



Informing you on ambient air quality
in the Belgian Regions

Flanders

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Wallonia

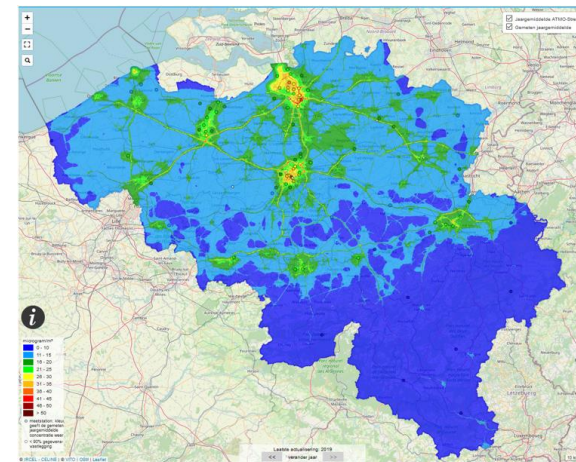
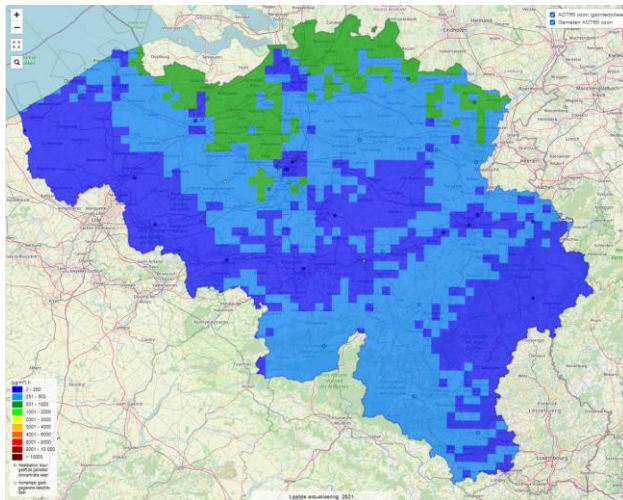


airclimat.wallonie.be

Exceedance situations indicators

→ population exposures, exceedance situations reported in BE : NO₂, O₃

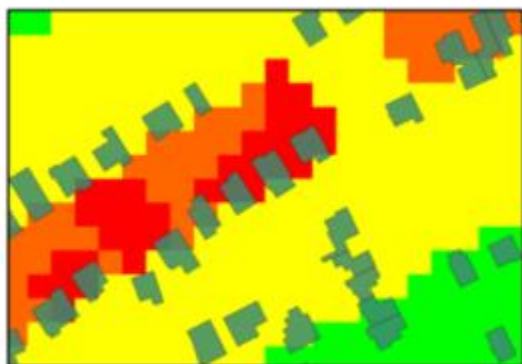
→ both based on model results :
NO₂: ATMO-street model (Flanders)
O₃: RIO-model



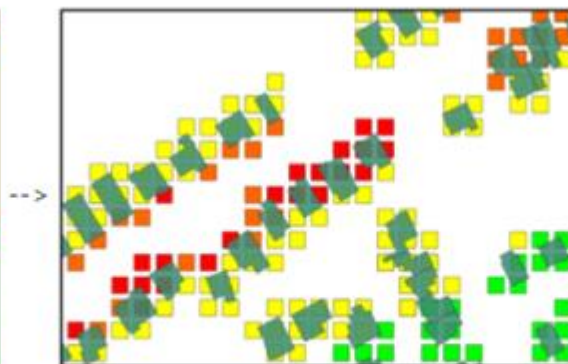
Figuur 2: Jaargemiddelde NO₂-concentraties ATMOStreet België 2019

Exceedance situations indicators

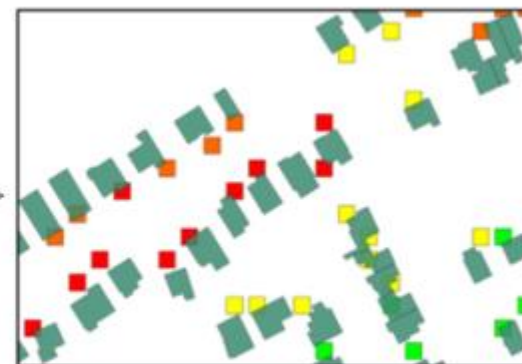
➡ Current methodology for reporting: ATMO-Street



NO2 model results



cells adjacent to buildings



maximum concentrations adjacent to building retained

➡ Results

40.5 µg/m³ < NO2 ≤ P99.99 µg/m³ (if P99.99 < 40.5 µg/m³, no exceedances and exposure in that zone)

| zone | pop_exc | pop_exc_perc | pop_not_exc_perc |
|----------|---------|--------------|------------------|
| BEF06S | 0 | 0.00 | 100.00 |
| FLANDERS | 1220 | 0.02 | 99.98 |
| BEF05S | 0 | 0.00 | 100.00 |
| BEF04A | 970 | 0.36 | 99.64 |
| BEF03S | 0 | 0.00 | 100.00 |
| BEF01S | 0 | 0.00 | 100.00 |
| BEF02A | 1765 | 0.29 | 99.71 |

40.5 µg/m³ ≤ NO2 ≤ P99.99 µg/m³

| zone | area (m²) | road_length (m) |
|--------|-----------|-----------------|
| BEF01S | 0 | 0 |
| BEF02A | 299800 | 12776 |
| BEF03S | 0 | 0 |
| BEF04A | 45600 | 2865 |
| BEF05S | 0 | 0 |
| BEF06S | 0 | 0 |

- ➡ new ESI: flagging : few, significant, large, very widespread exceedance
- ➡ BE: flagging : based on exceedance (exposure, area) calculations using model results
- ➡ methodology to determine ESI stays the same

Spatial Representativeness

- ⇒ 10 % for rural and urban background stations
20 % for industrial stations
- ⇒ levels of tolerance < measurement uncertainty
- ⇒ risks of missing out on area's of same spatial representativeness