

Supplementary material

Seasonal variation in mortality and the role of temperature: a multi-country multi-city Study

Lina Madaniyazi,^{1,2} Ben Armstrong,³ Yeonseung Chung,⁴ Chris Fook Sheng Ng,² Xerxes Seposo,² Yoonhee Kim,⁵ Aurelio Tobias,^{2,6} Yuming Guo,^{7,8} Francesco Sera,^{3,9} Yasushi Honda,^{10,11} Antonio Gasparini,^{3,12,13} Masahiro Hashizume^{1,2,14*}, MCC collaborative research network¹⁵

*Corresponding author

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Complementary results not shown in main text

Table S1. Description of country/region-specific data for each season[§]
(Complementary table with the summary of study period, included cities and total number of death cases)

| Country/region | Study period | No of locations | All-cause mortality* (No of cases) | | | | Cardiovascular mortality (No of cases) | | | | Respiratory mortality (No of cases) | | | |
|-----------------------------|-------------------|-----------------|------------------------------------|-----------------|-----------------|-----------------|--|-----------------|----------------|-----------------|-------------------------------------|----------------|----------------|----------------|
| | | | Fall | Spring | Summer | Winter | Fall | Spring | Summer | Winter | Fall | Spring | Summer | Winter |
| Argentina* | 2005- 2015 | 3 | 163671 | 168979 | 153552 | 200131 | NA | NA | NA | NA | NA | NA | NA | NA |
| Australia* | 1988- 2009 | 3 | 288510 | 289810 | 268595 | 331035 | NA | NA | NA | NA | NA | NA | NA | NA |
| Brazil* | 1997- 2011 | 18 | 864123 | 826583 | 812016 | 898414 | NA | NA | NA | NA | NA | NA | NA | NA |
| Canada | 1986- 2015 | 26 | 913579 | 946004 | 881111 | 993055 | 306822 | 323655 | 291260 | 342872 | 70359 | 84650 | 66127 | 95363 |
| Chile | 2004- 2014 | 4 | 77908 | 80071 | 73712 | 93771 | NA | NA | NA | NA | NA | NA | NA | NA |
| China**† | 1996- 2015 | 17 | 281249 | 303549 | 277240 | 339632 | 108240 | 117303 | 101135 | 141324 | 34455 | 41270 | 36350 | 52601 |
| Colombia | 1998- 2013 | 5 | 238429 | 236800 | 238155 | 243155 | 66495 | 66284 | 67477 | 67644 | 24924 | 24287 | 24497 | 26108 |
| Czech Republic | 1994- 2015 | 4 | 171904 | 179429 | 170023 | 190554 | 85783 | 91110 | 84301 | 98846 | 8771 | 10535 | 8303 | 12244 |
| Estonia | 1997- 2015 | 5 | 35780 | 37558 | 34399 | 38610 | NA | NA | NA | NA | NA | NA | NA | NA |
| Finland | 1994- 2014 | 1 | 36753 | 39142 | 36831 | 40582 | 13554 | 14967 | 13590 | 15291 | 2074 | 2592 | 2111 | 2965 |
| France | 2000- 2014 | 18 | 394642 | 406199 | 386608 | 446940 | 23422 | 25636 | 22766 | 28596 | 6042 | 7273 | 5610 | 9257 |
| Germany | 1993- 2015 | 12 | 746985 | 791852 | 736526 | 830502 | NA | NA | NA | NA | NA | NA | NA | NA |
| Greece | 2001- 2010 | 1 | 66222 | 74514 | 70350 | 76883 | 31063 | 35357 | 32492 | 37282 | 6365 | 7792 | 6693 | 7921 |
| Iran | 2004- 2013 | 1 | 28154 | 31031 | 31516 | 30884 | 9673 | 9987 | 11153 | 9891 | 1568 | 1765 | 1887 | 1525 |
| Ireland* | 1984- 2007 | 6 | 248322 | 271690 | 238464 | 299739 | 78763 | 88276 | 75855 | 97427 | 35141 | 43437 | 31630 | 53931 |
| Italy | 1987- 2015 | 24 | 393888 | 419523 | 388115 | 466208 | 36493 | 40280 | 34348 | 45774 | 18209 | 20715 | 17957 | 24202 |
| Japan | 1972-2015 | 47 | 9538037 | 10157928 | 9100747 | 11146329 | 3159160 | 3512202 | 2891588 | 4068403 | 1125848 | 1309345 | 1090746 | 1502371 |
| Mexico | 1998- 2014 | 10 | 731833 | 716547 | 686088 | 845618 | 185385 | 182780 | 173856 | 223177 | 66229 | 65224 | 53932 | 98802 |
| Moldova | 2001- 2010 | 4 | 14987 | 15339 | 13845 | 15735 | NA | NA | NA | NA | NA | NA | NA | NA |
| Netherlands | 1995- 2016 | 9 | 834784 | 895872 | 828826 | 943966 | NA | NA | NA | NA | NA | NA | NA | NA |
| Norway | 1969- 2016 | 1 | 63894 | 65536 | 62171 | 71847 | 26579 | 27379 | 25422 | 30206 | 6018 | 6777 | 5742 | 8640 |
| Philippines | 2006- 2010 | 4 | 66939 | 70068 | 67600 | 69909 | 21471 | 21972 | 22149 | 21809 | 7319 | 8164 | 7807 | 7900 |
| Portugal | 1980- 2012 | 2 | 256638 | 279244 | 252767 | 333603 | NA | NA | NA | NA | NA | NA | NA | NA |
| Romania | 1994- 2016 | 8 | 230459 | 242545 | 223165 | 254977 | NA | NA | NA | NA | NA | NA | NA | NA |
| South Africa | 1997- 2013 | 52 | 2090424 | 2089411 | 2009452 | 2319843 | 309568 | 319179 | 292343 | 378598 | 246159 | 259221 | 225096 | 316438 |
| South Korea | 1992- 2015 | 7 | 988120 | 1012023 | 948751 | 1023381 | 243234 | 253130 | 222744 | 263853 | 51709 | 60388 | 49823 | 62469 |
| Spain | 1990- 2010 | 52 | 820029 | 880126 | 806510 | 991807 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sweden | 1990- 2016 | 4 | 166968 | 176240 | 163049 | 187504 | 62855 | 67843 | 61609 | 72932 | 10077 | 12801 | 9952 | 14601 |
| Switzerland | 1995- 2013 | 8 | 58403 | 61266 | 56618 | 67351 | 21732 | 22883 | 20502 | 25627 | 3243 | 4237 | 3161 | 5374 |
| Taiwan | 1994- 2014 | 3 | 306032 | 287007 | 324401 | 292133 | 68261 | 61731 | 77607 | 61845 | 30795 | 25754 | 32420 | 27549 |
| Thailand | 1999- 2008 | 62 | 465084 | 453245 | 438418 | 471106 | NA | NA | NA | NA | NA | NA | NA | NA |
| UK | 1999- 2008 | 24 | 3263150 | 3528960 | 3215188 | 3974210 | 1269119 | 1387366 | 1228021 | 1543796 | 426027 | 498687 | 397136 | 706796 |
| USA† | 1973- 2006 | 272 | 8533553 | 8913673 | 8306547 | 9602288 | 3248721 | 3456588 | 3149145 | 3775859 | 662499 | 777874 | 631914 | 933510 |
| Vietnam | 2009- 2013 | 2 | 28657 | 26243 | 25735 | 27538 | 6453 | 5873 | 6114 | 5993 | 2364 | 2126 | 2073 | 2407 |
| 34 countries/regions | 1972- 2016 | 719 | 33408110 | 34974007 | 32327091 | 38159240 | 9382846 | 10131781 | 8905477 | 11357045 | 2846195 | 3274914 | 2710967 | 3972974 |

* Data on non-external mortality was used because data on all-cause mortality is not available for these locations.

† For China and USA, most of the locations have data on all-cause, cardiovascular, and respiratory mortality; while a few locations have data only on all-cause mortality or cause-specific mortality (both cardiovascular and respiratory mortality); 2 locations in China and 31 locations in USA have data for cause-specific mortality but do not have data for all-cause/non-external mortality.

§ For locations in the northern hemisphere: Fall (September, October, and November), Spring (March, April, and May), Summer (June, July, and August), Winter (December, January, and February); for locations in the southern hemisphere: Fall (March, April, and May), Spring (September, October, and November), Summer (December, January, and February), Winter (June, July, and August)

Additional information on location-specific characteristics

We collected data on location-specific characteristics on environmental factors (climate and air pollution), demographics, and socioeconomic factors. For climatic indicators, we considered the average daily mean temperature, daily mean temperature range, and daily mean relative humidity from the MCC dataset and took the averaged value across multiple years for the analysis. We collected global estimates of annual PM_{2.5} levels of the Data Integration Model for Air Quality available for the year of 2014, which were available at a spatial resolution of 0.1° for latitude and longitude. The PM_{2.5} concentration of the grid cell [0.1° × 0.1°] was assigned to each location.

For demographic and socioeconomic factors, we collected from the Organization for Economic Co-operation and Development (OECD) Regional and Metropolitan Database (<http://stats.oecd.org/Index.aspx>), including the proportion of population aged over 65 years old, gross domestic product (GDP), Gross Value Added (GVA, a measure of labour productivity), education level, unemployment rate, and Gini index. The OECD data are available at three geographical levels, including the city/metropolitan area, small region (i.e., provinces or prefectures), and large region (i.e., administrative regions or small states). In addition, the OECD data on socioeconomic factors are available for different time periods for different locations ranging from 2000-2014. For each demographic and socioeconomic indicator, we used the value that were measured in a single year or averaged across multiple years and collected at the smallest geographical level available. The details for OECD data collection were described in previous work.¹

1. Sera, F. *et al.* How urban characteristics affect vulnerability to heat and cold: a multi-country analysis. *Int. J. Epidemiol.* **48**, 1101–1112 (2019).

Table S2. Summary of the location-specific characteristics on climate, demographics, socioeconomic factors, and air pollutants

| Indicators | Definition | Years | Numbers of locations* | Median±SD [IQR] |
|--|--|---------------------------------------|-----------------------|-------------------------------|
| Climate | | | | |
| Averaged mean temperature (°C) | Averaged value of daily mean temperature | Varied between locations ranging from | 719 | 13.92±4.79 [10.54, 14.51] |
| Total range of daily mean temperature | Difference between the maximum value and the minimum value of daily mean temperature | 1969 to 2016 | 719 | 31.67±9.35 [23.98, 38.61] |
| Averaged mean relative humidity (%) | Averaged value of daily mean relative humidity | | 560 | 68.93±8.22 [65.16, 72.05] |
| Demographic | | | | |
| % population ≥65 years (%) | % old population (65 years or more) | 2000 | 449 | 12.66±3.76 [10.38, 14.76] |
| Socioeconomic | | | | |
| GDP (US\$) | GDP per capita (US\$) (current prices, current Public Private Partnership) | 2001; 2010 | 504 | 38972±15550.63 [30062, 78444] |
| Labour productivity (US\$) | Gross Value Added per worker (current prices, current Public Private Partnership) | 2005; 2009-2010 | 412 | 79445±41112.17 [66413, 84225] |
| Education level (%) | Share of labour force with at least secondary-level education | 2000 | 313 | 22.57±4.83 [20.37, 24.88] |
| Unemployment rate (%) | Unemployment rate (%) | 2001; 2010 | 486 | 5.61±8.25 [4.16, 7.67] |
| Gini index | Gini (disposable income, after taxes and transfers); low index means low inequality | 2009-2014 | 313 | 0.37±0.05 [0.32,0.40] |
| Air pollution | | | | |
| PM _{2.5} (µg/m ³) | Averaged annual mean PM _{2.5} concentration | 2014 | 719 | 9.25±10.45 [8.24, 12.59] |

IQR: Interquartile range; SD: Standard Deviation

* Numbers of locations with valid data on the indicator

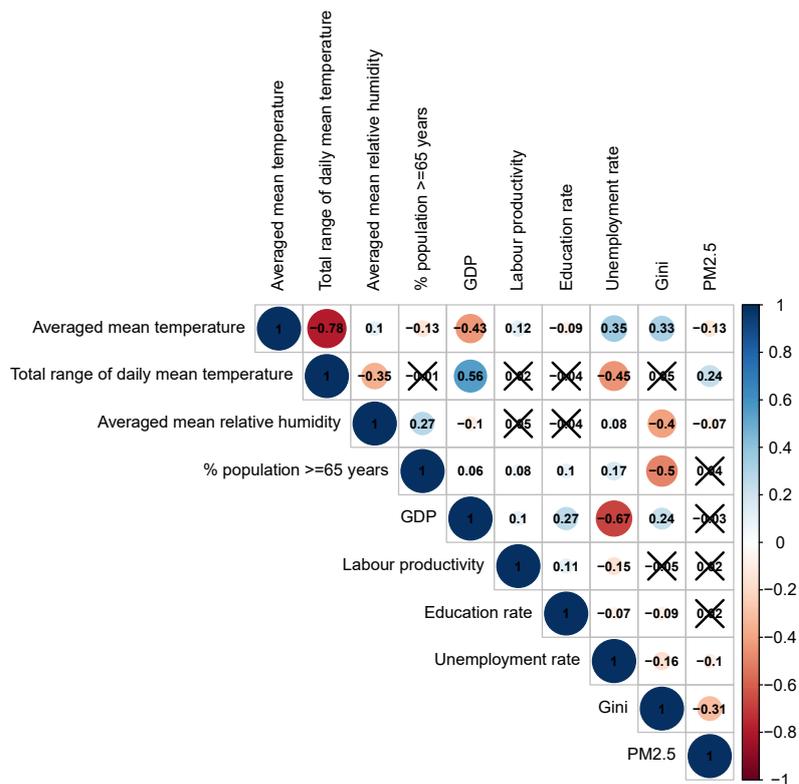


Figure S1. Correlation matrix between location-specific indicators. Analysis was limited to the locations that have all-cause/non-external mortality and valid data on the indicators.

(Red: negative association; Blue: positive associations; Cross: $p > 0.05$)

Table S3. Location-specific peak-to-trough ratio (95% confidence intervals) without and with temperature adjustment for all-cause, circulatory and respiratory mortality

| Country/region | Location | Climate Zone | All-cause/non-external mortality | | Cardiovascular mortality | | Respiratory mortality | |
|------------------|-----------------|--------------|----------------------------------|--------------------------|--------------------------|-----------|-----------------------|-----------|
| | | | Not adjusted | Adjusted | Not adjusted | Adjusted | Not adjusted | Adjusted |
| Argentina | Buenos Aires | Temperate | 1.33(1.31,1.35) | 1.13(1.09,1.18) | NA | NA | NA | NA |
| Argentina | Cordoba | Temperate | 1.4(1.37,1.43) | 1.19(1.12,1.27) | NA | NA | NA | NA |
| Argentina | Rosario | Temperate | 1.41(1.38,1.44) | 1.12(1.05,1.19) | NA | NA | NA | NA |
| Argentina | (Pooled) | | 1.38(1.33,1.43) | 1.14 (1.10,1.19) | NA | NA | NA | NA |
| Australia | Brisbane | Temperate | 1.38(1.35,1.41) | 1.08(0.99,1.18) | NA | NA | NA | NA |
| Australia | Melbourne | Temperate | 1.23(1.21,1.24) | 1.11(1.07,1.15) | NA | NA | NA | NA |
| Australia | Sydney | Temperate | 1.38(1.37,1.4) | 1.14(1.09,1.18) | NA | NA | NA | NA |
| Australia | (Pooled) | | 1.33(1.22,1.44) | 1.11 (1.08, 1.15) | NA | NA | NA | NA |
| Brazil | Belem | Tropical | 1.1(1.08,1.12) | 1.09(1.06,1.12) | NA | NA | NA | NA |
| Brazil | Belo Horizonte | Temperate | 1.11(1.09,1.13) | 1.06(1.04,1.08) | NA | NA | NA | NA |
| Brazil | Brasilia | Tropical | 1.09(1.07,1.11) | 1.02(0.99,1.06) | NA | NA | NA | NA |
| Brazil | Cuiaba | Tropical | 1.25(1.23,1.27) | 1.14(1.09,1.18) | NA | NA | NA | NA |
| Brazil | Curitiba | Temperate | 1.12(1.08,1.15) | 1.08(1.01,1.16) | NA | NA | NA | NA |
| Brazil | Fortaleza | Tropical | 1.17(1.15,1.18) | 1.2(1.17,1.22) | NA | NA | NA | NA |
| Brazil | Goiania | Tropical | 1.03(1.01,1.05) | 1.01(0.99,1.04) | NA | NA | NA | NA |
| Brazil | Joao Pessoa | Tropical | 1.08(1.05,1.11) | 1.08(1.03,1.14) | NA | NA | NA | NA |
| Brazil | Maceio | Tropical | 1.11(1.09,1.14) | 1.14(1.09,1.19) | NA | NA | NA | NA |
| Brazil | Manaus | Tropical | 1.1(1.07,1.12) | 1.08(1.05,1.11) | NA | NA | NA | NA |
| Brazil | Natal | Tropical | 1.1(1.08,1.13) | 1.11(1.06,1.16) | NA | NA | NA | NA |
| Brazil | Porto Alegre | Temperate | 1.25(1.23,1.27) | 1.05(1,1.11) | NA | NA | NA | NA |
| Brazil | Recife | Tropical | 1.11(1.09,1.12) | 1.1(1.08,1.13) | NA | NA | NA | NA |
| Brazil | Salvador | Tropical | 1.12(1.1,1.15) | 1.1(1.05,1.15) | NA | NA | NA | NA |
| Brazil | Sao Luis | Tropical | 1.09(1.07,1.1) | 1.13(1.1,1.17) | NA | NA | NA | NA |
| Brazil | Sao Paulo | Temperate | 1.18(1.17,1.19) | 1.08(1.07,1.09) | NA | NA | NA | NA |

| | | | | | | | | |
|---------------|--------------------|-------------|------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|
| Brazil | Teresina | Tropical | 1.16(1.13,1.2) | 1.11(1.08,1.14) | NA | NA | NA | NA |
| Brazil | Vitoria | Tropical | 1.06(1.02,1.09) | 1.09(1.02,1.16) | NA | NA | NA | NA |
| Brazil | (Pooled) | | 1.08(1.06,1.10) | 1.06 (1.04, 1.08) | NA | NA | NA | NA |
| Canada | Abbotsford | Temperate | 1.13(1.1,1.16) | 1.09(1,1.17) | 1.16(1.11,1.22) | 1.16(0.98,1.36) | 1.68(1.54,1.84) | 1.68(1.1,2.58) |
| Canada | Calgary | Continental | 1.14(1.12,1.16) | 1.11(1.04,1.19) | 1.23(1.19,1.26) | 1.21(1.08,1.35) | 1.5(1.42,1.58) | 1.5(1.19,1.9) |
| Canada | Edmonton | Continental | 1.14(1.12,1.16) | 1.12(1.05,1.2) | 1.2(1.17,1.24) | 1.08(0.97,1.2) | 1.46(1.39,1.53) | 1.55(1.22,1.96) |
| Canada | Halifax | Continental | 1.17(1.14,1.19) | 1.01(0.92,1.12) | 1.22(1.17,1.26) | 1.19(0.93,1.52) | 1.7(1.57,1.83) | 1.71(1.07,2.73) |
| Canada | Hamilton | Continental | 1.17(1.15,1.19) | 1.12(1.01,1.23) | 1.24(1.21,1.28) | 1.15(1.02,1.29) | 1.6(1.51,1.69) | 1.63(1.17,2.28) |
| Canada | Kingston | Continental | 1.14(1.11,1.16) | 1.07(0.96,1.18) | 1.18(1.12,1.24) | 1.13(0.91,1.41) | 1.57(1.44,1.71) | 1.09(0.93,1.28) |
| Canada | Kitchener-Waterloo | Continental | 1.21(1.18,1.24) | 1.08(0.98,1.19) | 1.3(1.25,1.35) | 1.34(1.11,1.62) | 1.62(1.51,1.75) | 1.19(0.81,1.74) |
| Canada | London Ontario | Continental | 1.15(1.13,1.18) | 1.09(0.99,1.21) | 1.2(1.16,1.24) | 1.07(0.91,1.26) | 1.55(1.46,1.65) | 1.42(1.13,1.8) |
| Canada | Montreal | Continental | 1.23(1.22,1.25) | 1.19(1.12,1.26) | 1.33(1.31,1.35) | 1.23(1.12,1.35) | 1.86(1.8,1.93) | 1.87(1.54,2.28) |
| Canada | Niagara | Continental | 1.18(1.17,1.2) | 1.09(1.01,1.18) | 1.26(1.23,1.29) | 1.2(1.04,1.39) | 1.61(1.53,1.69) | 1.34(1.05,1.72) |
| Canada | Oakville | Continental | 1.14(1.11,1.17) | 1.1(0.98,1.24) | 1.21(1.16,1.26) | 1.07(0.92,1.24) | 1.58(1.45,1.71) | 1.39(0.92,2.09) |
| Canada | Oshawa | Continental | 1.19(1.16,1.22) | 1.06(0.94,1.19) | 1.24(1.18,1.29) | 1.13(0.85,1.51) | 1.68(1.55,1.83) | 2.42(1.3,4.5) |
| Canada | Ottawa | Continental | 1.15(1.12,1.17) | 1.13(1.01,1.28) | 1.2(1.15,1.25) | 1.05(0.89,1.24) | 1.52(1.39,1.65) | 1.62(1.07,2.43) |
| Canada | Regina | Continental | 1.17(1.14,1.2) | 1.08(0.94,1.25) | 1.22(1.17,1.27) | 1.16(0.92,1.45) | 1.54(1.42,1.67) | 1.24(0.74,2.08) |
| Canada | Saint John NB | Continental | 1.17(1.16,1.18) | 1.13(1.08,1.17) | 1.22(1.21,1.24) | 1.11(1.04,1.19) | 1.52(1.49,1.56) | 1.47(1.27,1.7) |
| Canada | Sarnia | Continental | 1.12(1.09,1.15) | 1.08(0.95,1.23) | 1.15(1.1,1.21) | 1.16(0.9,1.49) | 1.63(1.49,1.8) | 1.45(1,2.09) |
| Canada | Saskatoon | Continental | 1.18(1.16,1.2) | 1.02(0.98,1.05) | 1.25(1.21,1.29) | 1.04(0.91,1.19) | 1.67(1.56,1.8) | 1.52(1.15,2.03) |
| Canada | Sault Ste. Marie | Continental | 1.17(1.15,1.19) | 1.06(1,1.13) | 1.22(1.18,1.26) | 1.08(1,1.16) | 1.73(1.63,1.84) | 1.56(1.14,2.14) |
| Canada | St. John's NFL | Continental | 1.18(1.16,1.19) | 1.09(1.03,1.15) | 1.25(1.23,1.28) | 1.13(1.03,1.23) | 1.62(1.57,1.68) | 1.3(1.16,1.45) |
| Canada | Sudbury | Continental | 1.13(1.09,1.16) | 1.32(1.11,1.56) | 1.19(1.13,1.26) | 1.12(0.87,1.45) | 1.55(1.38,1.75) | 2.16(1.14,4.1) |
| Canada | Thunder Bay | Continental | 1.15(1.14,1.17) | 1.11(1.05,1.17) | 1.21(1.18,1.23) | 1.14(1.03,1.26) | 1.46(1.4,1.53) | 1.21(1,1.46) |
| Canada | Toronto | Continental | 1.19(1.17,1.21) | 1.04(1.01,1.07) | 1.28(1.24,1.32) | 1.11(0.98,1.25) | 1.7(1.59,1.8) | 1.11(0.87,1.41) |
| Canada | Vancouver | Temperate | 1.19(1.16,1.21) | 1.14(1.01,1.29) | 1.22(1.17,1.27) | 1.15(0.98,1.35) | 1.59(1.48,1.71) | 1.61(1.07,2.41) |
| Canada | Victoria | Temperate | 1.17(1.15,1.2) | 1.09(0.93,1.27) | 1.22(1.18,1.27) | 1.06(0.99,1.14) | 1.63(1.5,1.78) | 1.78(0.99,3.2) |

| | | | | | | | | |
|-----------------|-----------------|-------------|------------------------|--------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Canada | Windsor | Continental | 1.15(1.11,1.18) | 1.04(0.99,1.09) | 1.23(1.17,1.29) | 1.05(0.89,1.25) | 1.49(1.32,1.68) | 1.5(0.95,2.36) |
| Canada | Winnipeg | Continental | 1.1(1.07,1.13) | 1.14(0.98,1.34) | 1.15(1.09,1.21) | 1.31(0.98,1.76) | 1.56(1.37,1.76) | 1.7(1.01,2.87) |
| Canada | (Pooled) | | 1.16(1.15,1.17) | 1.08 (1.05, 1.10) | 1.22(1.20,1.23) | 1.09 (1.05,1.13) | 1.57(1.54,1.61) | 1.39 (1.27,1.51) |
| Chile | Chillan | Temperate | 1.33(1.24,1.44) | 1.5(0.88,2.54) | NA | NA | NA | NA |
| Chile | Santiago | Temperate | 1.36(1.34,1.38) | 1.23(1.15,1.31) | NA | NA | NA | NA |
| Chile | Temuco | Temperate | 1.3(1.23,1.37) | 1.13(1.02,1.25) | NA | NA | NA | NA |
| Chile | Valparaiso | Temperate | 1.27(1.23,1.32) | 1.19(1.05,1.34) | NA | NA | NA | NA |
| Chile | (Pooled) | | 1.31(1.26,1.36) | 1.17 (1.09,1.26) | NA | NA | NA | NA |
| China | Anshan | Continental | 1.23(1.18,1.28) | 1.22(0.93,1.59) | 1.34(1.28,1.41) | 1.36(0.93,1.99) | 1.89(1.62,2.22) | 1.73(1.15,2.6) |
| China | Beijing | Continental | 1.42(1.4,1.45) | 1.28(1.11,1.47) | 1.56(1.52,1.60) | 1.25(1.07,1.46) | 2.09(1.97,2.21) | 2.25(1.60,3.16) |
| China | Fuzhou | Temperate | 1.22(1.12,1.32) | 1.56(1.16,2.11) | 1.37(1.23,1.53) | 1.8(1.16,2.8) | 1.27(1.07,1.51) | 2.11(0.81,5.52) |
| China | Guangzhou | Temperate | 1.43(1.39,1.47) | 1.11(1.06,1.16) | 1.66(1.59,1.73) | 1.14(1.05,1.24) | 1.71(1.61,1.81) | 1.28(1.19,1.38) |
| China | Hangzhou | Temperate | 1.59(1.5,1.68) | 1.4(1.1,1.79) | 1.65(1.51,1.8) | 1.6(0.95,2.7) | 2.24(1.99,2.53) | 1.62(0.97,2.7) |
| China | Hong Kong | Temperate | 1.3(1.28,1.32) | 1.13(1.06,1.2) | 1.55(1.51,1.59) | 1.1(1.04,1.17) | 1.56(1.5,1.62) | 1.47(1.27,1.71) |
| China | Lanzhou | Dry | 1.24(1.2,1.28) | 1.26(0.99,1.61) | NA | NA | NA | NA |
| China | Nanjing | Temperate | NA | NA | 1.27(1.24,1.30) | 1.21(1.05,1.38) | 1.75(1.65,1.86) | 1.26(1.11,1.43) |
| China | Shanghai | Temperate | 1.51(1.48,1.53) | 1.15(1.07,1.24) | 1.66(1.62,1.70) | 1.21(1.07,1.36) | 2.31(2.22,2.41) | 1.68(1.30,2.17) |
| China | Shenyang | Continental | 1.19(1.17,1.21) | 1.21(1.03,1.41) | 1.31(1.27,1.35) | 1.31(1.02,1.68) | 1.54(1.43,1.66) | 1.65(0.96,2.83) |
| China | Suzhou | Temperate | 1.56(1.5,1.61) | 1.13(1.03,1.25) | NA | NA | NA | NA |
| China | Taiyuan | Continental | 1.3(1.25,1.36) | 1.33(0.95,1.86) | 1.37(1.29,1.46) | 1.67(1.01,2.77) | 2.1(1.87,2.37) | 2.62(1.11,6.2) |
| China | Tangshan | Continental | NA | NA | 1.70(1.55,1.86) | 3.12(1.41,6.89) | 2.08(1.75,2.47) | 8.69(2.11,35.78) |
| China | Tianjin | Continental | 1.28(1.21,1.34) | 1.16(1,1.33) | 1.41(1.33,1.5) | 1.63(0.95,2.78) | 1.76(1.42,2.19) | 5.27(0.82,33.92) |
| China | Urumqi | Dry | 1.16(1.08,1.25) | 1.27(0.91,1.79) | NA | NA | NA | NA |
| China | Wuhan | Temperate | 1.72(1.64,1.8) | 1.47(1.31,1.66) | 1.89(1.79,2) | 1.58(1.33,1.87) | 2.77(2.42,3.19) | 1.55(0.86,2.78) |
| China | Xian | Temperate | 1.36(1.31,1.41) | 1.13(0.85,1.49) | 1.59(1.52,1.67) | 1.17(0.78,1.74) | 1.63(1.53,1.73) | 1.11(0.75,1.63) |
| China | (Pooled) | | 1.34(1.33,1.35) | 1.18 (1.15,1.20) | 1.49(1.47,1.50) | 1.23 (1.19,1.26) | 1.70(1.67,1.74) | 1.25 (1.20,1.30) |
| Colombia | Barranquilla | Tropical | 1.1(1.08,1.13) | 1.09(1.05,1.13) | 1.07(1.03,1.12) | 1.09(1.04,1.14) | 1.38(1.3,1.47) | 1.38(1.25,1.53) |
| Colombia | Bogota | Temperate | 1.09(1.08,1.1) | 1.11(1.09,1.12) | 1.07(1.05,1.1) | 1.07(1.04,1.1) | 1.36(1.32,1.41) | 1.42(1.36,1.48) |

