Reply on RC2 – Supplementary Figures (SFs)
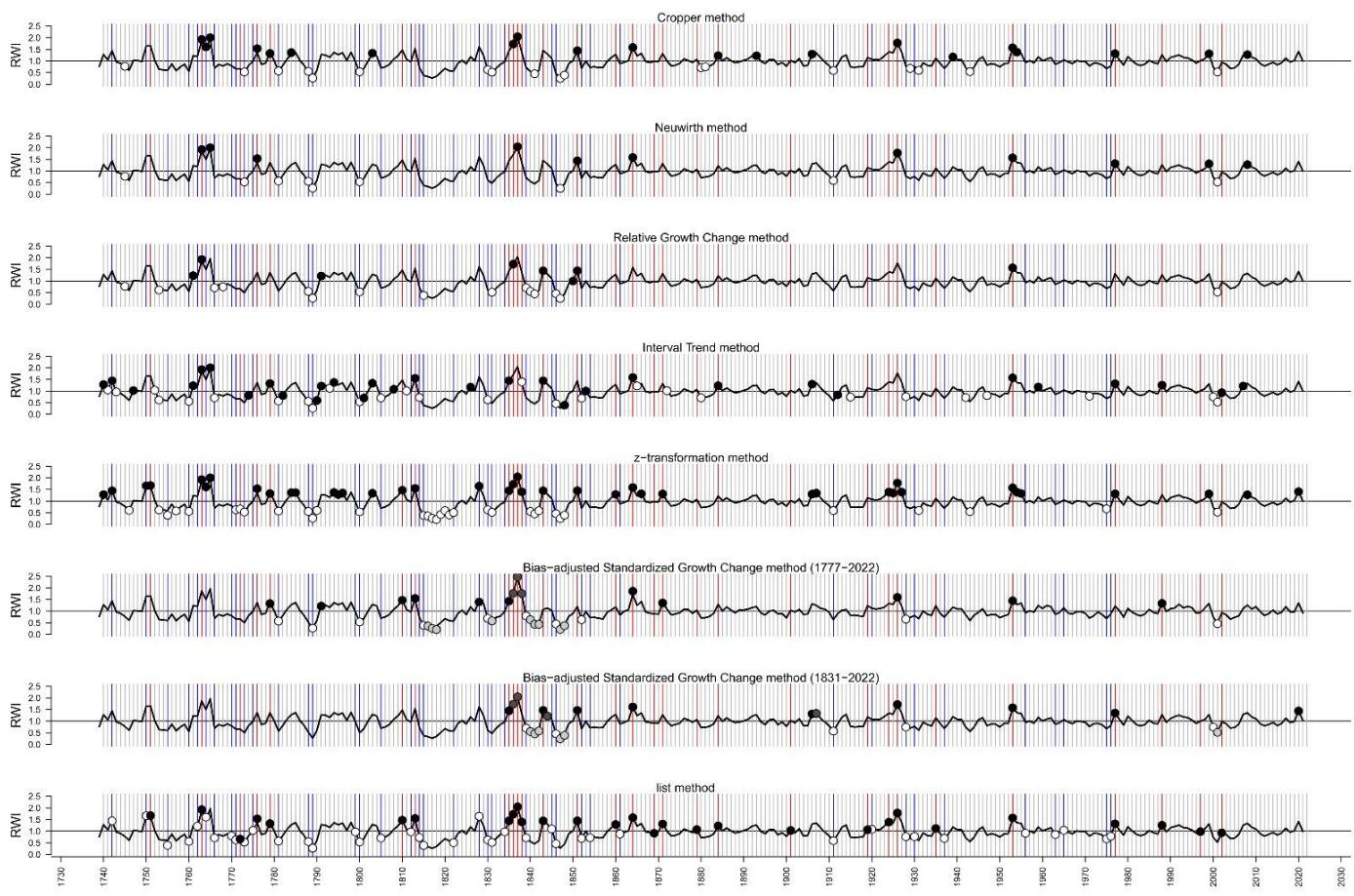
Fig. SF1. Pointer years of Scots pine determined by different methods: Normalisation in a moving window (Cropper, Neuwirth), Relative Growth Change, Interval Trend, Z-transformation, Bias-adjusted Standardised Growth Change (for two periods: 1777–2020 and 1831–2020) (van der Maaten-Theunissen et al., 2015, 2021; Buras et al., 2020, 2022), and the list method (Yamaguchi, 1991). The following parameters were applied: for Cropper and Neuwirth, a 13-year moving window was used to calculate local growth deviations, with a series threshold requiring 75% of trees to exhibit an event year; Neuwirth further applied thresholds of 1, 1.28, and 1.645 to identify weak, strong, and extreme events. Relative Growth Change (RGC) was determined by comparing each year to the 4 preceding years, defining a pointer year when at least 75% of trees showed a growth change exceeding +60% or -40%. The Interval Trend method identified years where a minimum of 95% of trees displayed a consistent upward or downward growth trend, while Z-transformation defined pointer years based on a standard deviation (z-score) threshold of 1. Black (white) circles denote positive (negative) pointer years determined by the respective method. Red (blue) lines denote all positive (negative) pointer years determined by different methods.
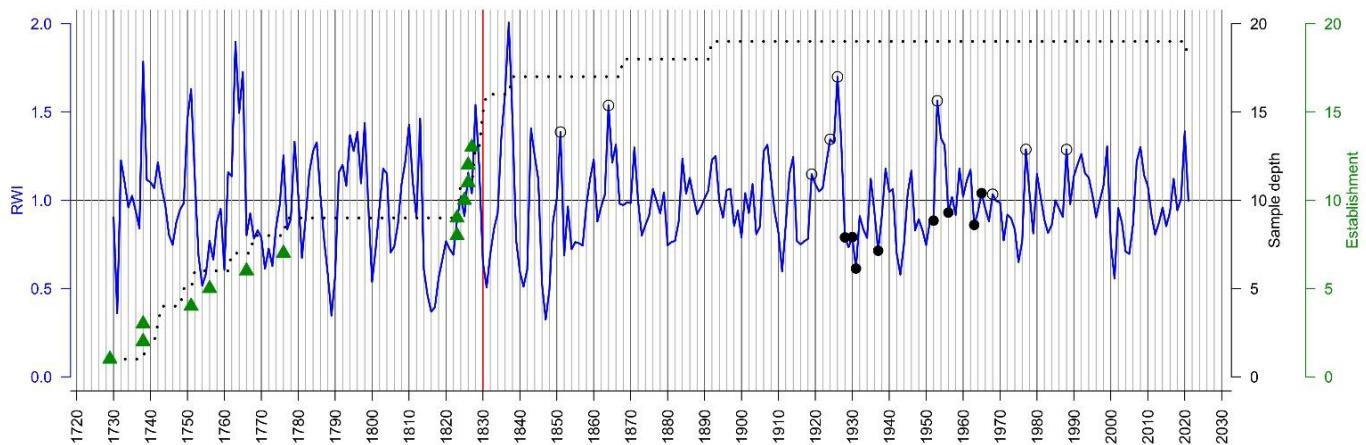
Fig. SF2. Scots pine (*Pinus sylvestris* L.) chronology (blue line), selected pointer years aligning with regional data (Cedro and Lamentowicz, 2008; Dauškane et al., 2011; Edvardsson et al., 2015, 2019) (circles), and tree recruitment dates (green triangles) of living peatland trees in Wielkie Bagno, Solska Forest. RWI – ring width index. Sample depth is denoted by a dotted line, fire date recorded in the tree ring material by red vertical line, and positive (negative) pointer years by open black (filled black) circles.

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