

Table 1

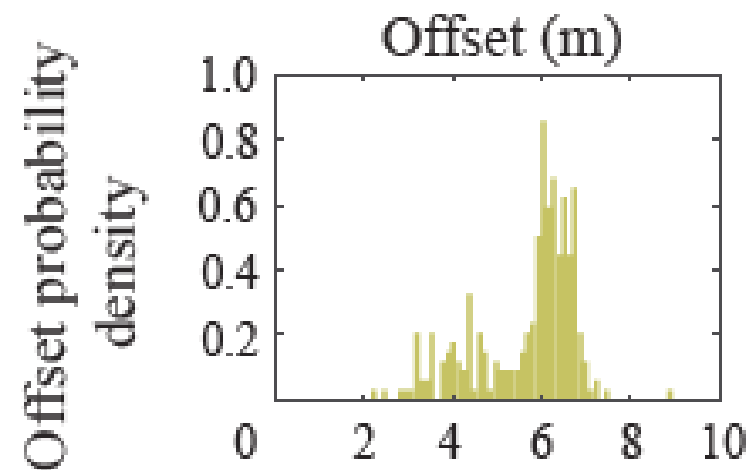
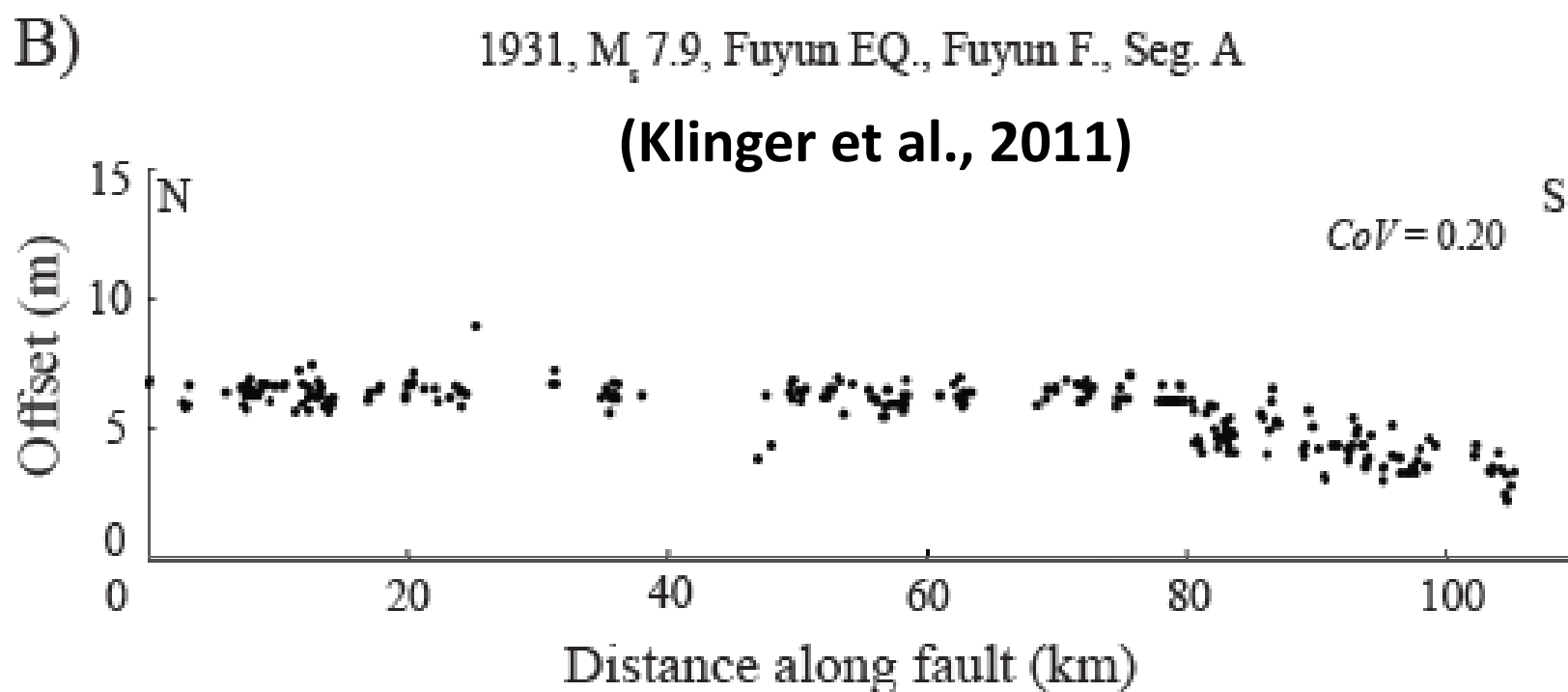
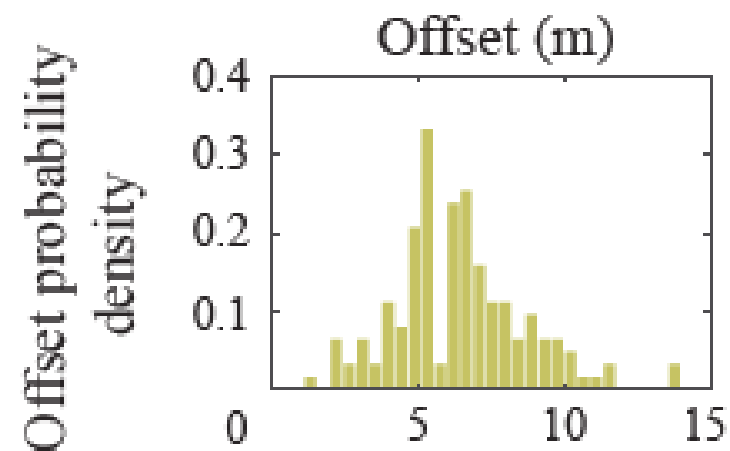
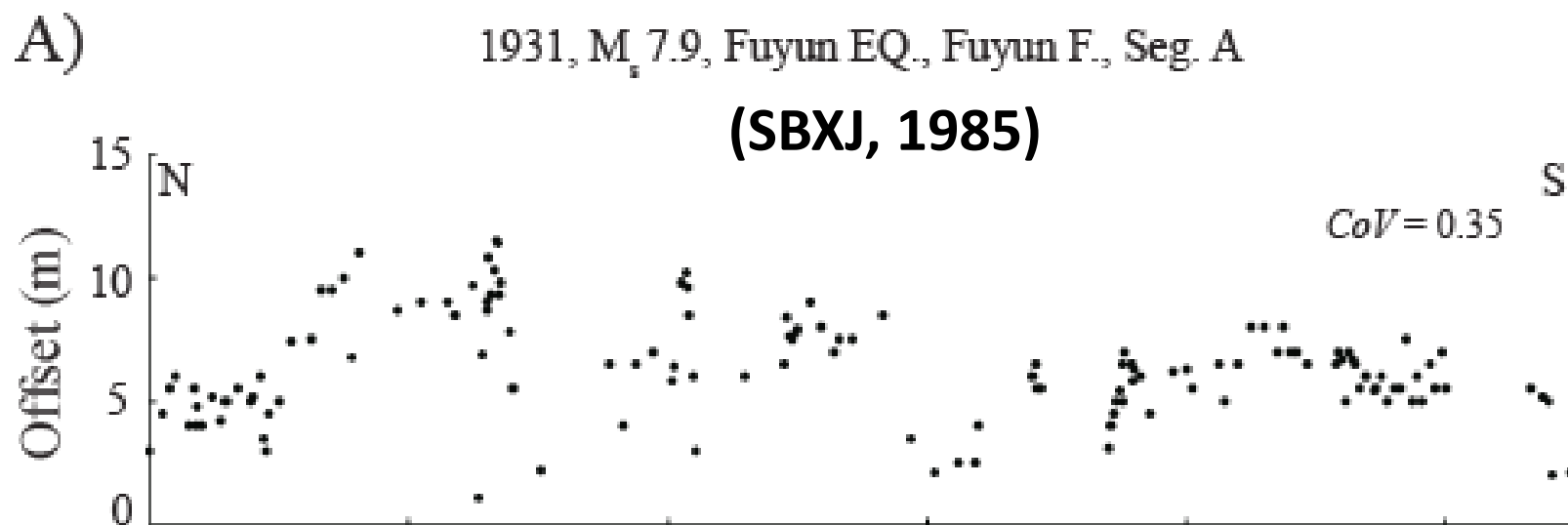
Event No.	Earthquake, Fault / Fault Segment	Type	Offset	Number	Fault Length	Offset Density	CoV	Event No.	Earthquake, Fault / Fault Segment	Type	Offset	Number	Fault Length	Offset Density	CoV
Event 1	1857, $M_w$ 7.9, Fort Tejon EQ., SAF	SSR	5.6 m	100	330 km	0.30 /km	0.45	Event 21	1992, $M_w$ 7.3, Landers EQ., Landers F. & Homestead Valley F.	SSR					
	Seg. Cholama (~ 0 - 50 km)		3.6 m	11	50 km	0.22 /km	0.30		Seg. Emerson (~ 7 - 29 km)		3.8 m	21	22 km	0.95 /km	0.46
	Seg. Carrizo (~ 50 - 120 km)		8.0 m	43	70 km	0.61 /km	0.17		Seg. Homestead Valley North (~ 26 - 42 km)		2.3 m	13	16 km	0.81 /km	0.44
	Seg. Big Bend (~ 120 - 181 km)		5.3 m	14	61 km	0.23 /km	0.21		Seg. Johnson Valley Trace (~ 45 km - 63 km)		1.8 m	15	18 km	0.83 /km	0.36
	Seg. South Mojave (~ 221 - 333 km)		3.2 m	32	112 km	0.29 /km	0.37	Event 22	1997, $M_w$ 7.2, Zirkuh EQ., Abiz F.	SSR	1.2 m	67	122 km	0.55 /km	0.47
Event 2	1891, $M_w$ 7.5, Nobi EQ., Neodani F.	SSL	3.4 m	21	80 km	0.26 /km	0.69		Seg. North (~ 0 - 70 km)		1.1 m	39	70 km	0.56 /km	0.47
	Seg. Neodani (~ 20 - 50 km)		4.1 m	15	30 km	0.50 /km	0.55		Seg. South (~ 70 - 122 km)		1.3 m	28	52 km	0.54 /km	0.46
