GEOGRAPHICAL VARIATIONS OF THE MINIMUM MORTALITY TEMPERATURE AT A GLOBAL SCALE: A MULTI-COUNTRY STUDY

Supplementary Material

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eTable 1. Additional information on the MCC dataset.

COUNTRY	COUNTRY	PERIOD	MORTALITY DATA	TEMPERATURE DATA
Argentina	3 cities	2005-2015	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the National Ministry of Health.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements from one meteorological station in each city provided by the National Weather Service.
Australia	3 cities	1988-2009	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the Australian Bureau of Statistics.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements from meteorological stations located within ≤30 km of each city provided by the Australian Bureau of Meteorology.
Brazil	18 cities	1997-2011	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99.) Provided by the Ministry of Health.	Mean daily temperature (in ˚C) computed from the 24-hour average of hourly measurements, from weather stations located within the urban area by the National Institute of Meteorology of Brazil.
Canada	25 census metropolitan areas (CMA) and 1 city (Hamilton)	1986-2015	All causes. Collected from the Canadian Mortality Database.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements obtained from the Environment Canada and collected from monitoring stations located closest to the CMA centre.
Chile	4 cities	2004-2014	All causes. Provided by the *Departamento de Estadísticas e Información de Salud, Ministerio de Salud*.	Mean daily temperature (in ˚C), computed as the 24-hour average based on hourly measurements provided by the *Sistema de Información Nacional de Calidad del Aire (SINCA), Ministerio del Medio Ambiente*.
China	15 cities	1996-2015	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the Municipal Center for Disease Control and Prevention in each city.	Mean daily temperature (in ˚C), computed as averaged hourly temperatures obtained from the China Meteorological Data Sharing Service System (http://data.cma.cn/).
Colombia	5 cities	1998-2013	All causes. Provided by the National Administrative Department of Statistics *(DANE)*.	Mean daily temperature (in ˚C), computed as 24-hour average based on hourly measurements provided by the *Instituto de Hidrología, Meteorología y Estudios Ambientales de Colombia (IDEAM)*.
Costa Rica	1 city	2000-2017	All causes. Provided by the Instituto Nacional de Estadística y Censo. [Open Access]	Mean daily temperature (in ºC) obtained from WMO-NOAA (Surface Data Hourly Global, DS3505).
Czech Republic	3 cities and 1 rural region	1994-2015	All causes. Provided by the Czech Statistical Office and the Institute of Health Information and Statistics.	Mean daily temperature (in ºC) obtained from stations operated by the Czech Hydrometeorological Institute (measurements in standard climatic terms 7:00, 14:00 and 21:00 local time, and daily means).
Ecuador	2 cities	2014-2016	All causes. Provided by the *Instituto Nacional de Estadística y Censos.* [Open Access]	Mean daily temperature (in ºC) obtained from WMO-NOAA (Surface Data Hourly Global, DS3505).
Estonia	4 cites and 1 region	1997-2015	All causes. Provided by the Estonian Causes of Death Registry.	Mean daily temperature (in ºC) computed as the 24-hour average of hourly measurements collected from the Estonian Environment Agency.

COUNTRY	COUNTRY	PERIOD	MORTALITY DATA	TEMPERATURE DATA
Finland	1 metropolitan area	1994-2014	All causes. Provided by Statistics Finland.	Mean daily temperature (in ºC) obtained from the Finnish Meteorological Institute.The weather stations around the country were interpolated onto a 10×10 km grid covering the whole of Finland, using a Kriging model.
France	18 cities	2000-2014	All causes. Provided by the French National Institute of Health and Medical Research (CepiDC).	Mean daily temperature(in ºC) computed as the mean of the minimal and maximal temperature, obtained from the Meteo France. A single weather station was selected for each city.
Germany	12 cities	1993-2015	All causes. Provided by th Research Data Centres of the Federation and the Federal States of Germany *(Forschungsdatenzentr um der Statistischen Ämter des Bundes und der Länder)*.	Mean daily temperature (in ºC) computed as the 24-hour average based on hourly measurements obtained from the Climate Data Centre of the German National Meteorological Service *(Deutscher Wetterdienst)*.
Greece	1 city	2001-2010	All causes. Provided by the Hellenic Statistical Authority.	Mean daily temperature (in ˚C), computed as the 24-hour average based on hourly measurements collected from the National observatory of Athens (http://www.noa.gr/) from site “Thisio” located in the city of Athens.
Guatemala	1 city	2009-2016	All causes. Provided by the *Instituto Nacional de Estadística, Unidad de Estadística de Salud.*	Mean daily temperature (in ˚C), provided by the *Instituto Nacional de Sismología, Vulancología, Meteorología y Hidrología.*
Island of Ireland	4 regions covering all Island population (ROI) and 2 in the Northern Ireland (NI)	1984-2007	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the Irish Central Statistics Office Northern and Ireland Social Research Agency.	Mean daily temperature (in ºC) computed as the 24-hour average based on hourly measurements, obtained from two weather stations for each ROI regions and NI regions from Met Eireann, and the United Kingdom Meteorological Office.
Iran	1 city	2004-2013	All causes. Provided by the Ferdows organization of Mashhad Municipality.	Mean daily temperature (in ºC) computed as the 24-hour average based on hourly measurements collected from Iran Meteorological Organization (IRIMO) (http://www.irimo.ir/).
Italy	18 cities	2006-2015	All causes. Obtained from local mortality registries and from the rapid mortality surveillance system.	Mean daily temperature (in ºC) computed as the 24-hour average based on 6-hour measurements obtained from the Meteorological Service of the Italian Air Force. A single weather station was selected for each city, using the airport monitoring station located closest to the city center.
Japan	47 prefectures	1985-2015	All causes. Provided by the Ministry of Health, Labour and Welfare.	Mean daily temperature (in ºC) provided by the Japan Meteorology Agency from the station located within the urban area of the capital city.
South Korea	7 cities	1992-2015	All causes. Provided by Korea Bureau of Statistics	Mean daily temperature (in ºC) computed as the 24-hour average based on hourly measurements obtained from weather stations located within the urban area managed by Korea Meteorological Administration.

COUNTRY	COUNTRY	PERIOD	MORTALITY DATA	TEMPERATURE DATA
Kuwait	1 city	2000-2016	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the National Center for Health Information, Ministry of Health, Kuwait.	Mean daily temperature (in ºC) computed as the 24-hour average based on hourly measurements from the Directorate General of Civil Aviation (Kuwait Airport) and Kuwait's Environmental Public Authority.
Mexico	10 metropolitan areas	1998-2014	All causes. Provided by the National Institute of Statistics, Geography and Informatics.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements collected through the *Servicio Meteorológico Nacional* (SMN) and the *Instituto Nacional de Ecología y CambioClimático* (INECC).
Moldova	4 cities	2001-2010	All causes. Provided by the National Centre for Health Management.	Mean daily temperature(in ˚C) computed as the average between daily minimum and maximum obtained from State Hydrometeorological Service, Moldova. A single weather station was selected for each city.
The Netherlands	5 regions	1995-2016	All causes. Provided by Statistics Netherlands.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements obtained from the Royal Dutch Meteorological Institute (KNMI).
Norway	1 city	1985-2016	All causes. Provided by the Norwegian Cause of Death registry.	Mean daily temperature (in ˚C) based on an observational modeled dataset from the Norwegian Meteorological Institute.
Panama	1 city	2013-2016	All causes. Provided by the *Instituto Nacional de Estadística y Censo, Centro de Información Estadística*.	Mean daily temperature (in ˚C) provided by the *Empresa de Transmisión Eléctrica, S.A.* (ETESA). [Open Access]
Paraguay	1 city	2004-2016	All causes. Provided by the *Ministerio de Salud Pública y Bienestar Social, Dirección General de Información Estratégica en Salud, Subsistema de Información de Estadísticas Vitales.*	Mean daily temperature (in ˚C) obtained from the Global Historical Climatology Network (NOAA/WMO).
Peru	18 regions	2008-2014	All causes. Provided by the Peruvian Ministry of Health (MINSA).	Mean daily temperature (in ˚C) obtained from the National Meteorology and Hydrology Service of Peru (SENAMHI). One station per Region contributed data to each department series.
Philippines	4 cities	2006-2010	All causes. Provided by the Philippine Statistics Agency.	Mean daily temperature (in ˚C) computed as 24-hour average based on hourly measurements, obtained from National Oceanic and Atmospheric Administration (NOAA).
Portugal	2 cities	1985-2012	All causes. Provided by Statistics Portugal.	Mean daily temperature (in ˚C) computed as the 24-hour averagebased on hourly measurements collected from the National Oceanic and Atmospheric Administration (NOAA).
Puerto Rico	1 city	2009-2016	All causes. Provided *by the nstituto de EstadísticasVitales de Puerto Rico.*	Mean daily temperature (in ˚C) obtained from the Global Historical Climatology Network (NOAA/WMO).
Romania	8 cities	1994-2016	All causes. Provided by the Romanian National Institute of Statistics.	Mean daily temperature (in ˚C) obtained from stations operated by the National Meteorological Administration of Romania (NMA RO) (https://www.ecad.eu/)

