

Erratum

Erratum to “Iron oxidation state in lower mantle mineral assemblages
I. Empirical relations derived from high-pressure experiments”
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In [Table 1](#) of the above article the wt.% oxide values and their totals for samples SL21, SL22 and SL23 are incorrect. The corrected and complete [Table 1](#) is reprinted below. We apologise for any inconvenience that these errors may have caused.

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Table 1
Composition of starting materials and run products

Starting materials (wt.% oxides)															
Run#	SiO ₂	TiO ₂	Al ₂ O ₃	Cr ₂ O ₃	NiO	FeO	Fe ₂ O ₃	MnO	MgO	CaO	Na ₂ O	Σ _{ox}	Mg#	Fe ³⁺ /ΣFe	
SL21	44.6	—	—	—	—	6.72 ^a	15.03	—	33.7	—	—	100.0	0.75	0.67	
SL22	45.4	—	2.88	—	—	6.83 ^a	10.63	—	34.2	—	—	100.0	0.79	0.58	
SL23	49.3	—	—	—	—	14.29 ^a	—	—	36.4	—	—	100.0	0.82	0.00	
KLB1	44.5	0.16	3.59	0.31	0.25	8.10	—	0.12	39.2	3.44	0.30	99.97	0.90	0.00	
High-pressure run products (cations p.f.u.)															
Run#	phase ^b	Si	Ti	Al	Cr	Ni	Fe ^c	Mn	Mg	Ca	Na	Σ _{cat}	Mg#	Fe ³⁺ /ΣFe	Fe ³⁺ /ΣFe
														EELS	Möss
S2069	pv	0.984(20)	—	0.001(1)	—	—	0.108(3)	—	0.923(18)	—	—	2.015(27)	0.895	—	0.32(8)
	fp	0.001(1)	—	0.000(1)	—	—	0.318(3)	—	0.680(14)	—	—	0.999(14)	0.681	—	—
S2104	pv	0.930(19)	—	0.068(2)	—	—	0.158(6)	—	0.879(18)	—	—	2.036(26)	0.848	0.46(10)	0.43(8)
	fp	0.001(1)	—	0.004(1)	—	—	0.378(4)	—	0.614(12)	—	—	0.997(13)	0.618	0.09(5)	—
S2395	pv	0.980(29)	—	0.003(1)	—	—	0.127(11)	—	0.908(27)	—	—	2.019(42)	0.877	0.41(10)	0.38(20)
	fp	0.004(1)	—	0.000(1)	—	—	0.379(8)	—	0.613(18)	—	—	0.996(20)	0.617	0.13(5)	—
S2557	pv	0.932(19)	—	0.068(2)	—	—	0.153(6)	—	0.880(18)	—	—	2.033(26)	0.852	0.48(10)	0.45(20)
	fp	0.001(1)	—	0.003(1)	—	—	0.320(6)	—	0.673(13)	—	—	0.997(15)	0.678	0.00(2)	—
S2671	pv	0.947(28)	—	0.065(2)	—	—	0.125(9)	—	0.884(27)	—	—	2.020(40)	0.876	0.46(10)	0.32(20)
	fp	0.002(1)	—	0.008(1)	—	—	0.363(7)	—	0.621(19)	—	—	0.994(20)	0.631	0.18(10)	—
S2718	pv	0.963(19)	0.003(1)	0.052(2)	0.003(1)	0.001(1)	0.072(3)	0.001(1)	0.897(18)	0.014(1)	0.002(1)	2.008(27)	0.925	—	0.30(20) ^d
	fp	0.003(1)	0.000(1)	0.008(1)	0.004(1)	0.006(1)	0.154(3)	0.001(1)	0.809(16)	0.001(1)	0.012(1)	0.997(17)	0.840	0.03(3)	—
	mj	0.870(17)	0.001(1)	0.259(8)	0.004(1)	0.001(1)	0.064(2)	0.002(1)	0.721(14)	0.067(2)	0.016(1)	2.005(24)	0.918	0.25(5)	—
S2728	pv	0.958(19)	0.004(1)	0.042(1)	0.003(1)	0.000(1)	0.065(6)	0.001(1)	0.921(18)	0.018(1)	0.002(1)	2.016(27)	0.934	—	0.23(20) ^d
	fp	0.001(1)	0.000(1)	0.005(1)	0.003(1)	0.006(1)	0.144(4)	0.001(1)	0.828(17)	0.001(1)	0.009(1)	0.999(17)	0.851	0.02(2)	—
	mj	0.909(27)	0.000(1)	0.220(7)	0.006(1)	0.000(1)	0.057(3)	0.002(1)	0.689(21)	0.083(3)	0.019(1)	1.987(35)	0.923	0.40(10)	—

^a Added as a stoichiometric mixture of metallic Fe and Fe₂O₃.

^b pv: perovskite; fp: ferropericlasite; mj: majorite.

^c Total iron.

^d Determined from relative areas corrected for Fe³⁺ in majorite.