

A Guide to GeoConvert: An online geography matching and conversion tool for UK academics

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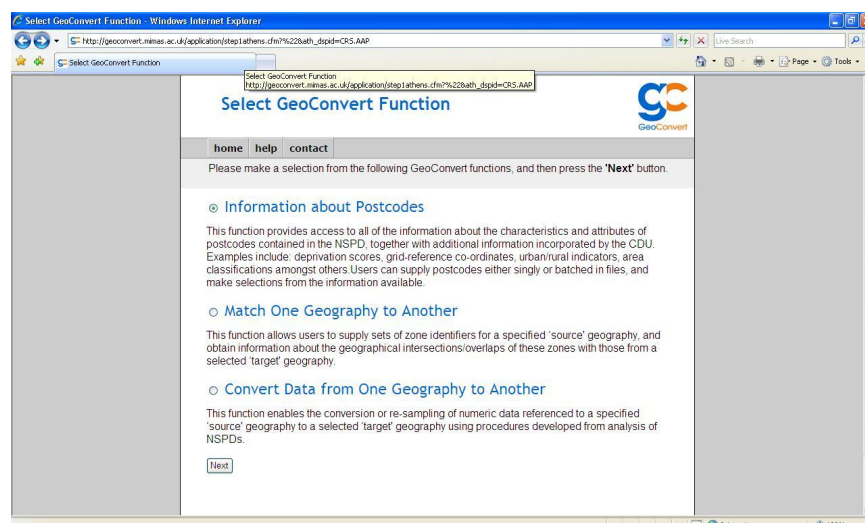
8th March 2010

Geoconvert is an online tool, developed by the Census Dissemination Unit (CDU) at Manchester University which is able to perform the following functions:

- Obtain grid locations for postcode data from the National Statistics Postcode Directory (NSPD), a list of all current and terminated postcodes in the UK which is maintained by the Office of National Statistics and updated every 3 months.
- Match postcodes to a variety of different geographies, including administrative, electoral, health and census geographies
- Obtain postcode metadata collected from the national census (deprivation score, urban/rural indicators, area classifiers etc.)
- Convert population-based data from one geography to another
- Obtain details of geographical relationships between zones in different geographies such as intersections or matches.

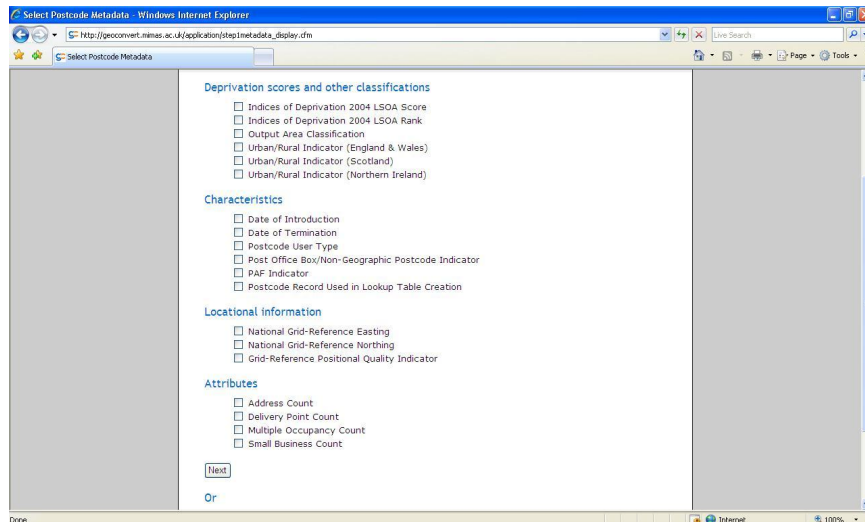
GeoConvert can be accessed by the url <http://geoconvert.mimas.ac.uk/>, and requires you to log in via UK Federation. After selecting Lancaster University from the drop down menu, you will be asked for your Athens user name and password. Click the 'Alternative login' button, and click 'Lancaster University'. You will then be directed to the Lancaster University login page. Here you simply need to use your library card number and library card password to log in. You may also need to register with the Census Registration Service (CRS). You will automatically be asked to do this once you try to log into GeoConvert for the first time. Once you have completed the registration form, and clicked on the link in the confirmation email, you are automatically registered for a number of Census resources such as the aggregated outputs from the Census Dissemination Unit (<http://cdu.mimas.ac.uk/>), and digitised boundary data from UKBorders (<http://borders.edina.ac.uk>).