COUNTRY	COUNTRY	PERIOD	MORTALITY DATA	TEMPERATURE DATA
South Africa	52 district municipalities	1997-2013	All causes. Provided by Statistics South Africa.	Mean daily temperature (in ˚C) computed as the average between daily minimum and maximum collectedfrom the Agricultural Research Council of South Africa and the National Oceanic and Atmospheric Administration (NOAA).
Spain	52 cities	1990-2014	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the Spain National Institute of Statistics.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements obtained from weather stations of the Spain National Meteorology Agency. A single weather station, located within the urban area or at the near airport, was selected foreach city.
Sweden	3 cities	1991-2016	All causes. Provided by the Swedish Cause of Death Register at the Swedish National Board of Health and Welfare.	Mean daily temperature (in ˚C) computed as the 24-hour averagebased on hourly measurements, obtained from the Environment and Health Administration.
Switzerland	7 cities and 1 metropolitan area (Lugano)	1995-2013	Non-external causes other than accidents (ICD-10 codes A00-R99, V01-V99, W00-X59). Provided from Federal Office of Statistics (Switzerland).	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements obtained from the IDAWEB database (a service provided by MeteoSwiss, the Swiss Federal Office of Meteorology and Climatology). A single weather station located within or near the urban area was selected for each city.
Thailand	62 regions	1999-2008	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the Ministry of Public Health, Thailand.	Mean daily temperature (in ˚C) computed as the average between daily minimum and maximum obtained from the Meteorological Department, Ministry of Information and Communication Technology, Thailand.
Taiwan	3 cities	1994-2014	All causes. Provided by the Department of Health, Taiwan.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements provided by air quality monitoring stations by the Taiwan Environmental Protection Agency.
UK	10 regions	1990-2012	All causes. Provided by the Office of National Statistics.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements from UKCP09 5kmx5km product.
Uruguay	1 city	2012-2016	Non-external causes (ICD-9: 0-799; ICD-10: A00-R99). Provided by the *Ministerio de Salud Publica* (MSP).	Mean daily temperature (in ˚C) provided by the *Instituto Uruguayo de Meteorología* (INUMET)
USA	211 cities	1985-2006	All causes. Provided by XXX.	Mean daily temperature (in ˚C) computed as the 24-hour average based on hourly measurements obtained from the National Climatic Data Center (NCDC) of the National Oceanic and Atmospheric Administration (NOAA).
Vietnam	2 cities	2009-2013	All causes. Provided by the Provincial Department of Health.	Mean daily temperature (in ˚C) computed from the 24-hour average of hourly measurements, obtained from National Oceanic and Atmospheric Administration's (NOAA) National Climate Data Center (NCDC). A single weather station was selected for each city.

eTable 2. Distribution of the minimum mortality temperature (MMT, ºC) by country.

Country	Num. cities	Percentile distribution (MMT, ºC)						
		Min.	p10	p25	p50	p75	p90	Max.
Argentina	3	23.1	23.1	23.1	24.7	25.0	25.0	25.0
Australia	3	21.8	21.8	21.8	22.9	23.9	23.9	23.9
Brazil	18	19.5	22.3	23.0	25.2	28.8	29.7	33.4
Canada	26	-33.5	1.9	17.3	19.5	21.1	22.7	24.8
Chile	4	7.7	7.7	12.1	17.3	18.1	18.2	18.2
China	15	-23.6	-20.0	-0.3	22.7	27.7	29.1	32.2
Colombia	5	17.4	17.4	23.2	27.3	31.0	31.1	31.1
Czech Republic	4	18.1	18.1	18.1	18.2	19.1	19.8	19.8
Costa Rica	1	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Ecuador	2	18.8	18.8	18.8	24.5	30.2	30.2	30.2
Estonia	5	-27.8	-27.8	17.0	17.6	17.7	26.8	26.8
Finland	1	17.0	17.0	17.0	17.0	17.0	17.0	17.0
France	18	-5.5	11.6	19.2	20.4	22.8	29.3	31.7
Germany	12	14.8	15.4	17.5	18.0	18.8	19.5	19.9
Greece	1	21.5	21.5	21.5	21.5	21.5	21.5	21.5
Guatemala	1	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Iran	1	28.0	28.0	28.0	28.0	28.0	28.0	28.0
Ireland	6	14.9	14.9	16.1	16.4	19.1	21.5	21.5
Italy	18	-4.0	10.7	12.8	21.7	24.4	32.1	32.3
Japan	47	12.0	22.0	24.6	26.2	27.1	27.7	28.2
Kuwait	1	31.0	31.0	31.0	31.0	31.0	31.0	31.0
Mexico	10	18.8	19.5	21.6	22.1	24.4	24.8	24.8
Moldova	4	6.0	6.0	13.6	21.9	27.5	32.3	32.3
Netherland	5	4.0	4.0	12.5	14.3	17.4	18.1	18.1
Norway	1	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Panama	1	26.4	26.4	26.4	26.4	26.4	26.4	26.4
Paraguay	1	27.6	27.6	27.6	27.6	27.6	27.6	27.6
Peru	18	5.3	8.4	11	16.4	24.6	29.2	30.7
Philippines	4	24.7	24.7	26.5	28.8	29.4	29.6	29.6
Portugal	2	20.0	20.0	20.0	20.9	21.7	21.7	21.7
Puerto Rico	1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
Romania	8	9.6	9.6	20.1	21.1	21.9	23.3	23.3
South Africa	52	1.2	16.8	20.0	25.0	27.4	30.8	34.4
South Korea	7	1.0	1.0	6.3	24.7	25.0	27.5	27.5
Spain	52	-10.8	7.2	14.9	20.9	24.7	26.0	31.8

