

ReadMe

Three sample data sets from Baltimore County have been provided for the Journey-to-crime routine described in Chapter 13. The coordinate system is longitude, latitude (spherical). The data sets are simulated and do not represent real data. While the original distribution was real, random spatial error has been added to protect confidentiality. These data should be used for tutorial purposes, not for research.

1. JtcTest1.dbf – 2000 simulated robberies in Baltimore County, MD. This file can be used to provide an empirical estimate of the journey-to-crime for Baltimore County robbers.
2. JtcTest2.dbf – 2500 simulated burglaries in Baltimore County, MD. This file can be used to provide an empirical estimate of the journey-to-crime for Baltimore County burglars.
3. SERIAL1.DBF – the simulated incident locations for a single serial offender who committed 7 offences.

Instructions for running the Calibrate Journey-to-crime routine:

1. Extract all files to a single directory.
2. Load the parameter file 'Load journey-to-crime data.param' on the options page
3. On the Journey-to-Crime tab (under Spatial Modeling I) and then click on the dialogue box 'Select data file for calibraton'.
4. Load either of the two simulated robbery/burglary files (#1 or #2 above), JtcTest1.dbf or JtcTest2.dbf.
 - A. The origin X field is HOMEX
 - B. The origin Y field is HOMEY
 - C. The destination X field is INCIDX
 - D. The destination Y field is INCIDY
 - E. The coordinate system is longitude, latitude (spherical)

5. Click on 'Select output file' and define an output file name (e.g., Distance function for JtcTest1.txt).
6. Click on 'Select kernel parameters'. You can choose the type of kernel, the bandwidth, and the number of intervals in this dialogue. For the first time your run it, keep the default values.
7. Click 'Compute' to run the Calibrate journey-to-crime function routine. You can view a graph of the results after it runs by clicking on 'View graph'.

Instructions for estimating the origin location of the sample serial offender dataset

1. Load the serial offender file (SERIAL1.dbf) as the Primary File.
 - A. The X coordinate is LON
 - B. The Y coordinate is LAT
 - C. The coordinate system is longitude, latitude (spherical)
2. Define the Reference File
 - A. The lower-left X coordinate is -76.91
 - B. The lower-left Y coordinate is 39.19
 - C. The upper-right X coordinate is -76.32
 - D. The upper-right Y coordinate is 39.72
 - E. Define the grid by the number of columns and use the default 100.
3. On the Journey-to-Crime Estimation page (under Spatial Modeling I), click on 'Use already-calibrated distance function' and load one of the calibration files that you just created above.
4. Click 'Compute' to run the journey-to-crime estimation routine.
5. You can also define a mathematical model for your calibration file. See Chapter 13 for details. Try the default model values for the first time you run it.