Climate of the Past Discussions

Clim. Past Discuss., referee comment RC2
https://doi.org/10.5194/cp-2021-46-RC2, 2021

Comment on cp-2021-46

Anonymous Referee #2

Referee comment on "Age and driving mechanisms of the Eocene–Oligocene transition from astronomical tuning of a lacustrine record (Rennes Basin, France)" by Slah Boulila et al., Clim. Past Discuss., https://doi.org/10.5194/cp-2021-46-RC2, 2021

This study presents an astronomical time scale from ~31 to ~39 Ma. It is worth of investigation since there are unresolved precise time scale for this period. However, as the RC1 mentioned there are new studies like GTS 2020 and Westerhold et al., 2020 paper that need to be compared and discussed. Statistical method of testing astronomical signals is also needed. From my understanding, authors anchored the floating time sale to the previously proposed age of EOB and then use this as a starting point to tune the bandpassed 405-kyr of studied data to the orbital solution. This process needs to be clearer in the presentation.

In line 160, “We have aso”should be “we have also”

In Figure 4, what are the blue lines in panel B and C?

If authors can address the above issues, I recommend this as publication.