

Figure 4: Fe appears to have a negative trend starting around 45 wt% which indicates that Fe is easily incorporated into lattice structures as the other major element diagrams show the first crystals forming around 45 wt% silica. Fe-bearing minerals include olivines, magnetite, and pyroxenes. These all form relatively early in the evolution of a melt.



Figure 3: Mg, in comparison to Fe, appears more compatible as it is incorporated into crystals more easily as indicated by its rapid consumption. This is reflected in the negative trend that appears steeper than that of Fe in figure 3. Mg-bearing minerals phases include olivines, pyroxenes, amphiboles, and micas (biotite).