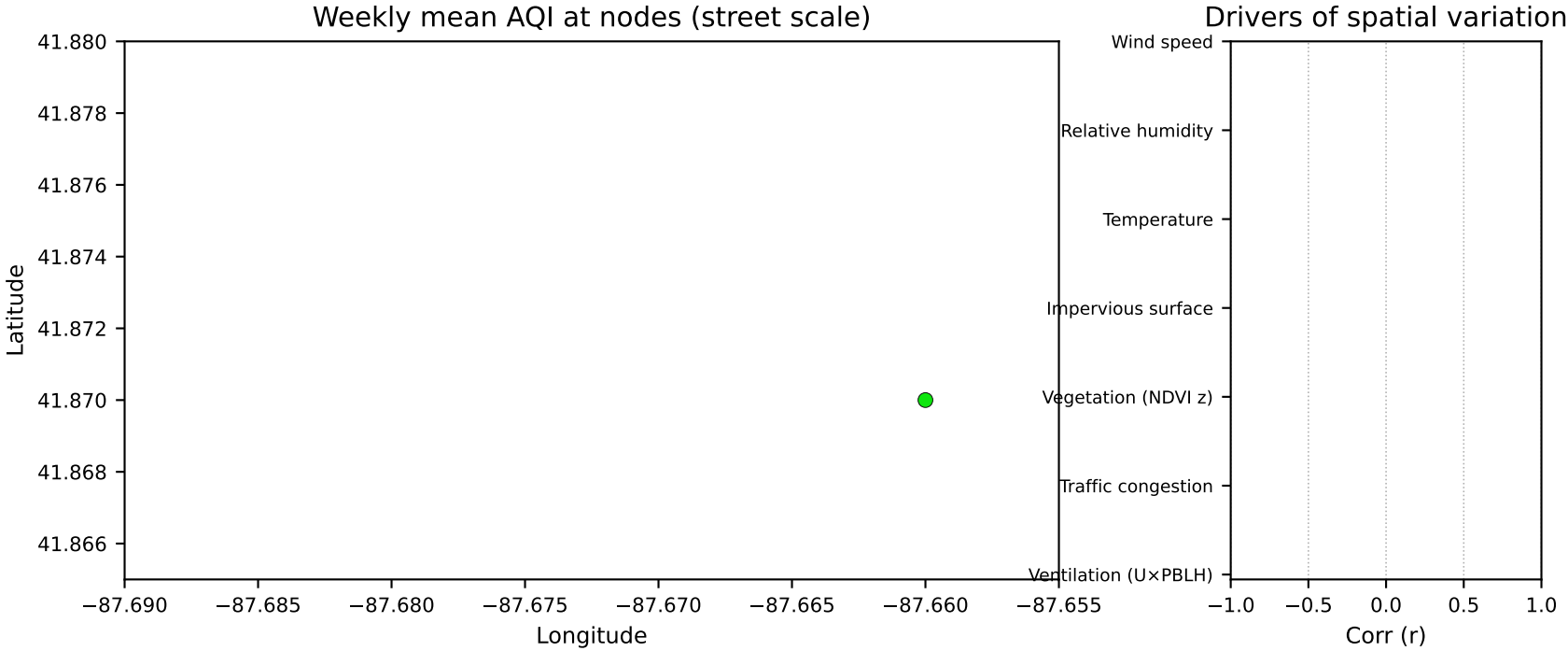
Illinois Medical District — Street-level AQI dashboard | 2024-01-01 to 2024-01-07



Weekly inference:

Illinois Medical District, week 2024-W01 (2024-01-01–2024-01-07): street-level weekly AQI median ≈ 30 (P10≈30, P90≈30).

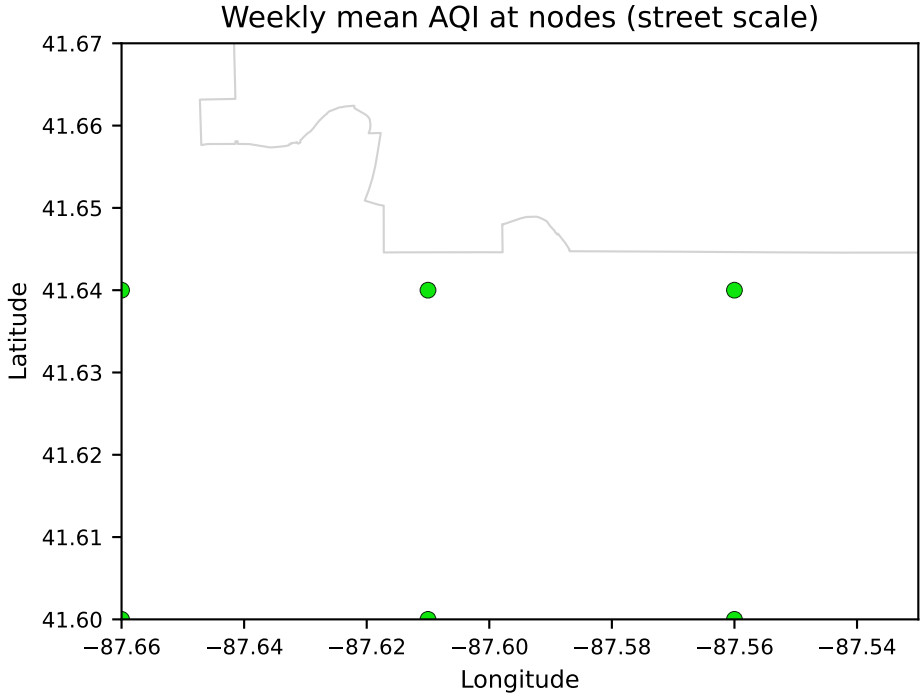
Local mean conditions: T̄≈-0.9 °C, RH̄≈80%, Ū≈7.1 m/s.

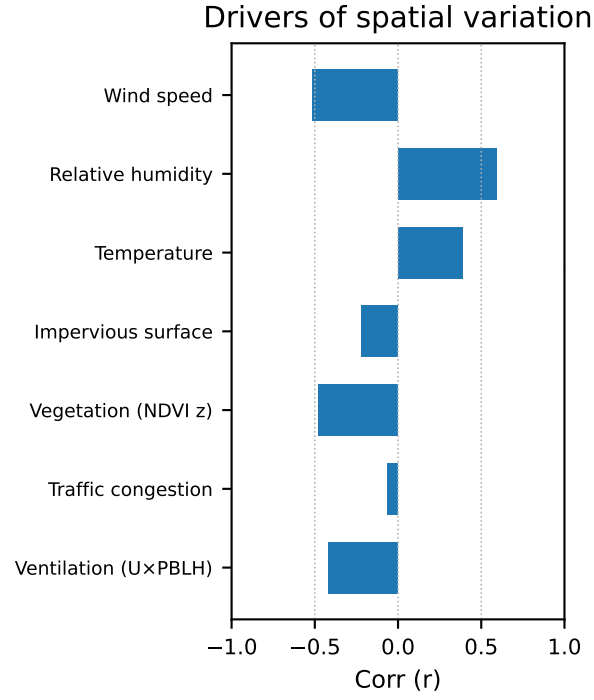
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-01-01 to 2024-01-07





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W01 (2024-01-01–2024-01-07): street-level weekly AQI median ≈ 37 (P10≈33, P90≈38).

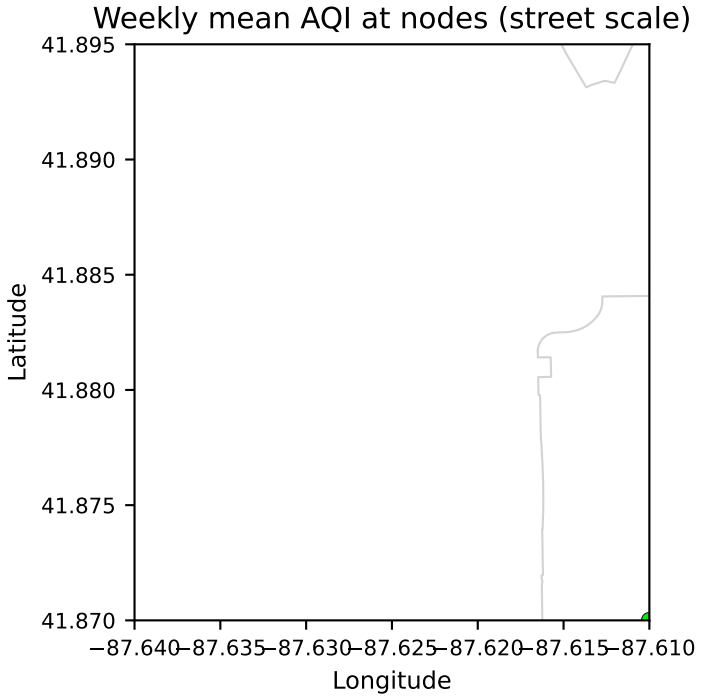
Local mean conditions: T≈-0.9 °C, RH≈78%, U≈5.5 m/s.

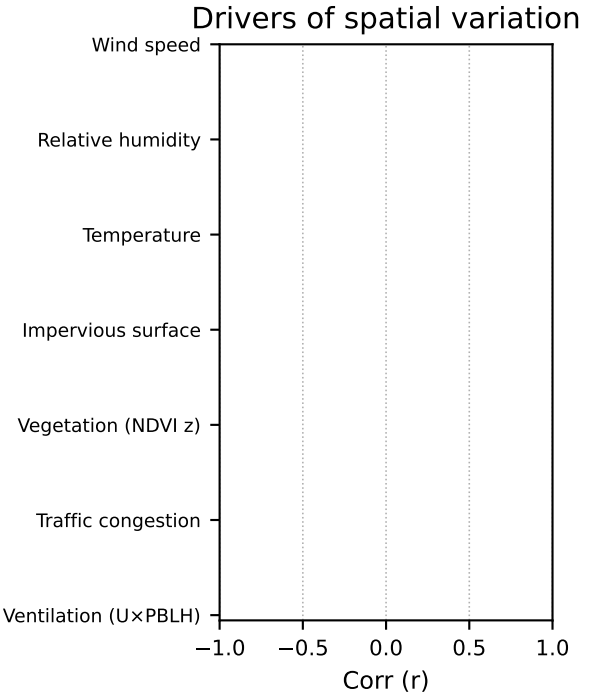
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.41). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.07). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.48). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.22). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate positive correlation (r≈0.39). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-01-01 to 2024-01-07





Weekly inference:

Lakefront Downtown, week 2024-W01 (2024-01-01–2024-01-07): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

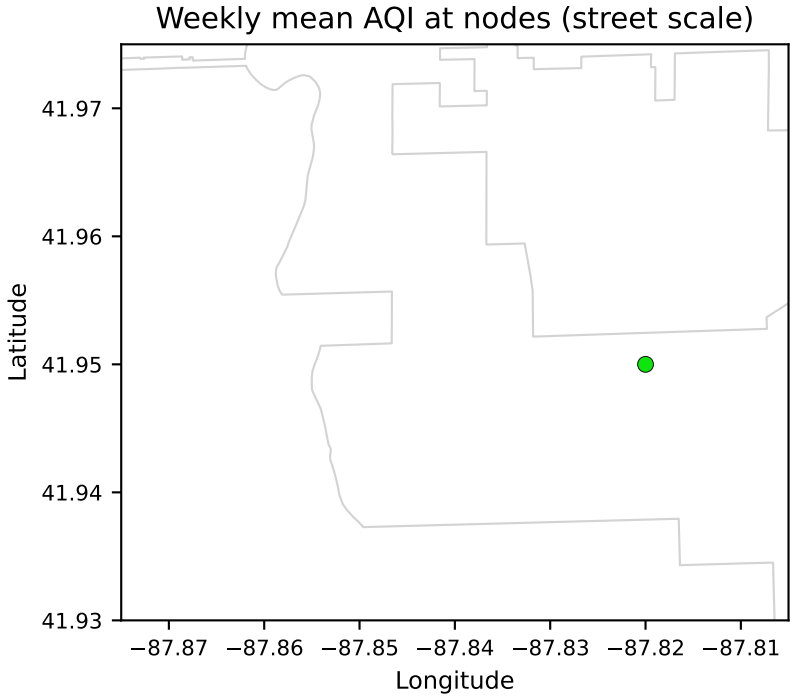
Local mean conditions: T≈-0.8 °C, RH≈80%, U≈7.1 m/s.

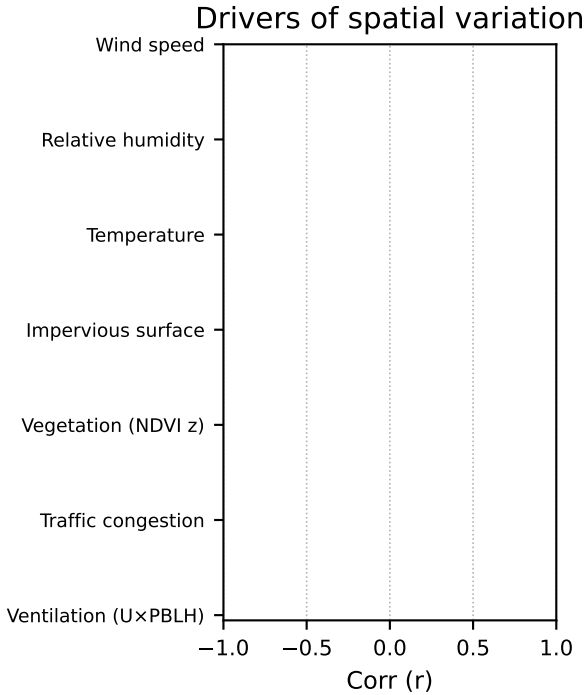
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-01-01 to 2024-01-07





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W01 (2024-01-01–2024-01-07): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

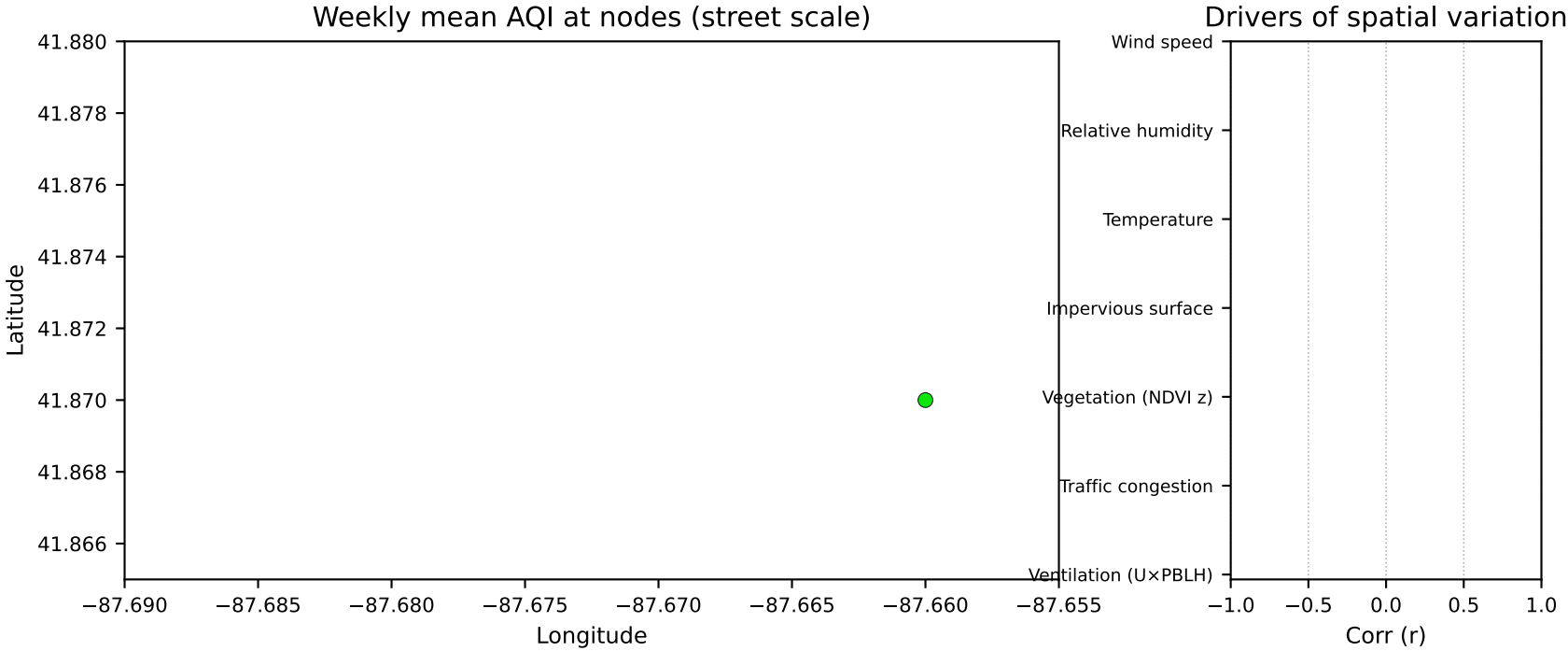
Local mean conditions: T̄≈-1.2 °C, RH̄≈77%, Ū≈6.0 m/s.

Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Illinois Medical District — Street-level AQI dashboard | 2024-01-08 to 2024-01-14



Weekly inference:

Illinois Medical District, week 2024-W02 (2024-01-08–2024-01-14): street-level weekly AQI median ≈ 27 (P10≈27, P90≈27).

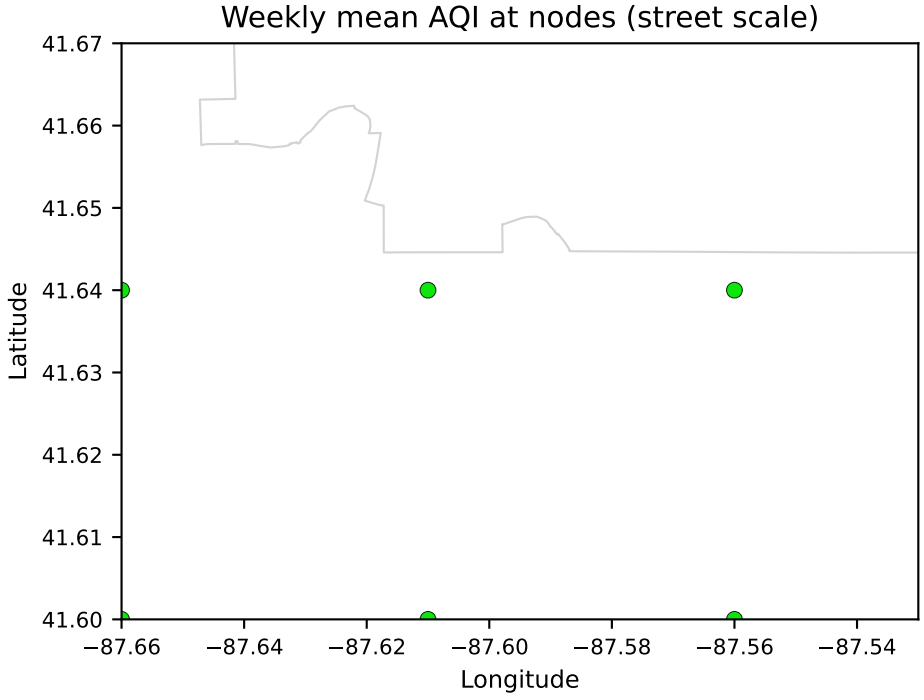
Local mean conditions: T̄≈-3.8 °C, RH̄≈82%, Ū≈6.7 m/s.

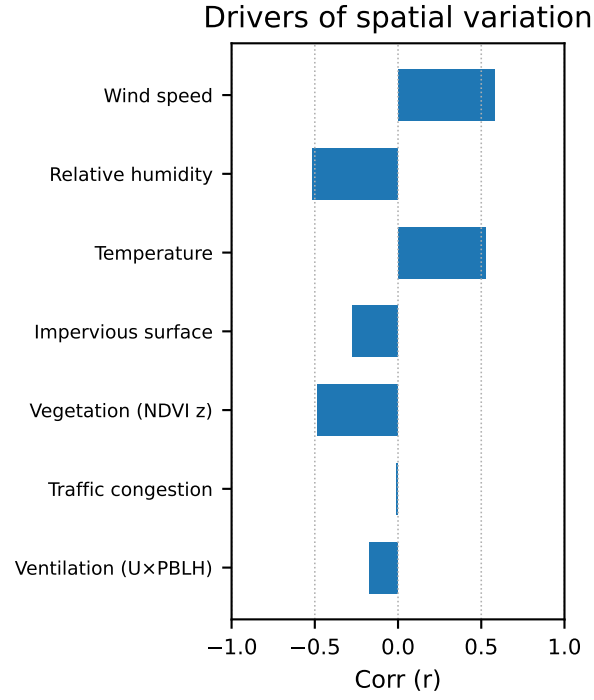
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-01-08 to 2024-01-14





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W02 (2024-01-08–2024-01-14): street-level weekly AQI median ≈ 32 (P10≈30, P90≈33).

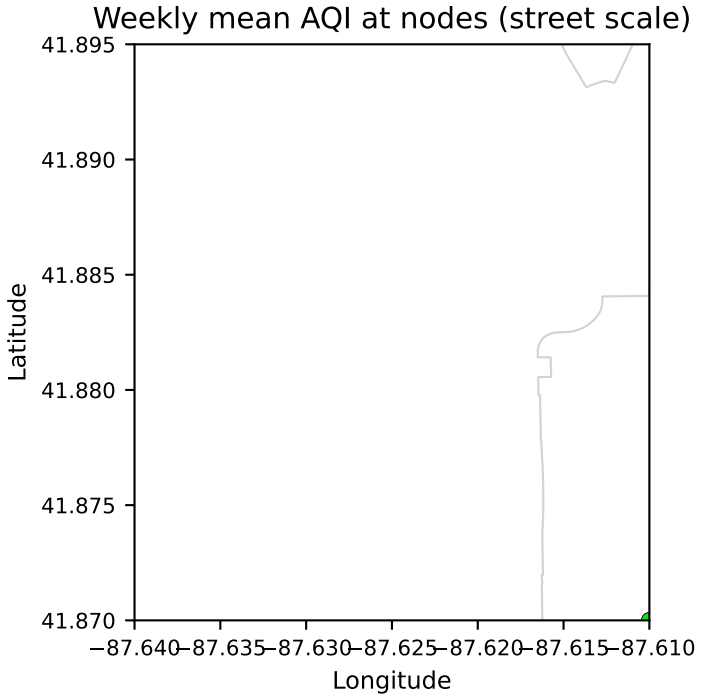
Local mean conditions: T̄≈-3.9 °C, RH̄≈81%, Ū≈6.9 m/s.

