Table S1. Equation (1) applied to the trends of the CRU data and RCP scenario. In both cases, the time period is 25 years, 1991-2015 for CRU data, 2015-2039, and 2075-2099 for RCPs. The results in bold correspond to the significative difference (for details see S2-S5 of supplementary material .

Data	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Z (Tmp 2015-2039)																	
RCP4.5	1.662	-0.441	1.387	1.675	**2.577**	-0.317	-0.580	-0.731	0.504	-0.380	1.292	-0.043	-1.069	**-3.415**	**-2.554**	**-2.450**	-1.763
RCP6.0	0.722	-0.086	1.849	**2.274**	**3.035**	1.146	0.855	-0.303	0.338	0.098	0.912	0.156	-0.830	**-2.853**	**-1.943**	-1.477	-1.040
RCP8.5	0.134	-1.090	0.320	1.091	1.906	-1.474	-0.887	**-2.558**	-0.304	-1.684	0.113	-1.188	-1.824	**-3.877**	**-3.481**	**-4.058**	**-2.469**
Z (Tmp 2075-2099)																	
RCP4.5	**3.551**	**3.166**	**4.067**	**4.125**	**4.660**	**1.986**	1.720	**1.940**	**2.542**	0.949	**3.249**	**2.570**	0.752	-0.950	-0.209	0.100	0.744
RCP6.0	0.784	-0.151	1.119	1.632	**2.380**	-0.349	-0.331	-1.465	-0.635	-1.896	-0.623	0.786	-1.731	**-3.283**	**-2.533**	**-3.110**	-1.208
RCP8.5	-1.805	**-3.317**	-1.451	-0.442	0.648	**-2.984**	**-3.255**	**-6.048**	**-2.322**	**-4.419**	-1.751	**-3.506**	**-3.169**	**-5.741**	**-4.939**	**-5.765**	**-3.806**
Z (Tmx 2015-2039)																	
RCP4.5	1.825	0.352	**1.970**	**2.057**	**2.517**	-1.359	-1.675	0.163	0.509	0.827	1.684	1.462	-1.763	**-3.287**	**-3.632**	-1.557	**-2.089**
RCP6.0	1.104	0.061	**2.341**	**2.205**	**2.688**	-0.689	0.701	0.401	0.783	1.535	1.542	1.328	-1.474	**-2.473**	**-2.852**	-0.977	-1.636
RCP8.5	0.809	0.104	1.204	1.308	**2.026**	**-2.075**	-1.937	-0.853	-0.145	-0.123	0.749	0.835	**-2.587**	**-3.676**	**-4.616**	**-2.068**	**-2.813**
Z (Tmx 2075-2099)																	
RCP4.5	**2.640**	**3.015**	**3.898**	**3.483**	**4.050**	0.112	0.857	**2.193**	**2.182**	**2.208**	**2.508**	**3.284**	0.404	-1.149	-1.690	0.790	-0.292
RCP6.0	1.558	0.690	2.350	1.254	**1.989**	-1.295	0.879	-0.086	0.242	0.140	1.323	**2.928**	**-2.433**	**-3.730**	**-3.892**	-1.249	**-2.059**
RCP8.5	-0.183	-1.927	-0.636	-0.210	0.596	**-3.572**	**-2.957**	**-4.527**	-1.820	-1.775	-0.979	-1.656	**-3.749**	**-5.371**	**-6.374**	**-4.425**	**-4.156**
Z (Tmn 2015-2039)																	
RCP4.5	0.169	-0.063	-0.225	1.672	**2.907**	0.722	-0.735	**-2.186**	-1.095	-2.061	-0.373	-1.907	-0.820	**-2.648**	-1.061	**-2.354**	-1.068
RCP6.0	0.243	-0.234	0.189	1.338	**2.356**	1.500	0.764	-1.043	-0.738	-1.013	-1.396	-1.524	-0.251	**-2.329**	-1.003	-1.667	-0.366
RCP8.5	-0.870	-1.385	-1.187	0.440	1.812	0.269	-1.232	**-2.908**	**-2.439**	**-3.595**	-1.768	**-2.503**	-1.728	-3.160	-1.549	**-3.219**	**-2.696**
Z (Tmn 2075-2099)																	
RCP4.5	**2.335**	1.948	**2.281**	**3.637**	**4.604**	**2.216**	**2.176**	0.664	1.043	0.370	1.561	0.730	0.924	-0.606	1.169	-0.176	1.438
RCP6.0	-1.458	0.456	-1.465	-0.061	1.064	0.151	-0.867	-1.909	**-2.170**	**-3.208**	-1.582	-1.600	**-2.419**	**-2.862**	-0.907	**-3.073**	-1.346
RCP8.5	**-2.713**	**-3.658**	**-3.275**	-0.825	0.207	-1.094	**-2.986**	**-6.393**	**-3.344**	**-5.146**	**-4.953**	**-4.873**	**-2.485**	**-5.272**	**-2.971**	**-4.677**	**-5.009**
Z (Pre 2015-2039)																	
RCP4.5	1.717	1.594	1.573	**2.332**	**2.086**	0.267	-1.872	-0.635	0.709	0.232	1.231	0.745	0.346	**1.938**	**2.027**	0.179	**2.733**
RCP6.0	1.593	1.769	1.886	**2.843**	**2.844**	0.108	**-1.977**	-0.691	0.565	0.312	1.024	0.969	0.001	1.852	1.848	0.134	**2.546**

