Zhang C, Wang J, Li S, Hou L (2022).
Research on the multiscale characteristics of the early spring temperature and response to climate indices over the past 179 years in the Qinling Mountains
iForest – Biogeosciences and Forestry – doi: 10.3832/ifor4069-015

Supplementary Material

Fig. S1 - Comparison of the temperature in the Qinling Mountains to the rest of the time series at the interdecadal and quasi-century scales. (a) China's nearly one hundred-year temperature series (Tang & Ren 2005); (b) early summer temperature sequence in the northern Sichuan Plateau (Li et al. 2015); (c) May-July temperature sequence in central Qinling (Hu et al. 2018); (d) early spring reconstructed temperature in the Qinling Mountains over the past 179 years.

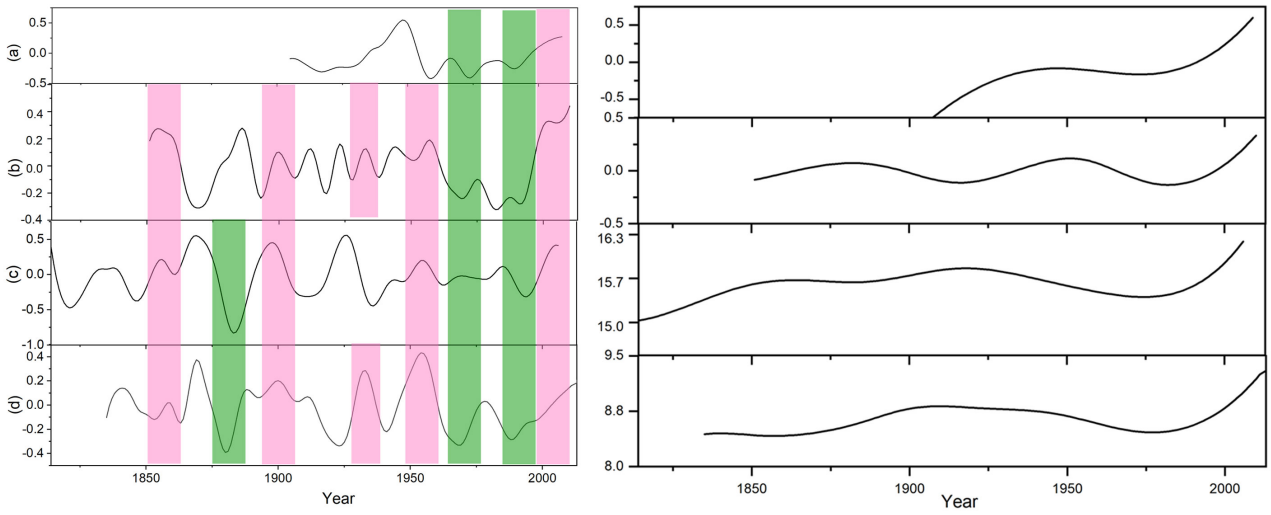


Fig. S2 - Comparison of the temperature and AMO index at the different time scales in the Qinling Mountains from February to April, 1874–2013.

