

List of Files for: Rudolf et al (2021): Ring Shear and Slide-Hold-Slide Test Measurements for Soda-Lime Glassbeads of 300-400 μ m diameter used at the Helmholtz Laboratory for Tectonic Modelling, Potsdam, Germany. GFZ Data Services. <https://doi.org/10.5880/GFZ.4.1.2021.002>

Placeholders for naming scheme of data files: X -> spring type; x -> sorting character; N -> normal load; i -> sorting index; v -> loading rate; NUM -> laboratory experiment reference number

File Name	Type	Explanation
0-Scripts\Make_All_Figures.py	Python Source	Script that creates all Plots for the publication.
0-Scripts\README.md	Markdown Text	Documentation on how to install and run the Python module.
0-Scripts\rststicksli\requirements.txt	Text	Requirements list for automatic module installation using pip.
0-Scripts\rststicksli\rststicksli\edit_configs.py	Python Source	Batch config editor for config scripts.
0-Scripts\rststicksli\rststicksli\main.py	Python Source	Main file which does a basic analysis.
0-Scripts\rststicksli\rststicksli\modules\analysis.py	Python Source	Provides basic analysis functions.
0-Scripts\rststicksli\rststicksli\modules\cfitt.py	Python Source	Contains fitting functions and curve fitting algorithms.
0-Scripts\rststicksli\rststicksli\modules\config.py	Python Source	Provides the default config file and functions for handling configurations.
0-Scripts\rststicksli\rststicksli\modules\distroClasses.py	Python Source	A simple module to handle statistical distributions.
0-Scripts\rststicksli\rststicksli\modules\eventfinder.py	Python Source	Provides functions to search for events and clean the catalogue.
0-Scripts\rststicksli\rststicksli\modules\generator.py	Python Source	Provides functions for generating artificial data to test the performance of the module.
0-Scripts\rststicksli\rststicksli\modules\plotting.py	Python Source	Provides functions for plotting the results found with eventfinder and analysis.
0-Scripts\rststicksli\rststicksli\modules\postprocess.py	Python Source	Provides functions to do advanced analysis of events, such as durations and displacement.
0-Scripts\rststicksli\rststicksli\modules\preparation.py	Python Source	Provides functions to split raw data into smaller sets.
0-Scripts\rststicksli\rststicksli\modules\processing.py	Python Source	Wrapper module for the main functionality.
0-Scripts\rststicksli\rststicksli\modules\rescaling.py	Python Source	Provides functions to do data rescaling and special event analysis.
0-Scripts\rststicksli\rststicksli\modules\rstfile_io.py	Python Source	Provides data input and output facility, as well as various conversion functions.
0-Scripts\rststicksli\rststicksli\modules\utils.py	Python Source	Provides miscellaneous utility functions such as stress conversion, filtering or normalization.
0-Scripts\rststicksli\rststicksli\modules__init__.py	Python Source	Python module initialisation file, needed for detection of module.
0-Scripts\rststicksli\rststicksli\paper.mplstyle	Matplotlib Stylesheet	Stylesheet that defines the plot style for the publication figures.
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Fig2_curves.py	Python Source	Plots exemplary slip curves from the data (Figure 2).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Fig3_9_k_v_space.py	Python Source	Plots the detected slip modes and the slip modes in relation to critical stiffness (Figures 3 and 9).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Fig4_stiffness_drops_rate.py	Python Source	Plots the various stress drop rates (Figure 4).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Fig5_A1_rel_occurr.py	Python Source	Plots the histograms of relative occurrence (Figure 5) and all frictional stress drops for the RST experiments (Figure A1).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Fig6_rec_loading.py	Python Source	Plots recurrence and reloading time depending on normalized loading rate (Figure 6).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Fig7_shs_synth.py	Python Source	Plots the overview of Slide-Hold-Slide test results (Figure 7).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Fig8_bvalues.py	Python Source	Plots the alternative ways to obtain RSD-parameters (Figure 8).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\FigA2_asym.py	Python Source	Plots all asymmetries for all experiments (Figure A2).
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\FigA3_stiffness_calc.py	Python Source	Creates the stiffness plots (Figure A3)
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\FigS11_all_data.py	Python Source	Creates the plots of all time series (Supplementary Information)
0-Scripts\rststicksli\rststicksli\scripts\paper_plots\Make_All_Figures.py	Python Source	Creates all plots by calling the plotting functions sequentially.
0-Scripts\rststicksli\rststicksli\scripts\statistics\b_value_recurrence.py	Python Source	Provides the plot for healing rate estimation from recurrence.
0-Scripts\rststicksli\rststicksli\scripts\statistics\B_value_vL_tr.py	Python Source	Provides the plot for the scaling of loading rate with recurrence time.
0-Scripts\rststicksli\rststicksli\scripts\statistics\cycle_dropsize.py	Python Source	Provides the plot for the drop sizes.
0-Scripts\rststicksli\rststicksli\scripts\statistics\reloading_stiffness.py	Python Source	Provides the plot showing the reloading stiffness compared to the machine stiffness.
0-Scripts\rststicksli\rststicksli\set_plotstyle.py	Python Source	Provides functions for setting the plot style.
0-Scripts\rststicksli\rststicksli\split_into_sets.py	Python Source	Splits a raw data file into sets of equal loading rate.
0-Scripts\rststicksli\rststicksli\view_data.py	Python Source	Simple data viewer to look at an individual file.
0-Scripts\rststicksli\rststicksli__init__.py	Python Source	Python module initialisation file, needed for detection of module.
0-Scripts\rststicksli\setup.cfg	Configuration File	Configuration file for the installation of the rststicksli module with pip.
0-Scripts\rststicksli\setup.py	Python Source	Setup file for installation.
1-RawData\0-MainExperiments\X_x_NkPa_sets\i_NkPa_v_mm-s_NUM.h5	HDF5 File	Main time series data file.
1-RawData\0-MainExperiments\X_x_NkPa_sets\i_NkPa_v_mm-s_NUM.ini	Configuration File	Configuration file containing data analysis parameters.
1-RawData\0-MainExperiments\X_x_NkPa_sets\eqs\i_NkPa_v_mm-s_NUM_eqs.h5	HDF5 File	Event database found with rststicksli.main.
1-RawData\0-MainExperiments\modes.json	JSON File	Slip mode database.
1-RawData\0-MainExperiments\AllDataPlots\all_plots.tex	LaTeX File	TEX file to create the supplementary information document.
1-RawData\1-SHSTests_stressed\NUM_SHS_vmmmin_NPa [f=1.00kHz] [date].h5	HDF5 File	SHS time series data file for stressed experiments.
1-RawData\1-SHSTests_stressed\NUM_SHS_vmmmin_NPa [f=1.00kHz] [date].json	JSON File	Picked SHS points database.
1-RawData\2-SHSTests_unstressed\NUM_SHS_vmmmin_NPa [f=1.00kHz] [date].h5	HDF5 File	SHS time series data file for unstressed experiments.
1-RawData\3-Stiffness\Stiffness_SpringX [f=1.00kHz] [date].h5	HDF5 File	Stiffness measurements for each Spring and RST.