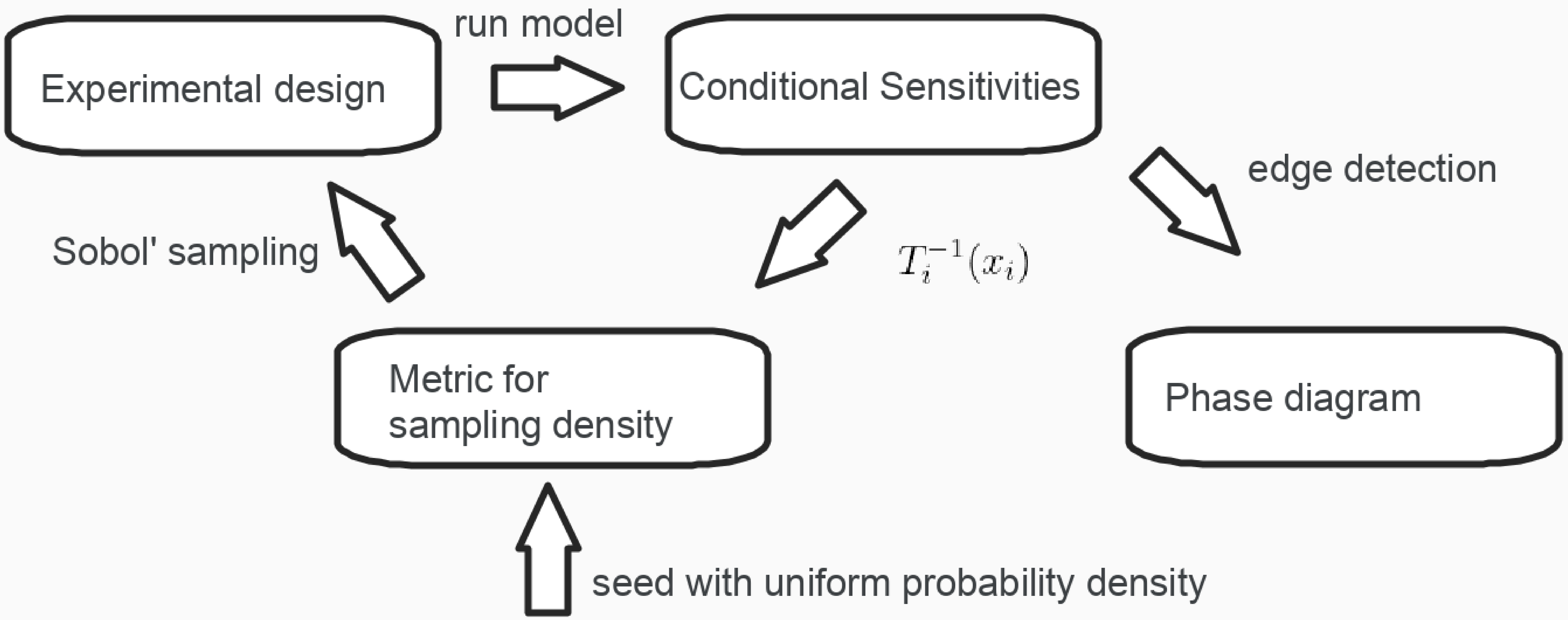
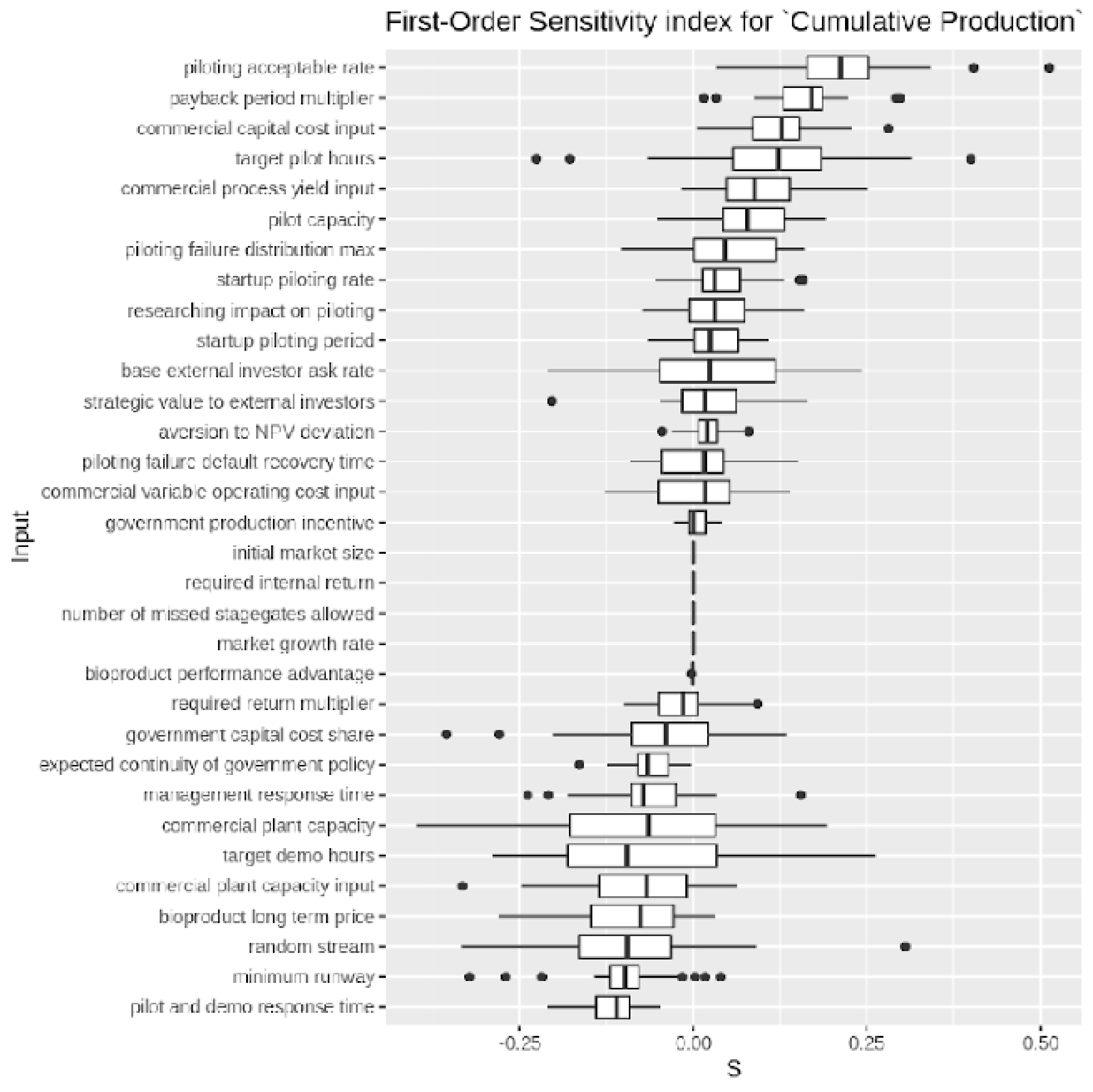
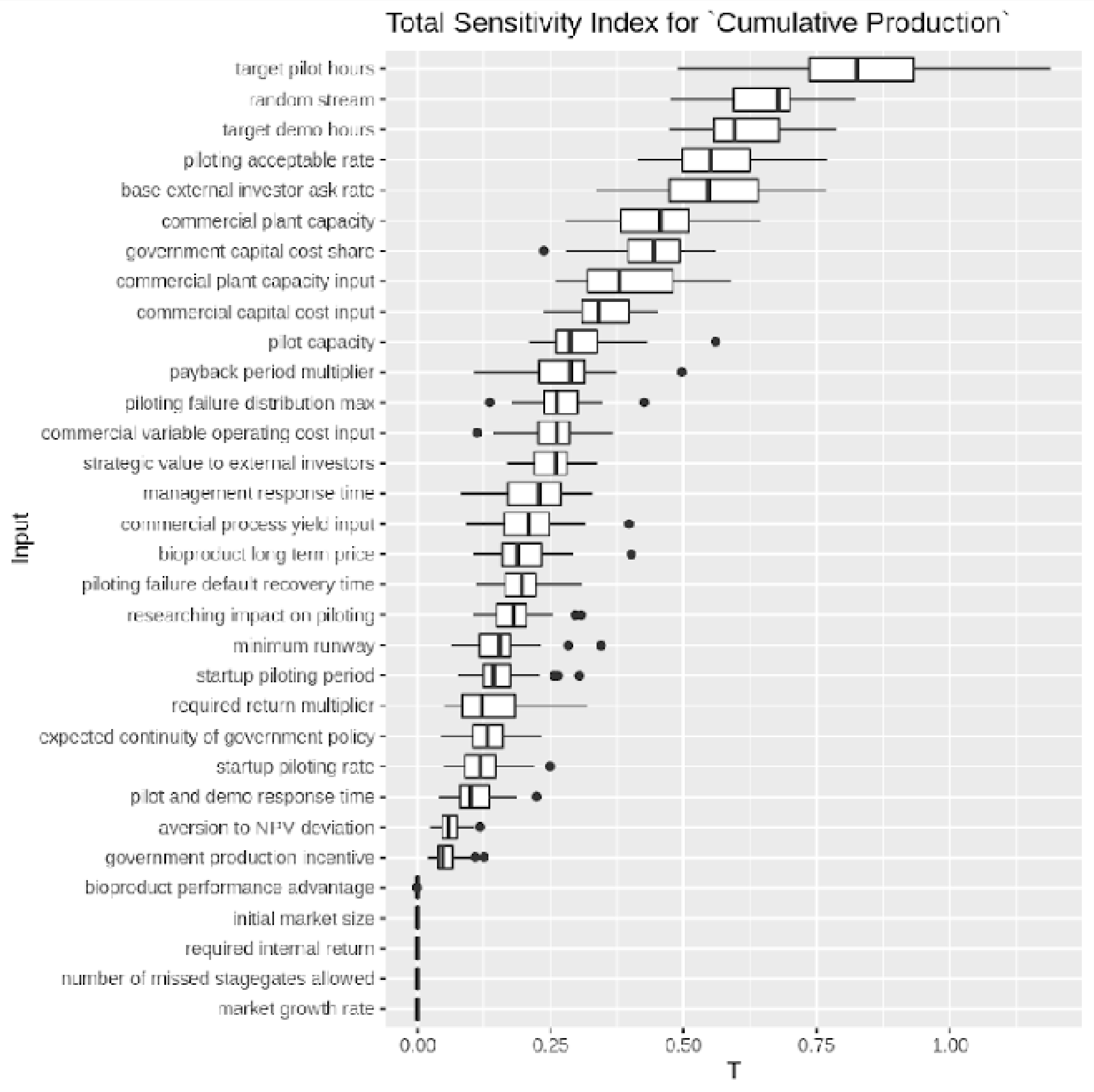
Sequential Sensitivity Analysis