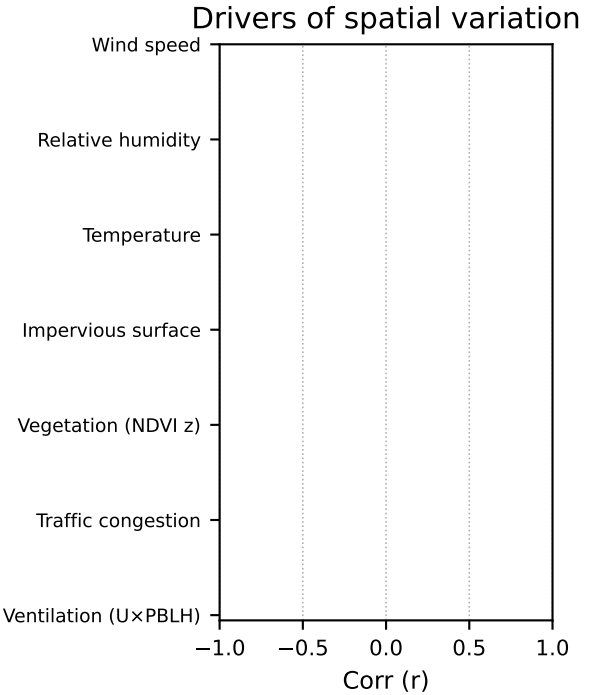
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak negative correlation (r≈-0.17). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.01). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.48). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.27). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate positive correlation (r≈0.53). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-01-08 to 2024-01-14





Weekly inference:

Lakefront Downtown, week 2024-W02 (2024-01-08–2024-01-14): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

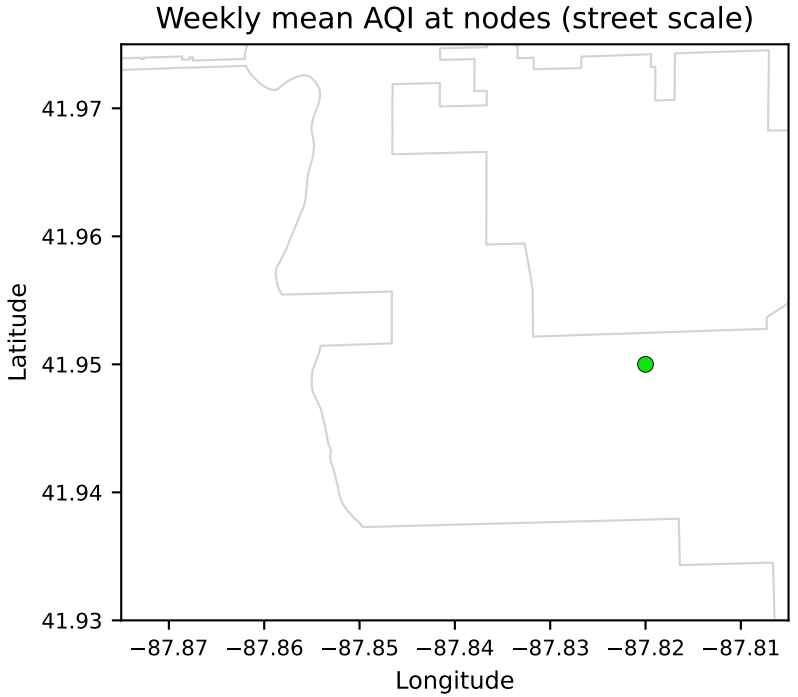
Local mean conditions: T≈-3.7 °C, RH≈82%, U≈6.7 m/s.

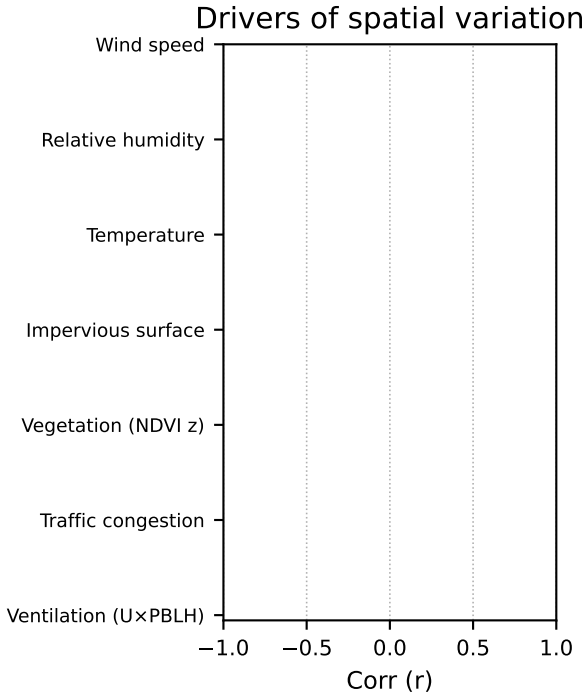
Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-01-08 to 2024-01-14





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W02 (2024-01-08–2024-01-14): street-level weekly AQI median ≈ 30 (P10≈30, P90≈30).

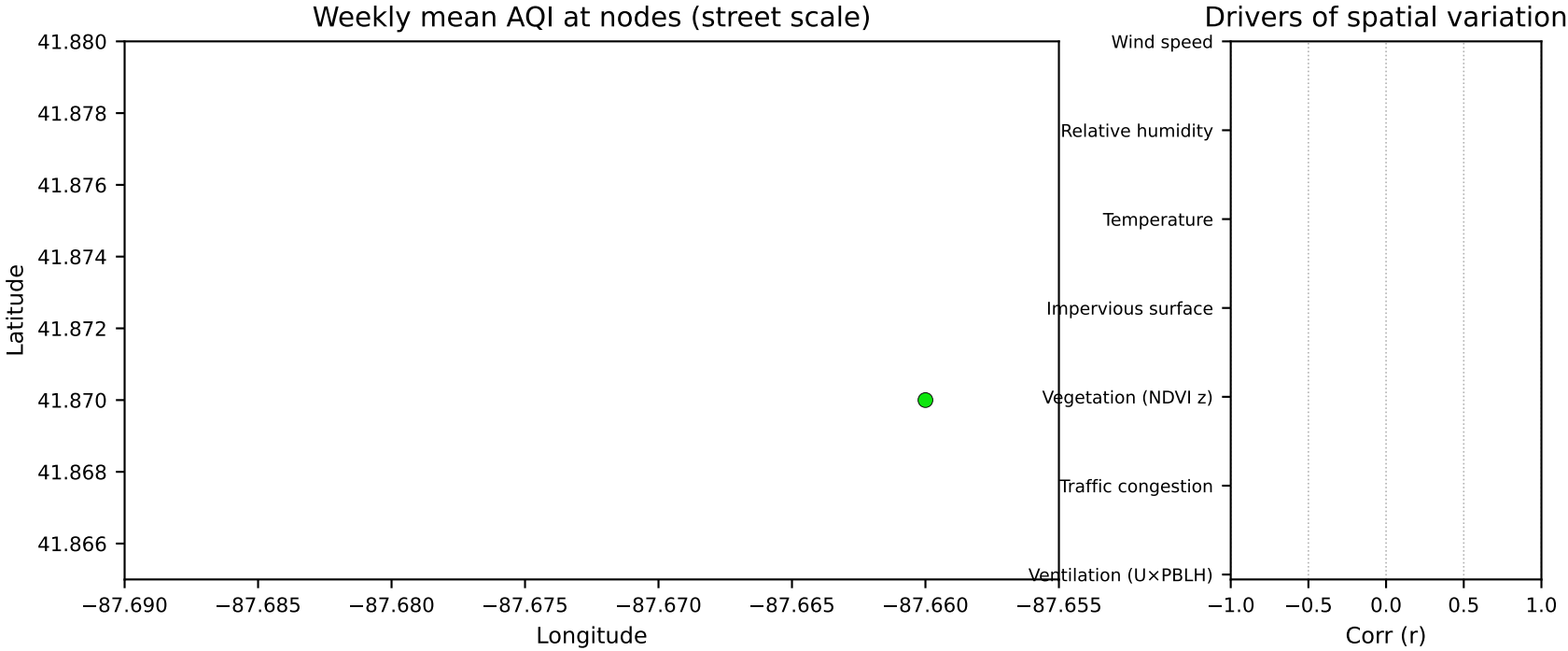
Local mean conditions: T̄≈-4.4 °C, RH̄≈83%, Ū≈5.1 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-01-15 to 2024-01-21



Weekly inference:

Illinois Medical District, week 2024-W03 (2024-01-15–2024-01-21): street-level weekly AQI median ≈ 26 (P10≈26, P90≈26).

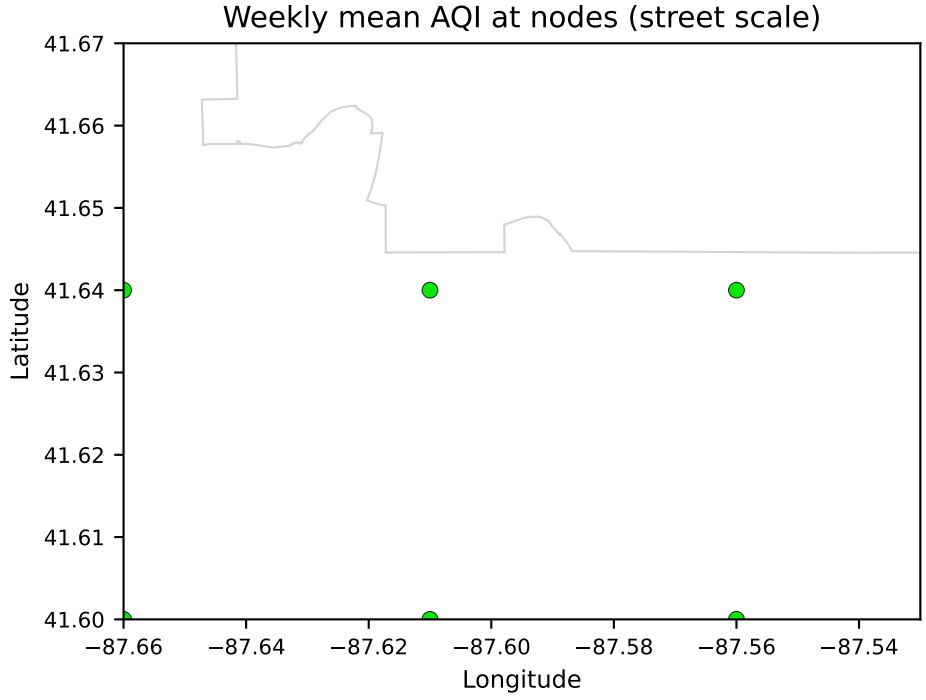
Local mean conditions: T≈-13.4 °C, RH≈65%, U≈16.3 m/s.

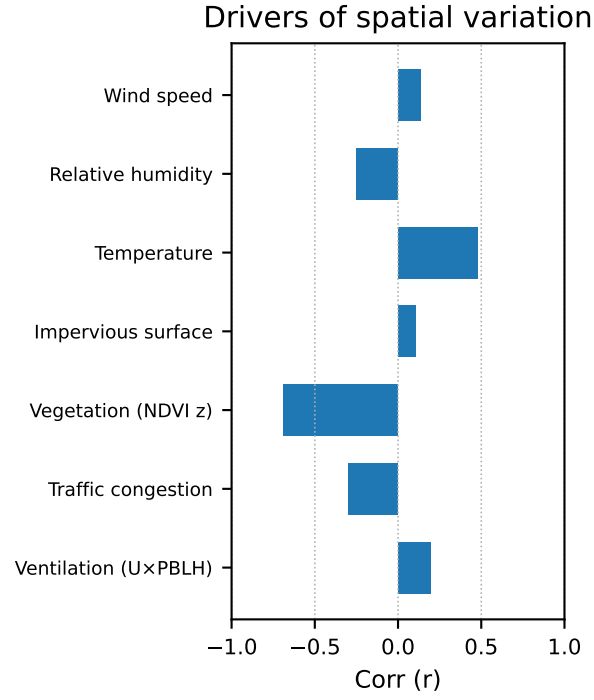
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-01-15 to 2024-01-21





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W03 (2024-01-15–2024-01-21): street-level weekly AQI median ≈ 30 (P10≈28, P90≈30).

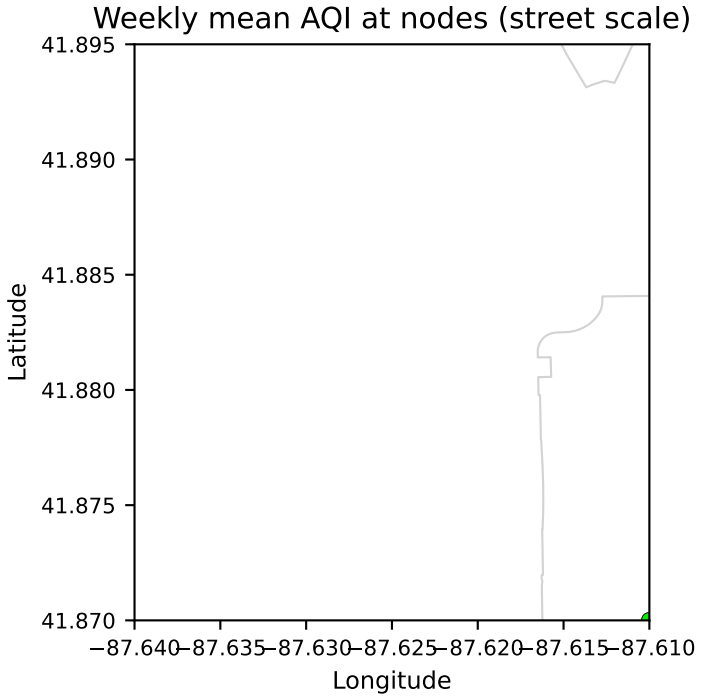
Local mean conditions: T≈-12.9 °C, RH≈65%, U≈12.6 m/s.

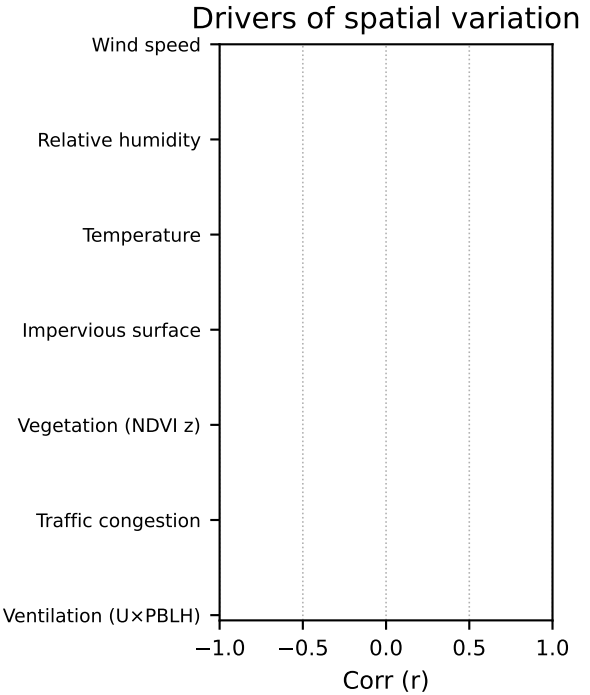
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak positive correlation (r≈0.20). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: weak negative correlation (r≈-0.30). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): strong negative correlation (r≈-0.69). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak positive correlation (r≈0.11). More impervious, built-up surfaces coincided with elevated AQI, aligning with dense emission sources and reduced near-surface mixing.
- Temperature: moderate positive correlation (r≈0.48). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-01-15 to 2024-01-21





Weekly inference:

Lakefront Downtown, week 2024-W03 (2024-01-15–2024-01-21): street-level weekly AQI median ≈ 28 (P10≈28, P90≈28).

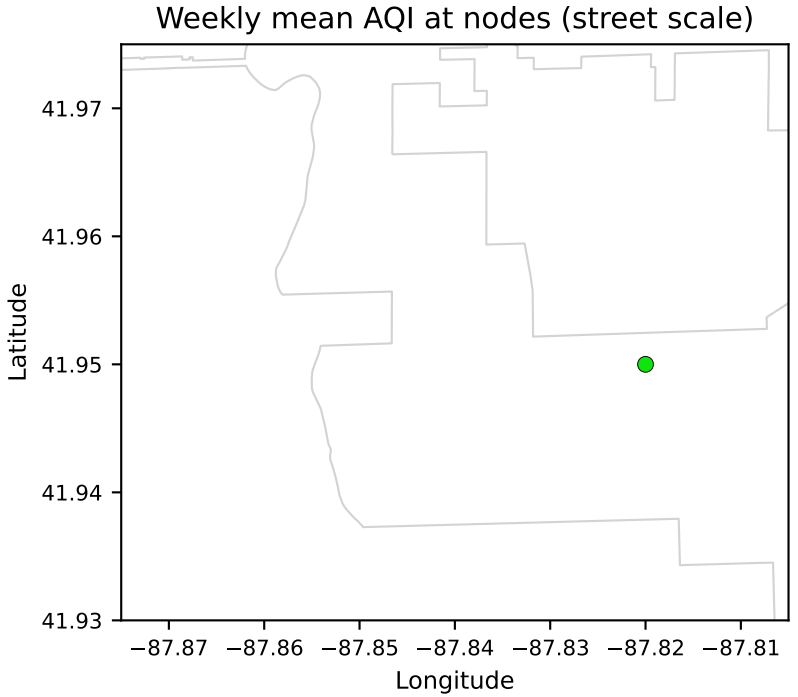
Local mean conditions: T≈-13.3 °C, RH≈65%, U≈16.3 m/s.

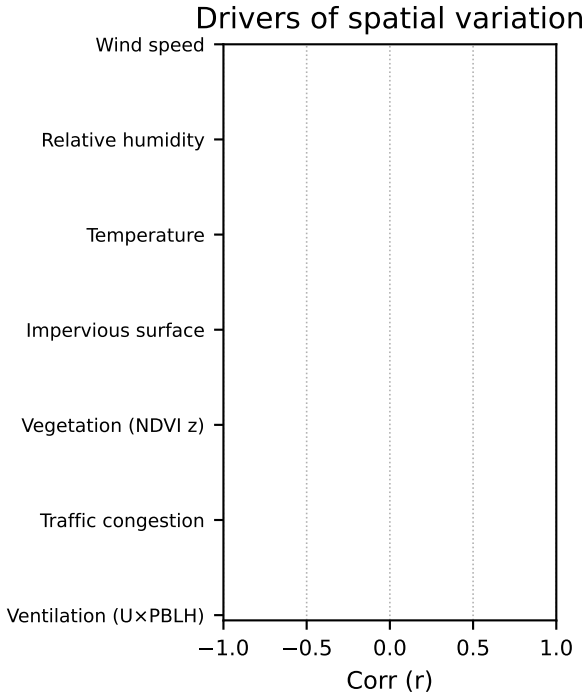
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-01-15 to 2024-01-21





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W03 (2024-01-15–2024-01-21): street-level weekly AQI median ≈ 28 (P10≈28, P90≈28).

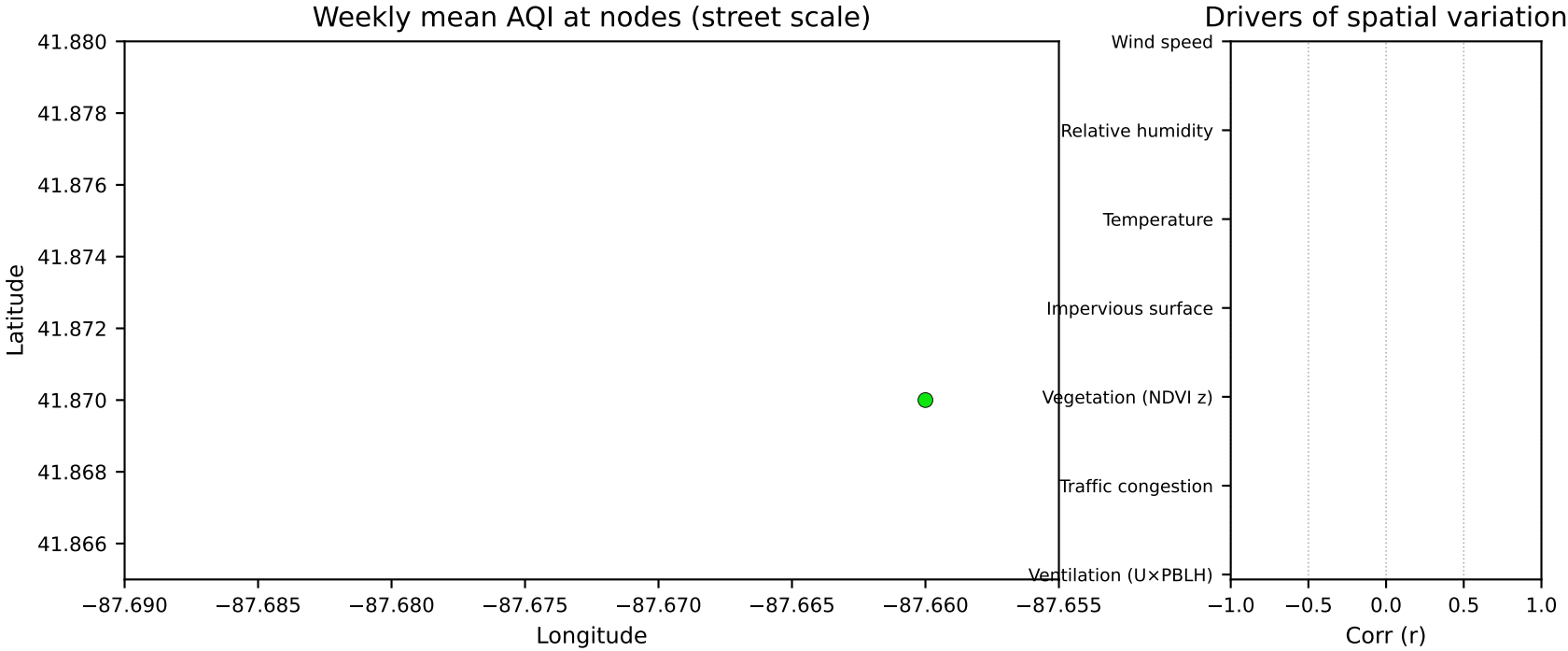
Local mean conditions: T≈-14.1 °C, RH≈67%, U≈12.7 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-01-22 to 2024-01-28



Weekly inference:

Illinois Medical District, week 2024-W04 (2024-01-22–2024-01-28): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

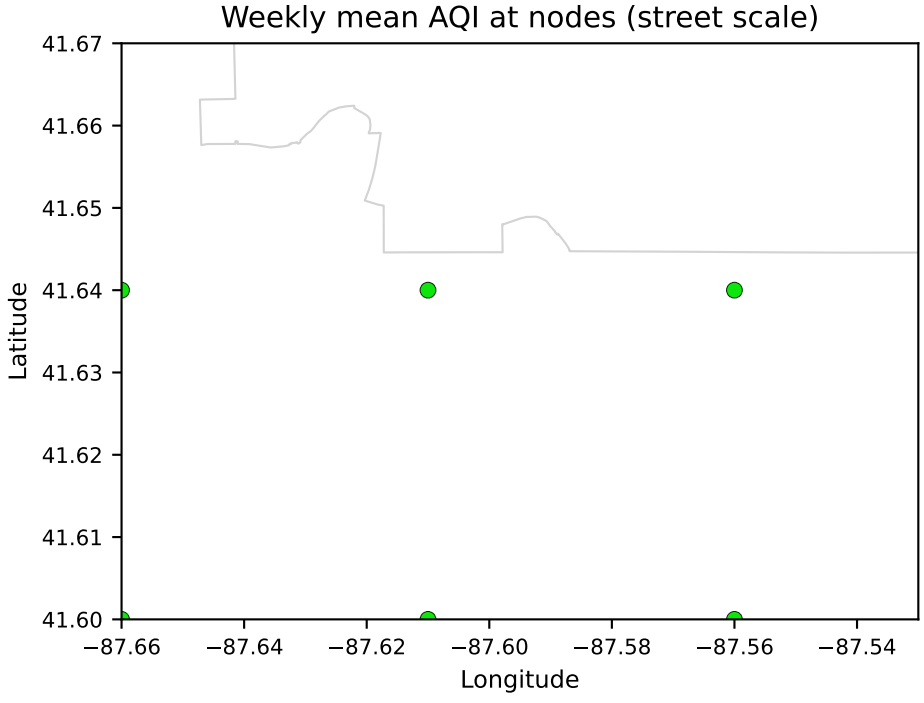
Local mean conditions: T≈1.1 °C, RH≈92%, U≈-0.0 m/s.

