

## ***Interactive comment on “Characterization of atmospheric bioaerosols along the transport pathway of Asian dust during the Dust-Bioaerosol 2016 Campaign” by Kai Tang et al.***

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Tang et al., have conducted a large scale and comprehensive campaign with the aim to explain key questions in the nature of long distance aerosol transport. The manuscript documents two major aspects of the aerosol samples: microscopy and molecular biology, through several sampling sites and spanning several dust events. The paper provided valuable findings relating an important process (Asian dust events) which may be applicable to many other similar systems worldwide.

Pg.1, Ln. 22 - I do not understand what "charge capacity" means throughout this paper. I can not find relevant results regarding "charge capacity" and microscopy. Did you

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mean something like fluorescence intensity, fluorescence concentration (as indicated when referring to some of the figures), or particle counts?

Pg.5, Ln.7 - First mention of MiSeq should have company information (Illumina, CA, USA)

Pg.7, Ln.7 - in-text citation style should be "...previously described by Maki et al., (2014)." This should also be changed in other parts of the manuscript.

Pg.8, Ln.5 - Suggest changing to "phenol chloroform extraction/ ethanol precipitation" for clarity.

Pg.8, Ln.6 - in-text citation style should be "Maki et al., (2017)"

Pg.8, Ln.10 - Should include the hypervariable region(s) targeted (and the primer used) in the first step of PCR amplification.

Pg.8, Ln.12 - This BioProject is not publicly available, it needs to be released.

Pg.9, Ln.16 - Consistency in period symbol: (Att. Bac. Coe.) (Dep. Rat.) (Col. Rat.)

Pg.14, Ln.4 - This seems to be a major observation/trend, why do you think this is the case?

Pg.14, Ln.6 - For reproducibility, please consider uploading the OTU sequences as supplemental files in FASTA format.

Pg.15, Ln.21 - Avoid contraction, use "It is"

Pg.17, Ln.9 - Avoid contraction, use "It is"

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