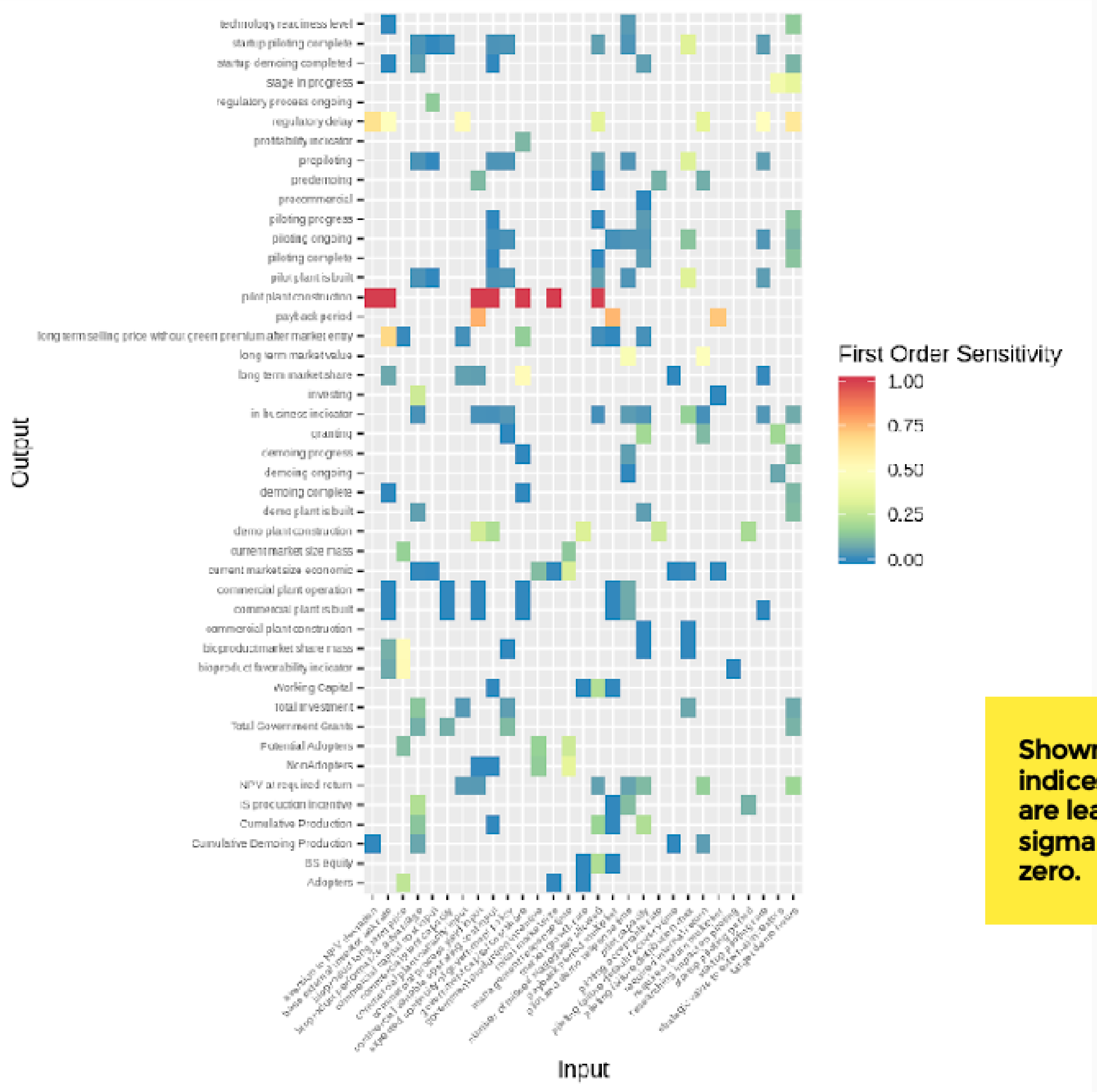
$$S_i = V_{X_i}\left[E_{X_{-i}}(Y|X_i)\right] = 1 - \frac{\sum_{j=1}^{N}\left[f(A)_j - f(B_A^{(i)})_j\right]^2}{\sum_{j=1}^{N}\left[f(A)_j - f(B)_j\right]^2}$$

$$T_i = E_{X_{-i}}\left[V_{X_i}(Y|X_{-i})\right] = \frac{\sum_{j=1}^{N}\left[f(B)_j - f(B_A^{(i)})_j\right]^2}{\sum_{j=1}^{N}\left[f(A)_j - f(B)_j\right]^2}$$



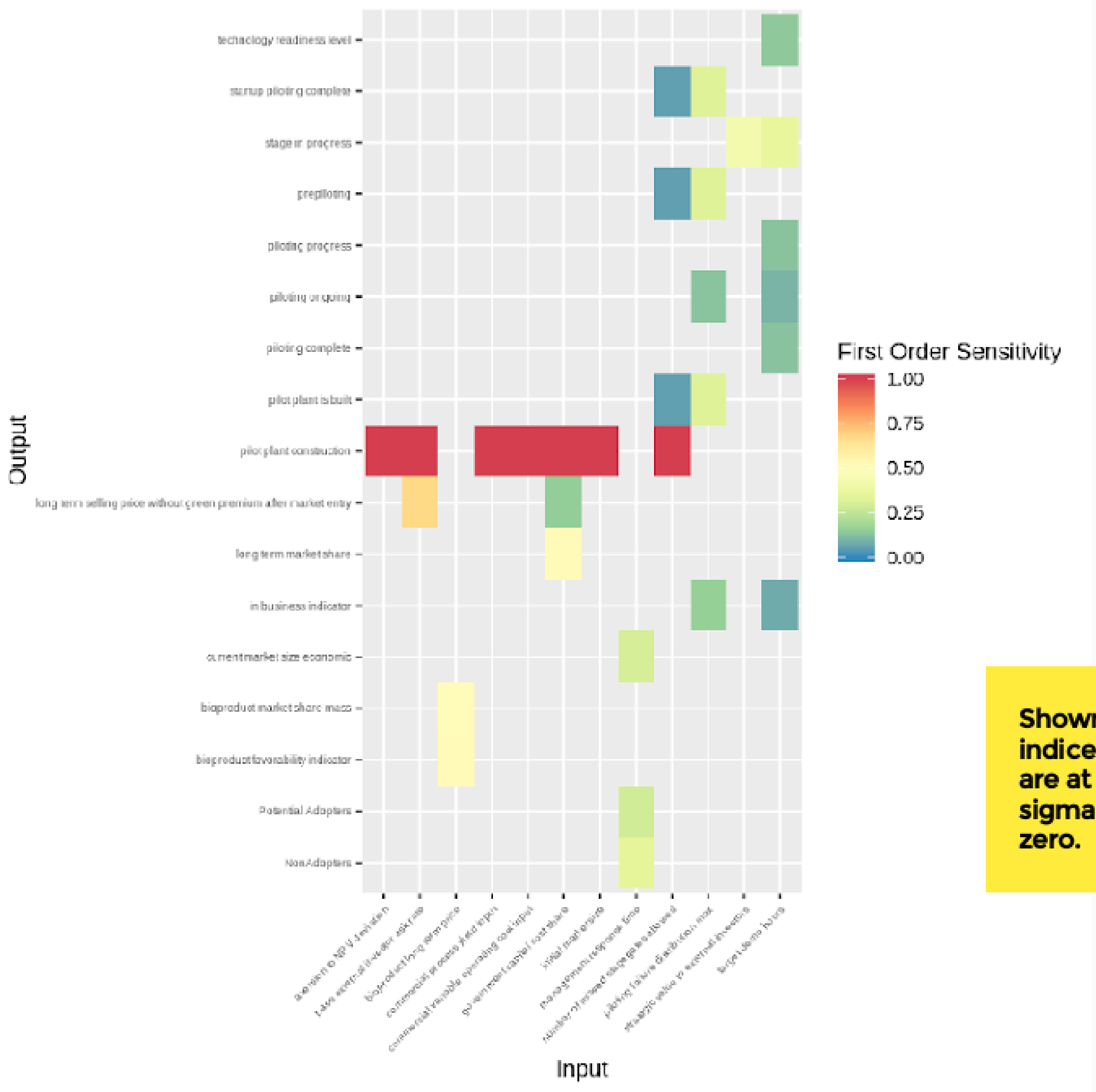


