

## Supplementary information - Appendix A: climate change and epidemiological data

**Table S1 – Countries climate and epidemiological indices**

		WI 1990-2016	T2016	PD			AD/D			ALS/MND		
				DEATHS	PREV	DALY'S	DEATHS	PREV	DALY'S	DEATHS	PREV	DALY'S
1	Afghanistan	0.052	14.392	0.375	0.270	0.362	0.071	-0.015	0.051	0.318	0.032	0.227
2	Albania	0.055	12.533	0.109	0.140	0.124	-0.034	-0.016	-0.030	-0.072	0.068	-0.150
3	Algeria	0.035	23.650	0.424	0.380	0.424	-0.018	-0.043	-0.024	0.069	0.029	-0.086
4	Andorra	0.034	9.600	0.159	0.121	0.141	-0.032	-0.049	-0.044	0.132	0.210	-0.004
5	Angola	-0.003	22.042	0.502	0.197	0.418	0.237	-0.031	0.154	0.186	0.050	0.093
6	Antigua Barbuda	0.018	26.925	0.145	0.123	0.133	0.006	-0.016	-0.005	-0.057	0.049	-0.047
7	Argentina	0.010	14.450	0.010	0.025	0.018	-0.027	-0.040	-0.036	0.292	0.278	0.220
8	Armenia	0.063	7.142	0.135	0.107	0.131	0.036	-0.005	0.020	0.058	0.037	-0.028
9	Australia	0.009	22.300	0.155	0.082	0.101	-0.060	-0.092	-0.083	0.219	0.303	0.127
10	Austria	0.043	7.592	0.151	0.142	0.146	-0.057	-0.039	-0.058	0.368	0.369	0.172
11	Azerbaijan	0.063	12.917	0.151	0.119	0.138	0.019	0.004	0.010	0.357	0.052	0.242
12	Bahrain	0.063	28.983	0.264	0.290	0.259	-0.011	-0.021	-0.034	-0.076	0.041	-0.105
13	Bangladesesh	0.021	25.725	-0.102	0.250	-0.038	-0.259	-0.006	-0.226	-0.256	0.086	-0.296
14	Barbados	0.017	27.042	0.186	0.113	0.162	0.057	-0.020	0.027	0.127	0.043	0.120
15	Belarus	0.046	7.917	0.108	0.090	0.108	0.013	-0.012	0.004	0.293	0.054	0.177
16	Belgium	0.029	10.767	0.155	0.124	0.136	-0.073	-0.092	-0.088	0.248	0.372	0.109
17	Belize	0.028	26.200	0.304	0.201	0.289	0.046	-0.039	0.027	1.366	0.098	0.891
18	Benin	0.031	28.433	0.156	0.141	0.162	-0.045	-0.071	-0.050	0.229	0.034	0.083
19	Bolivia	-0.006	21.067	0.211	0.141	0.192	0.029	-0.035	0.005	0.241	0.076	0.114
20	Bosnia Herzegovina	0.057	10.583	0.160	0.195	0.180	-0.022	-0.005	-0.021	0.225	0.101	0.166
21	Botswana	0.021	22.800	0.263	0.220	0.253	0.022	-0.032	-0.005	0.425	0.066	0.418
22	Brazil	0.030	25.892	0.150	0.164	0.150	0.001	0.052	0.032	0.773	0.203	0.562
23	Brunei	0.011	27.142	0.179	0.125	0.170	0.027	-0.041	0.008	0.073	0.162	0.073
24	Bulgaria	0.066	11.908	-0.053	0.008	-0.023	-0.014	-0.006	-0.017	-0.285	-0.045	-0.409
25	Burkina Faso	0.023	29.125	0.116	0.144	0.113	-0.036	-0.039	-0.052	0.238	0.051	0.172
26	Burundi	0.010	20.842	0.254	0.159	0.230	0.042	-0.044	0.009	-0.209	0.007	-0.235
27	Cambodia	0.004	28.050	0.576	0.266	0.469	0.178	-0.039	0.114	0.367	0.106	0.206
28	Cameroon	0.016	25.275	0.155	0.116	0.153	-0.002	-0.042	-0.014	0.400	0.015	0.378
29	Canada	0.060	-5.442	0.454	0.430	0.445	-0.014	-0.059	-0.046	0.202	0.421	0.127
30	Cape Verde	0.020	23.358	0.316	0.245	0.303	0.044	-0.038	0.017	0.718	0.082	0.531
31	Central African Rep	0.023	25.550	0.109	0.080	0.105	0.029	0.034	0.042	0.053	-0.006	-0.002
32	Chad	0.032	27.692	0.113	0.120	0.113	-0.042	-0.040	-0.048	0.117	0.052	0.107
33	Chile	0.009	9.075	0.165	0.199	0.175	-0.053	-0.059	-0.072	0.047	0.276	0.002
34	China	0.034	7.442	0.827	1.157	1.040	-0.001	0.056	0.005	-0.011	0.186	-0.121
35	Colombia	0.018	25.483	0.120	0.155	0.134	-0.073	-0.049	-0.068	0.679	0.124	0.417
36	Comoros	0.016	24.617	0.310	0.230	0.291	0.040	-0.041	0.013	-0.038	-0.001	-0.112
37	Costa Rica	0.006	25.158	0.128	0.153	0.140	-0.060	-0.042	-0.058	0.476	0.172	0.486

