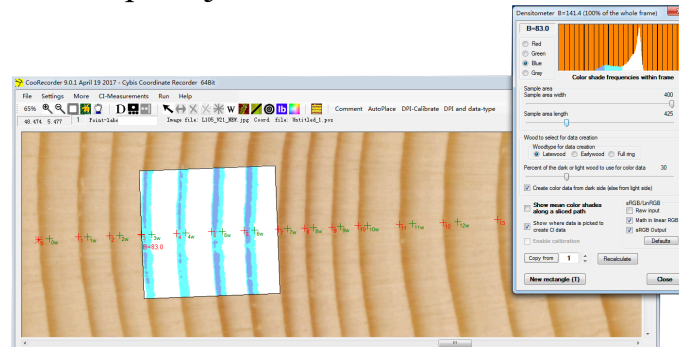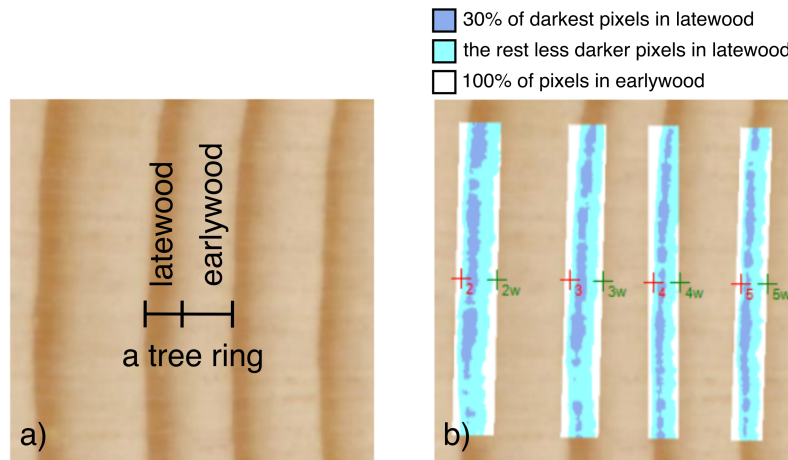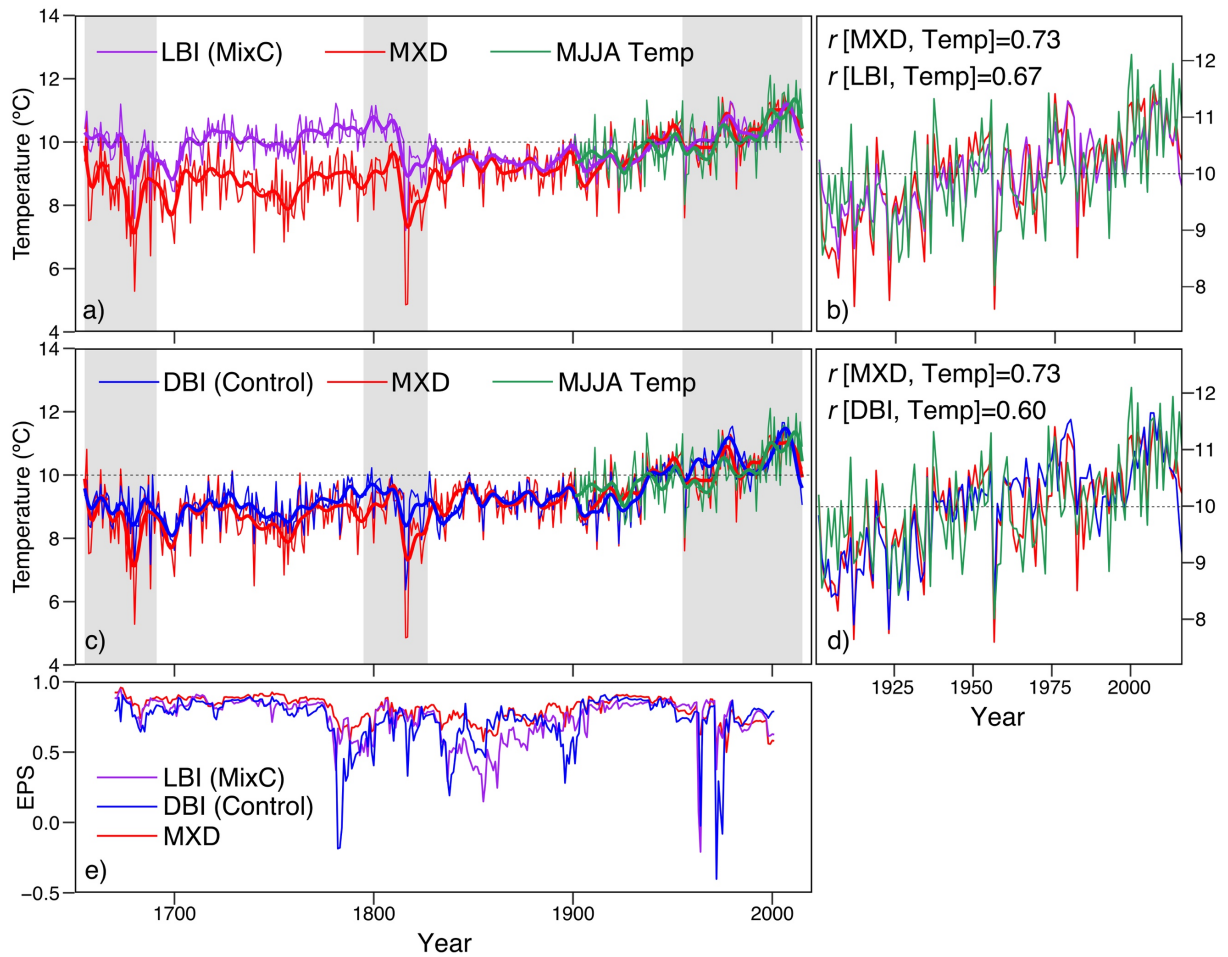# Supplement reply letter to Jesper Björklund