Once you have logged in, you will see the following screen:

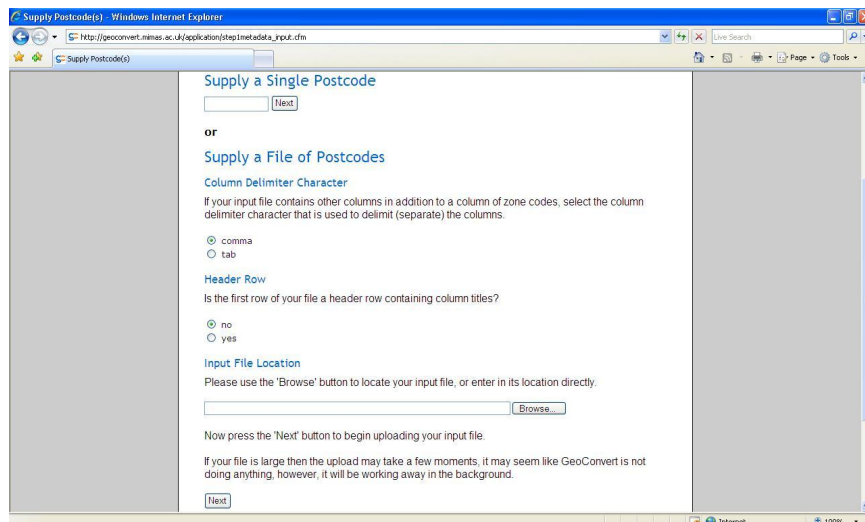


Obtaining Postcode Metadata

To obtain postcode metadata such as grid locations, deprivation indices and area classifiers for each postcode, click the top option, then the 'Next' button. On the screen that follows, select the most recent NSPD database from the drop-down menu (currently February 2007 version), and click the 'Next' button. The screen that follows will enable you to select the metadata that you require for your postcode data.

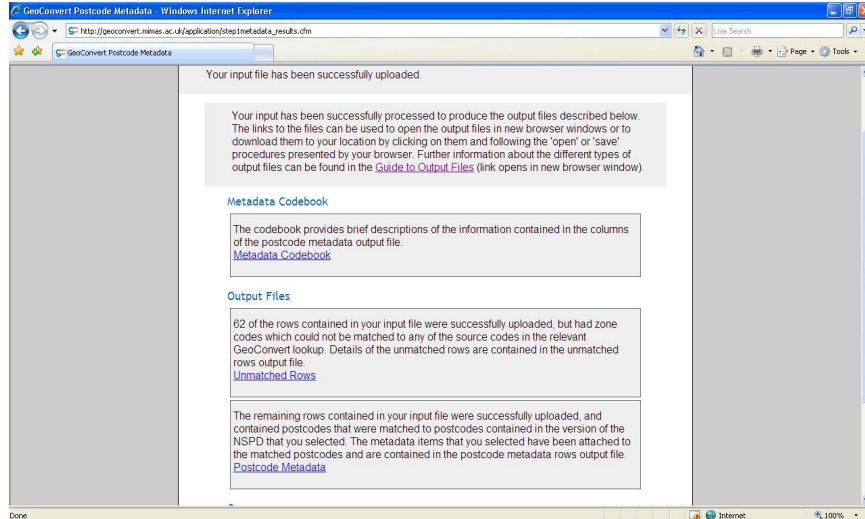


Tick the box next to the metadata you require, and tick on the 'Next' button. You then need to upload your postcode data.



If you require metadata for more than one postcode, then you need to provide the postcode data in a file that is in a plain text format, with either comma or tab delimiters if they are required. If you are providing a file with more than one column, then the first column must contain the postcode data. Further information, and an example input file can be found at http://geoconvert.mimas.ac.uk/help/input_files.htm. Once you have entered the location of your input file, and selected the correct options for the column delimiter character, and whether or not the file contains a header row, click the 'Next' button.