38	Cote d'Ivoire	0.018	27.267	0.208	0.137	0.204	0.031	-0.031	0.022	0.242	0.014	0.204
39	Croatia	0.052	11.992	0.079	0.079	0.086	-0.003	-0.013	-0.009	0.121	-0.040	-0.069
40	Cuba	0.010	26.175	0.079	0.090	0.090	-0.032	-0.048	-0.043	-0.026	0.027	-0.111
41	Cyprus	0.071	20.308	0.049	0.163	0.060	-0.081	-0.017	-0.090	-0.154	0.197	-0.274
42	Czech Republic	0.047	9.192	0.076	0.093	0.075	-0.026	-0.014	-0.033	0.005	-0.008	-0.161
43	Demo Rep Congo	0.010	24.558	0.236	0.067	0.215	0.048	-0.034	0.033	-0.045	-0.011	-0.145
44	Denmark	0.034	9.008	0.567	0.459	0.513	-0.123	-0.201	-0.171	-0.154	0.208	-0.194
45	Djibouti	0.039	28.967	0.382	0.273	0.356	0.064	-0.041	0.033	0.236	-0.001	0.025
46	Dominica	0.020	22.792	0.172	0.155	0.165	0.007	-0.035	-0.018	0.504	0.138	0.519
47	Dominican Rep	0.004	24.567	0.138	0.175	0.146	-0.076	-0.062	-0.080	0.137	0.085	0.003
48	Ecuador	0.003	22.192	0.108	0.136	0.112	-0.063	-0.051	-0.070	0.606	0.076	0.435
49	Egypt	0.057	23.692	0.402	0.407	0.410	-0.015	0.009	-0.008	0.296	0.071	0.074
50	El Salvador	0.019	25.758	0.138	0.186	0.137	-0.063	-0.037	-0.070	0.199	0.077	0.119
51	Eq Guinea	0.017	24.942	0.583	0.423	0.524	0.118	-0.044	0.040	0.003	0.246	-0.149
52	Eritrea	0.049	27.583	0.437	0.269	0.397	0.094	-0.055	0.044	0.172	0.038	0.104
53	Estonia	0.040	6.492	0.056	0.015	0.032	-0.002	-0.016	-0.011	0.001	0.027	-0.125
54	Ethiopia	0.032	23.600	0.407	0.249	0.369	0.093	-0.041	0.060	-0.085	0.039	-0.185
55	Fiji	0.012	24.592	0.054	0.147	0.075	-0.072	-0.007	-0.063	0.335	0.070	0.313
56	Finland	0.053	3.117	0.157	0.058	0.103	-0.023	-0.074	-0.050	-0.238	0.195	-0.242
57	France	0.028	11.792	-0.051	-0.022	-0.049	-0.006	0.011	-0.017	0.050	0.273	-0.061
58	Gabon	0.019	25.833	0.283	0.181	0.258	0.100	-0.020	0.066	0.101	0.002	0.034
59	Georgia	0.064	7.842	0.086	0.052	0.083	0.022	0.002	0.017	-0.064	0.017	-0.063
60	Germany	0.034	9.917	0.145	0.115	0.126	-0.208	-0.177	-0.184	0.013	0.275	-0.099
61	Ghana	0.024	28.225	0.284	0.135	0.265	0.120	-0.030	0.087	0.536	0.062	0.428
62	Greece	0.055	14.842	0.116	0.132	0.115	-0.054	-0.037	-0.054	1.563	0.294	1.149
63	Greenland	0.068	-15.875	0.128	0.127	0.130	-0.020	-0.040	-0.041	0.033	0.298	-0.014
64	Grenada	0.023	27.575	0.293	0.227	0.283	0.051	-0.027	0.028	0.729	0.136	0.645
65	Guatemala	0.026	24.283	0.157	0.180	0.157	-0.026	-0.026	-0.038	0.266	0.057	0.194
66	Guine-Bissau	0.020	27.833	0.162	0.131	0.155	-0.022	-0.044	-0.034	0.182	0.020	0.098
67	Guinea	0.020	26.583	0.179	0.110	0.175	0.015	-0.044	0.002	0.298	0.009	0.118
68	Guyana	0.023	26.475	0.168	0.151	0.160	0.025	-0.016	0.001	-0.015	0.090	-0.085
69	Haiti	0.004	25.533	0.217	0.145	0.207	0.017	-0.063	-0.007	0.166	0.028	-0.017
70	Honduras	0.018	24.475	0.198	0.184	0.187	-0.020	-0.043	-0.036	0.432	0.063	0.255
71	Hungary	0.058	11.483	0.083	0.095	0.090	-0.010	-0.016	-0.014	0.003	-0.002	0.019
72	Iceland	0.048	3.133	0.204	0.134	0.174	-0.001	-0.065	-0.029	0.237	0.251	0.128
73	India	0.025	25.133	0.558	0.297	0.496	0.234	-0.055	0.135	0.569	0.161	0.440
74	Indonesia	0.010	26.417	0.551	0.217	0.434	0.326	-0.001	0.206	0.431	0.106	0.170
75	Iran	0.058	18.558	0.612	0.587	0.625	0.037	-0.012	0.024	0.849	0.073	0.586
76	Iraq	0.054	22.958	0.233	0.227	0.235	-0.016	-0.014	-0.018	0.253	0.036	0.171
77	ireland	0.004	9.700	0.180	-0.041	0.164	-0.050	-0.049	-0.060	0.247	0.376	0.179
78	Israel	0.064	21.192	-0.048	-0.041	-0.056	-0.052	-0.039	-0.061	-0.232	0.174	-0.296
79	Italy	0.044	13.217	-0.055	-0.034	-0.046	-0.018	-0.029	-0.044	0.358	0.345	0.090
80	Jamaica	0.006	25.333	0.208	0.137	0.196	0.015	-0.043	0.001	0.455	0.058	0.317
81	Japan	0.030	11.600	0.102	0.213	0.157	0.102	0.178	0.105	-0.025	0.199	-0.119