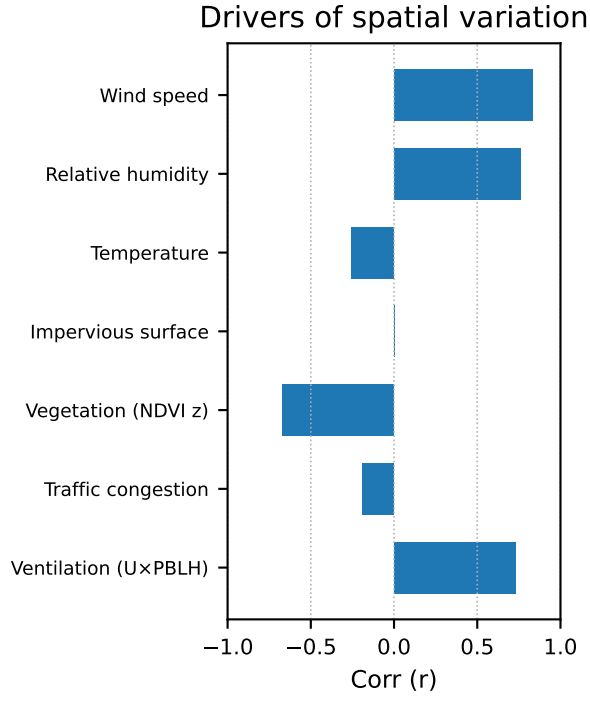
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-01-22 to 2024-01-28





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W04 (2024-01-22–2024-01-28): street-level weekly AQI median ≈ 41 (P10≈38, P90≈41).

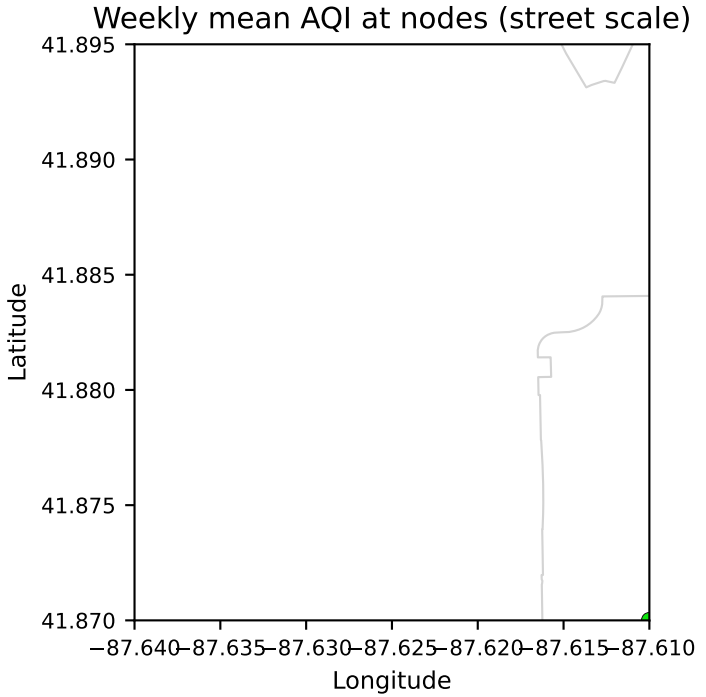
Local mean conditions: T̄≈1.2 °C, RH̄≈93%, Ū≈0.2 m/s.

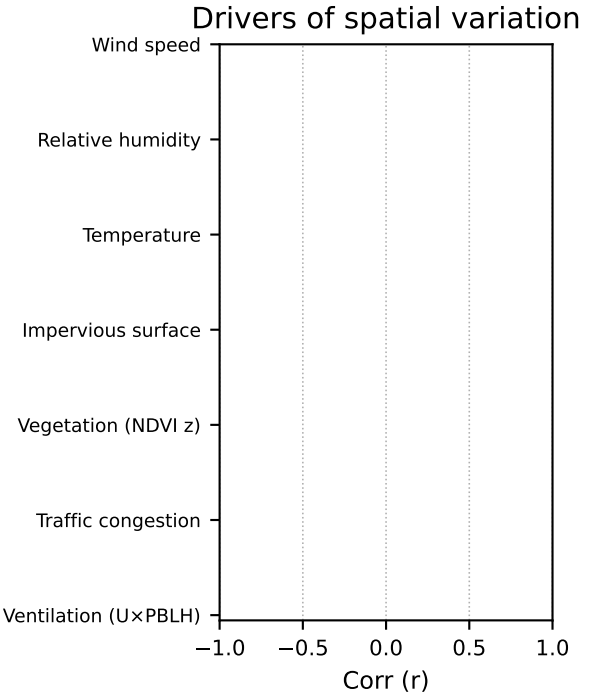
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): strong positive correlation (r≈0.73). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: weak negative correlation (r≈-0.19). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): strong negative correlation (r≈-0.67). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: negligible positive correlation (r≈0.00). More impervious, built-up surfaces coincided with elevated AQI, aligning with dense emission sources and reduced near-surface mixing.
- Temperature: weak negative correlation (r≈-0.25). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-01-22 to 2024-01-28





Weekly inference:

Lakefront Downtown, week 2024-W04 (2024-01-22–2024-01-28): street-level weekly AQI median ≈ 37 (P10≈37, P90≈37).

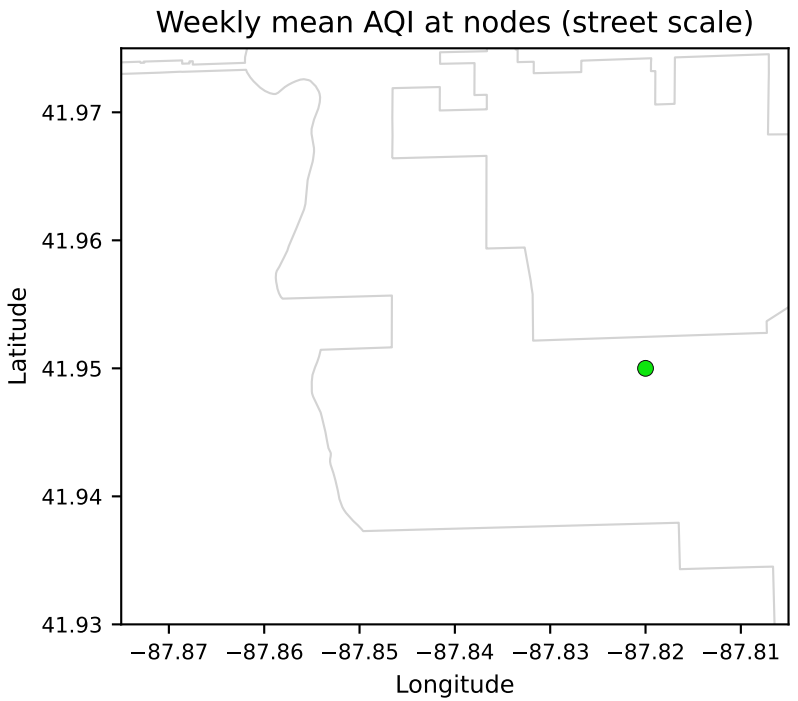
Local mean conditions: T≈1.2 °C, RH≈92%, U≈-0.0 m/s.

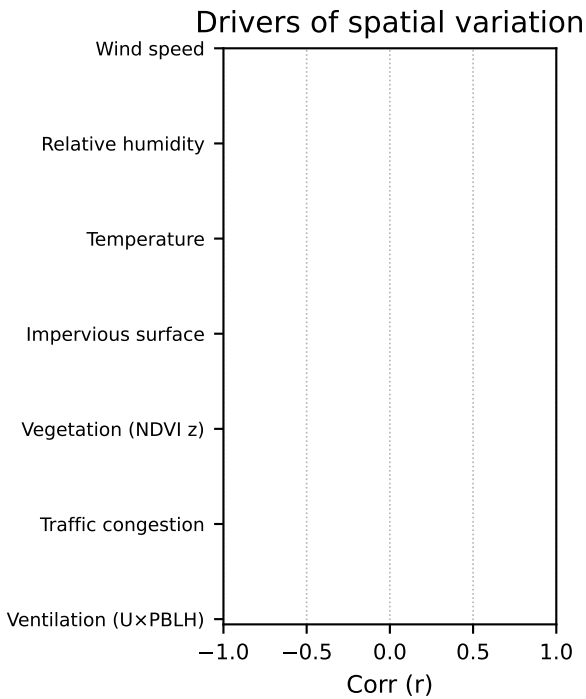
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-01-22 to 2024-01-28





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W04 (2024-01-22–2024-01-28): street-level weekly AQI median ≈ 38 (P10≈38, P90≈38).

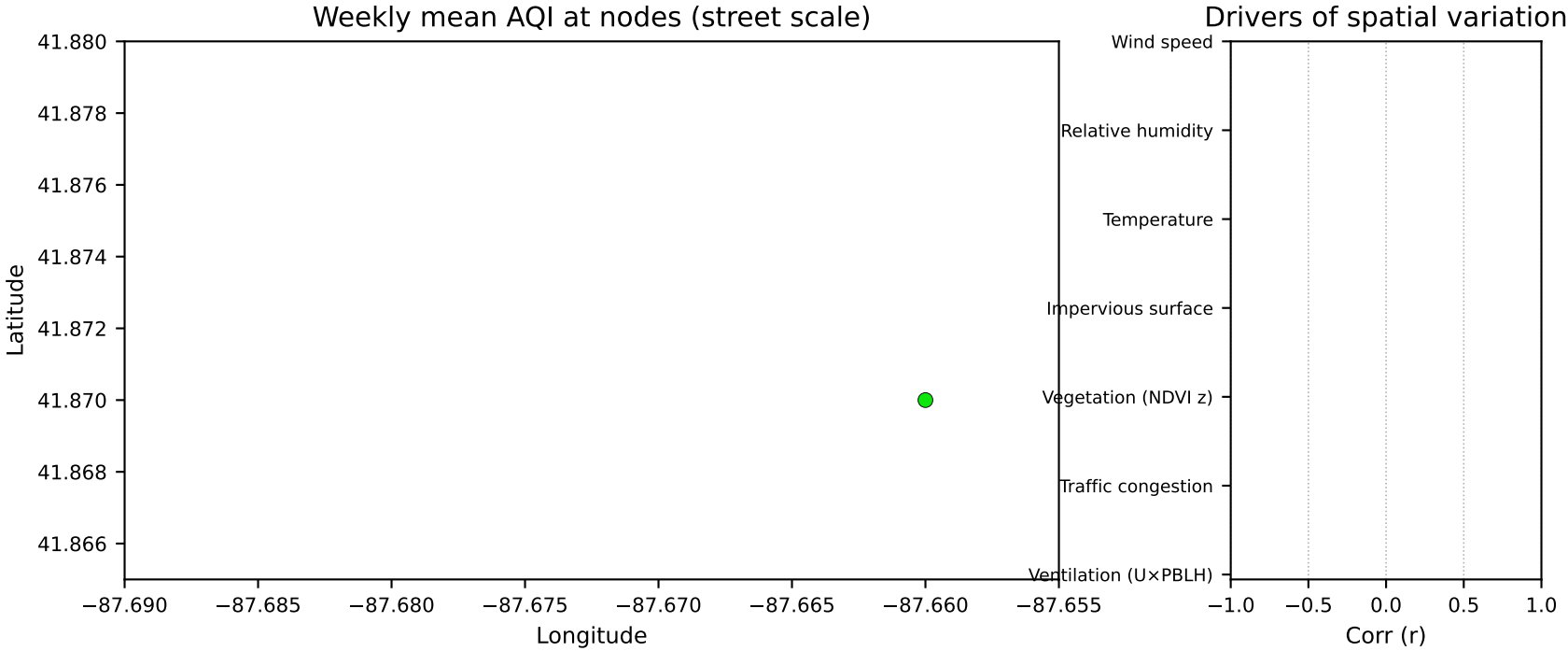
Local mean conditions: T≈0.9 °C, RH≈93%, U≈-0.3 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-01-29 to 2024-02-04



Weekly inference:

Illinois Medical District, week 2024-W05 (2024-01-29–2024-02-04): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

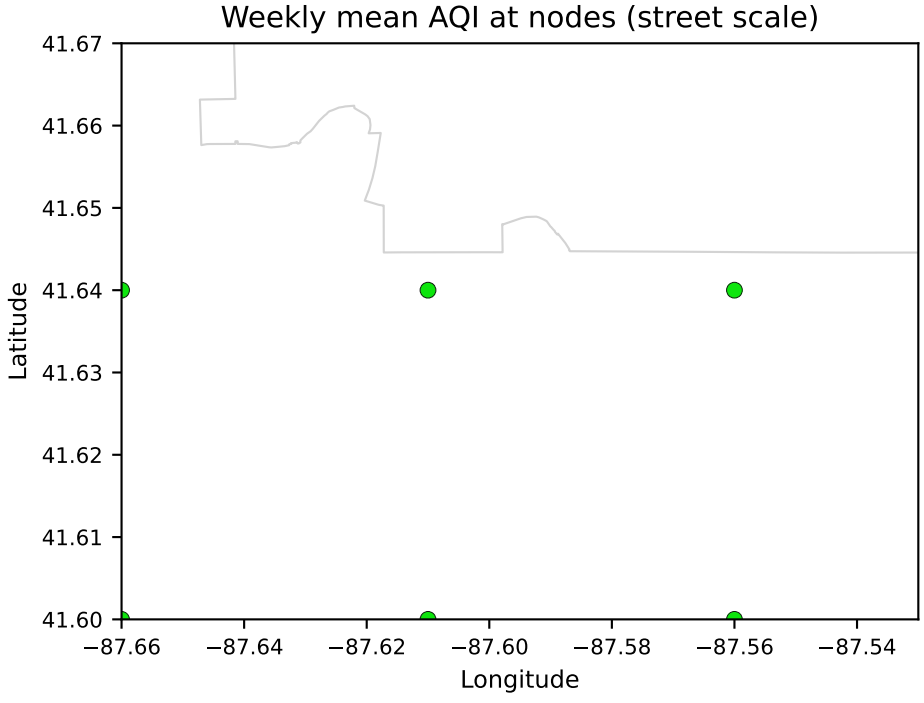
Local mean conditions: T̄≈1.4 °C, RH̄≈87%, Ū≈0.6 m/s.

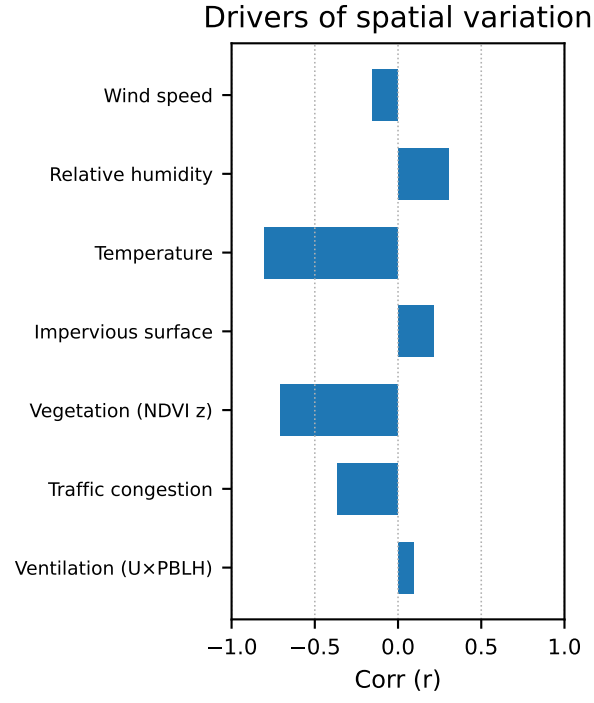
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-01-29 to 2024-02-04





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W05 (2024-01-29–2024-02-04): street-level weekly AQI median ≈ 39 (P10≈37, P90≈40).

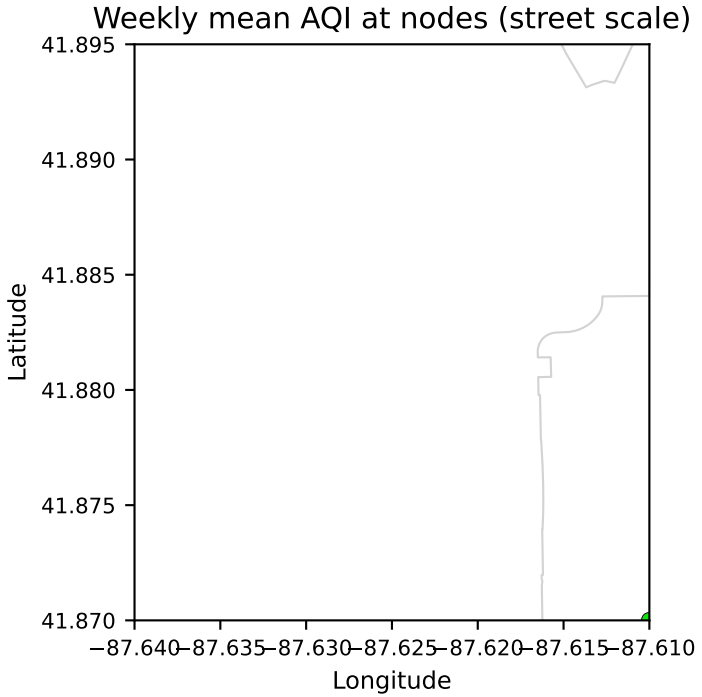
Local mean conditions: T̄≈1.4 °C, RH̄≈85%, Ū≈0.8 m/s.

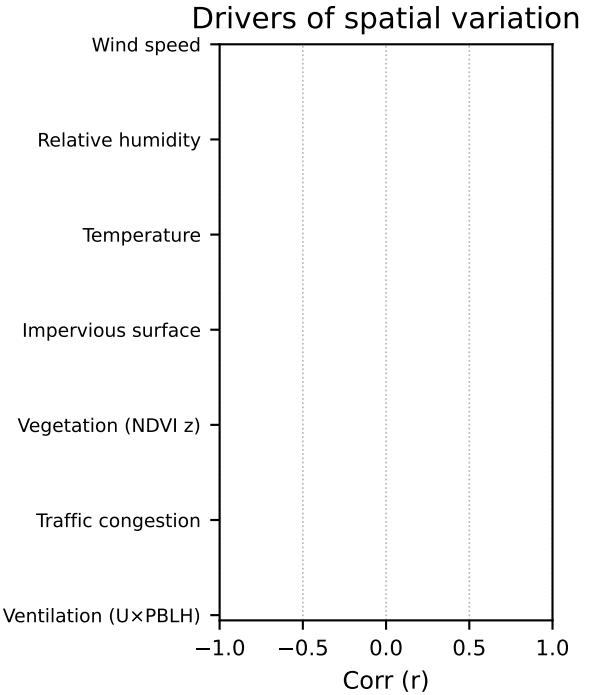
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): negligible positive correlation (r≈0.09). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: moderate negative correlation (r≈-0.36). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): strong negative correlation (r≈-0.70). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak positive correlation (r≈0.21). More impervious, built-up surfaces coincided with elevated AQI, aligning with dense emission sources and reduced near-surface mixing.
- Temperature: strong negative correlation (r≈-0.80). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-01-29 to 2024-02-04





Weekly inference:

Lakefront Downtown, week 2024-W05 (2024-01-29–2024-02-04): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

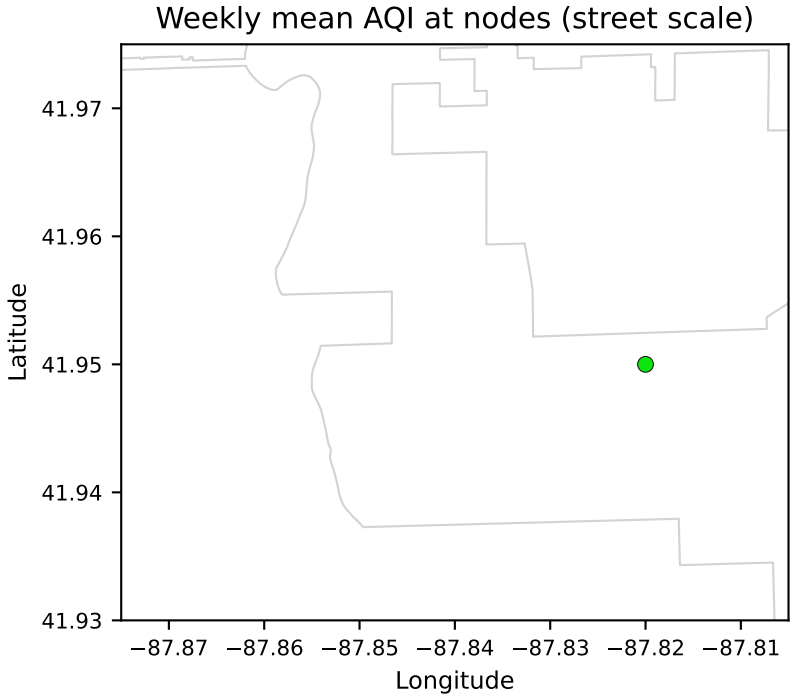
Local mean conditions: T≈1.5 °C, RH≈87%, U≈0.6 m/s.

