

Cramwinckel, M.J., van der Ploeg, R., van Helmond, N.A.G.M., Waarlo, N., Agnini, C., Bijl, P.K., van der Boon, A., Brinkhuis, H., Frieling, J., Krijgsman, W., Mather, T.A., Middelburg, J.J., Peterse, F., Slomp, C.P., and Sluijs, A., 2022, Deoxygenation and organic carbon sequestration in the Tethyan realm associated with the middle Eocene climatic optimum: GSA Bulletin, <https://doi.org/10.1130/B36280.1>.

Supplemental Material

Figure S1. Abundance of key calcareous nannofossil index taxa throughout the studied interval at the Belaya River Section.

Figure S2. Mercury (Hg) contents of middle Eocene Belaya River section sediments, plotted together with data sets with comparable C_{org} content.

Figure S3. Frequency (number of samples) histogram of binned ppb Hg/wt% C_{org} values.

Table S1. GDGT distributions (areas) from the middle Eocene Kuma Fm, Belaya River section.

Table S2. Geochemical proxy records from the middle Eocene Kuma Fm, Belaya River section.

Table S3. Calcareous nannofossil biostratigraphic data for selected taxa from the middle Eocene Kuma Fm, Belaya River section.

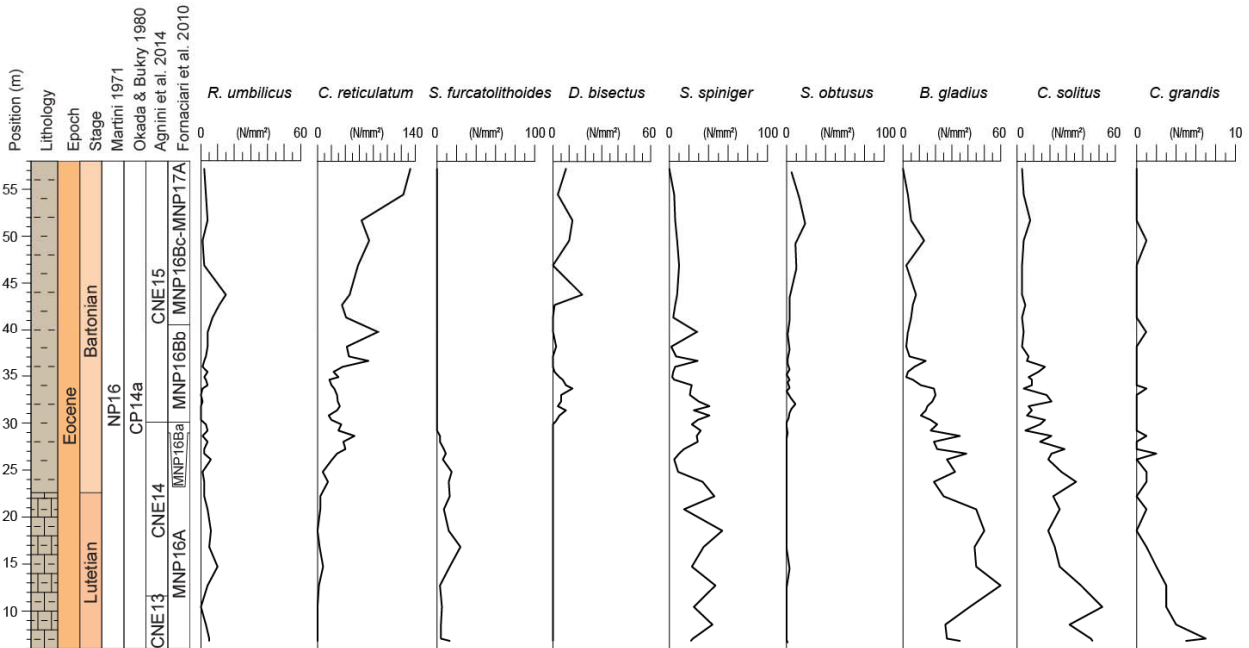


Figure S1. Abundance of key calcareous nannofossil index taxa throughout the studied interval at the Belaya River Section. Plotted in number of specimens per mm² against height in meters.