Event 3	1906, $M$ 8.0, San Francisco EQ., SAF	SSR	3.0 m	36	300 km	0.12 /km	0.49	Event 23	1998, $M_w$ 6.6, Fandoga EQ., Gowk F.	SSR	1.0 m	20	25 km	0.80 /km	0.92
Event 4	1920, $M_s$ 8.5, great Haiyuan EQ., Haiyuan F.	SSL	3.9 m	165	138 km	1.20 /km	0.52	Event 24	1999, $M_w$ 7.1, Hector Mine EQ., Lavic Lake F. & Bullion F.	SSR	1.5 m	166	46 km	3.61 /km	0.87
	Seg. Western (~ 0 - 75 km)		3.0 m	88	75 km	1.17 /km	0.47		Seg. Lavic Lake Basin (~ 0 - 16 km)		1.23 m	53	16 km	3.31 /km	0.78
	Seg. Middle (~ 76 - 138 km)		5.0 m	77	63 km	1.22 /km	0.43		Seg. Bullion Mountains (~ 16 - 30.5 km)		2.23 m	69	14.5 km	4.76 /km	0.69
Event 5	1927, $M$ 7.6, Kita-Dango EQ., Goumura F.	SSL	1.1 m	67	17 km	3.94 /km	0.86		Seg. Bullion Fault (~ 30.5 - 46 km)		0.78 m	44	15.5 km	2.84 /km	0.88
Event 6	1930, $M$ 7.3, Kita-Izu EQ., Kita-Izu F.	SSR	1.5 m	48	31 km	1.55 /km	0.69	Event 25	1999, $M_w$ 7.4, Izmit EQ., North Anatolian F.	SSR	1.6 m	108	107 km	1.01 /km	0.82
	Seg. Himenoyu_Kadono_Ono (~ 0 - 8 km)		1.1 m	11	8 km	1.38 /km	0.62		Seg. A (~ 0 - 32 km)		1.7 m	35	32 km	1.09 /km	0.73
	Seg. Ukihashi_Tanna (~ 9 - 24 km)		1.8 m	33	15 km	2.20 /km	0.58		Seg. B (~ 32 - 71 km)		2.1 m	45	39 km	1.15 /km	0.71
Event 7	1931, $M_s$ 7.9, Fuyun EQ., Fuyun F.	SSR	6.2 m	150	119 km	1.26 /km	0.38		Seg. C (~ 71 - 107 km)		0.7 m	28	36 km	0.78 /km	0.74
