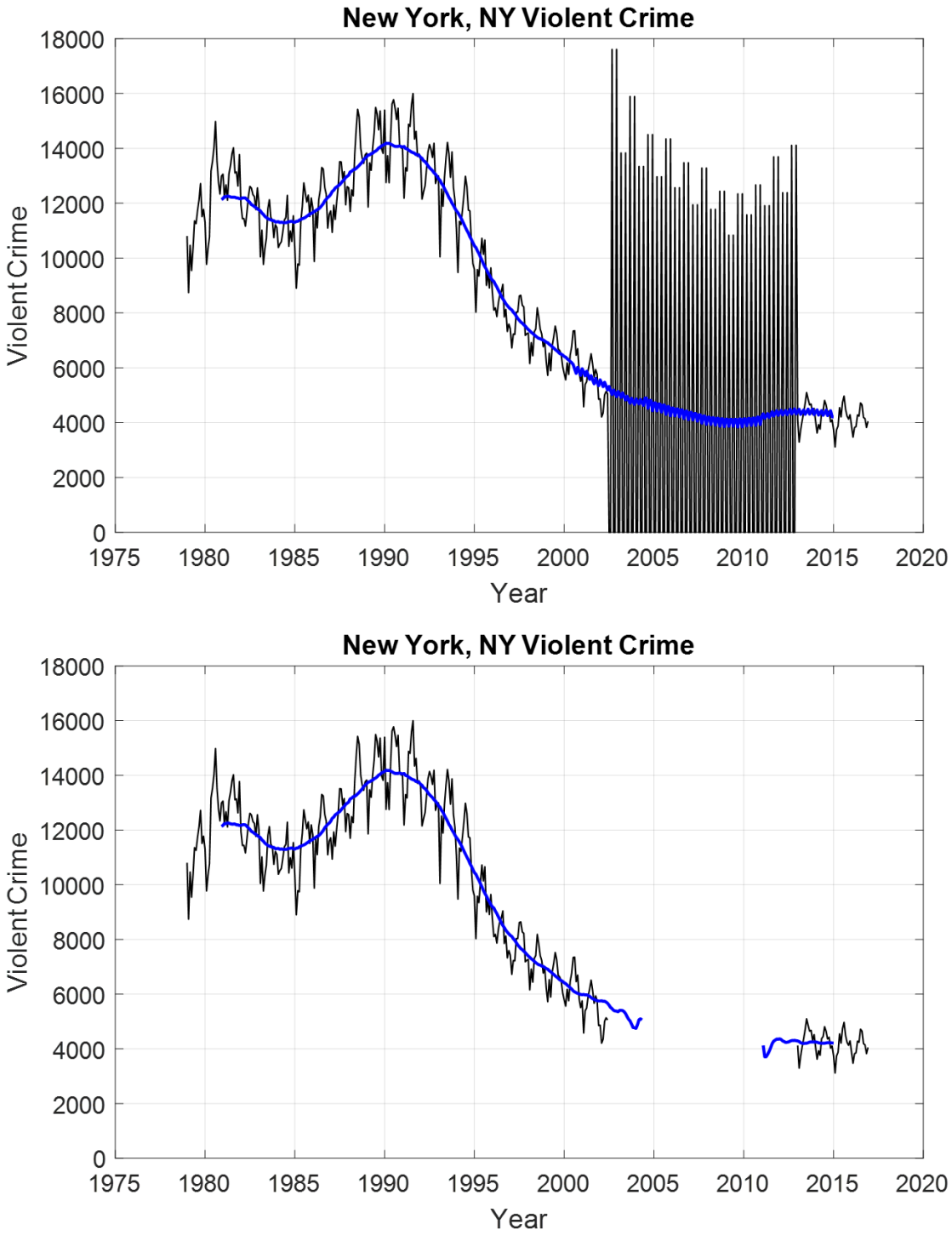