The length of time it will take to match your postcode data with the relevant metadata will depend on the number of rows in your input file. Once the process has completed, you will be presented with the following screen:

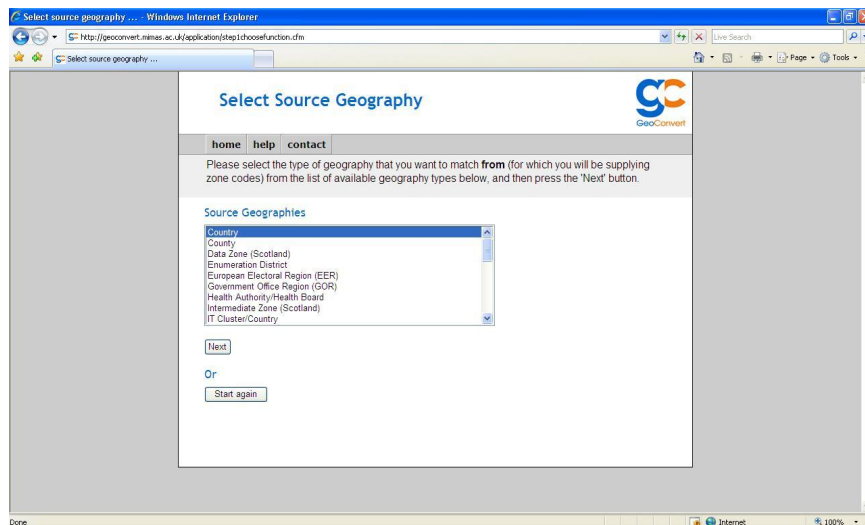


The output results are in the form of a comma delimited file (.csv). The Matched Rows output file, {Number}_Matched.csv, contains data for the rows of the input file for which postcodes which were successfully matched to the selected version of the NSPD database. The columns of this output file will correspond to the columns of the input file, with additional columns corresponding to the select metadata. The Unmatched output file, {Number}_Unmatched.csv, contains data for the rows of the input file for which it was not possible to match the postcodes to the selected version of the NSPD database. Further information on possible output files can be found at http://geoconvert.mimas.ac.uk/help/output_files.htm

Match/Convert Data from One Geography to Another

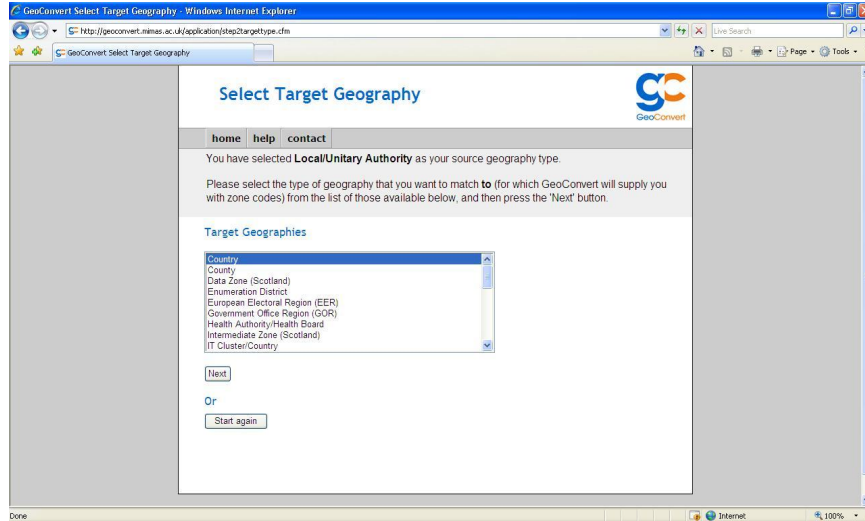
The process of matching data from one geography to another, and the process of converting data from one geography to another, are very similar. Click on the relevant option on the 'Select GeoConvert Function' screen, and click the 'Next' button.

On the screen that follows, select the type of geography that you want to match/convert e.g you may be providing data for which the Output area is known, or for which you have the full postcode.