	Seg. A (~ 0 - 110 km)		6.4 m	143	110 km	1.30 /km	0.35	Event 26	1999, $M_w$ 7.1, Duzce EQ., North Anatolian F.	SSR	2.3 m	71	40 km	1.78 /km	0.57
	Section. A1 (~ 0 - 21 km)		5.93 m	30	21 km	1.43 /km	0.37	Event 27	2001, $M_w$ 7.8, Kokoxili EQ., Kunlun F.	SSR	4.3 m	88	421 km	0.21 /km	0.45
	Section. A2 (~ 21 - 29 km)		9.06 m	19	8 km	2.38 /km	0.33		Seg. C (~ 100 - 421 km)		4.4 m	81	321 km	0.25 /km	0.44
	Section. A3 (~ 29 - 78 km)		6.06 m	51	49 km	1.04 /km	0.33		Section. C1 (~ 100 - 202 km)		3.2 m	24	102 km	0.24 /km	0.28
	Section. A4 (~ 78 - 110 km)		6.19 m	43	32 km	1.34 /km	0.14		Section. C2 (~ 202 - 251 km)		5.7 m	17	49 km	0.35 /km	0.30
Event 8	1939, $M$ 7.9, Erzincan EQ., North Anatolian F.	SSR	4.7 m	26	300 km	0.09 /km	0.47		Section. C3 (~ 251 - 300 km)		5.4 m	30	49 km	0.61 /km	0.27
Event 9	1940, $M_w$ 7.0, Imperial Valley EQ., Imperial F.	SSR	2.3 m	61	59 km	1.03 /km	0.84	Event 28	2002, $M_w$ 7.9, Alaska EQ., Denali F. & Totschuunda F.	SSR	4.0 m	138	302 km	0.46 /km	0.52
	Seg. A (~ 0 - 19 km)		0.4 m	11	19 km	0.58 /km	0.67		Seg. A (~ 0 - 63 km)		1.4 m	13	63 km	0.21 /km	0.75
	Seg. B (~ 19 - 26 km)		1.2 m	19	7 km	2.71 /km	0.44		Seg. B (~ 63 - 126 km)		4.1 m	36	63 km	0.57 /km	0.29
