$$L = L_0 e^{-kd} + L_{\infty} (1 - e^{-kd})$$

$$L = (L_0 - L_{\infty}) e^{-kd} + L_{\infty}$$

$$\frac{L - L_{\infty}}{L_{\infty}} = \frac{L_0 - L_{\infty}}{L_{\infty}} e^{-kd}$$

$$C = C_0 e^{-kd}$$

$$d = -\frac{1}{k} \ln \frac{C}{C_0}$$

$$\frac{C}{C_0} \ge 0.05$$

$$d_{vis} = -\frac{1}{k} \ln (0.05) \approx \frac{3}{k}$$

$$\begin{cases} u = u_0 + \alpha \frac{x}{z} \\ v = v_0 + \alpha \frac{y}{z} \end{cases}$$

$$v_h = v_0 - \alpha \tan \theta$$

$$L = (L_0 - L_{\infty}) e^{-kd} + L_{\infty}$$

$$= (L_0 - L_{\infty}) e^{-\frac{k\lambda}{v - v_h}} + L_{\infty}$$

$$\frac{dL}{dv} = \frac{k\lambda (L_0 - L_{\infty})}{(v - v_h)^2} e^{\frac{-k\lambda}{v - v_h}}$$

$$\frac{d^2L}{dv^2} = \frac{k\lambda (L_0 - L_{\infty})}{(v - v_h)^3} e^{\frac{-k\lambda}{v - v_h}} (\frac{k\lambda}{v - v_h} - 2)$$

$$\frac{d^2L}{dv^2} = 0 \text{ khi } \frac{k\lambda}{v - v_h} - 2 = 0$$

$$v_i = v_h + \frac{k\lambda}{2}$$

$$k = \frac{2(v_i - v_h)}{\lambda} = \frac{2}{d_i}$$

 $d_{vis} = \frac{3}{k} = \frac{3\lambda}{2(v_i - v_h)}$ 

 $v_i = v_h + \frac{k\lambda}{2}$