82	Jordan	0.065	20.017	0.271	0.287	0.260	-0.038	-0.008	-0.035	0.392	0.045	0.423
83	Kazakhstan	0.051	7.608	0.055	0.090	0.063	-0.042	-0.008	-0.039	-0.022	0.040	-0.060
84	Kenya	0.022	25.575	0.409	0.220	0.364	0.153	-0.021	0.096	0.442	0.031	0.250
85	Kiribati	-0.001	27.492	0.283	0.159	0.256	0.138	-0.012	0.091	0.464	0.047	0.460
86	Kuwait	0.059	26.892	0.428	0.357	0.405	0.001	-0.025	-0.006	-0.210	-0.003	-0.293
87	Kyrgystan	0.055	3.000	0.067	0.052	0.069	-0.002	-0.002	0.002	0.032	-0.001	0.018
88	Laos	0.012	24.217	0.430	0.260	0.428	0.155	-0.015	0.102	0.249	0.111	0.101
89	Latvia	0.035	7.100	0.077	0.076	0.080	0.000	-0.005	-0.004	1.143	0.070	0.852
90	Lebanon	0.067	16.550	0.197	0.339	0.208	-0.125	-0.030	-0.126	-0.277	0.032	-0.324
91	Lesotho	0.026	13.417	0.172	0.180	0.168	0.007	-0.017	-0.009	1.088	0.065	1.062
92	Liberia	0.015	26.175	0.176	0.106	0.171	0.039	-0.035	0.023	0.056	0.004	-0.101
93	Lithuania	0.035	7.767	0.092	0.088	0.096	0.006	-0.008	0.001	1.338	0.213	1.053
94	Luxembourg	0.031	10.108	0.181	0.134	0.160	-0.066	-0.109	-0.097	0.044	0.272	-0.075
95	Macedonia	0.056	11.200	0.059	0.077	0.068	0.012	0.003	0.007	-0.520	0.058	-0.701
96	Madagascar	0.020	22.825	0.172	0.141	0.159	-0.014	-0.031	-0.012	-0.046	0.004	-0.122
97	Malawi	0.013	22.692	0.283	0.190	0.269	0.043	-0.034	0.019	0.152	0.021	-0.098
98	Malaysia	0.013	26.308	0.199	0.264	0.191	-0.076	-0.009	-0.068	0.238	0.086	0.178
99	Maldives	-0.010	27.800	0.258	0.251	0.258	0.012	0.005	0.012	-0.244	0.087	-0.347
100	Mali	0.021	29.142	0.231	0.132	0.200	0.046	-0.037	0.014	-0.057	0.062	-0.130
101	Malta	0.050	20.250	0.153	0.154	0.154	-0.040	-0.045	-0.050	0.145	0.323	0.155
102	Marshall Islands	0.026	28.425	-0.047	0.133	-0.019	-0.159	-0.017	-0.138	0.009	0.047	0.011
103	Mauritania	0.027	28.625	0.205	0.157	0.189	0.030	-0.030	0.004	-0.061	0.033	-0.039
104	Mauritius	0.040	24.017	0.198	0.215	0.181	-0.060	-0.031	-0.065	0.027	0.086	-0.035
105	Mexico	0.023	21.758	0.144	0.177	0.164	-0.062	-0.039	-0.055	0.642	0.098	0.387
106	Moldova	0.064	11.233	0.059	0.065	0.069	-0.035	-0.016	-0.021	0.169	0.011	0.159
107	Mongolia	0.028	0.633	0.052	0.112	0.059	-0.018	-0.002	-0.033	0.384	0.068	0.212
108	Montenegro	0.059	9.642	0.109	0.084	0.103	0.014	0.004	0.013	0.030	0.041	-0.053
109	Morocco	0.046	18.642	0.573	0.573	0.542	0.076	-0.043	0.045	0.425	0.051	0.216
110	Mozambique	0.016	24.600	0.210	0.207	0.207	-0.026	-0.040	-0.041	-0.004	0.071	-0.123
111	Myanmar	0.018	23.683	0.457	0.294	0.412	0.088	-0.031	-0.065	0.267	0.133	0.176
112	Namibia	0.020	21.042	0.257	0.202	0.236	0.022	-0.034	-0.007	0.107	0.048	0.090
113	Nepal	0.039	13.850	0.667	0.295	0.545	0.270	-0.054	0.148	0.458	0.081	0.254
114	Netherlands	0.032	10.583	-0.060	-0.075	-0.670	-0.142	-0.168	-0.159	0.078	0.281	-0.014
115	New Zeland	0.018	10.742	0.185	0.136	0.149	-0.070	-0.084	-0.076	0.108	0.251	0.035
116	Nicaragua	0.010	25.642	0.138	0.159	0.148	-0.050	-0.039	-0.048	0.336	0.042	0.202
117	Niger	0.036	28.333	0.140	0.080	0.131	0.019	-0.028	0.009	-0.050	0.018	-0.195
118	Nigeria	0.026	27.725	0.278	0.198	0.265	0.060	-0.009	0.038	0.043	0.060	-0.018
119	North Korea	0.021	6.592	0.151	0.060	0.144	0.034	-0.038	0.025	0.146	0.026	0.126
120	Northern Mariana Islands	0.021	28.317	0.081	0.140	0.095	-0.043	-0.019	-0.051	0.439	0.055	0.304
121	Norway	0.037	2.233	0.930	0.871	0.939	-0.072	-0.097	-0.093	0.019	0.280	-0.084
122	Oman	0.036	26.383	0.634	0.743	0.679	-0.075	-0.049	-0.087	0.751	0.072	0.433
123	Pakistan	0.047	21.550	0.438	0.279	0.395	0.107	-0.043	0.058	0.664	0.070	0.485
124	Panama	0.009	25.867	0.114	0.143	0.122	-0.082	-0.066	-0.083	0.098	0.094	0.094
125	Papua	-0.003	25.133	0.189	0.157	0.169	0.016	-0.022	-0.007	-0.013	0.069	-0.026