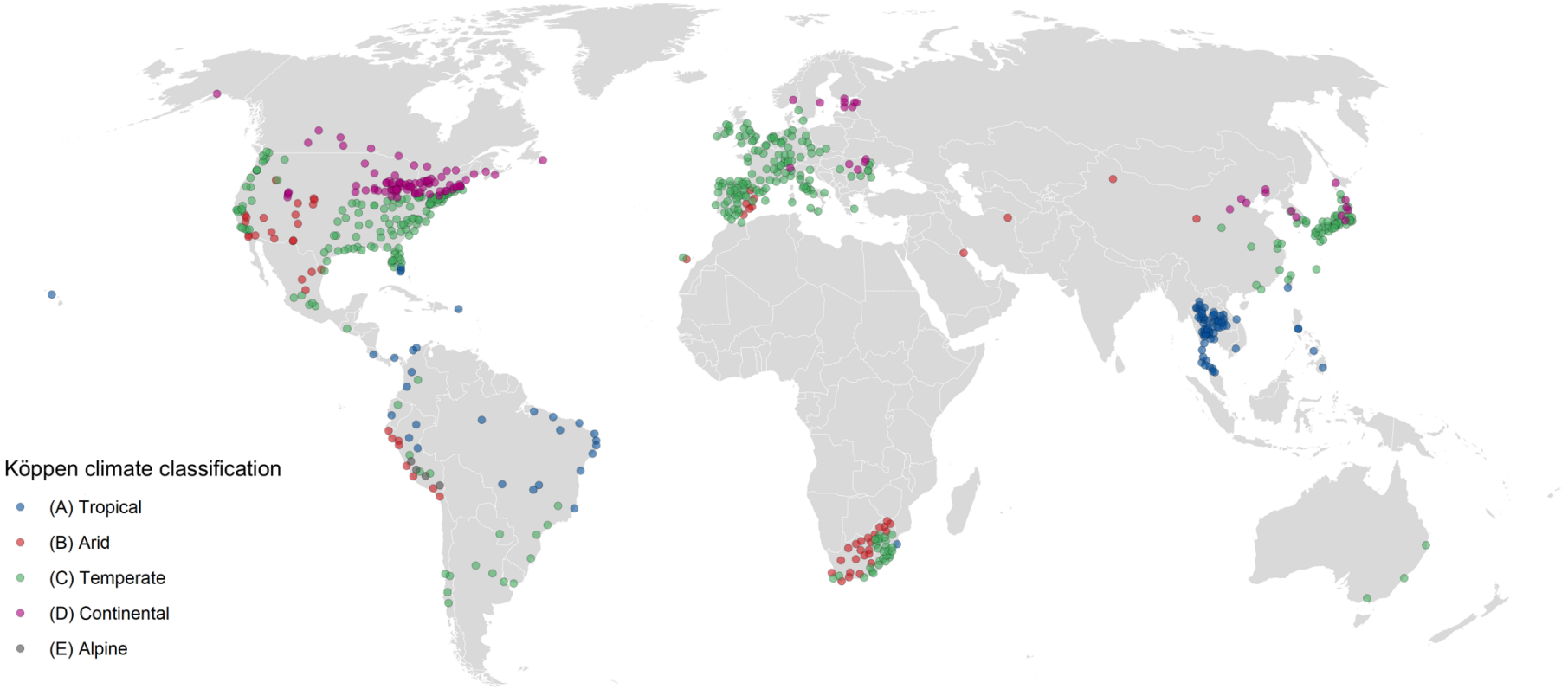
Country	Num. cities	Percentile distribution (MMT, ºC)						
		Min.	p10	p25	p50	p75	p90	Max.
Sweden	3	13.0	13.0	13.0	16.6	17.4	17.4	17.4
Switzerland	8	7.8	7.8	11.0	14.7	19.5	23.4	23.4
Taiwan	3	25.4	25.4	25.4	26.0	27.3	27.3	27.3
Thailand	62	11.3	18.6	26.3	28.9	30.5	32.1	34.2
UK	10	15.8	15.9	16.2	17.0	17.6	18.3	18.8
Uruguay	1	23.7	23.7	23.7	23.7	23.7	23.7	23.7
USA	211	-28.8	-13.9	19.3	23.2	26.2	29.0	36.3
Vietnam	2	23.1	23.1	23.1	27.0	30.8	30.8	30.8

eTable 3. Distribution of the minimum mortality temperature percentile (MMTP, %) by country.

Country	Num. cities	Percentile distribution (MMTP, %)						
		Min.	p10	p25	p50	p75	p90	Max.
Argentina	3	74.4	74.4	74.4	85.2	86.9	86.9	86.9
Australia	3	69.2	69.2	69.2	88.3	90.9	90.9	90.9
Brazil	18	0.0	0.0	50.9	70.7	81.5	99.5	99.9
Canada	26	0.0	29.8	81.0	85.2	89.5	97.3	100.0
Chile	4	13.4	13.4	37.8	67.7	78.1	82.9	82.9
China	15	0.0	0.1	9.6	40.7	84.7	85.8	99.7
Colombia	5	59.6	59.6	86.9	96.6	98.5	99.4	99.4
Costa Rica	1	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Czech Republic	4	84.2	84.2	84.8	85.3	86.2	87.0	87.0
Ecuador	2	91.7	91.7	91.7	95.0	98.2	98.2	98.2
Estonia	5	0.0	0.0	89.4	89.9	91.2	100.0	100.0
Finland	1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
France	18	0.0	50.6	80.7	87.9	89.1	99.7	100.0
Germany	12	71.6	72.1	81.3	84.7	87.4	88.0	88.4
Greece	1	58.8	58.8	58.8	58.8	58.8	58.8	58.8
Guatemala	1	98.7	98.7	98.7	98.7	98.7	98.7	98.7
Iran	1	89.9	89.9	89.9	89.9	89.9	89.9	89.9
Ireland	6	90.1	90.1	93.4	94.3	99.0	100.0	100.0
Italy	18	0.0	20.6	39.8	75.9	82.4	98.3	98.9
Japan	47	33.9	83.8	86.4	87.9	89.5	90.2	92.9
Kuwait	1	57.9	57.9	57.9	57.9	57.9	57.9	57.9
Mexico	10	24.5	27.0	34.4	65.5	69.9	83.7	85.2
Moldova	4	35.7	35.7	59.9	85.9	93.8	100.0	100.0
Netherland	5	15.9	15.9	58.5	67.0	86.3	88.8	88.8
Norway	1	88.9	88.9	88.9	88.9	88.9	88.9	88.9
Panama	1	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Paraguay	1	76.4	76.4	76.4	76.4	76.4	76.4	76.4
Peru	18	0.0	0.0	3.9	56.4	84.1	89.6	93.9
Philippines	4	1.0	1.0	28.0	57.6	75.6	90.9	90.9
Portugal	2	82.7	82.7	82.7	86.6	90.4	90.4	90.4
Puerto Rico	1	97.2	97.2	97.2	97.2	97.2	97.2	97.2
Romania	8	48.7	48.7	80.3	81.8	86.5	89.9	89.9
South Africa	52	0.0	23.7	50.6	74.9	89.4	95.9	99.7
South Korea	7	8.4	8.4	17.1	85.8	86.8	95.9	95.9
Spain	52	0.0	20.1	47.1	81.8	86.5	89.4	100.0

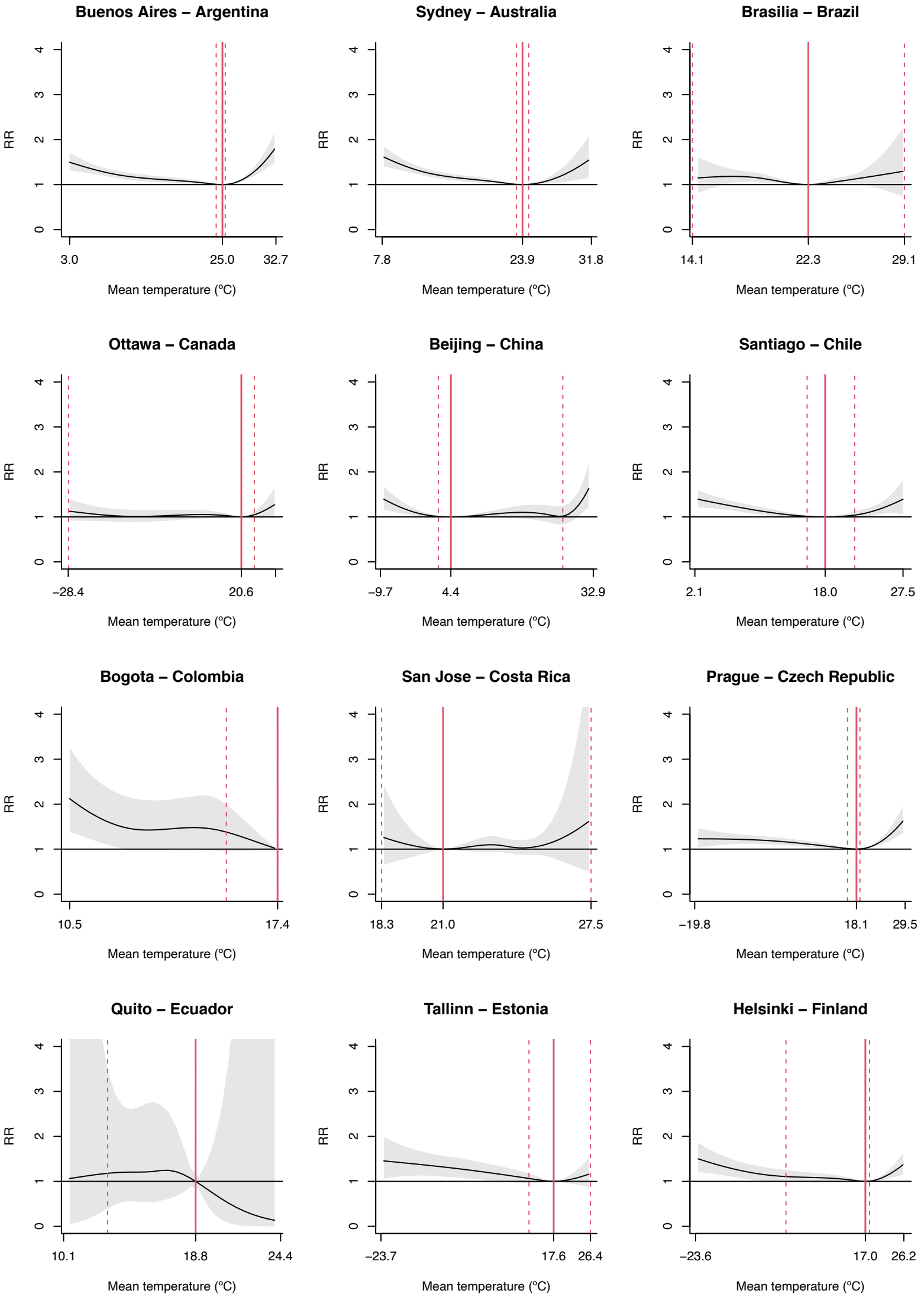
Country	Num. cities	Percentile distribution (MMTP, %)						
		Min.	p10	p25	p50	p75	p90	Max.
Sweden	3	64.2	64.2	64.2	82.9	87.1	87.1	87.1
Switzerland	8	41.3	41.3	48.9	63.8	87.8	98.9	98.9
Taiwan	3	46.6	46.6	46.6	54.9	71.8	71.8	71.8
Thailand	62	0.0	0.0	18.9	66.7	89.7	99.9	100.0
UK	10	87.3	88.7	90.4	90.7	90.9	91.6	92.1
Uruguay	1	78.8	78.8	78.8	78.8	78.8	78.8	78.8
USA	211	0.0	0.0	64.7	83.6	88.2	95.3	100.0
Vietnam	2	0.1	0.1	0.1	46.1	92.1	92.1	92.1

