

Licence:

Creative Commons Attribution 4.0 International (CC-BY 4.0, <https://creativecommons.org/licenses/by/4.0>).

Citation:

Schmid, T., Schreurs, G., Warsitzka, M. & Rosenau, M. (2020): Effect of sieving height on density and friction of brittle analogue material: Ring-shear test data of quartz sand used for analogue experiments in the Tectonic Modelling Lab of the University of Bern. GFZ Data Services. <http://doi.org/10.5880/fidgeo.2020.006>

ZIP folder	File name	File format	Content
	2020-006_Schmid-et-al_List-of-files	.pdf	List of files
	2020-006_Schmid-et-al_Description-of-data	.pdf	Description of data and methods
2020-006_Schmid-et-al_Scripts	RSTanalysis_2Repetitions	.py	Python script for analysing and plotting friction and time series data (Mohr plot, histograms, shear curves)
	RSTcor_3_heights	.m	Matlab script for correlation and plotting RST data
2020-006_Schmid-et-al_Data files	443 UB_quartzsand_cor	.png	Visualization of correlation data
	443 UB_quartzsand_cor	.txt	Table of peak-, dynamic- and static friction coefficient, cohesion and density values with corresponding std. Deviations
	443-01 UB_quartzsand_10_dynamic	.txt	Pairs of normal stress and corresponding shear strength for dynamic friction for 10 cm sieving height
	443-01 UB_quartzsand_10_hist	.pdf	Histograms of friction coefficients and cohesions for 10 cm sieving height
	443-01 UB_quartzsand_10_lineregr	.pdf	Mohr plot of friction data for 10 cm sieving height
	443-01 UB_quartzsand_10_peak	.txt	Pairs of normal stress and corresponding shear strength for peak friction for 10 cm sieving height
	443-01 UB_quartzsand_10_reactivation	.txt	Pairs of normal stress and corresponding shear strength for reactivation friction for 10 cm sieving height
	443-01 UB_quartzsand_10_ts	.pdf	Visualization of time series data (shear curves): Shear stress vs. shear displacement for 10 measurements for 10 cm sieving height
	443-01 UB_quartzsand_10_ts	.txt	Table of time series data for 10 measurements of shear stress (Pa, columns 2-11) at given normal stresses (Pa, first cell in each column) vs. time (column 1) for 10 cm sieving height
	443-02 UB_quartzsand_20_dynamic	.txt	Pairs of normal stress and corresponding shear strength for dynamic friction for 20 cm sieving height
	443-02 UB_quartzsand_20_hist	.pdf	Histograms of friction coefficients and cohesions for 20 cm sieving height
	443-02 UB_quartzsand_20_lineregr	.pdf	Mohr plot of friction data for 20 cm sieving height
	443-02 UB_quartzsand_20_peak	.txt	Pairs of normal stress and corresponding shear strength for peak friction for 20 cm sieving height
	443-02 UB_quartzsand_20_reactivation	.txt	Pairs of normal stress and corresponding shear strength for reactivation friction for 20 cm sieving height
	443-02 UB_quartzsand_20_ts	.pdf	Visualization of time series data (shear curves): Shear stress vs. shear displacement for 10 measurements for 20 cm sieving height
	443-02 UB_quartzsand_20_ts	.txt	Table of time series data for 10 measurements of shear stress (Pa, columns 2-11) at given normal stresses (Pa, first cell in each column) vs. time (column 1) for 20 cm sieving height
	443-03 UB_quartzsand_30_dynamic	.txt	Pairs of normal stress and corresponding shear strength for dynamic friction for 30 cm sieving height
	443-03 UB_quartzsand_30_hist	.pdf	Histograms of friction coefficients and cohesions for 30 cm sieving height
	443-03 UB_quartzsand_30_lineregr	.pdf	Mohr plot of friction data for 30 cm sieving height
	443-03 UB_quartzsand_30_peak	.txt	Pairs of normal stress and corresponding shear strength for peak friction for 30 cm sieving height
	443-03 UB_quartzsand_30_reactivation	.txt	Pairs of normal stress and corresponding shear strength for reactivation friction for 30 cm sieving height
	443-03 UB_quartzsand_30_ts	.pdf	Visualization of time series data (shear curves): Shear stress vs. shear displacement for 10 measurements for 30 cm sieving height
	443-03 UB_quartzsand_30_ts	.txt	Table of time series data for 10 measurements of shear stress (Pa, columns 2-10) at given normal stresses (Pa, first cell in each column) vs. time (column 1) for 30 cm sieving height