126	Paraguay	0.013	23.325	0.234	0.194	0.231	-0.020	-0.061	-0.033	2.154	0.108	1.776
127	Peru	0.005	20.225	0.159	0.123	0.152	-0.040	-0.075	-0.051	-0.175	0.056	-0.242
128	Philippines	0.010	26.342	0.170	0.169	0.176	0.013	-0.008	0.006	0.170	0.067	0.025
129	Poland	0.045	9.367	0.137	0.142	0.140	-0.066	-0.088	-0.087	0.029	0.065	-0.087
130	Portugal	0.027	15.900	0.343	0.319	0.329	-0.042	-0.043	-0.049	0.957	0.376	0.482
131	Puerto Rico	0.016	25.283	0.141	0.122	0.135	0.013	-0.029	-0.008	0.162	0.080	0.057
132	Qatar	0.062	28.692	0.325	0.340	0.337	-0.042	-0.027	-0.048	-0.039	0.044	-0.100
133	Romania	0.067	10.358	0.081	0.102	0.092	-0.013	-0.009	-0.015	0.244	0.064	0.085
134	Russia	0.060	-4.375	0.090	0.071	0.090	0.000	-0.010	-0.003	0.399	0.027	0.253
135	Rwanda	0.014	19.533	0.525	0.246	0.458	0.162	-0.041	0.110	0.062	0.029	-0.022
136	Saint Lucia	0.020	26.642	0.213	0.180	0.208	0.012	-0.021	0.001	0.615	0.148	0.508
137	Saint Vincent and Grenadines	0.022	27.733	0.171	0.186	0.179	-0.058	-0.046	-0.056	1.762	0.131	1.310
138	Samoa	0.011	27.867	0.085	0.132	0.091	-0.044	-0.017	-0.044	-0.076	0.058	-0.066
139	Sao Tome	0.016	23.458	0.222	0.138	0.195	0.032	-0.035	0.014	0.268	0.028	0.093
140	Saudi Arabia	0.052	25.917	0.657	0.651	0.675	0.038	-0.002	0.025	0.881	0.071	0.482
141	Senegal	0.021	29.042	0.248	0.112	0.222	0.064	-0.060	0.035	0.168	0.021	0.084
142	Serbia	0.063	11.642	0.087	0.076	0.089	0.018	-0.004	0.008	0.225	0.039	0.089
143	Seychelles	0.027	27.892	0.160	0.190	0.151	-0.024	-0.011	-0.030	0.006	0.075	-0.038
144	Sierra Leone	0.018	26.975	0.154	0.127	0.156	-0.003	-0.036	-0.007	0.136	0.028	-0.020
145	Singapore	0.019	28.092	0.113	0.162	0.127	0.032	0.115	0.063	0.099	0.206	-0.012
146	Slovakia	0.054	8.758	0.080	0.097	0.086	-0.006	-0.013	-0.014	0.425	0.061	0.250
147	Slovenia	0.047	9.900	0.067	0.097	0.074	-0.046	-0.024	-0.051	-0.792	-0.201	-0.824
