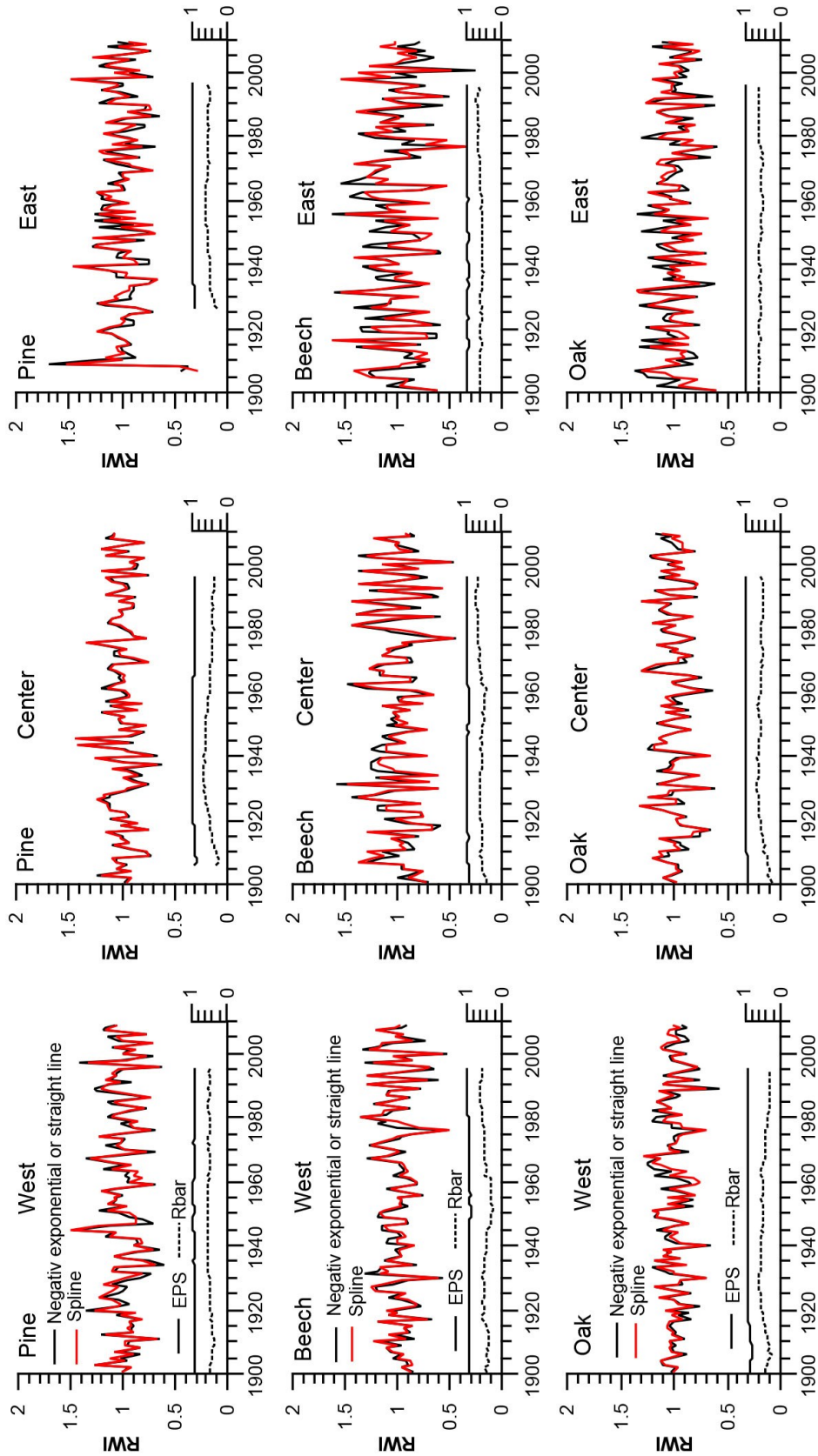


## Appendix 1

Fig. S1 - Comparison of different detrending methods for the (prewhitened) residual chronologies.  $R_{bar}$  (mean correlation between trees) and EPS (expressed population signal) are calculated in moving windows of 30 year length, central year is plotted.



Tab. S1 - Statistics of (prewhitened) residual chronologies. *Rbar* mean correlation between trees, *MSL* mean segment length, *EPS* expressed population signal, *MS* mean sensitivity

	Rbar	MS	MSL (years)	EPS	No of trees
Pine West	0.46	0.19	129	0.94	25
Pine Center	0.40	0.17	116	0.96	25
Pine East	0.46	0.20	95	0.97	25
Beech West	0.49	0.20	113	0.95	23
Beech Center	0.58	0.25	125	0.97	24
Beech East	0.59	0.26	138	0.97	24
Oak West	0.34	0.15	121	0.91	18
Oak Center	0.49	0.17	130	0.96	24
Oak East	0.56	0.21	144	0.97	24