

Mengke An, Fengshou Zhang, Derek Elsworth, Zhengyu Xu, Zhaowei Chen, Lianyang Zhang. Friction of Longmaxi shale gouges and implications for seismicity during hydraulic fracturing. *Journal of Geophysical Research: Solid Earth*.

Data S1

Experiment details, recorded data during each shear experiment, and friction data used to reflect the frictional properties of Longmaxi shale gouges in Sichuan Basin, southwest China.

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File lists (files found within DataS1.zip)

An_et_al_2020_Experiment_details_and_friction_data.txt
An_et_al_2020_S10_150.xlsx
An_et_al_2020_S14_150.xlsx
An_et_al_2020_S15_30.xlsx
An_et_al_2020_S15_150.xlsx
An_et_al_2020_S15_300.xlsx
An_et_al_2020_S19_150.xlsx
An_et_al_2020_S28_150.xlsx
An_et_al_2020_S29_150.xlsx
An_et_al_2020_S32_150.xlsx
An_et_al_2020_S33_150.xlsx
An_et_al_2020_S35_150.xlsx
An_et_al_2020_S38_90.xlsx
An_et_al_2020_S38_150.xlsx

File description

An_et_al_2020_Experiment_details_and_friction_data.txt – **Experiment details and friction data for Longmaxi shale gouges at different conditions.**

An_et_al_2020_S10_150.xlsx – **Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S10-150.**

An_et_al_2020_S14_150.xlsx – **Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S14-150.**

An_et_al_2020_S15_30.xlsx – **Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S15-30.**

An_et_al_2020_S15_150.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S15-150.

An_et_al_2020_S15_300.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S15-300.

An_et_al_2020_S19_150.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S19-150.

An_et_al_2020_S28_150.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S28-150.

An_et_al_2020_S29_150.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S29-150.

An_et_al_2020_S32_150.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S32-150.

An_et_al_2020_S33_150.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S33-150.

An_et_al_2020_S35_150.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S35-150.

An_et_al_2020_S38_90.xlsx – Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S38-90.

An_et_al_2020_S38_150.xlsx – **Recorded time series, shear displacement, confining pressure, pore fluid pressure, effective normal stress, shear stress, and coefficient of friction during the experiment with the testing ID of S38-150.**

Note: σ_c = confining pressure, P_f = pore fluid pressure, σ_{neff} = effective normal stress, T = temperature, τ = shear stress, μ = coefficient of friction, $a - b$ = frictional stability parameter.