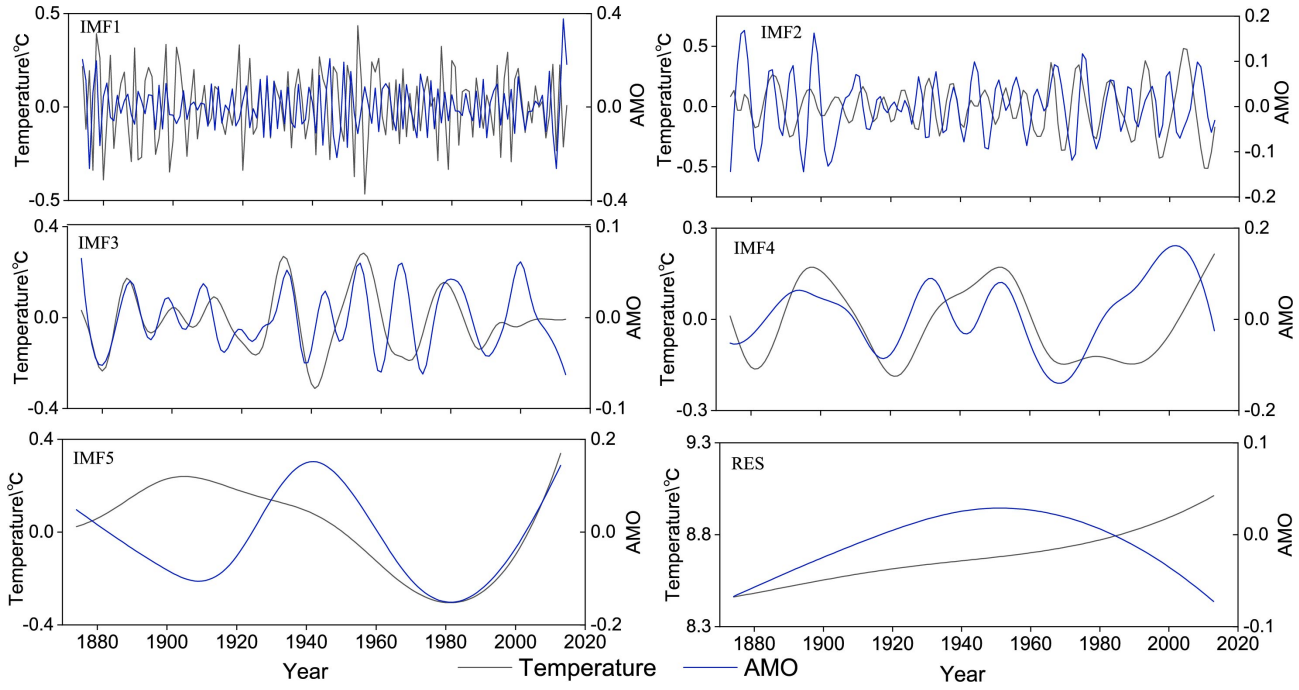


Fig. S3 - TDIC correlation analysis of the temperature and AMO in Qinling from February to April.

