JQS 2726 SUPPORTING INFORMATION: FIGS S1 to S4

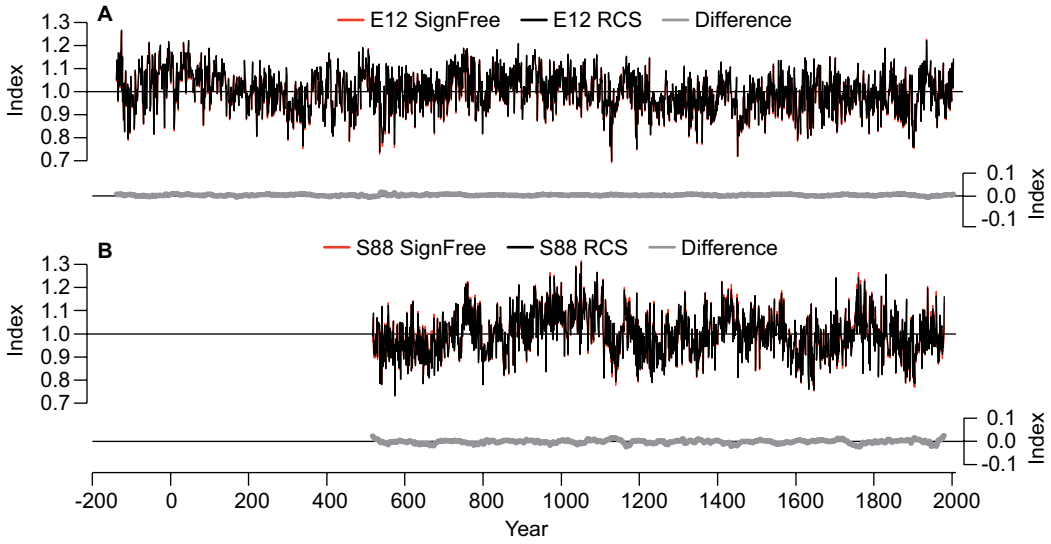

Figure S1. Comparison of RCS and Signal Free detrended chronologies. (A) RCS (black) and RCS plus Signal Free (red) detrended chronologies of the E12 dataset. Note the black curve is dawn on top of the red curve. Bottom panel shows the residual timeseries (grey) of the differently detrended chronologies. (B) Same as in (A), but for the S88 dataset.

