Sensitivity Analysis with SALib (Python)

DMDU Tutorial - Nov. 13, 2018

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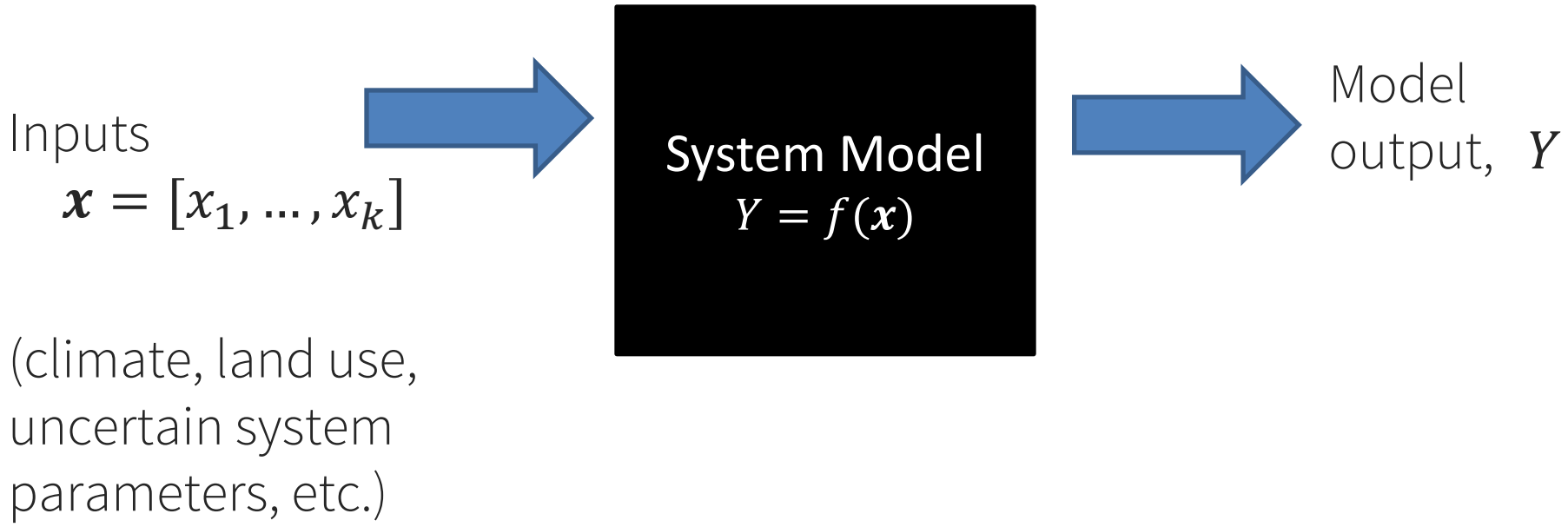
Which uncertain inputs have the most influence on system performance?



Three main steps (Pianosi et al. 2016)