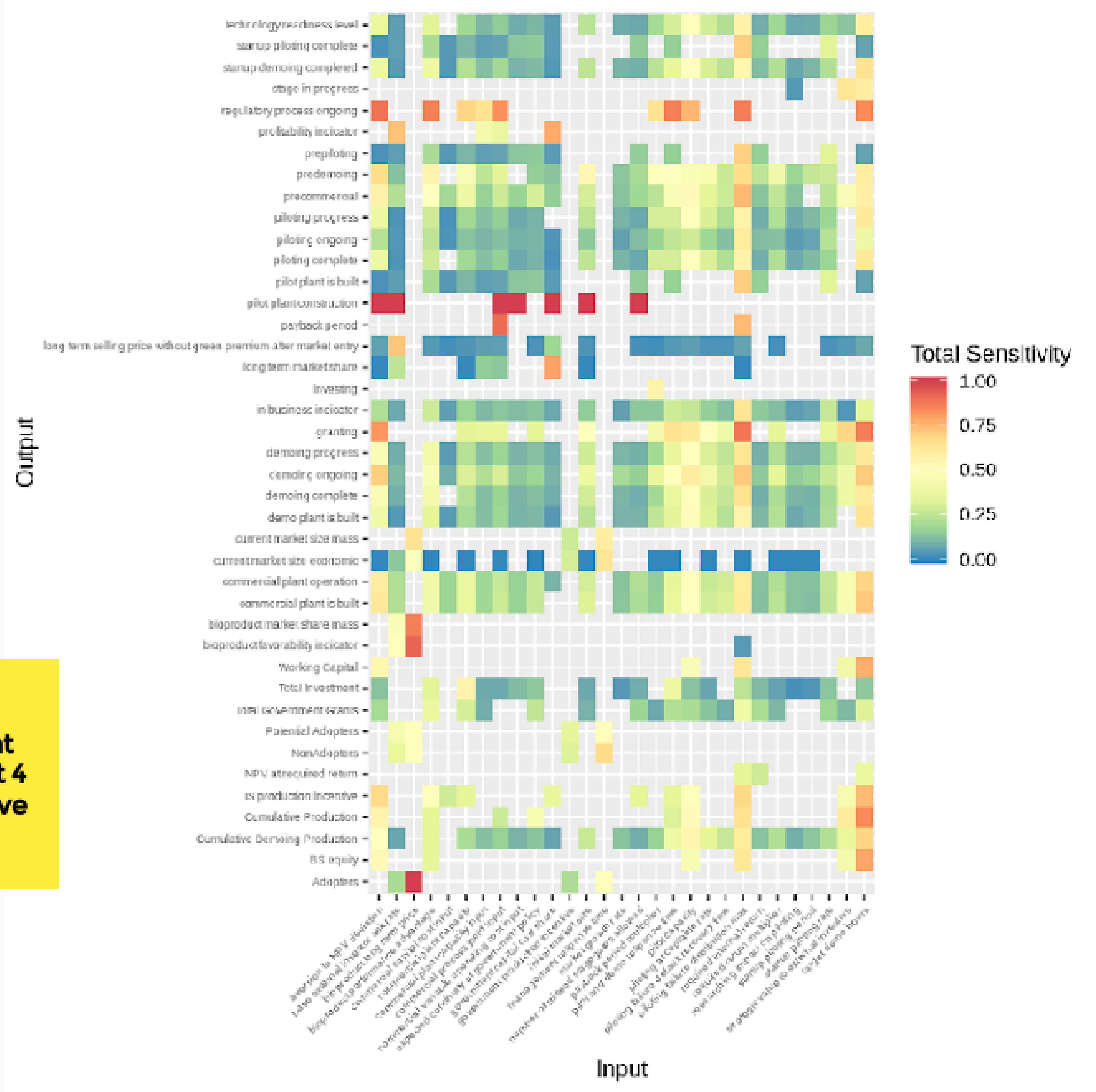
Variance-Based Sensitivity-Analysis Results



Shown are indices that are least 1.5 sigma above zero.

