



1 Supplementary Information for
2 **Predicted future mortality attributed to increases in**
3 **temperature and PM₁₀ concentration under**
4 **representative concentration pathway scenarios**

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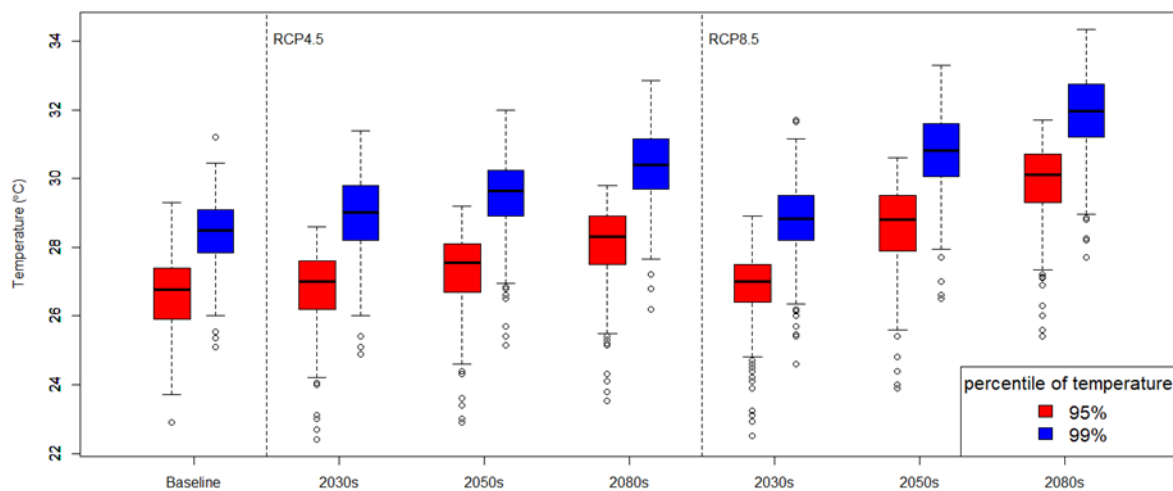


Figure S1. The 95th and 99th percentile temperatures (°C) in the 2030s, 2050s, and 2080s.