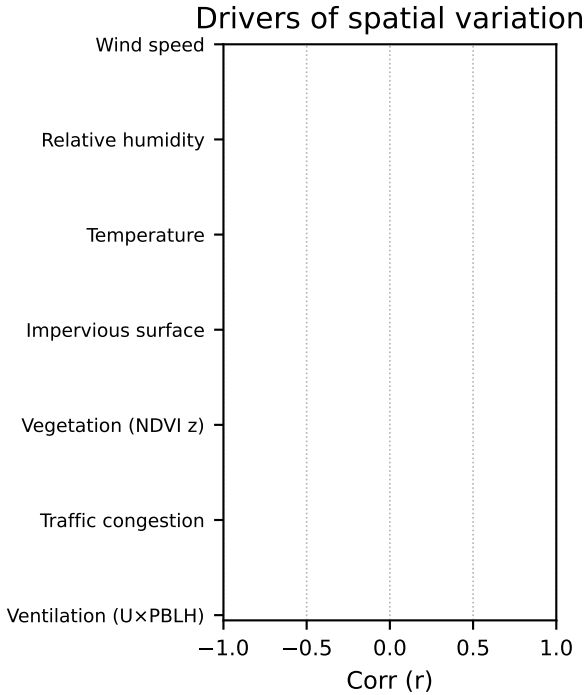
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-01-29 to 2024-02-04





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W05 (2024-01-29–2024-02-04): street-level weekly AQI median ≈ 37 (P10≈37, P90≈37).

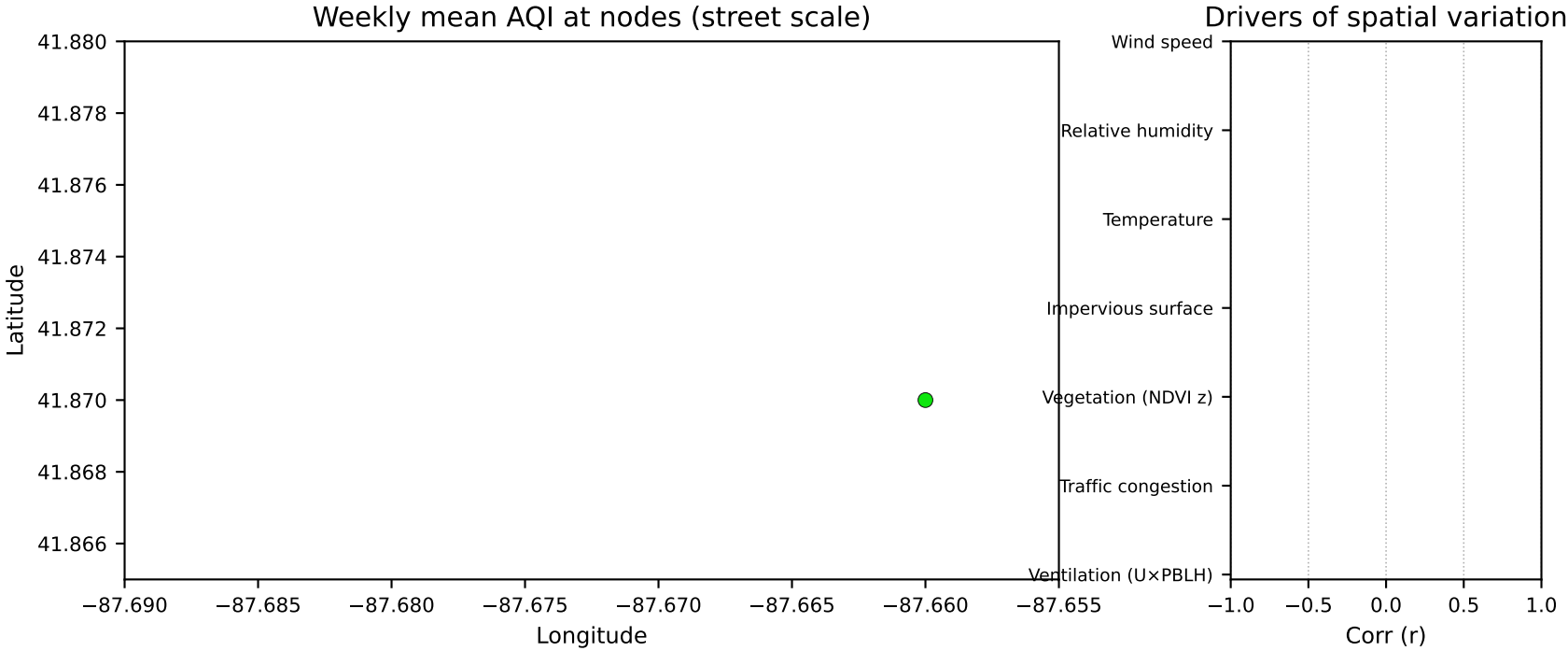
Local mean conditions: T≈1.5 °C, RH≈86%, U≈0.9 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-02-05 to 2024-02-11



Weekly inference:

Illinois Medical District, week 2024-W06 (2024-02-05–2024-02-11): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

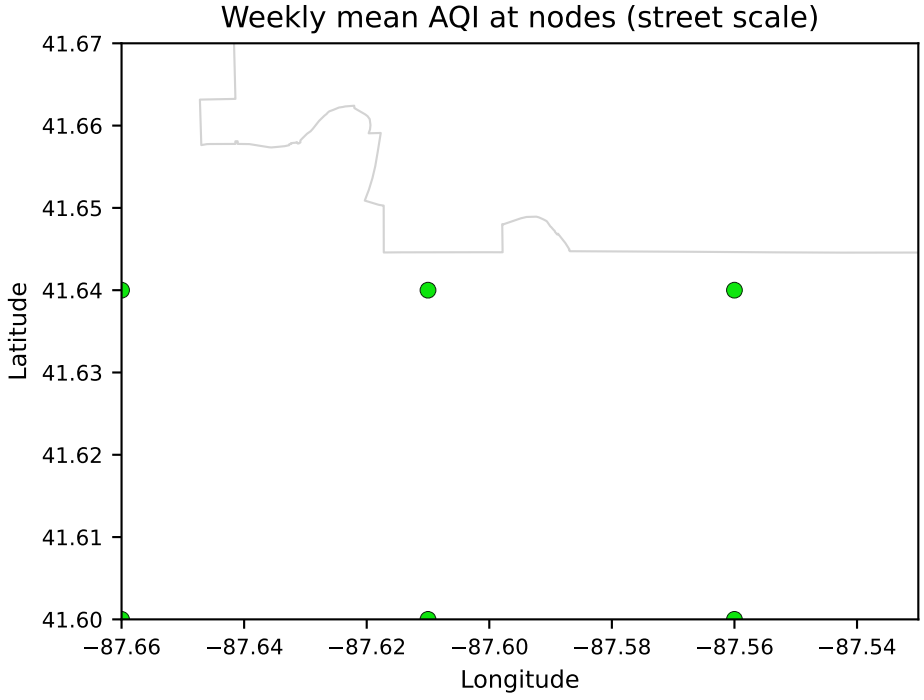
Local mean conditions: T̄≈3.2 °C, RH̄≈79%, Ū≈3.5 m/s.

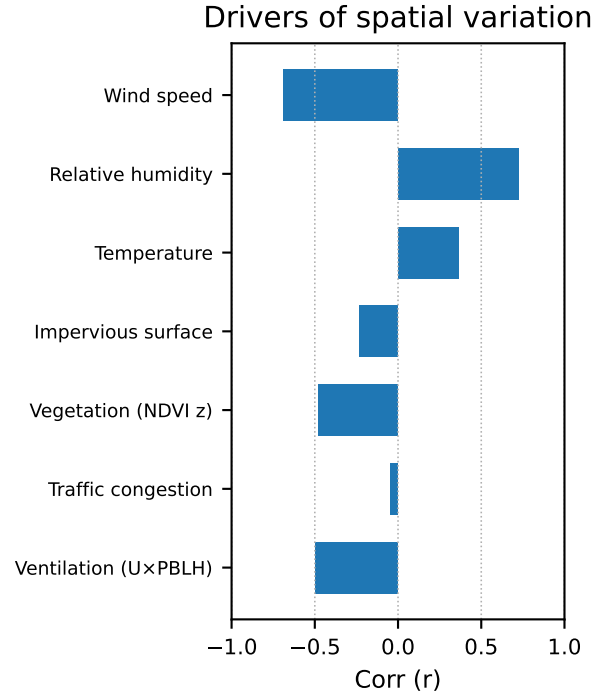
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-02-05 to 2024-02-11





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W06 (2024-02-05–2024-02-11): street-level weekly AQI median ≈ 39 (P10≈36, P90≈41).

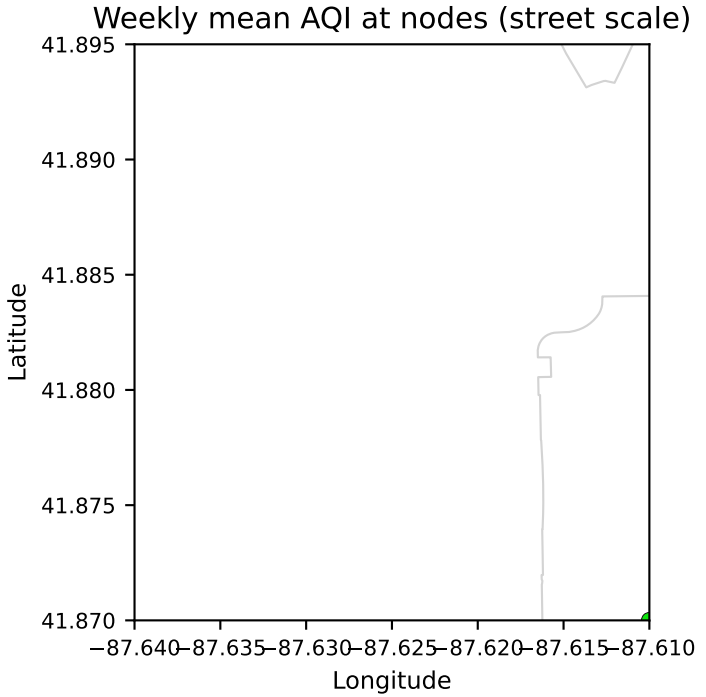
Local mean conditions: T≈3.4 °C, RH≈78%, U≈3.1 m/s.

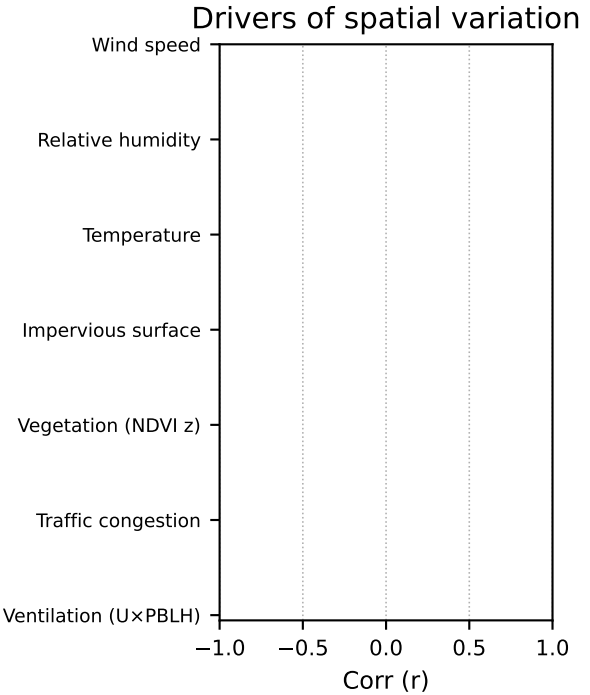
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.50). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.05). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.48). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.23). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate positive correlation (r≈0.36). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-02-05 to 2024-02-11





Weekly inference:

Lakefront Downtown, week 2024-W06 (2024-02-05–2024-02-11): street-level weekly AQI median ≈ 37 (P10≈37, P90≈37).

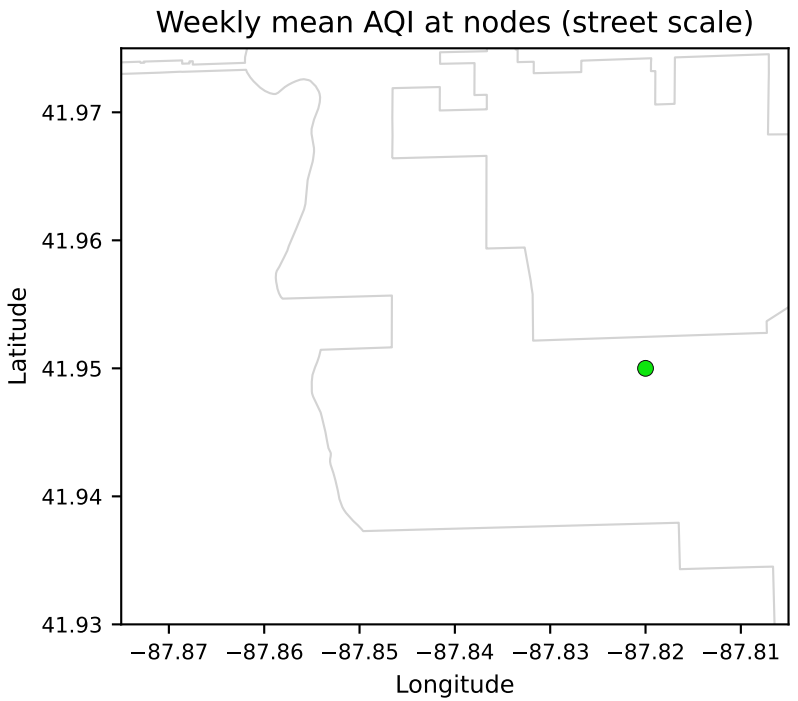
Local mean conditions: T≈3.3 °C, RH≈79%, U≈3.5 m/s.

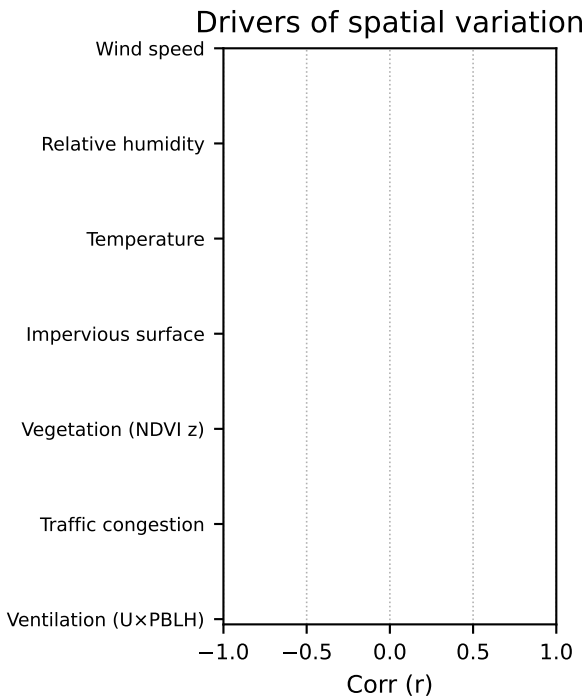
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-02-05 to 2024-02-11





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W06 (2024-02-05–2024-02-11): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

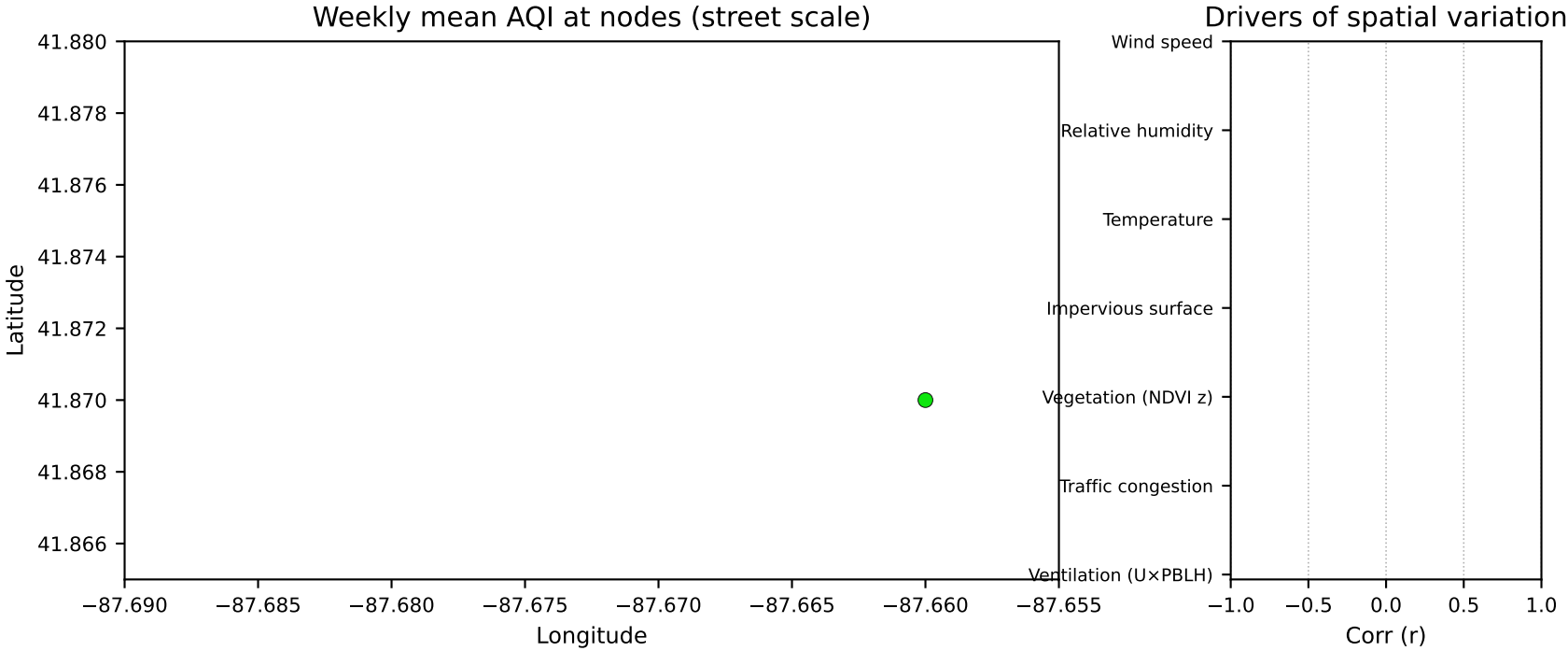
Local mean conditions: T≈3.1 °C, RH≈76%, U≈3.9 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-02-12 to 2024-02-18



Weekly inference:

Illinois Medical District, week 2024-W07 (2024-02-12–2024-02-18): street-level weekly AQI median ≈ 28 (P10≈28, P90≈28).

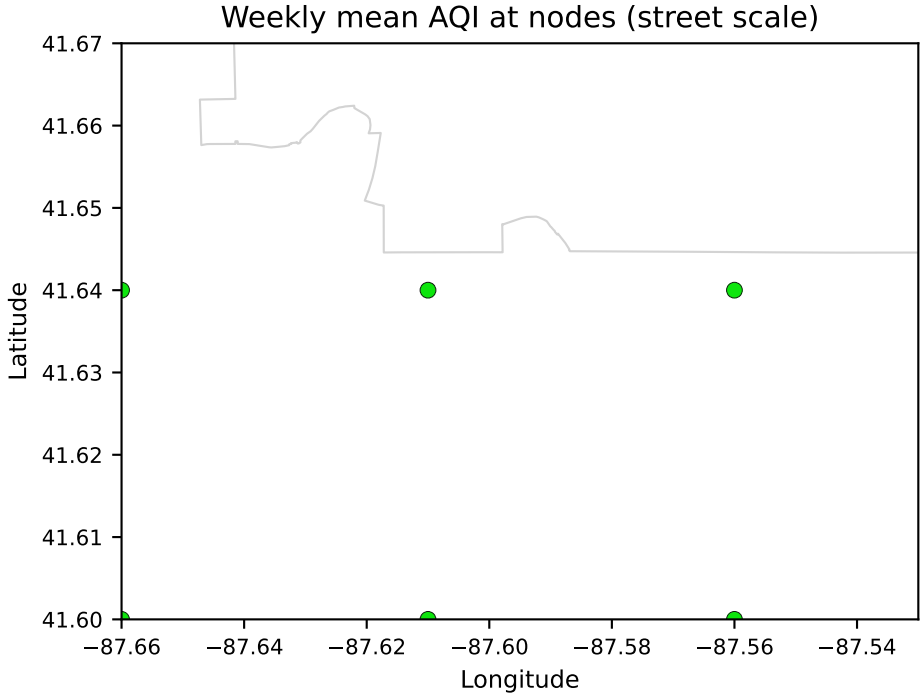
Local mean conditions: T̄≈-0.8 °C, RH̄≈62%, Ū≈10.1 m/s.

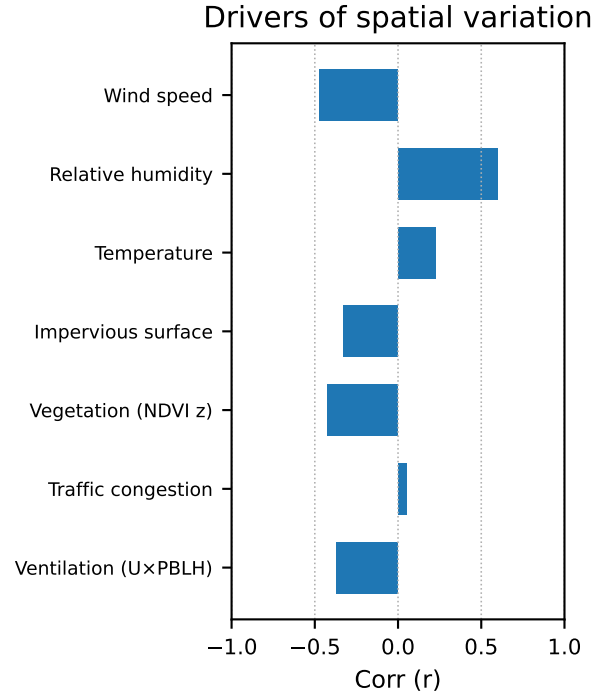
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-02-12 to 2024-02-18





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W07 (2024-02-12–2024-02-18): street-level weekly AQI median ≈ 34 (P10≈31, P90≈35).

