Replication files included:

1. analysis.r – R code for entropy weighting and regression analysis, produces results reported in manuscript and Supplemental Information.
2. census_data.r – R code to merge 1990 US Census data into heat_data.csv, calculate additional variables used in analysis.
3. consolidated_precincts.csv – Comma-delimited data on registration and turnout in the 1987 and 1989 San Francisco Municipal Elections.
4. districts87.geojson – A digitized map of the 1987 precinct boundaries.
5. explanatory_memo.pdf – A PDF memo with an overview of the methods used in the manuscript and implement in the replication file.
6. heat_data.csv – Comma-delimited data created by heat.r
7. heat_data.r – R code to calculate the change in heat emissions due to the 1989 earthquake in each precinct.
8. readme.pdf – This file.
9. SF_ne_data.csv – Comma-delimited data created by census_data.r, used for the analysis.
10. ti.kml – A KML file with the boundary for the Treasure Island precinct.
11. unweighted_results.csv – Comma-delimited file with unweighted regression results. This is a sensitivity analysis that is not described in the manuscript.
12. unweighted_results_placebo.csv – Comma-delimited file with unweighted placebo regression results. This is a sensitivity analysis that is not described in the manuscript.
13. weighted_results.csv -- Comma-delimited file with weighted regression results. These are the results reported in the manuscript.
14. weighted_results_placebo.csv -- Comma-delimited file with weighted placebo regression results. These results are described in the manuscript and reported in the Supplemental Information.
15. bg06_d90_shp, a folder containing the boundaries of the 1990 US Census block groups, with files:
    a. bg06_d90.dbf
    b. bg06_d90.shp
    c. bg06_d90.shx
16. census_data – A folder containing 1990 US Census data, with files:
    a. stf301.csv
    b. stf310.csv
    c. stf314.csv
17. Figure1 – A folder containing the shapefile and QGIS project used to create Figure 1, with files:
    a. SF_map.qgz
    b. SF_precincts.dbf
    c. SF_precincts.shp
    d. SF_precincts.shx
18. Landsat5_data – A folder containing Landsat 5 images and metadata, with the TIF and TFW files:
    a. 19840430.B6.tfw
    b. 19840430.B6.tif

c. 19840905.B6.tfw
d. 19840905.B6.tif
e. 19841023.B6.tfw
f. 19841023.B6.tif
g. 19841210.B6.tfw
h. 19841210.B6.tif
i. 19851008.B6.tfw
j. 19851008.B6.tif
k. 19851024.B6.tfw
l. 19851024.B6.tif
m. 19860125.B6.tfw
n. 19860125.B6.tif
o. 19860314.B6.tfw
p. 19860314.B6.tif
q. 19860501.B6.tfw
r. 19860501.B6.tif
s. 19860517.B6.tfw
t. 19860517.B6.tif
u. 19860602.B6.tfw
v. 19860602.B6.tif
w. 19860704.B6.tfw
x. 19860704.B6.tif
y. 19861024.B6.tfw
z. 19861024.B6.tif
aa. 19861109.B6.tfw
bb. 19861109.B6.tif
cc. 19861125.B6.tfw
dd. 19861125.B6.tif
ee. 19870117.B6.tfw
ff. 19870117.B6.tif
gg. 19870218.B6.tfw
hh. 19870218.B6.tif
ii. 19870407.B6.tfw
jj. 19870407.B6.tif
kk. 19870728.B6.tfw
ll. 19870728.B6.tif
mm. 19870813.B6.tfw
nn. 19870813.B6.tif
oo. 19870914.B6.tfw
pp. 19870914.B6.tif
qq. 19880321.B6.tfw
rr. 19880321.B6.tif
ss. 19880406.B6.tfw
tt. 19880406.B6.tif

uu. 19880508.B6.tfw
vv. 19880508.B6.tif
ww. 19880625.B6.tfw
xx. 19880625.B6.tif
yy. 19880711.B6.tfw
zz. 19880711.B6.tif
aaa. 19881202.B6.tfw
bbb. 19881202.B6.tif
ccc. 19890525.B6.tfw
ddd. 19890525.B6.tif
eee. 19890610.B6.tfw
fff. 19890610.B6.tif
ggg. 19890712.B6.tfw
hhh. 19890712.B6.tif
iii. 19890930.B6.tfw
jjj. 19890930.B6.tif
kkk. 19891101.B6.tfw
lll. 19891101.B6.tif

as well as a comma-delimited file with the date, day of the week, sun elevation, and sun azimuth for each image:

mmm. file_date.csv

19. weather_data, a folder containing data on the maximum temperature for San Francisco by date, with comma-delimted file:
    a. SF_80_90.csv

Replication Procedure:

To replicate the results in the manuscript, set the appropriate working directory for each of the three R files, and run them in the following order:

1. heat_data.r – produces heat_data.csv
2. census_data.r – produces SF_ne_data.csv
3. analysis.r – produces results reported in the manuscript