RCP8.5	1.682	1.618	**1.963**	**2.636**	**2.189**	0.148	-1.609	-0.428	0.503	0.226	1.089	0.838	0.322	1.877	**2.090**	0.229	**2.716**
Z (Pre 2075-2099)																	
RCP4.5	1.610	1.486	1.423	**2.347**	**1.918**	0.230	-1.883	-0.703	0.744	0.383	1.169	0.649	-0.170	1.661	**1.963**	0.117	**2.584**
RCP6.0	1.316	1.425	1.245	**2.859**	**1.965**	0.012	-1.740	-0.316	0.435	-0.188	1.123	0.375	0.295	1.834	**2.066**	0.205	**2.699**
RCP8.5	**2.539**	**4.609**	**10.340**	**7.990**	**13.842**	1.220	1.156	**7.854**	**4.090**	**4.750**	**3.408**	**4.481**	**6.660**	**5.675**	**5.094**	**2.942**	**4.945**

Table S2. Climate variable trends (Tmx) and standard errors of the 17 study points for the CRU and RCP's projection data. Note: 1539 mean 2015-2039 period and 7599 mean 2075-2099 period.

City Points	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error
	TMX OBS		RCP45 1539		RCP45 7599		RCP60 1539		RCP60 7599		RCP85 1539		RCP85 7599	
1	0.0399	0.0103	0.0199	0.00373	0.00999	0.00471	0.026	0.00723	0.021	0.0064	0.0308	0.00449	0.0421	0.00613
2	0.0393	0.0102	0.0353	0.00498	0.00364	0.00598	0.0385	0.00801	0.0299	0.00901	0.0381	0.00516	0.0637	0.0075
3	0.0494	0.0101	0.0269	0.00533	0.00667	0.00426	0.0225	0.00547	0.0229	0.00501	0.0357	0.00524	0.057	0.00637
4	0.0422	0.00966	0.0216	0.00263	0.00711	0.00286	0.0196	0.00342	0.0289	0.00437	0.0292	0.00232	0.0443	0.00246
5	0.0497	0.0104	0.0228	0.00245	0.00637	0.00251	0.0198	0.00394	0.0275	0.00404	0.028	0.00256	0.0433	0.00265
6	0.00673	0.00939	0.0197	0.0017	0.00564	0.00242	0.0135	0.00287	0.0204	0.00482	0.0271	0.00286	0.0439	0.00448
7	0.0189	0.00712	0.0327	0.00414	0.011	0.00585	0.0114	0.00797	0.00858	0.00933	0.0349	0.00418	0.0512	0.00828
8	0.0272	0.00717	0.0259	0.00345	0.00994	0.00324	0.0237	0.00497	0.0281	0.00755	0.0337	0.00256	0.0642	0.00392
9	0.036	0.00985	0.0307	0.00334	0.0129	0.00387	0.0262	0.0077	0.0327	0.00936	0.0375	0.00304	0.0563	0.00523
10	0.0316	0.00966	0.0233	0.00271	0.00844	0.00408	0.015	0.00485	0.0299	0.00729	0.0329	0.00417	0.0511	0.00522
11	0.0395	0.0101	0.0209	0.00447	0.0129	0.00323	0.022	0.00516	0.0238	0.00623	0.0314	0.00385	0.0508	0.00558
12	0.0394	0.00922	0.0247	0.00401	0.00681	0.00367	0.0256	0.00479	0.00916	0.00465	0.0308	0.00457	0.056	0.00392
13	0.00864	0.0088	0.0245	0.00186	0.00501	0.00173	0.0221	0.00242	0.0316	0.0034	0.0319	0.00184	0.0424	0.0019
14	-0.00546	0.00942	0.0259	0.0015	0.00564	0.00214	0.0189	0.00287	0.0332	0.00432	0.0301	0.0022	0.0475	0.00291
15	-0.00903	0.00913	0.0249	0.00197	0.00705	0.00267	0.0186	0.00324	0.0317	0.00511	0.0337	0.00152	0.0515	0.00261
16	0.00874	0.00688	0.0196	0.00113	0.00321	0.00128	0.0157	0.00182	0.0182	0.00316	0.0233	0.00149	0.0409	0.00234

