

**Table S3.** Mantel tests at the county-level using downsampled data.

	Phase correlations	
	Correlation	<i>p</i> -value
<i>Mantel tests</i>		
Population*	−0.21	0.04
Distance	−0.13	0.08
Humidity	0.13	0.087
Temperature	−0.005	0.49
Region†	−0.66	0.0001
<i>partial Mantel tests</i>		
Population, adjusted for:		
Distance	−0.23	0.03
Humidity	−0.21	0.026
Temperature	−0.21	0.041
Region	−0.04	0.35
Distance, adjusted for:		
Population	−0.15	0.05
Humidity	−0.03	0.33
Temperature	−0.26	0.0006
Region	0.09	0.15
Humidity, adjusted for:		
Population	0.16	0.04
Distance	0.04	0.33
Temperature	0.20	0.01
Region	−0.11	0.11
Temperature, adjusted for:		
Population	0.009	0.43
Distance	−0.22	0.001
Humidity	−0.16	0.03
Region	−0.15	0.04
Region, adjusted for:		
Population	−0.64	0.0001
Distance	−0.66	0.0001
Humidity	−0.66	0.0001
Temperature	−0.67	0.0001

Mantel and partial Mantel tests using Spearman correlations to detect associations between the phase synchrony of Norwegian, Swedish, and Danish counties and a number of predictor variables (using downsampled Norwegian and Danish data).

\* represents the product of population sizes for each municipality pair.

† binary variable indicating whether two counties are in the same country (0) or not (1).