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Citation: Latypova E., Corbi F., Mastella G., Funicello F., Moreno M., Bedford J. (2025): Data and scripts from Neighbouring segments control on earthquake recurrence patterns:

ZIP folder	File names	File format	Description
	2025-046_Latypova-et-al_Data-description	.pdf	Description of the data
	2025-046_Latypova-et-al_List-of-files	.pdf	List of files
2025-046_Latypova-et-al_Data	40_40Pa_long_fixed_center_of_long_asp	.csv	1-D array referring to the reference point (center point of long asperity) velocity time series in cm/s over time of 40-40 Pa double asymmetric asperity experiment with fixed long asperity
	40_40Pa_long_fixed_center_of_short_asp	.csv	1-D array referring to the reference point (center point of short asperity) velocity time series in cm/s over time of 40-40 Pa double asymmetric asperity experiment with fixed long asperity
	40_40Pa_short_fixed_center_of_long_asp	.csv	1-D array referring to the reference point (center point of long asperity) velocity time series in cm/s over time of 40-40 Pa double asymmetric asperity experiment with fixed short asperity
	40_40Pa_short_fixed_center_of_short_asp	.csv	1-D array referring to the reference point (center point of short asperity) velocity time series in cm/s over time of 40-40 Pa double asymmetric asperity experiment with fixed short asperity
	40_130Pa_long_fixed_center_of_long_asp	.csv	1-D array referring to the reference point (center point of long asperity) velocity time series in cm/s over time of 40-130 Pa double asymmetric asperity experiment with fixed long asperity
	40_130Pa_long_fixed_center_of_short_asp	.csv	1-D array referring to the reference point (center point of short asperity) velocity time series in cm/s over time of 40-130 Pa double asymmetric asperity experiment with fixed long asperity
	40_130Pa_short_fixed_center_of_long_asp	.csv	1-D array referring to the reference point (center point of long asperity) velocity time series in cm/s over time of 40-130 Pa double asymmetric asperity experiment with fixed short asperity
	40_130Pa_short_fixed_center_of_short_asp	.csv	1-D array referring to the reference point (center point of short asperity) velocity time series in cm/s over time of 40-130 Pa double asymmetric asperity experiment with fixed short asperity
	cv_matrix_40_10Pa_symmetric	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double symmetric asperity experiment with 40-10 Pa
	cv_matrix_40_40Pa_asymmetric_long_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-40 Pa with long asperity fixed
	cv_matrix_40_40Pa_asymmetric_short_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-40 Pa with short asperity fixed
	cv_matrix_40_40Pa_symmetric	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double symmetric asperity experiment with 40-40 Pa
	cv_matrix_40_70Pa_asymmetric_long_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-70 Pa with long asperity fixed
	cv_matrix_40_70Pa_asymmetric_short_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-70 Pa with short asperity fixed
	cv_matrix_40_70Pa_symmetric	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double symmetric asperity experiment with 40-70 Pa
	cv_matrix_40_100Pa_asymmetric_long_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-100 Pa with long asperity fixed
	cv_matrix_40_100Pa_asymmetric_short_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-100 Pa with short asperity fixed
	cv_matrix_40_100Pa_symmetric	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double symmetric asperity experiment with 40-100 Pa
	cv_matrix_40_130Pa_asymmetric_long_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-130 Pa with long asperity fixed
	cv_matrix_40_130Pa_asymmetric_short_fixed	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the double asymmetric asperity experiment with 40-130 Pa with short asperity fixed
	cv_matrix_40Pa_single	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the single asperity experiment with 40 Pa
	cv_matrix_70Pa_single	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the single asperity experiment with 70 Pa
	cv_matrix_100Pa_single	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the single asperity experiment with 100 Pa
	cv_matrix_130Pa_single	.csv	contain a 2-D matrix, where the CoV value calculated for 100 threshold values along strike through the center of asperity for the single asperity experiment with 130 Pa
	events_40_10Pa_symmetric	.csv	contain 2-D array of thresholded events with 31 rows- trench-orthogonal surface-velocity components (cm/s) at 31 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_40Pa_asymmetric_long_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_40Pa_asymmetric_short_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_40Pa_symmetric	.csv	contain 2-D array of thresholded events with 31 rows- trench-orthogonal surface-velocity components (cm/s) at 31 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_70Pa_asymmetric_long_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_70Pa_asymmetric_short_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_70Pa_symmetric	.csv	contain 2-D array of thresholded events with 31 rows- trench-orthogonal surface-velocity components (cm/s) at 31 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time

	events_40_100Pa_asymmetric_long_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_100Pa_asymmetric_short_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_100Pa_symmetric	.csv	contain 2-D array of thresholded events with 31 rows- trench-orthogonal surface-velocity components (cm/s) at 31 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_130Pa_asymmetric_long_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40_130Pa_asymmetric_short_fixed	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_40Pa_single	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_70Pa_single	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_100Pa_single	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
	events_130Pa_single	.csv	contain 2-D array of thresholded events with 25 rows- trench-orthogonal surface-velocity components (cm/s) at 25 positions along the trench, along the center point of asperity; and 4500 columns – 4 500 camera frames = 90 s of experimental time
2025-046_Latypova-et-al_Scripts	figure3	.py	python script for plotting Figure 3 of the main manuscript
	figureS3	.py	python script for plotting Figure S3 of the supporting material file
	figureS4	.py	python script for plotting Figure S4 of the supporting material file
	figureS5	.py	python script for plotting Figure S5 of the supporting material file
	figureS6	.py	python script for plotting Figure S6 of the supporting material file
	time_series_cumsums_for_40_40Pa_long_fixed	.py	python script for plotting time series and cumulative sum plots for four double asymmetric asperities experiments to give a general idea of what the data look like
	time_series_cumsums_for_40_40Pa_short_fixed	.py	python script for plotting time series and cumulative sum plots for four double asymmetric asperities experiments to give a general idea of what the data look like
	time_series_cumsums_for_40_130Pa_long_fixed	.py	python script for plotting time series and cumulative sum plots for four double asymmetric asperities experiments to give a general idea of what the data look like
	time_series_cumsums_for_40_130Pa_short_fixed	.py	python script for plotting time series and cumulative sum plots for four double asymmetric asperities experiments to give a general idea of what the data look like