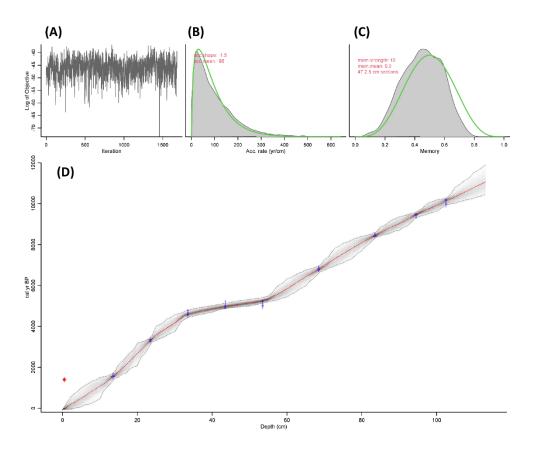
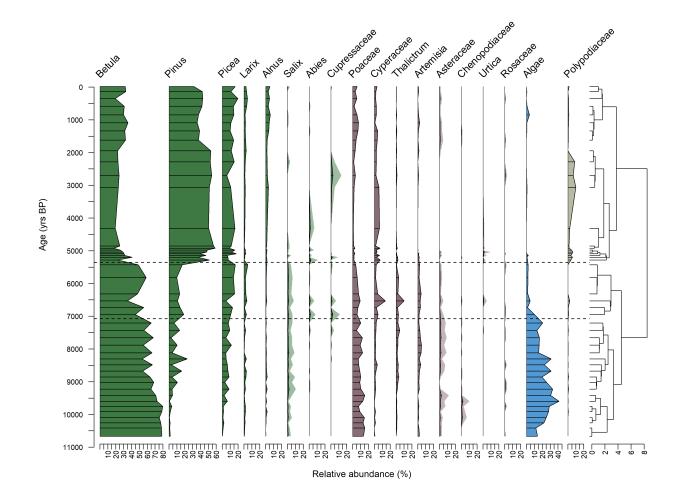


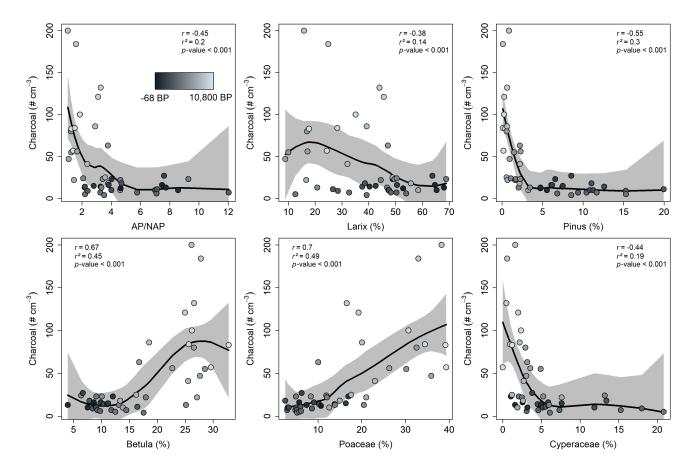
## Supplementary Material



**Supplementary Figure 1.** Original age-depth model output for sediment core EN18224-4, applying Bacon (Blaauw and Christen, 2011) to  $^{14}$ C dated bulk sediment samples. (A) Model iteration log. (B, C) Prior (green line) and posterior (grey area) distributions for accumulation rate and memory. (D) Age-depth model (blue distributions = calibrated ages of  $^{14}$ C dated samples; red distribution = outlier among dated samples; grey lines =  $2\sigma$  range; red line = median).



**Supplementary Figure 2.** Pollen and non-pollen palynomorph percentage diagram for sediment core EN18224-2, with zone separations from cluster analysis. Shaded area represents a visual exaggeration, added to pollen types of lower abundance.



Supplementary Figure 3. Scatterplots of macroscopic charcoal concentration and different REVEALS-transformed pollen types from sediment core EN18224-4, with LOESS-smoothing (grey area =  $2\sigma$  range, black line = mean). Colors of the dots represent their age (dark = modern; white = Early Holocene at c. 10,800 yrs BP).