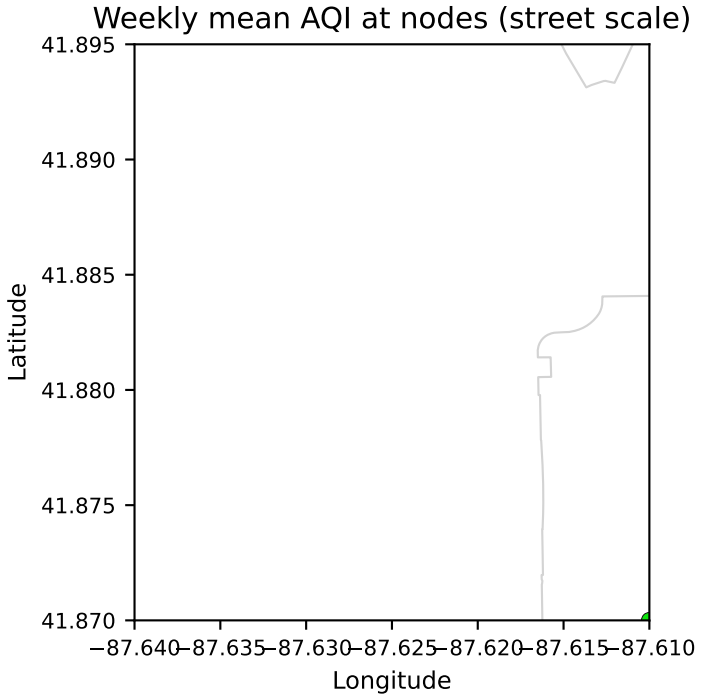
Local mean conditions: T̄≈-0.6 °C, RH̄≈60%, Ū≈8.7 m/s.

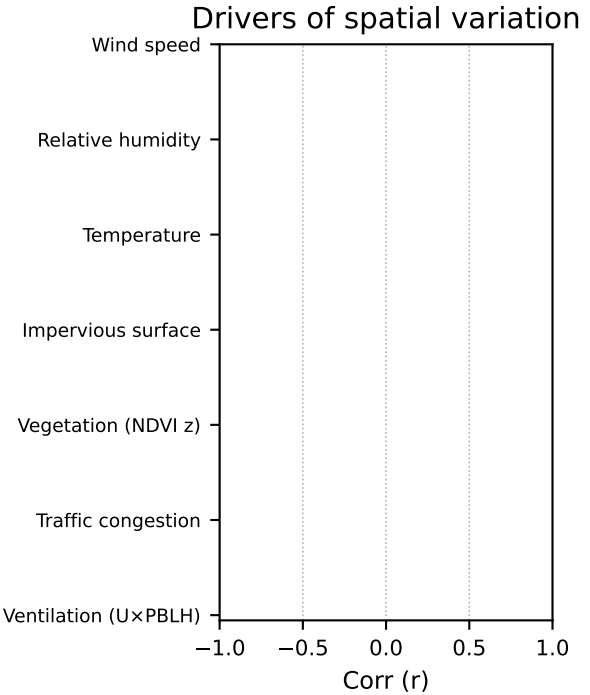
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.37). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.05). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.42). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.33). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: weak positive correlation (r≈0.22). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-02-12 to 2024-02-18





Weekly inference:

Lakefront Downtown, week 2024-W07 (2024-02-12–2024-02-18): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

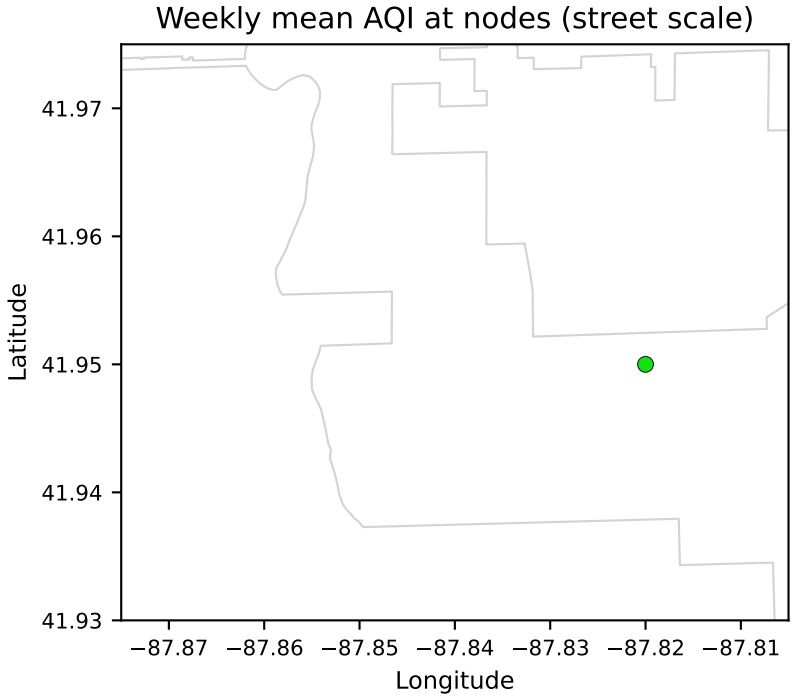
Local mean conditions: T̄≈-0.7 °C, RH̄≈62%, Ū≈10.1 m/s.

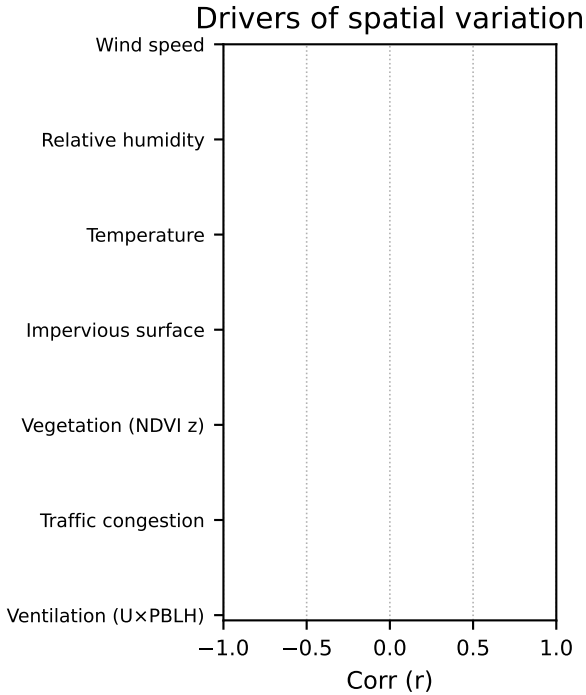
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-02-12 to 2024-02-18





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W07 (2024-02-12–2024-02-18): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

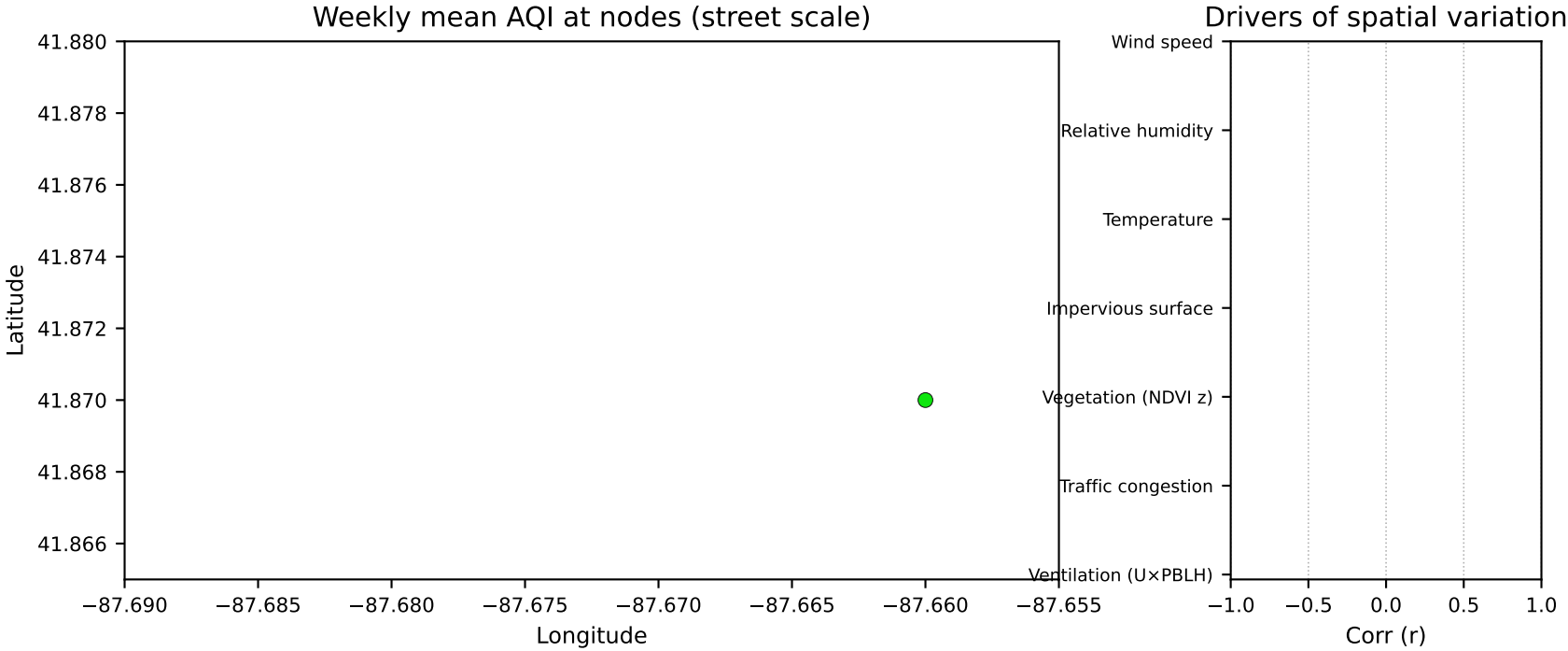
Local mean conditions: T≈-0.8 °C, RH≈58%, U≈9.0 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-02-19 to 2024-02-25



Weekly inference:

Illinois Medical District, week 2024-W08 (2024-02-19–2024-02-25): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

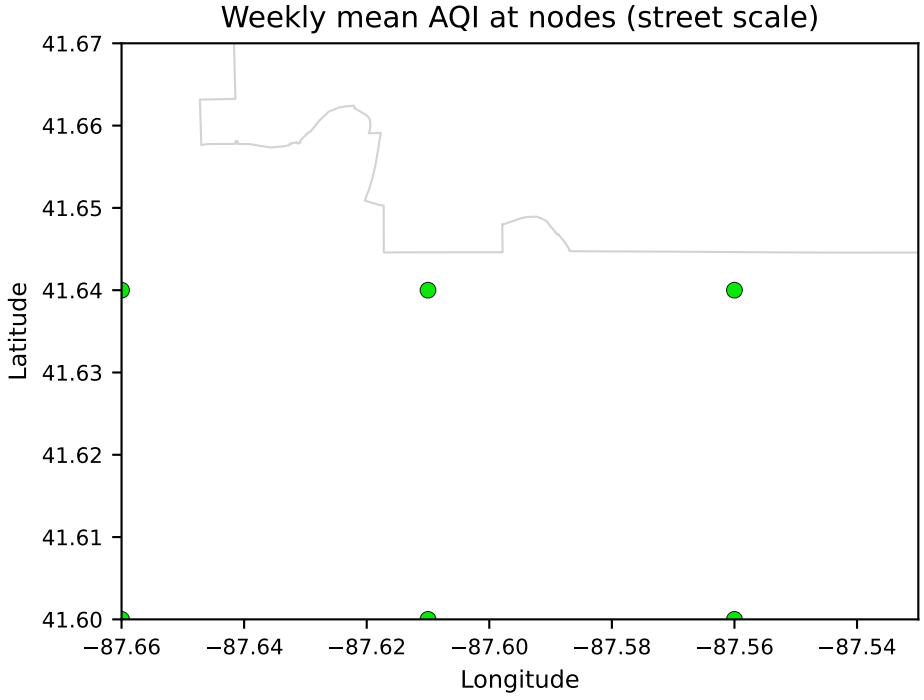
Local mean conditions: T̄≈3.5 °C, RH̄≈69%, Ū≈2.9 m/s.

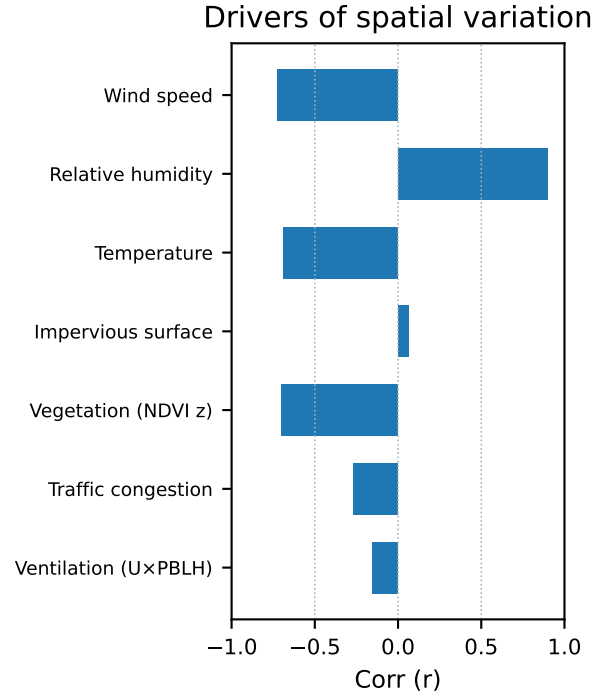
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-02-19 to 2024-02-25





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W08 (2024-02-19–2024-02-25): street-level weekly AQI median ≈ 39 (P10≈36, P90≈40).

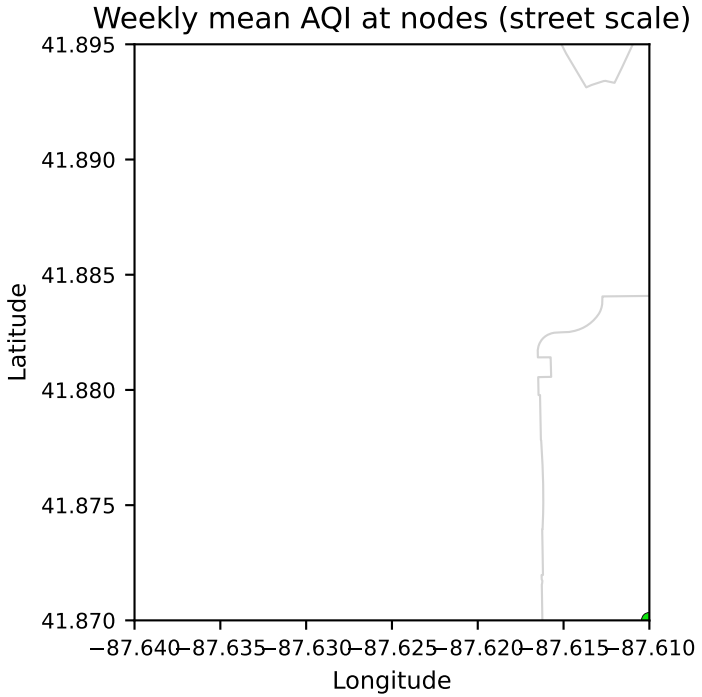
Local mean conditions: T≈3.9 °C, RH≈67%, U≈2.5 m/s.

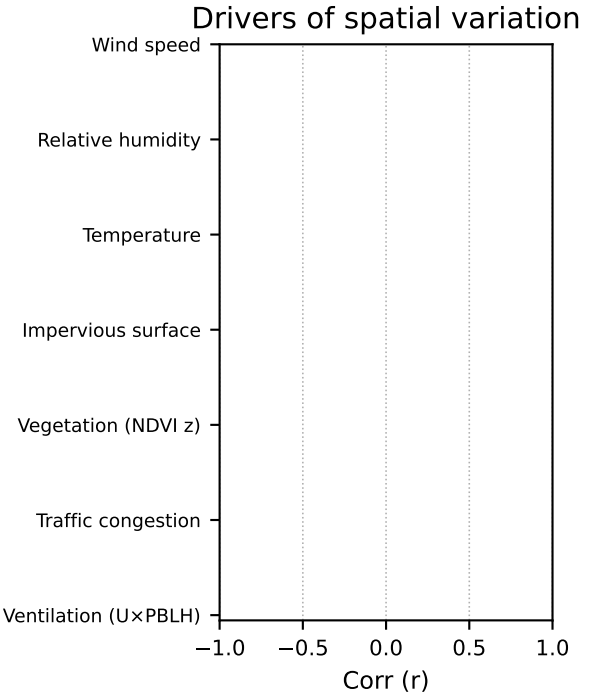
Driver-wise interpretation:

- Ventilation (U×PBLH): weak negative correlation (r≈-0.16). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak negative correlation (r≈-0.27). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): strong negative correlation (r≈-0.70). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: negligible positive correlation (r≈0.06). More impervious, built-up surfaces coincided with elevated AQI, aligning with dense emission sources and reduced near-surface mixing.
- Temperature: strong negative correlation (r≈-0.69). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Lakefront Downtown — Street-level AQI dashboard | 2024-02-19 to 2024-02-25





Weekly inference:

Lakefront Downtown, week 2024-W08 (2024-02-19–2024-02-25): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

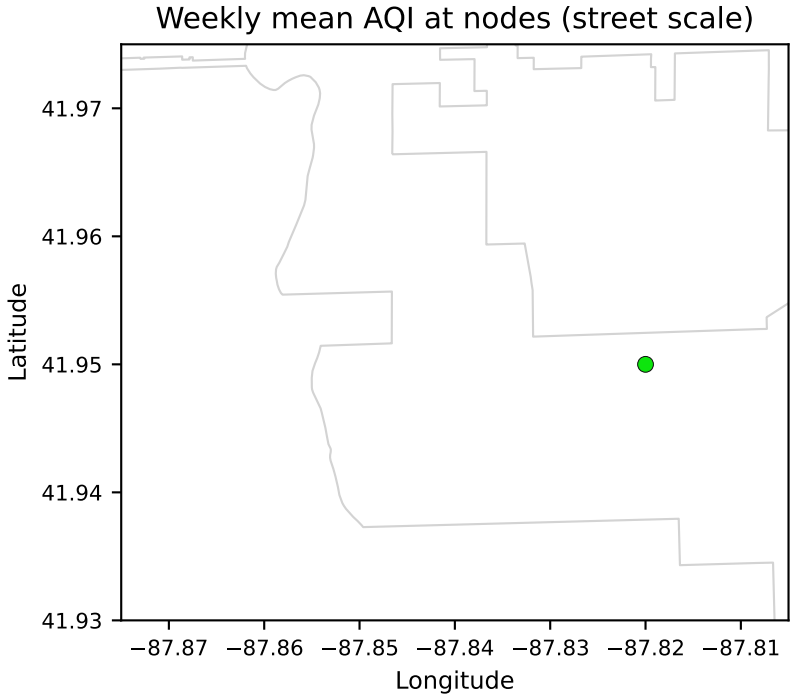
Local mean conditions: T≈3.6 °C, RH≈69%, U≈2.9 m/s.