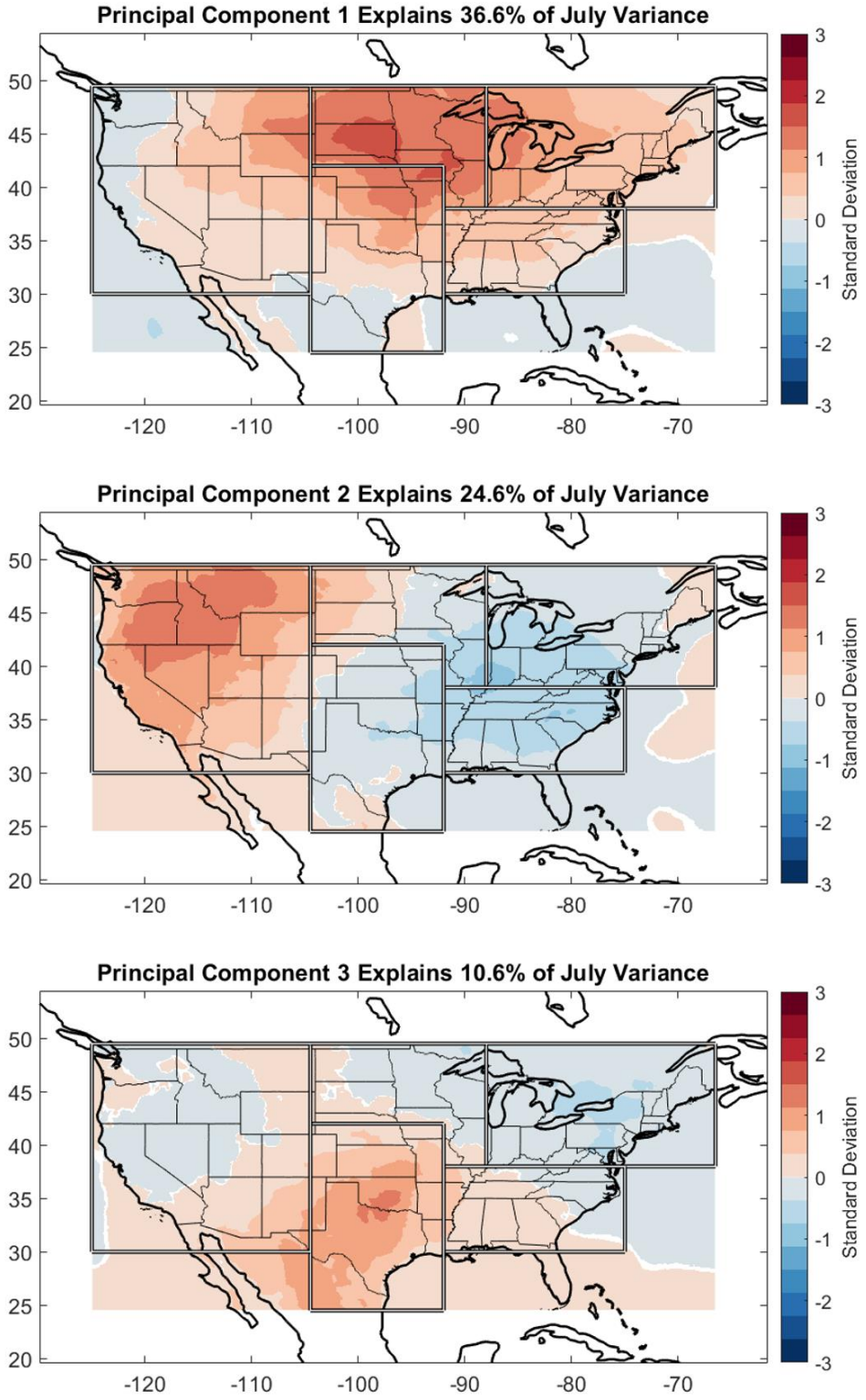
Supplementary Materials

