

**Table S1. FS and their fault activity, faulting style, seismogenic thickness, seismic coupling  $c$  (mean, min, max) following Carafa et al. (2017), weighted coupling factor, and weighted coupling factor multiplied with the best estimate of slip rate. For 22 FS from EDSF (Basili et al., 2013), the coupling factor was set to 1.0. The FS are sorted by seismic source designation.**

Seismic source name	Seismic source designation	Fault activity	Faulting style class	Seismogenic thickness (km)	c mean	c min	c max	Weighted coupling (0.7 * c mean + 0.3 * 0.7) or 1.0	best slip rate * weighed coupling (mm/year)
Buzet	SS.SI-002	potentially	thrust	7	0.53	0.43	0.63	0.58	0.03
Sočerga-Lupoglav	SS.SI-003	potentially	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.16
Črni Kal - Palmanova	SS.SI-006	active	thrust	7	0.53	0.43	0.63	0.58	0.12
Divača	SS.SI-011	probably	dextral strike-slip	6	0.80	0.65	0.95	0.77	0.15
Raša	SS.SI-014	active	dextral strike-slip	17	0.28	0.23	0.34	0.41	0.29
Vipava	SS.SI-015	questionable	dextral strike-slip	10	0.48	0.39	0.57	0.55	0.03
Predjama-Avče	SS.SI-019	active	dextral strike-slip	17	0.28	0.23	0.34	0.41	0.29
Jesenovec	SS.SI-020	questionable	dextral strike-slip	10	0.48	0.39	0.57	0.55	0.03
Idrija	SS.SI-022	active	dextral strike-slip	16	0.30	0.24	0.36	0.42	0.42
Podplanina-Podpreska	SS.SI-023	questionable	dextral transpressive	10	0.48	0.39	0.57	0.55	0.03
Ravne	SS.SI-025	active	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.04
Čeplez	SS.SI-026	potentially	dextral strike-slip	17	0.28	0.23	0.34	0.41	0.02
Vrhnika	SS.SI-027	potentially	dextral transpressive	18	0.27	0.22	0.32	0.40	0.02
Rakitna	SS.SI-029	potentially	dextral transpressive	16	0.30	0.24	0.36	0.42	0.04
Jalovec	SS.SI-031	questionable	sinistral strike-slip	12	0.40	0.33	0.48	0.49	0.05
Mojstrovka	SS.SI-032	questionable	sinistral strike-slip	12	0.40	0.33	0.48	0.49	0.05
Vrata	SS.SI-033	questionable	sinistral strike-slip	10	0.48	0.39	0.57	0.55	0.05
Krma	SS.SI-034	questionable	sinistral strike-slip	10	0.48	0.39	0.57	0.55	0.05
Možic-Sorica	SS.SI-035	potentially	dextral strike-slip	10	0.48	0.39	0.57	0.55	0.03
Mišja dolina	SS.SI-037	active	dextral strike-slip	16	0.30	0.24	0.36	0.42	0.19
Dražgoše	SS.SI-040	probably	dextral strike-slip	10	0.48	0.39	0.57	0.55	0.05
Želimlje-Ortnek	SS.SI-041	probably	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.20

Dobrepolje	SS.SI-043	probably	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.20
Zasip	SS.SI-044	potentially	dextral strike-slip	10	0.48	0.39	0.57	0.55	0.05
Kranj	SS.SI-045	potentially	dextral strike-slip	12	0.40	0.33	0.48	0.49	0.05
Žužemberk	SS.SI-046	active	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.22
Sava W	SS.SI-047a	active	dextral transpressive	15	0.32	0.26	0.38	0.43	0.43
Sava E-Celje	SS.SI-047b	active	dextral transpressive	15	0.32	0.26	0.38	0.43	0.43
Vodice	SS.SI-049	active	reverse	10	0.37	0.30	0.44	0.47	0.14
Stična	SS.SI-050	probably	dextral strike-slip	12	0.40	0.33	0.48	0.49	0.02
Toplice	SS.SI-051	active	dextral strike-slip	12	0.40	0.33	0.48	0.49	0.02
Košuta	SS.SI-052	potentially	reverse	12	0.31	0.25	0.37	0.43	0.13
Stol (Hochstuhl)	SS.SI-053	probably	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.17
Cerklje	SS.SI-054	active	dextral transpressive	10	0.48	0.39	0.57	0.55	0.16
Periadriatic W	SS.SI-056a	probably	dextral transpressive	20	0.24	0.20	0.29	0.38	0.23
Periadriatic E	SS.SI-056b	probably	dextral transpressive	20	0.24	0.20	0.29	0.38	0.23
Litija	SS.SI-057	potentially	dextral strike-slip	12	0.40	0.33	0.48	0.49	0.02
Trebnje	SS.SI-058	potentially	dextral strike-slip	13	0.37	0.30	0.44	0.47	0.02
Gornji Grad	SS.SI-060	questionable	sinistral strike-slip	12	0.40	0.33	0.48	0.49	0.02
Logarska dolina	SS.SI-061	questionable	sinistral strike-slip	12	0.40	0.33	0.48	0.49	0.02
Menina-Vransko	SS.SI-062	potentially	reverse	12	0.31	0.25	0.37	0.43	0.13
Zagorje	SS.SI-066	probably	dextral strike-slip	12	0.40	0.33	0.48	0.49	0.03
Poštena vas	SS.SI-068	potentially	sinistral transpressive	9	0.53	0.43	0.63	0.58	0.05
Savinja	SS.SI-070	questionable	sinistral strike-slip	12	0.40	0.33	0.48	0.49	0.02
Hrastnik	SS.SI-071	probably	dextral strike-slip	12	0.40	0.33	0.48	0.49	0.03
Orlica 1	SS.SI-074a	probably	reverse	9	0.41	0.33	0.49	0.50	0.04
Orlica 2	SS.SI-074b	probably	sinistral strike-slip	9	0.53	0.43	0.63	0.58	0.05
Orlica 3	SS.SI-074c	probably	sinistral transpressive	8	0.60	0.49	0.71	0.63	0.05
Artiče	SS.SI-075	active	reverse	8	0.46	0.38	0.55	0.53	0.05
Šoštanj W	SS.SI-076a	active	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.22