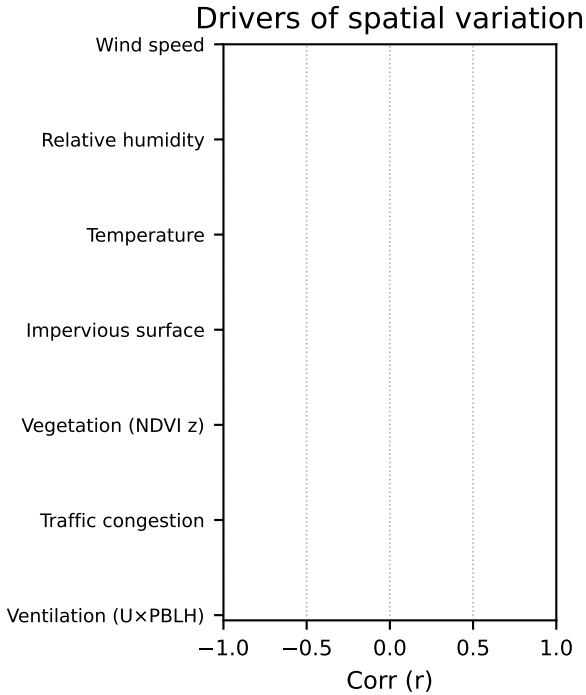
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-02-19 to 2024-02-25





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W08 (2024-02-19–2024-02-25): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

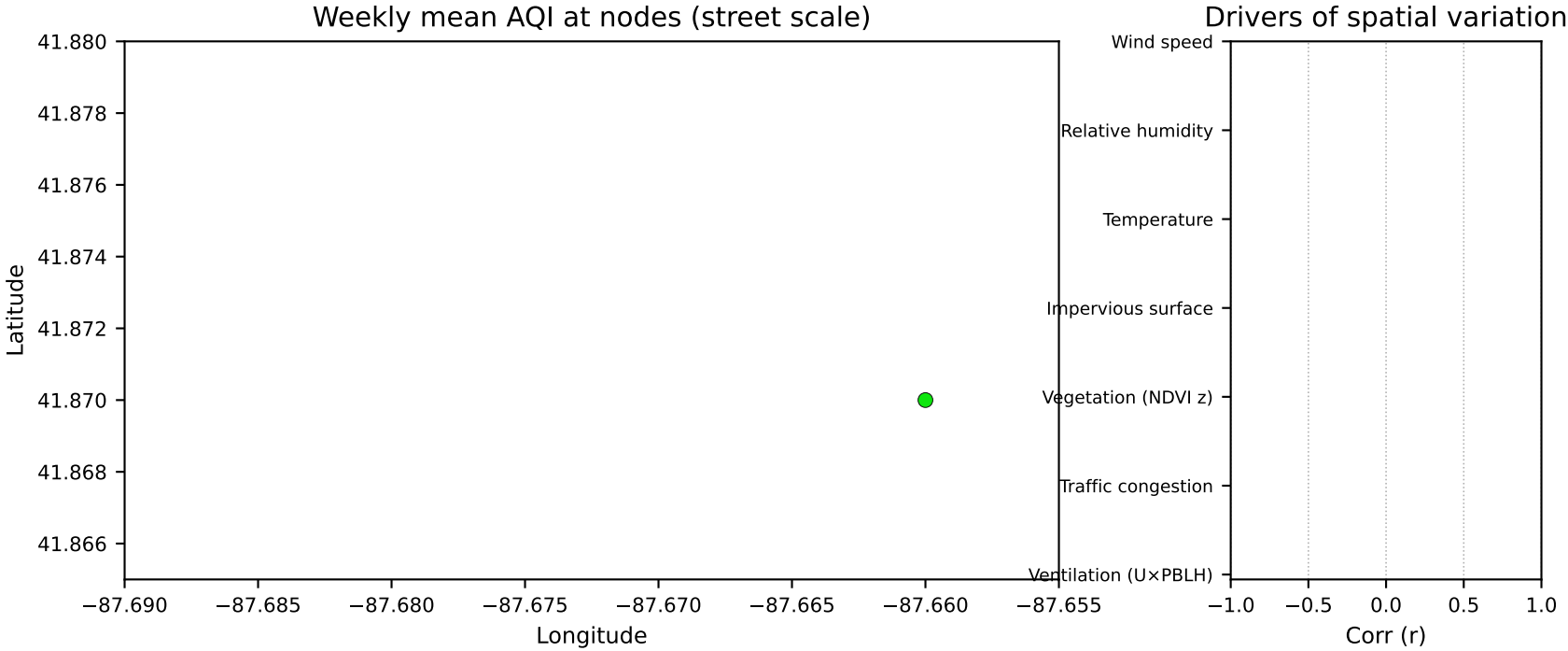
Local mean conditions: T≈3.9 °C, RH≈63%, U≈3.3 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-02-26 to 2024-03-03



Weekly inference:

Illinois Medical District, week 2024-W09 (2024-02-26–2024-03-03): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

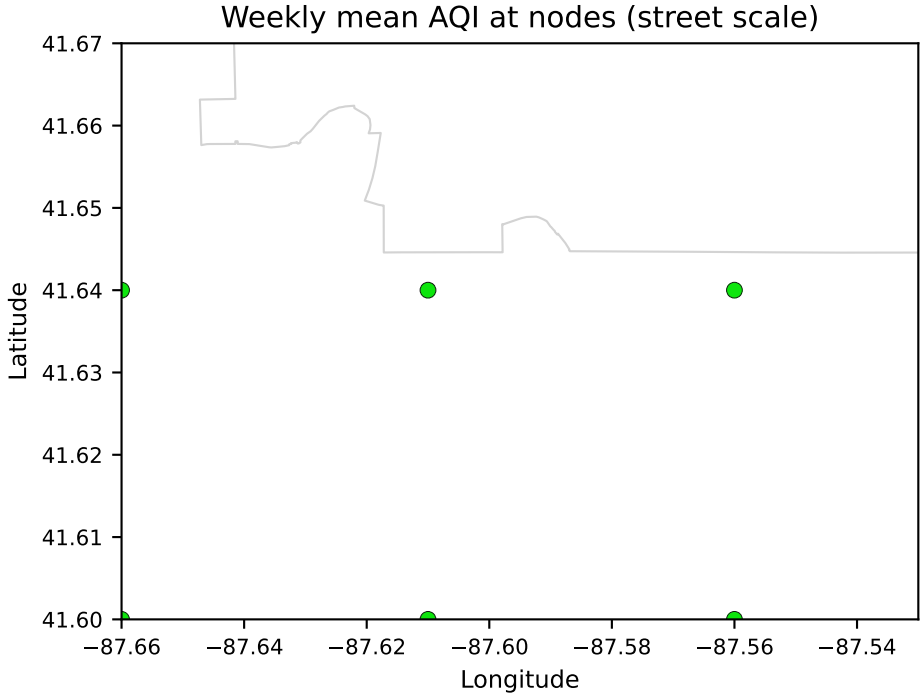
Local mean conditions: T̄≈6.1 °C, RH̄≈65%, Ū≈4.6 m/s.

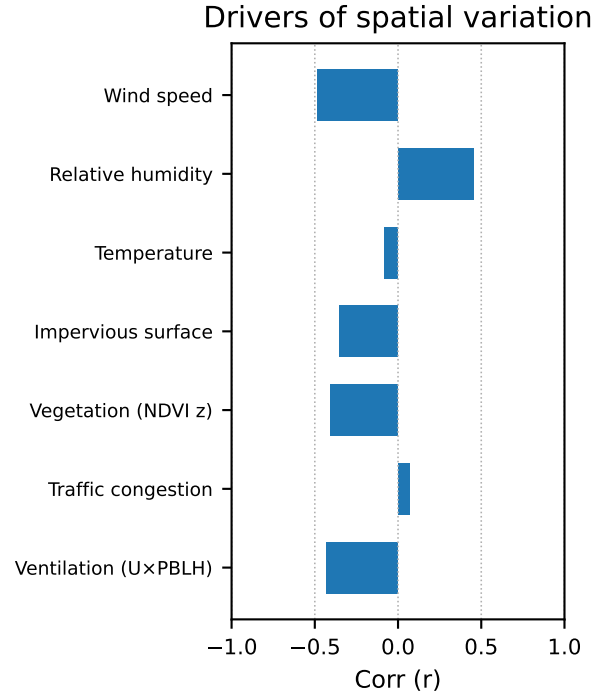
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-02-26 to 2024-03-03





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W09 (2024-02-26–2024-03-03): street-level weekly AQI median ≈ 39 (P10≈35, P90≈40).

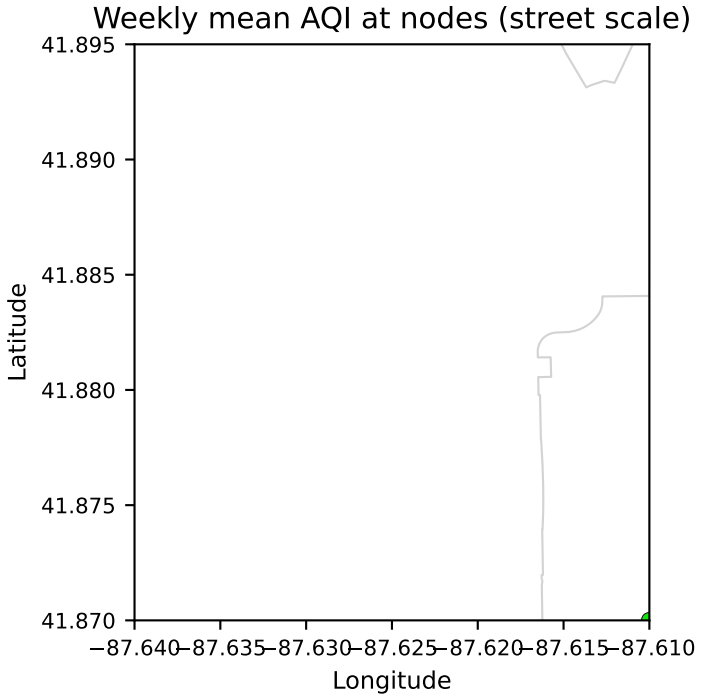
Local mean conditions: T≈6.5 °C, RH≈64%, U≈3.8 m/s.

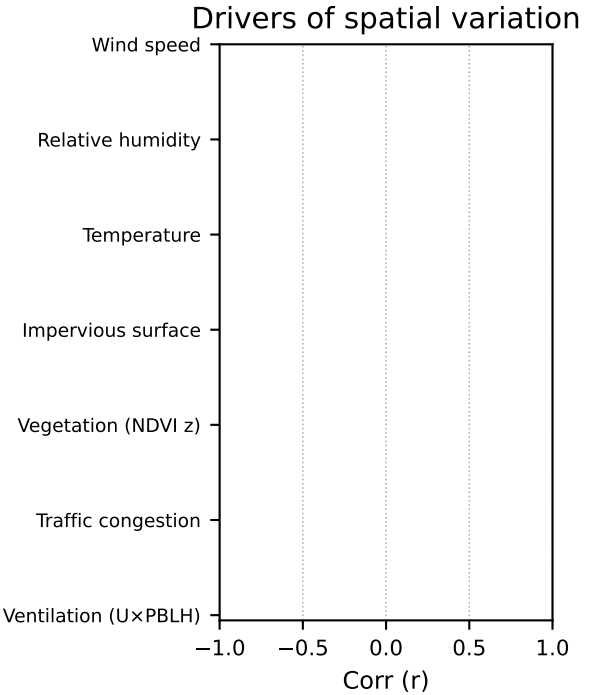
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.43). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.07). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.40). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.35). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: negligible negative correlation (r≈-0.08). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-02-26 to 2024-03-03





Weekly inference:

Lakefront Downtown, week 2024-W09 (2024-02-26–2024-03-03): street-level weekly AQI median ≈ 37 (P10≈37, P90≈37).

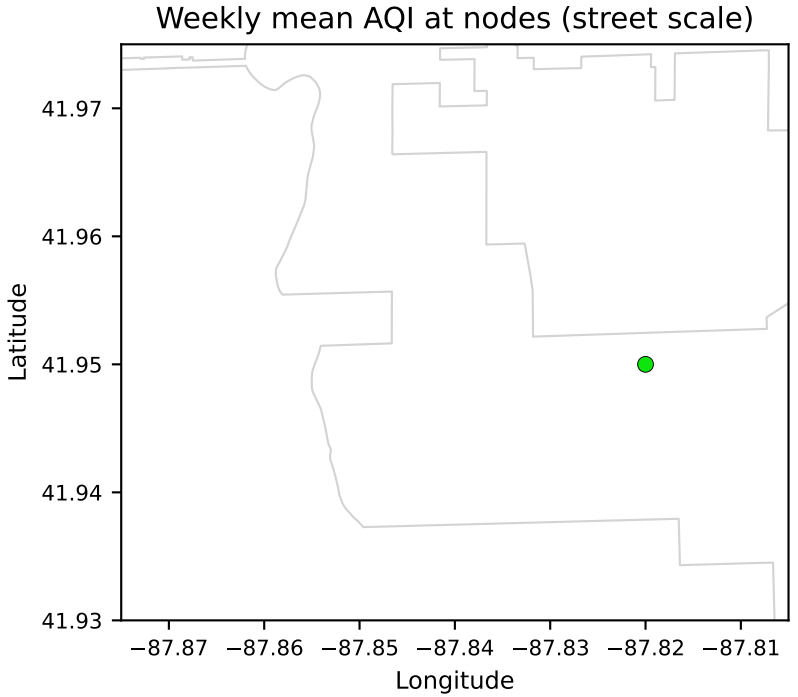
Local mean conditions: T≈6.2 °C, RH≈65%, U≈4.6 m/s.

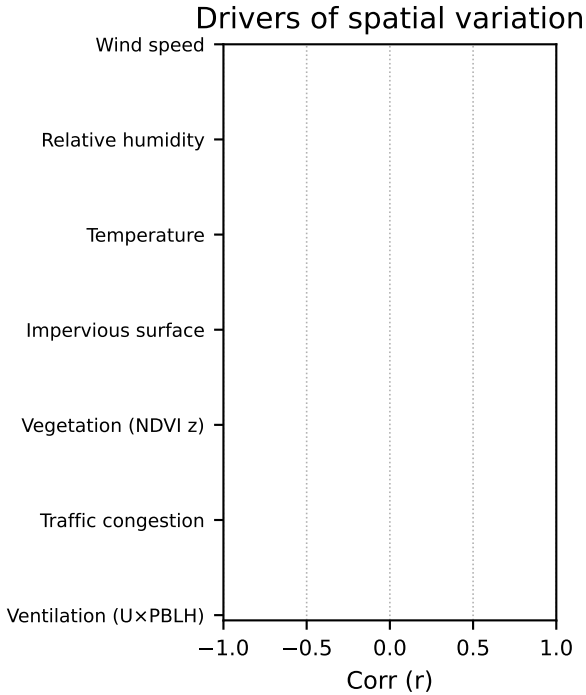
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-02-26 to 2024-03-03





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W09 (2024-02-26–2024-03-03): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

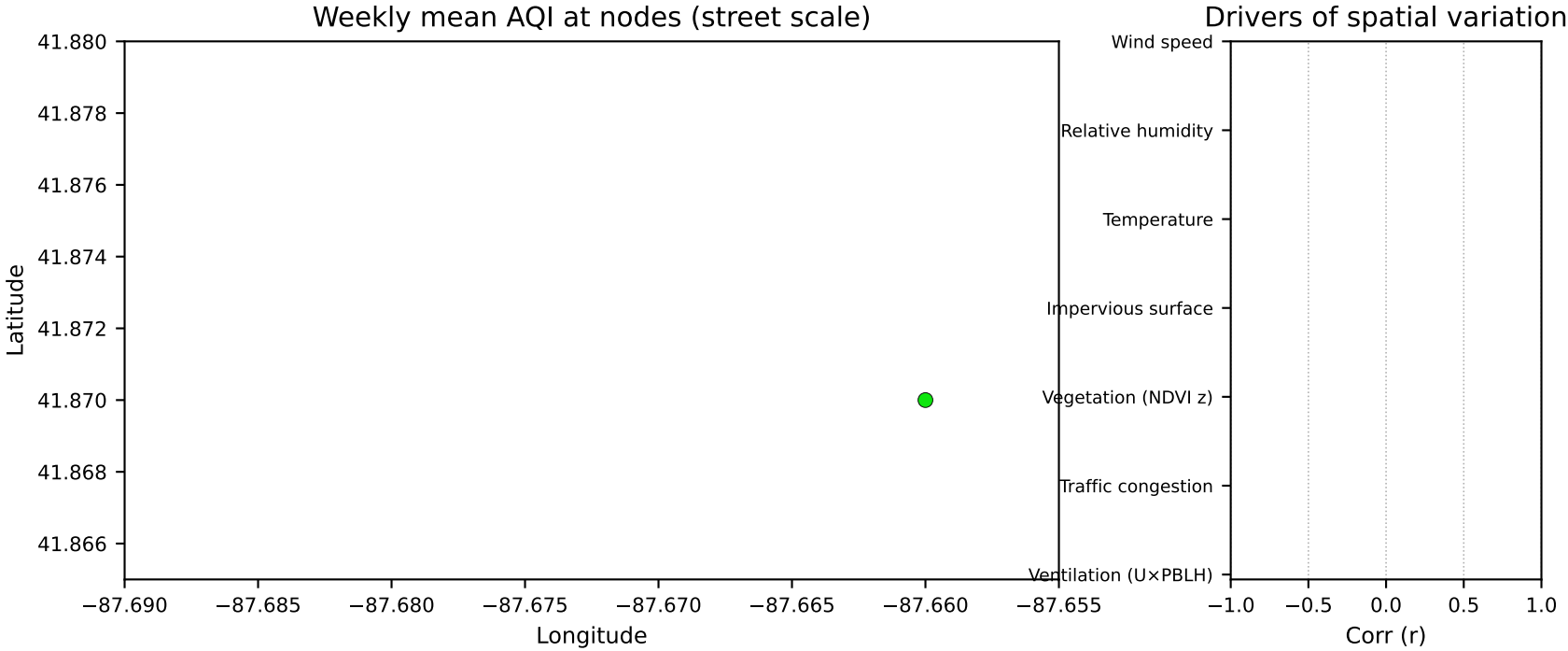
Local mean conditions: T≈6.4 °C, RH≈61%, U≈4.2 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-03-04 to 2024-03-10



Weekly inference:

Illinois Medical District, week 2024-W10 (2024-03-04–2024-03-10): street-level weekly AQI median ≈ 30 (P10≈30, P90≈30).

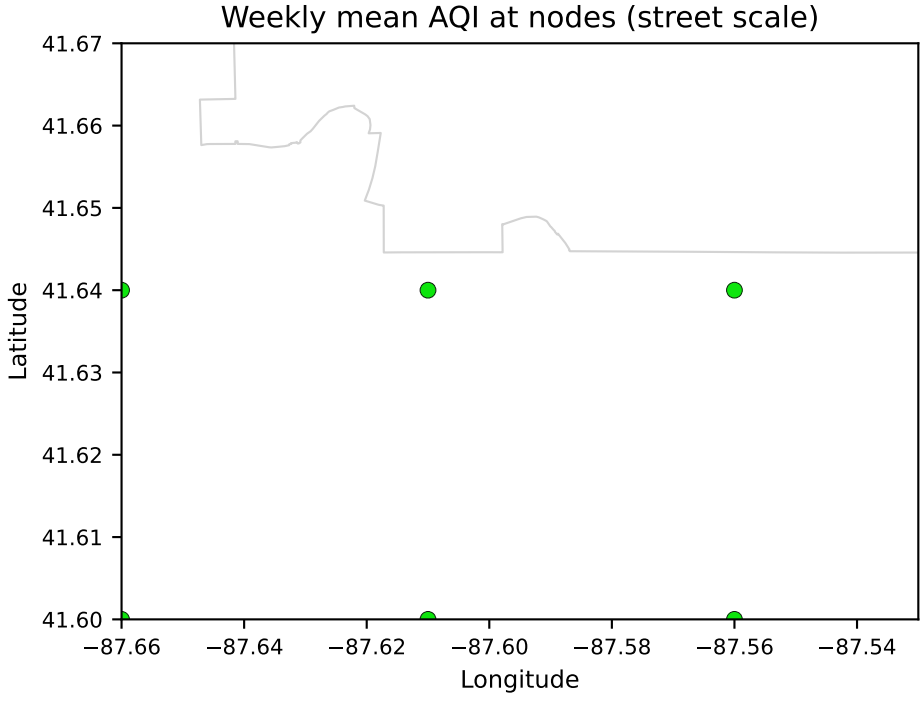
Local mean conditions: T̄≈5.7 °C, RH̄≈80%, Ū≈0.2 m/s.

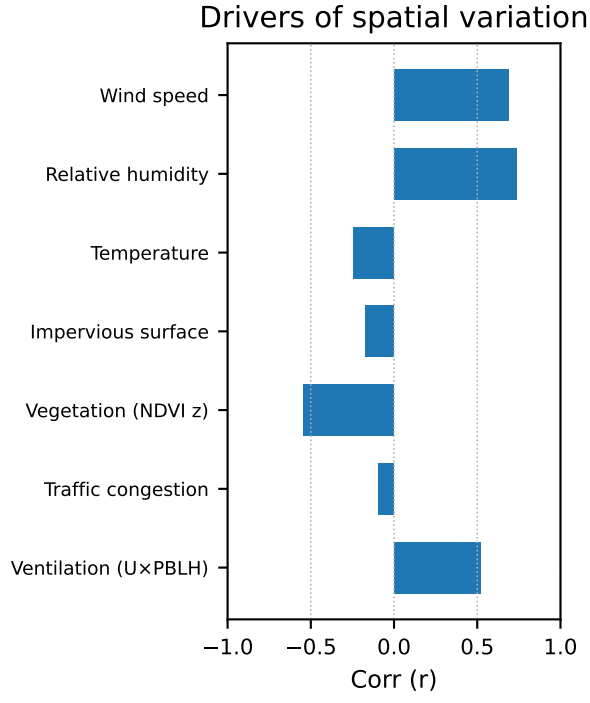
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-03-04 to 2024-03-10





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W10 (2024-03-04–2024-03-10): street-level weekly AQI median ≈ 37 (P10≈35, P90≈39).

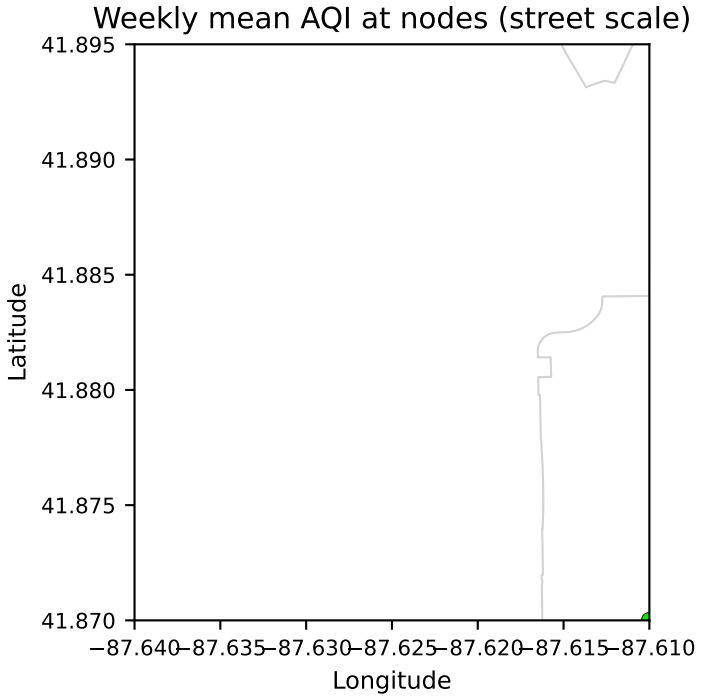
Local mean conditions: T≈6.7 °C, RH≈77%, U≈0.4 m/s.