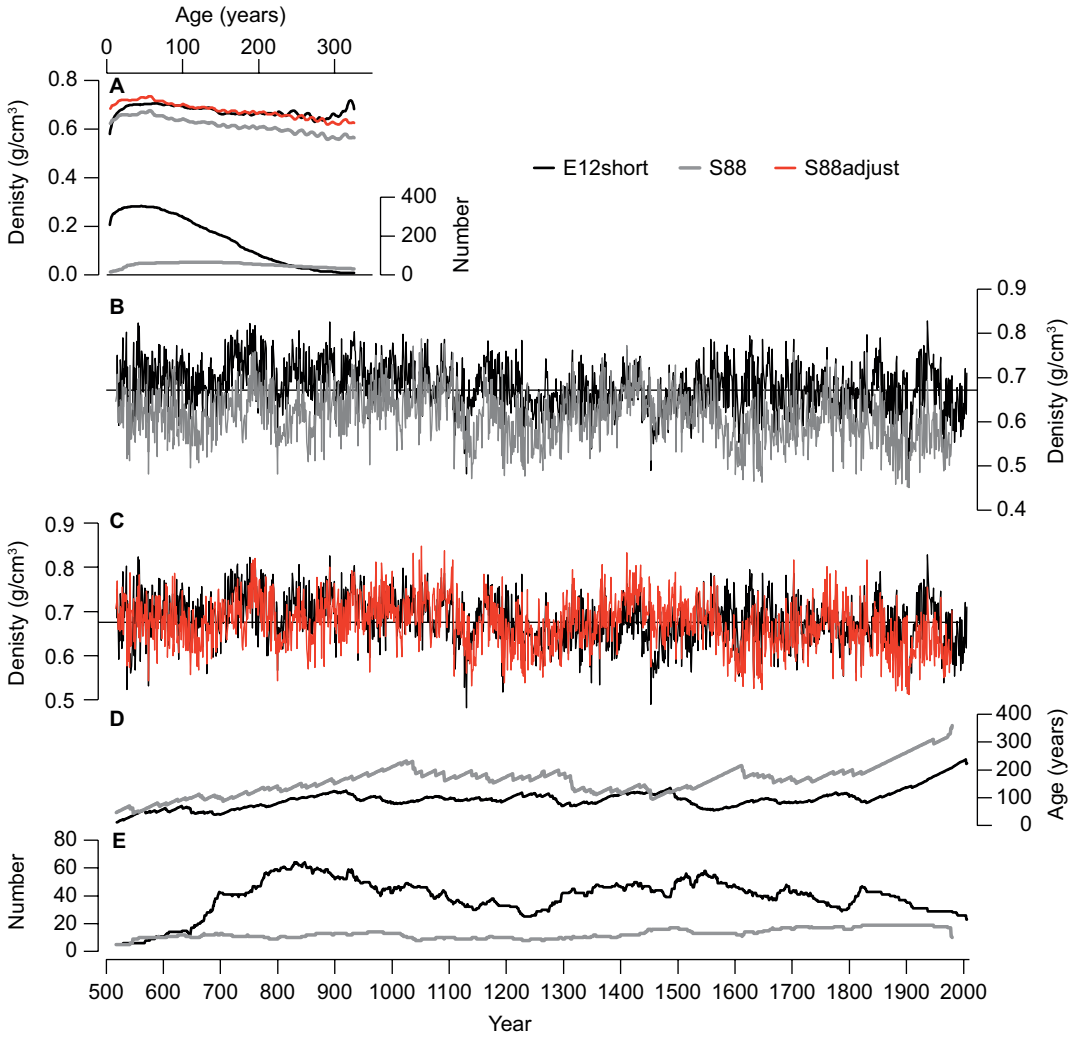

Figure S2. Adjustment of the S88 data. (A) Mean MXD timeseries (top) and replication curves (bottom) of the age-aligned E12short (black) and S88 (grey) datasets. E12short is a sub-sample of E12 approximating the temporal distribution of S88, i.e. living trees younger than AD 1822 (the age of the youngest living tree in S88) as well as pre-AD 500 sub-fossil trees (to match with the five samples of S88 in AD 517) were removed from E12. The E12short and S88 data are shown over the well-replicated (n ≥ 10 series) age range from 5 to 326 years. The red curve is the mean timeseries of the adjusted S88 data, achieved by lifting each measurement series by 0.053 g/cm³. All regional curves were smoothed using a 10-year spline filter. (B) Mean chronologies of the raw E12short and S88 MXD data. (C) Same as in (B) but for the E12short and S88adjust data. (D) Mean age curves, and (E) replication curves of the E12short and S88 data.

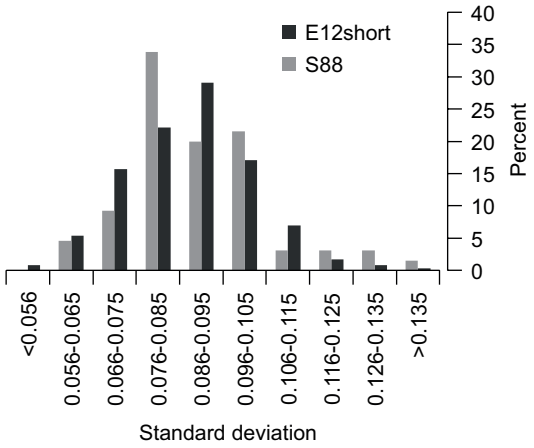

Figure S3. Variance of MXD timeseries. The number of individual MXD measurement series of the E12short and S88 datasets (in %) falling into distinct standard deviation classes ranging from < 0.056 to > 0.135 g/cm^3.

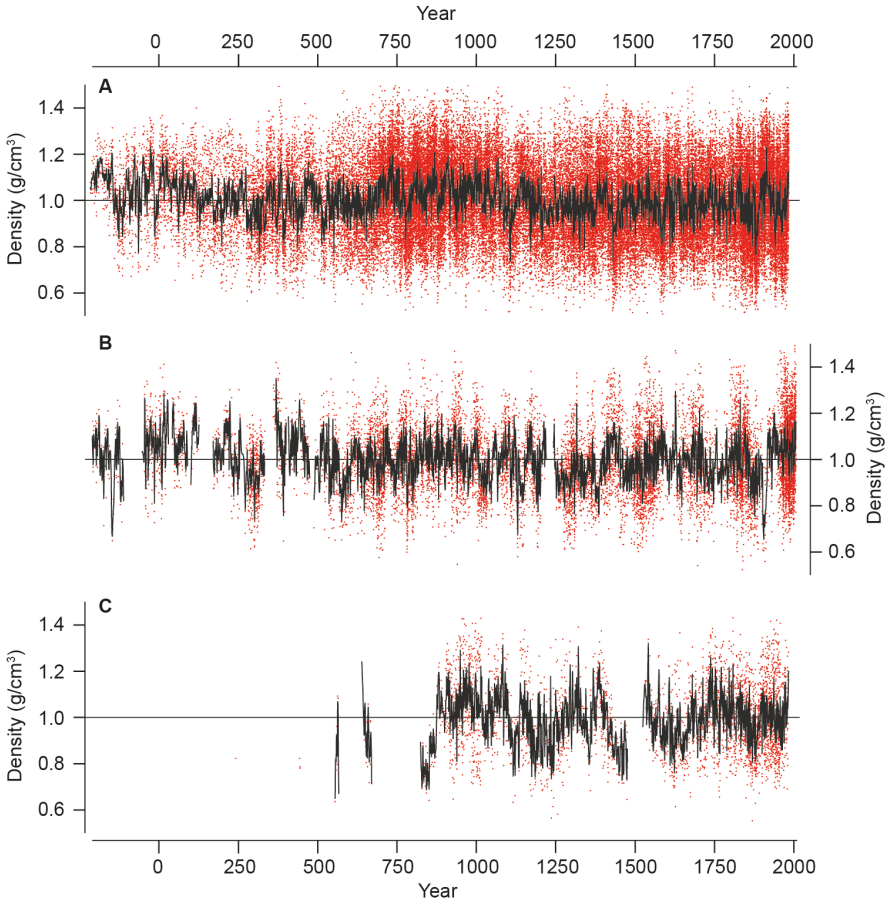

Figure S4. RCS detrended age-band chronologies. (A) RCS detrended chronology (black curve) of the 31-306 year age-band of the E12+S88adjust data. The red dots are the 98740 detrended MXD values in this age-band. (B and C) Same as in (A), but for the 1-30 year age-band containing 15202 values, and the 307-620 year age-band containing 3918 values.