Table S3. Climate variable trends (Tmn) and standard errors of the 17 study points for the CRU and RCP's projection data. Note: 1539 mean 2015-2039 period and 7599 mean 2075-2099 period.

City Points	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error
	TMN OBS		RCP45 1539		RCP45 7599		RCP60 1539		RCP60 7599		RCP85 1539		RCP85 7599	
1	0.0262	0.00655	0.0249	0.004	0.00791	0.00429	0.0235	0.00896	0.049	0.0142	0.0335	0.00524	0.0484	0.0049
2	0.0246	0.00674	0.0251	0.00408	0.00955	0.00377	0.0265	0.0045	0.0208	0.0049	0.0352	0.00362	0.0568	0.00566
3	0.0224	0.00803	0.0243	0.00258	0.00338	0.00224	0.0207	0.00405	0.0369	0.00578	0.0326	0.00305	0.0497	0.00223
4	0.0364	0.00866	0.0213	0.00256	0.00355	0.00256	0.0228	0.00532	0.0372	0.00965	0.0324	0.00274	0.044	0.00314
5	0.0472	0.00931	0.0194	0.00218	0.00294	0.00239	0.0233	0.00402	0.035	0.00669	0.0297	0.00255	0.0452	0.00256
6	0.0327	0.0125	0.0236	0.00156	0.00477	0.00161	0.0135	0.00274	0.0307	0.00417	0.0293	0.00169	0.0468	0.0031
7	0.0189	0.00712	0.0243	0.00179	0.00283	0.00195	0.0129	0.00329	0.0263	0.00469	0.0279	0.00163	0.0424	0.00335
8	0.011	0.00671	0.0265	0.00229	0.00633	0.00209	0.0186	0.00284	0.0269	0.00493	0.0321	0.00276	0.0565	0.00237
9	0.018	0.00748	0.0265	0.00206	0.0095	0.00322	0.0245	0.00464	0.0458	0.0104	0.037	0.00217	0.0476	0.00473
10	0.00642	0.00857	0.0259	0.00398	0.00271	0.00518	0.0179	0.00741	0.054	0.0121	0.0381	0.00205	0.0552	0.00405
11	0.022	0.00696	0.0248	0.00279	0.00983	0.00351	0.0335	0.0044	0.0385	0.00776	0.0354	0.003	0.0586	0.00248
12	0.00896	0.0081	0.0248	0.00183	0.00278	0.00243	0.0219	0.00254	0.0231	0.00353	0.0299	0.00208	0.0503	0.00252
13	0.0139	0.00959	0.0219	0.00178	0.00487	0.00183	0.0165	0.00389	0.0397	0.00466	0.0309	0.00219	0.0387	0.00276
14	-0.00274	0.00882	0.0213	0.00214	0.00293	0.00308	0.0184	0.00213	0.0242	0.00328	0.0257	0.00178	0.0447	0.00178
15	0.0116	0.00843	0.0208	0.002	0.00138	0.00229	0.0204	0.00241	0.0201	0.00408	0.0252	0.00245	0.0377	0.00247
16	0.0017	0.00789	0.0206	0.00148	0.00311	0.00126	0.0153	0.00206	0.0278	0.00314	0.0278	0.00186	0.0403	0.00242

Table S4. Climate variable trends (Tmp) and standard errors of the 17 study points for the CRU and RCP's projection data. Note: 1539 mean 2015-2039 period and 7599 mean 2075-2099 period.

