

## ***Interactive comment on “Multiple solvent signal presaturation in $^{13}\text{C}$ NMR” by Marine Canton et al.***

### **Anonymous Referee #1**

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This article entitled: “Multiple solvent signal presaturation in  $^{13}\text{C}$  NMR” by Canton et al presents a multi-site presaturation technique for  $^{13}\text{C}$  NMR spectroscopy. I have found the results and the approach nice and appropriate. I, therefore, think it is suitable for publication.

Nevertheless, I have a few minor comments and criticisms that authors could consider for the revised version of their manuscript.

1) the degree of novelty of the method was barely discussed. I think it is beneficial to have a brief statement summarising the originality of the approach so that it can stand out among other attempts.

2) At first, it was not clear to me at all - and still, it is not entirely - that what is the main purpose of the proposed method: solvent- or artefact suppression? i.e. it is not clear that the suppression of heterodecoupling artefacts is the goal of this study or a rather

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attractive by-product of it? This point needs to be clarified. Especially if the artefact suppression is the primary goal, then the title itself is a bit misleading and probably should bear an indication of artefact suppression for that matter.

3) Figure 3 is somewhat confusing; there is no noticeable intensity difference between solvent signals in (a) and (b). The only difference between (a) and (b) that I can see is the disappearance of heterodecoupling artefacts, which is very nice. Still, I expected to see some intensity difference with respect to solvent signals themselves as well.

4) Some other attempts with regard to multiple solvent suppression are worth mentioning, including (Teodor Parella, 1998) and (Claudio Dalvit, 1998).

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