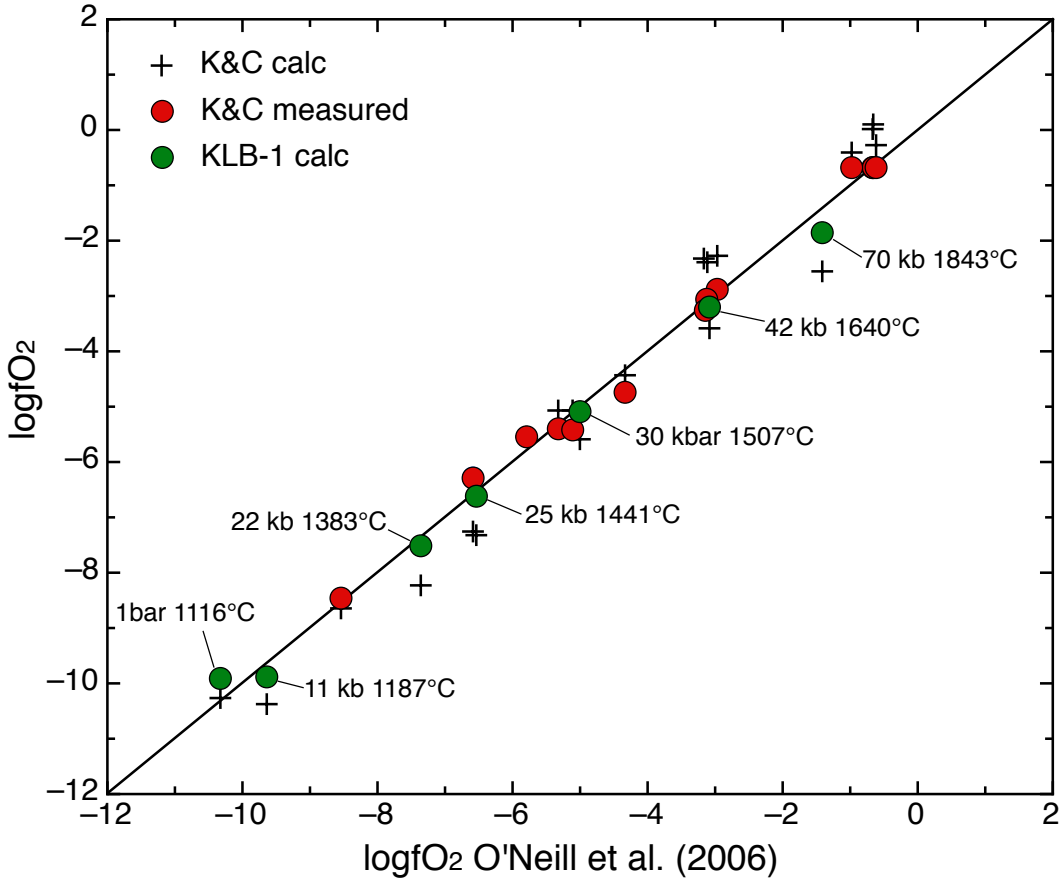

Figure 1: Plot of $\log f_{O_2}$ vs $\log f_{O_2}$ from the equation of O'Neill et al. (2006). Red circles: measured melt compositions (low in K_2O and P_2O_5) from Kress & Carmichael (1991). Green circles: calculated with the model of this study for KLB-1 bulk composition along the solidus at the P 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.

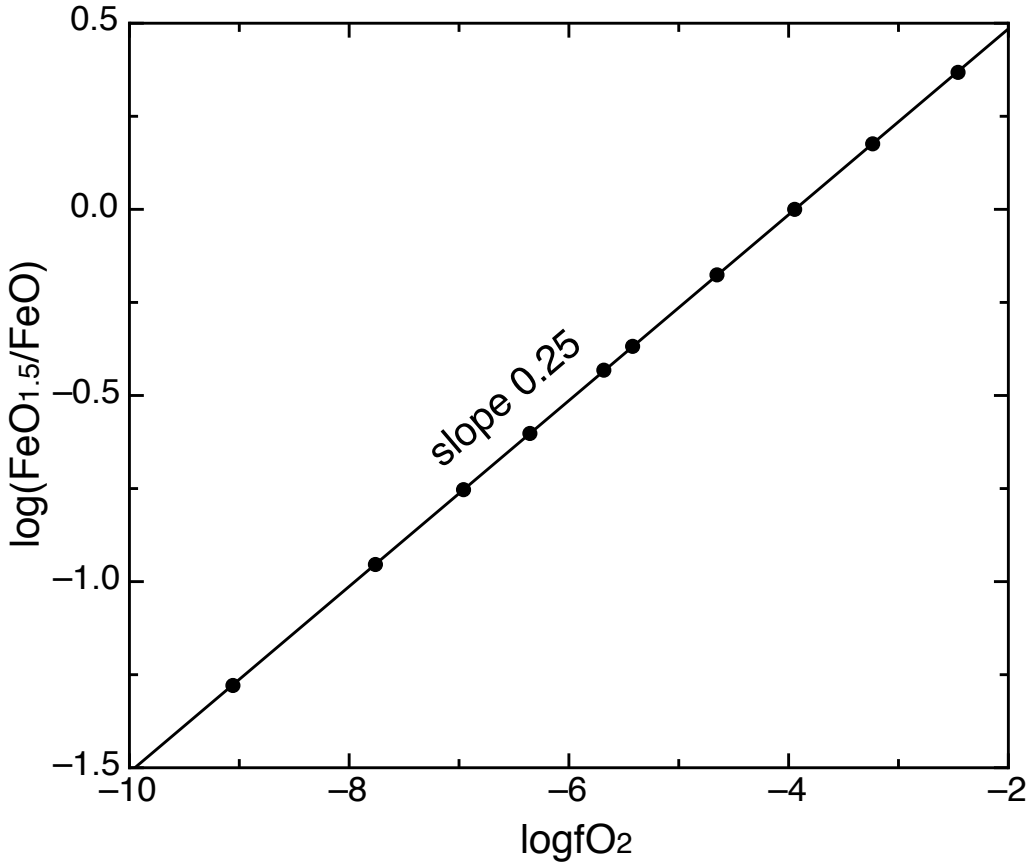

Figure 2: Plot of $\log\frac{FeO_{1.5}}{FeO}$ vs $\log f_{\mathrm{O}_2}$ for a MORB composition with $\mathrm{FeO}_T = 10.8$ wt% but varying $\mathrm{Fe_2O_3}$:FeO from 0.05 to 0.7. The slope is exactly 0.25 as expected.