eFigure 1. Geographical distribution of the 658 communities analyzed by Köppen climate classification.



eFigure 2. Overall cumulative exposure-response relationships and minimum mortality temperatures in 43 communities.

These exposure-response relationships are computed in the 43 communities, as the capital city or the largest city/area for each country, with the minimum mortality temperature (MMT) and the 2.5th and 97.5th percentiles are added as solid and dashed vertical lines in red color, respectively.


Buenos Aires – Argentina
RR
0
1
2
3
4
3.0
25.0
32.7
Mean temperature (ºC)
Sydney – Australia
RR
0
1
2
3
4
7.8
23.9
31.8
Mean temperature (ºC)
Brasilia – Brazil
RR
0
1
2
3
4
14.1
22.3
29.1
Mean temperature (ºC)
Ottawa – Canada
RR
0
1
2
3
4
−28.4
20.6
Mean temperature (ºC)
Beijing – China
RR
0
1
2
3
4
−9.7
4.4
32.9
Mean temperature (ºC)
Santiago – Chile
RR
0
1
2
3
4
2.1
18.0
27.5
Mean temperature (ºC)
Bogota – Colombia
RR
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2
3
4
10.5
17.4
Mean temperature (ºC)
San Jose – Costa Rica
RR
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2
3
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18.3
21.0
27.5
Mean temperature (ºC)
Prague – Czech Republic
RR
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2
3
4
−19.8
18.1
29.5
Mean temperature (ºC)
Quito – Ecuador
RR
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1
2
3
4
10.1
18.8
24.4
Mean temperature (ºC)
Tallinn – Estonia
RR
0
1
2
3
4
−23.7
17.6
26.4
Mean temperature (ºC)
Helsinki – Finland
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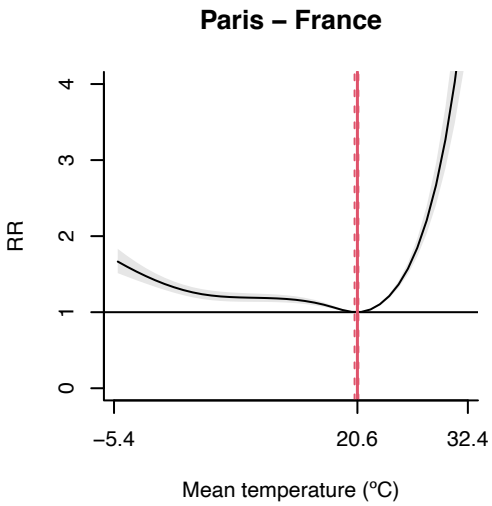
−23.6
17.0
26.2
Mean temperature (ºC)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3
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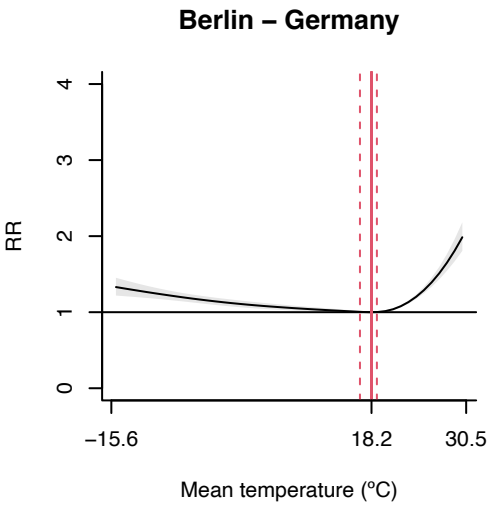
20.6
32.4
Mean temperature (ºC)


Berlin – Germany
RR
0
1
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3
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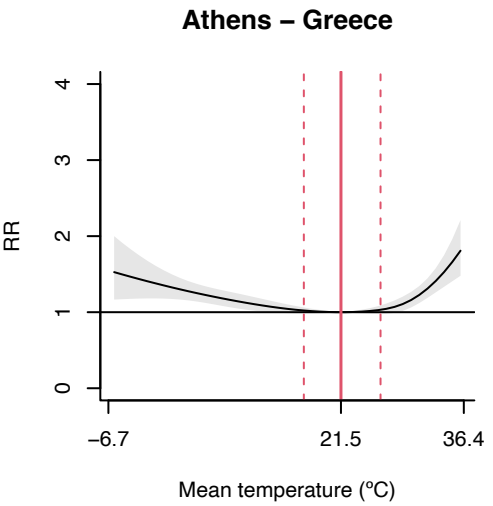
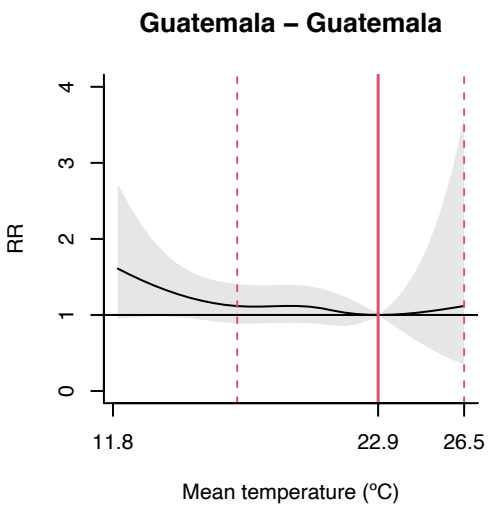
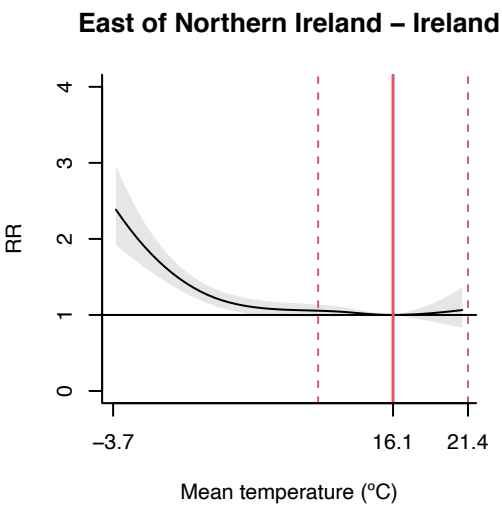
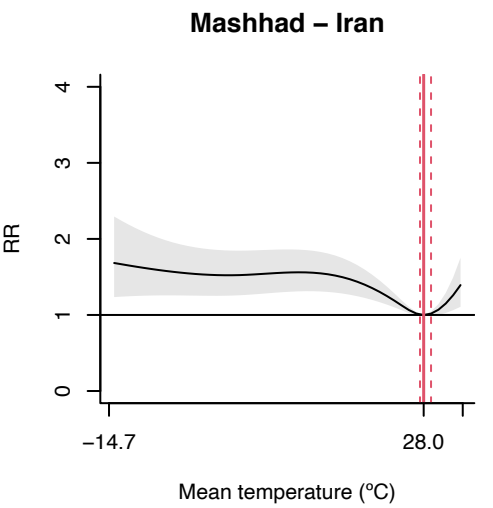
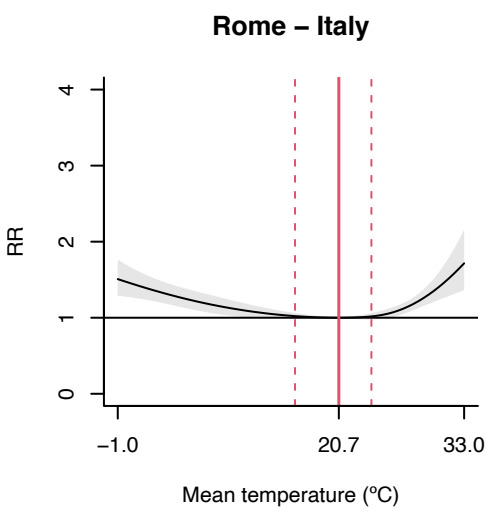
−15.6
18.2
30.5
Mean temperature (ºC)

