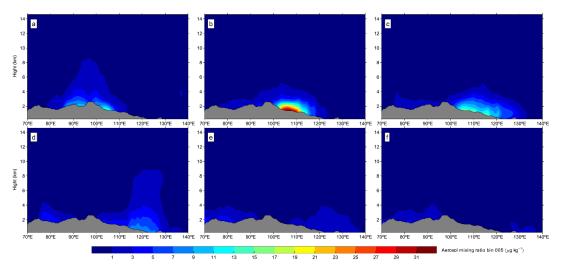


Figure S8. Vertical profile characteristics of dust aerosol mixing ratio of bin-005 accumulated in the atmosphere on a single day on 2–7 May 2017. (sub-graph (a) to (f) respectively describe dust aerosol mixing ratio of bin-005 on 2–7 May 2017)