Variance-Based Sensitivity-Analysis Results

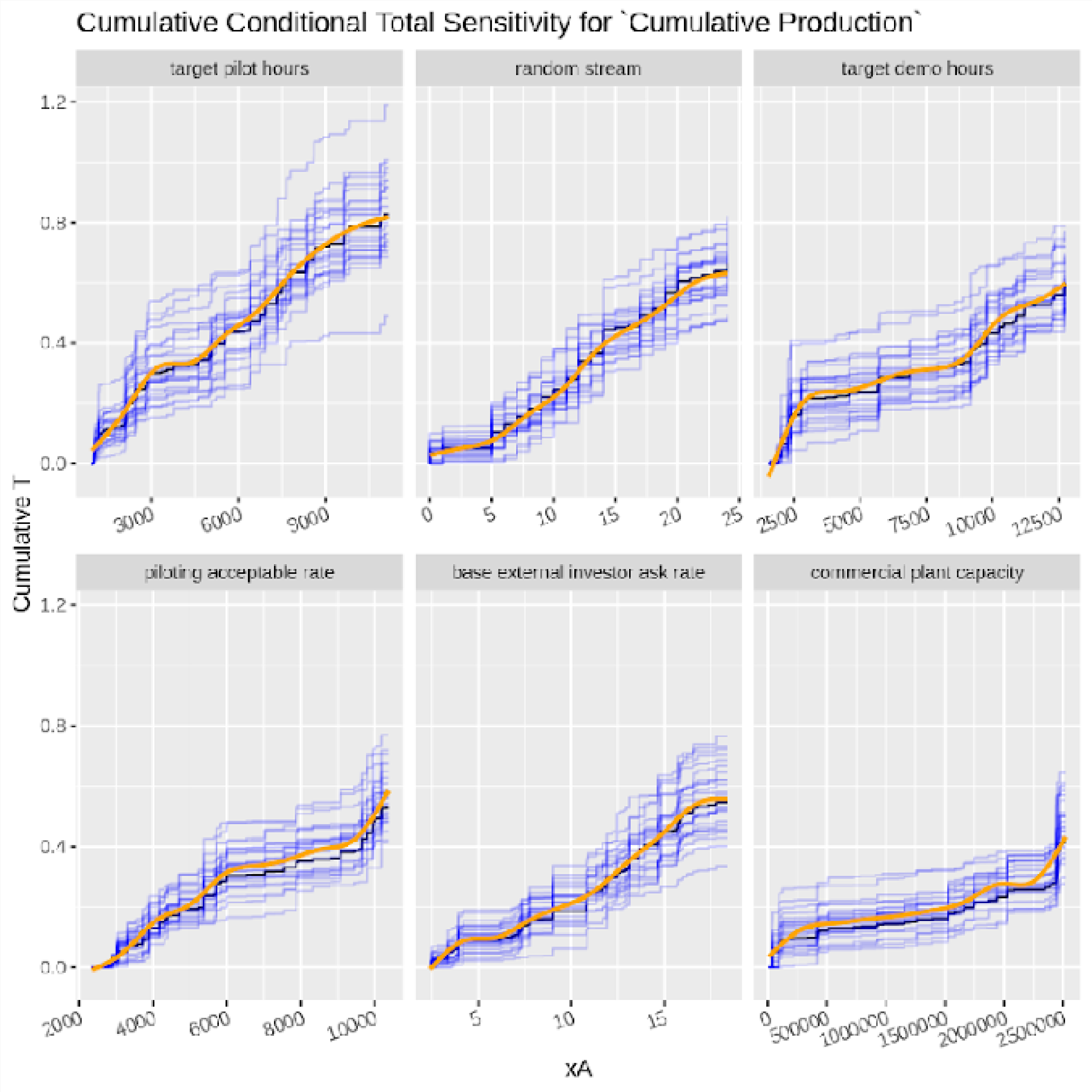