Crime Type	Percent of Initial Dataset	Percent of FBI 1981-2014 estimate
Violent Crime	90.4	85.9
Homicide	89.4	85.2
Forcible Rape	88.4	82.0
Robbery	92.2	89.0
Aggravated Assault	89.5	84.6
Simple Assault	89.9	N/A
Property Crime	90.7	85.4
Larceny	91.5	84.7
Burglary	90.2	86.2
Motor Vehicle Theft	91.6	87.8

Supplementary Table 1. Percentage of initial UCR dataset which passed through quality control processes and percentage of FBI 1981-2014 annually estimated totals which were used in calculations of regional correlation coefficients, per crime type.



Supplementary Figure 1. Top: New York, NY violent crime (black) overlaid with a four-year running mean (blue). Bottom: Same as top but after quality control.



Supplementary Figure 2. First three principal components of an EOF analysis of July temperature. The variance explained by each principal component in descending order is 36.6%, 24.6%, and 10.6% and the total variance explained by these three patterns combined is 71.6%.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.61**	0.53**	0.44*	0.51**	0.15	0.15	0.20	0.29	0.52**	0.14	0.47**	0.41*
SE	0.55**	0.44*	0.71**	0.33	0.26	0.29	0.47**	0.09	0.52**	0.15	0.02	0.63**
SC	0.59**	0.40*	0.49**	0.38*	0.16	0.25	-0.01	-0.12	0.33	0.06	0.12	0.79**
WE	0.34	0.65**	0.56**	0.49**	0.48**	0.40*	0.12	0.22	0.30	0.33	0.69**	0.55**
MW	0.61**	0.55**	0.59**	0.35*	0.24	-0.02	0.24	0.03	0.46**	0.21	0.06	0.49**