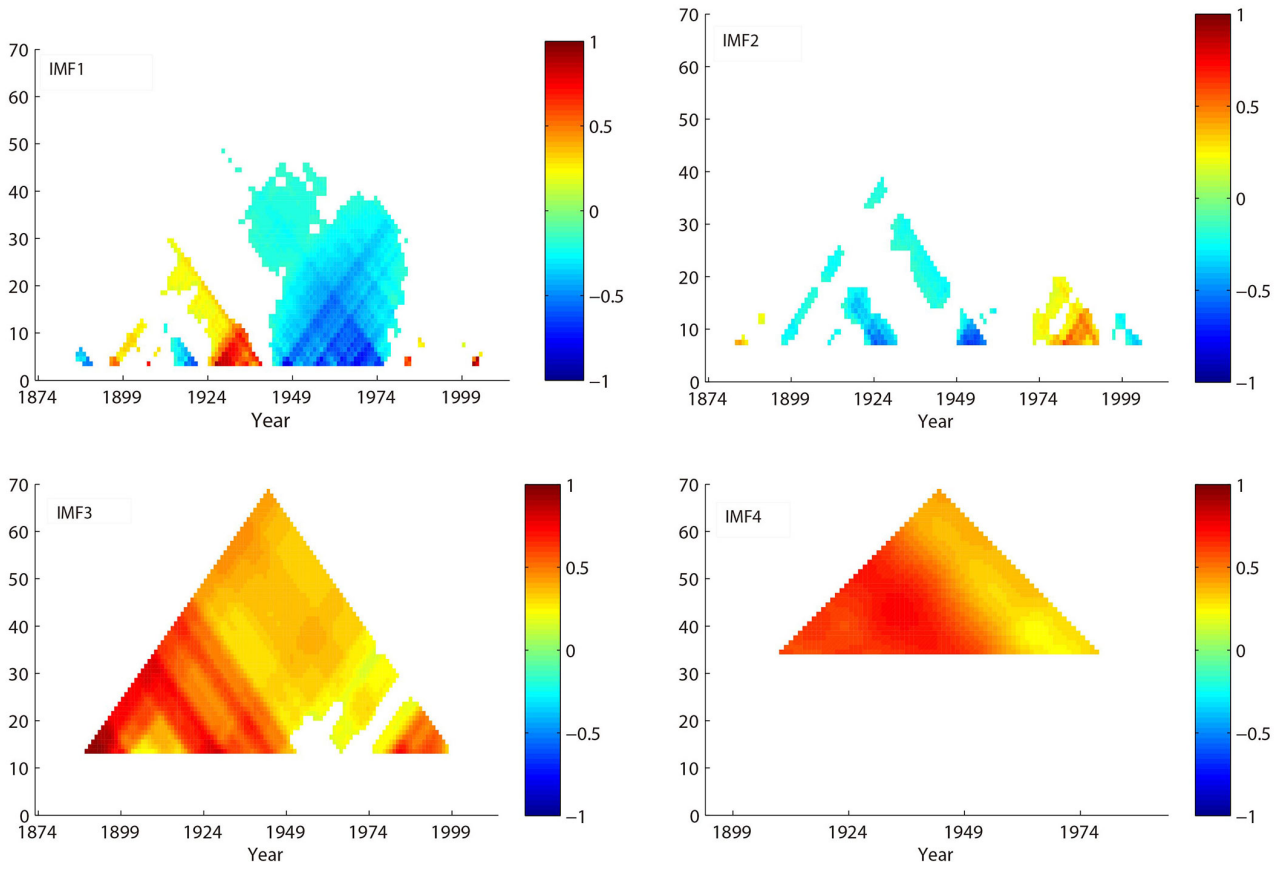
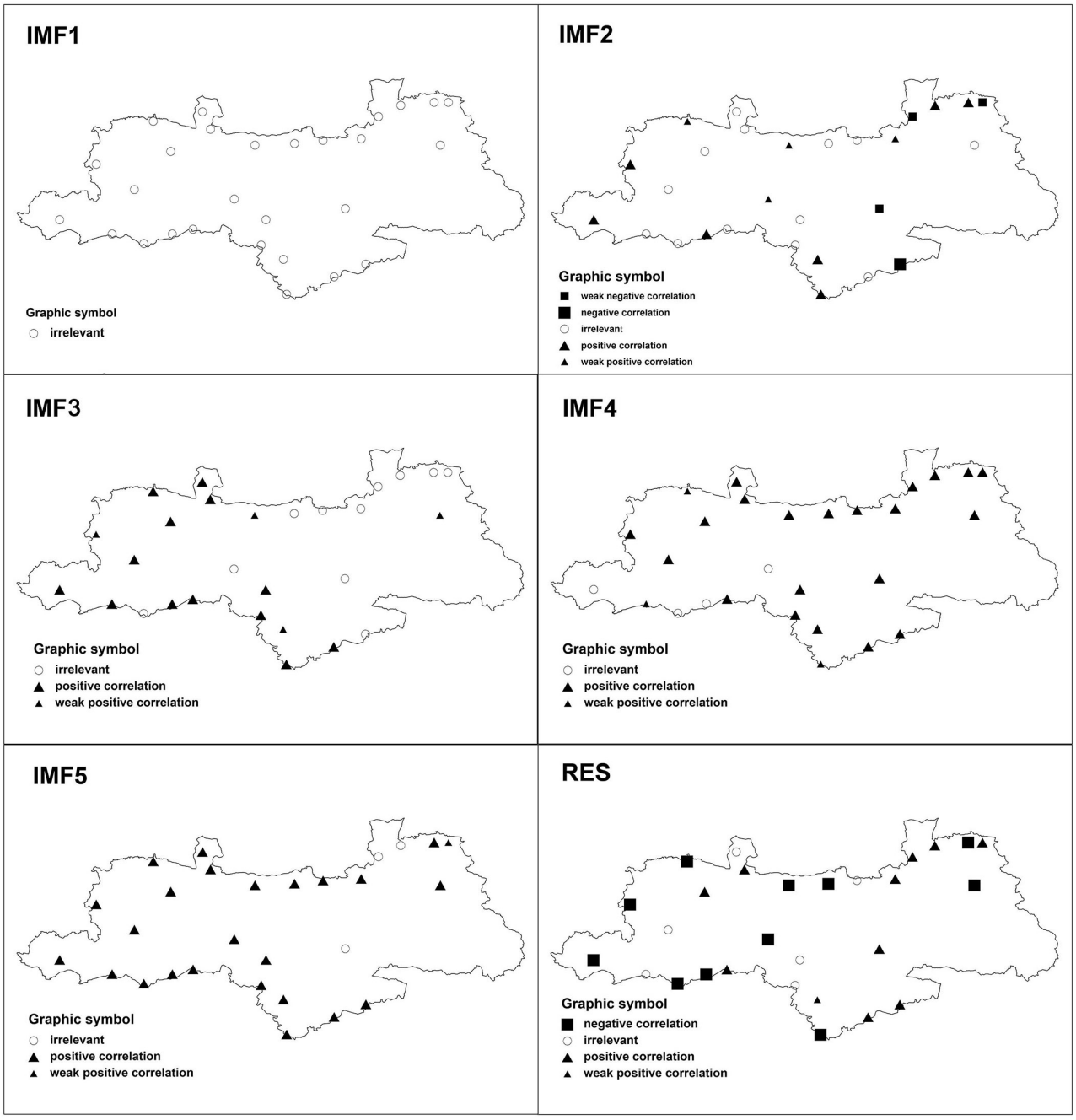


