**About this code**

**About**

Released: November 2022

Folders Module\_1 to Module\_3 contain the Python scripts used to produce the Granular Statistical Dataset and underlying Statistical Tables for the SERL Statistical Report Volume 1 - references below.

**Usage**

All scripts are written to work with Python version 3.x, with standard data science libraries installed (numpy, pandas, matplotlib, seaborn, etc.), plus the dask library.

Access to the SERL Observatory dataset is required. This code was written to work with version 4 of the dataset.

Modules 1 to 3 should be run in sequential order, as follows:

* Module 1:
  + Update locations.py with the appropriate paths to the SERL Observatory dataset files that you are using.
  + Run the Jupyter notebooks in numerical order.
  + (The data picker script does not need to be run separately).
* Module 2:
  + The Python scripts can be run in any order, except the heating\_seasons file, which should be run after the others.
* Module 3:
  + There is a single Python script to be run.

**Contact details**

For further information, contact the authors:

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Email: [info@serl.ac.uk](mailto:info@serl.ac.uk)

**References**

Please use the following details when citing the report or the accompanying dataset.

**Report**

Title: Smart Energy Research Lab: Energy use in GB domestic buildings 2021

Authors: Jessica Few, Martin Pullinger, Eoghan McKenna, Simon Elam, Ellen Webborn, Tadj Oreszczyn

Address: Smart Energy Research Lab, 14 Upper Woburn Place, University College London, London, WC1H 0NN, UK

Series name: Smart Energy Research Lab (SERL) Statistical Reports

Volume number: 1

Publisher: Smart Energy Research Lab

Place of publication: London, UK

Publication date: May 2022

Publisher URL: [www.serl.ac.uk](http://www.serl.ac.uk)

**Statistical Tables**

Title: Smart Energy Research Lab: Aggregated statistics of energy use in GB domestic buildings 2021

Authors: Jessica Few, Martin Pullinger, Eoghan McKenna, Simon Elam, Ellen Webborn, Tadj Oreszczyn

Address: Smart Energy Research Lab, 14 Upper Woburn Place, University College London, London, WC1H 0NN, UK

Series name: Smart Energy Research Lab (SERL) Statistical Datasets

Volume number: 1

Publisher: Smart Energy Research Lab

Place of publication: London, UK

Publication date: May 2022

Publisher URL: [www.serl.ac.uk](http://www.serl.ac.uk)

**Granular Statistical Dataset**

Title: Smart Energy Research Lab: Statistical Data, 2019-2021: Safeguarded Access

Authors: Simon Elam, Jessica Few McKenna, Eoghan McKenna, Martin Pullinger, Ellen Webborn, Tadj Oreszczyn, Ben Anderson, European Centre for Medium-Range Weather Forecasts, Ministry of Housing, Communities and Local Government, Royal Mail Group Limited

Volume number: 1

Series number: SN: 8963

Publisher: UK Data Service

Place of publication: London, UK

Publication date: June 2022

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