

Description of additional supplementary files accompanying the manuscript titled:

“Dual clumped isotopes from Mid-Eocene bivalve shell reveal a hot and summer wet climate of the Paris Basin”

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Overview of Supplementary Data files

Name	Description
Supplementary Data 1 Control Samples	Stable oxygen and carbon isotope data for subsamples of the two bulk samples BL and BH; isotopic values and increment position are displayed for each control sample, as well as, a weighted average for each subsample (Supplementary Figure. S1)
Supplementary Data 2 Inner shell record	Stable oxygen and carbon isotope records of the inner shell for the four parallel shells planes and the hinge (Supplementary Figure. S1)
Supplementary Data 3 Non-linear regression model	Parameter and input values for the non-linear regression model; Output displays estimate and corresponding uncertainties for each parameter; stable oxygen isotope dataset includes combined shell records (Supplementary Table 2) and model fit and confidence intervals (Fig. 1) data was compiled using an R script
Supplementary Data 4 Temperature calculations	Temperature calculation based on stable and clumped isotope data; comparison of different temperature calibrations and stable oxygen isotope values of the sea water (Supplementary Figures S2)
Supplementary Data 5 Recalculated temperatures "Le Guépelle"	Recalculated water temperatures from stable oxygen isotope data from the geological sampling side "Le Guépelle"; isotopic data and specimen description are derived from Huyghe et al. ¹
Supplementary Data 6 Offset of stable and clumped isotope temperatures	Temperature calculations based on stable and clumped isotope data; Comparison of the temperature offset in dependence of the used calibration and stable oxygen isotope value of the sea water (Fig.3)
Supplementary Data 7 Recalculated d18OSW	Comparison of recalculated stable oxygen isotope value of the seawater derived from different calibrations (Fig. 4)
Supplementary Data 8 Climate model data output	Climate model data from the CESM 1.2.2 extracted from the simulations of Li et al. ² ; Coordinates of the three marginal sea boxes and four continental cells; monthly temperature, precipitation and evaporation data for the seven investigated areas (Fig. 5, Supplementary Figure S5)
Supplementary Data 9	Raw data of the dual clumped isotope measurements, session and long-term data including carbonate and equilibrated gas standards, as well as unrelated carbonate samples
Supplementary Data 10	Climate model data output including datasets, figures and the used Python script Full information and description for this supplement are given in the "readme.txt" file
Supplementary Data 11 Non-linear regression model	R code for the non-linear regression model