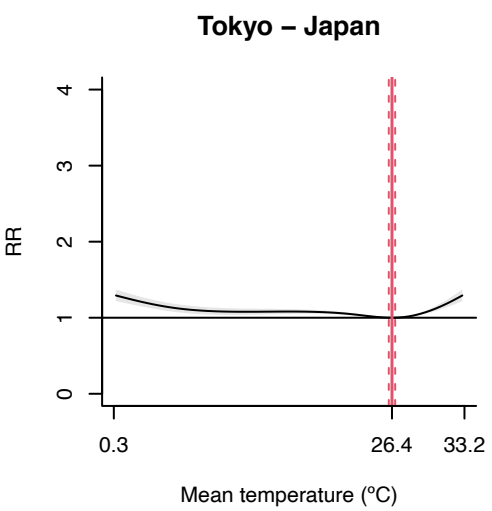

Athens – Greece
RR
0
1
2
3
4
−6.7
21.5
36.4
Mean temperature (ºC)

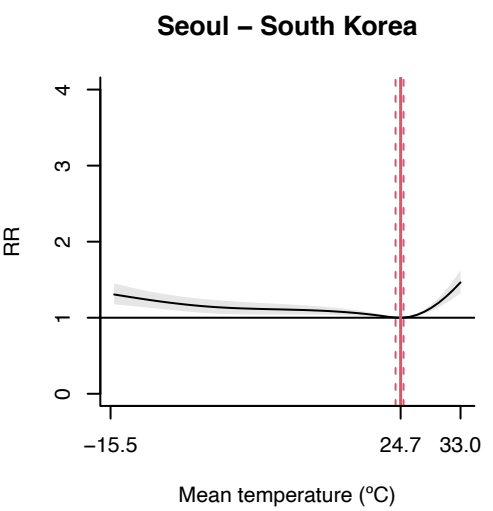

Guatemala – Guatemala
RR
0
1
2
3
4
11.8
22.9
26.5
Mean temperature (ºC)

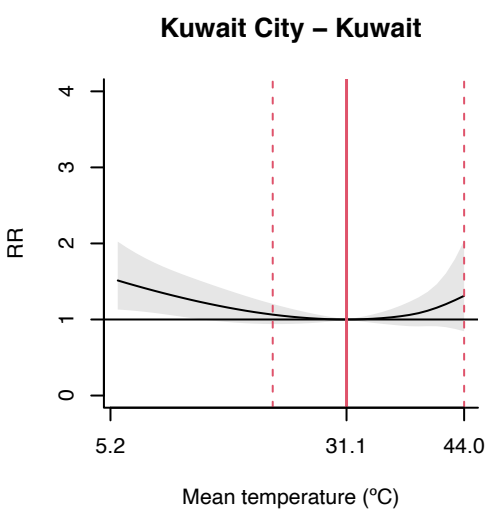

East of Northern Ireland – Ireland
RR
0
1
2
3
4
−3.7
16.1
21.4
Mean temperature (ºC)

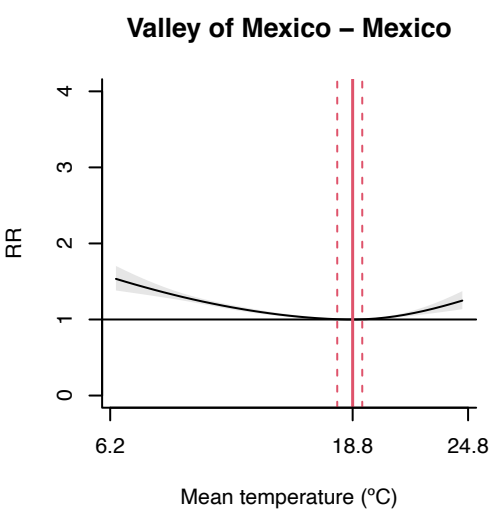

Mashhad – Iran
RR
0
1
2
3
4
−14.7
28.0
Mean temperature (ºC)

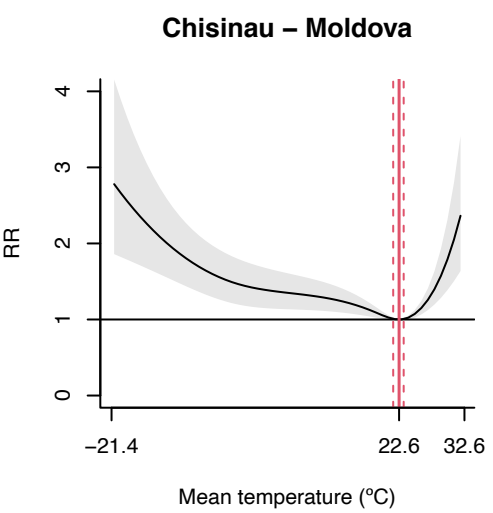

Rome – Italy
RR
0
1
2
3
4
−1.0
20.7
33.0
Mean temperature (ºC)


Tokyo – Japan
RR
0
1
2
3
4
0.3
26.4
33.2
Mean temperature (ºC)

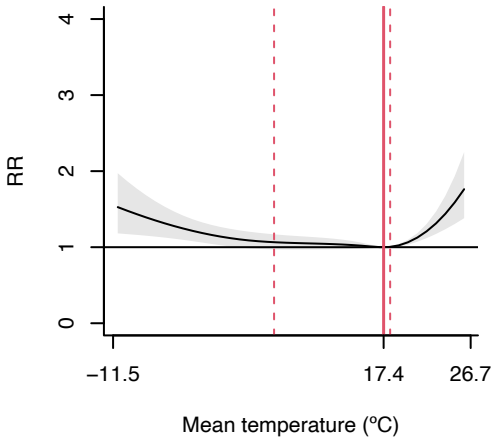

Seoul – South Korea
RR
0
1
2
3
4
−15.5
24.7
33.0
Mean temperature (ºC)


Kuwait City – Kuwait
RR
0
1
2
3
4
5.2
31.1
44.0
Mean temperature (ºC)

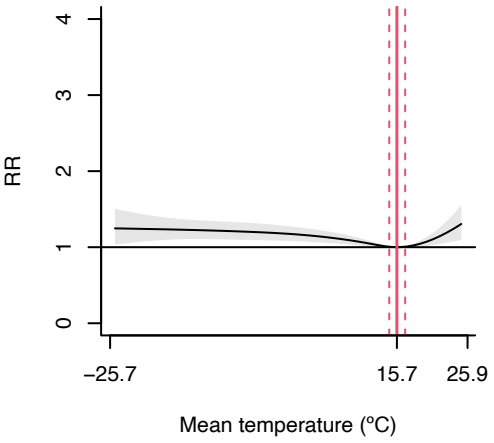

Valley of Mexico – Mexico
RR
0
1
2
3
4
6.2
18.8
24.8
Mean temperature (ºC)


Chisinau – Moldova
RR
0
1
2
3
4
−21.4
22.6
32.6
Mean temperature (ºC)

