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

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

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
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Publisher:	Smart Energy Research Lab
Place of publication:	London, UK
Publication date:	May 2022
Publisher URL:	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
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Publisher:	UK Data Service
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Publication date:	June 2022
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