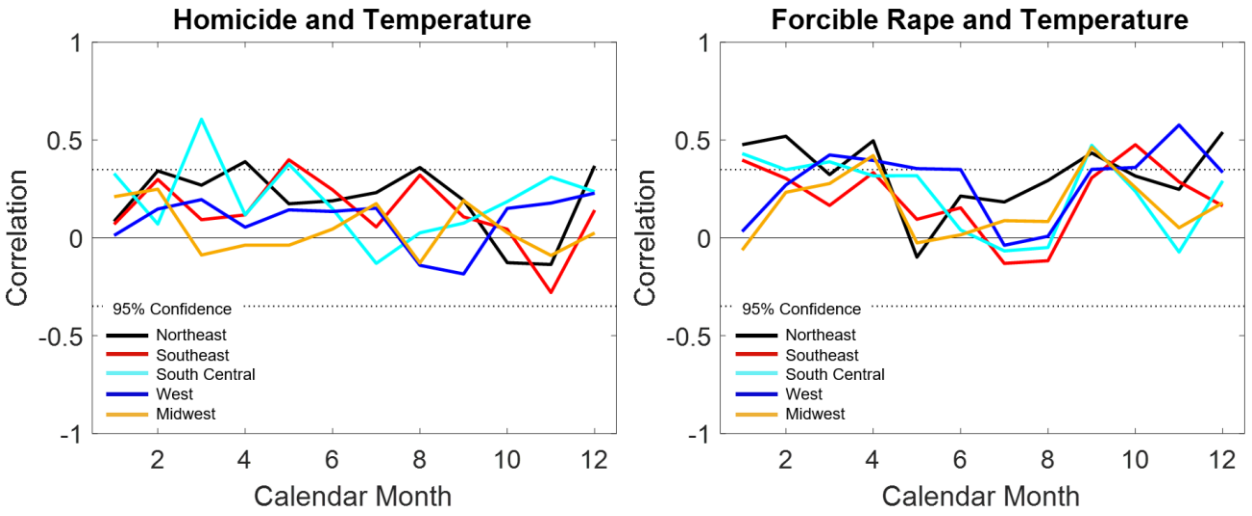
* - $p < 0.05$ ** - $p < 0.01$

Supplementary Table 2. Monthly correlations between violent crime and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Figure 6 (left). All significance tests are two-tailed Student's t-tests.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.83**	0.61**	0.45**	0.46**	0.18	0.14	0.10	0.31	0.17	0.21	0.60**	0.72**
SE	0.36*	0.37*	0.29	0.28	0.24	0.34	0.01	-0.11	0.14	0.02	0.12	0.52**
SC	0.53**	0.27	0.14	0.11	0.22	-0.09	-0.17	-0.02	0.13	-0.34	0.13	0.68**
WE	0.06	0.59**	0.14	0.14	-0.05	-0.16	-0.09	-0.08	0.12	-0.03	0.18	0.26
MW	0.85**	0.57**	0.54**	0.54**	0.18	-0.10	0.23	0.39*	0.21	0.28	0.70**	0.87**

* - $p < 0.05$ ** - $p < 0.01$

Supplementary Table 3. Monthly correlations between property crime and average temperature anomalies of all cities within each region. This information is identical to that shared in Figure 7 (left). All significance tests are two-tailed Student's t-tests.



Supplementary Figure 3. Left: monthly correlations between homicide and monthly temperature anomalies of all cities within each region. Right: same as left but for forcible rape.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.08	0.34	0.27	0.39*	0.17	0.19	0.23	0.36*	0.19	-0.13	-0.14	0.37*
SE	0.07	0.30	0.09	0.12	0.40*	0.25	0.06	0.32	0.11	0.04	-0.28	0.14
SC	0.33	0.07	0.61**	0.12	0.38*	0.15	-0.13	0.03	0.08	0.19	0.31	0.24
WE	0.01	0.15	0.20	0.05	0.14	0.13	0.15	-0.14	-0.18	0.15	0.18	0.23
MW	0.21	0.25	-0.09	-0.04	-0.04	0.04	0.18	-0.13	0.19	0.03	-0.09	0.03

