

Table A. Australian Paleomagnetic Poles Used in AUSWUS and SWEAT Reconstructions.

Pole Symbol	Rock Unit	Age (Ma)	Present Day		A_{95} ($\delta p/\delta m$)	Ref.	AUSWUS ¹		SWEAT ²		Reliability							Q
			Plat.	Plong.			Rlat.	Rlong.	Rlat.	Rlong.	1	2	3	4	5	6	7	
IM	Mt. Isa dykes (metamorphosed)	<1550-1500	79°S	111°E	8°	4	18°E	241°E	22°S	253°E	o	x	x	o	x	x	x	4
GRV	Gawler Range Volcanics	1530 ± 20	60°S	50°E	6°	1	26°S	214°E	1°N	237°E	x	x	x	x	x	x	x	5
GA	GA dykes	1470 ± 20	61°S	51°E	9°	1	26°S	215°E	2°N	238°E	x	x	x	x	x	x	x	5
IB	Mount Isa dykes	<1480	53°S	102°E	11°	1	1°N	222°E	27°N	225°E	o	o	x	o	x	x	x	4
ML	Morawa Lavas	1360 ± 140	20°N	59°E	17°	1	11°N	140°E	24°S	158°E	x	x						2?
GC	Giles Complex	1078+/-5	18°S	127°E	23/29	4,5,7	41°N	223°E	50°N	182°E	x	o	o	o	x	x	x	3
SDS	Stuart Dyke Swarm	1076 ± 33	10°S	82°E	10°	1,2	18°N	179°E	6°N	182°E	x	x						2?
KDS	Kulgera Dyke Swarm	1090 ± 32	17°N	84°E	12°	3	32°N	153°E	2°N	156°E	x	x	x	x	x	x	x	5
IAR	Mt. Isa Dykes	1116 ± 12	10°S	131°E	17°	4	50°N	223°E	53°S	169°E	x	x	x	x	x	x	x	5
MDS	Mundine Well Dyke Swarm	755 ± 3	47°N	136°E	5°	5	68°N	86°E	20°N	107°E	x	x	x	x	x	x	x	6
YB	Yilgarn Dykes	750-700?	20°N	102°E	28°	6	49°N	157°E	15°N	147°E	o	o	x	x	x	x	x	4

Notes: Plat. and Plong. are the latitude and longitude of the paleomagnetic pole in present-day coordinates; A_{95} is the semi-angle of the 95% cone of confidence about the pole; Ref. gives the reference for the pole and isotopic age used in this study; Rlat. and Rlong. are the latitude and longitude of the paleomagnetic pole after rotation about the specified Euler pole to bring the proto-Australian continent into North American coordinates; Reliability is the reliability criteria of Van der Voo (1989) and include 1, well determined rock age and a presumption that the magnetization is the same age; 2, sufficient number of samples ($N > 24$), precision parameter k (or K) ≥ 10 and cone of confidence α_{95} (or A_{95}) $\leq 10^\circ$; 3, adequate demagnetization that demonstrably includes vector subtraction (or equivalent method); 4, field tests that constrain the age of magnetization; 5, structural control, and tectonic coherence with craton or block involved; 6, presence of reversals; 7, no resemblance to paleopoles of younger age (by more than a period); x indicates that it meets the stated criteria; o means that it fails the criteria and a blank indicates that it is not determinable from the published data; Q is the numerical sum of the accepted reliability criteria.

¹AUSWUS configuration (this study), Euler pole of rotation is: latitude = 51.46°N, longitude = 106.70°E, angle = 114.33°.

²SWEAT configuration of Dalziel (1997) (keeping North America fixed in present day coordinates), Euler pole of rotation is: latitude = 28.90°, longitude = 126.04°, angle = 132.11°.

References:

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