



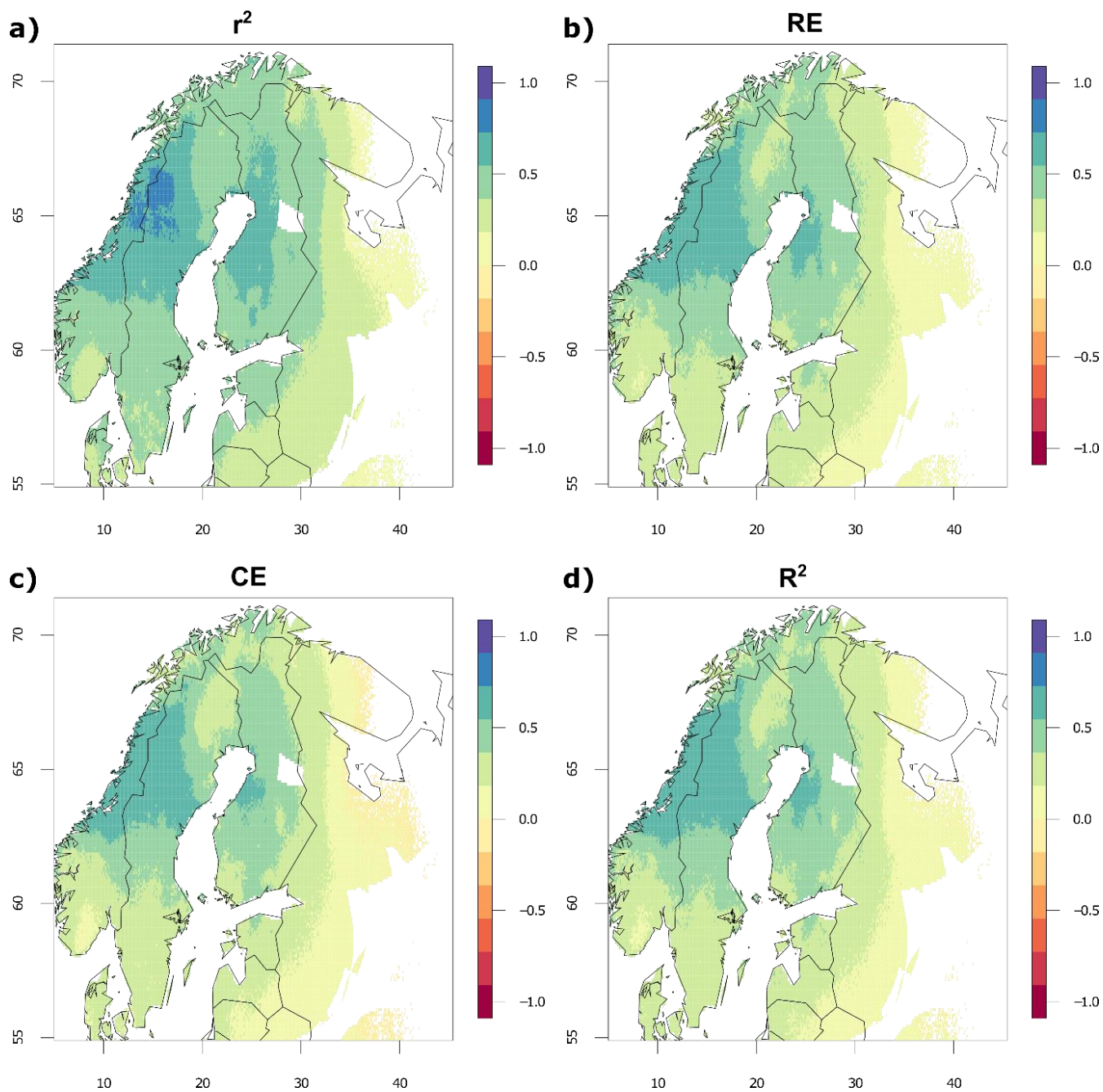
*Supplement of*

## **Recession or resilience? Long-range socioeconomic consequences of the 17th century volcanic eruptions in northern Fennoscandia**

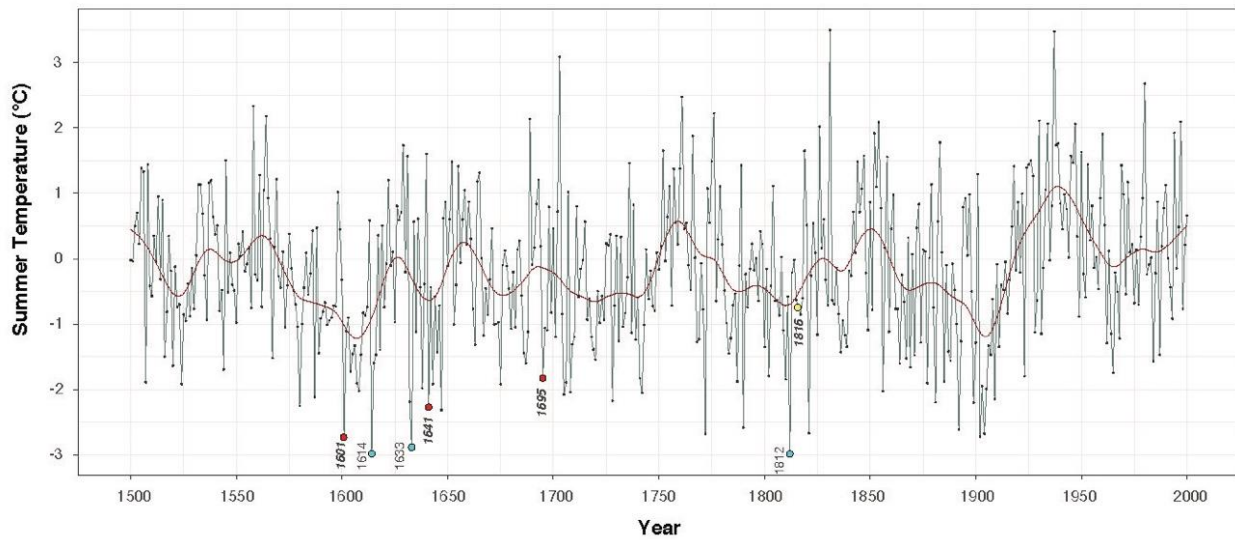
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**Figure S1.** Calibration/verification statistics of the principal component regressions used for JJA temperature field reconstruction. The maps (a, d) represent the median values of the coefficients of determination ( $R^2$  for the calibration period,  $r^2$  for the verification period), (b) the RE (reduction of error) and (c) CE (coefficient of efficiency) statistics computed. Regression models were calibrated on JJA temperatures obtained from the E-OBS pre-1950 and v22.0e gridded datasets ( $0.1 \times 0.1^\circ$  lat/long) over the period 1920–2000.



**Figure S2.** Summer (JJA) temperature anomalies (with respect to 1961–1990) reconstructed for the period 1500–2000 over Ostrobothnia. The red dots and years in bold indicates the JJA anomalies observed in the aftermath of the 1600 Huaynaputina, 1640/41 (Koma-ga-take and Parker) and 1695 unidentified eruptions. Yellow dots show the cooling observed after the 1815 Tambora eruption. Blue dots show the three coolest summers (1614, 1633, 1812) of the last 500 years.