	Seg. C (~ 26 - 44 km)		4.6 m	21	18 km	1.17 /km	0.22		Seg. C (~ 126 - 152 km)		4.6 m	20	26 km	0.77 /km	0.31
Event 10	1943, $M$ 7.6, Tosya EQ., North Anatolian F.	SSR	2.4 m	15	275 km	0.05 /km	0.53		Seg. D (~ 152 - 238 km)		5.2 m	51	86 km	0.59 /km	0.39
Event 11	1943, $M$ 7.2, Tottori EQ.	SSL							Seg. E (~ 238 - 302 km)		1.6 m	18	64 km	0.28 /km	0.59
	Seg. Yoshioka (~ 6 km - 11 km)		0.4 m	13	5 km	2.60 /km	0.92	Event 29	2010, $M_w$ 7.2, El Mayor-Cucapah EQ., Laguna Salada F.	SSR	0.7 m	559	55 km	10.16 /km	1.09
Event 12	1944, $M_w$ 7.3, Bolu-Gerede EQ., North Anatolian F.	SSR	3.4 m	46	206 km	0.22 /km	0.42		Seg. Laguna Salada (~ 0 - 5 km)		0.6 m	59	5 km	11.80 /km	1.14
	Seg. Gerede (~ 82 - 130 km)		4.2 m	18	48 km	0.38 /km	0.37		Seg. Pescadores (~ 5 - 20 km)		1.6 m	46	15 km	3.07 /km	0.60
	Seg. Izmetpasa (~ 130 - 182 km)		3.8 m	11	52 km	0.21 /km	0.24		Seg. Borrego (~ 33 - 35.5 km)		0.6 m	58	2.5 km	23.20 /km	0.79
Event 13	1967, $M$ 7.1, Madurun Valley EQ., North Anatolian F.	SSR	0.8 m	18	60 km	0.30 /km	0.78		Seg. Paso Inferior (~ 35.5 - 43 km)		0.8 m	231	7.5 km	30.80 /km	1.12
Event 14	1968, $M_w$ 6.6, Borrego Mountain EQ., Coyote Creek F.	SSR	0.1 m	63	31 km	2.03 /km	1.15		Seg. Paso Superior (~ 43 - 55 km)		0.5 m	155	12 km	12.92 /km	1.15
	Seg. North (~ 0 - 12 km)		0.2 m	15	12 km	1.25 /km	1.12	Event 30	2010, $M_w$ 7.1, Darfield EQ.		3.0 m	30	19 km	1.59 /km	0.54
