RCS Paper – Part 2 – Suplementary Material

Figure SM1 – A chronology was created using one-curve RCS standardisation with power transform (Cook and Peters 1997) and tree indices created as differences using the Yamal TRW data. (a) Chronology indices plotted by year and tree counts (grey shading), (b) standard deviation for each chronology year, (c) standard deviations sorted by chronology index size. There is a clear relationship between chronology index value and standard deviation (c). The magnitude of the slope is less than that of Figure 2c and thus would be over-corrected by the division of standard deviation by index value.

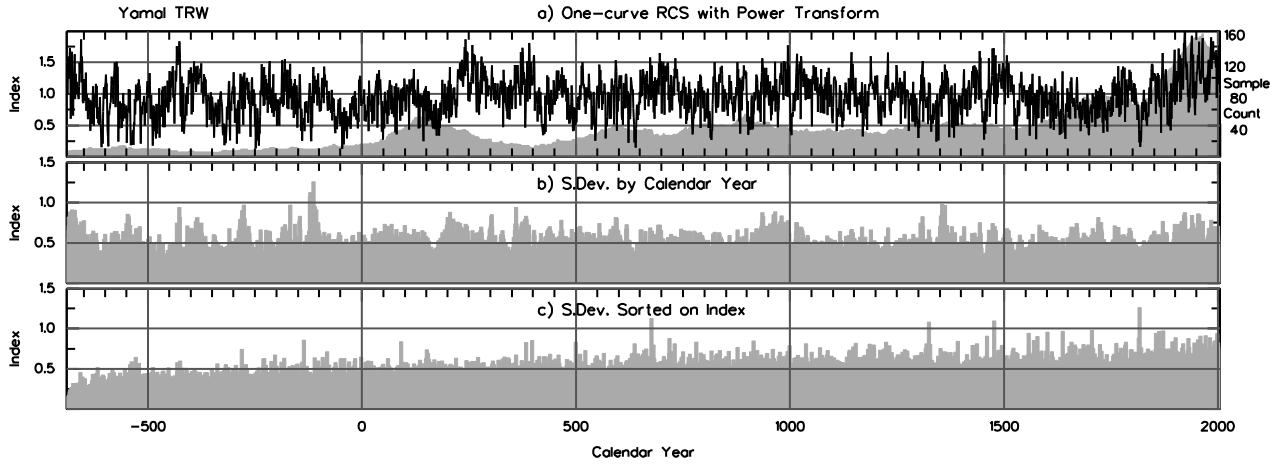

Figure SM2 – Standard deviation in each year of the chronologies created from the Yamal trees shown in Figure 7. Separate chronologies were generated as the average of tree indices created using one-curve, two-curve, three-curve and four-curve SF RCS with tree-indices transformed to have a normal. The standard deviations for each year of the chronologies containing all the variance (a), the variance associated with the mean values of each index series (b), and the variance associated with the slopes of each index series (c).

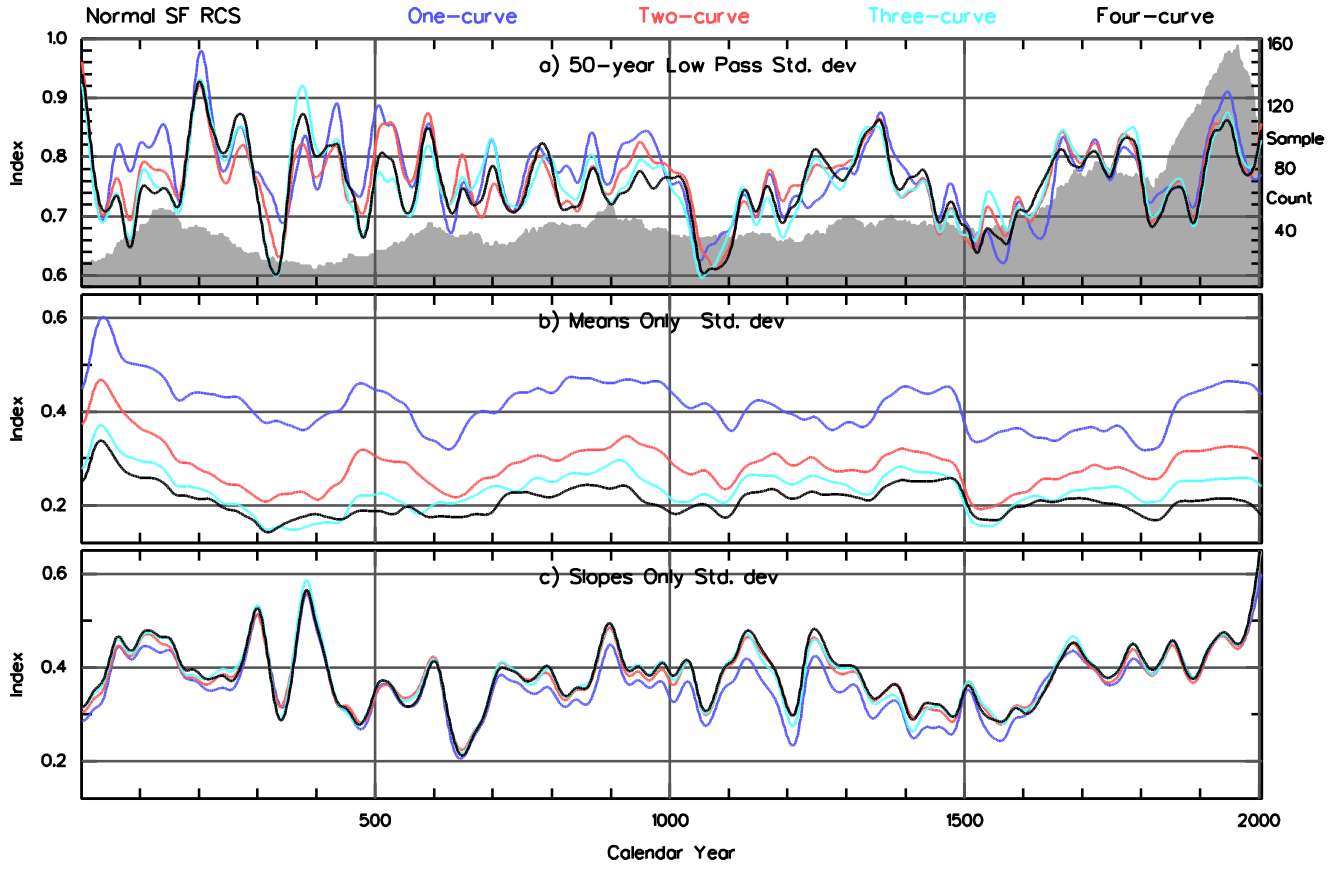

Figure SM3 – Standard deviation in each year of the chronologies created from the Tibetan Plateau trees shown in Figure 8. Separate chronologies were generated as the average of tree indices created using one-curve, two-curve, three-curve and four-curve SF RCS with tree-indices transformed to have a normal. The standard deviations for each year of chronologies containing all the variance (a), the variance associated with the mean values of each index series (b), and the variance associated with the slopes of each index series (c).