

Interactive comment on “Orbital forcing of terrestrial hydrology, weathering and carbon sequestration during the Palaeocene-Eocene Thermal Maximum” by Tom Dunkley Jones et al.

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We appreciate the Short Comment of Mike Clare, especially given his own detailed work on turbidite deposition within this section and the wider Basque Basin.

Questions of correlating the CIE onset and BEE between our study and Schmitz et al. (1997) are addressed in the author comment to Reviewer 1.

We appreciate Mike’s discussion of the contribution of stochastic turbidites within the Zumaia succession, but given Mike’s dataset of turbidites right through the Zumaia section, we ask the him the key question, as we have to other reviewers - is there any

C1

evidence for, or are there any logged turbidites within the SU of Zumaia? If so, where are they, how thick are they and what is the evidence for them? Given this information, we could then factor this into the interpretation of our results, for example by marking their position within the stratigraphic succession on our logs.

If these events within the SU are of such a fine scale as to be the (imperceptible?) millimetre scale pulses of fine, clay-grained sediment, as discussed by Victoriano Pujalte (Reviewer 2), then, following our response to this Reviewer, we argue that these cannot explain the ~ 0.5 m scale of the Si/Fe cyclicity observed within the SU.

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2017-131>, 2017.

C2