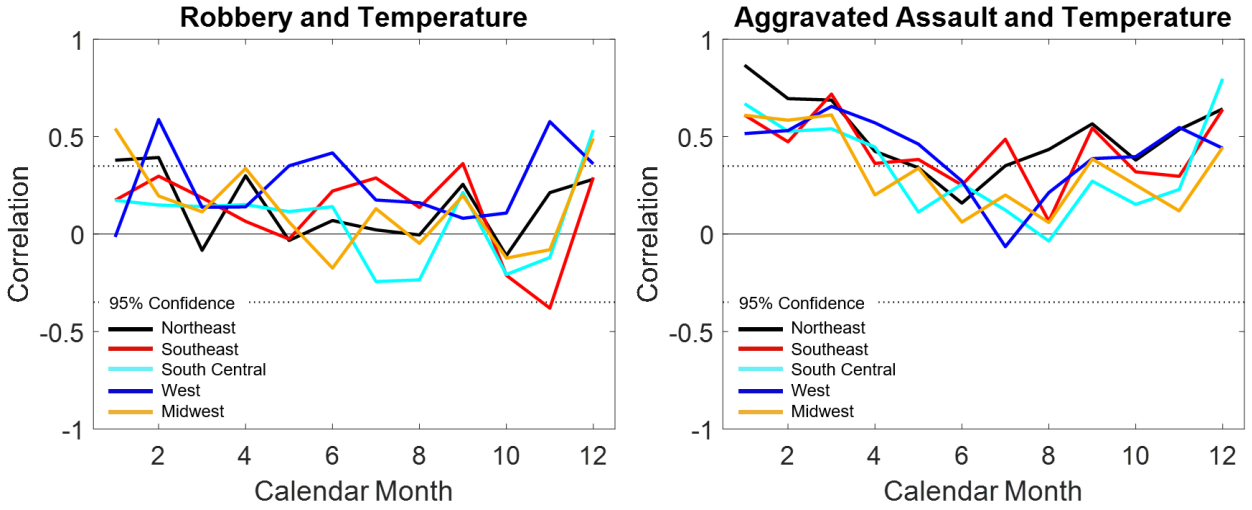
* - $p < 0.05$ ** - $p < 0.01$

Supplementary Table 4. Monthly correlations between homicide and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 2 (left). All significance tests are two-tailed Student's t-tests.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.48**	0.52**	0.32	0.50**	-0.10	0.21	0.18	0.29	0.43*	0.32	0.25	0.54**
SE	0.40*	0.30	0.17	0.33	0.09	0.15	-0.13	-0.12	0.31	0.48**	0.29	0.16
SC	0.43*	0.35*	0.39*	0.32	0.32	0.04	-0.07	-0.05	0.47**	0.24	-0.07	0.29
WE	0.03	0.27	0.42**	0.40*	0.35*	0.35*	-0.04	0.01	0.35*	0.36*	0.58**	0.33
MW	-0.06	0.23	0.28	0.42*	-0.03	0.02	0.09	0.08	0.46**	0.26	0.05	0.18

* - $p < 0.05$ ** - $p < 0.01$

Supplementary Table 5. Monthly correlations between forcible rape and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 2 (right). All significance tests are two-tailed Student's t-tests.



Supplementary Figure 4. Left: monthly correlations between robbery and monthly temperature anomalies of all cities within each region. Right: same as left but for aggravated assault.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.38*	0.39*	-0.08	0.30	-0.03	0.07	0.02	0.00	0.26	-0.11	0.21	0.28
SE	0.17	0.30	0.19	0.07	-0.03	0.22	0.29	0.14	0.36*	-0.21	-0.38*	0.29
SC	0.17	0.15	0.14	0.15	0.12	0.14	-0.24	-0.23	0.21	-0.21	-0.12	0.53**
WE	-0.01	0.59**	0.14	0.14	0.35*	0.42*	0.17	0.16	0.08	0.11	0.58**	0.36*
MW	0.54**	0.20	0.11	0.34	0.06	-0.17	0.13	-0.05	0.20	-0.12	-0.08	0.49**

