

## ***Interactive comment on “Water vapour profiles from Raman lidar automatically calibrated by microwave radiometer data during HOPE” by A. Foth et al.***

**Anonymous Referee #1**

Received and published: 31 May 2015

The paper is well written and to the point, but not too concise. Calibration of Raman lidar water vapour through MWR IWV has been done before, but this method focusses on automatic calibration procedures, which is relevant. It should be checked if previous work is duly cited and how the present work improves upon previous approaches (as already indicated by another reviewer).

A couple of remarks regarding the text and language: pg 6570 Line 18: replace 'dispose' by 'are equipped with' pg 6572 Line 7: replace 'informations' by 'information' pg 6572 Line 13: remove 'for' pg 6574 Line 4: replace 'adsorbed' by 'absorbed' pg 6579 Line 12: 'good agreement' - I would say: unbiased within about 10%. (verify that num-

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ber, which I estimated visually) pg 6581 Line 7: replace 'less' by 'decreasing' pg 6582 Line 17: The last paragraph is a statement about the authors intent for further study, but is not a conclusion from this work. This may be removed.

Figure 7: Add the integration time to the caption

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Interactive comment on Atmos. Chem. Phys. Discuss., 15, 6567, 2015.

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