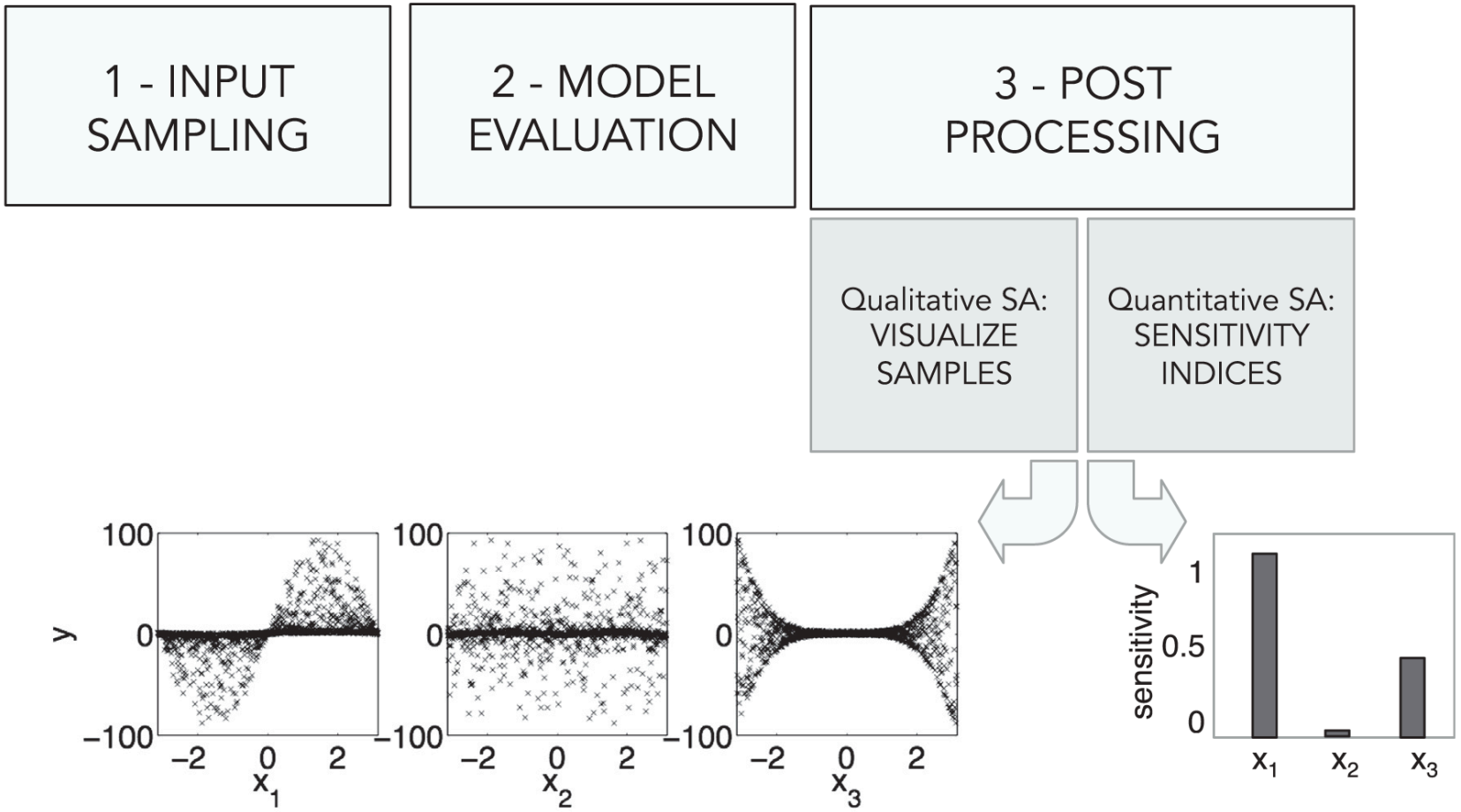
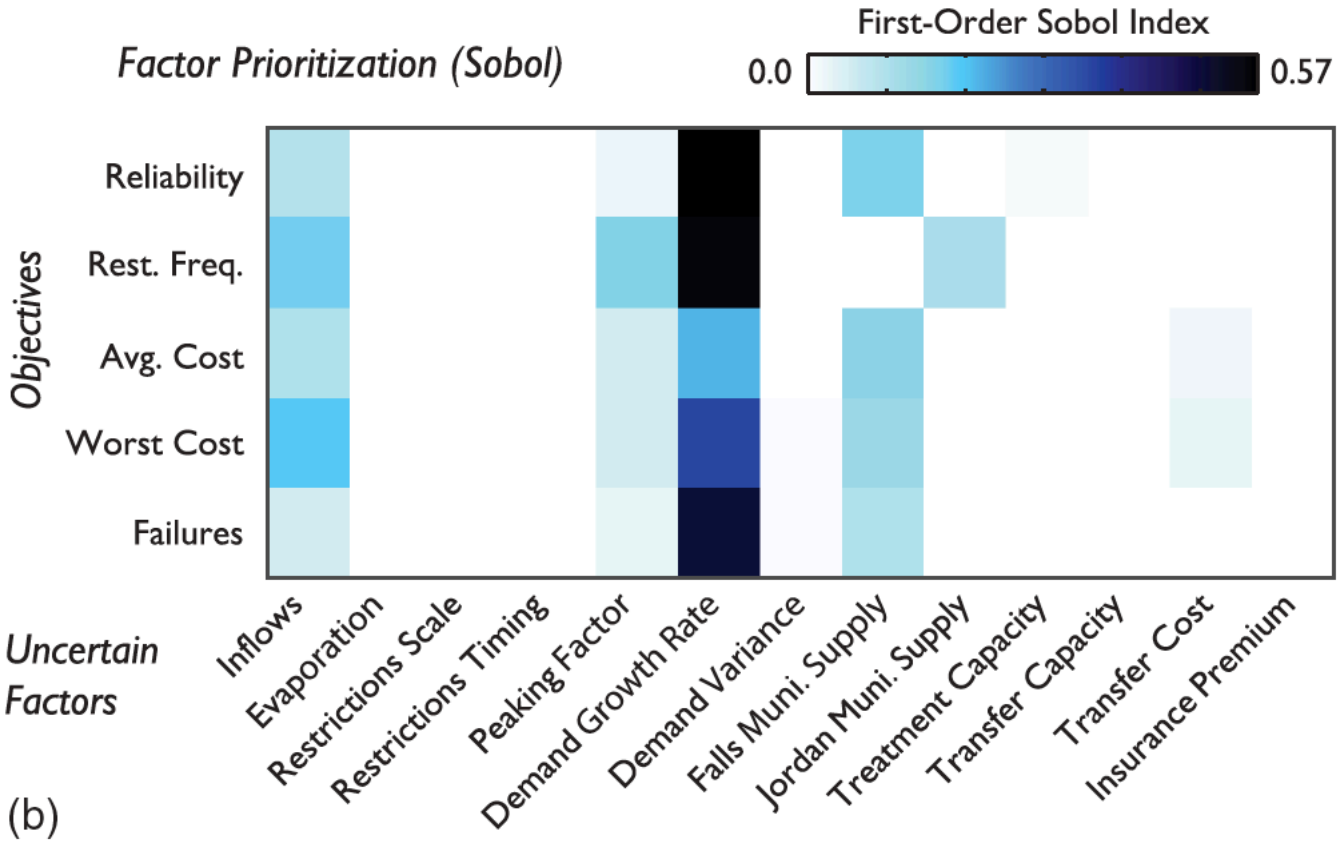


Fig. 2. The three basic steps in sampling-based Sensitivity Analysis, with an example of qualitative or quantitative results produced by the post-processing step.

Example results: urban water supply model



Sensitivity Analysis Library (SALib)

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Herman, J. and Usher, W. (2017) SALib: An open-source Python library for sensitivity analysis.
Journal of Open Source Software, 2(9).
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- Library: https://github.com/SALib/SALib
- Installation: **`pip install SALib`**
- Tutorial materials: https://github.com/jdherman/DMDU-2018-SALib-Tutorial
- Requirements: Python, NumPy, SciPy
- Tutorial: intro-level, 45 minutes