Supplementary material

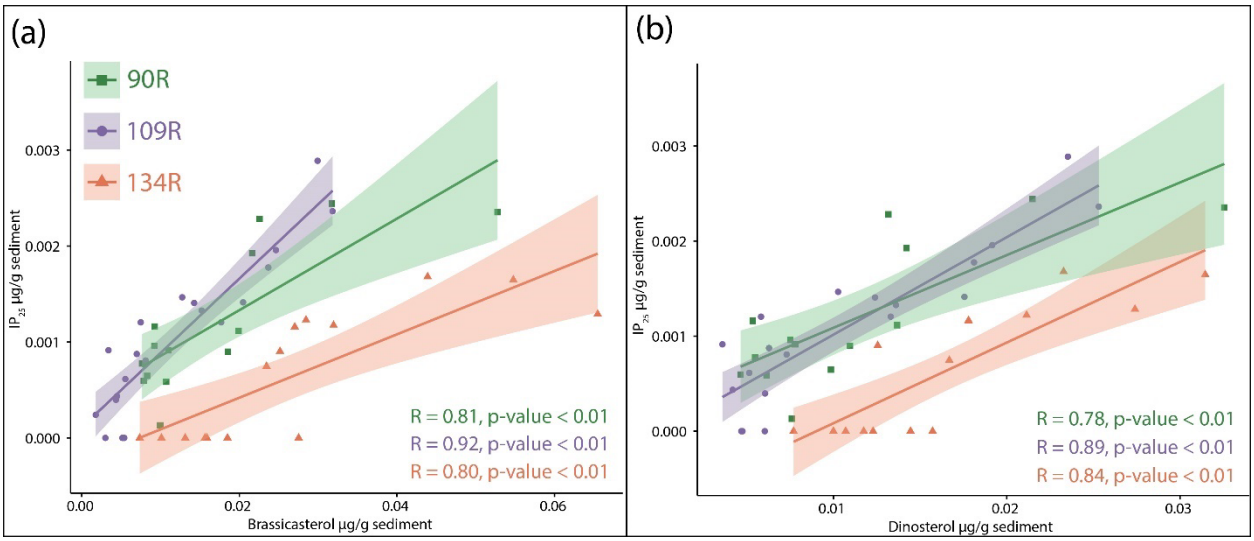

Figure S1: Pearson correlations of biomarkers: brassicasterol plotted against IP_{25} (a) and dinosterol plotted against IP_{25} (b) for all sediment cores: 90R (green), 109R (purple) and 134R (orange). The R values are listed for each core (bottom right) together with the p values.

