Table DR1. Paleomagnetic measurements and relative declination and inclination anomalies

Loc.	°N	°W	Unit*	n/n_0	Dec.	Inc.	Ŭ$_{95}$	ə	R†	ąR§	F#	ąF§
Mesa Cuadrada Reference Locality (Lewis and Stock, 1998a)												
MC	30.53	114.96	Tmrsf	5/6	218.3	-6.9	4.1	442.5	reference locality			
			Tmr4	8/10	348.8	50.3	2.6	482.7	reference locality			
Measurements of the Tuffs of Dead Battery Canyon relative to Tmr4												
Sierra San Fermín (Lewis and Stock, 1998a)												
SFI	30.54	114.83	Tmr4	11/12	42.4	42	3.4	165.3	53.6	5	8.3	3.4
			Tmr5	12/12	41	41.1	4.9	71.5	-1.4	6.4	0.9	4.8
			Tmr6**	2/6	75.8	49.1	2	7724	33.4	4.4	-7.1	3.2
SFK	30.55	114.79	Tmr4	6/6	42.1	52.7	6.1	101	53.3	9	-2.4	5.3
			Tmr5	6/6	32.3	46.6	3.5	304.3	-9.8	9	6.7	5.6
			Tmr6	4/6	48	55	3.9	418.7	5.9	9.7	-2.3	5.6
Isla Tiburón (Oskin et al. 2001)												
PRS	29.05	112.49	Tmr4	8/9	22.7	35.7	3.2	292	31.6	5	14.6	3.3
			Tmr5	12/12	13.6	48.7	3.2	170	-9.1	5	-12	3.6
Measurements of the Tuffs of San Felipe												
Sierra San Fermín (Lewis and Stock, 1998a)												
SFB	30.65	114.79	Tmrsf	3/6	258.5	-3.1	9.1	178.4	40.2	8	-3.8	8
SFD	30.73	114.85	Tmrsf	8/8	253	1.8	6.5	64	34.7	6	-8.7	6.1
SFE	30.66	114.83	Tmrsf	7/7	253.4	-2.8	5.7	93.3	35.1	6	-4.1	5.6
SFH	30.55	114.74	Tmrsf**	5/5	288.6	10.6	13.6	46.8	70.3	12	-17.5	11.4
SFJ	30.54	114.83	Tmrsf	6/6	255.4	-11.2	7.1	98.9	37.1	7	4.3	6.6
Santa Rosa Basin (Stock et al. 1999)												
SRB	30.85	114.97	Tmrsf	11/11	259.4	-11.5	2.7	261.6	41.1	4	4.6	3.9
Santa Isabel Wash (Stock et al. 1999; Nagy, 2000)												
SIW	30.38	114.92	Tmrsf	11/11	229.7	-9.1	2	497.7	11.4	4	2.2	3.6
Isla Tiburón (Oskin et al. 2001)												
SA	29.18	112.46	Tmrsf	6/7	235.1	-15.8	5.4	129	14.5	6	8.9	5.4
PR	29.07	112.49	Tmrsf	10/12	231.3	-1.3	4.6	101	10.7	5	-5.6	4.9
SM	28.98	112.46	Tmrsf	11/13	226	2.7	4	122	5.4	5	-9.6	4.6
BV	28.92	112.47	Tmrsf**	16/18	232.9	16.4	7.8	23	12.3	7	-23.3	7
Coastal Sonora (Oskin et al. 2001)												
PC	29.02	112.08	Tmrsf	13/13	263	-11.6	2.2	338	42.4	4	4.7	3.7
BK	28.88	112.01	Tmrsf	10/11	245.6	-10.4	3.9	138	25	5	3.5	4.5

* Tmrsf, Tuff of San Felipe; Tmr4 is the upper unit of the Tuffs of Mesa Cuadrada; Tmr5 and Tmr6, Tuffs of Dead Battery Canyon.

† Rotation of Tmrsf and Tmr4 relative to reference locality at Mesa Cuadrada. Clockwise values are positive. 2.3° subtracted from rotation values in Sonora to account for finite rotation of reference locality due to Pacific-North America plate displacement. These declination anomalies are probably caused by tectonic rotation of crustal blocks (c.f. Lewis and Stock, 1998a). Rotation of Tmr5 and Tmr6 calculated relative to Tmr4 at the same sample locality. Declination anomalies for Tmr5 and Tmr6 represent secular variation in the short time between emplacement of Tmr4 and emplacement of Tmr5 and Tmr6. Similar anomalies on both sides of the Gulf of California support that these are parts of the same pyroclastic flow deposit.

§ Calculated according to Beck (1980) and Demerest(1983).

Flattening of inclination relative to reference locality at Mesa Cuadrada for Tmrsf, Tmr3, and Tmr4. Flattening of inclination of Tmr5 and Tmr6 calculated relative to Tmr4 at sample locality to assess correlation.

** Sample with high error values or less than 3 cores used in average.

Table DR1
REFERENCES

Beck, M.E., 1980, Paleomagnetic record of plate-margin tectonic processes along the western edge of North America: Journal of Geophysical Research, v. 85, p. 7115–7131.

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