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|-----------------------|-------------------|-------------|------------------------|-------------------------|------------------------|--------------------------|------------------------|-------------------------|
| Colombia | Cali | Tropical | 1.16(1.14,1.18) | 1.15(1.12,1.19) | 1.19(1.15,1.23) | 1.19(1.13,1.25) | 1.44(1.37,1.52) | 1.37(1.27,1.49) |
| Colombia | Cartagena | Tropical | 1.10(1.06,1.13) | 1.06(1.00,1.13) | 1.03(0.98,1.08) | 1.03(0.93,1.15) | 1.31(1.19,1.43) | 1.27(1.06,1.51) |
| Colombia | Medellin | Tropical | 1.10(1.08,1.12) | 1.09(1.07,1.11) | 1.16(1.12,1.19) | 1.13(1.09,1.17) | 1.23(1.12,1.36) | 1.22 (1.09,1.36) |
| Colombia | (Pooled) | | 1.08(1.06,1.10) | 1.07 (1.05,1.09) | 1.07(0.98,1.16) | 1.06 (0.97, 1.15) | 1.23(1.05,1.44) | 1.23 (1.02,1.49) |
| Czech Republic | Brno | Temperate | 1.18(1.16,1.21) | 1.1(1.02,1.18) | 1.26(1.22,1.3) | 1.1(1,1.21) | 1.56(1.42,1.72) | 1.34(1.06,1.7) |
| Czech Republic | Ostrava | Temperate | 1.15(1.12,1.18) | 1.04(0.95,1.13) | 1.19(1.15,1.22) | 1.14(0.99,1.32) | 1.64(1.54,1.76) | 1.12(0.86,1.45) |
| Czech Republic | Prague | Temperate | 1.15(1.14,1.17) | 1.03(0.99,1.06) | 1.22(1.2,1.25) | 1.05(1,1.09) | 1.56(1.48,1.64) | 1.37(1.1,1.71) |
| Czech Republic | South Bohemia | Temperate | 1.18(1.16,1.19) | 1.06(1.01,1.11) | 1.24(1.22,1.26) | 1.05(0.98,1.12) | 1.72(1.63,1.81) | 1.35(1.08,1.67) |
| Czech Republic | (Pooled) | | 1.16(1.14,1.18) | 1.04 (0.99,1.09) | 1.22(1.20,1.24) | 1.04 (0.98,1.09) | 1.60(1.50,1.70) | 1.25 (1.07,1.47) |
| Estonia | Kohtla-Järve linn | Continental | 1.2(1.14,1.26) | 1.12(0.9,1.4) | NA | NA | NA | NA |
| Estonia | Narva linn | Continental | 1.12(1.06,1.18) | 1.05(0.98,1.14) | NA | NA | NA | NA |
| Estonia | Pärnu linn | Continental | 1.21(1.14,1.28) | 1.36(1.06,1.76) | NA | NA | NA | NA |
| Estonia | Tallinn | Continental | 1.16(1.14,1.19) | 1.06(0.96,1.17) | NA | NA | NA | NA |
| Estonia | Tartu linn | Continental | 1.20(1.14,1.25) | 1.19(1.03,1.38) | NA | NA | NA | NA |
| Estonia | (Pooled) | Continental | 1.16(1.14,1.19) | 1.08 (0.98,1.19) | NA | NA | NA | NA |
| Finland | Helsinki | Continental | 1.19(1.16,1.23) | 1.09(1.04,1.16) | 1.21(1.15,1.27) | 1.21(1.06,1.37) | 1.84(1.62,2.08) | 1.66(1.34,2.05) |
| France | Bordeaux | Temperate | 1.21(1.18,1.24) | 1.15(1.07,1.24) | 1.36(1.23,1.49) | 1.15(0.9,1.45) | 2.05(1.69,2.49) | 1.64(1.01,2.66) |
| France | Clermont-Ferrand | Temperate | 1.19(1.15,1.23) | 1.14(1,1.3) | 1.42(1.24,1.62) | 1.38(0.91,2.1) | 2(1.56,2.56) | 2.46(0.87,6.93) |
| France | Dijon | Temperate | 1.23(1.17,1.28) | 1.09(0.95,1.24) | 1.43(1.21,1.69) | 1.15(0.68,1.93) | 2.01(1.42,2.85) | 1.72(0.91,3.24) |
| France | Grenoble | Temperate | 1.21(1.17,1.25) | 1.08(0.99,1.18) | 1.22(1.09,1.38) | 1.09(0.69,1.72) | 2.64(2.07,3.36) | 4.36(1.65,11.48) |
| France | Le Havre | Temperate | 1.24(1.2,1.29) | 1.31(1.14,1.5) | 1.46(1.28,1.68) | 1.63(1.05,2.51) | 1.88(1.44,2.45) | 2.46(0.91,6.64) |
| France | Lens-Douai | Temperate | 1.26(1.22,1.29) | 1.15(1.03,1.28) | 1.39(1.25,1.55) | 1.93(1.28,2.92) | 1.88(1.55,2.29) | 1.81(0.85,3.85) |
| France | Lille | Temperate | 1.22(1.2,1.24) | 1.1(1.05,1.16) | 1.32(1.22,1.44) | 1.36(1.03,1.8) | 2(1.76,2.27) | 1.35(1,1.82) |
| France | Lyon | Temperate | 1.2(1.18,1.23) | 1.2(1.11,1.3) | 1.42(1.31,1.53) | 1.63(1.16,2.3) | 2.07(1.78,2.41) | 1.91(1.12,3.25) |
| France | Marseille | Temperate | 1.24(1.22,1.26) | 1.25(1.16,1.36) | 1.45(1.36,1.55) | 1.35(0.96,1.88) | 1.82(1.6,2.08) | 1.46(0.86,2.5) |
| France | Montpellier | Temperate | 1.24(1.2,1.28) | 1.2(1.02,1.42) | 1.59(1.39,1.81) | 2.56(1.33,4.94) | 2.57(1.99,3.31) | 2.99(0.71,12.55) |
| France | Nancy | Temperate | 1.22(1.18,1.26) | 1.11(0.98,1.25) | 1.36(1.2,1.54) | 1.12(0.75,1.67) | 2.5(1.91,3.27) | 2.72(1.22,6.08) |
| France | Nantes | Temperate | 1.19(1.16,1.22) | 1.06(0.97,1.17) | 1.33(1.19,1.47) | 1.5(1.1,2.04) | 1.85(1.53,2.25) | 1.74(0.93,3.26) |

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|----------------|---------------------------------------|-----------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| France | Nice | Temperate | 1.25(1.22,1.28) | 1.19(1.06,1.35) | 1.36(1.23,1.51) | 1.57(0.91,2.71) | 1.68(1.41,2.02) | 1.82(0.85,3.91) |
| France | Paris | Temperate | 1.2(1.18,1.22) | 1.13(1.09,1.17) | 1.29(1.25,1.33) | 1.08(0.98,1.2) | 1.77(1.65,1.89) | 1.53(1.21,1.94) |
| France | Rennes | Temperate | 1.2(1.15,1.24) | 1.08(0.98,1.19) | 1.29(1.1,1.51) | 1.19(0.8,1.77) | 2.19(1.67,2.87) | 4.68(1.47,14.88) |
| France | Rouen | Temperate | 1.24(1.21,1.28) | 1.13(1.03,1.25) | 1.47(1.33,1.62) | 1.14(0.78,1.68) | 1.82(1.46,2.28) | 2.92(1.37,6.22) |
| France | Strasbourg | Temperate | 1.19(1.15,1.22) | 1.08(0.98,1.19) | 1.33(1.19,1.49) | 1.17(0.76,1.81) | 1.81(1.43,2.28) | 2.37(1.04,5.42) |
| France | Toulouse | Temperate | 1.2(1.17,1.23) | 1.12(1.02,1.22) | 1.71(1.54,1.9) | 1.43(0.96,2.14) | 2.49(2.06,3.01) | 2.68(1.16,6.17) |
| France | (Pooled) | | 1.21(1.20,1.22) | 1.13 (1.10,1.16) | 1.36(1.30,1.42) | 1.22 (1.10,1.35) | 1.84(1.73,1.96) | 1.64 (1.30,2.06) |
| Germany | Berlin | Temperate | 1.18(1.17,1.19) | 1.09(1.06,1.12) | NA | NA | NA | NA |
| Germany | Bremen | Temperate | 1.18(1.16,1.2) | 1.12(1.05,1.18) | NA | NA | NA | NA |
| Germany | Dortmund | Temperate | 1.19(1.17,1.21) | 1.13(1.07,1.19) | NA | NA | NA | NA |
| Germany | Dresden | Temperate | 1.18(1.16,1.2) | 1.1(1.03,1.18) | NA | NA | NA | NA |
| Germany | Duesseldorf | Temperate | 1.18(1.16,1.2) | 1.13(1.07,1.19) | NA | NA | NA | NA |
| Germany | Frankfurt | Temperate | 1.19(1.17,1.2) | 1.12(1.06,1.19) | NA | NA | NA | NA |
| Germany | Hamburg | Temperate | 1.19(1.18,1.2) | 1.11(1.08,1.15) | NA | NA | NA | NA |
| Germany | Hannover | Temperate | 1.18(1.16,1.19) | 1.11(1.06,1.15) | NA | NA | NA | NA |
| Germany | Koeln | Temperate | 1.19(1.18,1.21) | 1.11(1.06,1.16) | NA | NA | NA | NA |
| Germany | Leipzig | Temperate | 1.17(1.15,1.19) | 1.07(1.01,1.14) | NA | NA | NA | NA |
| Germany | Muenchen | Temperate | 1.18(1.17,1.2) | 1.09(1.05,1.14) | NA | NA | NA | NA |
| Germany | Stuttgart | Temperate | 1.17(1.15,1.19) | 1.09(1.03,1.16) | NA | NA | NA | NA |
| Germany | (Pooled) | | 1.18(1.17,1.18) | 1.10 (1.09,1.12) | NA | NA | NA | NA |
| Greece | Athens | Temperate | 1.25(1.23,1.27) | 1.18(1.08,1.3) | 1.31(1.28,1.34) | 1.18(1.05,1.33) | 1.42(1.36,1.48) | 1.33(1.02,1.73) |
| Iran | Mashhad | Dry | 1.19(1.16,1.23) | 1.38(1.28,1.49) | 1.29(1.24,1.34) | 1.46(1.22,1.74) | 1.48(1.36,1.6) | 3.82(2.41,6.05) |
| Ireland | East of Northern Ireland | Temperate | 1.31(1.29,1.33) | 1.1(1.04,1.16) | 1.35(1.32,1.39) | 1.14(1.05,1.23) | 1.87(1.8,1.94) | 1.21(1.16,1.26) |
| Ireland | North East of the Republic of Ireland | Temperate | 1.37(1.34,1.39) | 1.08(1.03,1.14) | 1.42(1.37,1.46) | 1.07(0.97,1.18) | 2(1.91,2.1) | 1.21(1.08,1.35) |
| Ireland | North West of the Republic of Ireland | Temperate | 1.31(1.29,1.34) | 1.08(1.01,1.14) | 1.34(1.29,1.39) | 1.06(0.93,1.2) | 1.8(1.7,1.91) | 1.35(1.13,1.62) |

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|----------------|---------------------------------------|-----------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Ireland | South East of Republic of Ireland | Temperate | 1.35(1.33,1.37) | 1.11(1.07,1.15) | 1.42(1.38,1.45) | 1.17(1.1,1.25) | 2.02(1.95,2.09) | 1.51(1.32,1.73) |
| Ireland | South West of the Republic of Ireland | Temperate | 1.36(1.34,1.38) | 1.11(1.07,1.15) | 1.4(1.37,1.43) | 1.11(1.05,1.17) | 1.93(1.87,1.99) | 1.38(1.23,1.55) |
| Ireland | West of Northern Ireland | Temperate | 1.31(1.28,1.33) | 1.11(1.04,1.19) | 1.33(1.29,1.37) | 1.1(0.99,1.23) | 1.89(1.81,1.99) | 1.21(1.06,1.39) |
| Ireland | (Pooled) | Temperate | 1.33(1.31,1.35) | 1.10 (1.07,1.12) | 1.37(1.34,1.40) | 1.11 (1.07,1.16) | 1.92(1.85,1.98) | 1.29 (1.18,1.41) |
| Italy | Ancona | Temperate | 1.3(1.21,1.4) | 1.27(0.92,1.77) | NA | NA | NA | NA |
| Italy | Bari | Temperate | 1.29(1.25,1.34) | 1.29(1.08,1.53) | 1.57(1.36,1.8) | 1.29(1,1.65) | 2.27(1.64,3.12) | 4.71(0.69,32) |
| Italy | Bologna | Temperate | 1.31(1.28,1.33) | 1.63(1.43,1.87) | 1.5(1.41,1.59) | 2.42(1.68,3.5) | 1.62(1.44,1.82) | 1.41(0.78,2.54) |
| Italy | Brescia | Temperate | 1.22(1.16,1.28) | 1.5(1.18,1.9) | NA | NA | NA | NA |
| Italy | Brindisi | Temperate | 1.23(1.09,1.38) | 1.51(0.8,2.86) | 1.5(1.16,1.94) | 2(0.47,8.61) | 2.58(1.44,4.61) | 2.59(0.4,16.71) |
| Italy | Cagliari | Temperate | 1.34(1.27,1.4) | 1.38(1.07,1.79) | 1.75(1.57,1.95) | 1.86(0.97,3.55) | 1.95(1.59,2.39) | 2.79(1.05,7.41) |
| Italy | Catania | Temperate | 1.35(1.29,1.42) | 1.33(1.13,1.57) | NA | NA | NA | NA |
| Italy | Civitavecchia | Temperate | 1.33(1.23,1.43) | 1.58(1.05,2.39) | NA | NA | NA | NA |
| Italy | Florence | Temperate | 1.28(1.24,1.31) | 1.44(1.24,1.67) | 1.42(1.29,1.56) | 1.91(1.12,3.28) | 1.42(1.33,1.52) | 1.59(1.11,2.27) |
| Italy | Frosinone | Temperate | 1.37(1.27,1.47) | 1.1(0.83,1.48) | NA | NA | NA | NA |
| Italy | Genoa | Temperate | 1.26(1.23,1.28) | 1.11(1.02,1.21) | 1.55(1.44,1.66) | 1.33(0.95,1.89) | 2.06(1.76,2.41) | 1.87(1.02,3.42) |
| Italy | Latina | Temperate | 1.24(1.18,1.31) | 1.46(1.15,1.84) | NA | NA | NA | NA |
| Italy | Milan | Temperate | 1.31(1.28,1.33) | 1.45(1.31,1.61) | 1.47(1.4,1.54) | 1.98(1.43,2.74) | 1.48(1.41,1.55) | 2.41(1.72,3.38) |
| Italy | Naples | Temperate | 1.33(1.29,1.36) | 1.15(1.05,1.26) | 1.39(1.3,1.49) | 1.4(0.92,2.13) | 1.75(1.53,2) | 3(1.07,8.42) |
| Italy | Padua | Temperate | 1.22(1.1,1.35) | 1.24(0.82,1.87) | 1.42(1.18,1.73) | 1.58(0.75,3.33) | 1.89(1.35,2.66) | 2.6(0.81,8.32) |
| Italy | Palermo | Temperate | 1.4(1.37,1.43) | 1.17(1.1,1.25) | 1.61(1.5,1.72) | 1.19(0.91,1.57) | 1.48(1.37,1.59) | 1.3(0.97,1.73) |
| Italy | Pisa | Temperate | 1.11(1.05,1.19) | 1.11(0.9,1.37) | 1.38(1.13,1.7) | 1.59(0.8,3.16) | 1.23(1.07,1.41) | 1.34(0.8,2.24) |
| Italy | Rieti | Temperate | 1.32(1.18,1.48) | 1.75(1.08,2.84) | NA | NA | NA | NA |
| Italy | Rome | Temperate | 1.29(1.28,1.3) | 1.14(1.1,1.19) | 1.43(1.39,1.47) | 1.32(1.18,1.48) | 1.84(1.72,1.96) | 1.35(0.99,1.84) |
| Italy | Taranto | Temperate | 1.3(1.23,1.38) | 1.11(0.92,1.34) | 1.48(1.32,1.66) | 1.67(1.09,2.54) | 1.57(1.26,1.94) | 3.58(1.43,8.97) |
| Italy | Trieste | Temperate | 1.33(1.27,1.38) | 1.38(1.17,1.64) | 1.54(1.37,1.72) | 1.46(0.96,2.2) | 1.57(1.33,1.86) | 1.33(0.7,2.51) |

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|--------------|-----------------|-------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Italy | Turin | Temperate | 1.29(1.27,1.31) | 1.29(1.19,1.41) | 1.45(1.36,1.55) | 1.99(1.38,2.87) | 1.37(1.31,1.43) | 1.25(1,1.56) |
| Italy | Venice | Temperate | 1.3(1.25,1.35) | 1.18(1.01,1.36) | 1.55(1.42,1.7) | 1.24(0.74,2.08) | 1.8(1.54,2.1) | 1.6(0.57,4.48) |
| Italy | Viterbo | Temperate | 1.32(1.25,1.39) | 1.13(0.95,1.34) | NA | NA | NA | NA |
| Italy | (Pooled) | | 1.27(1.25,1.30) | 1.22 (1.14,1.30) | 1.45(1.42,1.49) | 1.33 (1.12,1.58) | 1.58(1.46,1.72) | 1.50 (1.22,1.83) |
| Japan | Aichi | Temperate | 1.29(1.29,1.3) | 1.11(1.08,1.15) | 1.54(1.53,1.55) | 1.15(1.09,1.21) | 1.52(1.5,1.55) | 1.37(1.23,1.52) |
| Japan | Akita | Temperate | 1.23(1.21,1.24) | 1.08(1.03,1.14) | 1.43(1.41,1.45) | 1.16(1.06,1.27) | 1.39(1.35,1.42) | 1.59(1.3,1.95) |
| Japan | Aomori | Temperate | 1.19(1.18,1.2) | 1.08(1.03,1.13) | 1.38(1.36,1.4) | 1.13(1.07,1.21) | 1.38(1.34,1.41) | 1.45(1.21,1.73) |
| Japan | Chiba | Temperate | 1.3(1.3,1.31) | 1.1(1.06,1.13) | 1.55(1.53,1.56) | 1.08(1.06,1.1) | 1.52(1.5,1.55) | 1.41(1.27,1.57) |
| Japan | Ehime | Temperate | 1.32(1.31,1.33) | 1.12(1.07,1.17) | 1.59(1.57,1.61) | 1.08(1.01,1.16) | 1.47(1.44,1.5) | 1.59(1.33,1.9) |
| Japan | Fukui | Continental | 1.31(1.3,1.32) | 1.09(1.04,1.15) | 1.56(1.53,1.59) | 1.14(1.05,1.25) | 1.46(1.41,1.5) | 1.24(0.98,1.57) |
| Japan | Fukuoka | Temperate | 1.29(1.28,1.29) | 1.08(1.05,1.12) | 1.51(1.49,1.52) | 1.11(1.05,1.17) | 1.55(1.53,1.58) | 1.5(1.34,1.66) |
| Japan | Fukushima | Temperate | 1.34(1.32,1.35) | 1.1(1.03,1.19) | 1.59(1.57,1.61) | 1.16(1.08,1.24) | 1.54(1.51,1.57) | 1.33(1.15,1.53) |
| Japan | Gifu | Temperate | 1.32(1.31,1.33) | 1.11(1.07,1.15) | 1.59(1.57,1.61) | 1.19(1.1,1.29) | 1.51(1.47,1.54) | 1.29(1.1,1.53) |
| Japan | Gunma | Temperate | 1.33(1.32,1.33) | 1.09(1.05,1.13) | 1.55(1.53,1.57) | 1.11(1.04,1.18) | 1.55(1.51,1.58) | 1.61(1.39,1.88) |
| Japan | Hiroshima | Temperate | 1.3(1.29,1.31) | 1.07(1.03,1.11) | 1.57(1.55,1.59) | 1.06(1,1.13) | 1.52(1.49,1.55) | 1.52(1.32,1.75) |
| Japan | Hokkaido | Continental | 1.12(1.12,1.13) | 1.09(1.05,1.13) | 1.27(1.26,1.29) | 1.15(1.09,1.22) | 1.27(1.25,1.29) | 1.27(1.15,1.41) |
| Japan | Hyogo | Temperate | 1.31(1.29,1.33) | 1.16(1.06,1.27) | 1.55(1.54,1.56) | 1.07(1.05,1.08) | 1.55(1.52,1.57) | 1.42(1.27,1.59) |
| Japan | Ibaraki | Temperate | 1.34(1.33,1.35) | 1.11(1.06,1.15) | 1.6(1.59,1.62) | 1.12(1.05,1.2) | 1.66(1.63,1.7) | 1.44(1.25,1.66) |
| Japan | Ishikawa | Temperate | 1.26(1.25,1.27) | 1.08(1.03,1.12) | 1.49(1.46,1.51) | 1.14(1.04,1.24) | 1.41(1.38,1.45) | 1.42(1.15,1.75) |
| Japan | Iwate | Continental | 1.33(1.29,1.36) | 1.16(1.11,1.21) | 1.5(1.48,1.52) | 1.07(1,1.15) | 1.51(1.48,1.55) | 1.59(1.34,1.9) |
| Japan | Kagawa | Temperate | 1.34(1.33,1.35) | 1.05(1.03,1.07) | 1.62(1.59,1.65) | 1.08(0.96,1.21) | 1.56(1.52,1.61) | 1.21(1.02,1.42) |
| Japan | Kagoshima | Temperate | 1.36(1.35,1.37) | 1.07(1.03,1.11) | 1.58(1.56,1.6) | 1.07(1.01,1.13) | 1.71(1.68,1.75) | 1.39(1.24,1.57) |
| Japan | Kanagawa | Temperate | 1.26(1.26,1.27) | 1.07(1.06,1.08) | 1.45(1.44,1.46) | 1.09(1.04,1.14) | 1.48(1.46,1.5) | 1.32(1.2,1.44) |
| Japan | Kochi | Continental | 1.32(1.31,1.34) | 1.06(1.02,1.1) | 1.52(1.5,1.55) | 1.13(1.03,1.23) | 1.58(1.54,1.63) | 1.32(1.09,1.6) |
| Japan | Kumamoto | Temperate | 1.34(1.33,1.35) | 1.08(1.04,1.12) | 1.58(1.56,1.6) | 1.11(1.05,1.19) | 1.64(1.61,1.68) | 1.28(1.12,1.46) |
| Japan | Kyoto | Temperate | 1.28(1.27,1.28) | 1.07(1.03,1.11) | 1.54(1.52,1.56) | 1.07(1.03,1.1) | 1.46(1.43,1.49) | 1.31(1.13,1.51) |
| Japan | Mie | Temperate | 1.34(1.34,1.35) | 1.12(1.07,1.18) | 1.6(1.58,1.62) | 1.11(1.04,1.18) | 1.57(1.54,1.61) | 1.58(1.31,1.91) |
| Japan | Miyagi | Temperate | 1.38(1.33,1.43) | 1.11(1.08,1.15) | 1.56(1.54,1.58) | 1.13(1.08,1.19) | 1.52(1.48,1.55) | 1.47(1.26,1.72) |

| | | | | | | | | |
|---------------|------------------|-------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Japan | Miyazaki | Continental | 1.34(1.33,1.35) | 1.05(1.01,1.09) | 1.59(1.57,1.62) | 1.07(0.97,1.18) | 1.65(1.6,1.69) | 1.29(1.09,1.53) |
| Japan | Nagano | Continental | 1.33(1.32,1.34) | 1.08(1.04,1.11) | 1.57(1.55,1.59) | 1.07(1.01,1.13) | 1.55(1.52,1.59) | 1.18(1.03,1.34) |
| Japan | Nagasaki | Temperate | 1.29(1.28,1.3) | 1.07(1.02,1.12) | 1.51(1.49,1.53) | 1.09(1.02,1.16) | 1.55(1.51,1.58) | 1.52(1.29,1.78) |
| Japan | Nara | Temperate | 1.3(1.29,1.31) | 1.06(1.02,1.12) | 1.55(1.52,1.58) | 1.04(1.01,1.07) | 1.48(1.44,1.52) | 1.28(1.05,1.56) |
| Japan | Niigata | Temperate | 1.27(1.26,1.28) | 1.14(1.1,1.18) | 1.52(1.5,1.54) | 1.23(1.16,1.31) | 1.41(1.39,1.44) | 1.52(1.31,1.76) |
| Japan | Oita | Temperate | 1.3(1.29,1.31) | 1.08(1.02,1.14) | 1.56(1.53,1.58) | 1.04(0.96,1.13) | 1.57(1.53,1.62) | 1.38(1.14,1.66) |
| Japan | Okayama | Temperate | 1.33(1.32,1.34) | 1.07(1.04,1.11) | 1.6(1.58,1.62) | 1.09(1.02,1.17) | 1.51(1.48,1.54) | 1.19(1.03,1.37) |
| Japan | Okinawa | Temperate | 1.26(1.24,1.27) | 1.1(1.05,1.15) | 1.39(1.36,1.42) | 1.07(1,1.15) | 1.66(1.61,1.72) | 1.49(1.31,1.7) |
| Japan | Osaka | Temperate | 1.24(1.24,1.25) | 1.09(1.06,1.13) | 1.46(1.45,1.47) | 1.07(1.02,1.13) | 1.46(1.44,1.48) | 1.25(1.14,1.37) |
| Japan | Saga | Temperate | 1.33(1.31,1.34) | 1.16(1.1,1.23) | 1.57(1.55,1.6) | 1.13(1.04,1.24) | 1.6(1.56,1.65) | 1.58(1.28,1.96) |
| Japan | Saitama | Temperate | 1.29(1.28,1.3) | 1.08(1.04,1.11) | 1.53(1.51,1.54) | 1.07(1.05,1.08) | 1.52(1.5,1.55) | 1.43(1.28,1.59) |
| Japan | Shiga | Temperate | 1.32(1.31,1.34) | 1.08(1.03,1.14) | 1.62(1.59,1.64) | 1.11(1.01,1.22) | 1.56(1.52,1.61) | 1.54(1.22,1.93) |
| Japan | Shimane | Temperate | 1.32(1.31,1.34) | 1.05(1,1.11) | 1.6(1.57,1.63) | 1.24(1.09,1.4) | 1.56(1.52,1.61) | 1.24(1,1.53) |
| Japan | Shizuoka | Temperate | 1.34(1.34,1.35) | 1.07(1.04,1.1) | 1.6(1.59,1.62) | 1.11(1.05,1.17) | 1.61(1.58,1.64) | 1.29(1.13,1.47) |
| Japan | Tochigi | Temperate | 1.35(1.34,1.36) | 1.13(1.07,1.19) | 1.61(1.59,1.63) | 1.17(1.08,1.26) | 1.63(1.6,1.67) | 1.48(1.27,1.73) |
| Japan | Tokushima | Temperate | 1.31(1.3,1.33) | 1.1(1.03,1.17) | 1.56(1.53,1.59) | 1.16(1.04,1.3) | 1.52(1.48,1.56) | 1.43(1.13,1.8) |
| Japan | Tokyo | Temperate | 1.25(1.25,1.26) | 1.12(1.09,1.14) | 1.44(1.43,1.45) | 1.11(1.06,1.15) | 1.47(1.45,1.49) | 1.46(1.35,1.57) |
| Japan | Tottori | Temperate | 1.33(1.31,1.34) | 1.08(1.01,1.16) | 1.61(1.57,1.64) | 1.17(1.06,1.29) | 1.58(1.52,1.63) | 1.34(1.03,1.74) |
| Japan | Toyama | Temperate | 1.25(1.23,1.26) | 1.09(1.03,1.15) | 1.45(1.43,1.48) | 1.07(0.97,1.17) | 1.38(1.35,1.42) | 1.28(1.06,1.56) |
| Japan | Wakayama | Temperate | 1.31(1.3,1.32) | 1.06(1.02,1.1) | 1.55(1.53,1.58) | 1.08(1.01,1.16) | 1.49(1.45,1.54) | 1.21(0.98,1.51) |
| Japan | Yamagata | Temperate | 1.27(1.26,1.29) | 1.09(1.04,1.14) | 1.5(1.47,1.52) | 1.12(1.02,1.22) | 1.45(1.42,1.49) | 1.4(1.16,1.69) |
| Japan | Yamaguchi | Temperate | 1.29(1.28,1.29) | 1.07(1.02,1.12) | 1.52(1.5,1.55) | 1.07(0.99,1.15) | 1.51(1.47,1.54) | 1.41(1.2,1.66) |
| Japan | Yamanashi | Continental | 1.36(1.35,1.38) | 1.06(0.98,1.15) | 1.64(1.61,1.67) | 1.02(0.99,1.06) | 1.66(1.61,1.72) | 1.57(1.23,1.99) |
| Japan | (Pooled) | | 1.29(1.28,1.31) | 1.08(1.07,1.09) | 1.53(1.51,1.56) | 1.09(1.08,1.11) | 1.51(1.49,1.54) | 1.37(1.33,1.40) |
| Mexico | Ciudad Juarez | Dry | 1.46(1.43,1.5) | 1.3(1.11,1.53) | 1.62(1.55,1.69) | 1.22(0.9,1.65) | 3.14(2.88,3.42) | 3.75(1.98,7.12) |
| Mexico | Comarca Lagunera | Dry | 1.43(1.4,1.47) | 1.2(1.05,1.36) | 1.62(1.55,1.68) | 1.25(0.98,1.59) | 2.43(2.25,2.63) | 1.7(1.11,2.6) |
| Mexico | Guadalajara | Temperate | 1.24(1.23,1.26) | 1.18(1.13,1.24) | 1.31(1.28,1.34) | 1.21(1.12,1.3) | 1.79(1.73,1.86) | 1.64(1.45,1.85) |
| Mexico | Leon | Temperate | 1.35(1.32,1.37) | 1.15(1.08,1.22) | 1.38(1.32,1.44) | 1.28(1.1,1.5) | 2.17(2.04,2.32) | 1.57(1.26,1.95) |