#Figure 1. The output of the densitometer function of Correcorder 8.0 used to generate Figure S6b in the original manuscript.

#Figure 2. The new Figure S6

#Revised Figure 6. Temperature reconstructions using the LBI chronology for the MixC protocol (purple), the Control DBI chronology (blue), and the reference MXD chronology (red) for the 1655–2015 (a, c) and 1901–2015 (b, d) time intervals. (e) shows the 1-year-lag moving EPS computed in 31-year windows. Thick smooth lines denote the 10-year low-pass series filtered using the Butterworth filter. Vertical gray bars show the periods where tree replication is less than 10 (Fig. S3c).

#Revised Table 2. Definitions of wood color intensities and tree-ring parameters used in this study. The RGB intensities refer to three color intensities measured separately from red (R), green (G), and blue (B) channels. The parameters No.1–3 are used to quantify wood colors while the parameters No. 4–6 are conventional dendrochronological parameters.

No.	Parameter	Definition
1	earlywood & latewood RGB intensities*	Mean R, G and B intensities from all pixels of earlywood or latewood (see Fig. S6), averaged from all tree rings of each wood lath.
2	wood RGB intensities*	Mean RGB intensities averaged from earlywood and latewood RGB intensities.
3	delta RGB intensities	Earlywood RGB intensities subtracted from corresponding latewood RGB intensities
4	LBI*	Mean blue intensity of 30% of the darkest pixels in the latewood of each tree ring (Fig. S6).
5	DBI	Raw LBI (measured from 30% of the darkest pixels) subtracted from raw earlywood BI (measured from 100% of pixels), automatically derived from CooRecorder 8.0 for each tree ring.
6	MXD	The maximum value of measured tree-ring latewood density.

*: data were inverted by subtracting the raw data from a value of 256.