

## ***Interactive comment on “Optimization of a gas chromatographic unit for measuring BVOCs in ambient air” by Kenneth Mermet et al.***

**Kenneth Mermet et al.**

kenneth.mermet@imt-lille-douai.fr

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Interactive comments – Report 1 (comments)

This paper described detail about biogenic VOC (terpenoid) measurements: method, calibration, error estimation etc. Accurate measurement of terpenoid is quite difficult, and most researchers avoid detailed experiment, especially error estimation. Therefore, this paper would be quite informative and useful for terpenoid measurement, and for considering the limitation (error) of the observed terpenoid data.

Comments:

Is it possible if other VOC (especially terpenoid) which is not included as target in this study would co-eluted with the target VOCs? In the text (page11 line5), author ex-

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plained about co-elution of target biogenic VOCs and anthropogenic VOCs. But the forest site like LANDEX campaign as demonstrated in this paper, non-target biogenic VOC would be more probable to interference the chromatogram. Are there any comment?

Reply This sentence has been added: “It should be noted that other compounds which have not been targeted here could possibly co-elute with targeted compounds and maybe other monoterpenes.” Also, in the uncertainties calculation, the  $u_{\chi\_int}^2$  term takes into account the possible evolution of peak shapes and possible over estimation due to the presence of a less abundant compound next to the eluted target compound.

Small thing:

page1 line23 & page2 line7 : "terpenoids" -> "terpenoid" change have been made

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