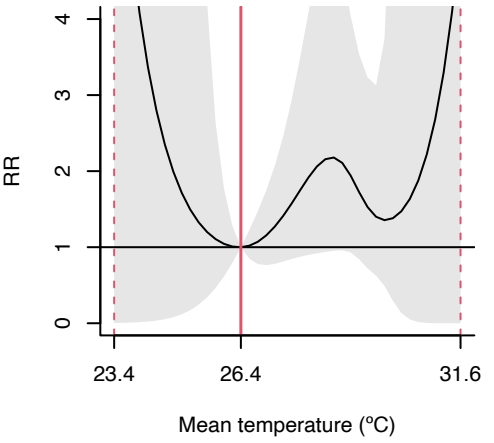
Amsterdam – The Netherlands



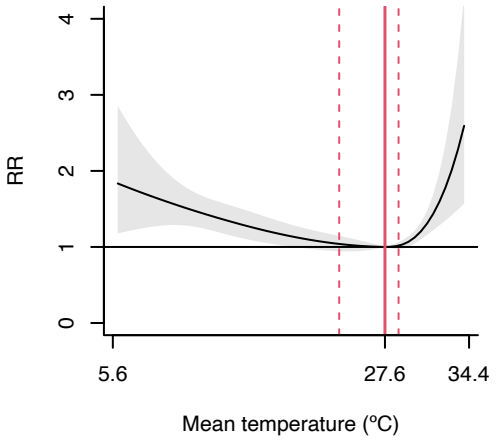
Oslo – Norway



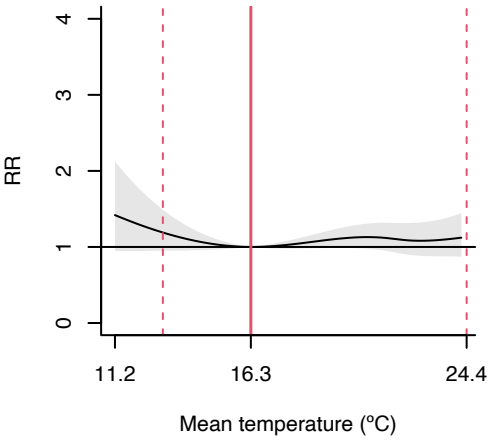
Panama City – Panama



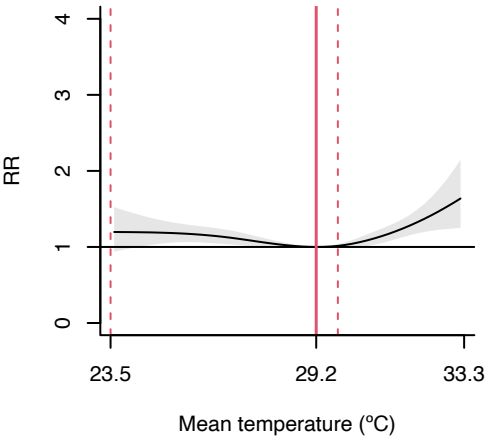
Asuncion – Paraguay



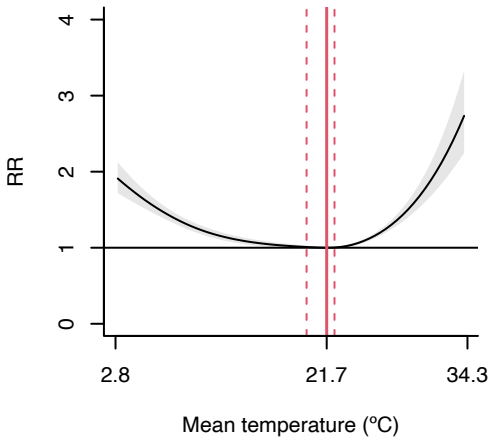
Lima – Peru



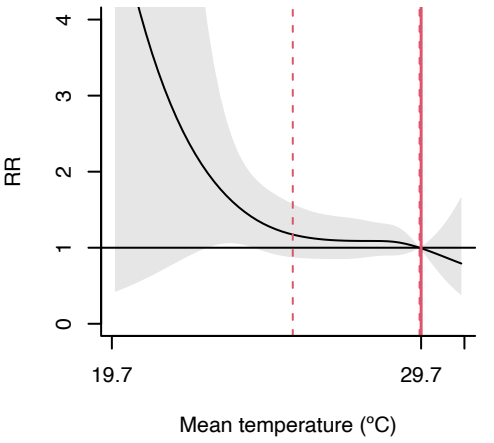
Manila – Philippines



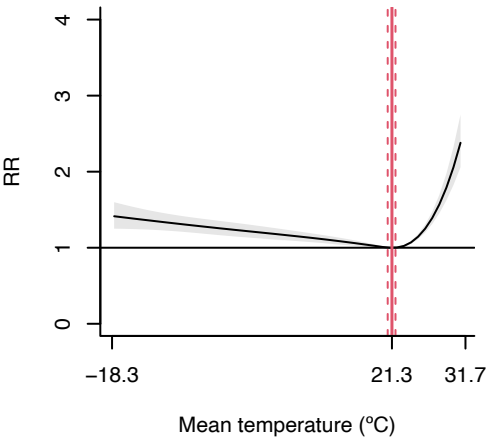
Lisboa – Portugal



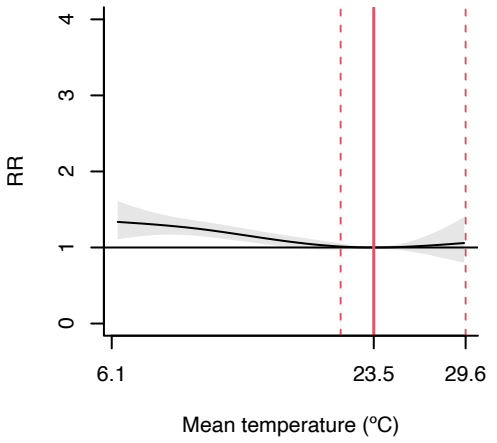
San Juan – Puerto Rico



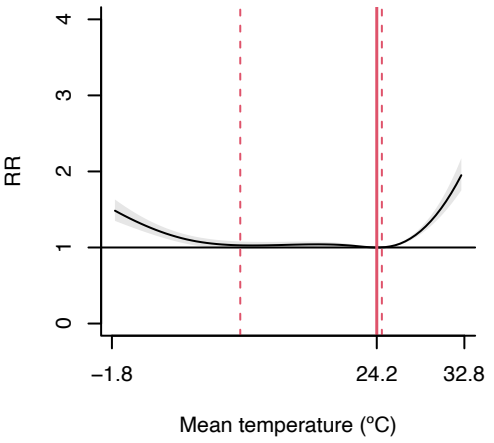
Bucharest – Romania



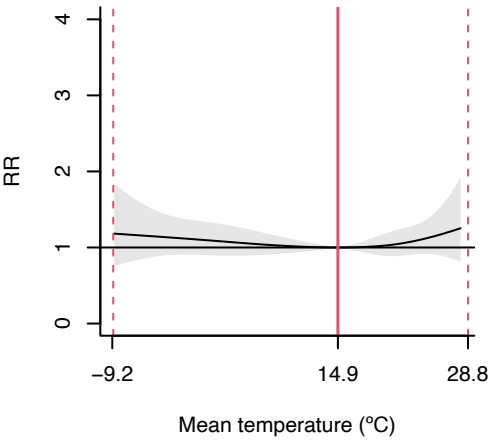
City of Cape Town – South Africa