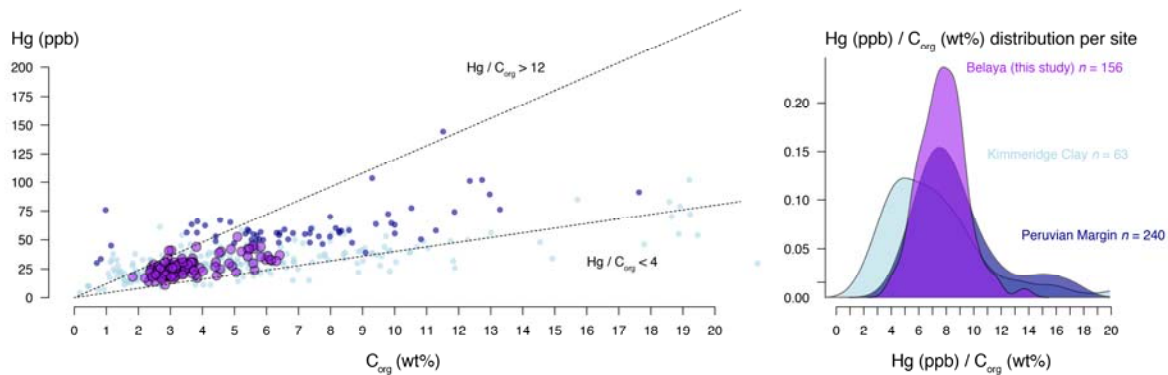


Figure S2. Mercury (Hg) contents of middle Eocene Belaya River section sediments, plotted together with data sets with comparable C_{org} content. Left: cross plot of Hg contents (in wt ppb) on the vertical axis against C_{org} contents (wt%) on the horizontal axis for the Kuma Fm, Belaya River section (purple; this study), modern Peruvian Margin sediments (dark blue; Shen et al., 2020), and the Jurassic–Cretaceous Kimmeridge Clay source rock (light blue; Percival et al., 2015). Right: the same data, with same color-coding, plotted as density function of Hg / C_{org} (ppb / %) ratios.

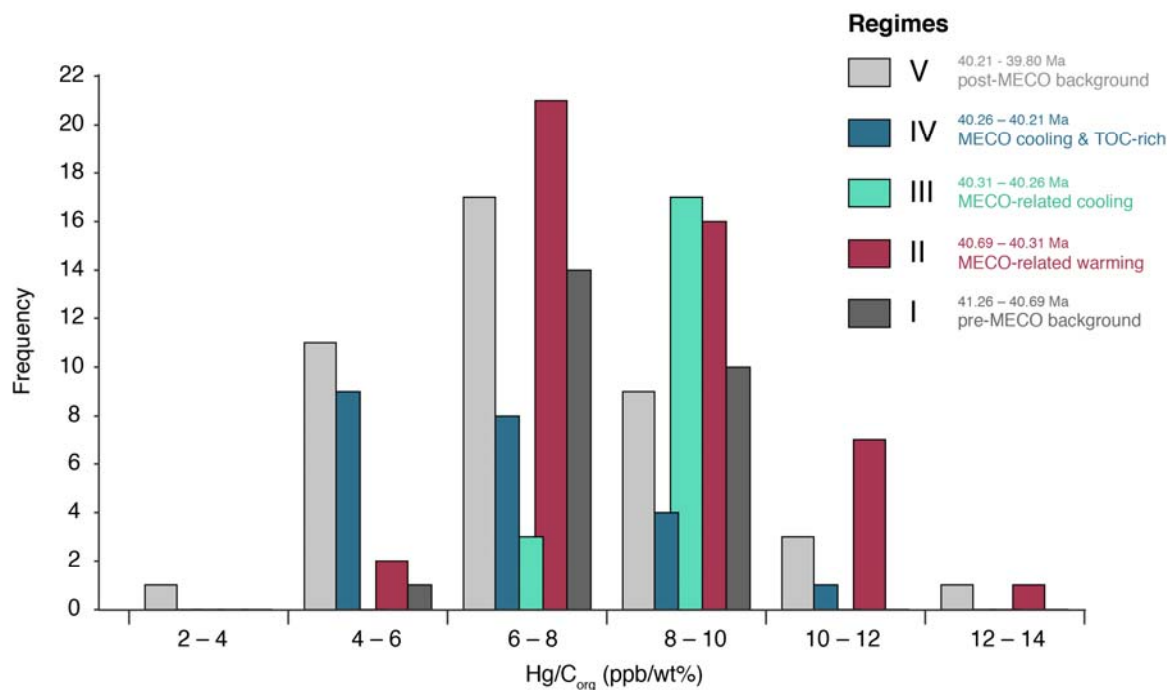


Figure S3. Frequency (number of samples) histogram of binned ppb Hg / wt% C_{org} values. Data have been subdivided into the here defined Regimes I-V, with a different total number of samples per regime.

REFERENCES CITED

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