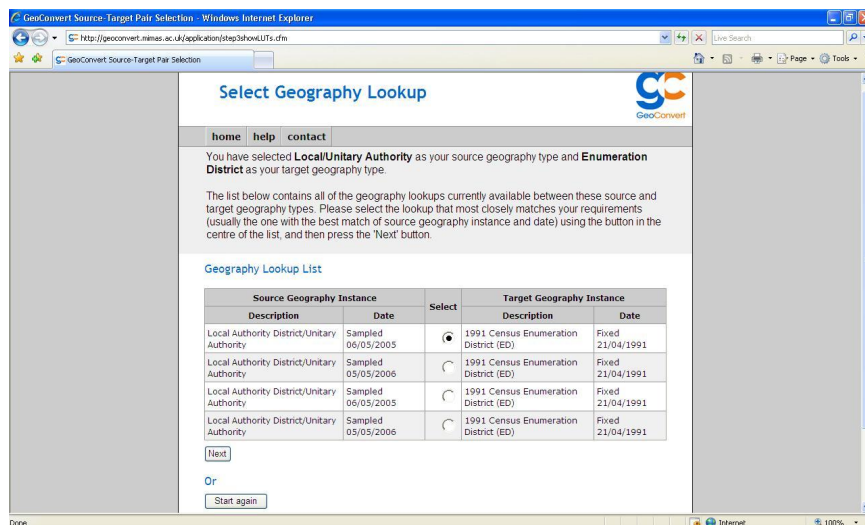


Click on the 'Next' button. Your choice of input geography will then be displayed in bold letters at the top of the screen, and you will be asked to select the type of geography to which you wish your data to be matched/converted.

You will then be shown several options for the geography 'lookups' that are currently available. These are generally in the form of the dates for which the source data and the target data have been sampled. For



example, in the screen below if your source data were collected in 2005, then you would select the first option, whereas if it were collected in 2006 you would choose the second option.



After clicking 'Next, depending on your choice of source data you will either be asked to upload a file containing the geography data that you wish to convert/match to the target geography, or you may be given the option to match/convert all source geography files that are available to download. If you are uploading a file, then recall that the column containing the source geography must be the first column in the file, and the file must be in plain text format. After uploading/downloading the relevant files, output files in the form of comma delimited files (.csv) are generated. These contain columns relating to the uploaded/downloaded data, and further columns representing the target geography of the source data and the proportion of the source geography that is contained in the target geography. For example, in the case where the source geography is Local Authority and the target is Enumeration District (as fixed by the 1991 census), the following .csv file is generated:

A	B	C
Local Authority District/Unitary Authority	proportion_of_source_in_target	1991 Census Enumeration District (ED)
2 A	0.0089	95MM0101
3 A	0.0066	95MM0102
4 A	0.0161	95MM0103
5 A	0.0092	95MM0104
6 A	0.0076	95MM0105
7 A	0.0089	95MM0106
8 A	0.0047	95MM0107
9 A	0.0174	95MM0108
10 A	0.0086	95MM0109
11 A	0.0055	95MM0201
12 A	0.0038	95MM0202
13 A	0.0044	95MM0203
14 A	0.0095	95MM0204
15 A	0.0037	95MM0205
16 A	0.009	95MM0206
17 A	0.0014	95MM0301
18 A	0.0028	95MM0302
19 A	0.0028	95MM0303
20 A	0.0015	95MM0304
21 A	0.0033	95MM0305
22 A	0.002	95MM0306
23 A	0.0041	95MM0307
24 A	0.0015	95MM0308
25 A	0.0031	95MM0401
26 A	0.0048	95MM0402
27 A	0.0038	95MM0403
28 A	0.0042	95MM0404
29 A	0.0034	95MM0501
30 A	0.0049	95MM0502
31 A	0.0031	95MM0503
32 A	0.0042	95MM0504
33 A	0.0046	95MM0505
34 A	0.0056	95MM0601

Further information regarding GeoCovert can be found on the GeoCovert help pages <http://geoconvert.mimas.ac.uk/help/index.htm>