148	Solomon Islands	-0.006	25.575	0.127	0.129	0.132	0.034	-0.005	0.012	0.066	0.054	0.095
149	Somalia	0.015	27.475	0.195	0.138	0.178	-0.004	-0.052	-0.017	-0.056	0.001	-0.161
150	South Africa	0.027	19.033	0.213	0.142	0.199	0.064	-0.031	0.034	0.293	0.059	0.198
151	South Korea	0.024	12.058	0.246	0.210	0.214	-0.026	-0.042	-0.045	-0.339	0.263	-0.347
152	South Sudan	0.033	27.950	0.342	0.159	0.305	0.102	-0.049	0.070	-0.015	0.006	-0.165
153	Spain	0.031	14.283	0.060	0.080	0.049	-0.096	-0.127	-0.124	0.411	0.367	0.121
154	Sri Lanka	0.017	27.758	0.082	0.205	0.119	-0.104	-0.001	-0.074	0.216	0.096	-0.002
155	Sudan	0.049	28.275	0.532	0.382	0.504	0.081	-0.028	0.050	0.340	0.069	0.216
156	Suriname	0.021	26.417	0.201	0.140	0.178	0.073	-0.016	0.036	0.558	0.100	0.395
157	Sweden	0.034	2.925	0.183	0.136	0.151	-0.004	-0.040	-0.027	0.359	0.335	0.253
158	Switzerland	0.036	6.350	0.139	0.103	0.108	-0.017	-0.061	-0.050	-0.074	0.228	-0.129
159	Syria	0.058	19.000	0.418	0.409	0.426	-0.006	-0.025	-0.012	0.234	0.040	0.056
160	Tajikistan	0.056	4.558	0.120	0.089	0.120	-0.022	-0.042	-0.028	-0.019	-0.011	-0.134
161	Tanzania	0.011	23.125	0.352	0.240	0.315	-0.002	-0.059	-0.016	0.114	0.040	-0.034
162	Thailand	0.005	27.350	0.252	0.317	0.276	-0.052	-0.015	-0.052	-0.034	0.100	-0.073
163	The Bahamas	0.016	25.433	0.115	0.094	0.105	0.041	0.005	0.021	-0.052	-0.002	-0.125
164	The Gambia	0.019	28.333	0.182	0.096	0.204	0.044	-0.037	0.026	0.051	0.013	-0.010
165	Timor-Leste	0.001	25.633	0.506	0.266	0.448	0.160	-0.012	0.115	0.397	0.136	0.115
166	Togo	0.032	27.942	0.175	0.151	0.179	-0.017	-0.041	-0.023	0.197	0.011	0.132
167	Tonga	0.008	25.042	0.098	0.139	0.110	0.008	0.000	-0.001	-0.014	0.054	0.001
168	Trinidad Tobago	0.020	26.750	0.108	0.132	0.113	-0.033	-0.029	-0.042	0.065	0.078	0.100
169	Tunisia	0.047	20.867	0.400	0.449	0.430	-0.019	-0.023	-0.023	0.156	0.051	-0.031