City Points	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error	m(°C/yr)	std. error
	TMP OBS		RCP45 1539		RCP45 7599		RCP60 1539		RCP60 7599		RCP85 1539		RCP85 7599	
1	0.033	0.00641	0.0209	0.00345	0.0073	0.00336	0.0272	0.00483	0.0256	0.00692	0.032	0.00375	0.0476	0.00493
2	0.032	0.00644	0.0354	0.00422	0.00595	0.00512	0.0328	0.00661	0.0335	0.00748	0.0409	0.00501	0.0642	0.00726
3	0.0357	0.00721	0.0252	0.0023	0.0044	0.00269	0.0213	0.00294	0.0266	0.00376	0.0332	0.00296	0.0468	0.00255
4	0.0392	0.00795	0.0257	0.00132	0.00541	0.00197	0.0202	0.00257	0.0252	0.00321	0.0302	0.00218	0.0429	0.00259
5	0.0485	0.00895	0.0251	0.00152	0.00581	0.00195	0.0198	0.00305	0.0258	0.00329	0.0309	0.00227	0.0425	0.00235
6	0.0193	0.00663	0.0215	0.00205	0.00507	0.00271	0.0112	0.00244	0.022	0.00395	0.0295	0.00198	0.0422	0.00386
7	0.0189	0.00712	0.0231	0.00131	0.00611	0.00214	0.0122	0.00327	0.0216	0.00394	0.0255	0.00216	0.0443	0.00319
8	0.0187	0.00632	0.0237	0.00261	0.00561	0.00236	0.0208	0.00284	0.0316	0.00613	0.0361	0.00251	0.0616	0.00322
9	0.0268	0.00658	0.0232	0.00275	0.009	0.00239	0.0243	0.00334	0.0319	0.0046	0.0289	0.00204	0.0442	0.00358
10	0.0194	0.00678	0.0222	0.00284	0.0116	0.00464	0.0186	0.00449	0.0398	0.00835	0.0314	0.00219	0.0518	0.00279
11	0.0309	0.00653	0.022	0.00219	0.0081	0.00257	0.024	0.00381	0.0364	0.00593	0.0301	0.0026	0.0433	0.00274
12	0.0242	0.00646	0.0245	0.00228	0.00555	0.0033	0.0231	0.00276	0.0178	0.00494	0.0327	0.00307	0.0491	0.00295
13	0.0114	0.00903	0.0212	0.00156	0.0045	0.00159	0.0191	0.0021	0.0279	0.00304	0.0284	0.00229	0.0407	0.00198
14	-0.00387	0.00802	0.0245	0.00216	0.00393	0.00173	0.0201	0.0025	0.0259	0.00423	0.0284	0.00222	0.045	0.00285
15	0.00135	0.00764	0.0215	0.00196	0.00299	0.00177	0.0168	0.00219	0.0234	0.00417	0.029	0.00217	0.0426	0.00337
16	0.0052	0.00616	0.021	0.0019	0.00455	0.00206	0.0152	0.0028	0.0273	0.00354	0.0318	0.00224	0.0423	0.00186

Table S5. Climate variable trends (Pre) and standard errors of the 17 study points for the CRU and RCP's projection data. Note: 1539 mean 2015-2039 period and 7599 mean 2075-2099 period.

