

Table DR1: Poles used to construct Laurentian margin paleolatitude plot (see Fig. 9).

	Paleopole Lat/Long	A ₉₅	rotated to Gondwana	rotated to Laurentia	Age (Ma)	paleo- Lat.	Ref
<u>Laurentia</u>							
Callander	46°N/310°E	6°	-	46°N/301°E	577 ±1	86°S	1
Catoctin Fm.	43°N/298°E	17°	-	43°N/298°E	570 ±5	83°S	1
Johnnie Fm.	10°N/342°E	~10°	-	10°N/342°E	~555	39°S	1
Skinner Cv.	15°S/327°E	9°	-	15°S/327°E	550 ±3	19°S	1
Tapeats Ss.	5°S/338°E	5°	-	5°S/338°E	~505	27°S	1
Moore Hol.	4°N/339°E	5°	-	4°N/339°E	~495	35°S	1
<u>Congo</u>							
Sinyai Dyke	29°S/319°E	5°	6°S/267°E	59°N/301°E	547 ±4	81°S	2
Ntonya Ring	28°N/345°E	2°	25°N/322°E	1°N/330°E	522 ±13	36°S	3
<u>India</u>							
Bhander Ss.	49°S/034°E	6°	0°N/285°E	41°N/309°E	~550	80°S	4
<u>Australia</u>							
Hawker Gp.	27°S/002°E	11°	14°N/305°E	19°N/321°E	~530	56°S	5
Lake Frome	29°S/026°E	10°	6°N/325°E	0°S/311°E	~505	40°S	5
<u>Antarctica</u>							
Sor Rondane	28°S/010°E	3°	3°S/325°E	0°N/308°E	515 ±10	40°S	6

Gondwana internal pole rotations from Lottes and Rowley (1990), rotated to South American coordinates. Gondwana poles (South America) rotated to Laurentia (North America) after Weil et al. (1998). References: 1 - modified after McCausland and Hodych (1998); 2 - Meert and van der Voo (1996), 3- Briden et al. (1993), 4 - McElhinny et al. (1978), 5 - Klootwijk (1980), 6 - Zijderveld (1968).

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