	Seg. Central (~ 12 - 24 km)		0.1 m	27	12 km	2.25 /km	0.81	Event 31	2010, $M_w$ 6.9, Yushu EQ., Yushu F.	SSL	1.2 m	47	31 km	1.52 /km	0.52
	Seg. South (~ 24 - 31 km)		0.02 m	21	7 km	3.00 /km	1.43		Seg. Buqionggei (~ 8 - 26 km)		1.4 m	32	18 km	1.78 /km	0.49
Event 15	1974, $M$ 6.9, Izu-Hando-Oki EQ.	SSR	0.3 m	15	6 km	2.50 /km	0.45	Event 32	2011, $M_w$ 6.8, Tarlay EQ., Nam Ma F.	SSL	0.7 m	45	16 km	2.81 /km	0.51
Event 16	1977, $M_w$ 5.8, Bob-Tangol EQ., Kuh Banan F.	SSR	0.1 m	36	20 km	1.80 /km	0.86	Event 33	2013, $M_w$ 7.7, Balochistan EQ., Hoahab F.	SSL	6.5 m	309	201 km	1.54 /km	0.43
Event 17	1979, $M_w$ 6.6, Imperial Valley EQ., Imperial F.	SSR	0.3 m	36	36 km	1.00 /km	0.55		Seg. Sumargiri Kaur (~ 0 - 94 km)		6.1 m	151	94 km	1.61 /km	0.36
Event 18	1981, $M_s$ 7.1, Golbaf-Sirch EQ., Gowk F. (~ 0 - 64 km)	SSR	0.1 m	62	64 km	0.97 /km	1.57		Seg. Mashkai River (~ 94 - 201 km)		6.9 m	158	107 km	1.48 /km	0.48
Event 19	1987, $M_w$ 6.6, Supertition Hills EQ., Supertition Hills F. & Wisnert F.	SSR						Event 34	2014, $M_w$ 6.9, Yutian EQ., Ailyn Togh F.	SSL	0.5 m	25	25 km	1.00 /km	0.48
	Seg. North (~ 0 - 15 km)		0.3 m	20	15 km	1.33 /km	0.69		Seg. South Xor Kol fruit (~ 0 - 13 km)		0.6 m	21	13 km	1.62 /km	0.47