City Points	m(mm/yr)	std. error	m(mm/yr)	std. error	m(mm/yr)	std. error	m(mm/yr)	std. error	m(mm/yr)	std. error	m(mm/yr)	std. error	m(mm/yr)	std. error
	PRE OBS		RCP45 1539		RCP457599		RCP601539		RCP607599		RCP857599		RCP857599	
1	0.0309	0.0188	-0.00192	0.00345	0.000216	0.00307	-0.000575	0.00607	0.00526	0.00511	-0.00132	0.00366	-0.0181	0.00434
2	0.0393	0.0251	-0.00111	0.00351	0.00171	0.00303	-0.00639	0.00606	0.00241	0.00627	-0.00185	0.00409	-0.0785	0.00482
3	0.0198	0.0117	0.000925	0.00264	0.00265	0.00286	-0.00314	0.00332	0.00441	0.00397	-0.00381	0.00277	-0.105	0.00296
4	0.0356	0.0133	0.00373	0.00314	0.00362	0.00294	-0.00414	0.00429	-0.0039	0.00373	-0.00039	0.00307	-0.0731	0.00286
5	0.0253	0.0103	0.00334	0.00216	0.00486	0.00273	-0.00576	0.00363	0.0043	0.00284	0.00166	0.00323	-0.121	0.00237
6	0.00782	0.0444	-0.00413	0.00507	-0.00251	0.00592	0.00293	0.00792	0.00726	0.00687	0.00117	0.00458	-0.0467	0.00481
7	-0.0499	0.0276	0.00256	0.00479	0.0034	0.00626	0.00664	0.00749	0.0000516	0.00786	-0.00471	0.00518	-0.0828	0.0069
8	-0.00998	0.0146	-0.0003	0.00433	0.000572	0.00346	0.000789	0.0054	-0.00485	0.00709	-0.00348	0.00411	-0.129	0.00406
9	0.0146	0.0205	-0.000252	0.00424	-0.000924	0.0038	0.00264	0.0052	0.00545	0.00467	0.00407	0.00412	-0.072	0.00528
10	0.00508	0.0173	0.000871	0.00529	-0.00171	0.00387	-0.000515	0.00453	0.00844	0.00437	0.00107	0.00384	-0.0808	0.00525
11	0.0333	0.028	-0.00149	0.00376	0.000392	0.00287	0.0044	0.00351	0.00139	0.00481	0.00254	0.00352	-0.0634	0.00459
12	0.0151	0.02	0.000032	0.00283	0.00198	0.00285	-0.00476	0.00445	0.00742	0.00431	-0.00202	0.00409	-0.0754	0.0028
13	0.000135	0.0211	-0.00721	0.0021	0.00375	0.00216	0.0000975	0.00649	-0.00632	0.0057	-0.00674	0.00314	-0.142	0.00319
14	0.0361	0.0202	-0.00323	0.00192	0.0023	0.00238	-0.00153	0.00217	-0.00119	0.00226	-0.00209	0.0024	-0.0792	0.00217
15	0.0553	0.0282	-0.00234	0.00363	-0.00042	0.00316	0.00259	0.00418	-0.00351	0.00383	-0.00406	0.00338	-0.0896	0.0037
16	0.00667	0.0443	-0.00128	0.00278	0.00145	0.00278	0.000696	0.00364	-0.00246	0.00309	-0.00354	0.00293	-0.124	0.00308

Table S6. Historic trends comparison between City point and Spatial analysis.

	Tmp (Spatial)		Tmp (City point)		Pre (Spatial)		Pre (City point)	
ID	m(°C/yr)	std. error	m(°C/yr)	std. error	m(mm/yr)	std. error	m(mm/yr)	std. error
1	0.0232	0.00197	0.0235	0.00191	0.113	0.172	0.162	0.164
2	0.0213	0.00188	0.0215	0.0019	0.187	0.152	0.195	0.24
3	0.0196	0.00208	0.0196	0.00202	0.261	0.0893	0.265	0.0958
4	0.019	0.00203	0.0183	0.0022	0.243	0.106	0.248	0.117
5	0.0173	0.00253	0.0167	0.00259	0.178	0.0914	0.175	0.0905
6	0.0135	0.00236	0.0134	0.00224	-0.224	0.187	-0.0364	0.288
7	0.0165	0.00256	0.0155	0.0027	-0.538	0.209	-0.386	0.221
8	0.0188	0.00217	0.0192	0.00217	-0.458	0.175	-0.312	0.145
9	0.0236	0.00191	0.0236	0.00191	-0.0743	0.19	-0.064	0.195
10	0.0222	0.00191	0.0224	0.00202	-0.0759	0.183	-0.0657	0.163
11	0.0241	0.00185	0.0252	0.00191	0.051	0.199	-0.0488	0.258
12	0.0218	0.00176	0.0217	0.00178	0.136	0.181	0.137	0.171
13	0.0206	0.00218	0.0207	0.00268	0.0957	0.127	0.215	0.18
14	0.0168	0.00254	0.017	0.00258	0.00666	0.219	0.0402	0.148
15	0.015	0.00239	0.0143	0.00238	0.263	0.182	0.64	0.236
16	0.0237	0.00213	0.0245	0.00212	-0.0267	0.402	-0.0681	0.328
17	0.015	0.00194	0.0144	0.00192	0.583	0.293	0.617	0.323