Editor Initial Decision: Reconsider after minor revisions (**Editor review**) (07 Apr 2015) by Dr. Yves Balkanski Comments to the Author:

The second referee deems that there are not enough new findings in this manuscript to warrant publication. Your answers point out that your main finding is that CMIP5 models that include only the direct-aerosol effect are unable to reproduce the observed trend of the Asian monsoon in recent decades.

Although, your findings are summarized in your abstract, you should have more explicitly stated them in the introduction. Please show how your study stands apart from previsous published ones and brings new insights into this Asian monsoon trend. In addition, you should strenghten this point has in your conclusions.

I would like you to work out these parts of the manuscript and point me to the changes you make in highlighting the original findings of this paper. This should alleviate the concerns of the referee.

Thank you

Yves Balkanski

Dear Editor,

Thank you for your careful reading and advises. We have revised our Introduction and Conclusion to have a more explicitly statement. Revisions inserted in the latest version of manuscript are highlighted as follow:

In the last paragraph of Introduction, added:

"... Various authors have questioned the ability of CMIP5 models to capture observed monsoon rainfall trends over India (e.g. Saha et al., 2014) and therefore the reliability of CMIP5 at making projections of future monsoon rainfall (Ramesh and Goswami, 2014; Sabeerali et al., 2014). In our study we shall demonstrate that it is only when aerosol indirect effects are included in models that they are able to capture the observed trends. ..."

In the fifth paragraph of Conclusion, modified:

"... While we generally have more confidence in our models if the present-day simulations perform well at simulating the mean monsoon, its seasonal cycle, and variability (Turner and Annamalai, 2012; Ramesh and Goswami, 2014; Sabeerali et al., 2014), a key

novelty of our study is that it is only the models containing aerosol indirect effects that can reasonably be expected to represent the observed trend."