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Supplementary material

Appendix 1.

Table A1. Loadings of principal components (PCs) with monthly indices of local temperature (T).

parameter	PC1	PC2
Tmean (Dec)	-0.01	**0.90**
Tmin (Dec)	-0.05	**0.91**
Tmax (Dec)	0.07	**0.87**
Tmean (Jan)	**0.66**	**0.59**
Tmin (Jan)	**0.70**	**0.57**
Tmax (Jan)	**0.61**	**0.60**
Tmean (Feb)	**0.85**	-0.16
Tmin (Feb)	**0.82**	-0.17
Tmax (Feb)	**0.85**	-0.15
Tmean (Mar)	**0.76**	0.27
Tmin (Mar)	**0.75**	0.24
Tmax (Mar)	**0.75**	0.26
Tmean (Apr)	0.04	0.18
Tmin (Apr)	0.11	0.08
Tmax (Apr)	0.00	0.22
Total variance (%)	*34.2*	*25.3*
Eigenvalue	*5.13*	*3.79*

Notes: Loading values which exceeded the lower threshold of large effect size (>0.50) were marked with bold (Cohen 1988). Tmean: mean temperature, Tmin: minimum temperature, Tmax: maximum temperature.

Table A2. Loadings of principal components (PCs) with monthly indices of local precipitation.

parameter	PC1	PC2
Precipitation (Dec)	-0.12	**0.86**
Precipitation (Jan)	**0.58**	**0.60**
Precipitation (Feb)	**0.77**	-0.29
Precipitation (Mar)	**0.71**	0.14
Precipitation (Apr)	-0.02	-0.00
Total variance (%)	*28.9*	*24.3*
Eigenvalue	*1.45*	*1.22*

Notes: Loading values which exceeded the lower threshold of large effect size (>0.50) were marked with bold (Cohen 1988).

Table A3. Loadings of principal components (PCs) with monthly indices of the North Atlantic Oscillation (NAO), Arctic Oscillation (AO) and East Atlantic Pattern (EA).

Month	NAO PC1	PC2	PC3	AO PC1	PC2	PC3	EA PC1	PC2
November	**0.93**	0.07	0.01	0.08	0.12	**0.91**	-0.05	**0.86**
December	**0.83**	0.10	0.42	**0.69**	-0.02	**0.55**	0.40	0.44
January	0.20	0.04	**0.92**	**0.90**	0.12	0.08	**0.60**	0.43
February	-0.17	**0.76**	0.46	**0.55**	**0.63**	-0.25	**0.66**	0.35
March	0.29	**0.87**	-0.13	0.02	**0.92**	0.19	**0.81**	-0.24
Total variance (%)	*34.0*	*27.2*	*25.2*	*32.0*	*25.3*	*24.8*	*32.2*	*25.9*
Eigenvalue	*1.70*	*1.36*	*1.26*	*1.60*	*1.26*	*1.24*	*1.61*	*1.31*

Notes: Loading values which exceeded the lower threshold of large effect size (>0.50) were marked with bold (Cohen 1988)

Table A4. Effect sizes of Pearson's correlations between principal components (PCs) of temperature, precipitation, Arctic Oscillation (AO), North Atlantic Oscillation (NAO), Multivariate ENSO Index (MEI) and East Atlantic Pattern (EA).

	AO PC1	AO PC2	NAO PC1	NAO PC2	MEI PC	EA PC1	EA PC2	Precipitation PC1	Precipitation PC2
Temperature PC1	0.13	0.00	-0.07	0.27	0.13	0.44*	0.20	0.13	0.00
Temperature PC2	0.27	0.00	0.10	-0.20	0.29	0.15	-0.10	0.08	0.11
AO PC1			0.00	0.10	0.31	0.00	0.12	0.01	-0.31
AO PC2			-0.14	0.00	-0.17	0.35*	-0.21	0.00	-0.21
NAO PC1					0.37*	-0.12	0.11	0.09	-0.16
NAO PC2					-0.17	0.17	-0.04	-0.13	-0.29
MEI PC						0.22	0.40*	0.07	-0.15
EA PC1								0.30	-0.09
EA PC2								0.25	-0.12

Notes: NAO PC1 was corrected for AO PC1 and NAO PC2, while temperature PC1 and precipitation PC1 were corrected for AO PC2. *$P < 0.0$