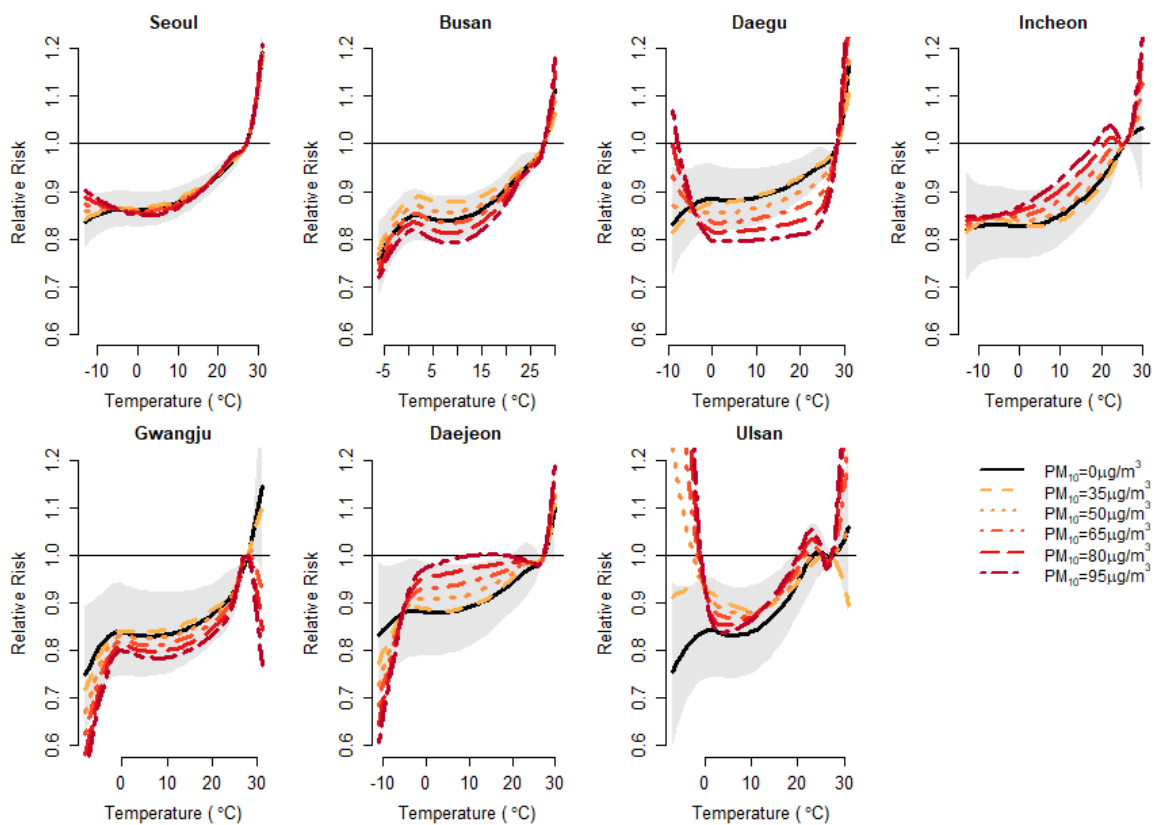
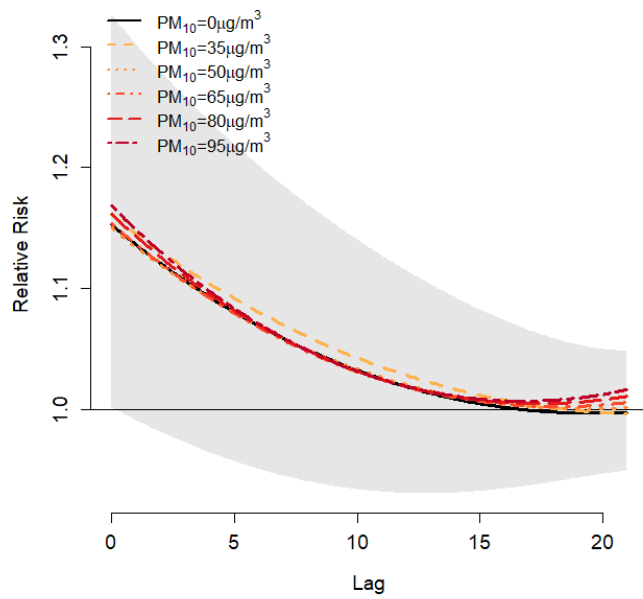
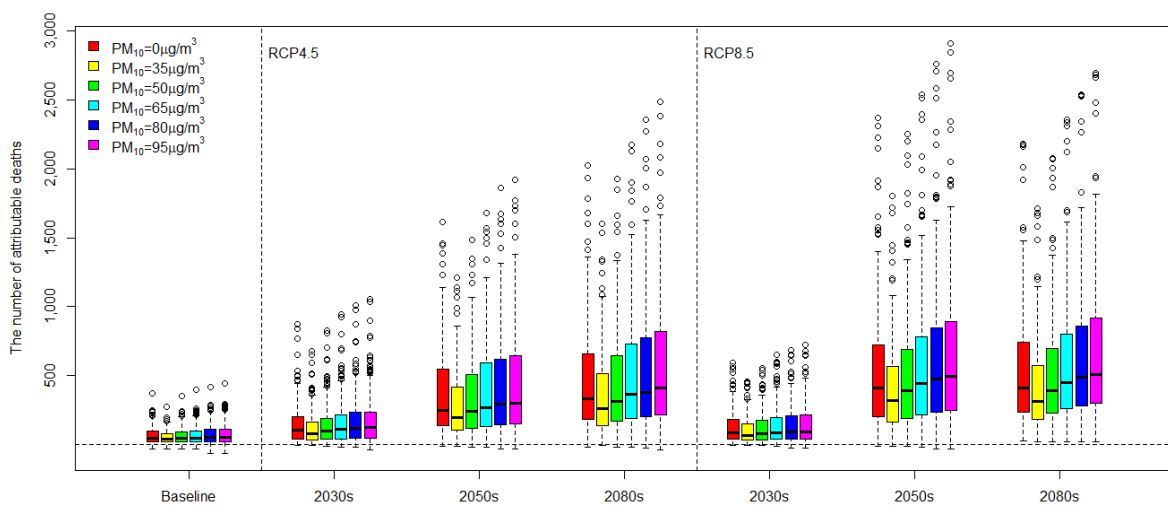


Figure S2. Association between temperature and mortality modified by air pollutants in 7 major cities in Korea.



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Figure S3. Association between lag on temperature and relative risk in considering various PM₁₀.



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Figure S4. Ten-year-average attributable deaths and the 95% confidence interval for each period by considering the relative risks of 229 districts.

30 **Table S1.** Mean relative risk and 95% confidence interval with various PM10 levels in the 229 considered districts.
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| RCP scenarios/ Projection period | Levels of PM ₁₀ (in $\mu\text{g}/\text{m}^3$) | | | | | |
|-------------------------------------|---|-----------|-----------|-----------|-----------|-----------|
| | 0 | 35 | 50 | 65 | 80 | 95 |
| Baseline | 1.07±0.05 | 1.05±0.03 | 1.06±0.04 | 1.07±0.05 | 1.08±0.06 | 1.08±0.06 |
| 2030s | 1.11±0.07 | 1.08±0.05 | 1.1±0.07 | 1.11±0.08 | 1.12±0.09 | 1.13±0.1 |
| RCP4.5 | 1.13±0.07 | 1.1±0.05 | 1.12±0.07 | 1.14±0.08 | 1.15±0.09 | 1.16±0.09 |
| 2050s | 1.18±0.08 | 1.14±0.06 | 1.17±0.08 | 1.2±0.09 | 1.22±0.1 | 1.23±0.11 |
| 2080s | 1.09±0.06 | 1.07±0.04 | 1.08±0.06 | 1.09±0.07 | 1.1±0.07 | 1.1±0.08 |
| RCP8.5 | 1.21±0.09 | 1.15±0.06 | 1.19±0.08 | 1.23±0.1 | 1.25±0.11 | 1.27±0.12 |
| 2050s | 1.24±0.08 | 1.17±0.05 | 1.22±0.07 | 1.27±0.09 | 1.29±0.1 | 1.31±0.11 |
| 2080s | | | | | | |

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