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|--------------------|------------------|-------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Mexico | Monterrey | Dry | 1.39(1.37,1.41) | 1.2(1.14,1.28) | 1.49(1.46,1.53) | 1.29(1.17,1.43) | 2.14(2.05,2.24) | 1.48(1.18,1.85) |
| Mexico | Puebla-Tlaxcala | Temperate | 1.3(1.28,1.31) | 1.13(1.07,1.21) | 1.34(1.29,1.38) | 1.16(1.02,1.32) | 2.15(2.05,2.26) | 2.25(1.81,2.79) |
| Mexico | San Luis Potosi | Dry | 1.43(1.39,1.46) | 1.21(1.11,1.33) | 1.55(1.48,1.63) | 1.34(1.13,1.59) | 2.44(2.26,2.64) | 2.24(1.67,3.01) |
| Mexico | Tijuana | Dry | 1.3(1.27,1.33) | 1.19(1.16,1.22) | 1.37(1.31,1.43) | 1.25(1.12,1.4) | 2.04(1.89,2.2) | 1.67(1.48,1.88) |
| Mexico | Toluca de Lerdo | Temperate | 1.33(1.3,1.35) | 1.28(1.2,1.36) | 1.37(1.31,1.43) | 1.24(1.05,1.46) | 2.24(2.13,2.35) | 1.93(1.61,2.32) |
| Mexico | Valley of Mexico | Temperate | 1.31(1.3,1.32) | 1.18(1.16,1.19) | 1.35(1.34,1.37) | 1.17(1.14,1.21) | 1.99(1.95,2.03) | 1.65(1.58,1.74) |
| Mexico | (Pooled) | | 1.34(1.29,1.39) | 1.18 (1.16,1.20) | 1.42(1.35,1.50) | 1.19 (1.16,1.23) | 2.18(1.98,2.39) | 1.71 (1.57,1.85) |
| Moldova | Anenii Noi | Temperate | 1.65(1.31,2.08) | 1.67(0.64,4.32) | NA | NA | NA | NA |
| Moldova | Cahul | Temperate | 1.41(1.25,1.6) | 1.22(0.84,1.78) | NA | NA | NA | NA |
| Moldova | Chisinau | Temperate | 1.19(1.15,1.23) | 1.09(0.99,1.2) | NA | NA | NA | NA |
| Moldova | Falesti | Continental | 1.41(1.19,1.67) | 2.69(1.16,6.28) | NA | NA | NA | NA |
| Moldova | (Pooled) | | 1.37(1.20,1.56) | 1.25 (0.96,1.62) | NA | NA | NA | NA |
| Netherlands | Amsterdam | Temperate | 1.22(1.2,1.24) | 1.13(1.06,1.2) | NA | NA | NA | NA |
| Netherlands | Den Haag | Temperate | 1.23(1.2,1.25) | 1.12(1.04,1.2) | NA | NA | NA | NA |
| Netherlands | Eindhoven | Temperate | 1.18(1.15,1.22) | 1.09(1,1.18) | NA | NA | NA | NA |
| Netherlands | Noord-Nederland | Temperate | 1.19(1.17,1.2) | 1.09(1.05,1.14) | NA | NA | NA | NA |
| Netherlands | Oost-Nederland | Temperate | 1.2(1.19,1.21) | 1.08(1.05,1.11) | NA | NA | NA | NA |
| Netherlands | Rotterdam | Temperate | 1.24(1.22,1.26) | 1.14(1.07,1.22) | NA | NA | NA | NA |
| Netherlands | Utrecht | Temperate | 1.18(1.15,1.22) | 1.26(1.13,1.41) | NA | NA | NA | NA |
| Netherlands | West-Nederland | Temperate | 1.2(1.2,1.21) | 1.12(1.1,1.15) | NA | NA | NA | NA |
| Netherlands | Zuid-Nederland | Temperate | 1.19(1.18,1.2) | 1.12(1.09,1.15) | NA | NA | NA | NA |
| Netherlands | (Pooled) | | 1.20(1.19,1.21) | 1.11 (1.09,1.13) | NA | NA | NA | NA |
| Norway | Oslo | Continental | 1.2(1.18,1.21) | 1.14(1.11,1.17) | 1.21(1.19,1.24) | 1.11(1.06,1.16) | 1.68(1.61,1.76) | 1.63(1.39,1.9) |
| Portugal | Lisboa | Temperate | 1.46(1.44,1.47) | 1.17(1.14,1.2) | NA | NA | NA | NA |
| Portugal | Porto | Temperate | 1.46(1.45,1.48) | 1.21(1.18,1.23) | NA | NA | NA | NA |
| Portugal | (Pooled) | | 1.46(1.45,1.47) | 1.19 (1.15,1.23) | NA | NA | NA | NA |
| Romania | Brasov | Continental | 1.23(1.2,1.26) | 1.11(1.02,1.22) | NA | NA | NA | NA |
| Romania | Bucharest | Temperate | 1.2(1.19,1.21) | 1.13(1.08,1.19) | NA | NA | NA | NA |

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|---------------------|---------------------------|-------------|------------------------|-------------------------|-----------------|-----------------|-----------------|-----------------|
| Romania | Cluj-Napoca | Continental | 1.19(1.16,1.21) | 1.16(1.06,1.27) | NA | NA | NA | NA |
| Romania | Constanta | Temperate | 1.22(1.19,1.25) | 1.19(1.08,1.32) | NA | NA | NA | NA |
| Romania | Craiova | Temperate | 1.21(1.18,1.24) | 1.13(1.01,1.26) | NA | NA | NA | NA |
| Romania | Galati | Temperate | 1.21(1.18,1.24) | 1.11(0.98,1.26) | NA | NA | NA | NA |
| Romania | Iasi | Continental | 1.18(1.15,1.22) | 1.03(0.94,1.14) | NA | NA | NA | NA |
| Romania | Timisoara | Temperate | 1.22(1.19,1.25) | 1.13(1.02,1.24) | NA | NA | NA | NA |
| Romania | (Pooled) | Temperate | 1.20(1.19,1.21) | 1.09 (1.04,1.14) | NA | NA | NA | NA |
| South Africa | Alfred Nzo | Temperate | 1.14(1.12,1.17) | 1.11(1.08,1.15) | 1.41(1.3,1.53) | 1.3(1.09,1.56) | 1.34(1.26,1.42) | 1.28(1.1,1.47) |
| South Africa | Amajuba | Temperate | 1.23(1.2,1.26) | 1.08(1.03,1.13) | 1.42(1.34,1.5) | 1.11(0.92,1.34) | 1.44(1.37,1.52) | 1.12(0.98,1.28) |
| South Africa | Amathole | Temperate | 1.17(1.15,1.19) | 1.14(1.11,1.16) | 1.3(1.25,1.35) | 1.22(1.16,1.28) | 1.41(1.36,1.47) | 1.24(1.09,1.41) |
| South Africa | Bojanala | Dry | 1.24(1.21,1.26) | 1.08(1.05,1.1) | 1.38(1.33,1.44) | 1.12(0.96,1.31) | 1.5(1.44,1.56) | 1.26(1.05,1.52) |
| South Africa | Buffalo City | Temperate | 1.18(1.16,1.2) | 1.2(1.15,1.25) | 1.32(1.27,1.37) | 1.36(1.25,1.5) | 1.37(1.3,1.43) | 1.34(1.2,1.49) |
| South Africa | Cacadu | Dry | 1.32(1.29,1.36) | 1.36(1.23,1.52) | 1.58(1.5,1.68) | 1.17(1.07,1.28) | 1.63(1.52,1.75) | 1.81(1.32,2.47) |
| South Africa | Cape Winelands | Temperate | 1.27(1.24,1.29) | 1.31(1.21,1.41) | 1.54(1.46,1.61) | 1.47(1.24,1.74) | 2.01(1.88,2.15) | 1.78(1.38,2.29) |
| South Africa | Capricorn | Dry | 1.18(1.16,1.2) | 1.03(1.01,1.06) | 1.32(1.27,1.37) | 1.09(1.05,1.14) | 1.45(1.4,1.51) | 1.27(1.09,1.47) |
| South Africa | Central Karoo | Dry | 1.43(1.34,1.53) | 1.76(1.43,2.16) | 1.67(1.48,1.89) | 1.8(1.2,2.7) | 2.28(1.92,2.7) | 1.99(1.11,3.59) |
| South Africa | Chris Hani | Temperate | 1.21(1.19,1.24) | 1.2(1.1,1.31) | 1.43(1.36,1.5) | 1.17(1.1,1.25) | 1.52(1.45,1.6) | 1.57(1.28,1.92) |
| South Africa | City of Cape Town | Temperate | 1.27(1.25,1.28) | 1.15(1.1,1.2) | 1.45(1.42,1.48) | 1.2(1.1,1.32) | 1.9(1.83,1.97) | 1.45(1.24,1.7) |
| South Africa | City of Johannesburg | Temperate | 1.29(1.28,1.3) | 1.12(1.09,1.16) | 1.43(1.4,1.46) | 1.14(1.05,1.23) | 1.8(1.75,1.86) | 1.51(1.35,1.69) |
| South Africa | City of Tshwane | Temperate | 1.26(1.24,1.28) | 1.14(1.08,1.2) | 1.4(1.37,1.44) | 1.19(1.06,1.33) | 1.69(1.63,1.74) | 1.49(1.26,1.76) |
| South Africa | Dr Kenneth Kaunda | Dry | 1.27(1.24,1.29) | 1.07(0.99,1.15) | 1.56(1.49,1.63) | 1.21(0.98,1.5) | 1.68(1.6,1.77) | 1.2(0.98,1.46) |
| South Africa | Dr Ruth Segomotsi Mompati | Dry | 1.21(1.18,1.24) | 1.12(1.05,1.2) | 1.4(1.32,1.49) | 1.44(1.06,1.97) | 1.58(1.49,1.68) | 1.25(0.95,1.64) |
| South Africa | Eden | Dry | 1.21(1.18,1.24) | 1.16(1.07,1.26) | 1.34(1.28,1.4) | 1.14(0.97,1.34) | 1.7(1.59,1.82) | 1.52(1.17,1.97) |
| South Africa | Ehlanzeni | Temperate | 1.11(1.09,1.12) | 1.05(0.99,1.12) | 1.27(1.23,1.32) | 1.05(1,1.11) | 1.31(1.26,1.36) | 1.19(1.01,1.4) |
| South Africa | Ekurhuleni | Temperate | 1.29(1.27,1.3) | 1.1(1.06,1.14) | 1.56(1.52,1.6) | 1.09(0.97,1.23) | 1.72(1.67,1.77) | 1.32(1.15,1.51) |
| South Africa | eThekweni | Temperate | 1.12(1.11,1.13) | 1.08(1.04,1.12) | 1.29(1.26,1.32) | 1.18(1.08,1.3) | 1.34(1.3,1.38) | 1.14(1.04,1.24) |

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|---------------------|---------------------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| South Africa | Fezile Dabi | Temperate | 1.27(1.24,1.3) | 1.07(0.97,1.19) | 1.61(1.53,1.68) | 1.24(0.96,1.59) | 1.55(1.48,1.63) | 1.37(1.05,1.79) |
| South Africa | Frances Baard | Dry | 1.28(1.24,1.32) | 1.11(1.02,1.21) | 1.57(1.47,1.67) | 1.25(1,1.56) | 1.74(1.62,1.87) | 1.17(1.06,1.29) |
| South Africa | Gert Sibande | Temperate | 1.2(1.18,1.22) | 1.17(1.11,1.23) | 1.42(1.36,1.48) | 1.46(1.28,1.66) | 1.46(1.4,1.52) | 1.53(1.35,1.73) |
| South Africa | Greater Sekhukhune | Dry | 1.22(1.19,1.24) | 1.08(1.04,1.12) | 1.36(1.3,1.41) | 1.18(1.02,1.36) | 1.43(1.38,1.5) | 1.13(0.94,1.37) |
| South Africa | iLembe | Temperate | 1.06(1.03,1.08) | 1.1(1.01,1.19) | 1.19(1.12,1.27) | 1.25(1.01,1.56) | 1.26(1.17,1.36) | 1.14(1.01,1.28) |
| South Africa | Joe Gqabi | Dry | 1.2(1.17,1.23) | 1.28(1.16,1.4) | 1.44(1.35,1.54) | 1.28(0.93,1.76) | 1.53(1.43,1.63) | 1.28(1.12,1.45) |
| South Africa | John Taolo Gaetsewe | Dry | 1.21(1.16,1.25) | 1.19(0.97,1.47) | 1.39(1.26,1.54) | 1.21(0.59,2.48) | 1.46(1.34,1.58) | 1.63(1.12,2.35) |
| South Africa | Lejweleputswa | Dry | 1.21(1.18,1.23) | 1.19(1.1,1.28) | 1.49(1.42,1.56) | 1.18(0.99,1.41) | 1.44(1.39,1.49) | 1.14(1.03,1.25) |
| South Africa | Mangaung | Dry | 1.23(1.21,1.25) | 1.07(0.98,1.18) | 1.47(1.4,1.53) | 1.24(0.94,1.63) | 1.63(1.55,1.71) | 1.2(0.94,1.54) |
| South Africa | Mopani | Dry | 1.16(1.13,1.18) | 1.06(0.97,1.16) | 1.26(1.2,1.32) | 1.07(0.95,1.21) | 1.35(1.28,1.41) | 1.17(0.95,1.44) |
| South Africa | Namakwa | Dry | 1.41(1.33,1.49) | 1.39(1.21,1.59) | 1.62(1.45,1.81) | 1.52(1.14,2.02) | 2.1(1.81,2.44) | 2.06(1.38,3.09) |
| South Africa | Nelson Mandela Bay | Temperate | 1.2(1.18,1.22) | 1.22(1.16,1.29) | 1.37(1.32,1.42) | 1.24(1.11,1.4) | 1.4(1.34,1.47) | 1.47(1.25,1.74) |
| South Africa | Ngaka Modiri Molema | Dry | 1.25(1.22,1.27) | 1.16(1.08,1.24) | 1.48(1.42,1.54) | 1.13(1.07,1.2) | 1.43(1.38,1.49) | 1.13(1.06,1.2) |
| South Africa | Nkangala | Temperate | 1.25(1.23,1.27) | 1.1(1.01,1.19) | 1.39(1.34,1.45) | 1.12(0.94,1.33) | 1.57(1.51,1.64) | 1.19(1,1.43) |
| South Africa | O.R.Tambo | Temperate | 1.11(1.09,1.13) | 1.09(1.07,1.12) | 1.18(1.12,1.24) | 1.27(1.05,1.53) | 1.34(1.28,1.41) | 1.41(1.18,1.69) |
| South Africa | Overberg | Dry | 1.22(1.18,1.28) | 1.09(1,1.18) | 1.41(1.29,1.53) | 1.15(0.97,1.37) | 1.83(1.63,2.05) | 1.25(0.81,1.93) |
| South Africa | Pixley ka Seme | Dry | 1.32(1.28,1.37) | 1.27(1.15,1.4) | 1.62(1.5,1.74) | 1.41(1.07,1.86) | 2.04(1.87,2.23) | 2(1.37,2.92) |
| South Africa | Sedibeng | Temperate | 1.29(1.27,1.31) | 1.1(1.04,1.16) | 1.53(1.47,1.59) | 1.14(0.91,1.43) | 1.67(1.61,1.73) | 1.12(0.92,1.38) |
| South Africa | Sisonke | Temperate | 1.1(1.07,1.13) | 1.07(0.99,1.15) | 1.27(1.18,1.36) | 1.08(0.91,1.28) | 1.33(1.25,1.42) | 1.34(1.08,1.65) |
| South Africa | Siyanda | Dry | 1.26(1.22,1.3) | 1.21(1.07,1.37) | 1.57(1.46,1.7) | 1.49(1.11,1.99) | 1.8(1.65,1.96) | 2.02(1.4,2.92) |
| South Africa | Thabo Mofutsanyane | Temperate | 1.19(1.16,1.21) | 1.1(1.04,1.17) | 1.48(1.43,1.54) | 1.19(1.12,1.26) | 1.47(1.42,1.52) | 1.16(1,1.36) |
| South Africa | Ugu | Temperate | 1.14(1.11,1.16) | 1.12(1.07,1.18) | 1.24(1.19,1.3) | 1.11(1.05,1.17) | 1.27(1.21,1.33) | 1.16(1.01,1.32) |
| South Africa | uMgungundlovu | Temperate | 1.17(1.15,1.19) | 1.09(1.06,1.11) | 1.34(1.29,1.4) | 1.28(1.16,1.42) | 1.35(1.29,1.42) | 1.11(0.97,1.26) |
| South Africa | uMkhanyakude | Tropical | 1.12(1.09,1.14) | 1.11(1.02,1.2) | 1.27(1.19,1.36) | 1.25(1,1.57) | 1.3(1.21,1.41) | 1.44(1.12,1.87) |
| South Africa | uMzinyathi | Temperate | 1.16(1.13,1.19) | 1.06(1.03,1.1) | 1.34(1.26,1.42) | 1.18(1.02,1.36) | 1.41(1.32,1.5) | 1.12(0.95,1.32) |
| South Africa | uThukela | Temperate | 1.21(1.18,1.23) | 1.13(1.1,1.16) | 1.39(1.33,1.46) | 1.09(1.02,1.16) | 1.46(1.39,1.53) | 1.15(1.07,1.23) |

| | | | | | | | | |
|---------------------|-----------------|-------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| South Africa | uThungulu | Temperate | 1.13(1.11,1.15) | 1.08(1.03,1.14) | 1.22(1.17,1.28) | 1.08(1.01,1.16) | 1.33(1.26,1.39) | 1.25(1.07,1.46) |
| South Africa | Vhembe | Dry | 1.11(1.08,1.13) | 1.11(1,1.24) | 1.2(1.13,1.27) | 1.17(0.8,1.69) | 1.28(1.21,1.36) | 1.78(1.18,2.68) |
| South Africa | Waterberg | Dry | 1.19(1.16,1.23) | 1.12(1.01,1.25) | 1.39(1.3,1.49) | 1.35(1.03,1.79) | 1.48(1.39,1.58) | 1.29(0.97,1.71) |
| South Africa | West Coast | Dry | 1.23(1.19,1.27) | 1.17(1.06,1.29) | 1.41(1.33,1.5) | 1.2(0.98,1.46) | 1.74(1.6,1.89) | 1.5(1.08,2.08) |
| South Africa | West Rand | Temperate | 1.25(1.23,1.27) | 1.15(1.09,1.22) | 1.38(1.32,1.44) | 1.14(0.9,1.44) | 1.7(1.62,1.78) | 1.3(1.04,1.62) |
| South Africa | Xhariep | Dry | 1.25(1.21,1.3) | 1.22(1.11,1.35) | 1.49(1.38,1.6) | 1.84(1.27,2.65) | 1.55(1.44,1.67) | 1.66(1.27,2.17) |
| South Africa | Zululand | Temperate | 1.13(1.11,1.16) | 1.1(1.04,1.16) | 1.34(1.26,1.43) | 1.35(1.07,1.71) | 1.4(1.32,1.48) | 1.5(1.18,1.92) |
| South Africa | (Pooled) | | 1.20(1.18,1.22) | 1.09 (1.07,1.12) | 1.39(1.36,1.42) | 1.15 (1.11,1.19) | 1.52(1.47,1.58) | 1.28 (1.23,1.34) |
| South Korea | Busan | Temperate | 1.14(1.14,1.15) | 1.11(1.08,1.14) | 1.31(1.3,1.33) | 1.12(1.07,1.17) | 1.43(1.38,1.47) | 1.87(1.52,2.3) |
| South Korea | Daegu | Temperate | 1.13(1.12,1.14) | 1.12(1.06,1.19) | 1.27(1.24,1.29) | 1.06(0.99,1.13) | 1.46(1.41,1.51) | 1.46(1.24,1.71) |
| South Korea | Daejeon | Continental | 1.16(1.14,1.17) | 1.16(1.09,1.23) | 1.28(1.24,1.32) | 1.5(1.29,1.75) | 1.48(1.4,1.57) | 1.68(1.16,2.42) |
| South Korea | Gwangju | Temperate | 1.15(1.13,1.16) | 1.12(1.05,1.18) | 1.26(1.23,1.3) | 1.05(0.99,1.12) | 1.34(1.27,1.4) | 1.32(0.92,1.92) |
| South Korea | Incheon | Temperate | 1.1(1.09,1.11) | 1.15(1.11,1.21) | 1.23(1.2,1.25) | 1.19(1.07,1.32) | 1.32(1.27,1.37) | 1.41(1.17,1.7) |
| South Korea | Seoul | Continental | 1.11(1.1,1.11) | 1.12(1.09,1.14) | 1.24(1.22,1.25) | 1.17(1.11,1.22) | 1.36(1.33,1.39) | 1.32(1.14,1.53) |
| South Korea | Ulsan | Temperate | 1.14(1.12,1.16) | 1.08(1.01,1.16) | 1.25(1.21,1.3) | 1.27(1.03,1.58) | 1.5(1.39,1.62) | 2.81(1.76,4.49) |
| South Korea | (Pooled) | | 1.13(1.11,1.14) | 1.12 (1.10,1.14) | 1.26(1.23,1.28) | 1.13 (1.03,1.25) | 1.40(1.35,1.45) | 1.51 (1.26,1.82) |
| Spain | A Coruna | Temperate | 1.26(1.23,1.29) | 1.12(1.07,1.17) | NA | NA | NA | NA |
| Spain | Albacete | Dry | 1.26(1.21,1.3) | 1.27(1.06,1.52) | NA | NA | NA | NA |
| Spain | Alicante | Dry | 1.33(1.29,1.37) | 1.24(1.08,1.44) | NA | NA | NA | NA |
| Spain | Almeria | Dry | 1.34(1.29,1.39) | 1.25(1.05,1.47) | NA | NA | NA | NA |
| Spain | Avila | Temperate | 1.19(1.13,1.24) | 1.1(0.98,1.24) | NA | NA | NA | NA |
| Spain | Badajoz | Temperate | 1.34(1.3,1.39) | 1.25(1.07,1.46) | NA | NA | NA | NA |
| Spain | Barcelona | Temperate | 1.4(1.38,1.41) | 1.27(1.21,1.34) | NA | NA | NA | NA |
| Spain | Bilbao | Temperate | 1.36(1.33,1.39) | 1.4(1.31,1.51) | NA | NA | NA | NA |
| Spain | Burgos | Temperate | 1.22(1.18,1.27) | 1.23(1.09,1.39) | NA | NA | NA | NA |
| Spain | Caceres | Temperate | 1.36(1.29,1.43) | 1.18(1.04,1.33) | NA | NA | NA | NA |
| Spain | Cadiz | Temperate | 1.42(1.37,1.47) | 1.34(1.19,1.52) | NA | NA | NA | NA |
| Spain | Castellon | Dry | 1.35(1.31,1.4) | 1.19(1.09,1.3) | NA | NA | NA | NA |

| | | | | | | | | |
|--------------|-------------------|-----------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|
| Spain | Ceuta | Temperate | 1.35(1.26,1.46) | 1.92(0.86,4.3) | NA | NA | NA | NA |
| Spain | Ciudad Real | Temperate | 1.29(1.23,1.35) | 1.13(0.98,1.31) | NA | NA | NA | NA |
| Spain | Cordoba | Temperate | 1.41(1.37,1.45) | 1.28(1.13,1.45) | NA | NA | NA | NA |
| Spain | Cuenca | Temperate | 1.34(1.27,1.41) | 1.31(1.13,1.51) | NA | NA | NA | NA |
| Spain | Girona | Temperate | 1.27(1.22,1.32) | 1.25(1.07,1.46) | NA | NA | NA | NA |
| Spain | Granada | Temperate | 1.38(1.34,1.41) | 1.41(1.25,1.59) | NA | NA | NA | NA |
| Spain | Guadalajara | Temperate | 1.22(1.16,1.28) | 1.19(0.94,1.5) | 1.31(1.28,1.34) | 1.21(1.12,1.3) | 1.79(1.73,1.86) | 1.64(1.45,1.85) |
| Spain | Huelva | Temperate | 1.39(1.35,1.44) | 1.26(1.1,1.45) | NA | NA | NA | NA |
| Spain | Huesca | Temperate | 1.27(1.2,1.33) | 1.37(1.12,1.69) | NA | NA | NA | NA |
| Spain | Jaen | Temperate | 1.38(1.33,1.43) | 1.42(1.23,1.64) | NA | NA | NA | NA |
| Spain | Leon | Temperate | 1.27(1.23,1.3) | 1.15(1.06,1.24) | 1.38(1.32,1.44) | 1.28(1.1,1.5) | 2.17(2.04,2.32) | 1.57(1.26,1.95) |
| Spain | Lleida | Temperate | 1.3(1.26,1.35) | 1.32(1.12,1.57) | NA | NA | NA | NA |
| Spain | Logrono | Temperate | 1.27(1.23,1.32) | 1.35(1.15,1.58) | NA | NA | NA | NA |
| Spain | Lugo | Temperate | 1.33(1.29,1.38) | 1.21(1.07,1.37) | NA | NA | NA | NA |
| Spain | Madrid | Temperate | 1.37(1.35,1.38) | 1.39(1.33,1.46) | NA | NA | NA | NA |
| Spain | Malaga | Temperate | 1.37(1.34,1.4) | 1.23(1.11,1.36) | NA | NA | NA | NA |
| Spain | Melilla | Temperate | 1.37(1.28,1.48) | 1.53(1.07,2.2) | NA | NA | NA | NA |
| Spain | Murcia | Dry | 1.39(1.36,1.43) | 1.29(1.16,1.43) | NA | NA | NA | NA |
| Spain | Ourense | Temperate | 1.33(1.29,1.37) | 1.24(1.11,1.38) | NA | NA | NA | NA |
| Spain | Oviedo | Temperate | 1.32(1.29,1.35) | 1.15(1.08,1.22) | NA | NA | NA | NA |
| Spain | Palencia | Temperate | 1.32(1.26,1.39) | 1.34(1.09,1.63) | NA | NA | NA | NA |
| Spain | Palma Mallorca | Temperate | 1.3(1.27,1.33) | 1.27(1.14,1.42) | NA | NA | NA | NA |
| Spain | Palmas G. Canaria | Dry | 1.26(1.23,1.29) | 1.09(1.05,1.13) | NA | NA | NA | NA |
| Spain | Pamplona | Temperate | 1.23(1.2,1.27) | 1.27(1.16,1.4) | NA | NA | NA | NA |
| Spain | Pontevedra | Temperate | 1.35(1.29,1.4) | 1.12(1.03,1.21) | NA | NA | NA | NA |
| Spain | Salamanca | Temperate | 1.24(1.2,1.27) | 1.24(1.1,1.39) | NA | NA | NA | NA |
| Spain | San Sebastian | Temperate | 1.28(1.25,1.32) | 1.25(1.19,1.31) | NA | NA | NA | NA |
| Spain | Santander | Temperate | 1.27(1.24,1.3) | 1.2(1.09,1.31) | NA | NA | NA | NA |

| | | | | | | | | |
|--------------------|-----------------|-------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Spain | Segovia | Temperate | 1.23(1.17,1.3) | 1.17(1.02,1.36) | NA | NA | NA | NA |
| Spain | Sevilla | Temperate | 1.43(1.4,1.45) | 1.37(1.28,1.48) | NA | NA | NA | NA |
| Spain | Soria | Temperate | 1.19(1.12,1.27) | 1.14(0.92,1.42) | NA | NA | NA | NA |
| Spain | Tarragona | Temperate | 1.3(1.25,1.36) | 1.26(1.12,1.41) | NA | NA | NA | NA |
| Spain | Tenerife | Temperate | 1.26(1.23,1.3) | 1.24(1.12,1.38) | NA | NA | NA | NA |
| Spain | Teruel | Temperate | 1.16(1.09,1.23) | 1.44(1.09,1.89) | NA | NA | NA | NA |
| Spain | Toledo | Temperate | 1.32(1.27,1.37) | 1.31(1.1,1.56) | NA | NA | NA | NA |
| Spain | Valencia | Temperate | 1.37(1.35,1.39) | 1.28(1.2,1.37) | NA | NA | NA | NA |
| Spain | Valladolid | Temperate | 1.27(1.23,1.3) | 1.2(1.08,1.34) | NA | NA | NA | NA |
| Spain | Vitoria | Temperate | 1.32(1.28,1.37) | 1.27(1.14,1.43) | NA | NA | NA | NA |
| Spain | Zamora | Temperate | 1.25(1.19,1.31) | 1.31(1.07,1.6) | NA | NA | NA | NA |
| Spain | Zaragoza | Dry | 1.3(1.28,1.33) | 1.32(1.21,1.43) | NA | NA | NA | NA |
| Spain | (Pooled) | | 1.29(1.27,1.31) | 1.23 (1.20,1.26) | NA | NA | NA | NA |
| Sweden | Gothenburg | Temperate | 1.21(1.19,1.23) | 1.08(1.04,1.13) | 1.26(1.23,1.3) | 1.07(1.01,1.14) | 1.75(1.65,1.86) | 2.06(1.59,2.67) |
| Sweden | Malmo | Temperate | 1.21(1.2,1.22) | 1.16(1.1,1.21) | 1.24(1.22,1.27) | 1.1(1.04,1.15) | 1.55(1.49,1.62) | 1.52(1.28,1.8) |
| Sweden | Skane | Temperate | 1.15(1.13,1.18) | 1.16(1.04,1.29) | NA | NA | NA | NA |
| Sweden | Stockholm | Continental | 1.19(1.18,1.21) | 1.1(1.03,1.17) | 1.24(1.22,1.27) | 1.07(1.01,1.14) | 1.76(1.66,1.86) | 1.38(1.17,1.64) |
| Sweden | (Pooled) | | 1.19(1.16,1.22) | 1.05 (0.96,1.15) | 1.25(1.23,1.26) | 1.08 (1.05,1.12) | 1.68(1.55,1.83) | 1.60 (1.26,2.03) |
| Switzerland | Basel | Temperate | 1.21(1.17,1.25) | 1.08(0.98,1.19) | 1.29(1.22,1.36) | 1.09(0.94,1.28) | 1.73(1.52,1.97) | 2.1(1.27,3.47) |
| Switzerland | Bern | Temperate | 1.27(1.23,1.31) | 1.21(1.04,1.4) | 1.34(1.27,1.41) | 1.34(1.05,1.71) | 2.11(1.82,2.44) | 2.48(1.4,4.39) |
| Switzerland | Geneve | Temperate | 1.26(1.21,1.32) | 1.18(1,1.4) | 1.29(1.21,1.38) | 1.23(0.95,1.61) | 2.1(1.79,2.46) | 2.51(1.55,4.04) |
| Switzerland | Lausanne | Temperate | 1.27(1.21,1.33) | 1.31(1.1,1.56) | 1.28(1.19,1.38) | 1.39(1.03,1.87) | 2.12(1.8,2.5) | 1.51(0.96,2.38) |
| Switzerland | Lugano | Continental | 1.28(1.24,1.33) | 1.31(1.10,1.57) | 1.37(1.29,1.46) | 1.48(1.06,2.05) | 2.15(1.86,2.49) | 2.25(1.33,3.80) |
| Switzerland | Luzern | Temperate | 1.26(1.20,1.32) | 1.31(1.06,1.63) | 1.23(1.12,1.34) | 1.21(0.91,1.59) | 2.39(1.89,3.02) | 2.67(1.26,5.64) |
| Switzerland | St. Gallen | Temperate | 1.27(1.21,1.34) | 1.19(0.99,1.42) | 1.34(1.24,1.46) | 1.20(0.93,1.55) | 2.23(1.80,2.76) | 2.49(1.21,5.12) |
| Switzerland | Zurich | Temperate | 1.27(1.24,1.30) | 1.34(1.22,1.46) | 1.32(1.28,1.37) | 1.26(1.11,1.43) | 1.99(1.80,2.21) | 2.43(1.65,3.59) |
| Switzerland | (Pooled) | | 1.25(1.23,1.27) | 1.22 (1.14,1.30) | 1.30(1.27,1.33) | 1.24 (1.14,1.34) | 2.02(1.90,2.16) | 2.06 (1.70,2.51) |
| Taiwan | Kaohsiung | Tropical | 1.16(1.14,1.17) | 1.02(0.97,1.06) | 1.34(1.31,1.38) | 1.08(0.98,1.2) | 1.33(1.28,1.39) | 1.13(0.98,1.3) |

