

Interactive comment on “Genesis of Diamond Dust and Thick Cloud Episodes observed above Dome C, Antarctica” by Philippe Ricaud et al.

Anonymous Referee #1

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This manuscript intends to study of cold weather conditions (over Antarctica). It focuses on clouds and diamond dust, and various observational platforms and model simulations over more than 1 month of observations. There are several issues with this manuscript and need to be improved significantly before goes to publication.

Major/minor issues: 1. Objectives are not clearly set up 2. lots of information but nothing to do with objectives 3. diamond dust definition is not right 4. See Gultepe et al AMS Bulletin/Atmos Res for ice fog, also diamond dust definitions. DD is not suspending in the air but ice fog it does. DD has large particles and usually plates which shines as diamond. 5. Better to have results on 1) clouds and 2) DD, then fill up with your knowledge/observations. 6. What is the method here? we know that all these observations are important. How do you come up with conclusions? 7. I don't see clear conclusions???? 8. what are the issues with models? for these conditions?

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9. manuscript should be reduced, using with tables and focusing with objectives 10. scientifically is a poor paper, no new ideas or relate objectives to new instrumental platforms or models.

Because of above I see that paper needs to be improved significantly before making a decisions if it is appropriate for this ACP.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2016-815, 2016.