

fractional crystallization

$$\frac{C_M}{C_{M_0}} = F^{D-1}$$

batch equilibrium

$$\frac{C_M}{C_{M_0}} = \frac{1}{F + D(1-F)}$$

at $D=[0,1] \rightarrow$ same

★ for $D \ll 1$ (incompatible), similar prediction for low amounts of crystal segregation as $\frac{M_m}{M_0} \rightarrow 0$, fractional crystallization has higher $\frac{C_M}{C_{M_0}}$

★ for $D > 1$ (compatible), $\frac{C_M}{C_{M_0}} \rightarrow 0$ faster

during fractional crystallization. Less crystal needed to deplete system of element

