

JPollution Student's Manual

Simon Clay, October 3, 2005

PollutionSampler is a program that simulates sampling of contaminated land. It does not go into technical details; it is designed to illustrate the strategies involved in a sampling exercise. Your instructor will give you further details of your exercise.

- 1. Load a map** Click on the file menu, and choose “Load map”. A file chooser dialog will appear. Consult your lab script or your instructor to find out which file to load. A topographic map, with green contour lines, will appear in the Map Panel (the black area making up most of the window). The map title will appear in the title bar, and some data about the map will appear in the Map Data Panel (white area with text, in the top left of the window). The information presented in the Map Data Panel is:
 - The map title (as displayed in the title bar)
 - Whether results are instantly visible, or only visible when all samples have been taken.
 - The scale of the map, which is the length of the sides in kilometres.
 - The prevailing wind speed, which affects the distribution of airborne pollution.
 - The prevailing wind direction.
 - The number of samples already taken, and the total number in the run.
- 2. Take samples** Click somewhere on the map, and a purple cross will appear. Click somewhere else, and the cross will disappear and reappear where you clicked. Click on the “Take sample” button to take a sample of the pollutant concentration where the purple cross is on the map. The purple cross is replaced by a yellow one, and a sample appears in the Sample Panel, below the “Take Sample” button. The first number in the list is the number of the sample. The second and third numbers are the x and y coordinates of the sample. The origin is the top left corner of the Map Panel. If the results are immediately visible, the last column will display the concentration of pollutant at the sample, in parts per million. If the results are not immediately visible, the entry will be “-”.
- 3. Finish taking samples** The number of samples to be taken is displayed in the Map Data Panel. When this many samples have been taken, it becomes impossible to take more. The results become visible when the last sample is taken if they were not visible before. The “Save data” option in the File menu saves the samples in a text file. Excel recognises the format of this file. This option is not available until all samples have been taken.