

Last phase of the Little Ice Age forced by volcanic eruptions

Supplementary Figures

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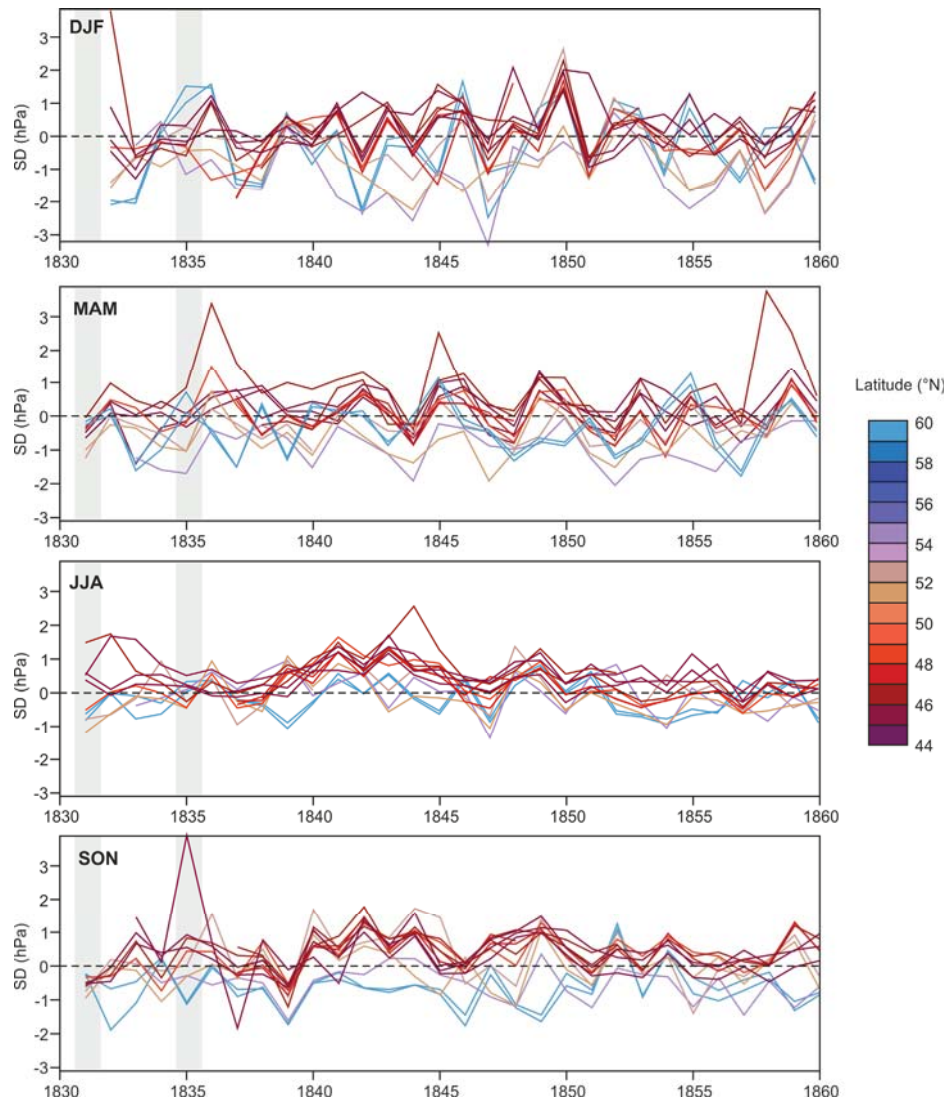


Figure S1 | Change in the European cyclone track. Standardized band-passed filtered daily surface pressure variability at 13 European stations (colour indicates latitude) for different seasons expressed as anomalies from a 1961-1990 climatology. Bars indicate volcanic eruptions. The area of maximum variability in the climatology stretches from Scotland to Scandinavia⁶⁴. Years in which northern stations (blue lines) have negative anomalies but midlatitude stations (red) positive anomalies are interpreted as southward shift, years with positive anomalies at all or most of the stations as intensification of the cyclone track.

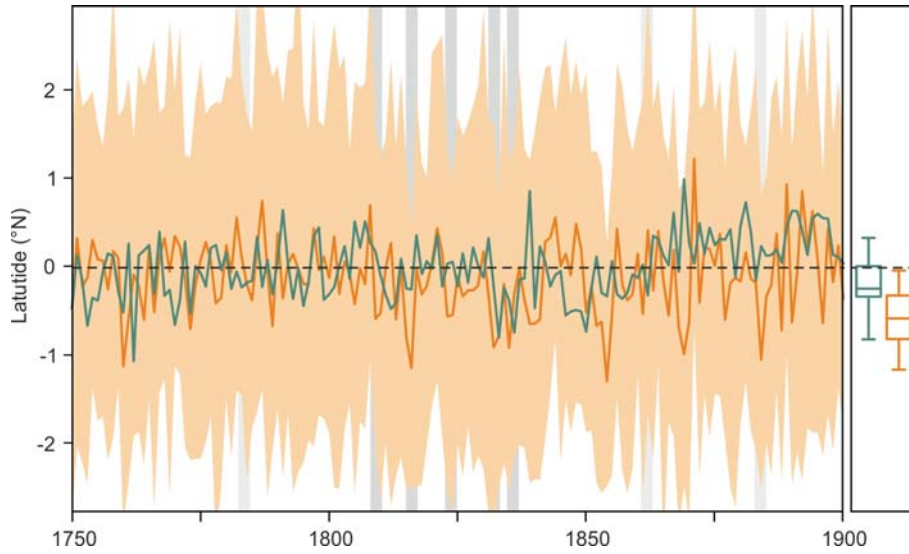


Figure S2 | Latitudinal changes of the northern tropical edge. Latitude of the zonal mean subtropical jet at 200 hPa (orange, with 95% of ensemble spread shaded) and of the downwelling branch of the northern Hadley cell (green, spread not shown for better visualisation) in the palaeo-reanalysis in April to September. Anomalies refer to the period 1779-1808. Bars indicate volcanic eruptions. Boxplots show post-volcanic warm season (box indicates quartiles, whiskers extend to the furthest observation within 1.5 x interquartile range from the box).