170	Turkey	0.067	12.133	0.256	0.338	0.278	-0.072	0.025	-0.041	-0.189	-0.015	-0.361
171	Turkmenistan	0.048	16.808	0.142	0.183	0.162	-0.046	-0.023	-0.043	0.239	0.057	0.118
172	Uganda	0.023	23.475	0.296	0.239	0.286	0.024	-0.042	-0.002	0.173	0.059	0.068
173	UK	0.017	9.192	0.325	0.223	0.263	-0.068	-0.103	-0.084	0.238	0.345	0.002
174	Ukraine	0.064	9.742	0.069	0.057	0.071	-0.013	-0.016	-0.013	0.185	0.018	0.140
175	United Arab Emirates	0.052	28.133	0.486	0.414	0.505	0.019	-0.043	0.002	0.670	0.017	0.498
176	Uruguay	0.007	17.600	0.071	0.109	0.082	-0.052	-0.046	-0.061	-0.015	0.234	-0.042
177	USA	0.042	8.958	0.224	0.095	0.150	0.116	-0.005	-0.038	0.279	0.034	0.143
178	Uzbekistan	0.053	14.308	0.140	0.153	0.155	-0.013	-0.009	-0.013	0.372	0.040	0.259
179	Vanuato	0.004	24.308	0.146	0.144	0.148	0.025	-0.011	0.012	0.143	0.053	0.172
180	Venezuela	0.029	26.458	0.093	0.140	0.110	-0.151	-0.134	-0.154	0.286	0.051	0.275
181	Vietnam	0.011	25.025	0.299	0.252	0.270	0.018	-0.026	-0.004	0.283	0.114	0.140
182	Yemen	0.018	23.742	0.609	0.456	0.581	0.057	-0.045	0.029	0.401	0.051	0.208
183	Zambia	0.004	22.567	0.338	0.204	0.331	0.062	-0.025	0.047	0.542	0.033	0.150
184	Zimbabwe	0.016	22.183	0.559	0.085	0.470	0.401	-0.025	0.312	0.382	-0.014	0.332

