Pick initial q_∞, σ, μ

$$\begin{bmatrix} \frac{df}{dq_\infty}\Big|_{x=1} & \frac{df}{d\sigma}\Big|_{x=1} & \frac{df}{d\mu}\Big|_{x=1} \\ |_{x=2} & |_{x=2} & |_{x=2} \\ \vdots & \vdots & \vdots \end{bmatrix} \begin{bmatrix} \Delta q_\infty \\ \Delta\sigma \\ \Delta\mu \end{bmatrix} = \begin{bmatrix} y_{actual} - q(x_1, q_\infty, \sigma, \mu) \\ x_2 \\ x_3 \\ \vdots \end{bmatrix}$$

A $\quad$ Δc $\quad$ R

$$A\Delta c = R$$

$$A^T A \Delta c = A^T R$$

$$\Delta c = (A^T A)^{-1} A^T R$$

Update our parameters

$$\begin{pmatrix} q_\infty \\ \sigma \\ \mu \end{pmatrix}' = \Delta c + \begin{pmatrix} q_\infty \\ \sigma \\ \mu \end{pmatrix}$$

Repeat until convergence $\quad \left| \begin{pmatrix} q_\infty \\ \sigma \\ \mu \end{pmatrix}' - \begin{pmatrix} q_\infty \\ \sigma \\ \mu \end{pmatrix} \right| < 1E-3$