Parambarplot(wave, timepoint) ← Model_LHS
Generate LHS matrix

Read LHS matrix
For j = rows of LHS

$$\text{LHS matrix} = \begin{bmatrix} a_1 & b_1 & c_1 \\ a_2 & b_2 & c_2 \\ a_3 & b_3 & c_3 \end{bmatrix}$$

Duplicate row j →

$$\begin{bmatrix} a_1 & b_1 & c_1 \\ a_1 & b_1 & c_1 \\ a_1 & b_1 & c_1 \end{bmatrix}$$

For i = columns (parameter)

For each parameter i, down 5%

For each parameter i, up 5%

$$\begin{bmatrix} a_1 * 0.95 & b_1 & c_1 \\ a_1 * 1 & b_1 & c_1 \\ a_1 * 1.05 & b_1 & c_1 \end{bmatrix}$$

Odesolve
T1D_ode →

$$\begin{bmatrix} sol(1) \\ sol(2) \\ sol(3) \end{bmatrix}$$

→ $plotsol(i,:) = \left[\left(\frac{sol(1)}{sol(2)} - 1 \right) * 100\% \quad \left(\frac{sol(3)}{sol(2)} - 1 \right) * 100\% \right]$

$$plotsol = \begin{bmatrix} p_{11} & p_{12} \\ p_{21} & p_{22} \\ p_{31} & p\_32 \end{bmatrix}$$

Absolute value ←

|plotsol| ←

Maximize plotsol by row ←