Šoštanj E	SS.SI-076b	potentially	sinistral transpressive	15	0.32	0.26	0.38	0.43	0.04
Northern Karavanke	SS.SI-078	potentially	thrust	5	0.74	0.60	0.88	0.73	0.22
Labot N	SS.SI-080a	active	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.33
Labot S	SS.SI-080b	active	dextral strike-slip	14	0.34	0.28	0.41	0.45	0.34
Haloze	SS.SI-081	potentially	reverse	8	0.46	0.38	0.55	0.53	0.03
Lovrenc	SS.SI-085	potentially	reverse	10	0.37	0.30	0.44	0.47	0.02
Donat	SS.SI-086	potentially	dextral strike-slip	10	0.48	0.39	0.57	0.55	0.35
Kungota	SS.SI-088	potentially	sinistral transpressive	10	0.48	0.39	0.57	0.55	0.03
Ljutomer	SS.SI-089	probably	reverse	10	0.37	0.30	0.44	0.47	0.01
Fella	SS.SI-090	probably	reverse	15	0.25	0.20	0.29	0.38	0.19
Gemona-Kobarid	SS.SI-091	potentially	thrust	n/a	n/a	n/a	n/a	1.00	0.42
Raša West	SS.SI-092	active	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.30
Orehovec	SS.SI-093	probably	sinistral strike-slip	12	0.40	0.33	0.48	0.49	0.10
Sveta Nedelja	SS.SI-094	active	sinistral strike-slip	15	0.32	0.26	0.38	0.43	0.10
North Medvednica	SS.SI-095	active	sinistral transpressive	16	0.30	0.24	0.36	0.42	0.08
Kašina	SS.SI-096	active	dextral transtensive	10	0.48	0.39	0.57	0.55	0.11
Montebelluna-Montereale	SS.SI-097	active	thrust	n/a	n/a	n/a	n/a	1.00	0.43
Trasaghis-Taipana	SS.SI-098	potentially	thrust	n/a	n/a	n/a	n/a	1.00	0.42
Maniago-Sequals	SS.SI-099	active	thrust	n/a	n/a	n/a	n/a	1.00	0.42
Medea	SS.SI-100	probably	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.16
Gemona-Tarcento	SS.SI-101	active	thrust	n/a	n/a	n/a	n/a	1.00	0.42
Andreis-Forgaria nel Friuli	SS.SI-102	potentially	thrust	n/a	n/a	n/a	n/a	1.00	0.42
Bassano-Vittorio Veneto	SS.SI-103	active	thrust	n/a	n/a	n/a	n/a	1.00	0.42
Trstenik	SS.SI-104	potentially	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.08
Velebit	SS.SI-105	probably	reverse	n/a	n/a	n/a	n/a	1.00	0.20
Vinodol-Rijeka	SS.SI-106	probably	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.26
Krk	SS.SI-107	potentially	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.16
Žuta Lokva	SS.SI-108	potentially	reverse	n/a	n/a	n/a	n/a	1.00	0.16

Plitvice	SS.SI-109	potentially	reverse	n/a	n/a	n/a	n/a	1.00	0.16
Mala Kapela	SS.SI-111	potentially	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.16
Slunj	SS.SI-112	potentially	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.14
Bosiljevo	SS.SI-113	potentially	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.14
Novo Selo	SS.SI-114	potentially	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.18
Molltal	SS.SI-115	potentially	dextral strike-slip	15	0.32	0.26	0.38	0.43	0.17
Mur-Murz	SS.SI-116	active	sinistral strike-slip	15	0.32	0.26	0.38	0.43	0.65
Gorjanci	SS.SI-117	questionable	thrust	9	0.41	0.33	0.49	0.50	0.10
Petrinja	SS.SI-118	active	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.12
Kalnik	SS.SI-119	probably	sinistral strike-slip	n/a	n/a	n/a	n/a	1.00	0.13
Kutina	SS.SI-120	probably	dextral transpressive	n/a	n/a	n/a	n/a	1.00	0.06