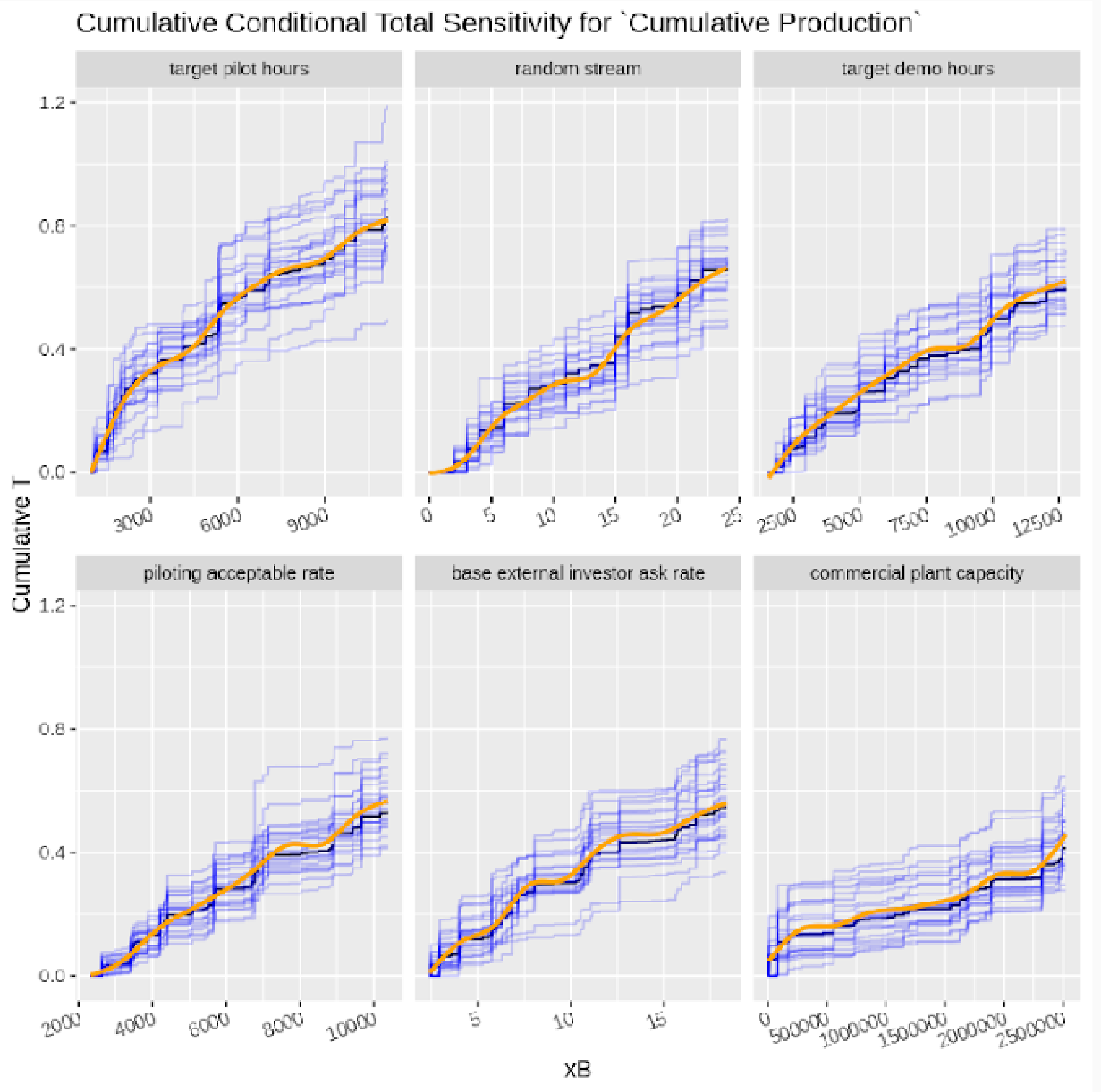


Shown are indices that are at least 4 sigma above zero.

