README: Source code, Data and Instructions

Article citation:
F. Jordán-Cuebas, U. Krogmann, Laundry Energy Consumption in Multistory Buildings: Technology versus Laundering Practices, *Journal of Building Engineering*, https://doi.org/10.1016/j.jobe.2026.115189.

Source code/data citation:
F. Jordán-Cuebas, U. Krogmann, Replication Data for: Laundry Energy Consumption in Multistory Buildings: Technology versus Laundering Practices, Harvard Dataverse, https://doi.org/10.7910/DVN/BTHCFL.

This repository includes four files: three data/code files and one README documentation file.

- **MCNA_inputdata_v1.mat:** MATLAB data file with the "input" and the "metered" data in structured arrays (i.e., struct). The "input" struct contains the input data for the washer water, hot water, washer energy and dryer energy consumption models. The "metered" struct contains washer water consumption, washer hot water consumption, washer energy consumption, and dryer electricity consumption to calculate the performance metrics.
- **MCNA_model_v1.m:** MATLAB code for the washer water, hot water, washer energy and dryer energy consumption models; computes performance metrics and outputs results. The code includes comments.
- **MCNA_model_v1.txt:** Plain text version of MCNA_model_v1.m.
- **MCNA_readme_v1.pdf:** Documentation of file contents, data structure, and model usage.

How to run the model in MATLAB:

- Download the MCNA_model_v1.m and MCNA_inputdata_v1.mat files.
- Start MATLAB and set the working directory to the folder containing the downloaded files.
- Run MCNA_model_v1.m
- The script loads the input data, runs the models, and generates the results and figures reported in the article. All required data and parameters are included in the MCNA_inputdata_v1.mat file or generated by the script.