5

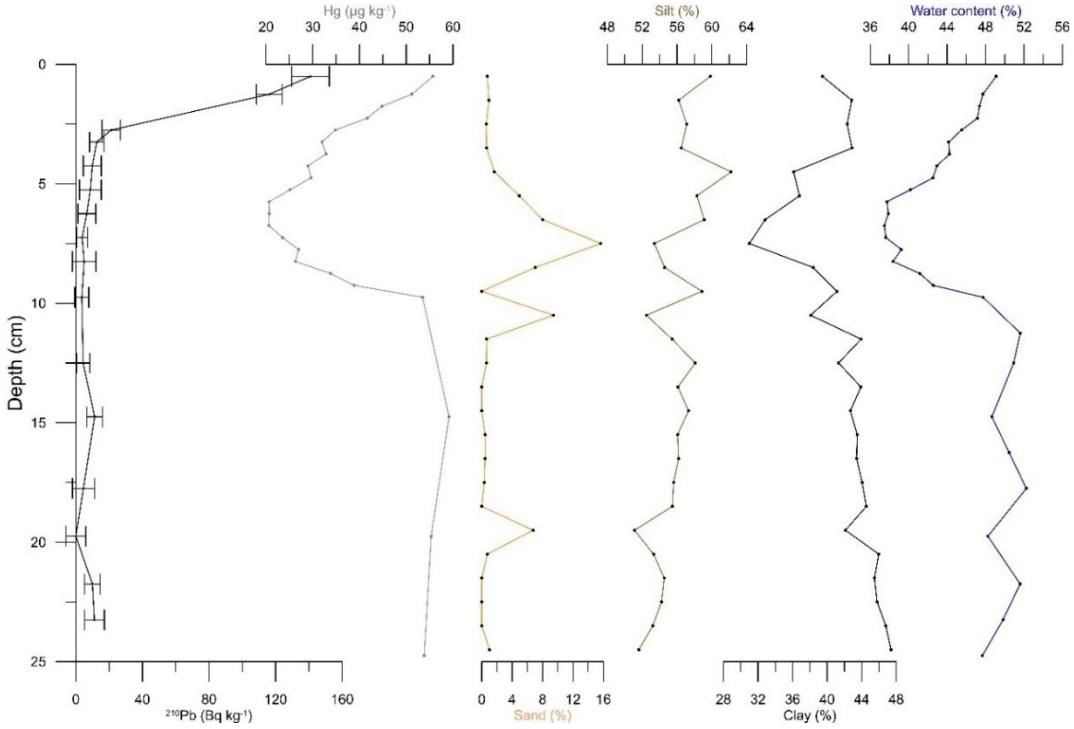

Figure S2: ^{210}Pb, Hg, grain size data (sand, silt and clay) and water content data for core 90R shown on depth.

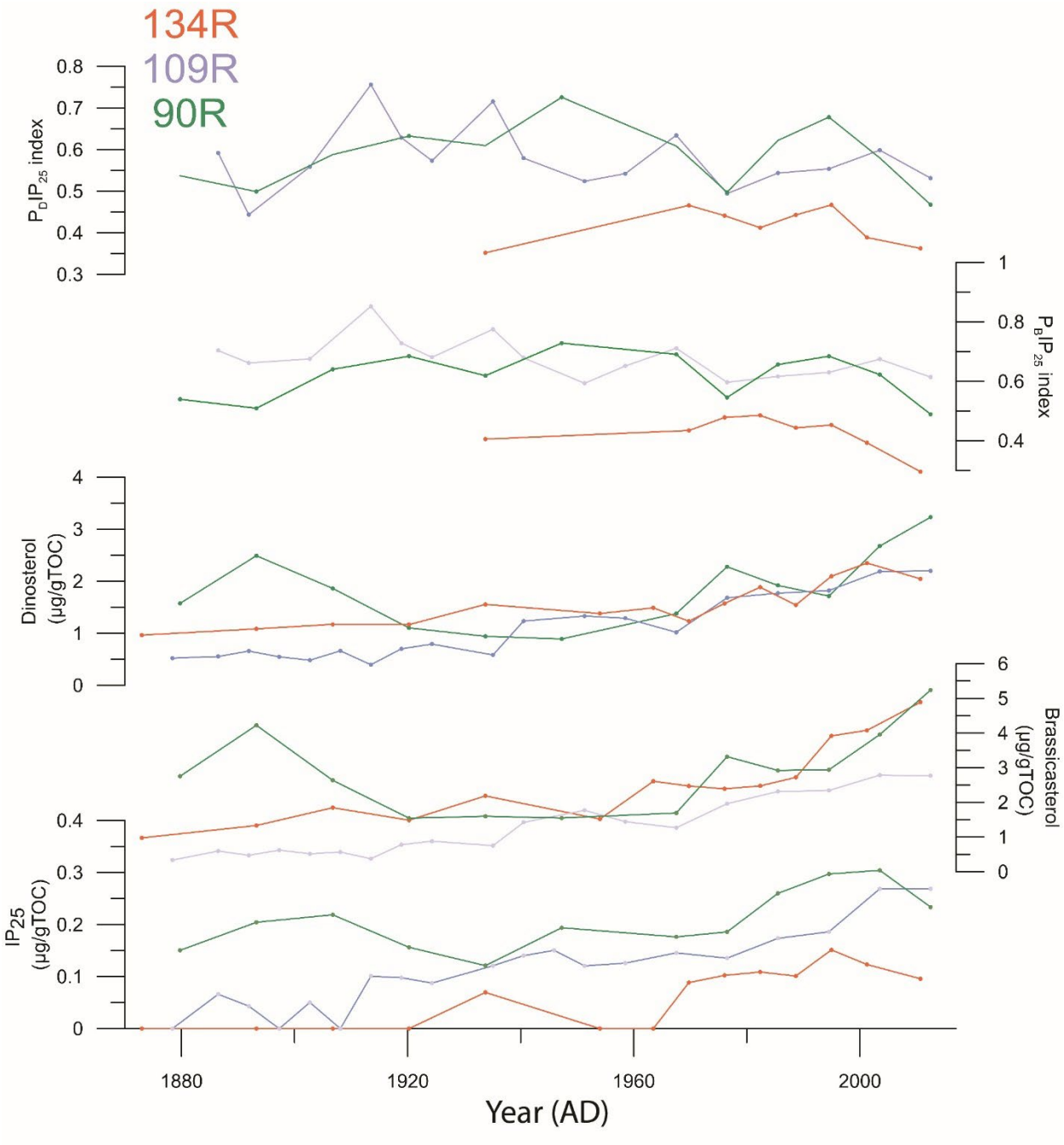

Figure S3: Comparison between the PIP_{25} index calculated using dinosterol (P_DIP_{25}) and brassicasterol (P_BIP_{25}) values.