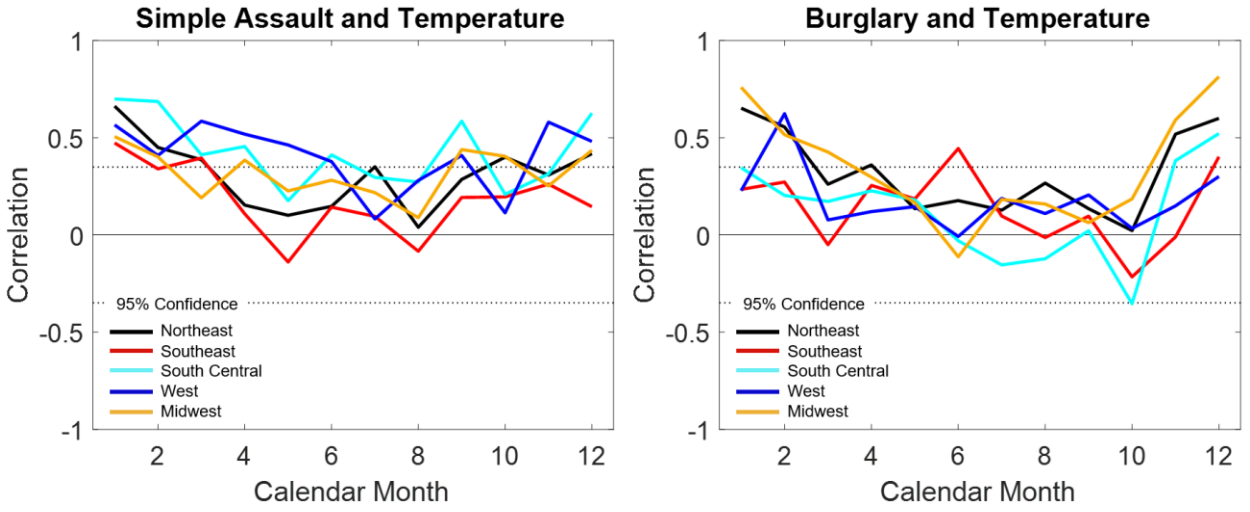
* - p < 0.05 ** - p < 0.01

Supplementary Table 6. Monthly correlations between robbery and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 3 (left). All significance tests are two-tailed Student's t-tests.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.87**	0.69**	0.69**	0.42*	0.34	0.16	0.35*	0.43*	0.57**	0.38*	0.54**	0.64**
SE	0.61**	0.47**	0.72**	0.36*	0.38*	0.25	0.49**	0.07	0.54**	0.32	0.30	0.64**
SC	0.67**	0.53**	0.54**	0.45**	0.11	0.26	0.12	-0.04	0.27	0.15	0.23	0.80**
WE	0.52**	0.53**	0.66**	0.57**	0.46**	0.27	-0.06	0.21	0.39*	0.40*	0.55**	0.44*
MW	0.61**	0.58**	0.61**	0.20	0.34	0.06	0.20	0.06	0.39*	0.25	0.12	0.44*

* - p < 0.05 ** - p < 0.01

Supplementary Table 7. Monthly correlations between aggravated assault and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 3 (right). All significance tests are two-tailed Student's t-tests.



Supplementary Figure 5. Left: monthly correlations between simple assault and monthly temperature anomalies of all cities within each region. Right: same as left but for burglary.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.66**	0.45**	0.39*	0.15	0.10	0.15	0.35*	0.04	0.29	0.40*	0.31	0.42*
SE	0.47**	0.34	0.40*	0.11	-0.14	0.14	0.10	-0.08	0.19	0.20	0.26	0.15
SC	0.70**	0.69**	0.41*	0.45**	0.18	0.41*	0.30	0.27	0.59**	0.21	0.31	0.63**
WE	0.57**	0.41*	0.58**	0.52**	0.46**	0.38*	0.08	0.28	0.41*	0.11	0.58**	0.48**
MW	0.51**	0.40*	0.19	0.38*	0.23	0.28	0.22	0.09	0.44*	0.40*	0.25	0.44*