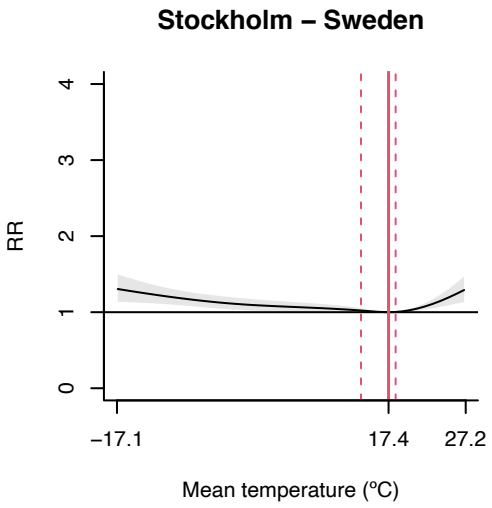


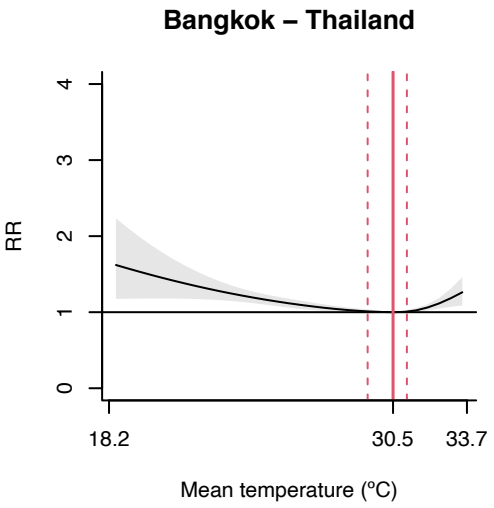
Madrid – Spain

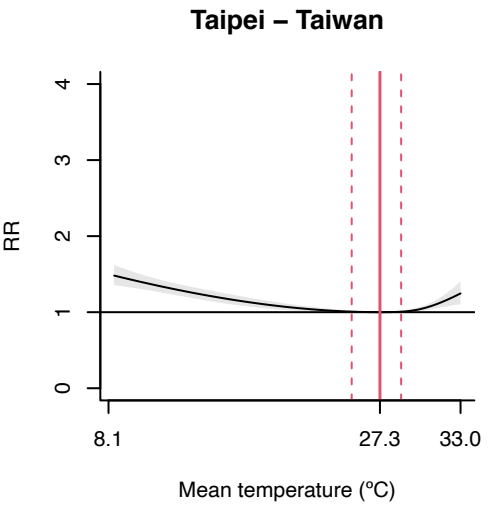


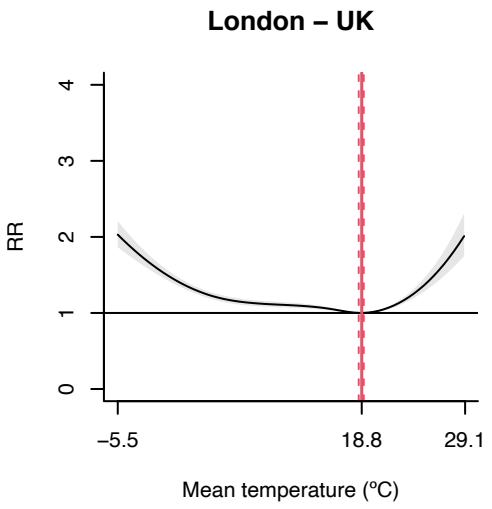
Geneve – Switzerland

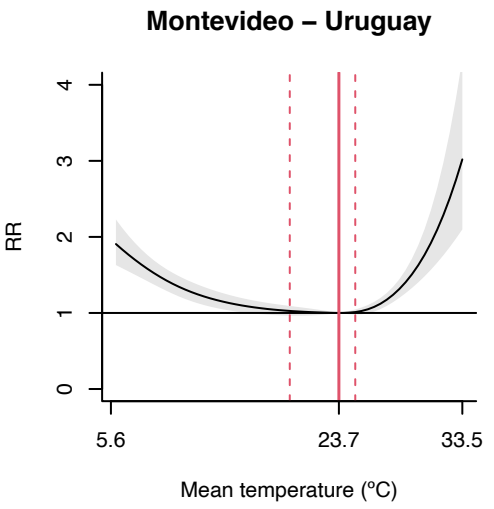


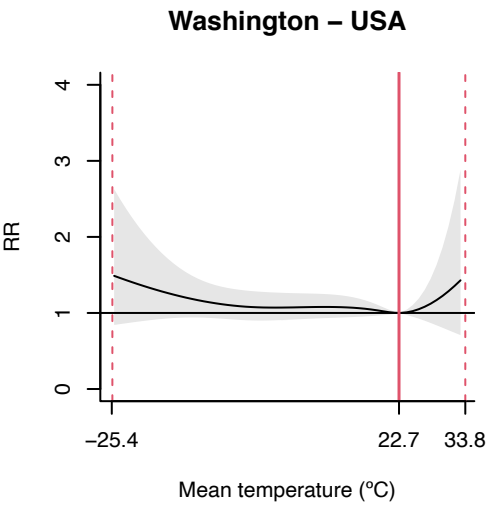

Stockholm – Sweden
RR
0
1
2
3
4
–17.1
17.4
27.2
Mean temperature (ºC)

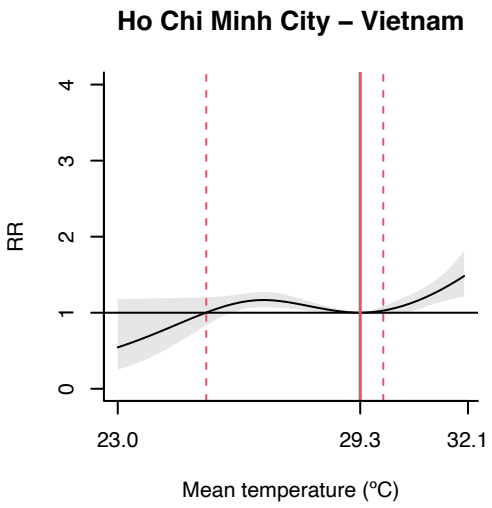

Bangkok – Thailand
RR
0
1
2
3
4
18.2
30.5
33.7
Mean temperature (ºC)


Taipei – Taiwan
RR
0
1
2
3
4
8.1
27.3
33.0
Mean temperature (ºC)

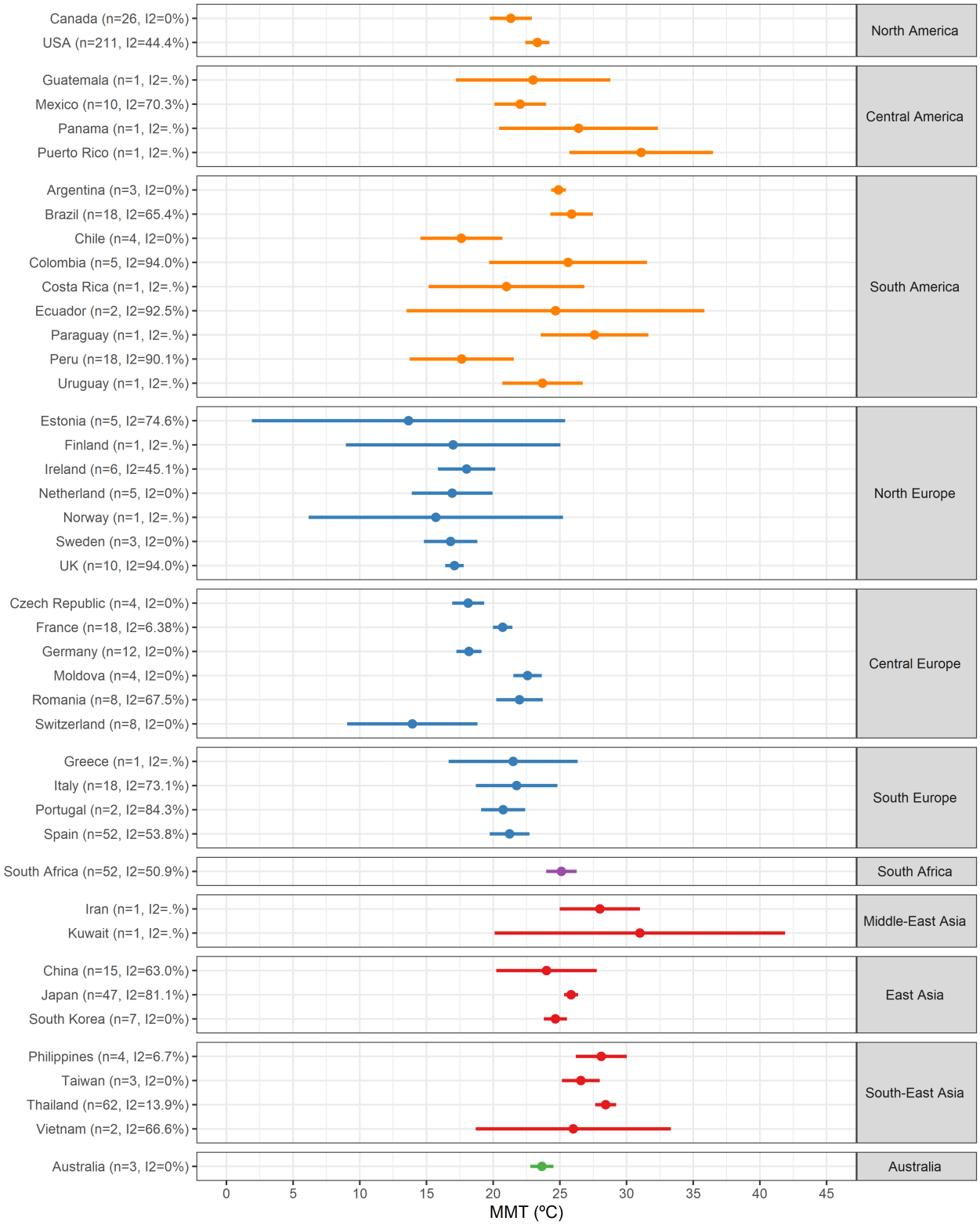

London – UK
RR
0
1
2
3
4
–5.5
18.8
29.1
Mean temperature (ºC)