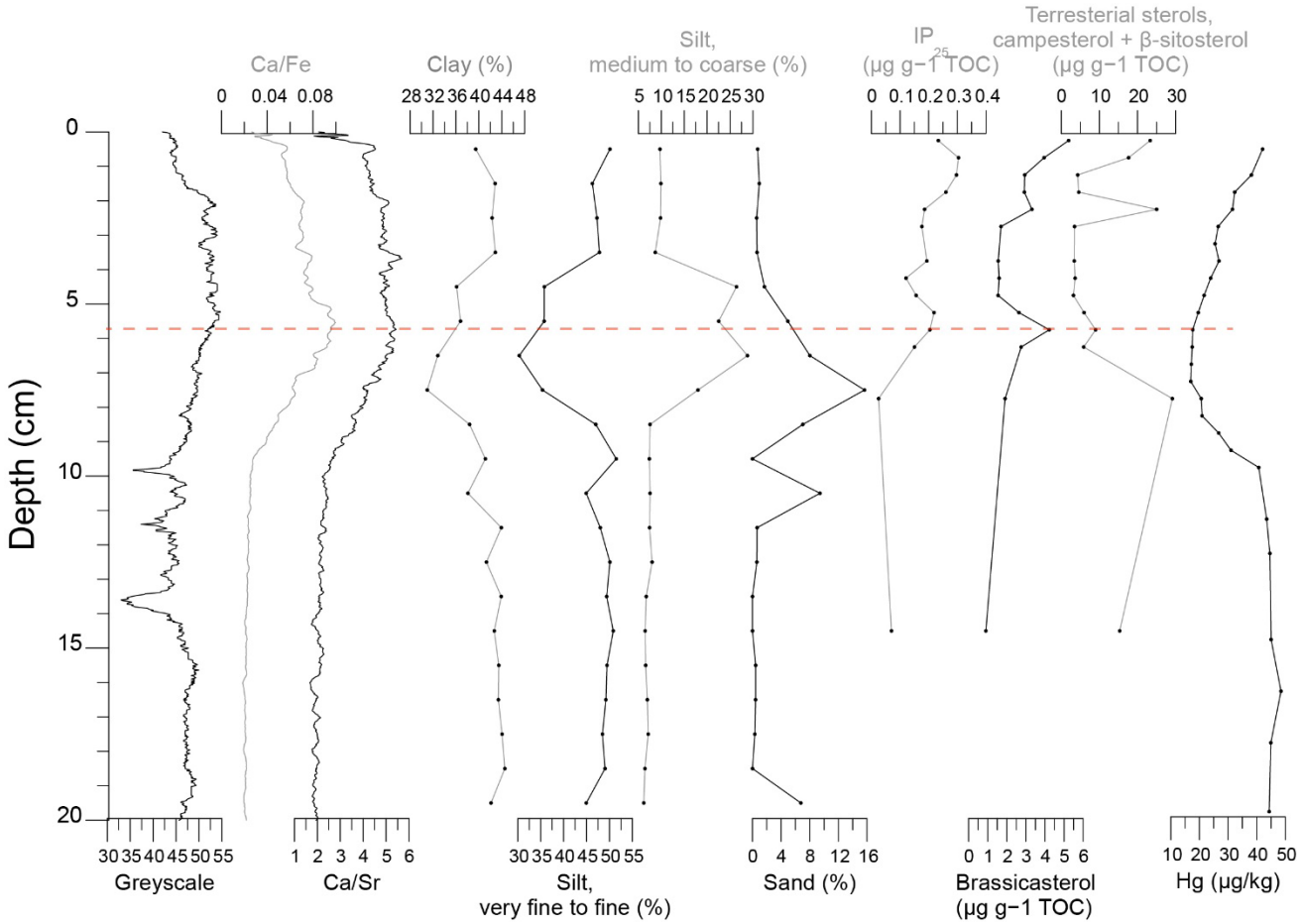

Figure S4: Sedimentological properties (greyscale, Ca/Fe, Ca/Sr, grain size), biomarker (IP_{25}, brassicasterol and terrestrial sterols) and Hg measurements for core 90R. The peak in sterols at 5.75 cm is shown (red dashed line).

