Attachement #2 relating to Reply on Comment 1

Heidi E. O'Hora et al.

Author comment on "Clumped-isotope-derived climate trends leading up to the end-Cretaceous mass extinction in northwestern Europe" by Heidi E. O'Hora et al., Clim. Past Discuss., https://doi.org/10.5194/cp-2021-104-AC3, 2022

Attached is PDF including 2 figures:

First - a figure displaying SEM imagery of 9 different shells from our study displaying different preservation states. We have adopted a new rating criteria. Instead of rating with a single preservation index, we rate on a 0 to 3 scale for severity of dissolution and again for severity of secondary growth. Samples with a 2 or 3 for secondary growth are determined to be "bad". Samples with a 2 or 3 for dissolution but no/minor secondary growth (0 or 1) are labeled "okay". Samples with a 0 or 1 for both dissolution and secondary growth are determined to be "good" based on SEM imagery. This figure combines these SEM rating with trace element concentrations. If trace element thresholds of either 100 ppm Mn and/or 2050 ppm Fe are exceeded, the sample is labeled as "bad" for trace elements. If a single sample fails either trace or SEM screening, it is eliminated from interpretations of temperature.

Second - a figure comparing our time series (horizon means and 1sd) to the composite timeseries developed by Hull et al. 2020. This shows the timing of warming at our site and globally during the Late Maastrichtian Warm Event. Notably, our record

Please also note the supplement to this comment:
https://cp.copernicus.org/preprints/cp-2021-104/cp-2021-104-AC3-supplement.pdf