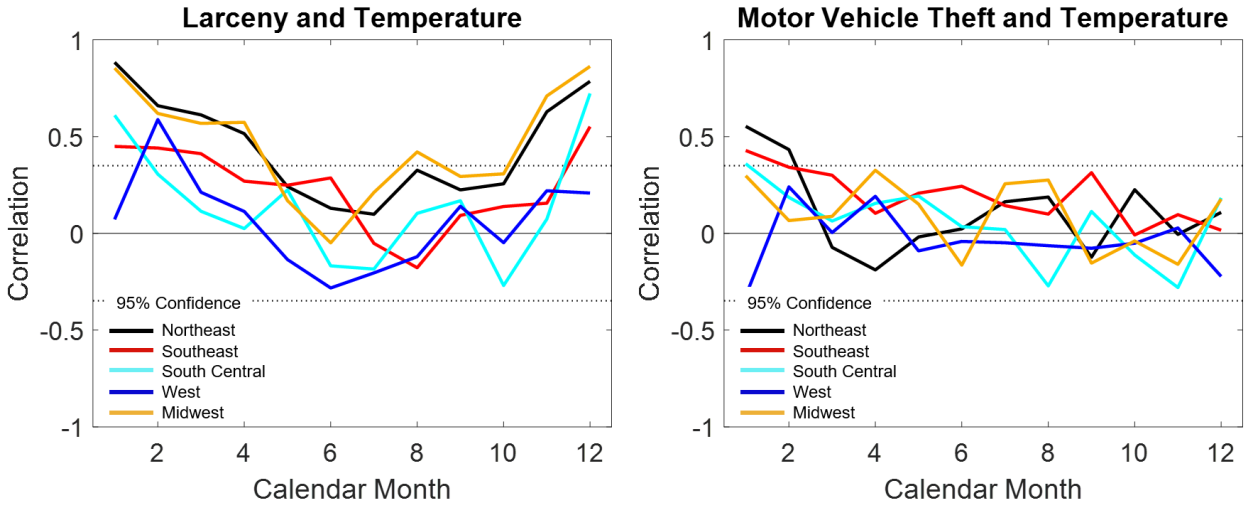
* - p < 0.05 ** - p < 0.01

Supplementary Table 8. Monthly correlations between simple assault and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 4 (left). All significance tests are two-tailed Student's t-tests.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.65**	0.56**	0.26	0.36*	0.13	0.18	0.13	0.27	0.13	0.02	0.52**	0.60**
SE	0.23	0.27	-0.05	0.25	0.19	0.44*	0.10	-0.01	0.10	-0.22	-0.01	0.40*
SC	0.35*	0.20	0.17	0.23	0.18	-0.03	-0.15	-0.12	0.02	-0.35	0.38*	0.52**
WE	0.23	0.62**	0.08	0.12	0.15	-0.01	0.19	0.11	0.21	0.03	0.15	0.30
MW	0.76**	0.52**	0.43*	0.30	0.17	-0.11	0.18	0.16	0.06	0.19	0.59**	0.81**

* - p < 0.05 ** - p < 0.01

Supplementary Table 9. Monthly correlations between burglary and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 4 (right). All significance tests are two-tailed Student's t-tests.



Supplementary Figure 6. Left: monthly correlations between larceny and monthly temperature anomalies of all cities within each region. Right: same as left but for motor vehicle theft.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.88**	0.66**	0.61**	0.52**	0.24	0.13	0.10	0.33	0.22	0.26	0.63**	0.79**
SE	0.45**	0.44*	0.41*	0.27	0.25	0.29	-0.05	-0.18	0.09	0.14	0.16	0.55**
SC	0.61**	0.31	0.11	0.02	0.22	-0.17	-0.18	0.10	0.17	-0.27	0.07	0.72**
WE	0.07	0.59**	0.21	0.11	-0.14	-0.28	-0.20	-0.12	0.14	-0.05	0.22	0.21
MW	0.85**	0.62**	0.57**	0.57**	0.17	-0.05	0.21	0.42*	0.29	0.31	0.71**	0.86**

* - $p < 0.05$ ** - $p < 0.01$

Supplementary Table 10. Monthly correlations between larceny and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 5 (right). All significance tests are two-tailed Student's t-tests.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NE	0.55**	0.43*	-0.07	-0.19	-0.02	0.02	0.16	0.19	-0.12	0.23	-0.01	0.11
SE	0.43*	0.34	0.30	0.10	0.21	0.24	0.14	0.10	0.31	-0.01	0.10	0.02
SC	0.36*	0.19	0.06	0.15	0.19	0.03	0.02	-0.27	0.11	-0.11	-0.28	0.18
WE	-0.32	0.24	0.00	0.19	-0.09	-0.04	-0.05	-0.06	-0.08	-0.05	0.03	-0.22
MW	0.30	0.07	0.09	0.33	0.15	-0.16	0.26	0.28	-0.15	-0.04	-0.16	0.18

* - $p < 0.05$ ** - $p < 0.01$

Supplementary Table 11. Monthly correlations between motor vehicle theft and monthly temperature anomalies of all cities within each region. This information is identical to that shared in Supplementary Figure 4 (right). All significance tests are two-tailed Student's t-tests.