

Supplementary Material

Table S1: Statistics of NFI chronology

No. of trees(radii)	Time span	Mean	SD	MS	\bar{r}_{bt}	AC(1)	EPS
37(74)	1784-1990	1.005	0.329	0.197	0.306	0.598	0.869

MS, Mean sensitivity; SD, standard deviation; \bar{r}_{bt} , mean correlation between trees;

AC(1), first-order autocorrelation; EPS, expressed population signal

All values are calculated for the common interval of 1784–1990 using the program ARSTAN (Cook 1985).

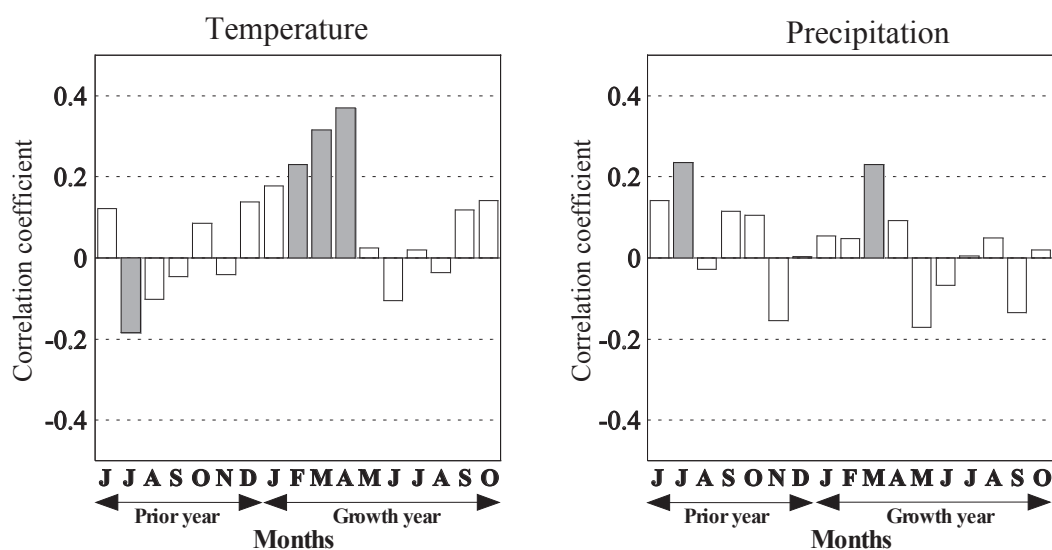


Figure S1: Simple correlation coefficient between NFI chronology and climatic records (monthly temperature and total precipitation at the Akita meteorological station, nearest to the forest site) Bars show correlation coefficients. Gray bars mean significant at 95% confidence level.

Supplementary Material

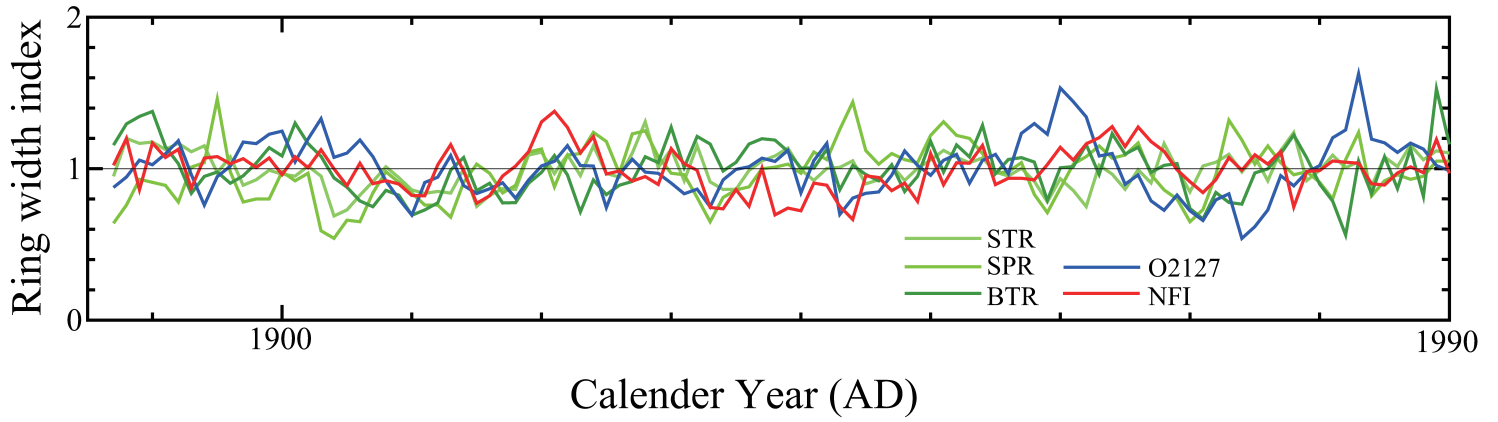


Figure S2: Comparison of five tree-ring chronologies used in this study over calibration period (1887-1990)