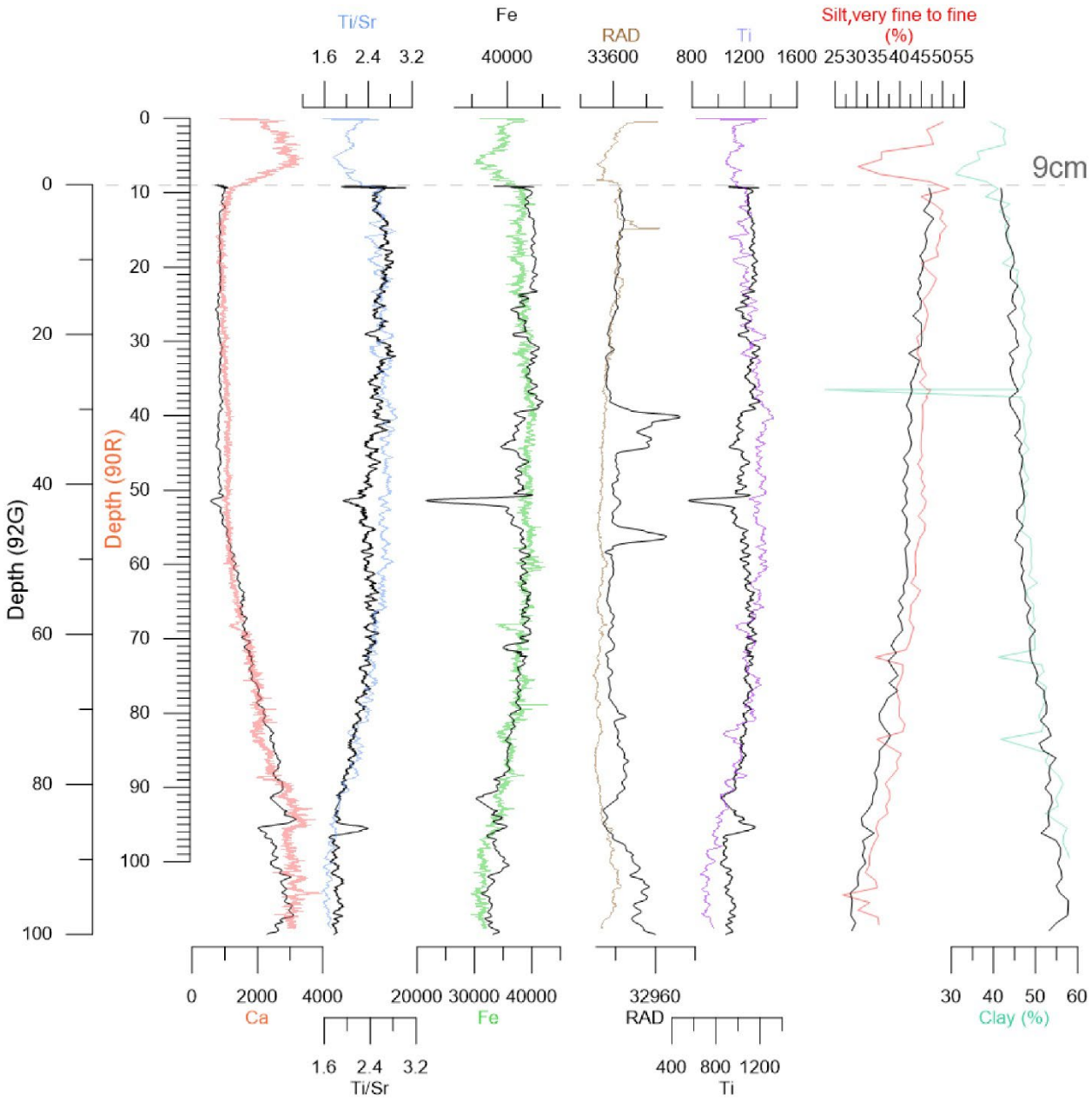

Figure S5: Selected elements (Ca, Fe, Ti), elemental ratios (Ti/Sr), RAD (X-ray intensity), and grain size (silt, clay) data used to align sediment cores DA17-NG-ST08-090R (90R) and DA17-NG-ST08-092G (92G). The amount of sediment lost from 92G is marked with a dashed line.