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ERRATUM

Erratum to: Melts of garnet lherzolite: experiments, models and comparison to melts of pyroxenite and carbonated lherzolite

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An unfortunate coding error led to erroneous predicted abundances of Na_2O in the melting models presented in Table 5 of Grove et al. (2013). The source of this error has been discovered and corrected; the cause of the discrepancy was an error in assignment of the partition coefficient expressions used for orthopyroxene and clinopyroxene. The values presented in a corrected Table 5 are the ones obtained using the appropriate partition coefficients for Na_2O. Our models of garnet lherzolite melts now have Na_2O abundances that are similar to the melts predicted by Longhi (2002) and the experimentally produced melt of Walter (1998).

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Table 5 Comparison of garnet lherzolite melting model of Longhi and test of model

	Primitive H&Z 10 and 1 % melts				Depleted H&Z 10 and 1 % melts			
	10 %[a]	L '02	1 %	L '02	10 %	L '02	1 %	L '02
SiO_2	45.7	46.2	46.0	45.6	45.8	46.0	45.4	44.9
TiO_2	1.14	0.98	2.09	1.43	1.04	0.97	2.09	1.61
Al_2O_3	13.0	13.0	14.9	15.1	12.8	12.8	13.1	14.3
Cr_2O_3	0.18	0.32	0.13	0.22	0.18	0.34	0.15	0.29
FeO	10.8	9.60	9.66	9.60	10.6	9.70	10.6	10.1
MgO	17.4	18.1	14.3	15.3	18.0	18.5	16.6	17.2
CaO	9.58	9.76	7.85	6.91	9.86	10.1	8.48	8.34
Na_2O	1.96	1.57	2.82	2.68	1.80	1.32	2.93	1.96
K_2O	0.29	0.28	2.27	2.13	0.07	0.07	0.59	0.54

	40.07[b]	Model[c]
SiO_2	45.5	45.6
TiO_2	1.27	0.89
Al_2O_3	10.3	11.1
Cr_2O_3	0.25	0.16
FeO	10.7	10.9
MgO	19.9	20.0
CaO	9.31	9.70
Na_2O	1.08	0.94
K_2O	0.7	0.65
T (°C)	1,610	1,624

Model calculation at 3 GPa and 10 and 1 % melting from this study and Longhi (2002)

[a] Melts of Hart and Zindler primitive (Hart and Zindler 1986) and depleted (Kinzler and Grove 1992) mantle compositions

[b] 40.07 shows the composition and temperature of a Lherzolite melt from Walter (1998) at 4 GPa and 13 wt% melting

[c] Forward model of melting using the Walter (1998) lherzolite composition and 13 % melting at 4 GPa. Temperature is that predicted by the model

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