| | | | | | | | | |
|-----------------|-------------------|-----------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Taiwan | Taichung | Temperate | 1.2(1.19,1.22) | 1.03(0.98,1.09) | 1.38(1.35,1.42) | 1.07(0.95,1.2) | 1.56(1.49,1.64) | 1.17(1.09,1.27) |
| Taiwan | Taipei | Temperate | 1.2(1.19,1.21) | 1.02(0.99,1.04) | 1.38(1.35,1.4) | 1.04(0.98,1.09) | 1.41(1.37,1.45) | 1.26(1.13,1.41) |
| Taiwan | (Pooled) | | 1.19(1.16,1.22) | 1.01 (1.00,1.02) | 1.37(1.34,1.40) | 1.01 (0.98,1.05) | 1.43(1.30,1.57) | 1.13 (1.06,1.20) |
| Thailand | Amnat Charoen | Tropical | 1.13(1.05,1.22) | 1.23(1.12,1.35) | NA | NA | NA | NA |
| Thailand | Ayutthaya | Tropical | 1.11(1.05,1.16) | 1.24(1.14,1.35) | NA | NA | NA | NA |
| Thailand | Bangkok | Tropical | 1.07(1.05,1.09) | 1.14(1.11,1.16) | NA | NA | NA | NA |
| Thailand | Buri Ram | Tropical | 1.12(1.08,1.16) | 1.16(1.01,1.33) | NA | NA | NA | NA |
| Thailand | Chachoengsao | Tropical | 1.13(1.08,1.19) | 1.34(1.19,1.51) | NA | NA | NA | NA |
| Thailand | Chaiyaphum | Tropical | 1.14(1.09,1.19) | 1.2(1.12,1.3) | NA | NA | NA | NA |
| Thailand | Chanthaburi | Tropical | 1.14(1.09,1.2) | 1.23(1.12,1.34) | NA | NA | NA | NA |
| Thailand | Chiang Mai | Tropical | 1.06(1.03,1.08) | 1.25(1.13,1.39) | NA | NA | NA | NA |
| Thailand | Chiang Rai | Tropical | 1.15(1.12,1.19) | 1.16(1.06,1.27) | NA | NA | NA | NA |
| Thailand | Chon Buri | Tropical | 1.11(1.08,1.15) | 1.16(1.09,1.24) | NA | NA | NA | NA |
| Thailand | Chumphon | Tropical | 1.13(1.07,1.21) | 1.14(1,1.29) | NA | NA | NA | NA |
| Thailand | Kalasin | Tropical | 1.13(1.09,1.18) | 1.16(1.07,1.25) | NA | NA | NA | NA |
| Thailand | Kamphaeng Phet | Tropical | 1.11(1.04,1.19) | 1.16(1.01,1.34) | NA | NA | NA | NA |
| Thailand | Kanchanaburi | Tropical | 1.07(1.02,1.12) | 1.2(1.07,1.34) | NA | NA | NA | NA |
| Thailand | Khon Kaen | Tropical | 1.09(1.06,1.13) | 1.22(1.15,1.29) | NA | NA | NA | NA |
| Thailand | Krabi | Tropical | 1.13(1.05,1.23) | 1.19(1.06,1.33) | NA | NA | NA | NA |
| Thailand | Lampang | Tropical | 1.07(1.03,1.11) | 1.05(0.97,1.14) | NA | NA | NA | NA |
| Thailand | Lamphun | Tropical | 1.1(1.03,1.16) | 1.16(1.02,1.31) | NA | NA | NA | NA |
| Thailand | Lop Buri | Tropical | 1.09(1.04,1.14) | 1.1(1.01,1.19) | NA | NA | NA | NA |
| Thailand | Maha Sarakham | Tropical | 1.11(1.06,1.17) | 1.22(1.13,1.33) | NA | NA | NA | NA |
| Thailand | Mukdahan | Tropical | 1.21(1.13,1.31) | 1.26(1.11,1.43) | NA | NA | NA | NA |
| Thailand | Nakhon Pathom | Tropical | 1.04(0.99,1.09) | 1.06(0.96,1.16) | NA | NA | NA | NA |
| Thailand | Nakhon Phanom | Tropical | 1.14(1.08,1.2) | 1.08(1.01,1.15) | NA | NA | NA | NA |
| Thailand | Nakhon Ratchasima | Tropical | 1.09(1.06,1.12) | 1.15(1.09,1.23) | NA | NA | NA | NA |

| | | | | | | | | |
|-----------------|---------------------|----------|-----------------|-----------------|----|----|----|----|
| Thailand | Nakhon Sawan | Tropical | 1.09(1.05,1.13) | 1.21(1.12,1.31) | NA | NA | NA | NA |
| Thailand | Nakhon Si Thammarat | Tropical | 1.07(1.04,1.11) | 1.25(1.12,1.39) | NA | NA | NA | NA |
| Thailand | Nan | Tropical | 1.15(1.1,1.22) | 1.36(1.18,1.56) | NA | NA | NA | NA |
| Thailand | Narathiwat | Tropical | 1.07(1.01,1.13) | 1.05(0.98,1.12) | NA | NA | NA | NA |
| Thailand | Nong Bua Lam Phu | Tropical | 1.13(1.06,1.21) | 1.42(1.22,1.66) | NA | NA | NA | NA |
| Thailand | Nong Khai | Tropical | 1.13(1.08,1.18) | 1.21(1.09,1.34) | NA | NA | NA | NA |
| Thailand | Nonthaburi | Tropical | 1.1(1.06,1.15) | 1.09(1,1.19) | NA | NA | NA | NA |
| Thailand | Pathum Thani | Tropical | 1.1(1.06,1.16) | 1.16(1.05,1.28) | NA | NA | NA | NA |
| Thailand | Pattani | Tropical | 1.09(1.02,1.16) | 1.15(1.06,1.25) | NA | NA | NA | NA |
| Thailand | Phayao | Tropical | 1.1(1.05,1.15) | 1.09(0.97,1.23) | NA | NA | NA | NA |
| Thailand | Phetchabun | Tropical | 1.11(1.07,1.16) | 1.4(1.21,1.63) | NA | NA | NA | NA |
| Thailand | Phetchaburi | Tropical | 1.06(1,1.13) | 1.13(1.03,1.24) | NA | NA | NA | NA |
| Thailand | Phichit | Tropical | 1.1(1.03,1.17) | 1.04(0.97,1.11) | NA | NA | NA | NA |
| Thailand | Phitsanulok | Tropical | 1.09(1.04,1.14) | 1.11(1.04,1.19) | NA | NA | NA | NA |
| Thailand | Phrae | Tropical | 1.11(1.06,1.16) | 1.18(1.08,1.29) | NA | NA | NA | NA |
| Thailand | Prachin Buri | Tropical | 1.08(1.03,1.14) | 1.22(1.11,1.33) | NA | NA | NA | NA |
| Thailand | Prachuap Khiri Khan | Tropical | 1.13(1.07,1.19) | 1.17(1.04,1.31) | NA | NA | NA | NA |
| Thailand | Ratchaburi | Tropical | 1.09(1.04,1.14) | 1.13(1.01,1.26) | NA | NA | NA | NA |
| Thailand | Rayong | Tropical | 1.18(1.12,1.24) | 1.49(1.3,1.71) | NA | NA | NA | NA |
| Thailand | Roi Et | Tropical | 1.11(1.07,1.15) | 1.28(1.18,1.39) | NA | NA | NA | NA |
| Thailand | Sa Kaeo | Tropical | 1.16(1.1,1.22) | 1.33(1.17,1.51) | NA | NA | NA | NA |
| Thailand | Sakon Nakhon | Tropical | 1.11(1.07,1.16) | 1.23(1.11,1.36) | NA | NA | NA | NA |
| Thailand | Samut Sakhon | Tropical | 1.07(1.01,1.13) | 1.23(1.11,1.37) | NA | NA | NA | NA |
| Thailand | Samutprakan | Tropical | 1.07(1.03,1.11) | 1.15(1.07,1.23) | NA | NA | NA | NA |
| Thailand | Saraburi | Tropical | 1.16(1.1,1.21) | 1.36(1.21,1.52) | NA | NA | NA | NA |
| Thailand | Si Sa Ket | Tropical | 1.11(1.07,1.15) | 1.16(1.07,1.27) | NA | NA | NA | NA |

| | | | | | | | | |
|--------------------|--------------------|-----------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Thailand | Songkhla | Tropical | 1.1(1.06,1.14) | 1.16(1.09,1.24) | NA | NA | NA | NA |
| Thailand | Sukhothai | Tropical | 1.23(1.16,1.3) | 1.28(1.16,1.41) | NA | NA | NA | NA |
| Thailand | Suphanburi | Tropical | 1.06(1.02,1.1) | 1.11(1.02,1.21) | NA | NA | NA | NA |
| Thailand | Surat Thani | Tropical | 1.15(1.1,1.2) | 1.33(1.22,1.44) | NA | NA | NA | NA |
| Thailand | Surin | Tropical | 1.16(1.11,1.2) | 1.23(1.13,1.34) | NA | NA | NA | NA |
| Thailand | Tak | Tropical | 1.07(1,1.14) | 1.1(0.97,1.24) | NA | NA | NA | NA |
| Thailand | Trang | Tropical | 1.23(1.16,1.3) | 1.45(1.32,1.58) | NA | NA | NA | NA |
| Thailand | Ubon Ratchathani | Tropical | 1.14(1.11,1.18) | 1.27(1.19,1.35) | NA | NA | NA | NA |
| Thailand | Udon Thani | Tropical | 1.15(1.11,1.19) | 1.34(1.24,1.44) | NA | NA | NA | NA |
| Thailand | Uttaradit | Tropical | 1.16(1.1,1.22) | 1.17(1.05,1.3) | NA | NA | NA | NA |
| Thailand | Yala | Tropical | 1.16(1.09,1.24) | 1.2(1.07,1.34) | NA | NA | NA | NA |
| Thailand | Yasothon | Tropical | 1.13(1.07,1.19) | 1.3(1.1,1.54) | NA | NA | NA | NA |
| Thailand | (Pooled) | | 1.08(1.06,1.09) | 1.16 (1.14,1.19) | NA | NA | NA | NA |
| Philippines | Cebu | Tropical | 1.1(1.06,1.14) | 1.12(1.08,1.17) | 1.08(1.01,1.16) | 1.07(0.97,1.19) | 1.27(1.15,1.42) | 1.35(1.2,1.53) |
| Philippines | Davao | Tropical | 1.07(1.04,1.11) | 1.07(1.03,1.11) | 1.21(1.13,1.28) | 1.16(1.07,1.25) | 1.29(1.15,1.44) | 1.33(1.18,1.51) |
| Philippines | Manila | Tropical | 1.1(1.08,1.12) | 1.13(1.1,1.16) | 1.06(1.01,1.11) | 1.08(1,1.16) | 1.22(1.14,1.31) | 1.48(1.33,1.65) |
| Philippines | Quezon | Tropical | 1.09(1.07,1.12) | 1.14(1.1,1.17) | 1.08(1.05,1.12) | 1.22(1.12,1.33) | 1.19(1.11,1.27) | 1.3(1.14,1.48) |
| Philippines | (Pooled) | | 1.09(1.07,1.11) | 1.11 (1.09,1.14) | 1.07(1.01,1.14) | 1.10 (1.03,1.18) | 1.19(1.14,1.24) | 1.33 (1.22,1.46) |
| UK | Bristol | Temperate | 1.33(1.29,1.36) | 1.14(1.1,1.18) | 1.34(1.29,1.4) | 1.08(1.02,1.15) | 2.22(2.07,2.38) | 1.79(1.37,2.33) |
| UK | Cardiff | Temperate | 1.32(1.28,1.36) | 1.13(1.03,1.23) | 1.36(1.3,1.43) | 1.15(0.95,1.38) | 2(1.85,2.17) | 1.55(1.33,1.81) |
| UK | East | Temperate | 1.34(1.33,1.35) | 1.17(1.14,1.2) | 1.36(1.34,1.37) | 1.16(1.12,1.21) | 2.25(2.2,2.3) | 1.73(1.62,1.85) |
| UK | East Midlands | Temperate | 1.35(1.34,1.36) | 1.16(1.13,1.2) | 1.36(1.34,1.37) | 1.12(1.08,1.17) | 2.26(2.21,2.31) | 1.67(1.56,1.8) |
| UK | Greater London | Temperate | 1.34(1.33,1.35) | 1.14(1.11,1.18) | 1.35(1.33,1.37) | 1.11(1.06,1.16) | 2.13(2.08,2.19) | 1.6(1.48,1.72) |
| UK | Greater Manchester | Temperate | 1.35(1.32,1.37) | 1.15(1.1,1.21) | 1.36(1.33,1.39) | 1.14(1.06,1.23) | 2.12(2.04,2.21) | 1.48(1.33,1.65) |
| UK | Kingston upon Hull | Temperate | 1.39(1.34,1.43) | 1.24(1.1,1.39) | 1.41(1.34,1.48) | 1.18(1.01,1.38) | 2.31(2.13,2.49) | 2.51(1.84,3.43) |
| UK | Leicester | Temperate | 1.34(1.3,1.37) | 1.08(1.04,1.13) | 1.34(1.29,1.4) | 1.13(0.96,1.34) | 2.17(2.03,2.33) | 1.57(1.22,2.03) |
| UK | Liverpool | Temperate | 1.35(1.33,1.38) | 1.16(1.13,1.19) | 1.35(1.3,1.39) | 1.09(1.04,1.13) | 2.13(2.02,2.24) | 1.56(1.32,1.85) |

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|-----|--------------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| UK | London | Temperate | 1.33(1.32,1.34) | 1.14(1.12,1.17) | 1.35(1.33,1.36) | 1.1(1.07,1.14) | 2.11(2.07,2.15) | 1.6(1.51,1.7) |
| UK | North East | Temperate | 1.34(1.33,1.35) | 1.21(1.17,1.25) | 1.37(1.35,1.39) | 1.18(1.13,1.23) | 2.1(2.04,2.15) | 1.77(1.63,1.94) |
| UK | North West | Temperate | 1.34(1.33,1.35) | 1.16(1.14,1.19) | 1.36(1.34,1.37) | 1.14(1.1,1.17) | 2.14(2.1,2.18) | 1.57(1.49,1.67) |
| UK | Norwich | Temperate | 1.37(1.32,1.43) | 1.17(1.12,1.23) | 1.33(1.25,1.41) | 1.22(0.97,1.52) | 2.58(2.31,2.88) | 2.36(1.63,3.39) |
| UK | Nottingham | Temperate | 1.38(1.35,1.42) | 1.18(1.09,1.28) | 1.38(1.33,1.43) | 1.11(1,1.24) | 2.46(2.3,2.62) | 1.65(1.34,2.02) |
| UK | Sheffield | Temperate | 1.35(1.31,1.38) | 1.19(1.15,1.23) | 1.35(1.3,1.4) | 1.15(1.1,1.21) | 2.25(2.11,2.4) | 1.62(1.31,2) |
| UK | South East | Temperate | 1.33(1.32,1.34) | 1.15(1.12,1.17) | 1.34(1.33,1.35) | 1.12(1.08,1.15) | 2.2(2.16,2.24) | 1.64(1.54,1.74) |
| UK | South West | Temperate | 1.32(1.31,1.33) | 1.14(1.11,1.17) | 1.34(1.33,1.35) | 1.07(1.04,1.11) | 2.17(2.12,2.22) | 1.71(1.59,1.84) |
| UK | Southampton | Temperate | 1.3(1.25,1.34) | 1.23(1.07,1.41) | 1.34(1.27,1.41) | 1.27(1.03,1.57) | 2.11(1.93,2.31) | 2.42(1.69,3.46) |
| UK | The Potteries | Temperate | 1.32(1.28,1.36) | 1.15(1.11,1.19) | 1.38(1.32,1.45) | 1.18(1.02,1.35) | 2.12(1.97,2.29) | 1.68(1.48,1.91) |
| UK | Tyneside | Temperate | 1.36(1.33,1.39) | 1.22(1.14,1.3) | 1.38(1.34,1.43) | 1.23(1.11,1.36) | 2.05(1.94,2.17) | 1.71(1.42,2.06) |
| UK | Wales | Temperate | 1.32(1.31,1.34) | 1.15(1.12,1.19) | 1.35(1.34,1.37) | 1.18(1.13,1.24) | 2.05(2,2.1) | 1.53(1.41,1.67) |
| UK | West Midlands | Temperate | 1.34(1.33,1.35) | 1.14(1.11,1.17) | 1.37(1.35,1.38) | 1.1(1.07,1.14) | 2.21(2.17,2.26) | 1.55(1.46,1.64) |
| UK | West Yorkshire | Temperate | 1.36(1.34,1.39) | 1.24(1.17,1.31) | 1.36(1.32,1.4) | 1.22(1.1,1.35) | 2.28(2.17,2.39) | 1.66(1.46,1.88) |
| UK | Yorkshire & Humber | Temperate | 1.35(1.34,1.36) | 1.22(1.19,1.25) | 1.37(1.36,1.39) | 1.2(1.16,1.24) | 2.19(2.15,2.24) | 1.77(1.65,1.9) |
| UK | (Pooled) | | 1.34(1.33,1.35) | 1.17(1.15,1.18) | 1.36(1.35,1.36) | 1.14(1.12,1.16) | 2.19(2.15,2.23) | 1.64(1.60,1.69) |
| USA | Akron | Continental | 1.14(1.12,1.16) | 1.08(0.96,1.22) | 1.27(1.23,1.31) | 1.2(1.03,1.41) | 1.53(1.45,1.62) | 1.19(0.99,1.43) |
| USA | Albany | Continental | 1.22(1.2,1.25) | 1.08(0.99,1.18) | 1.25(1.21,1.29) | 1.06(0.93,1.21) | 1.63(1.53,1.74) | 1.59(1.17,2.16) |
| USA | Albuquerque | Dry | 1.14(1.11,1.17) | 1.14(1.02,1.27) | 1.3(1.25,1.36) | 1.24(0.97,1.59) | 1.86(1.74,1.99) | 1.59(1.09,2.32) |
| USA | Allentown | Continental | 1.22(1.2,1.25) | 1.07(1,1.13) | 1.31(1.26,1.35) | 1.06(1.01,1.12) | 1.56(1.45,1.67) | 1.86(1.33,2.61) |
| USA | Anaheim | Temperate | 1.24(1.23,1.26) | 1.19(1.15,1.22) | 1.33(1.31,1.35) | 1.22(1.18,1.26) | 1.81(1.75,1.87) | 1.81(1.65,1.97) |
| USA | Anchorage | Continental | 1.02(1,1.04) | 1.05(1,1.1) | 1.08(0.95,1.22) | 1.13(0.78,1.64) | 1.67(1.3,2.15) | 1.38(0.57,3.33) |
| USA | Annandale | Temperate | 1.21(1.18,1.24) | 1.07(0.96,1.19) | 1.26(1.2,1.31) | 1.16(0.95,1.42) | 1.62(1.5,1.75) | 1.73(1.22,2.47) |
| USA | AnnArbor | Continental | 1.18(1.15,1.21) | 1.06(0.94,1.2) | 1.21(1.15,1.27) | 1.29(1,1.67) | 1.48(1.35,1.62) | 1.59(1.01,2.5) |
| USA | Arlington | Temperate | 1.09(1.06,1.12) | 1.08(0.98,1.2) | 1.33(1.21,1.47) | 1.36(0.85,2.16) | 2.09(1.66,2.63) | 2.23(1.4,99) |
| USA | Atlanta | Temperate | 1.21(1.19,1.24) | 1.15(1.06,1.25) | 1.26(1.22,1.3) | 1.24(1.09,1.42) | 1.75(1.63,1.87) | 1.52(1.2,1.94) |
| USA | Atlantic City | Temperate | 1.2(1.18,1.23) | 1.07(0.96,1.19) | 1.25(1.21,1.3) | 1.17(0.97,1.42) | 1.53(1.41,1.66) | 1.3(0.85,1.97) |

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|-----|----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Atzec | Dry | 1.22(1.15,1.3) | 1.13(0.86,1.5) | 1.29(1.14,1.46) | 1.98(1.08,3.65) | 1.64(1.34,2) | 2.53(0.88,7.24) |
| USA | Augusta | Temperate | 1.21(1.18,1.24) | 1.21(1.07,1.37) | 1.26(1.2,1.32) | 1.13(0.91,1.41) | 1.62(1.47,1.78) | 1.44(1.03,2) |
| USA | Austin | Temperate | 1.13(1.1,1.16) | 1.03(0.97,1.1) | 1.28(1.22,1.34) | 1.18(0.99,1.4) | 1.87(1.71,2.03) | 1.61(1.26,2.06) |
| USA | Bakersfield | Dry | 1.2(1.17,1.23) | 1.11(1.04,1.18) | 1.26(1.22,1.31) | 1.16(1.01,1.34) | 1.78(1.67,1.89) | 1.85(1.44,2.37) |
| USA | Baltimore | Temperate | 1.18(1.16,1.2) | 1.1(1.02,1.19) | 1.27(1.24,1.29) | 1.16(1.05,1.29) | 1.53(1.48,1.59) | 1.45(1.2,1.74) |
| USA | Bangor | Continental | 1.22(1.18,1.26) | 1.2(1,1.44) | 1.27(1.21,1.34) | 1.34(1,1.8) | 1.85(1.69,2.03) | 1.99(1.1,3.57) |
| USA | Barnstable | Temperate | 1.16(1.12,1.19) | 1.25(1.09,1.43) | 1.22(1.17,1.28) | 1.53(1.2,1.95) | 1.62(1.5,1.75) | 1.8(1.13,2.89) |
| USA | bath | Temperate | 1.2(1.16,1.25) | 1.27(1.06,1.52) | 1.27(1.18,1.37) | 1.16(1.05,1.28) | 1.56(1.37,1.77) | 1.5(0.99,2.27) |
| USA | Baton Rouge | Temperate | 1.2(1.18,1.23) | 1.14(1.04,1.24) | 1.3(1.25,1.34) | 1.1(0.96,1.27) | 1.88(1.73,2.04) | 1.5(1.08,2.08) |
| USA | Bergen | Temperate | 1.24(1.22,1.25) | 1.14(1.08,1.21) | 1.31(1.29,1.34) | 1.16(1.06,1.27) | 1.64(1.57,1.71) | 1.41(1.21,1.63) |
| USA | Biddeford | Continental | 1.05(1.03,1.08) | 1.04(0.93,1.16) | 1.04(0.99,1.08) | 1.2(0.98,1.45) | 1.88(1.55,2.28) | 2.1(0.74,5.94) |
| USA | Birmingham | Temperate | 1.21(1.18,1.24) | 1.05(0.95,1.15) | 1.25(1.22,1.29) | 1.03(0.94,1.13) | 1.65(1.57,1.73) | 1.36(1.11,1.66) |
| USA | Boise | Temperate | 1.19(1.14,1.23) | 1.07(0.98,1.17) | 1.21(1.13,1.29) | 1.12(0.92,1.36) | 1.8(1.61,2.01) | 2.22(1.32,3.74) |
| USA | Boston | Continental | 1.18(1.16,1.21) | 1.07(0.96,1.19) | 1.29(1.27,1.31) | 1.1(1,1.21) | 1.64(1.6,1.68) | 1.43(1.24,1.64) |
| USA | Boulder | Dry | 1.21(1.17,1.25) | 1.31(1.14,1.51) | 1.3(1.22,1.38) | 1.23(0.95,1.59) | 1.61(1.46,1.77) | 3.23(2.11,4.95) |
| USA | Brownsville | Temperate | 1.27(1.23,1.31) | 1.1(0.99,1.22) | 1.38(1.31,1.45) | 1.15(0.96,1.37) | 1.83(1.65,2.03) | 1.83(1.3,2.57) |
| USA | Buffalo | Continental | 1.2(1.18,1.23) | 1.06(1.04,1.09) | 1.3(1.27,1.33) | 1.1(0.98,1.23) | 1.5(1.44,1.56) | 1.61(1.26,2.06) |
| USA | Burlington | Continental | 1.18(1.14,1.23) | 1.33(1.06,1.66) | 1.27(1.18,1.36) | 1.25(0.96,1.63) | 1.54(1.35,1.76) | 2.11(1.02,4.37) |
| USA | Canton | Continental | 1.2(1.18,1.22) | 1.12(1.02,1.22) | 1.25(1.21,1.28) | 1.12(1.01,1.25) | 1.61(1.52,1.7) | 1.77(1.32,2.39) |
| USA | Carlisle | Temperate | 1.21(1.18,1.24) | 1.06(0.94,1.19) | 1.26(1.21,1.31) | 1.07(0.97,1.18) | 1.7(1.54,1.88) | 2.33(1.54,3.52) |
| USA | Cayce | Temperate | 1.08(1.05,1.11) | 1.06(0.99,1.14) | 1.24(1.13,1.35) | 1.24(0.91,1.7) | 1.74(1.45,2.09) | 2.52(1.06,5.99) |
| USA | Cedar Rapids | Continental | 1.23(1.2,1.27) | 1.05(0.92,1.2) | 1.23(1.17,1.3) | 1.16(0.96,1.42) | 1.77(1.62,1.94) | 1.41(0.9,2.21) |
| USA | Charleston, SC | Temperate | 1.21(1.19,1.24) | 1.07(0.96,1.19) | 1.29(1.24,1.35) | 1.05(0.94,1.17) | 1.58(1.47,1.71) | 1.09(0.75,1.58) |
| USA | Charleston, WC | Temperate | 1.19(1.16,1.21) | 1.03(1,1.06) | 1.24(1.2,1.28) | 1.09(0.99,1.19) | 1.57(1.46,1.69) | 1.54(1.11,2.14) |
| USA | Charlotte | Temperate | 1.21(1.18,1.24) | 1.11(0.99,1.24) | 1.28(1.22,1.33) | 1.12(0.93,1.34) | 1.46(1.33,1.59) | 1.26(0.93,1.71) |
| USA | Chatta | Temperate | 1.21(1.18,1.24) | 1.08(1.01,1.15) | 1.25(1.21,1.3) | 1.15(1.01,1.3) | 1.67(1.55,1.8) | 1.59(1.14,2.21) |
| USA | Chicago | Continental | 1.17(1.16,1.18) | 1.04(0.99,1.08) | 1.22(1.21,1.24) | 1.04(1,1.09) | 1.45(1.42,1.48) | 1.24(1.11,1.38) |
| USA | Cincinnati | Temperate | 1.21(1.19,1.23) | 1.13(1.05,1.22) | 1.26(1.23,1.29) | 1.21(1.09,1.34) | 1.63(1.55,1.7) | 1.48(1.15,1.91) |

| | | | | | | | | |
|-----|------------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Cleveland | Continental | 1.19(1.17,1.21) | 1.07(1,1.15) | 1.26(1.24,1.28) | 1.05(0.98,1.14) | 1.52(1.48,1.57) | 1.39(1.21,1.61) |
| USA | Colorado Springs | Dry | 1.21(1.18,1.24) | 1.31(1.17,1.45) | 1.23(1.18,1.29) | 1.36(1.13,1.65) | 1.68(1.57,1.81) | 1.98(1.49,2.63) |
| USA | Columbia | Temperate | 1.2(1.18,1.22) | 1.04(0.97,1.11) | 1.25(1.21,1.29) | 1.05(0.94,1.18) | 1.63(1.53,1.73) | 1.28(1.01,1.62) |
| USA | Columbus | Temperate | 1.17(1.16,1.19) | 1.13(1.06,1.21) | 1.23(1.2,1.26) | 1.16(1.04,1.29) | 1.51(1.44,1.58) | 1.37(1.16,1.63) |
| USA | Columbus, (OH) | Temperate | 1.2(1.18,1.23) | 1.16(1.05,1.28) | 1.26(1.22,1.3) | 1.14(1.01,1.29) | 1.59(1.48,1.7) | 1.62(1.12,2.34) |
| USA | Corpus christi | Temperate | 1.2(1.17,1.23) | 1.11(1,1.22) | 1.27(1.21,1.33) | 1.17(1.03,1.33) | 1.85(1.69,2.03) | 1.98(1.36,2.9) |
| USA | Coventry | Temperate | 1.05(1.02,1.07) | 1.17(1.02,1.35) | 1.04(1,1.09) | 1.15(0.94,1.4) | 1.72(1.46,2.04) | 1.85(0.76,4.53) |
| USA | Dallas | Temperate | 1.21(1.2,1.23) | 1.16(1.11,1.22) | 1.27(1.24,1.29) | 1.15(1.06,1.26) | 1.82(1.75,1.9) | 1.89(1.64,2.19) |
| USA | Davenport | Temperate | 1.23(1.2,1.26) | 1.05(0.95,1.15) | 1.27(1.22,1.32) | 1.08(0.93,1.24) | 1.65(1.53,1.77) | 1.41(1.08,1.85) |
| USA | Davis | Continental | 1.2(1.15,1.26) | 1.2(1.06,1.37) | 1.22(1.13,1.32) | 1.35(0.94,1.95) | 1.54(1.33,1.78) | 1.68(1.1,2.59) |
| USA | Dayton | Temperate | 1.19(1.16,1.21) | 1.19(1.06,1.34) | 1.21(1.18,1.25) | 1.15(0.99,1.33) | 1.58(1.49,1.67) | 1.34(1.11,1.61) |
| USA | Daytona Beach | Temperate | 1.22(1.2,1.24) | 1.1(1.04,1.18) | 1.33(1.29,1.36) | 1.27(1.14,1.4) | 1.59(1.49,1.69) | 1.37(1.14,1.64) |
| USA | Denver | Dry | 1.21(1.18,1.23) | 1.28(1.17,1.4) | 1.26(1.23,1.3) | 1.22(1.07,1.4) | 1.66(1.6,1.72) | 1.62(1.36,1.93) |
| USA | DesMoines | Continental | 1.2(1.17,1.22) | 1.07(0.99,1.16) | 1.25(1.21,1.3) | 1.18(1.04,1.33) | 1.63(1.52,1.74) | 1.24(0.98,1.57) |
| USA | Detroit | Continental | 1.16(1.14,1.18) | 1.1(1.03,1.19) | 1.22(1.2,1.23) | 1.04(0.98,1.1) | 1.47(1.43,1.5) | 1.3(1.14,1.48) |
| USA | Dodge | Continental | 1.24(1.19,1.29) | 1.06(0.89,1.26) | 1.31(1.22,1.41) | 1.21(0.92,1.6) | 1.7(1.42,2.04) | 2.56(1.27,5.19) |
| USA | Dover | Temperate | 1.19(1.15,1.23) | 1.13(0.93,1.38) | 1.25(1.17,1.33) | 1.1(0.89,1.36) | 1.66(1.48,1.88) | 2.08(1.11,3.87) |
| USA | Durham | Temperate | 1.23(1.2,1.27) | 1.12(1,1.25) | 1.27(1.21,1.34) | 1.11(0.9,1.38) | 1.79(1.62,1.97) | 1.62(1.04,2.5) |
| USA | El centro | Dry | 1.36(1.3,1.43) | 1.21(1.01,1.44) | 1.44(1.32,1.57) | 1.18(0.86,1.61) | 2.1(1.8,2.45) | 2.87(1.61,5.09) |
| USA | Elizabeth | Temperate | 1.22(1.2,1.24) | 1.11(1.04,1.19) | 1.27(1.24,1.31) | 1.06(0.95,1.19) | 1.58(1.49,1.68) | 1.41(1.11,1.79) |
| USA | Elkhart | Continental | 1.19(1.15,1.23) | 1.06(0.95,1.18) | 1.25(1.18,1.32) | 1.33(1.08,1.64) | 1.61(1.44,1.8) | 2.67(1.54,4.62) |
| USA | ElPaso | Dry | 1.25(1.22,1.27) | 1.24(1.12,1.37) | 1.32(1.27,1.37) | 1.2(1.03,1.4) | 1.84(1.71,1.97) | 2(1.42,2.82) |
| USA | Erie | Continental | 1.21(1.18,1.24) | 1.06(0.96,1.17) | 1.26(1.22,1.31) | 1.08(0.95,1.22) | 1.66(1.55,1.78) | 1.3(0.99,1.69) |
| USA | Essex | Temperate | 1.23(1.21,1.25) | 1.1(1.02,1.19) | 1.28(1.25,1.31) | 1.07(0.97,1.17) | 1.7(1.64,1.78) | 1.39(1.16,1.66) |
| USA | Eugene | Temperate | 1.19(1.16,1.22) | 1.11(1,1.23) | 1.22(1.17,1.27) | 1.05(0.99,1.13) | 1.62(1.5,1.75) | 1.42(1.03,1.96) |
| USA | Evansville | Temperate | 1.12(1.1,1.15) | 1.11(0.98,1.26) | 1.16(1.11,1.21) | 1.11(0.95,1.31) | 1.74(1.51,1.99) | 1.33(0.73,2.43) |
| USA | Everett | Temperate | 1.16(1.14,1.19) | 1.07(0.99,1.16) | 1.21(1.16,1.25) | 1.09(0.98,1.22) | 1.57(1.46,1.68) | 1.39(1.16,1.67) |
| USA | Fargo | Continental | 1.18(1.12,1.23) | 1.09(0.91,1.31) | 1.24(1.15,1.35) | 1.27(0.86,1.86) | 1.58(1.35,1.84) | 1.66(1.02,2.7) |

