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Jennings, Eleanor S. and Holland, T.J.B. (2015) A simple thermodynamic model for melting of Peridotite in the system NCFMASOCr. *Journal of Petrology* 56 (5), pp. 869-892. ISSN Print ISSN 0022-3530 - Online ISSN 1460-2415.

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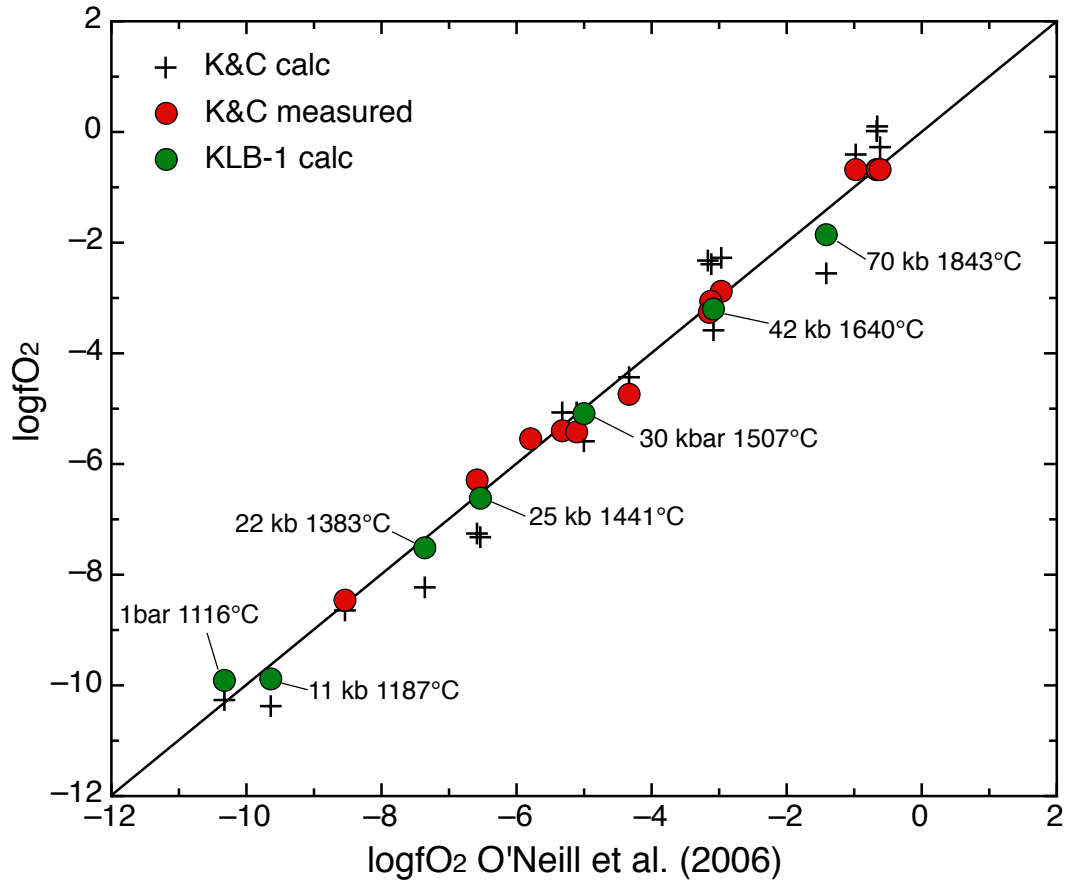


Figure 1: Plot of  $\log f_{\text{O}_2}$  vs  $\log f_{\text{O}_2}$  from the equation of O'Neill et al. (2006). Red circles: measured melt compositions (low in  $\text{K}_2\text{O}$  and  $\text{P}_2\text{O}_5$ ) from Kress & Carmichael (1991). Green circles: calculated with the model of this study for KLB-1 bulk composition along the solidus at the  $P$  and  $T$  indicated. Black crosses: calculations with the equation of Kress & Carmichael (1991). There is good agreement between the model of this study and O'Neill et al. (2006), but the expression of Kress & Carmichael (1991) gives more scattered results.

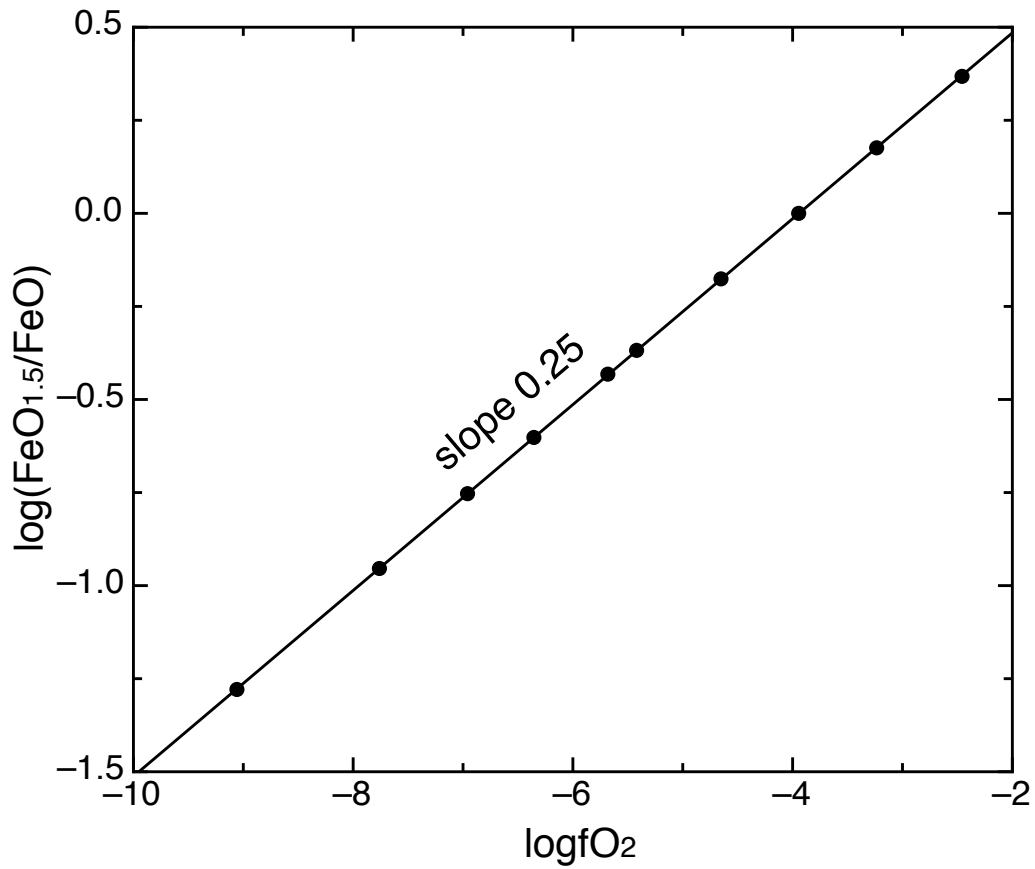


Figure 2: Plot of  $\log \frac{FeO_{1.5}}{FeO}$  vs  $\log f_{O_2}$  for a MORB composition with  $FeO_T = 10.8$  wt% but varying  $Fe_2O_3:FeO$  from 0.05 to 0.7. The slope is exactly 0.25 as expected.