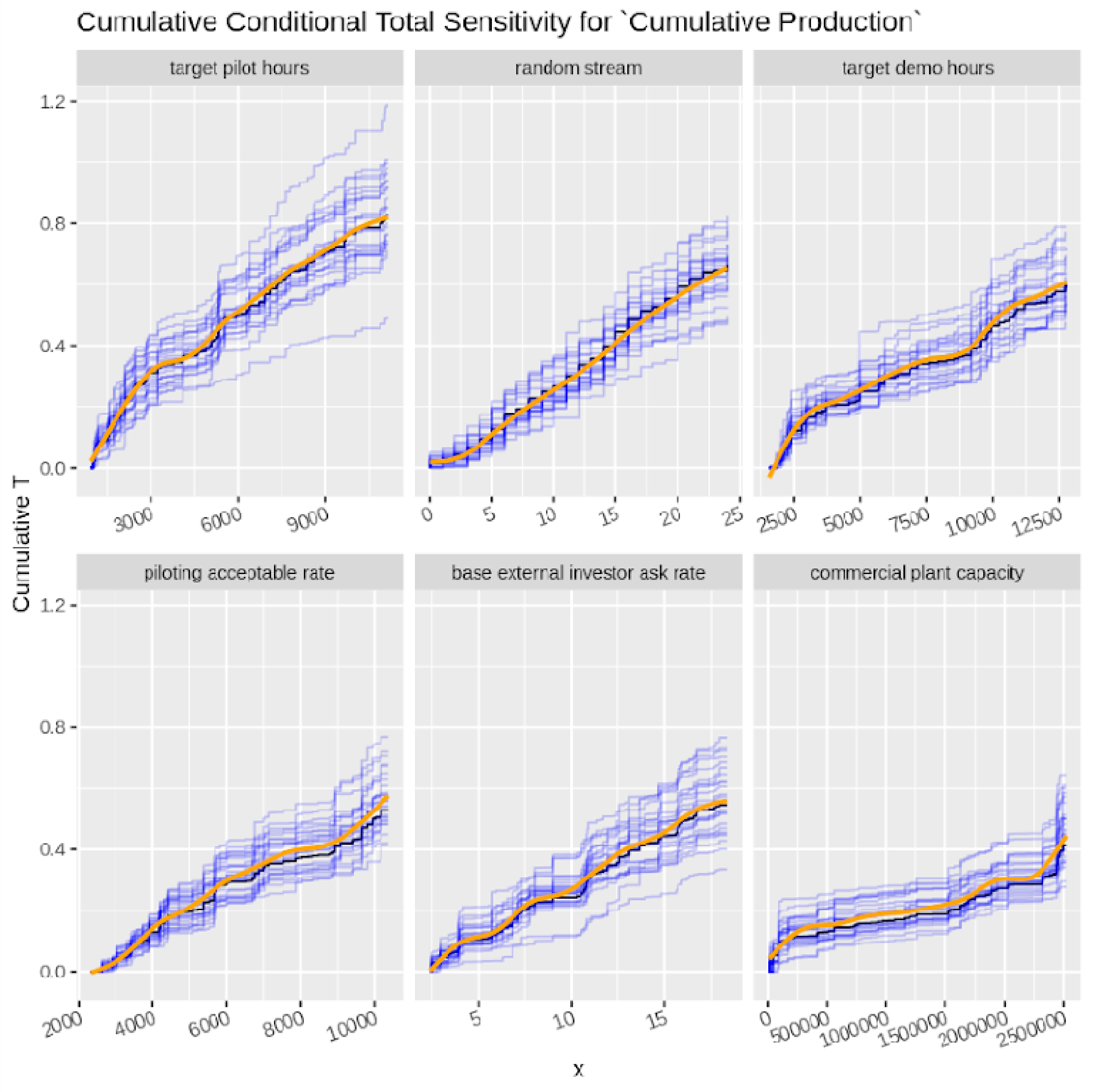
$$T_i(x) = \frac{\sum_{j=1}^{N} 1_{X_{A,j}^{(i)} \le x} \cdot \left[f(B)_j - f(B_A^{(i)})_j \right]^2}{\sum_{j=1}^{N} \left[f(A)_j - f(B)_j \right]^2}$$

$$T_i(x) = \frac{\sum_{j=1}^{N} 1_{X_{B,j}^{(i)} \le x} \cdot \left[f(B)_j - f(B_A^{(i)})_j \right]^2}{\sum_{j=1}^{N} \left[f(A)_j - f(B)_j \right]^2}$$





Values of `xA` and `yA` are interleaved.



$$T_i(x) = \frac{\sum_{j=1}^{N} 1_{\max\left(X_{A,j}^{(i)}, X_{B,j}^{(i)}\right) \leq x} \cdot \left[f(B)_j - f(B_A^{(i)})_j\right]^2}{\sum_{j=1}^{N} \left[f(A)_j - f(B)_j\right]^2}$$

$$T_i(x) = \frac{\sum_{j=1}^{N} 1_{\min\left(X_{A,j}^{(i)}, X_{B,j}^{(i)}\right) \geq x} \cdot \left[f(B)_j - f(B_A^{(i)})_j\right]^2}{\sum_{j=1}^{N} \left[f(A)_j - f(B)_j\right]^2}$$