



TROPOMI

Spatial coverage: global
Time coverage: 2021-2023
Spatial resolution: $5.5 \times 7 \text{ km}^2$
Temporal resolution: daily

Level-2

1. Download XCH₄ data for urban areas
2. Filter high-quality data

Level-3

1. Oversampled into $0.1^\circ \times 0.1^\circ$ resolution
2. Daily overpass



ERA5

Spatial coverage: global
Time coverage: 2021-2023
Spatial resolution: $0.25^\circ \times 0.25^\circ$
Temporal resolution: hourly

ERA5 hourly wind data
on pressure levels

Boundary layer height

Flux assessment

Source pixel method



EDGAR

Spatial coverage: global
Time coverage: 2021-2023
Spatial resolution: $0.1^\circ \times 0.1^\circ$
Temporal resolution: monthly

Sector gridded data

1. Monthly sector-specific gridmaps (2021-2023)
2. The comparable urban area

Comparison

1. Compare bottom-up inventories with top-down emission rates
2. Analyse divergency