FUZZY SET GOODNESS OF FIT

QUALITATIVE COMPARATIVE ANALYSIS

INSTRUCTIONS FOR USE

Installing Python

The programs provided for this analysis are written in the Python programming language. It will be necessary to install Python if not already installed. Linux and Mac systems usually have Python already installed. Windows users can download Python from this site:

[https://www.anaconda.com/distribution/#download-section](https://www.anaconda.com/distribution/" \l "download-section)

Choose the 3.x version and install. The installation folder will be something like:

C:\Anaconda3\python

Downloading the programs

The programs are stored on the Git Hub website. Use this URL:

<https://github.com/luminous-badger/fsgofv2>

Click on the green button on the right: Clone or Download

Choose : Download Zip

Use the file manager program to extract the files to the required folder.

There are three Python programs:

CDsn\_gui.py CDsuffp3\_multi.py CDnecp3\_multi.py

These steps should work on Windows Linux and Mac.

Running the program

File manager on Windows 10

First it is necessary to associate Python programs with the installed Python system.

From the Menu button choose:

Control Panel - View – Small Icons

Associate then associate Python with files ending .py and .pyw

Now the programs can be run.

Note that you will only be running the GUI program Cdsn\_gui.py. This calls the other two programs itself.

Navigate to the folder with the Python prgrams. You will need to copy your CSV data files here also. Click on Cdsn\_gui.py and you will be presented by the screen based program.

* Choose a file name from the drop down list
* Choose the Y-Column required; Y1 – Y4
* Choose Sufficient, Necessary or Both
* Click Run

The output will be placed in a folder named after the input file, sufficient, necessary and Y-value with the current date & time appended. Eg if the input file is called – myfile.csv, and Sufficient, Y-1 were chosen, the output folder will be called:

myfile\_suff\_Y1\_2019\_10\_13\_19\_22

Similarly for input file myfile.csv, and Necessary, Y-1 chosen, the output folder will be called:

myfile\_nec\_Y1\_2019\_10\_13\_19\_22

Running from Windows 10 Command Prompt.

From the menu button choose Command Prompt. Navigate to the folder with the programs and data file:

cd \Downloads\fsgofv2

Run the GUI Program:

C:\Anaconda3\python\python.exe Cdsn\_gui.py

and follow the steps above.

Running from Linux – file manager

Open the file manager and navigate to the directory with the Python programs. Right click on Cdsn\_gui.py and choose:

Open with – other Applcations. Enter *usr*bin/python3 in the box at the bottom and click Ok.

The program should be now run when double clicked. Follow the same steps as above.

Running from Mac – file manager

Open the file manager and navigate to the directory with the Python programs. Right click on Cdsn\_gui.py and choose:

Open with – Python Runner

The program should now run. Follow the same steps as above.