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|-----|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Fayetville | Temperate | 1.2(1.17,1.23) | 1.15(1.03,1.28) | 1.23(1.17,1.28) | 1.23(1.04,1.45) | 1.55(1.41,1.71) | 1.58(1.05,2.37) |
| USA | flint | Continental | 1.16(1.14,1.19) | 1.15(1.05,1.26) | 1.21(1.17,1.25) | 1.17(1.02,1.35) | 1.43(1.34,1.51) | 1.88(1.34,2.63) |
| USA | Fort Wayne | Continental | 1.15(1.12,1.18) | 1.15(1.01,1.31) | 1.29(1.22,1.36) | 1.18(0.94,1.5) | 1.49(1.32,1.67) | 1.83(1.11,3.02) |
| USA | Fresno | Dry | 1.26(1.23,1.3) | 1.24(1.11,1.38) | 1.36(1.31,1.4) | 1.1(0.95,1.28) | 1.88(1.77,2) | 1.41(1.12,1.78) |
| USA | Ft Wayne | Temperate | 1.19(1.16,1.22) | 1.13(1.01,1.26) | 1.25(1.2,1.3) | 1.22(1.02,1.46) | 1.44(1.34,1.56) | 1.44(1.08,1.92) |
| USA | Fort Lauderdale | Tropical | 1.17(1.16,1.19) | 1.09(1.05,1.12) | 1.24(1.22,1.26) | 1.12(1.06,1.18) | 1.41(1.36,1.46) | 1.28(1.14,1.44) |
| USA | Fort Myers | Temperate | 1.24(1.22,1.26) | 1.17(1.1,1.25) | 1.31(1.27,1.35) | 1.16(1.05,1.29) | 1.61(1.5,1.72) | 1.7(1.36,2.12) |
| USA | Fort Pierce | Temperate | 1.21(1.18,1.23) | 1.11(1.04,1.19) | 1.28(1.24,1.32) | 1.15(1.02,1.3) | 1.5(1.4,1.61) | 1.41(1.08,1.83) |
| USA | Fort Worth | Temperate | 1.23(1.22,1.25) | 1.19(1.13,1.26) | 1.28(1.25,1.32) | 1.17(1.06,1.29) | 1.81(1.73,1.9) | 2.03(1.71,2.41) |
| USA | Gary | Continental | 1.19(1.17,1.21) | 1.11(1.04,1.19) | 1.25(1.21,1.28) | 1.15(1.02,1.3) | 1.49(1.4,1.59) | 1.18(0.94,1.49) |
| USA | Gainesville | Temperate | 1.22(1.18,1.26) | 1.16(1.03,1.32) | 1.27(1.19,1.35) | 1.16(0.95,1.42) | 1.59(1.42,1.8) | 1.41(0.91,2.18) |
| USA | Gettysburg | Temperate | 1.25(1.2,1.31) | 1.34(1.07,1.69) | 1.31(1.22,1.4) | 1.35(0.94,1.93) | 1.57(1.33,1.86) | 2.45(1.03,5.78) |
| USA | Grand heaven | Continental | 1.16(1.12,1.19) | 1.12(0.97,1.29) | 1.17(1.1,1.24) | 1.13(0.91,1.41) | 1.64(1.48,1.82) | 1.63(0.93,2.86) |
| USA | Grand Junctio | Dry | 1.22(1.17,1.27) | 1.2(0.98,1.46) | 1.25(1.15,1.35) | 1.65(1.1,2.48) | 1.91(1.68,2.16) | 3.72(1.73,8) |
| USA | Grand Rapids | Continental | 1.18(1.16,1.2) | 1.04(0.98,1.12) | 1.22(1.19,1.26) | 1.06(0.92,1.24) | 1.51(1.42,1.6) | 1.26(1.01,1.58) |
| USA | Green Bay | Continental | 1.23(1.19,1.27) | 1.1(0.97,1.26) | 1.23(1.17,1.3) | 1.15(0.94,1.41) | 1.59(1.44,1.76) | 1.75(1.07,2.85) |
| USA | Greensboro | Temperate | 1.2(1.18,1.23) | 1.1(1,1.2) | 1.21(1.17,1.25) | 1.11(0.97,1.27) | 1.69(1.59,1.8) | 1.42(1.07,1.88) |
| USA | Greensburg | Temperate | 1.2(1.18,1.22) | 1.09(1.02,1.16) | 1.23(1.19,1.26) | 1.06(0.98,1.14) | 1.54(1.45,1.63) | 1.3(1.06,1.58) |
| USA | Greenville | Temperate | 1.25(1.22,1.27) | 1.06(0.99,1.13) | 1.28(1.23,1.32) | 1.08(0.95,1.22) | 1.78(1.65,1.92) | 1.6(1.24,2.07) |
| USA | Harrisburg | Temperate | 1.2(1.17,1.22) | 1.1(0.99,1.21) | 1.26(1.22,1.31) | 1.11(0.97,1.26) | 1.56(1.45,1.68) | 1.64(1.14,2.35) |
| USA | Hartford | Continental | 1.23(1.21,1.25) | 1.13(1.05,1.21) | 1.3(1.27,1.33) | 1.15(1.02,1.3) | 1.58(1.51,1.65) | 1.6(1.23,2.07) |
| USA | Hickory | Temperate | 1.24(1.2,1.28) | 1.31(1.11,1.54) | 1.29(1.22,1.36) | 1.29(0.97,1.71) | 1.82(1.61,2.05) | 2.64(1.55,4.5) |
| USA | Holland | Continental | 1.19(1.13,1.25) | 1.26(0.99,1.61) | 1.21(1.11,1.32) | 1.21(0.83,1.77) | 1.5(1.28,1.76) | 1.71(0.77,3.84) |
| USA | Honolulu | Tropical | 1.14(1.12,1.17) | 1.1(1.06,1.14) | 1.22(1.18,1.26) | 1.11(1.01,1.21) | 1.4(1.31,1.49) | 1.28(1.13,1.44) |
| USA | Houston | Temperate | 1.18(1.17,1.2) | 1.16(1.09,1.23) | 1.23(1.21,1.26) | 1.13(1.04,1.22) | 1.6(1.53,1.66) | 1.53(1.31,1.78) |
| USA | Huntsville | Temperate | 1.13(1.1,1.17) | 1.04(0.94,1.17) | 1.31(1.23,1.39) | 1.18(0.94,1.48) | 1.83(1.57,2.13) | 1.19(0.63,2.24) |
| USA | Indianapolis | Temperate | 1.16(1.13,1.18) | 1.12(1.01,1.23) | 1.22(1.18,1.26) | 1.12(0.98,1.28) | 1.5(1.43,1.57) | 1.37(1.11,1.68) |

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|-----|-------------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Iowa city | Continental | 1.22(1.15,1.28) | 1.13(0.87,1.46) | 1.23(1.12,1.36) | 1.21(0.81,1.83) | 1.65(1.34,2.04) | 1.66(0.63,4.39) |
| USA | Jackson | Temperate | 1.1(1.07,1.12) | 1.03(0.91,1.15) | NA | NA | NA | NA |
| USA | Jacksonville | Temperate | 1.19(1.16,1.22) | 1.08(0.97,1.19) | 1.26(1.21,1.31) | 1.14(0.97,1.34) | 1.51(1.4,1.64) | 1.52(1.07,2.15) |
| USA | Jersy city | Temperate | 1.24(1.22,1.26) | 1.23(1.13,1.34) | 1.31(1.28,1.35) | 1.2(1.05,1.37) | 1.65(1.54,1.76) | 1.74(1.3,2.31) |
| USA | Johnstown | Temperate | 1.16(1.13,1.19) | 1.1(0.94,1.28) | 1.15(1.1,1.19) | 1.07(0.94,1.23) | 1.51(1.29,1.76) | 1.77(0.85,3.65) |
| USA | Kalamazoo | Continental | 1.18(1.15,1.21) | 1.09(0.96,1.23) | 1.22(1.16,1.27) | 1.06(0.9,1.24) | 1.55(1.42,1.69) | 1.15(0.93,1.43) |
| USA | Kansas | Temperate | 1.19(1.18,1.2) | 1.12(1.06,1.18) | 1.23(1.21,1.25) | 1.15(1.06,1.26) | 1.6(1.55,1.65) | 1.41(1.25,1.59) |
| USA | Kansas City, (KS) | Temperate | 1.21(1.19,1.23) | 1.12(1.01,1.23) | 1.26(1.22,1.3) | 1.09(0.98,1.2) | 1.65(1.55,1.75) | 1.44(1.14,1.81) |
| USA | Kansas City, (MO) | Temperate | 1.13(1.09,1.17) | 1.06(0.93,1.21) | 1.29(1.18,1.4) | 1.1(0.85,1.41) | 1.69(1.44,1.97) | 1.39(0.88,2.18) |
| USA | Kenosha | Continental | 1.2(1.16,1.24) | 1.22(1.08,1.38) | 1.22(1.15,1.29) | 1.15(0.98,1.36) | 1.46(1.3,1.65) | 1.33(0.91,1.94) |
| USA | Kingston | Continental | 1.09(1.07,1.12) | 1.1(0.97,1.23) | 1.06(1.02,1.1) | 1.16(0.94,1.44) | 1.7(1.44,2.01) | 2.31(1.04,5.12) |
| USA | Klamath | Temperate | 1.16(1.1,1.23) | 1.23(0.98,1.55) | 1.21(1.09,1.34) | 1.42(0.98,2.07) | 1.67(1.41,1.98) | 1.36(0.83,2.22) |
| USA | Knoxville | Temperate | 1.21(1.18,1.25) | 1.13(1,1.28) | 1.22(1.17,1.27) | 1.07(0.92,1.25) | 1.64(1.54,1.75) | 1.6(1.17,2.18) |
| USA | Lafayette | Temperate | 1.04(1.02,1.06) | 1.04(0.98,1.1) | 1.23(1.13,1.34) | 1.25(0.98,1.59) | 2.11(1.71,2.6) | 1.79(0.93,3.44) |
| USA | Lafayette, IN | Continental | 1.19(1.15,1.24) | 1.12(0.97,1.29) | 1.3(1.21,1.4) | 1.14(1,1.3) | 1.56(1.37,1.76) | 1.36(0.79,2.35) |
| USA | Lafayette, LA | Temperate | 1.17(1.13,1.22) | 1.04(0.92,1.17) | 1.21(1.14,1.29) | 1.03(0.83,1.28) | 2(1.74,2.29) | 1.34(0.94,1.91) |
| USA | Lake Charles | Temperate | 1.21(1.17,1.24) | 1.12(1.02,1.22) | 1.24(1.18,1.3) | 1.15(1.01,1.31) | 1.74(1.58,1.92) | 2.13(1.4,3.24) |
| USA | Lakeland | Temperate | 1.26(1.24,1.28) | 1.12(1.06,1.18) | 1.33(1.3,1.37) | 1.09(0.98,1.2) | 1.58(1.49,1.68) | 1.26(1.05,1.52) |
| USA | Lancaster | Temperate | 1.23(1.21,1.25) | 1.15(1.05,1.27) | 1.27(1.24,1.31) | 1.17(1.01,1.37) | 1.78(1.67,1.9) | 1.71(1.21,2.42) |
| USA | Lansing | Continental | 1.17(1.14,1.2) | 1.06(0.93,1.2) | 1.17(1.12,1.22) | 1.14(0.97,1.34) | 1.52(1.39,1.66) | 1.25(0.99,1.59) |
| USA | LaPorte | Continental | 1.18(1.14,1.22) | 1.12(0.98,1.29) | 1.17(1.11,1.23) | 1.13(0.91,1.42) | 1.55(1.37,1.75) | 1.47(0.83,2.59) |
| USA | Las Vegas | Dry | 1.23(1.21,1.25) | 1.25(1.16,1.35) | 1.32(1.28,1.35) | 1.3(1.14,1.48) | 1.7(1.63,1.77) | 1.76(1.4,2.2) |
| USA | Lexington | Temperate | 1.15(1.12,1.18) | 1.08(0.94,1.23) | 1.28(1.21,1.37) | 1.14(0.83,1.56) | 1.6(1.41,1.82) | 2.04(1.1,3.77) |
| USA | Lincoln | Continental | 1.14(1.11,1.17) | 1.19(1.07,1.33) | 1.1(1.05,1.15) | 1.2(1.03,1.4) | 1.91(1.66,2.19) | 2.71(1.29,5.71) |
| USA | Little Rock | Temperate | 1.19(1.17,1.22) | 1.14(1.04,1.26) | 1.25(1.2,1.29) | 1.27(1.07,1.5) | 1.65(1.54,1.77) | 1.67(1.22,2.28) |
| USA | Logan | Continental | 1.25(1.16,1.34) | 1.23(0.92,1.64) | 1.37(1.2,1.56) | 1.24(0.69,2.23) | 2.07(1.6,2.67) | 1.6(0.53,4.86) |
| USA | Los Angeles | Temperate | 1.25(1.24,1.25) | 1.23(1.21,1.24) | 1.33(1.32,1.34) | 1.29(1.27,1.32) | 1.74(1.71,1.78) | 1.78(1.71,1.86) |
| USA | Louisville, KY | Temperate | 1.21(1.2,1.23) | 1.09(1.03,1.17) | 1.27(1.24,1.3) | 1.1(1,1.21) | 1.56(1.49,1.62) | 1.39(1.17,1.64) |

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|-----|---------------------------------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Louisville, OH | Temperate | 1.22(1.2,1.24) | 1.06(0.98,1.15) | 1.28(1.24,1.32) | 1.25(1.07,1.47) | 1.69(1.58,1.81) | 1.13(0.85,1.52) |
| USA | Lubbock | Dry | 1.18(1.15,1.21) | 1.2(1.06,1.35) | 1.3(1.24,1.37) | 1.28(1.03,1.58) | 1.95(1.76,2.15) | 2.09(1.37,3.19) |
| USA | Macon | Temperate | 1.23(1.2,1.26) | 1.06(0.97,1.17) | 1.27(1.21,1.33) | 1.09(0.91,1.31) | 1.63(1.47,1.82) | 1.19(0.93,1.54) |
| USA | Madison | Continental | 1.19(1.15,1.23) | 1.14(1,1.29) | 1.24(1.18,1.3) | 1.14(0.92,1.4) | 1.55(1.43,1.67) | 1.66(1.06,2.58) |
| USA | Madison, IL | Continental | 1.24(1.22,1.27) | 1.17(1.05,1.31) | 1.28(1.23,1.33) | 1.16(1.01,1.32) | 1.72(1.59,1.87) | 1.73(1.26,2.39) |
| USA | Madison, WI | Continental | 1.2(1.17,1.23) | 1.16(1.03,1.31) | 1.24(1.19,1.29) | 1.03(0.87,1.23) | 1.56(1.45,1.67) | 1.82(1.22,2.72) |
| USA | Marlborough | Temperate | 1.19(1.17,1.21) | 1.1(1.03,1.18) | 1.24(1.2,1.28) | 1.23(1.1,1.38) | 1.6(1.49,1.72) | 1.33(1.06,1.65) |
| USA | McAllen | Dry | 1.33(1.3,1.37) | 1.17(1.07,1.28) | 1.49(1.42,1.56) | 1.38(1.19,1.6) | 1.86(1.71,2.03) | 1.29(1,1.65) |
| USA | Medford | Temperate | 1.19(1.15,1.22) | 1.23(1.08,1.4) | 1.21(1.15,1.28) | 1.12(0.96,1.31) | 1.64(1.5,1.79) | 1.45(0.99,2.11) |
| USA | Palm Bay- Melbourne- Titusville | Temperate | 1.2(1.18,1.22) | 1.07(1,1.14) | 1.27(1.23,1.31) | 1.21(1.08,1.36) | 1.52(1.43,1.61) | 1.16(0.98,1.37) |
| USA | Memphis | Temperate | 1.18(1.16,1.2) | 1.08(1.02,1.14) | 1.21(1.19,1.24) | 1.18(1.07,1.31) | 1.56(1.48,1.64) | 1.56(1.33,1.84) |
| USA | Mercer | Continental | 1.2(1.16,1.23) | 1.27(1.1,1.46) | 1.2(1.15,1.26) | 1.33(1.07,1.66) | 1.62(1.47,1.79) | 1.39(0.93,2.1) |
| USA | Miami | Tropical | 1.13(1.11,1.15) | 1.11(1.06,1.17) | 1.21(1.19,1.23) | 1.15(1.09,1.22) | 1.35(1.3,1.4) | 1.22(1.11,1.34) |
| USA | Middles | Temperate | 1.23(1.21,1.25) | 1.1(1.02,1.18) | 1.31(1.27,1.34) | 1.25(1.09,1.43) | 1.55(1.46,1.65) | 1.27(0.96,1.7) |
| USA | Middletown | Continental | 1.17(1.14,1.2) | 1.11(1.01,1.22) | 1.2(1.16,1.25) | 1.11(0.97,1.26) | 1.56(1.45,1.67) | 1.39(1.06,1.83) |
| USA | Milwaukee | Continental | 1.2(1.18,1.21) | 1.08(1.03,1.13) | 1.26(1.24,1.28) | 1.14(1.05,1.24) | 1.44(1.4,1.49) | 1.25(1.09,1.43) |
| USA | Minneapolis | Continental | 1.21(1.2,1.22) | 1.14(1.08,1.2) | 1.24(1.22,1.27) | 1.09(1,1.19) | 1.61(1.56,1.66) | 1.49(1.26,1.76) |
| USA | Mobile | Temperate | 1.17(1.14,1.21) | 1.07(0.96,1.19) | 1.23(1.18,1.28) | 1.23(1.03,1.46) | 1.72(1.58,1.87) | 1.28(0.97,1.69) |
| USA | Modesto | Temperate | 1.22(1.18,1.25) | 1.28(1.14,1.43) | 1.35(1.28,1.42) | 1.36(1.1,1.69) | 1.86(1.69,2.04) | 2.12(1.46,3.08) |
| USA | Monmouth | Temperate | 1.18(1.17,1.19) | 1.09(1.05,1.13) | 1.23(1.21,1.25) | 1.07(1.01,1.14) | 1.55(1.49,1.61) | 1.49(1.28,1.73) |
| USA | Monroe | Temperate | 1.22(1.18,1.26) | 1.15(1,1.33) | 1.21(1.15,1.28) | 1.31(1.04,1.65) | 1.69(1.52,1.88) | 1.55(1.07,2.24) |
| USA | Montgomery | Temperate | 1.23(1.2,1.27) | 1.13(1.02,1.25) | 1.24(1.18,1.3) | 1.23(1.02,1.49) | 1.72(1.57,1.89) | 1.44(0.98,2.12) |
| USA | Muncie | Continental | 1.19(1.15,1.23) | 1.1(0.95,1.28) | 1.26(1.19,1.34) | 1.13(0.79,1.61) | 1.55(1.39,1.72) | 1.47(0.76,2.83) |
| USA | Muskegon | Continental | 1.12(1.09,1.16) | 1.13(0.98,1.29) | 1.08(1.04,1.13) | 1.23(1,1.51) | 1.81(1.51,2.15) | 2.01(0.91,4.47) |
| USA | Myrtle Beach | Temperate | 1.17(1.13,1.2) | 1.07(0.93,1.24) | 1.18(1.11,1.25) | 1.11(0.93,1.31) | 1.53(1.38,1.7) | 1.41(0.84,2.37) |
| USA | Nampa | Dry | 1.16(1.1,1.23) | 1.12(0.91,1.37) | 1.14(1.03,1.26) | 1.72(1.11,2.67) | 1.64(1.39,1.93) | 1.85(0.77,4.44) |
| USA | Nashua | Continental | 1.22(1.19,1.24) | 1.1(1.01,1.21) | 1.28(1.23,1.34) | 1.13(0.97,1.31) | 1.68(1.55,1.81) | 1.5(1.03,2.19) |

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|-----|---------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Nashville | Temperate | 1.21(1.19,1.23) | 1.1(1.02,1.18) | 1.25(1.21,1.29) | 1.07(0.97,1.18) | 1.51(1.43,1.61) | 1.58(1.22,2.05) |
| USA | Nassau | Temperate | 1.19(1.18,1.2) | 1.08(1.06,1.1) | 1.26(1.24,1.28) | 1.09(1.03,1.14) | 1.53(1.48,1.57) | 1.43(1.27,1.62) |
| USA | Newark | Temperate | 1.2(1.19,1.21) | 1.13(1.06,1.2) | 1.27(1.25,1.29) | 1.11(1,1.22) | 1.51(1.45,1.57) | 1.68(1.35,2.08) |
| USA | Newburgh | Continental | 1.19(1.17,1.22) | 1.03(0.98,1.09) | 1.28(1.23,1.32) | 1.09(0.96,1.23) | 1.51(1.4,1.63) | 1.27(0.93,1.73) |
| USA | Newhaven | Temperate | 1.22(1.21,1.24) | 1.13(1.05,1.22) | 1.28(1.26,1.31) | 1.12(1,1.26) | 1.61(1.53,1.68) | 1.38(1.15,1.64) |
| USA | New London | Temperate | 1.19(1.16,1.22) | 1.18(1.02,1.36) | 1.22(1.16,1.27) | 1.15(0.96,1.37) | 1.75(1.61,1.91) | 1.69(1.05,2.71) |
| USA | New Orleans | Temperate | 1.21(1.19,1.22) | 1.07(1.04,1.11) | 1.27(1.25,1.3) | 1.1(1.02,1.17) | 1.7(1.62,1.78) | 1.47(1.23,1.76) |
| USA | Newport News | Temperate | 1.12(1.09,1.15) | 1.04(0.99,1.09) | 1.27(1.16,1.39) | 1.31(0.88,1.96) | 1.97(1.6,2.44) | 2.09(1.16,3.75) |
| USA | New York | Temperate | 1.2(1.2,1.21) | 1.16(1.13,1.2) | 1.28(1.27,1.29) | 1.24(1.19,1.3) | 1.53(1.51,1.56) | 1.43(1.34,1.53) |
| USA | Niles | Continental | 1.17(1.14,1.21) | 1.04(0.95,1.13) | 1.22(1.16,1.28) | 1.07(0.9,1.27) | 1.46(1.33,1.59) | 1.56(1.08,2.27) |
| USA | Norfolk | Temperate | 1.12(1.09,1.15) | 1.1(1.01,1.2) | 1.13(1.08,1.18) | 1.02(0.96,1.09) | 1.78(1.51,2.09) | 1.68(1.07,2.64) |
| USA | Oakland | Temperate | 1.3(1.27,1.32) | 1.24(1.17,1.32) | 1.38(1.35,1.4) | 1.21(1.14,1.29) | 1.85(1.78,1.91) | 1.72(1.55,1.91) |
| USA | Ocala | Temperate | 1.23(1.21,1.26) | 1.08(1,1.16) | 1.33(1.28,1.39) | 1.09(0.97,1.23) | 1.74(1.61,1.88) | 1.55(1.17,2.05) |
| USA | Oklahoma | Temperate | 1.22(1.2,1.23) | 1.13(1.07,1.2) | 1.27(1.24,1.31) | 1.12(1.01,1.24) | 1.7(1.61,1.79) | 1.6(1.32,1.95) |
| USA | Oklahoma City | Temperate | 1.21(1.18,1.23) | 1.14(1.05,1.24) | 1.29(1.24,1.33) | 1.24(1.07,1.44) | 1.8(1.66,1.94) | 1.92(1.41,2.62) |
| USA | Olympia | Temperate | 1.12(1.09,1.15) | 1.17(1.04,1.32) | 1.3(1.19,1.42) | 1.21(0.86,1.7) | 1.97(1.66,2.34) | 1.49(0.86,2.56) |
| USA | Omaha | Continental | 1.2(1.17,1.23) | 1.06(0.96,1.16) | 1.23(1.18,1.28) | 1.21(0.99,1.48) | 1.7(1.58,1.83) | 1.39(1.05,1.85) |
| USA | Orlando | Temperate | 1.17(1.14,1.2) | 1.07(0.99,1.16) | 1.25(1.22,1.29) | 1.09(1,1.19) | 1.63(1.54,1.72) | 1.24(1.07,1.43) |
| USA | Ottawa | Continental | 1.23(1.2,1.27) | 1.15(0.97,1.37) | 1.26(1.2,1.33) | 1.27(1,1.6) | 1.65(1.48,1.84) | 1.16(0.98,1.37) |
| USA | Palm Beach | Tropical | 1.2(1.19,1.21) | 1.17(1.13,1.21) | 1.28(1.26,1.3) | 1.23(1.16,1.31) | 1.45(1.39,1.52) | 1.25(1.09,1.44) |
| USA | Pensacola | Temperate | 1.16(1.13,1.19) | 1.04(0.93,1.15) | 1.2(1.16,1.25) | 1.05(0.94,1.18) | 1.68(1.54,1.84) | 1.43(1.09,1.86) |
| USA | Philadelphia | Temperate | 1.21(1.2,1.23) | 1.12(1.05,1.19) | 1.3(1.27,1.33) | 1.1(1,1.22) | 1.64(1.56,1.73) | 1.61(1.3,2) |
| USA | Philadelphia | Temperate | 1.22(1.21,1.23) | 1.06(1.03,1.09) | 1.29(1.28,1.3) | 1.04(1,1.09) | 1.59(1.56,1.63) | 1.36(1.26,1.48) |
| USA | Phoenix | Dry | 1.3(1.28,1.31) | 1.24(1.16,1.32) | 1.32(1.29,1.34) | 1.24(1.13,1.36) | 1.89(1.83,1.95) | 1.89(1.63,2.2) |
| USA | Pittsburgh | Temperate | 1.21(1.2,1.22) | 1.11(1.06,1.16) | 1.27(1.25,1.29) | 1.18(1.1,1.26) | 1.52(1.47,1.56) | 1.49(1.33,1.67) |
| USA | Plymouth | Continental | 1.22(1.19,1.24) | 1.15(1.05,1.27) | 1.27(1.24,1.31) | 1.12(0.97,1.29) | 1.75(1.64,1.86) | 1.87(1.5,2.35) |
| USA | Portage | Temperate | 1.19(1.15,1.24) | 1.11(0.97,1.28) | 1.26(1.19,1.34) | 1.08(0.89,1.32) | 1.54(1.34,1.77) | 1.2(0.65,2.21) |
| USA | Port Arthur | Temperate | 1.21(1.17,1.24) | 1.14(1.05,1.24) | 1.22(1.17,1.27) | 1.23(1.05,1.45) | 1.83(1.67,2.01) | 1.97(1.43,2.7) |