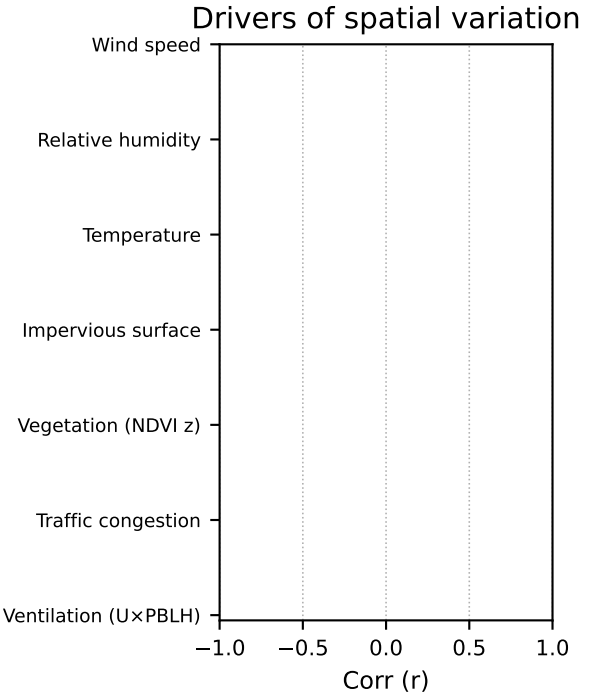
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate positive correlation (r≈0.52). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: negligible negative correlation (r≈-0.09). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.55). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.17). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: weak negative correlation (r≈-0.24). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-03-04 to 2024-03-10





Weekly inference:

Lakefront Downtown, week 2024-W10 (2024-03-04–2024-03-10): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

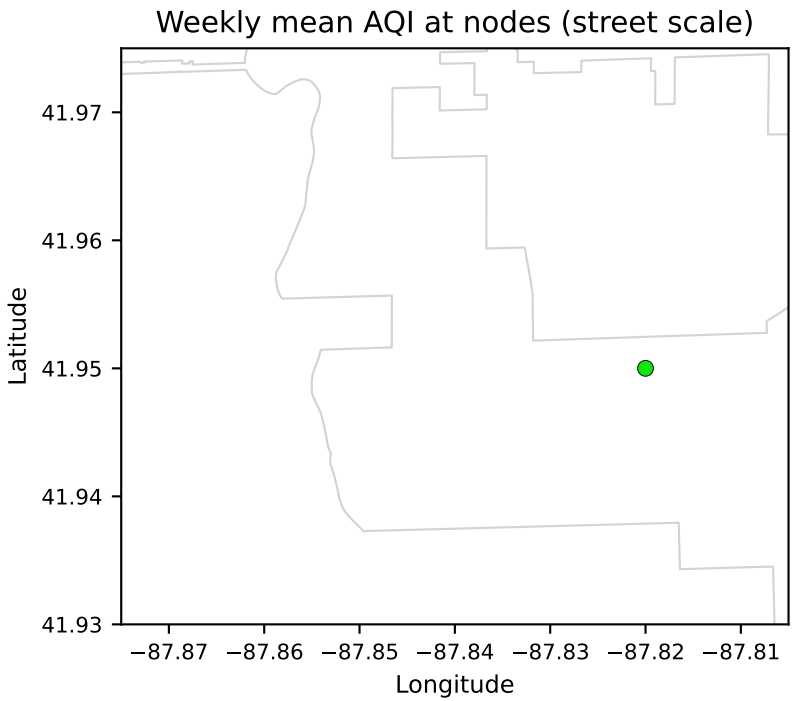
Local mean conditions: T≈5.8 °C, RH≈80%, U≈0.2 m/s.

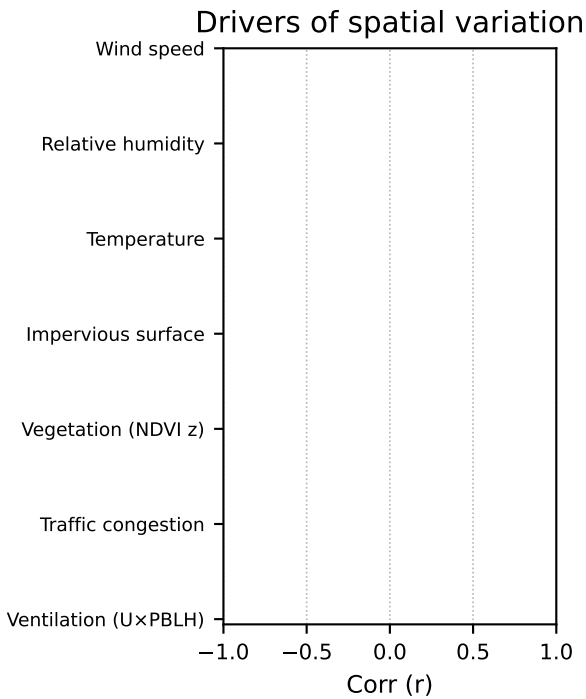
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-03-04 to 2024-03-10





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W10 (2024-03-04–2024-03-10): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

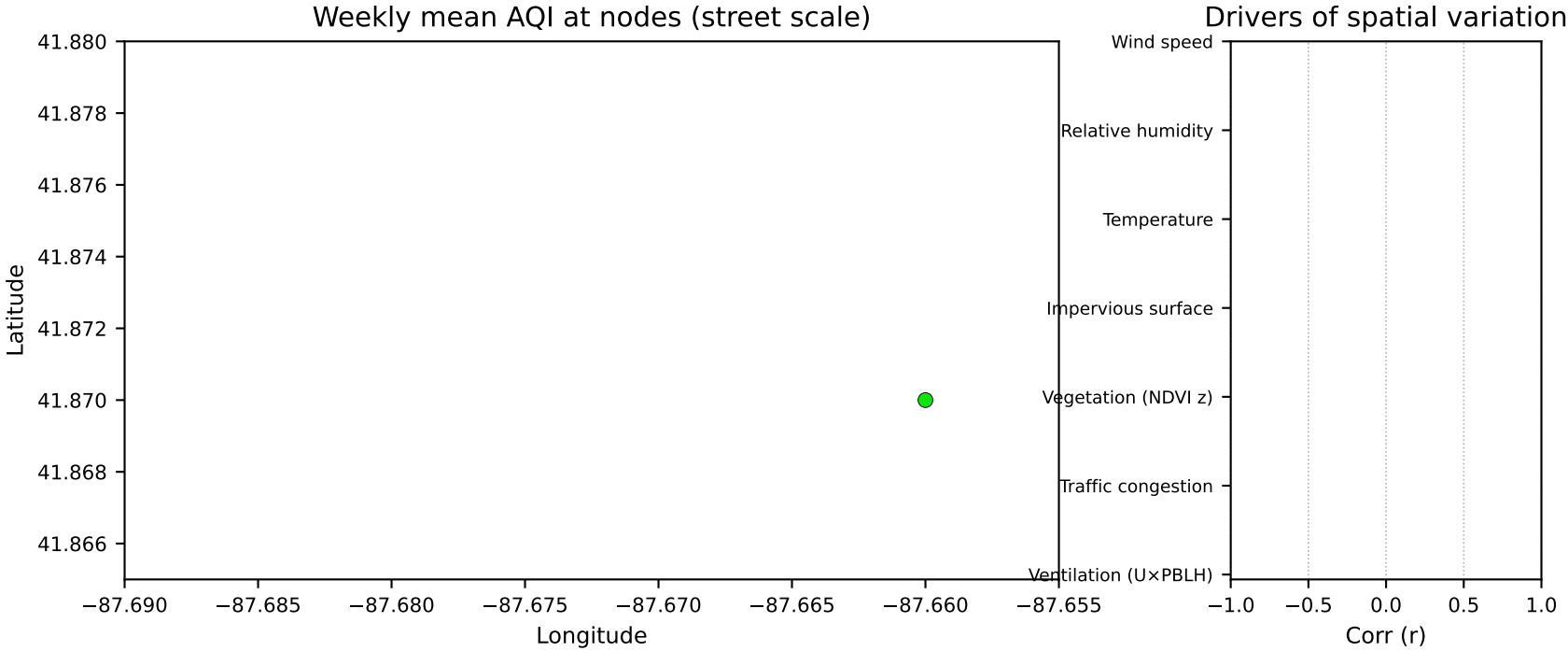
Local mean conditions: T̄≈6.0 °C, RH̄≈75%, Ū≈0.2 m/s.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Illinois Medical District — Street-level AQI dashboard | 2024-03-11 to 2024-03-17



Weekly inference:

Illinois Medical District, week 2024-W11 (2024-03-11–2024-03-17): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

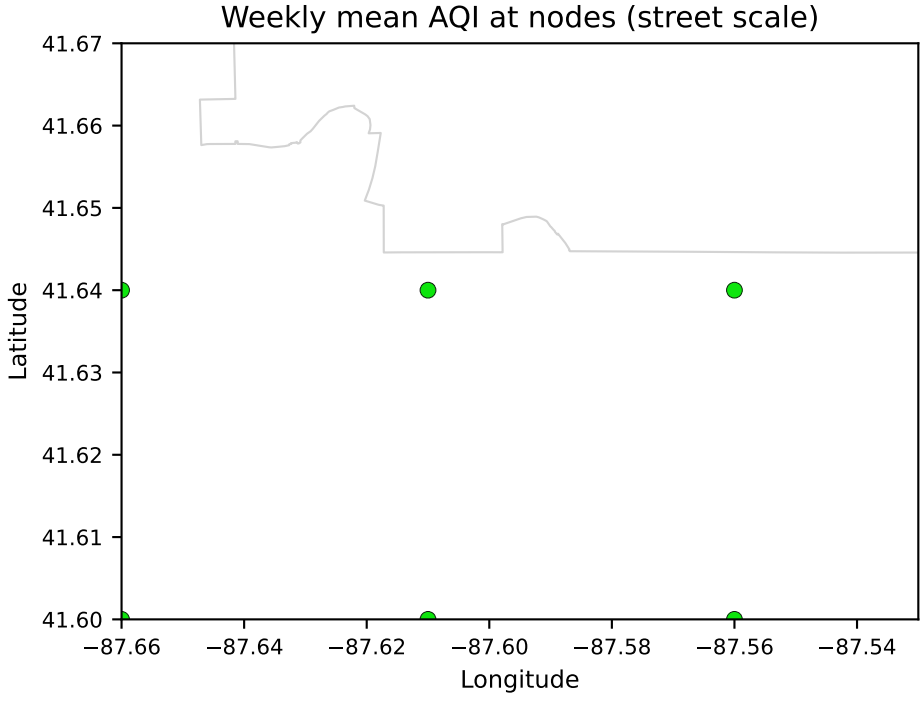
Local mean conditions: T̄≈7.4 °C, RH̄≈69%, Ū≈9.6 m/s.

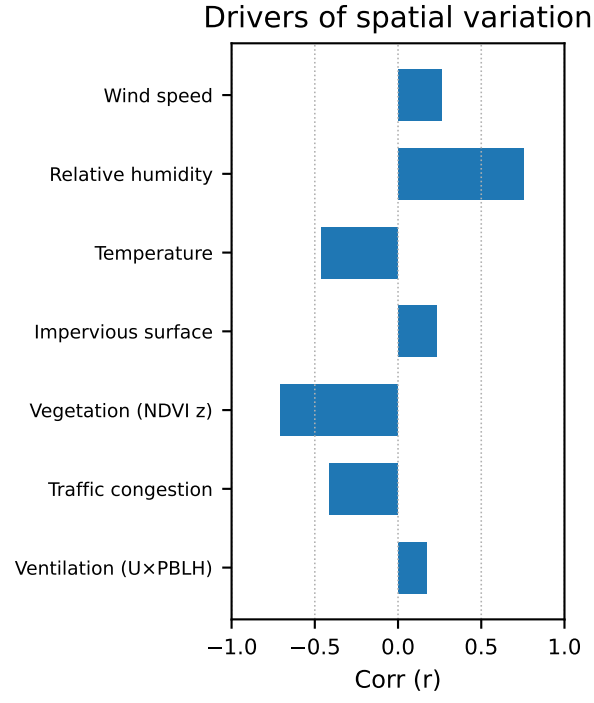
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-03-11 to 2024-03-17





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W11 (2024-03-11–2024-03-17): street-level weekly AQI median ≈ 37 (P10≈35, P90≈38).

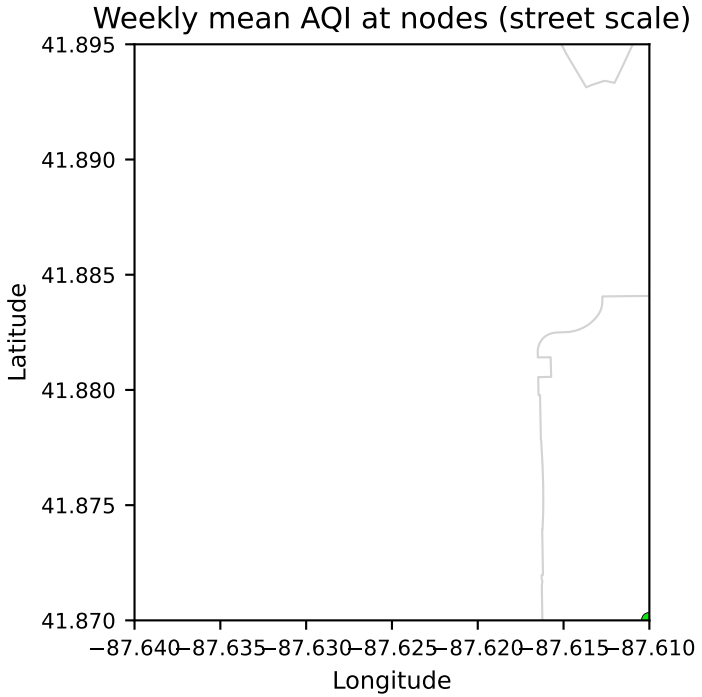
Local mean conditions: T̄≈8.4 °C, RH̄≈65%, Ū≈8.3 m/s.

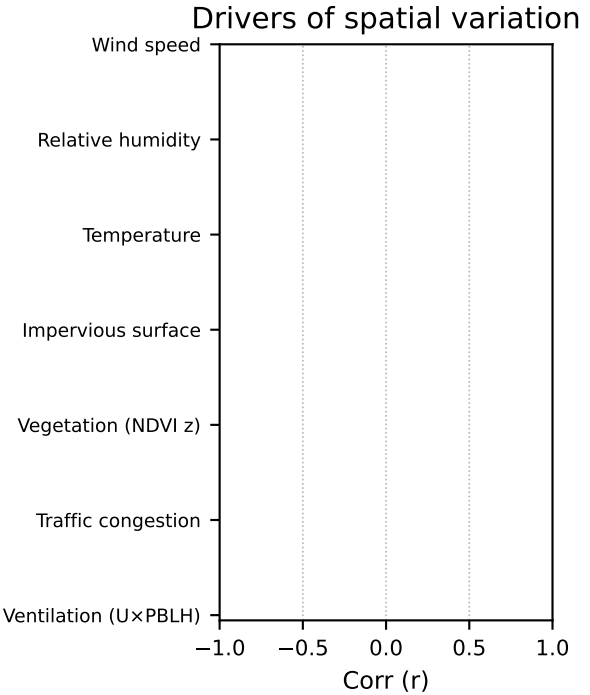
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak positive correlation (r≈0.17). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: moderate negative correlation (r≈-0.41). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): strong negative correlation (r≈-0.71). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak positive correlation (r≈0.23). More impervious, built-up surfaces coincided with elevated AQI, aligning with dense emission sources and reduced near-surface mixing.
- Temperature: moderate negative correlation (r≈-0.46). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-03-11 to 2024-03-17





Weekly inference:

Lakefront Downtown, week 2024-W11 (2024-03-11–2024-03-17): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

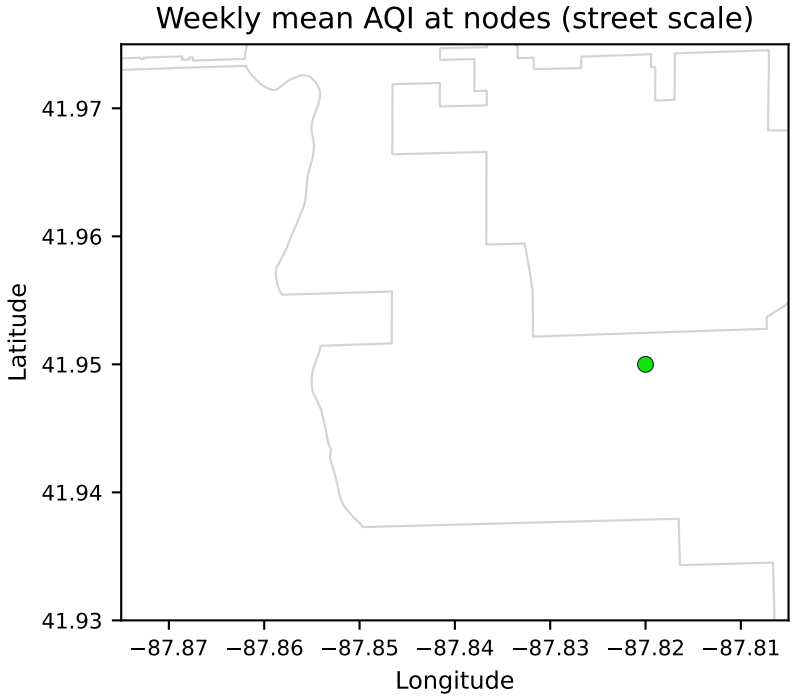
Local mean conditions: T≈7.5 °C, RH≈69%, U≈9.6 m/s.

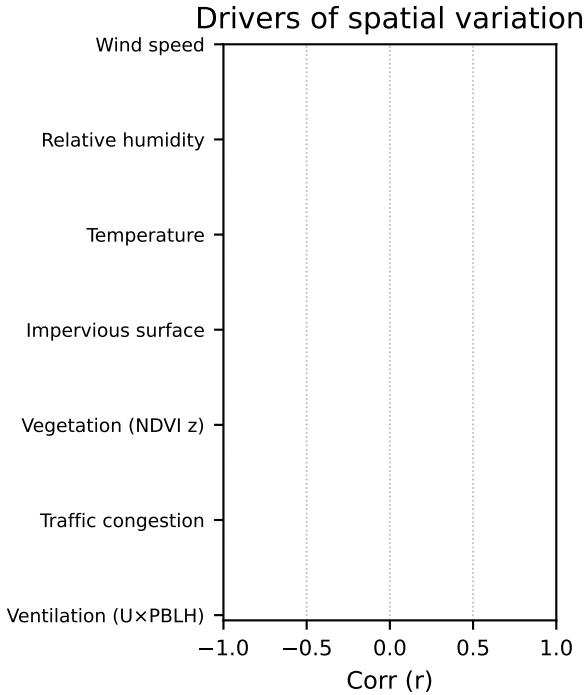
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-03-11 to 2024-03-17





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W11 (2024-03-11–2024-03-17): street-level weekly AQI median ≈ 34 (P10≈34, P90≈34).

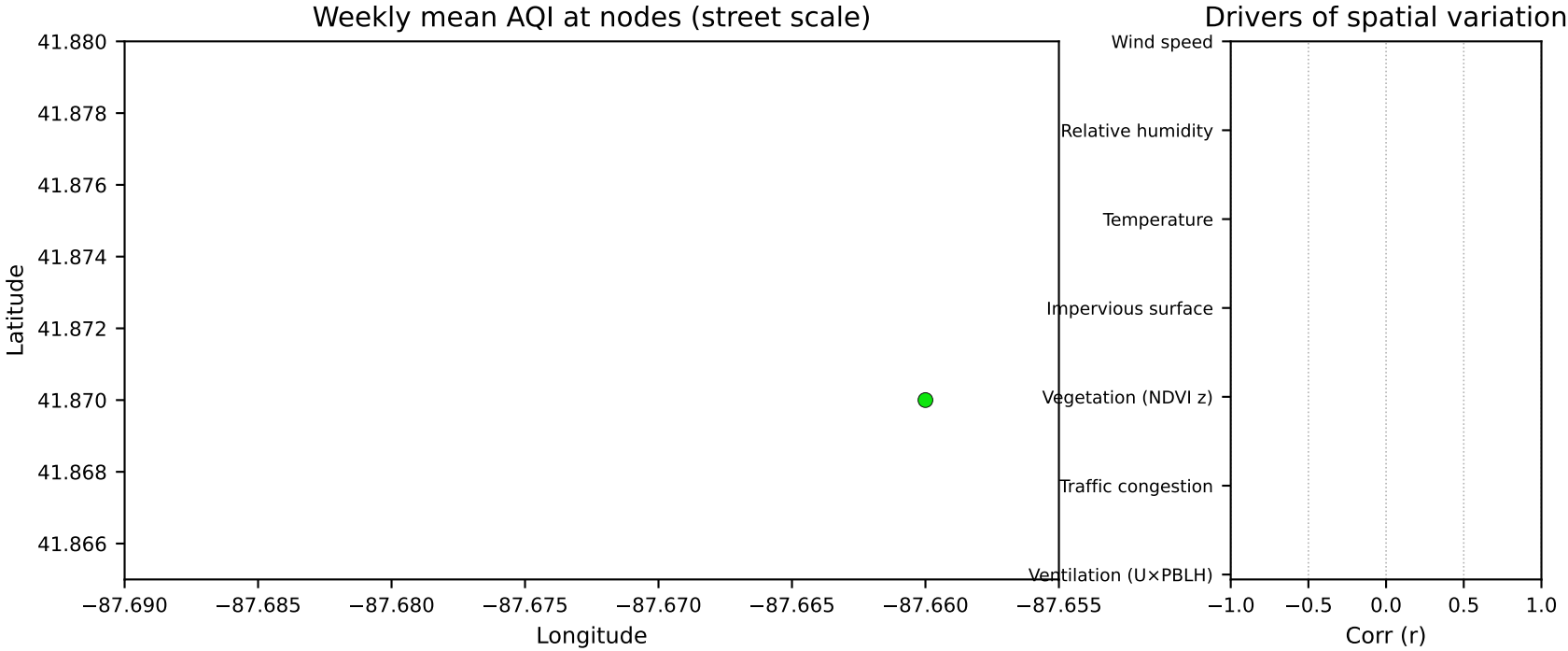
Local mean conditions: T≈7.9 °C, RH≈63%, U≈8.1 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-03-18 to 2024-03-24



Weekly inference:

Illinois Medical District, week 2024-W12 (2024-03-18–2024-03-24): street-level weekly AQI median ≈ 28 (P10≈28, P90≈28).

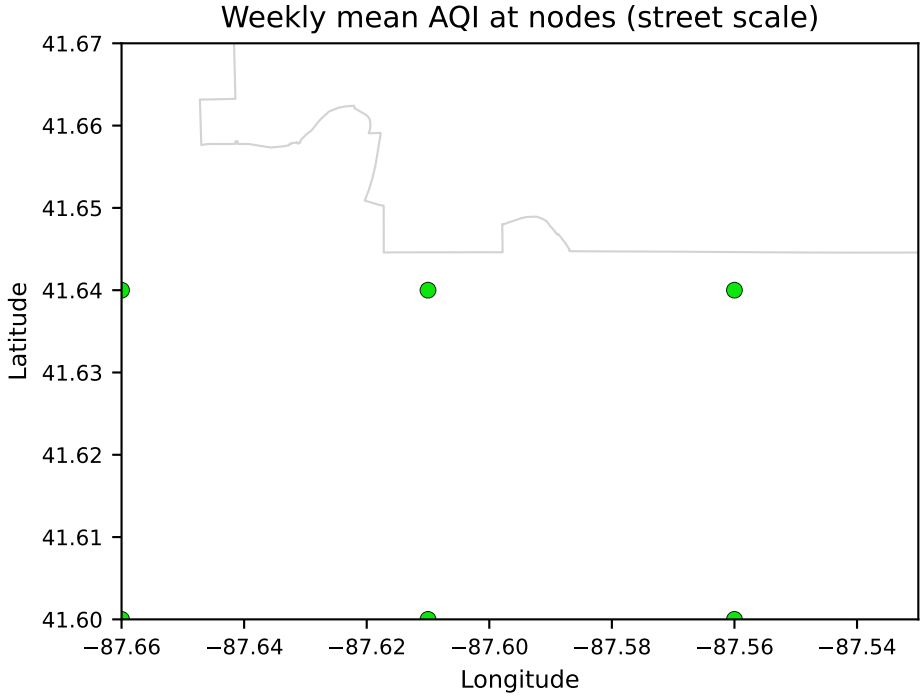
Local mean conditions: T̄≈1.3 °C, RH̄≈63%, Ū≈0.2 m/s.