Fig. S4 - Spatial correlation between the temperature and AMO in February to April in the Qinling Mountains (positive correlation and negative correlation both exceed 0.01 confidence test; weak positive correlation and weak negative correlation both exceed 0.05 confidence test; irrelevant means do not exceed confidence test).



Tab. S1 - Multiscale cycles of the various climate signal.

Cycle (a)	SOI (P5)	Nino3.4 (P5)	PDO (2–4)	AMO (2–4)	NAO (P12)	NP (P5)	GATA (2–4)
IMF1	3.08	3.12	3.07	2.98	2.71	2.98	2.88
IMF2	6.72	5.69	6.67	6.37	5.60	6.97	5.95
IMF3	14.10	13.83	15.24	14.74	12.34	13.55	12.77
IMF4	32.89	29.00	35.56	35.00	27.54	32.86	34.00
IMF5	49.33	79.50	65.00	70.00	71.60	57.50	72.00

Tab. S2 - Correlation between the temperature in Qinling and the climate signal components. (*): P<0.05; (**): P<0.01.

Cycle	SOI	Nino3.4	PDO	AMO	NAO	NP	GATA
IMF1	-0.15	0.23**	0.11	-0.11	0.08	-0.08	0.30**
IMF2	-0.17**	0.17**	0.03	-0.01	0.40**	-0.09	-0.10
IMF3	0.09	-0.13	-0.01	0.41**	0.07	-0.01	-0.14
IMF4	-0.37**	-0.33**	0.19*	0.39**	0.01	0.14	0.23**
IMF5	-0.26**	0.19*	-0.25**	0.40**	0.49**	-0.20*	0.50**
RES	-0.78**	0.99**	0.74**	-0.01	0.27**	-0.35**	0.99**