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|-----|-------------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Portland, OR | Temperate | 1.2(1.18,1.21) | 1.09(1.04,1.15) | 1.24(1.22,1.27) | 1.12(1.04,1.2) | 1.65(1.59,1.71) | 1.54(1.29,1.83) |
| USA | Portland, ME | Continental | 1.23(1.2,1.25) | 1.17(1,1.37) | 1.26(1.21,1.32) | 1.08(0.85,1.36) | 1.81(1.69,1.93) | 2.54(1.52,4.24) |
| USA | Providence | Temperate | 1.23(1.21,1.26) | 1.12(0.98,1.27) | 1.24(1.16,1.31) | 1.41(1.05,1.88) | 1.5(1.36,1.65) | 1.68(0.96,2.93) |
| USA | Provo | Continental | 1.24(1.19,1.28) | 1.3(1,1.68) | 1.31(1.23,1.39) | 1.47(0.99,2.18) | 1.66(1.49,1.85) | 3.72(1.58,8.76) |
| USA | Raleigh | Temperate | 1.19(1.17,1.22) | 1.05(0.95,1.17) | 1.23(1.18,1.28) | 1.11(0.96,1.28) | 1.65(1.53,1.79) | 1.24(0.96,1.6) |
| USA | Reading | Temperate | 1.23(1.21,1.25) | 1.13(1.03,1.25) | 1.32(1.27,1.36) | 1.15(0.99,1.34) | 1.68(1.57,1.79) | 1.83(1.3,2.56) |
| USA | Reno | Temperate | 1.22(1.19,1.25) | 1.04(0.95,1.14) | 1.28(1.22,1.34) | 1.15(0.94,1.4) | 1.57(1.47,1.69) | 1.37(1.01,1.88) |
| USA | Richmond | Temperate | 1.2(1.16,1.24) | 1.15(0.99,1.34) | 1.35(1.27,1.44) | 1.2(0.98,1.47) | 1.75(1.51,2.04) | 1.28(0.66,2.48) |
| USA | Riverside | Temperate | 1.29(1.27,1.32) | 1.27(1.18,1.36) | 1.32(1.3,1.35) | 1.25(1.19,1.32) | 1.81(1.76,1.87) | 1.85(1.68,2.04) |
| USA | Rochester | Continental | 1.16(1.14,1.17) | 1.09(1.03,1.16) | 1.2(1.17,1.23) | 1.17(1.04,1.31) | 1.48(1.41,1.55) | 1.5(1.25,1.8) |
| USA | Rockville | Temperate | 1.23(1.21,1.25) | 1.13(1.04,1.21) | 1.28(1.24,1.32) | 1.09(0.95,1.25) | 1.58(1.49,1.66) | 1.46(1.18,1.8) |
| USA | Sacramento | Temperate | 1.25(1.23,1.28) | 1.21(1.11,1.32) | 1.31(1.28,1.35) | 1.07(0.99,1.16) | 1.87(1.78,1.96) | 1.57(1.31,1.87) |
| USA | Saint Charles | Temperate | 1.21(1.18,1.25) | 1.14(0.97,1.33) | 1.17(1.11,1.24) | 1.23(0.95,1.59) | 1.82(1.65,2.01) | 2.43(1.48,3.99) |
| USA | Saint Clair | Temperate | 1.23(1.2,1.26) | 1.09(1,1.18) | 1.28(1.23,1.33) | 1.15(0.99,1.33) | 1.78(1.65,1.93) | 1.37(1.05,1.8) |
| USA | Salt Lake City | Continental | 1.21(1.18,1.24) | 1.26(1.11,1.44) | 1.28(1.22,1.33) | 1.34(1.09,1.66) | 1.68(1.53,1.83) | 1.45(1.04,2.01) |
| USA | Salt Lake | Continental | 1.19(1.17,1.21) | 1.16(1.06,1.28) | 1.23(1.19,1.27) | 1.21(1.02,1.43) | 1.59(1.51,1.69) | 1.47(1.08,2.01) |
| USA | San Antonio | Temperate | 1.25(1.22,1.27) | 1.16(1.08,1.24) | 1.32(1.28,1.36) | 1.21(1.08,1.36) | 1.93(1.81,2.07) | 1.61(1.32,1.96) |
| USA | San Bernardino | Temperate | 1.29(1.26,1.32) | 1.26(1.18,1.34) | 1.35(1.31,1.39) | 1.24(1.13,1.37) | 1.93(1.82,2.05) | 2.39(1.95,2.94) |
| USA | San Diego | Dry | 1.25(1.23,1.26) | 1.22(1.16,1.27) | 1.32(1.29,1.35) | 1.25(1.17,1.33) | 1.95(1.86,2.04) | 2.29(1.99,2.62) |
| USA | San Francisco | Temperate | 1.23(1.2,1.25) | 1.11(1.04,1.19) | 1.3(1.25,1.34) | 1.13(1.04,1.23) | 1.85(1.71,2) | 1.8(1.43,2.26) |
| USA | San Jose | Temperate | 1.28(1.26,1.31) | 1.21(1.14,1.28) | 1.41(1.36,1.45) | 1.32(1.21,1.44) | 2(1.87,2.14) | 2.17(1.81,2.6) |
| USA | Santa Ana/Anaheim | Temperate | 1.28(1.26,1.3) | 1.23(1.18,1.29) | 1.37(1.34,1.41) | 1.24(1.16,1.33) | 2(1.9,2.11) | 2.47(2.15,2.84) |
| USA | Santa Barbara | Temperate | 1.23(1.21,1.26) | 1.16(1.08,1.23) | 1.32(1.27,1.37) | 1.2(1.07,1.33) | 1.81(1.67,1.95) | 1.78(1.46,2.17) |
| USA | San Antonio | Temperate | 1.24(1.22,1.25) | 1.16(1.1,1.22) | 1.29(1.26,1.32) | 1.24(1.14,1.35) | 1.82(1.74,1.91) | 1.64(1.4,1.92) |
| USA | Sarasota | Temperate | 1.26(1.25,1.28) | 1.16(1.11,1.22) | 1.33(1.3,1.36) | 1.22(1.13,1.33) | 1.66(1.58,1.74) | 1.55(1.33,1.8) |
| USA | Scranton | Continental | 1.22(1.2,1.23) | 1.1(1.03,1.17) | 1.28(1.25,1.3) | 1.07(0.96,1.18) | 1.5(1.44,1.56) | 1.58(1.31,1.89) |
| USA | San Diego | Dry | 1.22(1.21,1.23) | 1.17(1.14,1.2) | 1.29(1.27,1.31) | 1.19(1.13,1.24) | 1.75(1.69,1.8) | 1.84(1.7,2) |

| | | | | | | | | |
|-----|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Seattle | Temperate | 1.18(1.16,1.2) | 1.1(1.03,1.18) | 1.24(1.21,1.27) | 1.09(1.01,1.18) | 1.6(1.54,1.66) | 1.42(1.2,1.7) |
| USA | Shreveport | Temperate | 1.18(1.14,1.21) | 1.06(0.99,1.14) | 1.33(1.26,1.41) | 1.22(1.02,1.46) | 1.71(1.56,1.88) | 1.26(0.97,1.64) |
| USA | Sioux City | Continental | 1.18(1.14,1.23) | 1.03(0.84,1.26) | 1.23(1.14,1.32) | 1.07(0.84,1.37) | 1.59(1.39,1.82) | 1.21(0.92,1.59) |
| USA | South bend | Continental | 1.22(1.19,1.25) | 1.11(1,1.23) | 1.32(1.27,1.37) | 1.22(1.03,1.45) | 1.52(1.41,1.64) | 1.55(1.19,2.02) |
| USA | Spartanburg | Temperate | 1.22(1.19,1.24) | 1.07(0.96,1.2) | 1.28(1.23,1.33) | 1.06(0.89,1.27) | 1.57(1.46,1.7) | 1.16(0.85,1.58) |
| USA | Spokane | Temperate | 1.12(1.09,1.15) | 1.05(0.92,1.19) | 1.23(1.17,1.28) | 1.23(1.04,1.46) | 1.61(1.51,1.71) | 1.7(1.23,2.35) |
| USA | Springfield, MO | Temperate | 1.21(1.18,1.25) | 1.08(0.99,1.18) | 1.24(1.18,1.29) | 1.09(0.95,1.25) | 1.62(1.5,1.76) | 1.6(1.19,2.15) |
| USA | Springfield, MA | Continental | 1.23(1.21,1.25) | 1.16(1.05,1.27) | 1.26(1.23,1.3) | 1.15(0.99,1.34) | 1.71(1.62,1.81) | 1.55(1.23,1.94) |
| USA | St. Petersburg | Temperate | 1.2(1.18,1.22) | 1.08(1.03,1.12) | 1.26(1.23,1.3) | 1.13(1.04,1.22) | 1.57(1.5,1.64) | 1.26(1.09,1.45) |
| USA | Stamford | Temperate | 1.23(1.22,1.25) | 1.09(1.02,1.16) | 1.29(1.27,1.32) | 1.15(1.06,1.24) | 1.62(1.56,1.69) | 1.24(1.03,1.5) |
| USA | State College | Continental | 1.21(1.17,1.26) | 1.16(0.96,1.4) | 1.28(1.19,1.37) | 1.47(1.08,2) | 1.51(1.3,1.75) | 1.4(0.78,2.51) |
| USA | Steubenville | Temperate | 1.2(1.16,1.25) | 1.15(1,1.33) | 1.29(1.22,1.36) | 1.34(1.09,1.66) | 1.49(1.34,1.66) | 1.29(0.86,1.92) |
| USA | St Louis | Temperate | 1.22(1.21,1.23) | 1.14(1.1,1.19) | 1.27(1.25,1.29) | 1.22(1.15,1.29) | 1.63(1.57,1.68) | 1.47(1.31,1.65) |
| USA | Stockton | Temperate | 1.26(1.24,1.29) | 1.09(1.03,1.17) | 1.31(1.26,1.35) | 1.06(0.95,1.19) | 1.8(1.69,1.9) | 1.69(1.32,2.16) |
| USA | Syracuse | Continental | 1.15(1.12,1.18) | 1.14(1.03,1.27) | 1.22(1.18,1.27) | 1.2(0.97,1.47) | 1.51(1.43,1.61) | 1.32(1.02,1.71) |
| USA | Tacoma | Temperate | 1.2(1.17,1.22) | 1.14(1.02,1.27) | 1.26(1.22,1.31) | 1.12(0.94,1.35) | 1.67(1.57,1.77) | 1.79(1.31,2.45) |
| USA | Tallahassee | Temperate | 1.2(1.17,1.24) | 1.15(1.04,1.28) | 1.24(1.16,1.33) | 1.22(1.02,1.46) | 1.57(1.39,1.78) | 1.42(0.91,2.21) |
| USA | Tampa | Temperate | 1.19(1.16,1.22) | 1.07(1.02,1.13) | 1.27(1.23,1.31) | 1.16(1.07,1.26) | 1.57(1.49,1.65) | 1.31(1.1,1.56) |
| USA | Terra Haute | Temperate | 1.21(1.17,1.25) | 1.03(0.9,1.19) | 1.26(1.2,1.33) | 1.12(0.87,1.44) | 1.59(1.43,1.77) | 1.14(0.97,1.34) |
| USA | Toledo | Continental | 1.16(1.13,1.18) | 1.11(0.98,1.27) | 1.25(1.21,1.29) | 1.11(0.95,1.29) | 1.46(1.37,1.55) | 1.18(0.89,1.57) |
| USA | Topeka | Temperate | 1.19(1.15,1.22) | 1.11(1.01,1.21) | 1.36(1.26,1.46) | 1.36(1.02,1.81) | 1.86(1.64,2.12) | 3.17(1.6,6.28) |
| USA | Trenton | Temperate | 1.21(1.18,1.23) | 1.08(1,1.17) | 1.29(1.24,1.33) | 1.14(0.99,1.31) | 1.7(1.58,1.83) | 1.37(1.04,1.8) |
| USA | Tucson | Dry | 1.28(1.26,1.3) | 1.26(1.18,1.35) | 1.34(1.3,1.37) | 1.23(1.1,1.39) | 1.85(1.77,1.93) | 1.86(1.53,2.26) |
| USA | Tulsa | Temperate | 1.18(1.15,1.21) | 1.13(1.01,1.27) | 1.25(1.21,1.29) | 1.04(0.93,1.15) | 1.69(1.59,1.8) | 1.47(1.1,1.96) |
| USA | Vancouver | Temperate | 1.17(1.14,1.2) | 1.15(1.02,1.29) | 1.24(1.18,1.31) | 1.34(1.07,1.67) | 1.61(1.46,1.76) | 1.83(1.21,2.76) |
| USA | Vancouver | Temperate | 1.17(1.14,1.2) | 1.15(1.02,1.29) | 1.22(1.17,1.27) | 1.15(0.98,1.35) | 1.59(1.48,1.71) | 1.61(1.07,2.41) |
| USA | Ventura | Temperate | 1.23(1.21,1.26) | 1.19(1.15,1.22) | 1.28(1.24,1.32) | 1.18(1.12,1.24) | 1.77(1.66,1.89) | 1.81(1.6,2.04) |
| USA | Visalia | Dry | 1.22(1.19,1.25) | 1.19(1.08,1.32) | 1.28(1.23,1.34) | 1.39(1.17,1.64) | 1.68(1.56,1.81) | 1.82(1.36,2.44) |

| | | | | | | | | |
|-----|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| USA | Washington | Temperate | 1.15(1.13,1.18) | 1.12(1.04,1.21) | 1.25(1.2,1.29) | 1.23(1.03,1.46) | 1.47(1.35,1.6) | 1.31(0.83,2.08) |
| USA | WDC | Temperate | 1.18(1.16,1.19) | 1.07(1.02,1.12) | 1.24(1.21,1.27) | 1.07(1.01,1.12) | 1.49(1.42,1.56) | 1.29(1.05,1.6) |
| USA | Weber | Continental | 1.18(1.14,1.23) | 1.1(0.97,1.26) | 1.24(1.17,1.31) | 1.49(1.11,1.99) | 1.75(1.57,1.94) | 2.44(1.44,4.14) |
| USA | Wichita | Temperate | 1.22(1.2,1.24) | 1.2(1.11,1.31) | 1.22(1.18,1.26) | 1.06(0.92,1.22) | 1.75(1.63,1.87) | 1.93(1.49,2.49) |
| USA | Wilmington | Temperate | 1.18(1.16,1.2) | 1.03(0.94,1.13) | 1.24(1.2,1.28) | 1.05(1,1.1) | 1.5(1.4,1.6) | 1.18(0.94,1.47) |
| USA | Winston | Temperate | 1.23(1.2,1.25) | 1.05(0.95,1.15) | 1.26(1.21,1.31) | 1.15(0.98,1.34) | 1.56(1.45,1.68) | 1.32(0.94,1.87) |
| USA | Worcester | Continental | 1.25(1.22,1.28) | 1.07(0.96,1.2) | 1.28(1.24,1.32) | 1.14(0.96,1.35) | 1.66(1.59,1.74) | 1.44(1.08,1.93) |
| USA | York | Temperate | 1.22(1.2,1.25) | 1.1(0.99,1.23) | 1.28(1.24,1.32) | 1.09(0.94,1.25) | 1.66(1.55,1.77) | 1.89(1.29,2.78) |
| USA | Youngstown | Continental | 1.2(1.18,1.22) | 1.13(1.05,1.23) | 1.27(1.23,1.3) | 1.14(1.01,1.29) | 1.56(1.47,1.65) | 1.4(1.14,1.72) |
| USA | Atlanta | Temperate | NA | NA | 1.27(1.24,1.3) | 1.12(1.02,1.22) | 1.67(1.6,1.74) | 1.3(1.15,1.47) |
| USA | Baton Rouge | Temperate | NA | NA | 1.32(1.26,1.38) | 1.06(0.98,1.14) | 1.91(1.73,2.11) | 1.52(1.04,2.22) |
| USA | Charleston | Temperate | NA | NA | 1.22(1.17,1.28) | 1.12(0.97,1.29) | 1.6(1.47,1.74) | 1.81(1.22,2.69) |
| USA | Charlotte | Temperate | NA | NA | 1.25(1.2,1.3) | 1.05(0.92,1.2) | 1.6(1.49,1.71) | 1.45(1.03,2.04) |
| USA | Daytona Beach, | Temperate | NA | NA | 1.3(1.26,1.34) | 1.24(1.1,1.41) | 1.54(1.44,1.64) | 1.34(1.09,1.66) |
| USA | Des Moines | Continental | NA | NA | 1.23(1.17,1.29) | 1.17(1.01,1.37) | 1.64(1.51,1.78) | 1.17(0.89,1.54) |
| USA | Dutchess County | Continental | NA | NA | 1.29(1.23,1.36) | 1.28(0.95,1.72) | 1.7(1.54,1.88) | 2.35(1.29,4.25) |
| USA | Galveston | Temperate | NA | NA | 1.2(1.13,1.27) | 1.06(0.97,1.16) | 1.65(1.48,1.83) | 1.73(1.01,2.97) |
| USA | Grand Rapids | Continental | NA | NA | 1.21(1.17,1.26) | 1.12(0.93,1.35) | 1.54(1.43,1.65) | 1.3(1,1.7) |
| USA | Hamilton | Temperate | NA | NA | 1.2(1.15,1.26) | 1.05(0.97,1.14) | 1.58(1.46,1.7) | 1.27(0.95,1.71) |
| USA | Jacksonville | Temperate | NA | NA | 1.25(1.21,1.3) | 1.1(0.98,1.24) | 1.58(1.49,1.67) | 1.36(1.08,1.71) |
| USA | Jersey City | Temperate | NA | NA | 1.34(1.29,1.38) | 1.17(0.99,1.39) | 1.66(1.54,1.8) | 2.03(1.48,2.77) |
| USA | Little Rock | Temperate | NA | NA | 1.25(1.19,1.31) | 1.23(1.01,1.51) | 1.67(1.54,1.81) | 1.73(1.27,2.37) |
| USA | Los Angeles | Temperate | NA | NA | 1.37(1.35,1.38) | 1.28(1.25,1.31) | 1.8(1.76,1.84) | 1.78(1.7,1.87) |
| USA | Myrtle Beach | Temperate | NA | NA | 1.18(1.1,1.27) | 1.19(0.95,1.49) | 1.48(1.32,1.66) | 1.45(0.76,2.75) |
| USA | Nanjing | Temperate | NA | NA | 1.27(1.24,1.3) | 1.21(1.05,1.38) | 1.75(1.65,1.86) | 1.26(1.11,1.43) |
| USA | Naples | Tropical | NA | NA | 1.39(1.31,1.47) | 1.23(0.99,1.53) | 1.46(1.33,1.61) | 1.87(1.24,2.82) |
| USA | New York | Temperate | NA | NA | 1.3(1.29,1.32) | 1.27(1.21,1.34) | 1.54(1.51,1.58) | 1.44(1.31,1.59) |
| USA | Orange County | Temperate | NA | NA | 1.38(1.35,1.41) | 1.28(1.21,1.35) | 1.88(1.82,1.96) | 2.04(1.84,2.26) |

| | | | | | | | | |
|---------|--------------------------------|-------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|
| USA | Portland | Continental | NA | NA | 1.28(1.22,1.36) | 1.37(0.96,1.95) | 1.79(1.65,1.94) | 2.94(1.61,5.36) |
| USA | Portland | Temperate | NA | NA | 1.23(1.2,1.27) | 1.1(1,1.22) | 1.66(1.59,1.73) | 1.71(1.39,2.1) |
| USA | Punta Gorda | Temperate | NA | NA | 1.28(1.21,1.35) | 1.09(0.97,1.23) | 1.57(1.42,1.72) | 1.26(0.9,1.77) |
| USA | Rockford | Continental | NA | NA | 1.26(1.2,1.33) | 1.25(0.97,1.6) | 1.72(1.55,1.9) | 1.76(1.09,2.84) |
| USA | Saginaw | Continental | NA | NA | 1.23(1.17,1.29) | 1.07(0.81,1.4) | 1.35(1.23,1.48) | 1.35(0.77,2.36) |
| USA | Salinas | Temperate | NA | NA | 1.31(1.24,1.38) | 1.34(1.16,1.56) | 1.91(1.73,2.11) | 1.55(1.21,1.98) |
| USA | San Jose | Temperate | NA | NA | 1.39(1.36,1.43) | 1.28(1.15,1.42) | 1.84(1.76,1.94) | 1.77(1.49,2.11) |
| USA | Springfield | Continental | NA | NA | 1.28(1.24,1.32) | 1.15(0.94,1.41) | 1.71(1.61,1.82) | 1.61(1.21,2.15) |
| USA | Tangshan | Continental | NA | NA | 1.7(1.55,1.86) | 3.12(1.41,6.89) | 2.08(1.75,2.47) | 8.69(2.11,35.78) |
| USA | Utica-Rome | Continental | NA | NA | 1.29(1.23,1.35) | 1.16(0.97,1.39) | 1.65(1.53,1.79) | 1.29(1.02,1.62) |
| USA | Virginia Beach | Temperate | NA | NA | 1.26(1.22,1.29) | 1.21(1.07,1.37) | 1.61(1.54,1.69) | 1.34(1.1,1.64) |
| USA | West Palm Beach- Boca Raton | Tropical | NA | NA | 1.28(1.25,1.3) | 1.28(1.19,1.38) | 1.44(1.37,1.5) | 1.31(1.11,1.54) |
| USA | (Pooled) | Tropical | 1.19(1.18,1.19) | 1.10 (1.09,1.11) | 1.25(1.25,1.26) | 1.12 (1.11,1.13) | 1.62(1.61,1.63) | 1.44 (1.42,1.47) |
| Vietnam | Ho Chi Minh City | Tropical | 1.16(1.13,1.19) | 1.20 (1.16,1.25) | 1.15(1.1,1.21) | 1.22(1.14,1.3) | 1.20(1.12,1.29) | 1.23(1.14,1.34) |
| Vietnam | Hue | Tropical | 1.50(1.36,1.66) | 1.55 (1.37,1.76) | 1.75(1.5,2.05) | 1.62(1.26,2.07) | 2.07(1.19,3.61) | 3.01(0.64,14.15) |
| Vietnam | (Pooled) | | 1.29(0.97,1.70) | 1.34 (1.03,1.73) | 1.39(0.91,2.15) | 1.36 (1.01,1.82) | 1.47(0.86,2.48) | 1.63 (0.72,3.70) |

Table S4. Third-stage random-effects meta-regression models

| Models | Estimates without temperature adjustment | | | Estimates with temperature adjustment | | |
|---|--|---------|------------------|---------------------------------------|---------|------------------|
| | Test for predictor | Q test* | I ² § | Test for predictor | Q test* | I ² § |
| All-cause/non-external mortality | | | | | | |
| Intercept only | <0.001 | <0.001 | 97.50% | <0.001 | <0.001 | 89.0% |
| 1+country | <0.001 | <0.001 | 92.5% | <0.001 | <0.001 | 76.6% |
| 1+country+climate zone | <0.001 | <0.001 | 91.9% | <0.001 | <0.001 | 75.8% |
| 1+country+ climate zone +averaged daily mean temperature | <0.001 | <0.001 | 91.5% | <0.001 | <0.001 | 75.5% |
| 1+country + climate zone +range of daily mean temperature | <0.001 | <0.001 | 91.7% | <0.001 | <0.001 | 75.5% |
| 1+ climate zone + averaged daily mean temperature + range of daily mean temperature | <0.001 | <0.001 | 96.5% | <0.001 | <0.001 | 85.9% |
| 1+country+ climate zone + averaged daily mean temperature + range of daily mean temperature | <0.001 | <0.001 | 91.4% | <0.001 | <0.001 | 75.0% |
| Cardiovascular mortality | | | | | | |
| Intercept only | <0.001 | <0.001 | 96.1% | <0.001 | <0.001 | 86.1% |
| 1+country | <0.001 | <0.001 | 85.3% | <0.001 | <0.001 | 80.6% |
| 1+country+ climate zone | <0.001 | <0.001 | 84.0% | <0.001 | <0.001 | 80.2% |
| 1+country+ climate zone + averaged daily mean temperature | <0.001 | <0.001 | 83.1% | <0.001 | <0.001 | 79.8% |
| 1+country+ climate zone + range of daily mean temperature | <0.001 | <0.001 | 83.4% | <0.001 | <0.001 | 79.7% |
| 1+ climate zone + averaged daily mean temperature + range of daily mean temperature | <0.001 | <0.001 | 95.4% | <0.001 | <0.001 | 84.5% |
| 1+country+ climate zone + averaged daily mean temperature + range of daily mean temperature | <0.001 | <0.001 | 82.9% | <0.001 | <0.001 | 79.1% |
| Respiratory mortality | | | | | | |
| Intercept only | <0.001 | <0.001 | 94.7% | <0.001 | <0.001 | 87.7% |
| 1+country | <0.001 | <0.001 | 84.8% | <0.001 | <0.001 | 64.4% |
| 1+country+ climate zone | <0.001 | <0.001 | 83.0% | <0.001 | <0.001 | 62.6% |
| 1+country+climate zone + averaged daily mean temperature | <0.001 | <0.001 | 82.2% | <0.001 | <0.001 | 61.9% |
| 1+country+ climate zone + range of daily mean temperature | <0.001 | <0.001 | 82.2% | <0.001 | <0.001 | 59.3% |
| 1+ climate zone + averaged daily mean temperature + range of daily mean temperature | <0.001 | <0.001 | 92.6% | <0.001 | <0.001 | 82.3% |
| 1+country+ climate zone + averaged daily mean temperature + range of daily mean temperature | <0.001 | <0.001 | 81.7% | <0.001 | <0.001 | 58.5% |

*Multivariate Cochran Q test for heterogeneity (*p-value*); §I² statistic (%) in different multivariate random-effects meta-regression models.

Seasonality assessment summarised for each country or region

The seasonality curve for each country/region before and after temperature adjustment was reported in Figure S2. The pooled estimates for unadjusted and adjusted PTR in each country/region were presented in Table S3 and Figure 4.

Before adjusting for temperature, a similar seasonal pattern with a high mortality in cool seasons and a low mortality in warm seasons was observed for most countries/regions, with the exception of Thailand, where mortality was distributed almost evenly from March to October (Figure S2). Lower PTRs for all-cause mortality were observed in those countries where most locations included in the analysis were located in a tropical climate, including Brazil (1.08 (95%CI: 1.06, 1.10)), Colombia (1.08 (95%CI: 1.06, 1.10)), Thailand (1.08 (95%CI: 1.06, 1.09)), and Philippines (1.09 (95%CI: 1.07, 1.11)); larger PTRs for all-cause mortality ranging between 1.33 and 1.46 were found in Australia, Ireland, China, Mexico, UK, Moldova, Argentina, and Portugal, where most locations included in the analysis locate in temperate or continental climate zones. A higher but imprecise PTR for all-cause mortality was observed in Vietnam (1.29 (95%CI: 0.97, 1.70)).

When adjusted for temperature effects, the pattern of higher mortality in cool seasons remained for most countries, but with reduced amplitudes, whereas in Korea we found higher estimates in warm seasons for cardiovascular mortality (Figure S2). The country/region-specific PTRs showed a reduction after adjusting for temperature for most countries, although the reductions varied between countries/regions (Figure 4, main text). A larger reduction in the estimates for all-cause mortality was observed in Portugal, Argentina, Ireland, Australia, Japan, Taiwan, UK, Mexico, and China, and most of the locations included in these countries/regions have temperate or continental climate; a smaller reduction was found in Spain, Italy, Brazil, and Korea, although the corresponding confidence intervals were only significant for Spain. Countries where most locations included in the analysis are characterized with tropical climate, including Colombia, Philippines, Vietnam, and Thailand, did not show a reduction in PTR after temperature adjustment, with largely overlapped confidence intervals for PTRs in Colombia, Philippines, and Vietnam before and after adjustment.

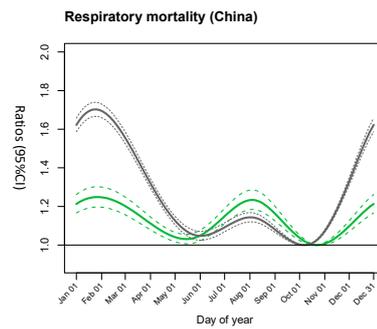
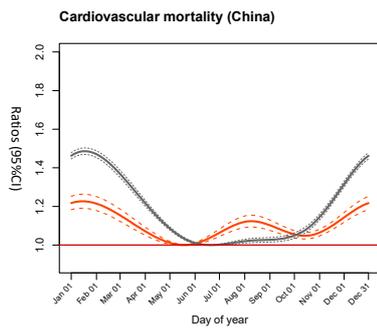
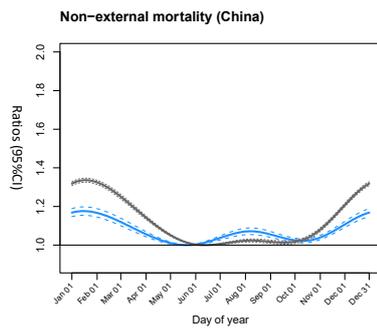
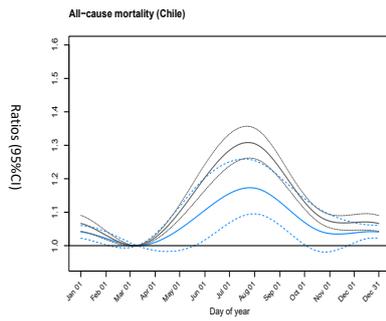
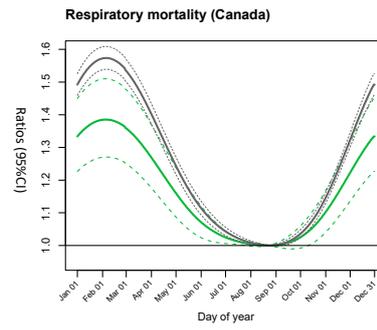
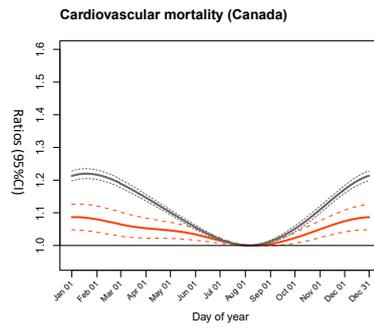
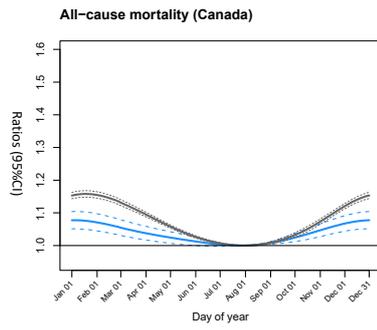
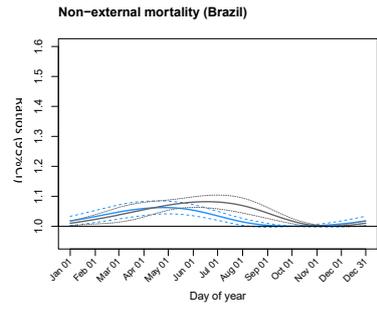
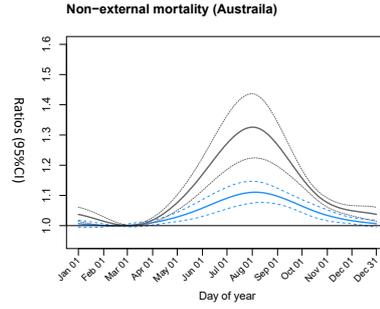
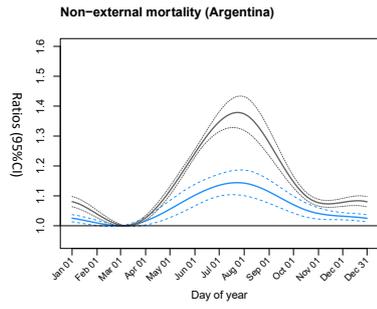
Figure S2. Seasonality in 34 countries/regions before (grey) and after adjusting for temperature for all-cause/non-external mortality (blue), cardiovascular mortality (red), and respiratory mortality (green)

