

Reviewer 3 (file name amtd-6-C1442-2013)

We thank the reviewer for his kind encouragement and careful reading of the manuscript. Please note that T. Narayana Rao and O. Bousquet , who actively participated in the revision of the paper, have also been added as co-authors.

The literature discussion is a very good and concise review. The one dynamical feature that might be added is a sentence about MJO effects since that is tropical phenomena now.

There are a number of minor changes and typos:

Abstract line 16: replace “mere” with “simple”

Abstract line 18: replace “to” with “with”, ie: “. . . associated with strong . . . ”

Page 3, line 5: Reword: “. . . most previous studies focus on the Northern Hemisphere”

Page 4, line 1: insert “for” prior to “which” (ie, “for which”)

Page 4, line 16: replace “revealed” with “found”, make technique plural ie techniques

Page 4 line 19: replace “every” with “all”

Page 5, line ???: replace “to” with “with”

Page 5 line 13: Reword: “Such an instrumental setup enables calibration of the radar data and investigation of the . . . ”

Page 5 line 18: “pluviometer” is a very unusual word in English, why not just use “rain gauge”.

Reply: Above grammatical mistakes and typos are corrected in the revised version.

Page 6: indicate how far the profiler is from hills or significant terrain. How far is the profiler from the mountain or mouth of the valley?

Reply: The required information is given in the revised manuscript. UHF radar is located about 3 km away from the edge of the lava plateau and is located at the mouth of the river.

Page 6 line 7: Circuse is another word not used in English, I’m not sure what the meaning is here, perhaps volcanic basin or watershed? At the bottom of page 6 is “littoral” and it is unclear what that is, perhaps coast? “Planeze” is close enough to the English “plane” to be left as is.

Circuse has been replaced by cirque - Planeze is replaced by lava plateau

Page 6, line 22: Is Gillot a location name or a missing reference?

Reply: Gillot is a location name.

Page 7, line 4: Reword: “During a 4 minute cycle, in clear air and rain, it provides vertical profiles of reflectivity, the three components of wind, Doppler spectral width and skewness.”

Reply: The above sentence has been rewritten in the revised version.

Page 8 line 25: replace “attenuated” by “reduced”

Page 9 line 4: The threshold on skewness very efficiently removes snow echoes.

Page 9, line 15: is 40m/s a typo? Should it be mm/h?

Page 10, line 19: replace “concerned” with “influenced”

Page 13, line 12: “consistent”

Page 14 line 9 : “consistency”

Page 15, line 7: “another”

51 *Figure 2: mark the location of the wind profiler*
52 *Figure 6 caption: “Profile”, also either write “dark blue” or “black” (not just “dark”).*
53 *Figure 7: Write: “These images are proved by Meteosat” (not “Such”). Also please indicate*
54 *the position of Reunion Is. with an arrow or similar.*
55 *Reply: Above grammatical mistakes and typos were corrected in the revised version.*
56 *Figure 8: “particules” is not an English word, but particles also doesn’t fit, what is meant*
57 *here?*
58 *Note that in 3) there are more data, since all data were taken into account*
59 *Figure 10 caption: “associated”*
60 *Reply: Corrected.*
61 *Figures 8 – 11: the plots are rather small. Care will need to be taken in the final version that*
62 *the labels are readable. In those captions, it is not necessary to include “the” before the date;*
63 *eg, “(a) 2 Feb 2010, . . . ”.*
64 *Reply: These figures were redrawn in the revised version. Labels are now clearly visible and*
65 *readable. Grammatical mistakes have also been corrected.*
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