Generate input design

Run model at inputs

Build emulator for each output dim.

Perform GSA (eFAST/Sobol)

Approach 1 (emulator only)

Compute principal components (PCs)

Build emulator for first n PCs.

Perform GSA (eFAST/Sobol)

Approach 2 (emulator-PCA hybrid)

Perform GSA (GAM/PLS)

Approach 3 (no emulator)