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Interactive comment on "The lofting of Western Pacific regional aerosol by island thermodynamics as observed around Borneo" by N. H. Robinson et al.

N. H. Robinson et al.

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We thank the reviewer for their comments for improving our manuscript. We have addressed each of the comments in turn below.

Page 1222, section 2,2 line 10-16. I don't think you should talk about two atmospheric layers specifically here when you have not yet shown any vertical profiles. Since this section is intended to be about the methodology in general, a more appropriate phrase would be something like "Boundaries between atmospheric layers were estimated from sharp...."

We agree and have changed line 10, p1222 as suggested C2755

Lines 14-16 appear to be repetition of lines 10-14 essentially.

We agree and have change this section to read The boundary between the lower two atmospheric layers was estimated from sharp gradient changes in aerosol mass concentration profiles (typically of at least 50% within a 300 hPa range) and inversions in tephigrams (constructed from thermodynamic data recorded from the BAe-146, and presented in Sect. 4.2 and the Supplement). A top layer which contained very small concentrations of aerosol was also identified.

Page 1224, line 20 "vapouriser" Page 1226 line 14 ... "approxiamtely" Page 1228 line 3 - you must define ITC here as it has previously only been used in the Abstract

We thank the reviewer for highlighting these technical corrections and have amended them accordingly.

Page 1241 Conclusions section: there is some repetition between the extensive discussion section and the first part of the conclusions. Please consider whether this is necessary.

We are aware of there is some repetition but felt it was valuable to present both a detailed systematic interpretation of the data in the discussion section, as well as the more concise picture of the whole system in the conclusions section.

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 1215, 2012.