

Table S1*Characteristic remanent magnetization (ChRM) direction of each specimen*

Sample ID	Method	Demagnetization steps	N	D _g (°)	I _g (°)	D _s (°)	I _s (°)	MAD (°)
WZ16-1A	TD	230–440 °C	11	340.8	3.8	316.5	-52.7	3.2
WZ16-2A	TD	230–440 °C	10	343.7	5.3	321.7	-53.8	7.8
WZ16-3A	TD	230–470 °C	12	344.6	16.6	333.9	-45.7	9
WZ16-4A	TD	230–440 °C	11	336.3	3.2	311.3	-49.6	3.8
WZ16-5A	TD	260–560 °C	14	343.8	10.3	327.2	-50.2	4.7
WZ16-6A	TD	230–560 °C	5	327.9	10.4	312.5	-38.6	8.5
WZ16-7A	TD	230–440 °C	11	331	15.7	320.1	-37.7	7.7
WZ16-8A	TD	230–500 °C	13	339.8	18.2	330.2	-41.6	5.5
WZ18-1	TD	310–450 °C	5	0.4	11	342.6	-53.6	3.9
WZ18-2	AFD	25–100 mT	8	357.8	12.4	341	-50.8	2.3
WZ18-6A	TD	250–580 °C	12	9.8	5.7	351.1	-63.3	6
WZ18-7	TD	310–480 °C	6	357.4	25.5	352	-40.2	5.6
WZ18-8	TD	280–480 °C	7	15	7.9	3.6	-63.6	6.9
WZ19-1A	TD	260–580 °C	17	348.8	-34.1	258.7	-54.2	4.1
WZ19-3A	TD	260–580 °C	17	343.4	-26.3	273	-51.4	5.4
WZ19-4A	TD	290–580 °C	16	335.7	-14.7	289.7	-43.6	6
WZ19-5A	TD	260–580 °C	16	328.9	-48.8	245.6	-35.5	2.6
WZ19-6A	TD	230–580 °C	18	320.4	-36.6	261.1	-31	2.5
WZ19-10	TD	260–580 °C	13	3	-34.5	247	-64.3	1.8
WZ20-1A	TD	230–580 °C	14	34.7	6.3	49.3	-64.5	2.2
WZ20-2A	TD	230–580 °C	14	31.9	6.8	42.8	-65	2.3
WZ20-3	TD	260–580 °C	13	16.3	25.1	13.7	-47.3	3.2
WZ20-4	TD	230–580 °C	13	34.6	17.3	41.5	-54.1	3.9
WZ20-7A	AFD	30–80 mT	7	2.6	8.9	343.1	-56.6	4.1
WZ20-8A	AFD	20–50 mT	6	13.9	12.2	4.5	-59.2	1.7
WZ20-9	TD	280–570 °C	12	31.9	34.7	32.2	-37.8	8.9
WZ23-4A	TD	230–530 °C	12	157.7	4.4	113.5	65.6	4.4
WZ23-5A	TD	290–570 °C	14	159.9	0.9	123.5	65.7	5.1
WZ23-6A	TD	250–540 °C	9	162.7	2.8	123.9	69.7	6.2
WZ23-8A	TD	230–580 °C	16	134.2	-0.8	105.1	42.1	3.3
WZ23-10	TD	230–470 °C	10	130.3	-0.9	103.4	38.4	10
WZ24-1	TD	250–450 °C	7	6.4	-13.8	328.7	-73	9.3
WZ24-2A	AFD	35–100 mT	6	358.8	-11.1	320.9	-65.6	6
WZ24-3	TD	250–530 °C	7	11.4	-18.8	326.2	-79.9	8.4
WZ24-4A	AFD	20–100 mT	10	0.1	6.4	345.7	-53.1	4
WZ24-6	TD	250–510 °C	9	21.8	1.4	36	-60.8	8.8
WZ24-9A	TD	230–530 °C	10	6.8	-7.3	1.8	-72.2	9.4
WZ24-10	TD	280–450 °C	5	358.9	6.8	344.4	-52.1	9.9
WZ25-1A	TD	230–430 °C	8	341	4.1	311	-50.9	7

WZ25-2A	TD	230–430 °C	9	340	-5.6	295.7	-53.6	3.5
WZ25-3A	TD	230–390 °C	7	331.8	0.2	300.2	-44	5.7
WZ25-6A	TD	230–570 °C	16	343.9	18.1	330.5	-44.9	7.2
WZ25-7A	TD	260–580 °C	16	340.1	28.7	337.1	-35	8.6
WZ25-9A	TD	230–530 °C	11	3.4	16.1	353.1	-57.4	1.8
WZ25-10	TD	230–430 °C	8	13.2	16.1	10.7	-59.8	1.9
WZ26-4A	AFD	25–120 mT	9	353.7	63.1	151.1	45.9	2.1
WZ26-6A	AFD	20–60 mT	6	193	-49.6	306.3	-50.5	2.7
WZ26-7A	AFD	20–120 mT	10	179.4	-39.2	303.2	-64.6	10
WZ26-9A	AFD	20–120 mT	10	181.7	-47.7	312.7	-57.2	3.6
WZ26-10	AFD	25–80 mT	7	7.7	64.5	144.4	41.8	2.8
WZ26-11	AFD	25–120 mT	9	199.1	-28.9	271.4	-53.5	7.1
WZ27-3A	AFD	20–100 mT	9	235.9	81.1	136.7	44.6	5.5
WZ27-5A	AFD	30–120 mT	7	103.2	87.8	123.9	40	5.5
WZ27-7A	AFD	20–120 mT	10	4.3	78.6	110.6	47	5.5
WZ27-9A	AFD	20–120 mT	10	151	83.9	128.3	36.4	6.6
WZ27-10	AFD	25–100 mT	8	276.9	74	138.3	55.5	6.6
WZ28-1A	AFD	25–120 mT	9	259.8	-87.2	302.4	-40	0.6
WZ28-2A	AFD	25–120 mT	9	148	-73.9	293.7	-56.4	1.6
WZ28-4A	AFD	30–100 mT	7	123.5	-72.3	305.9	-59.7	1.6
WZ28-5A	AFD	25–120 mT	9	106	-61.6	328.7	-67.3	2.6
WZ28-6A	AFD	25–120 mT	9	100.5	-61	334.7	-65.9	0.8
WZ28-7A	AFD	20–120 mT	9	107	-45.1	15.6	-76.7	1.1
WZ29-1A	HD	230–580 °C	14	358.4	-66.2	295	-46	3.1
WZ29-2A	HD	260–580 °C	13	1	-75.2	282.4	-48.7	3.9
WZ29-3A	HD	230–580 °C	14	13.3	-69.3	291.9	-52.1	2.6
WZ29-5A	HD	250–420 °C	6	7.5	-81.9	272.1	-49.8	4.7
WZ29-6A	HD	230–580 °C	14	33.3	-77.4	276.3	-55.6	3.3
WZ29-7A	AFD	20–60 mT	5	27	-73.3	284.2	-55.9	3.9
WZ29-8A	HD	260–530 °C	10	48.9	-78.2	271.4	-57.7	2
WZ29-10	AFD	20–120 mT	11	38	-65.3	296.6	-62	3.2

Note: TD, thermal demagnetization; AFD, alternating field demagnetization; Demagnetization Steps, demagnetization steps to calculate the ChRM direction; N, number of demagnetization steps to calculate the ChRM direction; Dg and Ig, declination and inclination before tilt correction; Ds and Is, declination and inclination after tilt correction; MAD, maximum angular deviation of the ChRM direction.