

Interactive comment on “Impacts of Amazonia biomass burning aerosols assessed from short-range weather forecasts” by S. R. Kolusu et al.

Anonymous Referee #1

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General comments

The article authored by SR Kolusu et.al., in ACP journal with entitled “ Impacts of Amazonia biomass burning aerosols assessed from short-range weather forecasts” is an piece of observational and as well as model approach to address the importance of the biomass burning aerosols on the short range forecast through explained by use of the meteorological parameters from both observations and model simulations. It is given insights to the scientific community to address the key questions on the implementation on the schemes of aerosols in the models for the betterment of the short-range forecast. This is one of the important study to investigate the radiative impacts of biomass

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burning aerosols on the meteorology through short-range forecasts. This explains in a effective way of the impacts on different meteorological aspects with support of the observations data sets during the simulation period.

The article should be acceptable for publication after met the following comments which is given below

Specific comments

1. Please provide details of the global model and resolution of the data which is used for the forcing? 2. Did you assimilate any data using 3DVar on the global forcing? If it is the case, which data should be assimilated? 3. Did you considered the spin up time for the model, when you considered the 48 hr forecast? 4. CLIM performance is not well captures the phenomena's as compared to PROG simulations at all the observational sites, what is the initial and boundary conditions is used for the CLIM simulations?? 5. Page 18894, line -27: Please mention the level of aerosol layer? 6. Page 18896, line-11: “ The inclusion of aerosols improves the surface temperatures biases at T + 12 and T + 24 h”. It would be great if you could explain about the comment.

Technical comments

In page No. 18893, line No.5:Please check whether word ‘a’ before ‘around’ is meaningful??

In page No.18894, line no. 5: Please remove surface word which is written twice

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 18883, 2015.

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