**Table S1** Data analysed in this work. For the 184 countries that have been analysed, it lists the 1990-2016 warming index (column 3), the 2016 annual average temperature (column 4), and the 1990-2016 variations of patients' deaths, prevalence and DALYs for Parkinson's patients (PD; columns 5-6-7), for Alzheimer's Disease and other Dementias (AD/D; columns 8-9-10), and for Amyotrophic Lateral Sclerosis/Motor Neuron Diseases (ALS/MND; column 11-12-13). The temperature values refer to the 2-meter temperature: data have been extracted from the World Bank Climate Change Data Portal (<https://climateknowledgeportal.worldbank.org/download-data>). The PD indices come from Dorsey et al (2018), the AD/D indices from Nichols et al. (2019), and the ALS/MND from Logroscino et al. (2018).

**Table S2 – Clusters' population**

	HT-LW	HT-HT	LT-LW	LT-HW
1	Antigua Barbuda	Algeria	Angola	Afghanistan
2	Bangladesh	Bahrain	Argentina	Albania
3	Barbados	Belize	Australia	Andorra
4	Brunei	Benin	Bolivia	Armenia
5	Burkina Faso	Brazil	Botswana	Austria
6	Cambodia	Chad	Burundi	Azerbaijan
7	Cameroon	Djibouti	Chile	Belarus
8	Cape Verde	Egypt	Dominica	Belgium
9	Central African Rep	Eritrea	Ecuador	Bosnia Herzegovina
10	Colombia	Ethiopia	Ireland	Bulgaria
11	Comoros	Guatemala	Madagascar	Canada
12	Costa Rica	Kuwait	Malawi	China
13	Cote d'Ivoire	Mauritania	Mexico	Croatia

14	Cuba	Mauritius	Namibia	Cyprus
15	Demo Rep Congo	Niger	New Zeland	Czech Republic
16	Dominican Rep	Nigeria	North Korea	Denmark
17	El Salvador	Oman	Peru	Estonia
18	Eq Guinea	Qatar	Rwanda	Finland
19	Fiji	Saudi Arabia	South Korea	France
20	Gabon	Seychelles	Tanzania	Georgia
21	Ghana	South Sudan	UK	Germany
22	Grenada	Sudan	Uruguay	Greece
23	Guine-Bissau	Togo	Zambia	Greenland
24	Guinea	United Arab Emirates	Zimbabwe	Hungary
25	Guyana	Venezuela		Iceland
26	Haiti			Iran
27	Honduras			Iraq
28	India			Israel
29	Indonesia			Italy
30	Jamaica			Japan
31	Kenya			Jordan
32	Kiribati			Kazakhstan
33	Laos			Kyrgystan
34	Liberia			Latvia
35	Malaysia			Lebanon
36	Maldives			Lesotho
37	Mali			Lithuania
38	Marshall Islands			Luxembourg
39	Mozambique			Macedonia
40	Myanmar			Malta
41	Nicaragua			Moldova
42	Northern Mariana Islands			Mongolia
43	Panama			Montenegro
44	Papua			Morocco
45	Paraguay			Nepal
46	Philippines			Netherlands
47	Puerto Rico			Norway
48	Saint Lucia			Pakistan
49	Saint Vincent and Grenadines			Poland
50	Samoa			Portugal
51	Sao Tome			Romania
52	Senegal			Russia
53	Sierra Leone			Serbia
54	Singapore			Slovakia
55	Solomon Islands			Slovenia
56	Somalia			South Africa
57	Sri Lanka			Spain