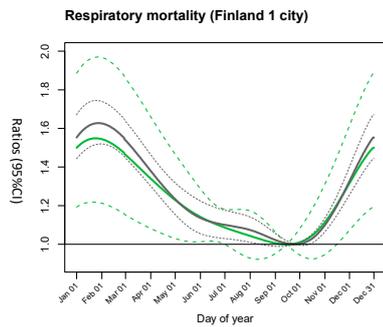
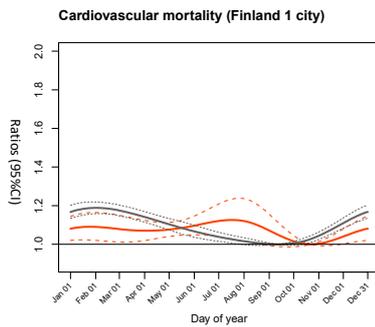
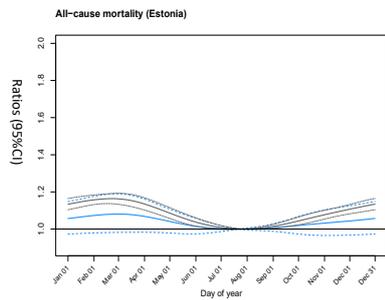
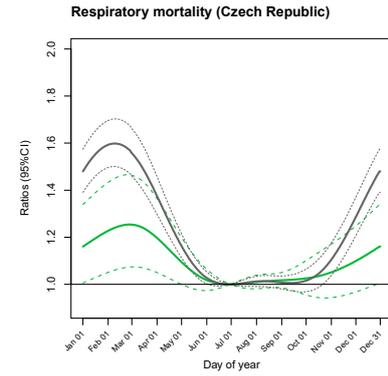
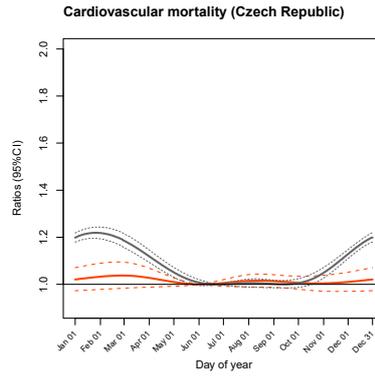
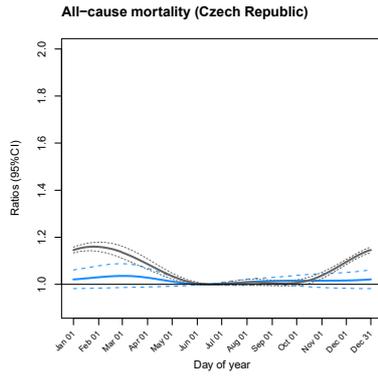
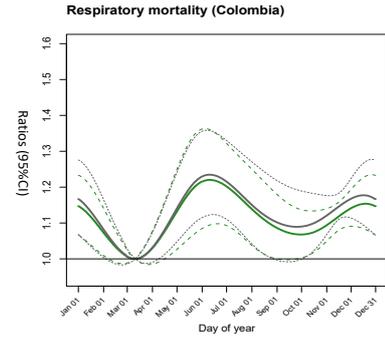
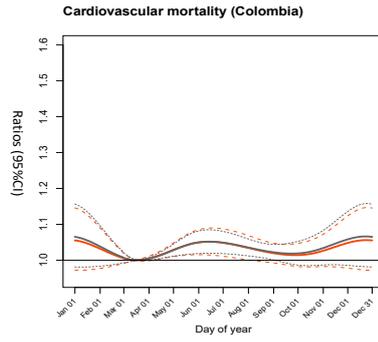
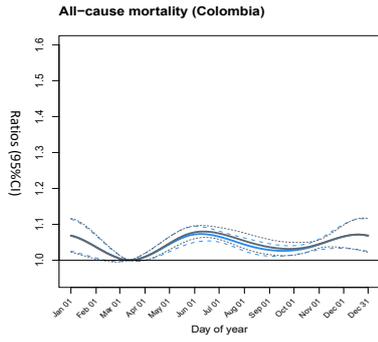
The seasonality is computed as the relative risk (RR) of mortality estimates at each day to minimum mortality estimates at the trough day with 95% confidence intervals (95%CI) in 34 countries:

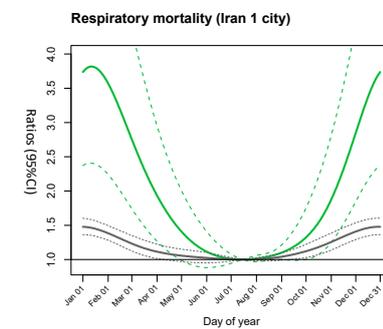
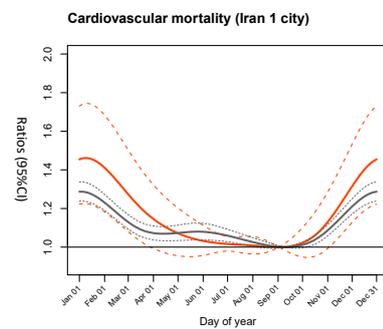
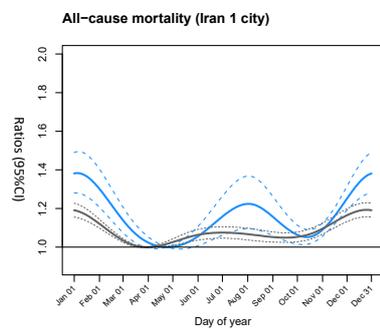
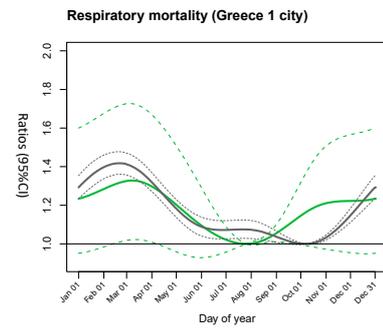
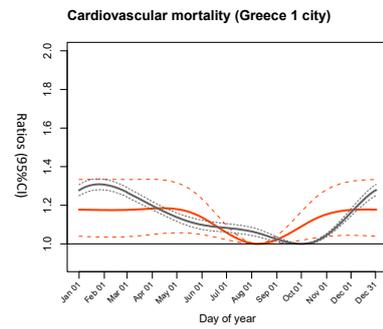
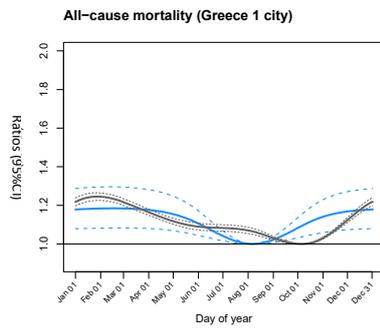
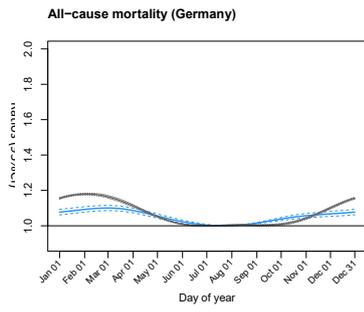
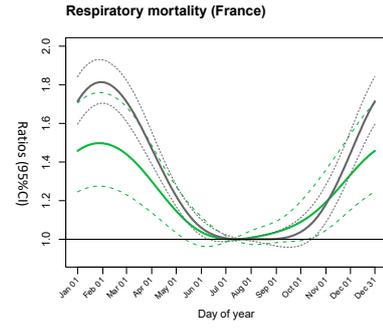
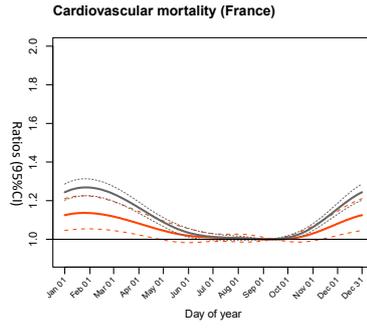
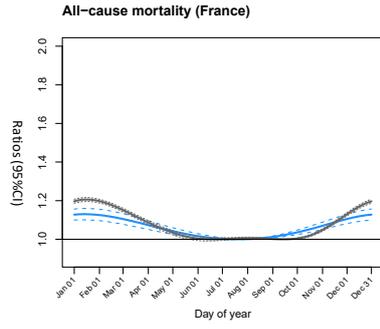
$$RR = \frac{\text{Mortality estimate at day}_i}{\text{Minimum mortality estimate at the trough}}$$

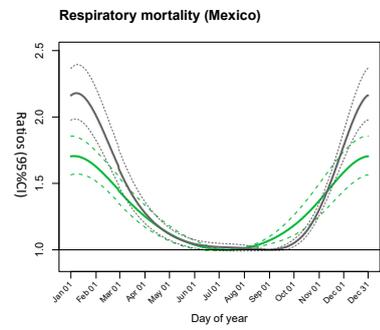
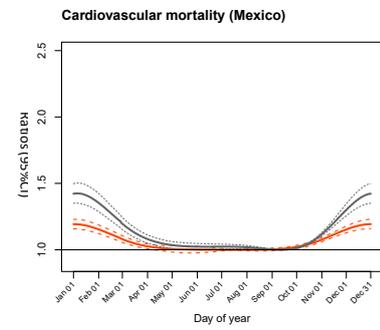
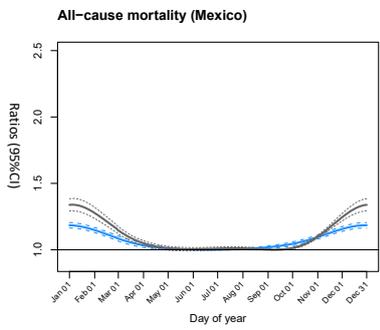
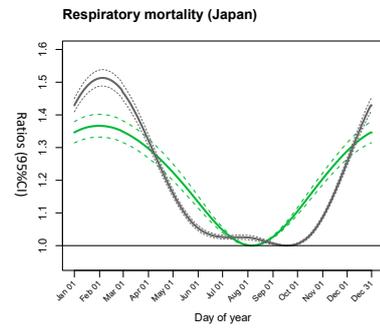
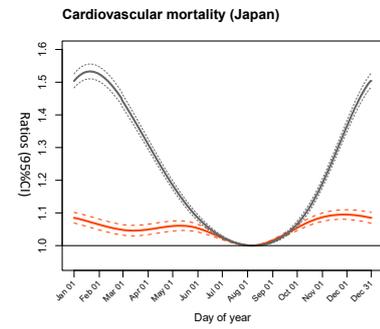
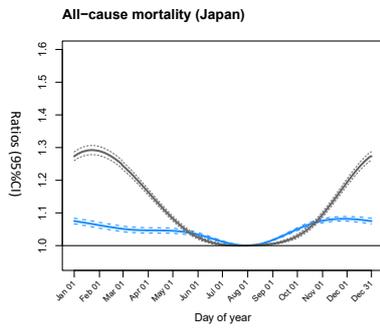
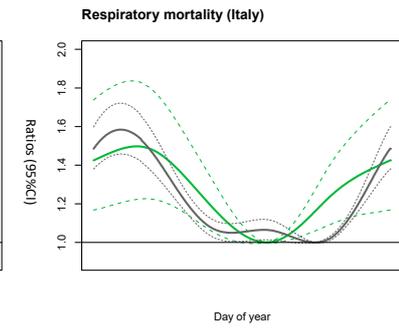
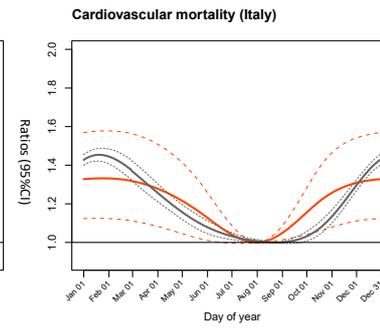
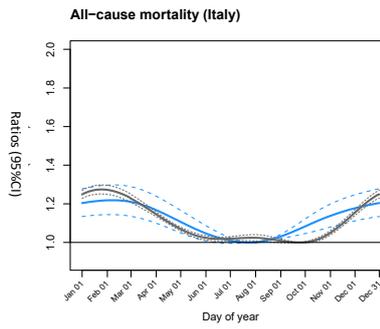
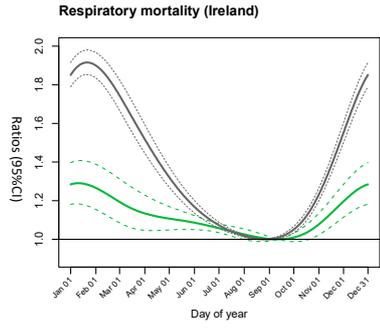
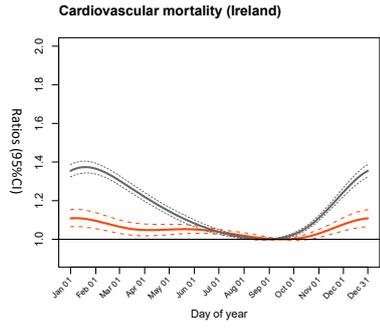
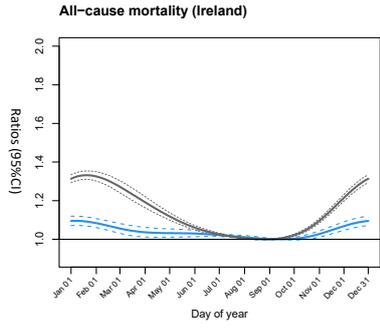
We obtained these estimates by pooling location-specific estimates for each country.

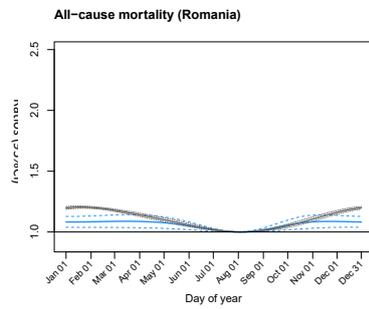
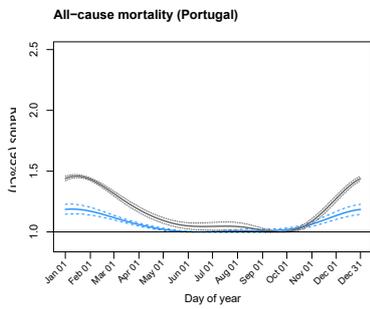
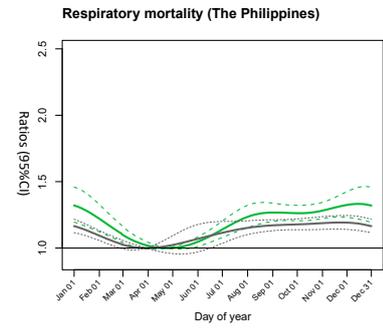
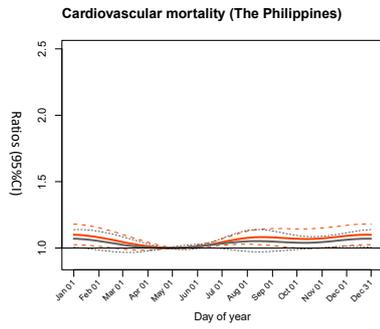
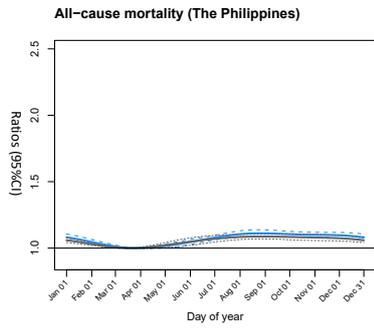
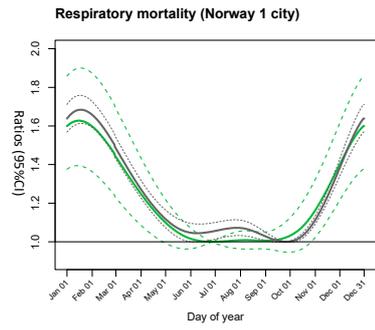
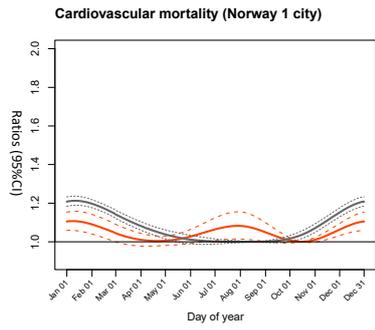
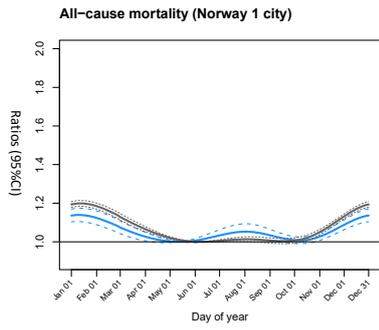
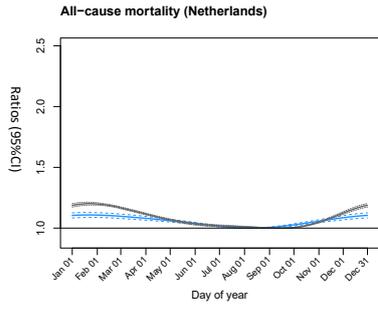
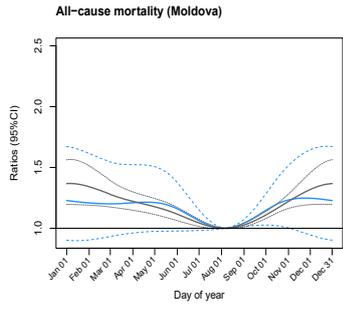
In order to illustrate the different seasonal pattern between two hemispheres in this figure, we numbered the day of year starting from January 1st for all the locations in the south hemisphere. This is different from the main analysis: some locations are in the same climate zone but in the different hemisphere, so the day of year was numbered from July 1st for locations in southern hemisphere, in order to conduct meta-analysis to pool location-specific estimates of seasonal splines to each climate zone)

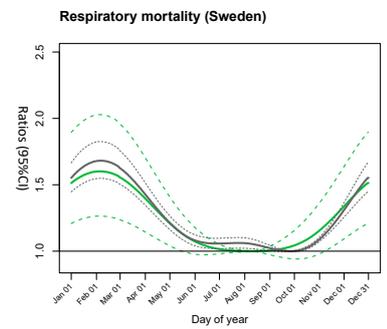
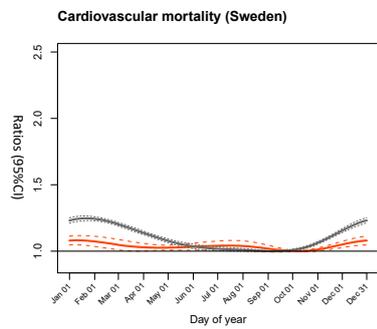
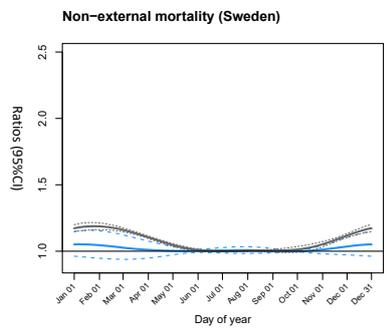
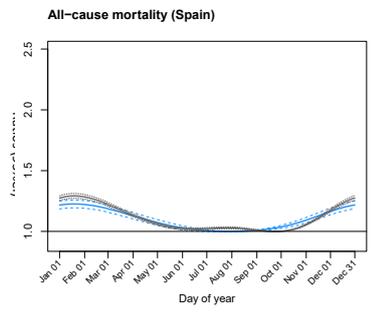
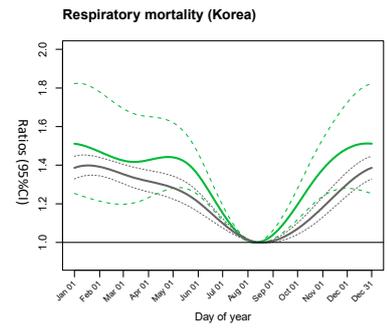
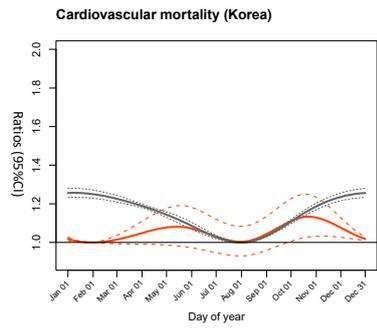
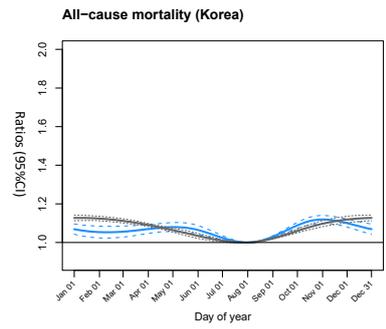
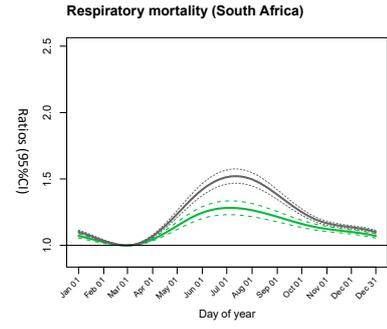
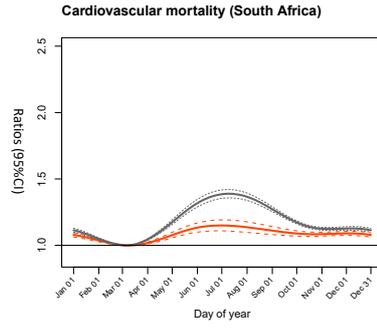
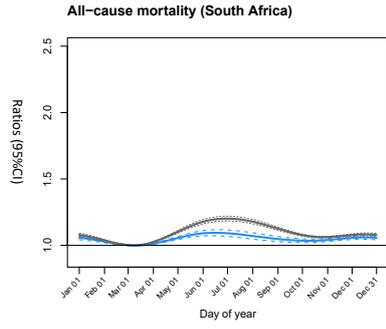


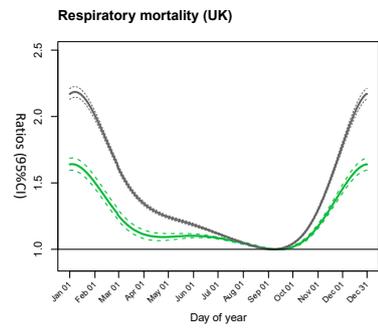
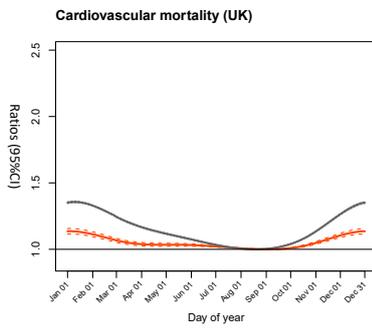
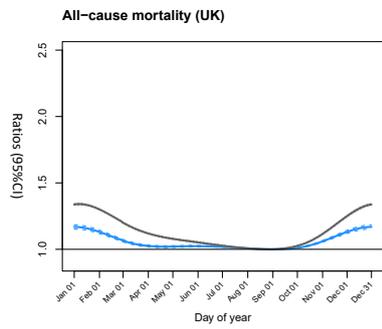
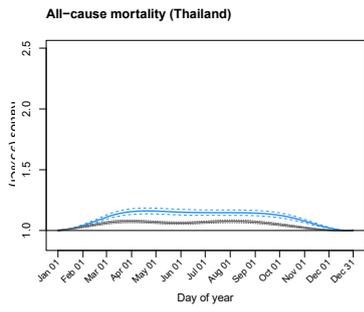
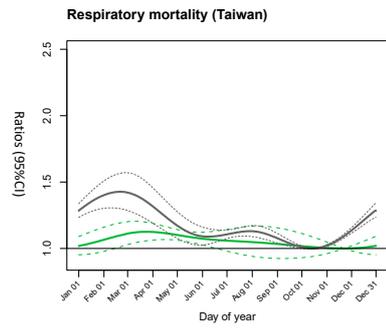
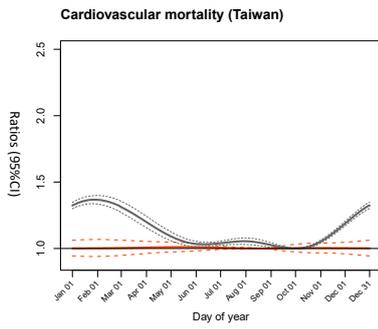
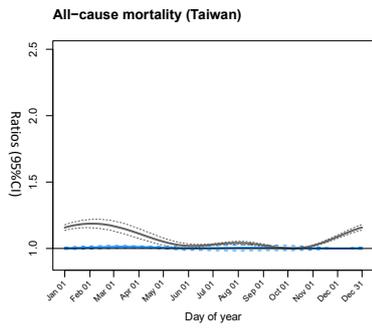
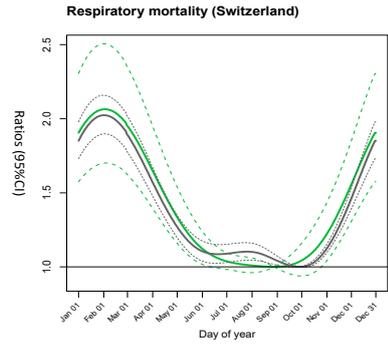
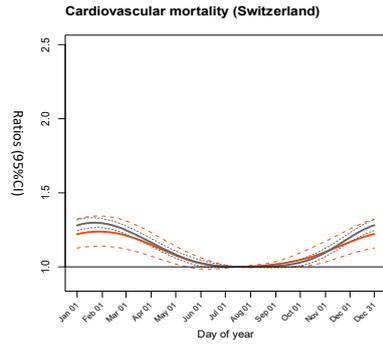
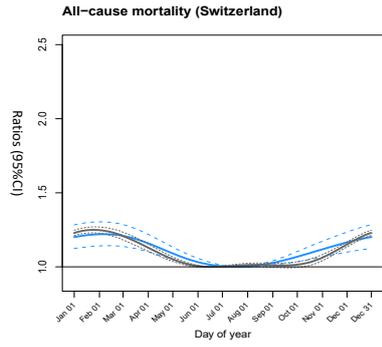


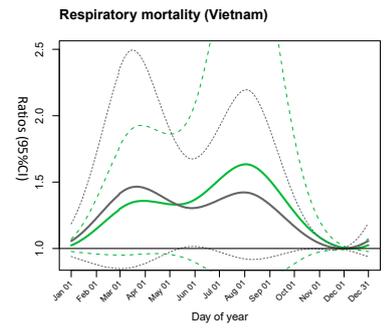
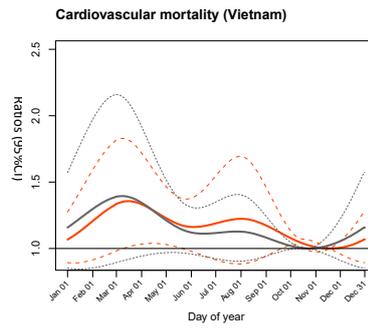
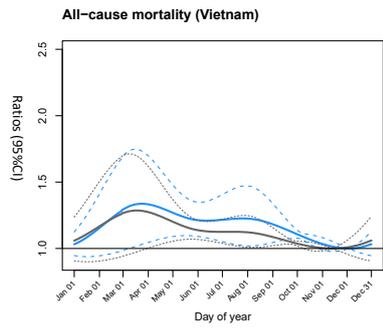
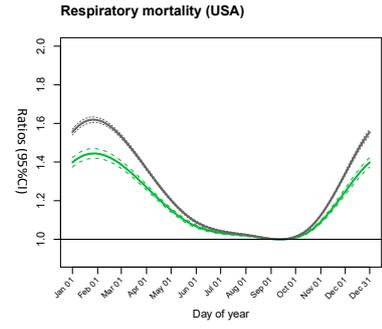
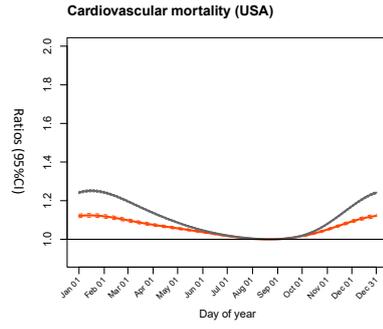
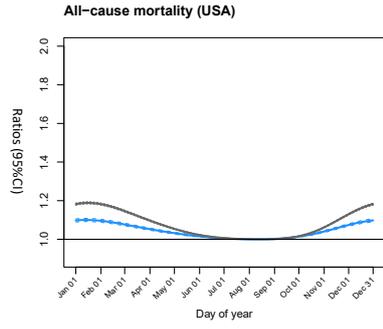












Results from sensitivity analysis

We fitted ten models in sensitivity analysis to test our modelling choices on cyclic spline for day of year for seasonality assessment (Model 1, Model 2, and Model 3) and cross-basis function for temperature adjustment (Model 4 to Model 10):

Table S5. Summary of models for main analysis and sensitivity analysis

| Models | Cyclic spline for day of year seasonality assessment | Cross-basis function for temperature adjustment | |
|------------|--|--|---|
| | | Exposure-response association | Lag-response association |
| Main Model | 4 df | A natural cubic spline function with three internal knots at 25 th , 50 th , and 75 th percentiles of temperature | A natural cubic spline function with 3 df with extended lag up to 21 days |
| Model 1 | 5 df | Same as main model | Same as main model |
| Model 2 | 6 df | Same as main model | Same as main model |
| Model 3 | Subperiod analysis (after 2000) | Same as main model | Same as main model |
| Model 4 | Same as main model | A natural cubic spline function with three internal knots at knots for exposure-response at 10 th , 75 th , and 90 th percentiles of temperature | Same as main model |
| Model 5 | Same as main model | A natural cubic spline function with three internal knots at knots for exposure-response at 10 th , 25 th , 75 th , and 90 th percentiles of temperature | Same as main model |
| Model 6 | Same as main model | A natural cubic spline function with three internal knots at knots for exposure-response at 10 th , 50 th , and 90 th percentiles of temperature | Same as main model |
| Model 7 | Same as main model | Quadratic B-spline function with three internal knots at 25 th , 50 th , and 75 th percentiles of temperature | Same as main model |
| Model 8 | Same as main model | Same as main model | A natural cubic spline function with 3 df with extended lag up to 14 days |
| Model 9 | Same as main model | Same as main model | A natural cubic spline function with 3 df with extended lag up to 28 days |
| Model 10 | Same as main model | Same as main model | A natural cubic spline function with 6 df with extended lag up to 21 days |

