

Clim. Past Discuss., author comment AC1 https://doi.org/10.5194/cp-2021-103-AC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on RC1

Denis-Didier Rousseau et al.

Author comment on "Abrupt climate changes and the astronomical theory: are they related?" by Denis-Didier Rousseau et al., Clim. Past Discuss., https://doi.org/10.5194/cp-2021-103-AC1, 2021

Thanks to Reviewer #1 for their comments on our manuscript. We intend to submit a detailed reply as required by CP but would like at present to provide just a short perspective on the paper's motivation and further background on the methodology. First of all, the paper is a contribution to the CP Special Issue dedicated to the celebration of the centennial of MM's 1920 book. As such, this paper is based on the invited presentation given during the centennial symposium and is part of a series of papers on the detection of abrupt transitions by using two distinct but complementary methods: a modified Kolmogorov-Smirnov (KS) method and the recurrence plot (RP) method used in the paper at hand.

The new KS method is currently in revision in another journal, where it is also being compared to the RP approach. We appreciate your suggestion of carrying out a sensitivity analysis of the RP results and we are conducting such an analysis in order to revise this manuscript.