58	Suriname	Sweden
59	Thailand	Switzerland
60	The Bahamas	Syria
61	The Gambia	Tajikistan
62	Timor-Leste	Tunisia
63	Tonga	Turkey
64	Trinidad Tobago	Turkmenistan
65	Uganda	Ukraine
66	Vanuato	USA
67	Vietnam	Uzbekistan
68	Yemen	

**Table S2** list of the names of the countries in the 4 clusters: the high-temperature and high-warming (HT-HW) cluster; the high-temperature and low-warming (HT-LW) cluster; the low-temperature and high-warming (LT-HW) cluster; and the low-temperature and low-warming (LT-LW) cluster.

WBCCDP: World Bank Climate Change Data Portal: link: <https://climateknowledgeportal.worldbank.org/download-data>.

**Table S3**

<b>A</b>	<i>AD/D Deaths</i>	<b>HT-HW</b>	<b>HT-LW</b>	<b>LT-HW</b>	<b>LT-LW</b>
	<b>HT-HW</b>	100.0%	44.8%	20.0%	55.7%
	<b>HT-LW</b>		100.0%	<b>1.2%</b>	<b>98.2%</b>
	<b>LT-HW</b>			100.0%	7.2%
	<b>LT-LW</b>				100.0%
<b>B</b>	<i>ALS/MND Deaths</i>	<b>HT-HW</b>	<b>HT-LW</b>	<b>LT-HW</b>	<b>LT-LW</b>
	<b>HT-HW</b>	100.0%	91.9%	64.4%	50.6%
	<b>HT-LW</b>		100.0%	44.1%	39.8%
	<b>LT-HW</b>			100.0%	82.4%
	<b>LT-LW</b>				100.0%
<b>C</b>	<i>PD Deaths</i>	<b>HT-HW</b>	<b>HT-LW</b>	<b>LT-HW</b>	<b>LT-LW</b>
	<b>HT-HW</b>	100.0%	<b>0.7%</b>	<b>0.5%</b>	9.7%
	<b>HT-LW</b>		100.0%	29.3%	50.5%
	<b>LT-HW</b>			100.0%	22.4%
	<b>LT-LW</b>				100.0%

**Table S3.** Differences between the distributions of deaths indices of the 4 clusters for AD/D, ALS/MND and PD patients. The table reports the p-value of the Student's t-test calculated between the distributions of deaths for the different clusters. Bold values identify the statistically significant correlations with Student's t-test  $p < 0.05$  (5%).

**Table S4**

<b>A</b>	<i>AD/D DALYs</i>	<b>HT-HW</b>	<b>HT-LW</b>	<b>LT-HW</b>	<b>LT-LW</b>
	<b>HT-HW</b>	100.0%	57.4%	13.4%	77.6%
	<b>HT-LW</b>		100.0%	<b>0.9%</b>	89.7%
	<b>LT-HW</b>			100.0%	11.2%
	<b>LT-LW</b>				100.0%
<b>B</b>	<i>ALS/MND DALYs</i>	<b>HT-HW</b>	<b>HT-LW</b>	<b>LT-HW</b>	<b>LT-LW</b>
	<b>HT-HW</b>	100.0%	59.5%	67.5%	72.5%
	<b>HT-LW</b>		100.0%	21.6%	36.5%
	<b>LT-HW</b>			100.0%	93.1%
	<b>LT-LW</b>				100.0%
<b>C</b>	<i>PD DALYs</i>	<b>HT-HW</b>	<b>HT-LW</b>	<b>LT-HW</b>	<b>LT-LW</b>
	<b>HT-HW</b>	100.0%	<b>0.2%</b>	<b>1.0%</b>	<b>3.2%</b>
	<b>HT-LW</b>		100.0%	30.2%	74.8%
	<b>LT-HW</b>			100.0%	39.6%
	<b>LT-LW</b>				100.0%

**Table S4.** Differences between the distributions of DALYs indices of the 4 clusters for AD/D, ALS/MND and PD patients. The table reports the p-value of the Student's t-test calculated between the distributions of DALYs for the different clusters. Bold values identify the statistically significant correlations with Student's t-test  $p < 0.05$  (5%).