Table S6. Results from sensitivity analysis on cyclic spline function for seasonality assessment and by using subperiod data from year 2000 peak-to-trough ratio (95% confidence intervals) for all-cause mortality for each country/region, by using 5 and 6 for *df*

| Country/region | Cyclic spline function <i>df</i> =4 (Main model) | | Cyclic spline function <i>df</i> =5 (Model 1) | | Cyclic spline function <i>df</i> =6 (Model 2) | | Subperiod analysis after 2000 (Model 3) | |
|------------------|---|------------------------|--|------------------------|--|-------------------------|--|------------------------|
| | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted |
| Argentina | 1.379 (1.327,1.433) | 1.144 (1.103,1.186) | 1.375 (1.330, 1.421) | 1.158 (1.112,1.205) | 1.387 (1.339, 1.436) | 1.153 (1.107, 1.202) | 1.379 (1.327,1.433) | 1.144 (1.103,1.186) |
| Australia | 1.326 (1.224,1.436) | 1.111 (1.076,1.146) | 1.312 (1.217,1.415) | 1.109 (1.076,1.143) | 1.323 (1.223, 1.431) | 1.108 (1.073, 1.144) | 1.265 (1.186,1.350) | 1.076 (1.051,1.103) |
| Brazil | 1.082 (1.061,1.103) | 1.062 (1.041,1.084) | 1.085 (1.061,1.110) | 1.064 (1.040,1.088) | 1.083 (1.058,1.108) | 1.067 (1.043,1.092) | 1.086 (1.063,1.109) | 1.065 (1.041,1.090) |
| Canada | 1.158 (1.148,1.168) | 1.077 (1.051,1.104) | 1.159 (1.150,1.169) | 1.074 (1.048,1.102) | 1.168 (1.157,1.179) | 1.064 (1.038,1.090) | 1.162 (1.150,1.173) | 1.075 (1.039,1.112) |
| Chile | 1.308 (1.262,1.357) | 1.173 (1.094,1.258) | 1.317 (1.273,1.363) | 1.203 (1.128,1.282) | 1.324 (1.291,1.359) | 1.240 (1.168,1.315) | 1.308 (1.262,1.357) | 1.173 (1.094,1.258) |
| China | 1.336 (1.326,1.347) | 1.176 (1.154,1.198) | 1.342 (1.330,1.355) | 1.180 (1.157,1.203) | 1.343 (1.332,1.355) | 1.184 (1.164,1.203) | 1.294 (1.209,1.385) | 1.062 (0.998,1.132) |
| Colombia | 1.080 (1.063,1.096) | 1.073 (1.053,1.093) | 1.079 (1.059,1.098) | 1.070 (1.015,1.127) | 1.078 (1.056,1.100) | 1.074 (1.049,1.100) | 1.080 (1.061,1.099) | 1.075 (1.026,1.126) |
| Czech | 1.16 (1.14,1.18) | 1.04 (0.99,1.09) | 1.165 (1.147,1.184) | 1.030 (0.977,1.085) | 1.165 (1.144,1.188) | 1.057 (1.022,1.094) | 1.157 (1.140,1.175) | 1.057 (1.009,1.109) |
| Estonia | 1.164 (1.137,1.191) | 1.081 (0.982,1.190) | 1.174 (1.150,1.199) | 1.069 (1.012,1.129) | 1.225 (1.183,1.268) | 1.191 (1.073,1.322) | 1.171 (1.150,1.194) | 1.103 (0.989,1.230) |
| Finland | 1.193 (1.157,1.231) | 1.094 (1.036,1.155) | 1.153 (1.133,1.174) | 1.083 (1.014,1.155) | 1.154 (1.133,1.176) | 1.107 (1.040,1.178) | 1.143 (1.120,1.166) | 1.053 (1.003,1.105) |
| France | 1.206 (1.196,1.216) | 1.130 (1.101,1.16) | 1.209 (1.197,1.220) | 1.123 (1.099,1.148) | 1.214 (1.200,1.227) | 1.121 (1.093,1.149) | 1.206 (1.196,1.216) | 1.130 (1.101,1.160) |
| Germany | 1.179 (1.174,1.184) | 1.100 (1.086,1.115) | 1.197 (1.190,1.204) | 1.097 (1.082,1.113) | 1.196 (1.188,1.205) | 1.095 (1.079,1.112) | 1.164 (1.159,1.169) | 1.090 (1.073,1.107) |
| Greece | 1.245 (1.226,1.265) | 1.185 (1.083,1.296) | 1.249 (1.230,1.268) | 1.190 (1.088,1.303) | 1.270 (1.129,1.293) | 1.167 (1.068,1.276) | 1.245 (1.226,1.265) | 1.185 (1.083,1.296) |
| Iran | 1.193 (1.157,1.230) | 1.383 (1.28,1.495) | 1.196 (1.158,1.236) | 1.382 (1.281,1.491) | 1.192 (1.155,1.232) | 1.390 (1.292,1.495) | 1.193 (1.157,1.230) | 1.383 (1.280,1.495) |
| Ireland | 1.332 (1.310,1.354) | 1.096 (1.072,1.12) | 1.334 (1.313,1.355) | 1.098 (1.076,1.120) | 1.352 (1.325,1.379) | 1.100 (1.077,1.124) | 1.254 (1.227,1.282) | 1.095 (1.051,1.142) |
| Italy | 1.274 (1.251,1.298) | 1.219 (1.144,1.298) | 1.306 (1.286,1.326) | 1.182 (1.102,1.266) | 1.318 (1.298,1.338) | 1.175 (1.103,1.251) | 1.266 (1.241,1.291) | 1.218 (1.146,1.294) |
| Japan | 1.292 (1.278,1.306) | 1.082 (1.075,1.089) | 1.302 (1.287,1.317) | 1.085 (1.077,1.092) | 1.293 (1.129,1.307) | 1.077 (1.068,1.085) | 1.288 (1.274,1.302) | 1.126 (1.118,1.134) |

Table S6. Continued

| Country/region | Cyclic spline function <i>df</i> =4 (Main model) | | Cyclic spline function <i>df</i> =5 (Model 1) | | Cyclic spline function <i>df</i> =6 (Model 2) | | Subperiod analysis after 2000 (Model 3) | |
|------------------------|---|------------------------|--|-------------------------|--|-------------------------|--|------------------------|
| | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted |
| Korea | 1.127 (1.114,1.142) | 1.119 (1.099,1.14) | 1.127 (1.116,1.139) | 1.112 (1.090,1.134) | 1.128 (1.113,1.142) | 1.089 (1.070,1.107) | 1.136 (1.118,1.154) | 1.110 (1.087,1.134) |
| Mexico | 1.339 (1.293,1.386) | 1.127 (1.16,1.20) | 1.365 (1.326,1.405) | 1.201 (1.176,1.228) | 1.368 (1.329,1.408) | 1.197 (1.175,1.219) | 1.325 (1.281,1.371) | 1.180 (1.162,1.198) |
| Moldova | 1.368 (1.196,1.566) | 1.249 (0.959,1.624) | 1.382 (1.192,1.604) | 1.328 (0.999,1.765) | 1.378 (1.181,1.603) | 1.309 (0.983, 1.744) | 1.368 (1.196,1.566) | 1.249 (0.959,1.624) |
| Netherlands | 1.201 (1.190,1.213) | 1.108 (1.088,1.129) | 1.202 (1.192,1.211) | 1.101 (1.080,1.121) | 1.202 (1.191,1.212) | 1.102 (1.081,1.123) | 1.198 (1.188,1.208) | 1.113 (1.091,1.134) |
| Norway | 1.199 (1.184,1.214) | 1.139 (1.105,1.174) | 1.206 (1.189,1.224) | 1.135 (1.104,1.166) | 1.218 (1.201,1.236) | 1.133 (1.105,1.162) | 1.210 (1.182,1.240) | 1.173 (1.095,1.257) |
| Portugal | 1.459 (1.446,1.472) | 1.188 (1.148,1.228) | 1.452 (1.435,1.468) | 1.178 (1.135,1.223) | 1.455 (1.441,1.470) | 1.177 (1.140,1.215) | 1.438 (1.421,1.455) | 1.189 (1.117,1.266) |
| Romania | 1.204 (1.195,1.214) | 1.088 (1.036,1.142) | 1.214 (1.204,1.224) | 1.074 (1.025,1.125) | 1.200 (1.189,1.210) | 1.065 (1.028,1.104) | 1.186 (1.169,1.203) | 1.080 (1.023,1.139) |
| South Africa | 1.202 (1.184,1.220) | 1.095 (1.072,1.117) | 1.208 (1.189,1.226) | 1.092 (1.069,1.116) | 1.204 (1.186,1.222) | 1.104 (1.083,1.126) | 1.192 (1.175,1.209) | 1.069 (1.048,1.089) |
| Spain | 1.292 (1.273,1.312) | 1.226 (1.194,1.258) | 1.288 (1.268,1.308) | 1.205 (1.177,1.233) | 1.293 (1.273,1.314) | 1.215 (1.186,1.245) | 1.286 (1.265,1.307) | 1.242 (1.201,1.285) |
| Sweden | 1.188 (1.161,1.215) | 1.052 (0.959,1.154) | 1.191 (1.162,1.220) | 1.053 (0.976,1.135) | 1.192 (1.155,1.230) | 1.054 (0.985,1.127) | 1.200 (1.180,1.220) | 1.049 (0.932,1.181) |
| Switzerland | 1.250 (1.230,1.270) | 1.221 (1.143,1.304) | 1.249 (1.220,1.279) | 1.216 (1.134,1.304) | 1.258 (1.220,1.297) | 1.209 (1.126,1.297) | 1.217 (1.196,1.238) | 1.188 (1.092,1.292) |
| Taiwan | 1.187 (1.156,1.219) | 1.012 (1.003,1.022) | 1.189 (1.153,1.226) | 1.017 (1.007,1.028) | 1.192 (1.156,1.228) | 1.018 (1.008,1.029) | 1.177 (1.145,1.209) | 1.019 (0.967,1.075) |
| Thailand | 1.076 (1.065,1.088) | 1.161 (1.137,1.185) | 1.100 (1.088,1.113) | 1.194 (1.169,1.218) | 1.103 (1.089,1.115) | 1.196 (1.173,1.220) | 1.070 (1.058,1.082) | 1.141 (1.118,1.163) |
| The Philippines | 1.087 (1.069,1.105) | 1.111 (1.086,1.137) | 1.111 (1.086,1.135) | 1.125 (1.099,1.150) | 1.109 (1.087,1.131) | 1.124 (1.097,1.151) | 1.087 (1.069,1.105) | 1.111 (1.086,1.137) |
| UK | 1.340 (1.335,1.346) | 1.168 (1.153,1.184) | 1.350 (1.343,1.356) | 1.177 (1.162,1.192) | 1.368 (1.360,1.375) | 1.183 (1.167,1.198) | 1.301 (1.295,1.307) | 1.126 (1.106,1.147) |
| USA | 1.189 (1.183,1.194) | 1.100 (1.092,1.108) | 1.193 (1.187, 1.199) | 1.092 (1.083, 1.101) | 1.203 (1.196, 1.209) | 1.089 (1.079, 1.099) | 1.208 (1.202,1.214) | 1.080 (1.067,1.092) |
| Vietnam | 1.286 (0.975,1.697) | 1.337 (1.03,1.734) | 1.311 (0.964,1.785) | 1.374 (1.034,1.826) | 1.377 (0.946,2.004) | 1.145 (1.018,1.967) | 1.286 (0.975,1.697) | 1.337 (1.03,1.734) |

Table S7. Results from sensitivity analysis on spline functions for temperature adjustment for each country/region. Temperature adjusted peak-to-trough ratio (95% confidence intervals) for all-cause/non-external mortality for each country/region, by varying modelling choices on temperature adjustment

| Country/region | Main model | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 | Model 10 |
|------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Argentina | 1.144 (1.103,1.186) | 1.142 (1.105,1.182) | 1.144 (1.102,1.188) | 1.139 (1.1,1.178) | 1.148 (1.103,1.195) | 1.181 (1.128,1.236) | 1.118 (1.079,1.158) | 1.147 (1.105,1.19) |
| Australia | 1.111 (1.076,1.146) | 1.11 (1.076,1.144) | 1.11 (1.077,1.143) | 1.11 (1.076,1.145) | 1.108 (1.071,1.147) | 1.143 (1.104,1.183) | 1.1 (1.068,1.132) | 1.109 (1.074,1.145) |
| Brazil | 1.062 (1.041,1.084) | 1.062 (1.041,1.083) | 1.062 (1.041,1.084) | 1.062 (1.041,1.084) | 1.063 (1.042,1.084) | 1.063 (1.046,1.08) | 1.064 (1.04,1.09) | 1.062 (1.041,1.084) |
| Canada | 1.077 (1.051,1.104) | 1.064 (1.043,1.085) | 1.069 (1.048,1.091) | 1.075 (1.049,1.101) | 1.067 (1.046,1.089) | 1.082 (1.059,1.106) | 1.071 (1.043,1.1) | 1.077 (1.051,1.104) |
| Chile | 1.173 (1.094,1.258) | 1.203 (1.138,1.273) | 1.195 (1.126,1.268) | 1.202 (1.136,1.272) | 1.195 (1.125,1.270) | 1.216 (1.158,1.278) | 1.224 (1.147,1.307) | 1.197 (1.129,1.270) |
| China | 1.176 (1.154,1.198) | 1.152 (1.131,1.173) | 1.159 (1.137,1.181) | 1.168 (1.147,1.190) | 1.146 (1.125,1.167) | 1.141 (1.151,1.193) | 1.175 (1.153,1.198) | 1.163 (1.143,1.185) |
| Colombia | 1.07 (1.05,1.09) | 1.073 (1.052,1.094) | 1.054 (0.965,1.152) | 1.073 (1.053,1.094) | 1.066 (0.990,1.147) | 1.073 (1.053,1.093) | 1.073 (1.053,1.093) | 1.041 (0.935,1.158) |
| Czech | 1.036 (0.987,1.088) | 1.027 (0.982,1.073) | 1.050 (0.999,1.105) | 1.031 (0.984,1.081) | 1.044 (0.994,1.096) | 1.057 (1.010,1.107) | 1.031 (0.981,1.084) | 1.035 (0.983,1.089) |
| Estonia | 1.081 (0.982,1.190) | 1.047 (0.996,1.100) | 1.244 (1.132,1.368) | 1.070 (0.972,1.178) | 1.042 (0.920,1.181) | 1.081 (0.981,1.191) | 1.081 (0.982,1.189) | 1.076 (0.689,1.681) |
| Finland | 1.094 (1.036,1.155) | 1.084 (1.019,1.153) | 1.082 (1.016,1.152) | 1.056 (0.995,1.12) | 1.059 (0.997,1.126) | 1.051 (1.013,1.092) | 1.047 (0.985,1.113) | 1.055 (1.011,1.099) |
| France | 1.13 (1.101,1.16) | 1.114 (1.09,1.139) | 1.124 (1.099,1.149) | 1.118 (1.092,1.145) | 1.124 (1.099,1.149) | 1.142 (1.117,1.169) | 1.138 (1.107,1.171) | 1.13 (1.101,1.16) |
| Germany | 1.1 (1.086,1.115) | 1.087 (1.072,1.101) | 1.106 (1.092,1.121) | 1.094 (1.08,1.109) | 1.109 (1.094,1.124) | 1.122 (1.109,1.136) | 1.093 (1.077,1.11) | 1.1 (1.085,1.115) |
| Greece | 1.185 (1.083,1.296) | 1.157 (1.055,1.269) | 1.166 (1.063,1.279) | 1.176 (1.074,1.288) | 1.163 (1.059,1.276) | 1.199 (1.116,1.289) | 1.13 (1.018,1.255) | 1.179 (1.077,1.29) |
| Iran | 1.383 (1.28,1.495) | 1.366 (1.268,1.472) | 1.368 (1.269,1.473) | 1.362 (1.264,1.468) | 1.371 (1.27,1.481) | 1.361 (1.271,1.457) | 1.395 (1.279,1.523) | 1.387 (1.282,1.5) |
| Ireland | 1.096 (1.072,1.12) | 1.087 (1.064,1.111) | 1.095 (1.072,1.118) | 1.093 (1.07,1.118) | 1.098 (1.075,1.122) | 1.135 (1.111,1.159) | 1.068 (1.037,1.1) | 1.095 (1.071,1.119) |
| Italy | 1.219 (1.144,1.298) | 1.177 (1.103,1.257) | 1.175 (1.102,1.253) | 1.203 (1.128,1.282) | 1.184 (1.109,1.265) | 1.258 (1.204,1.314) | 1.244 (1.155,1.339) | 1.217 (1.143,1.296) |
| Japan | 1.082 (1.075,1.089) | 1.073 (1.066,1.079) | 1.076 (1.069,1.083) | 1.079 (1.072,1.085) | 1.069 (1.062,1.076) | 1.079 (1.072,1.085) | 1.085 (1.078,1.093) | 1.083 (1.076,1.09) |

Table S7. Continued

| Country/region | Main model | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 | Model 10 |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Korea | 1.119 (1.099,1.14) | 1.075 (1.057,1.092) | 1.069 (1.05,1.088) | 1.113 (1.093,1.134) | 1.073 (1.053,1.093) | 1.108 (1.087,1.129) | 1.124 (1.103,1.145) | 1.120 (1.098,1.141) |
| Mexico | 1.127 (0.92,1.382) | 1.182 (1.16,1.205) | 1.184 (1.16,1.207) | 1.163 (0.908,1.49) | 1.186 (1.166,1.207) | 1.194 (1.178,1.211) | 1.107 (0.943,1.3) | 1.135 (0.909,1.418) |
| Moldova | 1.249 (0.959,1.624) | 1.284 (0.940,1.755) | 1.312 (0.944,1.822) | 1.243 (0.960,1.610) | 1.291 (0.942,1.769) | 1.219 (1.020,1.457) | 1.173 (1.013,1.359) | 1.248 (0.965,1.614) |
| Netherlands | 1.108 (1.088,1.129) | 1.097 (1.078,1.116) | 1.111 (1.091,1.131) | 1.105 (1.085,1.125) | 1.115 (1.095,1.134) | 1.134 (1.116,1.152) | 1.104 (1.082,1.126) | 1.108 (1.088,1.129) |
| Norway | 1.139 (1.105,1.174) | 1.137 (1.106,1.168) | 1.143 (1.111,1.175) | 1.135 (1.102,1.168) | 1.143 (1.11,1.176) | 1.144 (1.11,1.179) | 1.137 (1.103,1.172) | 1.141 (1.107,1.176) |
| Portugal | 1.188 (1.148,1.228) | 1.189 (1.149,1.231) | 1.195 (1.15,1.242) | 1.186 (1.146,1.227) | 1.193 (1.154,1.234) | 1.229 (1.205,1.254) | 1.171 (1.122,1.223) | 1.187 (1.148,1.228) |
| Romania | 1.088 (1.036,1.142) | 1.084 (1.036,1.134) | 1.081 (1.03,1.134) | 1.083 (1.032,1.137) | 1.083 (1.033,1.136) | 1.093 (1.042,1.148) | 1.1 (1.038,1.165) | 1.089 (1.039,1.142) |
| South Africa | 1.095 (1.072,1.117) | 1.091 (1.069,1.114) | 1.094 (1.071,1.118) | 1.093 (1.071,1.116) | 1.096 (1.073,1.119) | 1.103 (1.083,1.123) | 1.08 (1.054,1.106) | 1.096 (1.074,1.118) |
| Spain | 1.226 (1.194,1.258) | 1.219 (1.189,1.25) | 1.218 (1.188,1.249) | 1.222 (1.191,1.255) | 1.22 (1.189,1.251) | 1.253 (1.221,1.285) | 1.218 (1.184,1.252) | 1.225 (1.193,1.258) |
| Sweden | 1.052 (0.959,1.154) | 1.053 (0.975,1.136) | 1.055 (0.977,1.139) | 1.05 (0.971,1.135) | 1.051 (0.971,1.139) | 1.061 (0.965,1.168) | 1.066 (0.985,1.153) | 1.052 (0.96,1.153) |
| Switzerland | 1.221 (1.143,1.304) | 1.197 (1.125,1.274) | 1.209 (1.135,1.289) | 1.211 (1.134,1.293) | 1.208 (1.133,1.287) | 1.237 (1.174,1.305) | 1.210 (1.117,1.310) | 1.220 (1.142,1.303) |
| Taiwan | 1.012 (1.003,1.022) | 1.013 (1.003,1.024) | 1.013 (1.004,1.023) | 1.012 (1.002,1.022) | 1.013 (1.004,1.022) | 1.033 (1.004,1.063) | 1.011 (0.983,1.038) | 1.012 (1.003,1.022) |
| Thailand | 1.161 (1.137,1.185) | 1.163 (1.14,1.187) | 1.157 (1.134,1.181) | 1.162 (1.139,1.186) | 1.153 (1.13,1.176) | 1.143 (1.122,1.165) | 1.176 (1.151,1.202) | 1.161 (1.138,1.185) |
| The Philippines | 1.111 (1.086,1.137) | 1.11 (1.086,1.136) | 1.11 (1.085,1.136) | 1.111 (1.086,1.136) | 1.111 (1.085,1.137) | 1.107 (1.078,1.138) | 1.111 (1.089,1.134) | 1.111 (1.086,1.137) |
| UK | 1.168 (1.153,1.184) | 1.164 (1.149,1.18) | 1.164 (1.147,1.18) | 1.165 (1.149,1.181) | 1.168 (1.152,1.184) | 1.195 (1.18,1.211) | 1.151 (1.134,1.168) | 1.169 (1.153,1.184) |
| USA | 1.1 (1.092,1.108) | 1.09 (1.081,1.099) | 1.06 (1.052,1.069) | 1.096 (1.087,1.105) | 1.093 (1.084,1.102) | 1.112 (1.103,1.12) | 1.095 (1.086,1.105) | 1.099 (1.09,1.108) |
| Vietnam | 1.337 (1.03,1.734) | 1.337 (1.044,1.712) | 1.331 (1.038,1.706) | 1.336 (1.045,1.708) | 1.351 (1.036,1.761) | 1.346 (1.031,1.758) | 1.335 (1.025,1.739) | 1.334 (1.031,1.727) |

Model 4: knots for exposure-response at 10th, 75th, and 90th; **Model 5:** knots for exposure-response at 10th, 25th, 75th, and 90th;
Model 6: knots for exposure-response at 10th, 50th, and 90th; **Model 7:** Quadratic B-spline for exposure-response;
Model 8: 14 days of lag period; **Model 9:** 28 days of lag period; **Model 10:** 6 *df* for lag-response

Figure S3. Seasonality of all-cause mortality without and with temperature adjustment in four Köppen-Geiger Climate zones before (top)* and after (bottom) adjusting for temperature

The seasonality is computed as the relative risk (RR) of mortality estimates at each day to minimum mortality estimates at the trough day with 95% confidence intervals (95% CIs) for four Köppen-Geiger Climate zones:

$$RR = \frac{\text{Mortality estimate at day}_i}{\text{Minimum mortality estimate at the trough}}$$

We obtained these estimates by pooling location-specific estimates from cities located in each climate zone.

**For temperature unadjusted seasonality, results from Model 1 to Model 3 were shown, since Model 4 to Model 10 were fitted for temperature adjustment.*

Model 1: cyclic spline with 5 df

Model 2: cyclic spline with 6 df

Model 3: Subperiod analysis since 2000

Model 4: knots for exposure-response at 10th, 75th, and 90th;

Model 5: knots for exposure-response at 10th, 25th, 75th, and 90th;

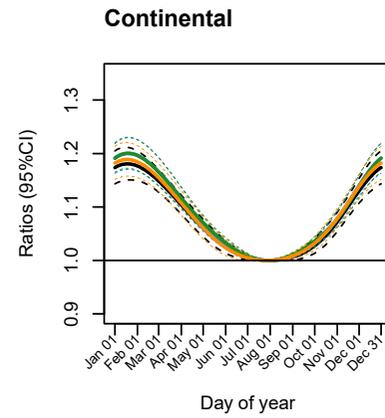
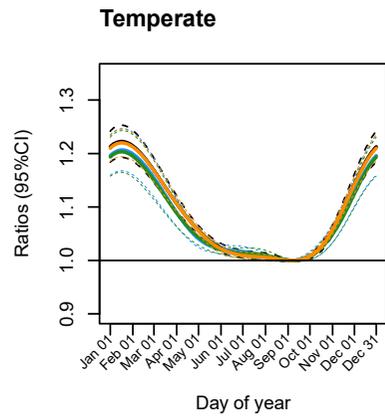
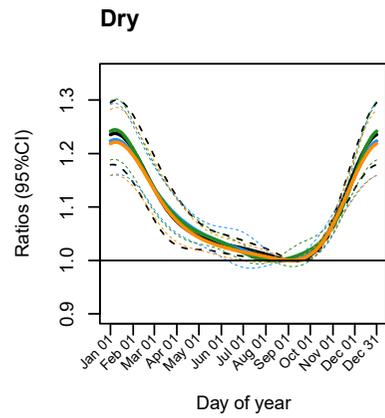
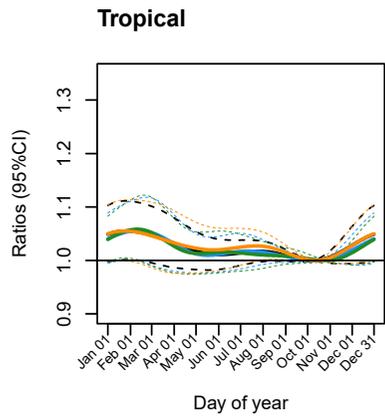
Model 6: knots for exposure-response at 10th, 50th, and 90th;

Model 7: Quadratic B-spline for exposure-response;

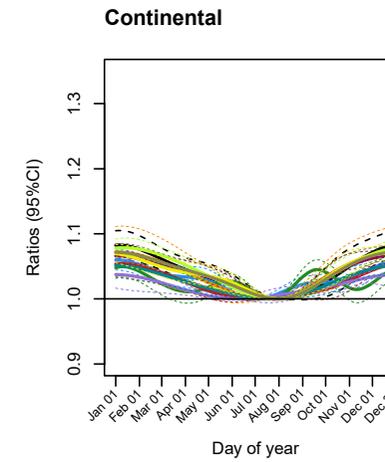
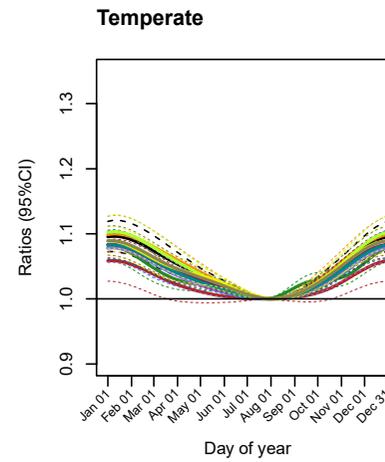
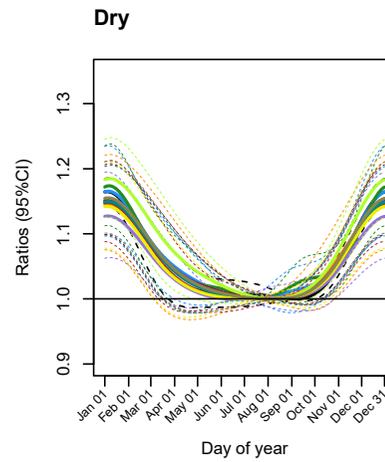
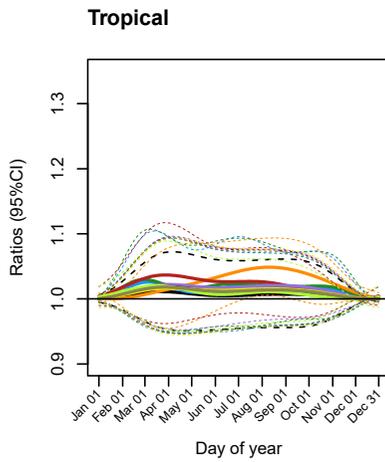
Model 8: 14 days of lag period;

Model 9: 28 days of lag period;

Model 10: 6 df for lag-response.



— Main Model
 - - - Model 1
 - - - Model 2
 - - - Model 3



— Main Model
 - - - Model 1
 - - - Model 2
 - - - Model 3
 - - - Model 4
 - - - Model 5
 - - - Model 6
 - - - Model 7
 - - - Model 8
 - - - Model 9
 - - - Model 10

Figure S4. Peak-to-trough ratio (95% confidence Interval) of all-cause mortality in four Köppen-Geiger Climate zones before (black)* and after (red) adjusting for temperature

**For temperature unadjusted PTR, results from Model 1 to Model 3 were shown, since Model 4 to Model 10 were fitted for temperature adjustment.*

Main model in main text: cyclic spline with 4 df;

Model 1: cyclic spline with 5 df;

Model 2: cyclic spline with 6 df;

Model 3: Subperiod analysis since 2000;

Model 4: knots for exposure-response at 10th, 75th, and 90th;

Model 5: knots for exposure-response at 10th, 25th, 75th, and 90th;

Model 6: knots for exposure-response at 10th, 50th, and 90th;

Model 7: Quadratic B-spline for exposure-response;

Model 8: 14 days of lag period;

Model 9: 28 days of lag period;

Model 10: 6 df for lag-response.

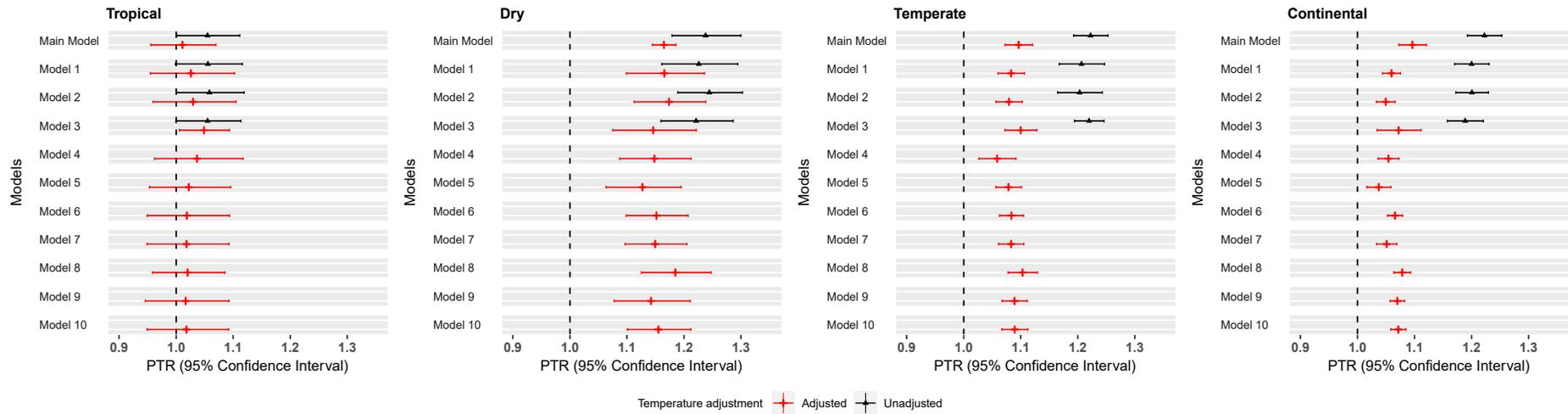


Figure S5. Associations between location-specific indicators and unadjusted (left)* and adjusted (right) peak-to-trough ratio of all-cause mortality.

Coefficients with 95% confidence intervals (95% CIs) were obtained from a meta-regression model adjusted by indicators for country.

Results are expressed as the changes in PTR for standard deviation increase in the indicators.

**For associations between indicators and unadjusted PTR, results from Model 1 to Model 3 were shown, since Model 4 to Model 10 were fitted for temperature adjustment.*

Main model in main text: cyclic spline with 4 df;

Model 1: cyclic spline with 5 df;

Model 2: cyclic spline with 6 df;

Model 3: Subperiod analysis since 2000;

Model 4: knots for exposure-response at 10th, 75th, and 90th;

Model 5: knots for exposure-response at 10th, 25th, 75th, and 90th;

Model 6: knots for exposure-response at 10th, 50th, and 90th;

Model 7: Quadratic B-spline for exposure-response;

Model 8: 14 days of lag period;

Model 9: 28 days of lag period;

Model 10: 6 df for lag-response.