Montevideo – Uruguay
RR
0
1
2
3
4
5.6
23.7
33.5
Mean temperature (ºC)

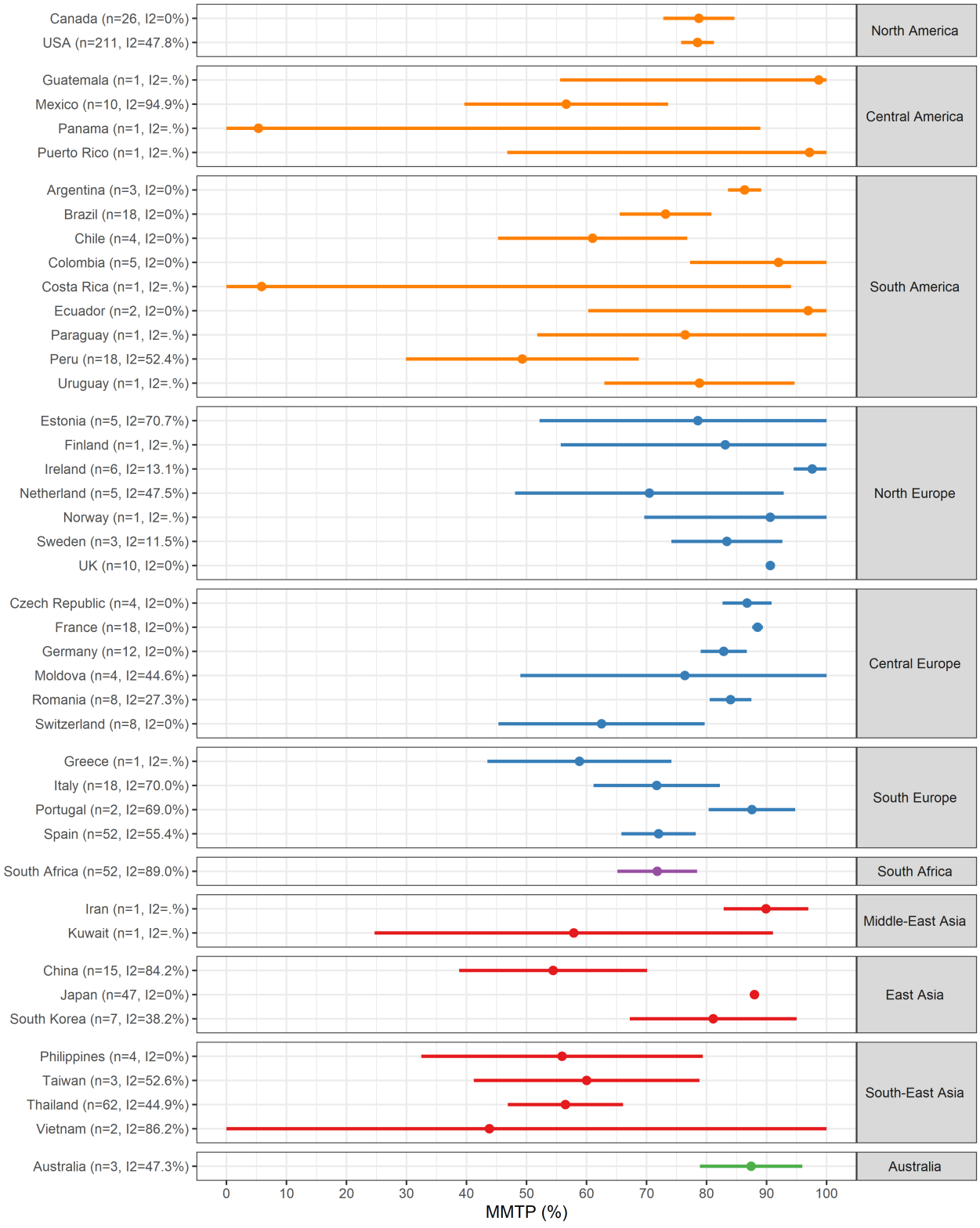
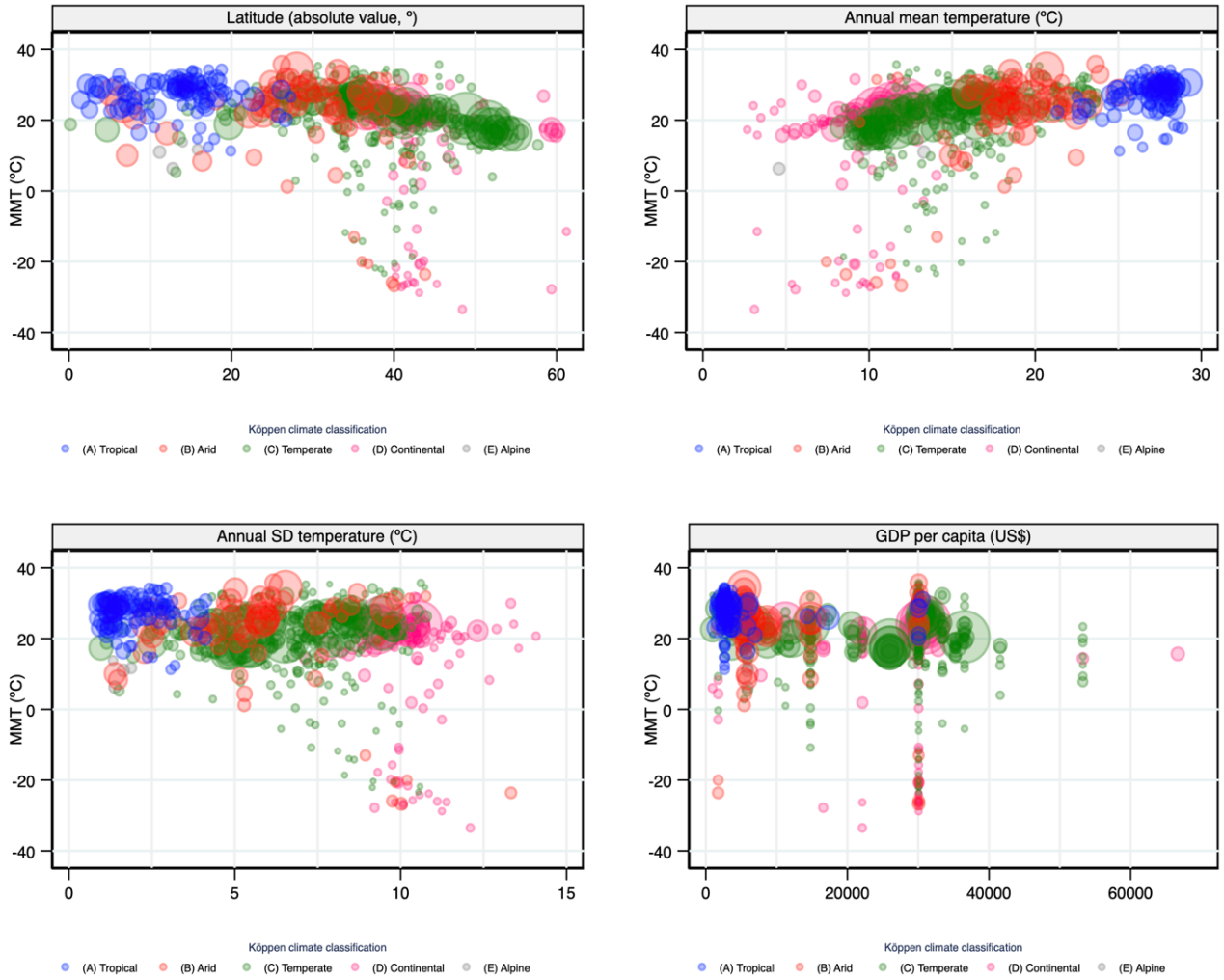

Washington – USA
RR
0
1
2
3
4
–25.4
22.7
33.8
Mean temperature (ºC)


Ho Chi Minh City – Vietnam
RR
0
1
2
3
4
23.0
29.3
32.1
Mean temperature (ºC)

eFigure 3. Pooled minimum mortality temperature (MMT, ºC) by country.



eFigure 4. Pooled minimum mortality temperature percentile (MMTP, %) by country.



eFigure 5. Scatter plots between minimum mortality temperature (MMT, ºC) and geographical, climatic and socio-economic indicators.