Air Quality Policy Evaluation Tool (AQ-PET)

Yuqing Dai, Bowen Liu, Zongbo Shi et al.
Why evaluating AQ “interventions”?
Confounder: Weather

Short-term change in air quality dominated by met. variations
Confounder: underlying trend

Source: Ricardo Energy & Environment
What is AQ-PET

- A simple tool to quantify the causal impact of air pollution control policies
- No prior knowledge of machine learning or causal inference model needed
- No prior coding experience needed
- Illustrations generated can be directly used for reporting

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User interface
Example outcome

SHAP value

Variable importance

Partial dependence

Observed vs. de-weathered

Causal impact of CAZ