Magn. Reson. Discuss., https://doi.org/10.5194/mr-2020-6-RC2, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "Multiple solvent signal presaturation in <sup>13</sup>C NMR" by Marine Canton et al.

## **Anonymous Referee #2**

Received and published: 11 May 2020

The manuscript would be of interest to many people. The following suggestions may improve an already good paper:

Replace 13C with 13C(1H). This is important because the authors report problems when the decoupler.

The proton concentration is not 110 M, is around 99 M as biological samples contain around 10% of deuterated water.

It would be nice if the authors comment on the use of decoupler schemes that are tolerant to pulse imperfections.

The authors should clarify whether the problems with the decoupler not being calibrated appear even when the probe is well tuned. Do they have an auto-tuning probe? In some cases, the miscalibration problem can be minimized with auto-tuning probes. In

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other cases, pulse calibrations are still necessary.

Replace "Miscalibrations may cause" with "Decoupler miscalibrations may cause". Miscalibrations on the carbon channel rarely cause problems.

Interactive comment on Magn. Reson. Discuss., https://doi.org/10.5194/mr-2020-6, 2020.