$$\vartheta_{Ar} = \begin{bmatrix} r \\ \sigma \\ h^* \\ r_c \\ \beta \end{bmatrix} = \begin{bmatrix} 0.034 \\ 0.501 \\ 4.000 \\ 2.837 \\ 0.110 \end{bmatrix}$$

$$\lambda_{NS}$$

$$\vartheta_{NS} = \begin{bmatrix} r \\ \sigma \\ \omega \end{bmatrix} = \begin{bmatrix} 3.842 \\ 0.262 \\ 0.013 \end{bmatrix}$$

$$\vartheta_{Cy} = \begin{bmatrix} r \\ \sigma \end{bmatrix} = \begin{bmatrix} 0.683 \\ 1.773 \end{bmatrix}$$

$$\lambda_{Ar}$$

$$\lambda_{Cy}$$

$$\lambda = \begin{bmatrix} \lambda_{NS}^* \\ \lambda_{Ar} \\ \lambda_{Cy} \end{bmatrix} = \begin{bmatrix} 0.7634 \\ 0.1616 \\ 0.0750 \end{bmatrix}$$