	Seg. Central (~ 11 - 23 km)		0.3 m	27	12 km	2.25 /km	0.55	Event 35	2016, $M_w$ 7.1, Kumamoto EQ., Hinagu F. & Futagawa F.	SSR	0.5 m	123	41 km	3.00 /km	0.98
Event 20	1990, $M_s$ 7.8, Luzon EQ., Philippine F.	SSL	3.5 m	49	112 km	0.45 /km	0.46		Seg. Takano-Shirahata (~ 0 - 6 km)		0.4 m	32	6 km	5.33 /km	0.47
	Seg. A (~ 0 - 48 km)		2.9 m	29	48 km	0.60 /km	0.48		Seg. Futagawa (~ 6 - 41 km)		0.6 m	91	35 km	2.60 /km	1.02
	Seg. B (~ 48 - 112 km)		4.4 m	20	64 km	0.31 /km	0.34								

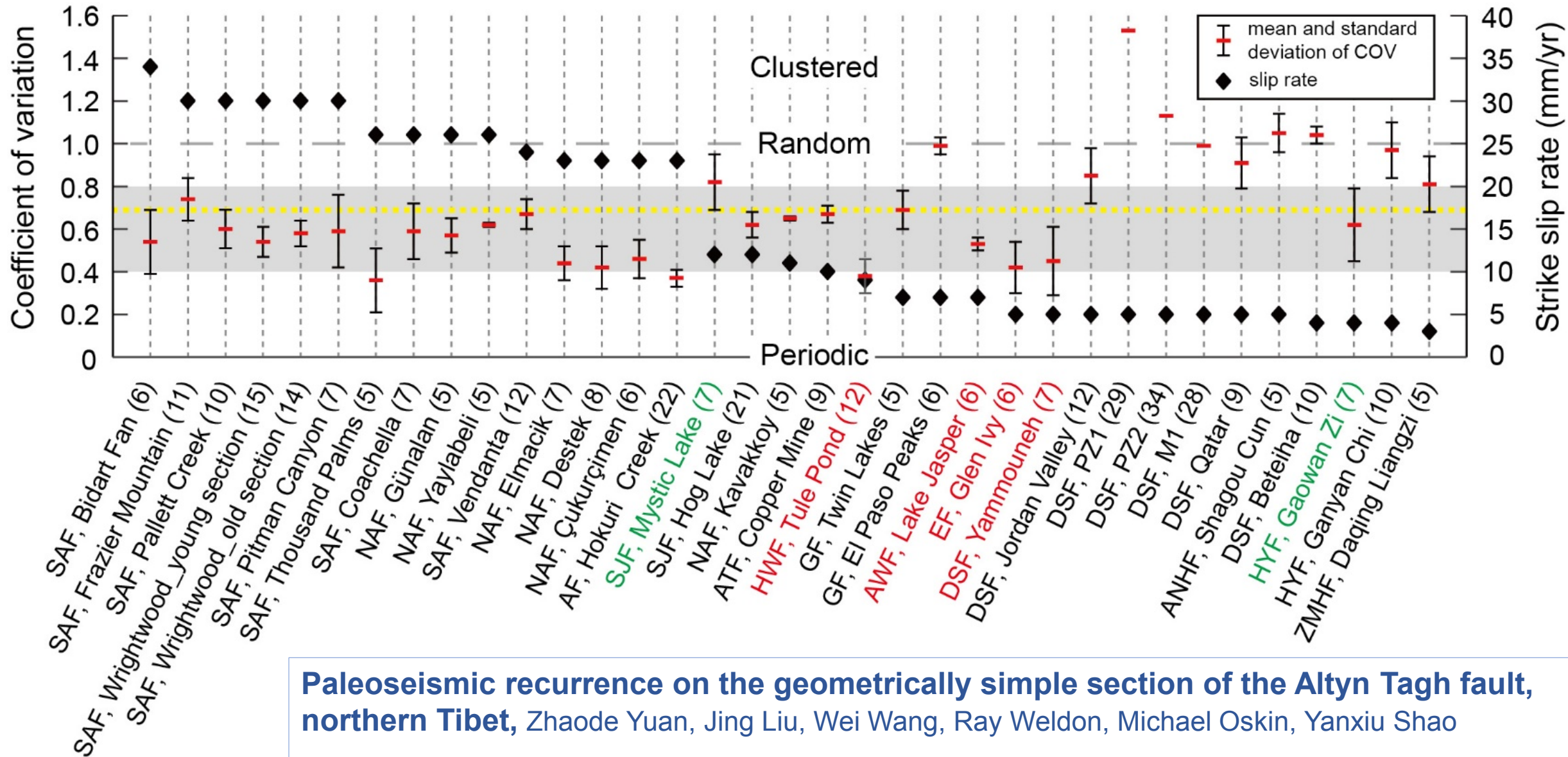
# Weldon (et al) SCEC 2019 PFDHA Meeting LightningTalk

Data from:

Modeling  
repeated  
coseismic slip  
to identify  
and characterize  
individual  
earthquakes  
from  
geomorphic  
offsets on  
strike-slip faults

Z. Lin, J. Liu-Zeng,  
R. Weldon, J. Tian,  
C. Ding, and Y. Du





Plot of coefficient of variation (COV) for the intervals between earthquakes from different sites with records of  $\geq 5$  earthquakes. Yellow dashed line represents the mean of all the sites, 0.69. Red sites are those in which slip rates and COVs do not follow the relationship that higher slip rate corresponds to lower COV. Green sites are equivocal due to large COV uncertainty. Most sites exhibit COVs between 0.4 and 0.8, indicating that quasiperiodic behavior is common.