

Magn. Reson. Discuss., author comment AC1 https://doi.org/10.5194/mr-2021-24-AC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on RC1

Kenneth A. Marincin et al.

Author comment on "Using delayed decoupling to attenuate residual signals in editing filters" by Kenneth A. Marincin et al., Magn. Reson. Discuss., https://doi.org/10.5194/mr-2021-24-AC1, 2021

We thank the referee for a timely and very supportive review. We agree that delayed decoupling is uncommon, and we will cite other applications when we first mention the term "delayed decoupling":

Delayed decoupling has previously been used to enhance sensitivity in solution NMR (Rößler et al., 2020), and the partitioning of adjacent undecoupled and decoupled periods has been used to determine carbon hybridization states in solid-state NMR spectra (Alla and Lippmaa, 1976). Decoupling without delay has been used to suppress undesired antiphase coherences for filters immediately preceding detection (Yang et al., 1995). Here, we use delayed decoupling to improve isotope filtering while minimizing sensitivity losses due to relaxation.