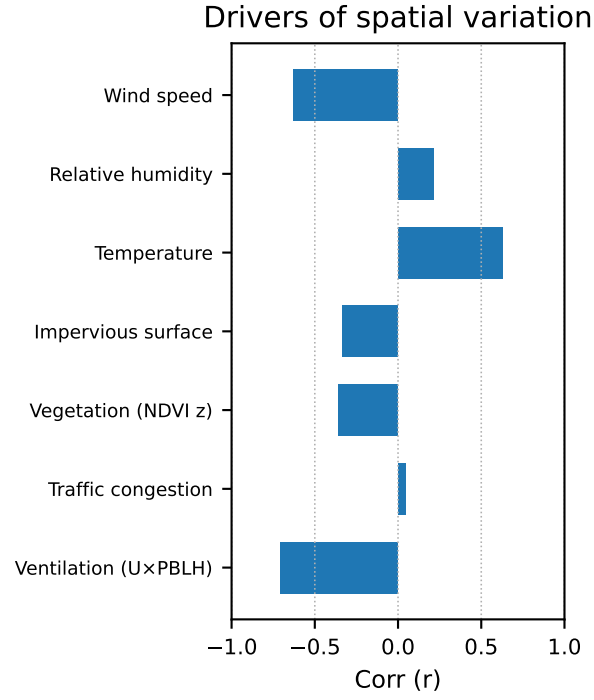
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-03-18 to 2024-03-24





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W12 (2024-03-18–2024-03-24): street-level weekly AQI median ≈ 33 (P10≈29, P90≈34).

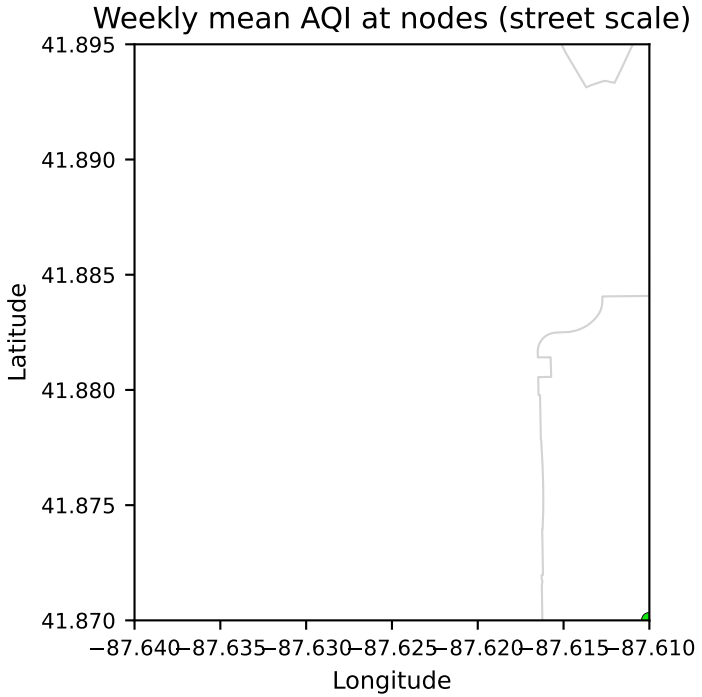
Local mean conditions: T̄≈1.4 °C, RH̄≈58%, Ū≈0.9 m/s.

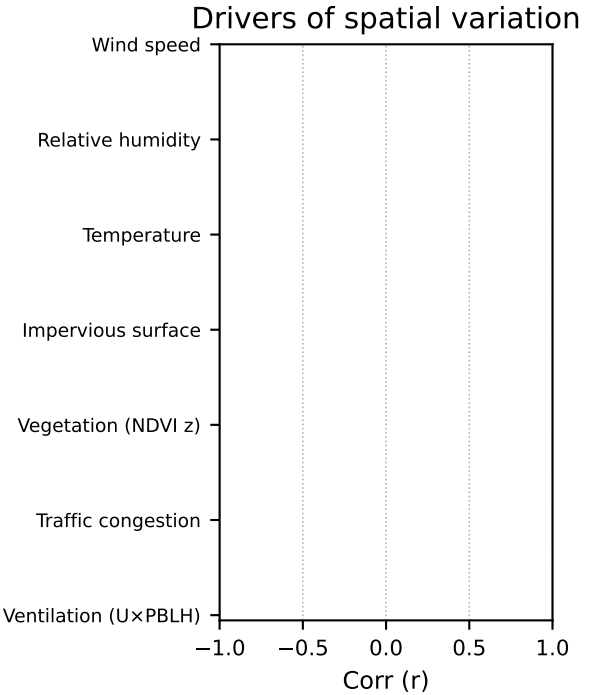
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): strong negative correlation (r≈-0.70). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.05). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.36). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.33). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong positive correlation (r≈0.63). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-03-18 to 2024-03-24





Weekly inference:

Lakefront Downtown, week 2024-W12 (2024-03-18–2024-03-24): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

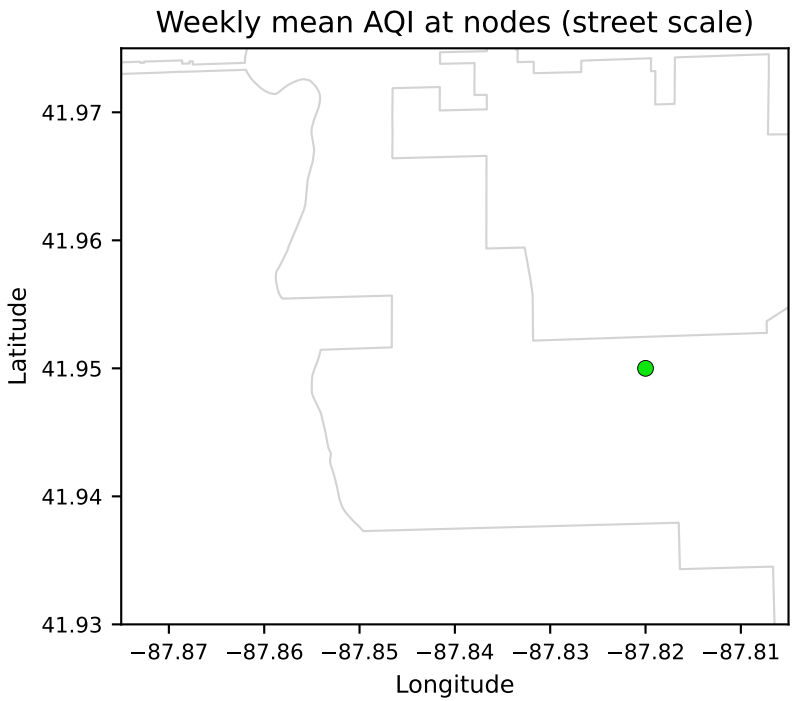
Local mean conditions: T≈1.4 °C, RH≈63%, U≈0.2 m/s.

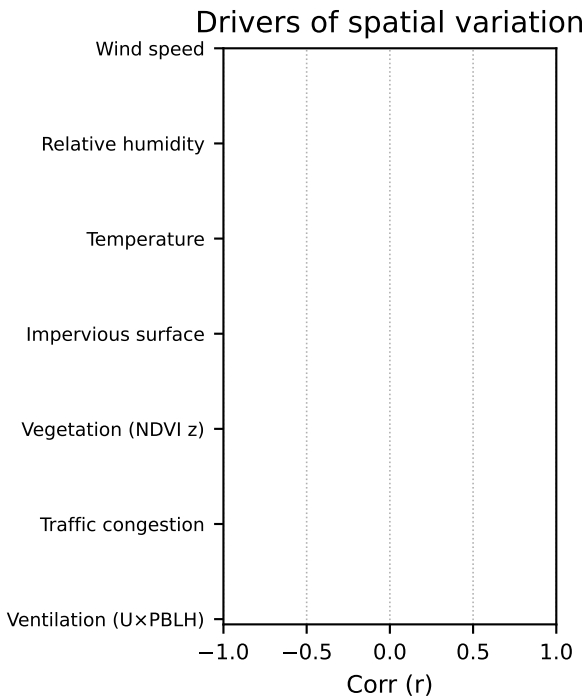
Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-03-18 to 2024-03-24





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W12 (2024-03-18–2024-03-24): street-level weekly AQI median ≈ 30 (P10≈30, P90≈30).

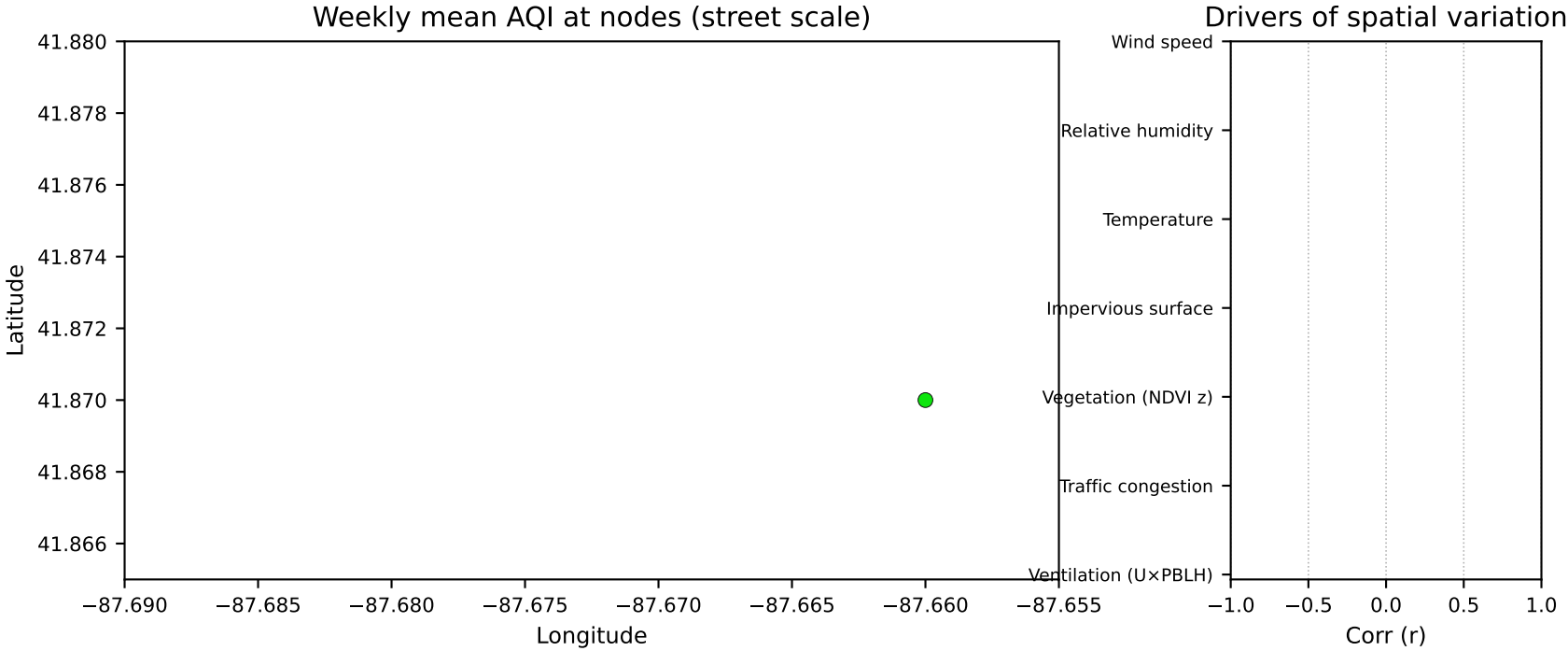
Local mean conditions: T≈1.0 °C, RH≈59%, U≈0.9 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-03-25 to 2024-03-31



Weekly inference:

Illinois Medical District, week 2024-W13 (2024-03-25–2024-03-31): street-level weekly AQI median ≈ 30 (P10≈30, P90≈30).

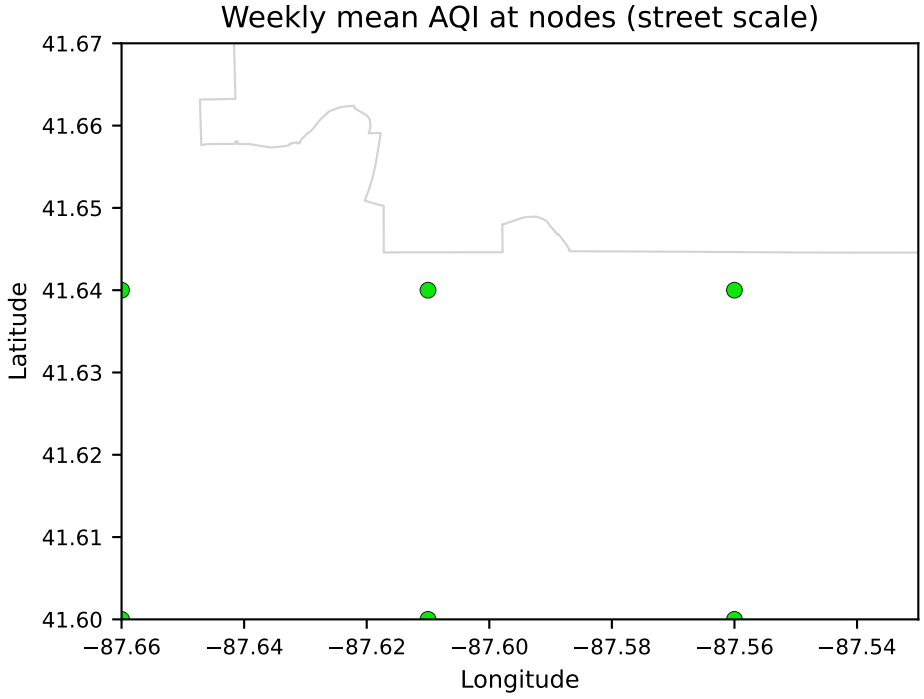
Local mean conditions: T̄≈5.8 °C, RH̄≈73%, Ū≈2.7 m/s.

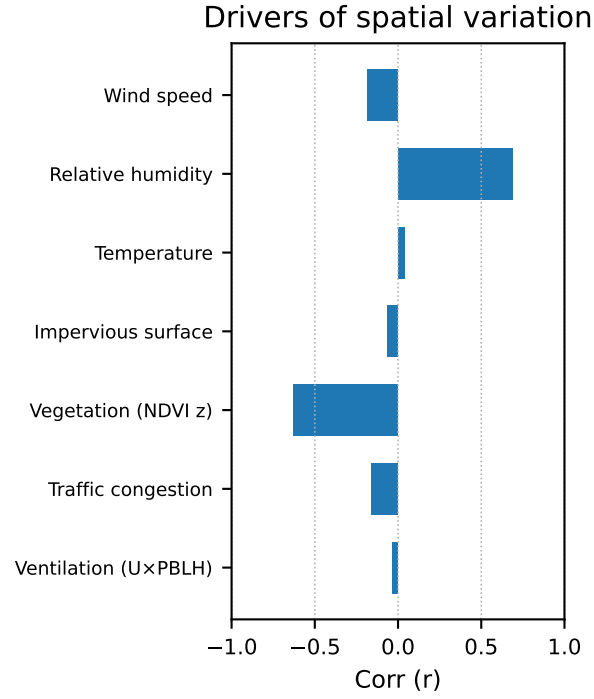
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-03-25 to 2024-03-31





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W13 (2024-03-25–2024-03-31): street-level weekly AQI median ≈ 34 (P10≈33, P90≈35).

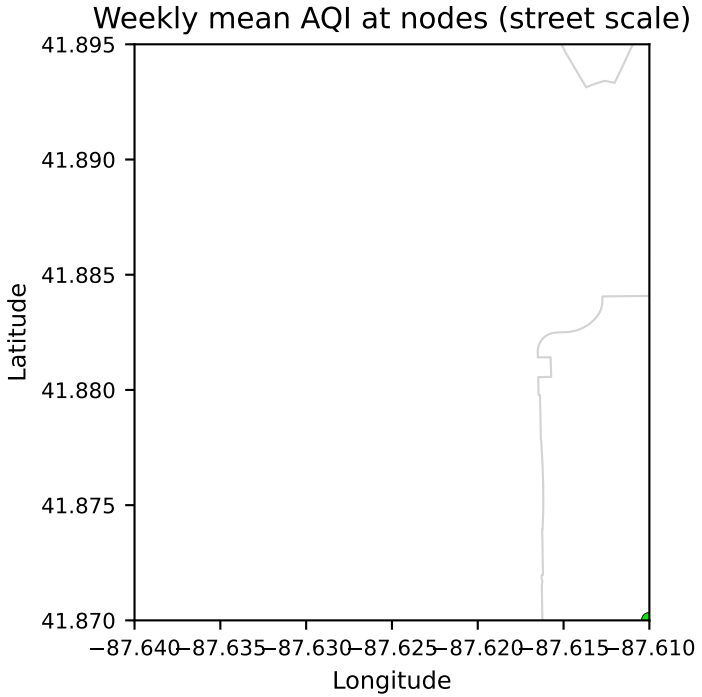
Local mean conditions: T≈6.6 °C, RH≈70%, U≈2.4 m/s.

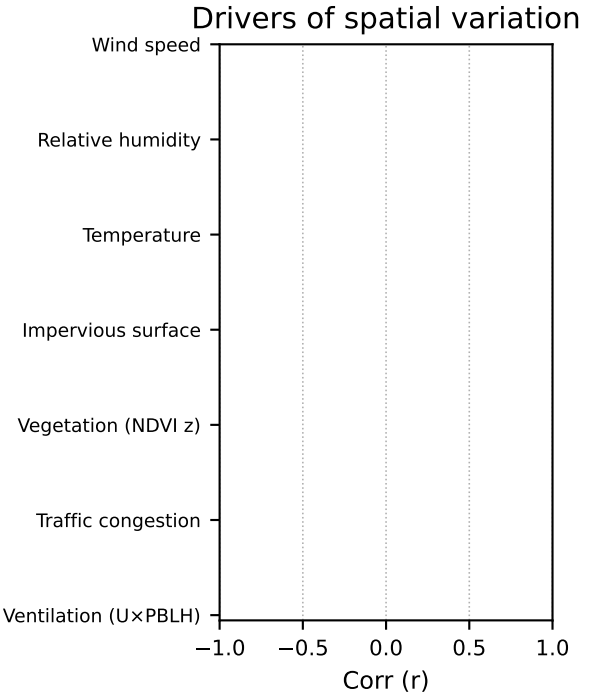
Driver-wise interpretation:

- Ventilation (U×PBLH): negligible negative correlation (r≈-0.03). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak negative correlation (r≈-0.16). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): strong negative correlation (r≈-0.63). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: negligible negative correlation (r≈-0.06). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: negligible positive correlation (r≈0.04). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Lakefront Downtown — Street-level AQI dashboard | 2024-03-25 to 2024-03-31





Weekly inference:

Lakefront Downtown, week 2024-W13 (2024-03-25–2024-03-31): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

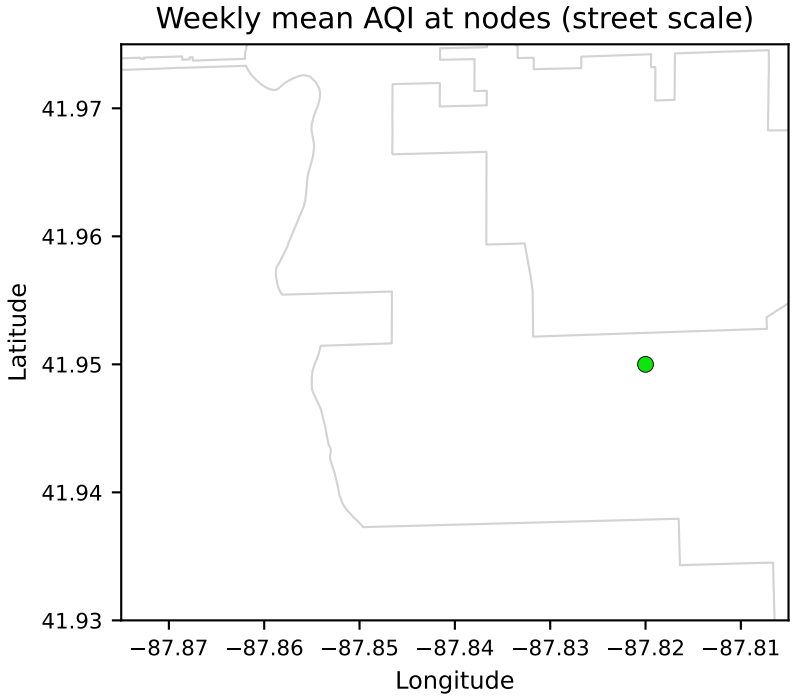
Local mean conditions: T≈5.9 °C, RH≈73%, U≈2.7 m/s.

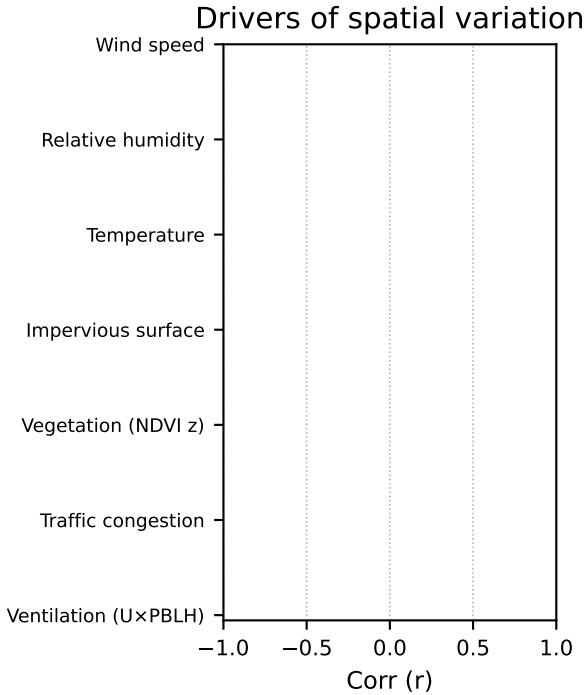
Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-03-25 to 2024-03-31





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W13 (2024-03-25–2024-03-31): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

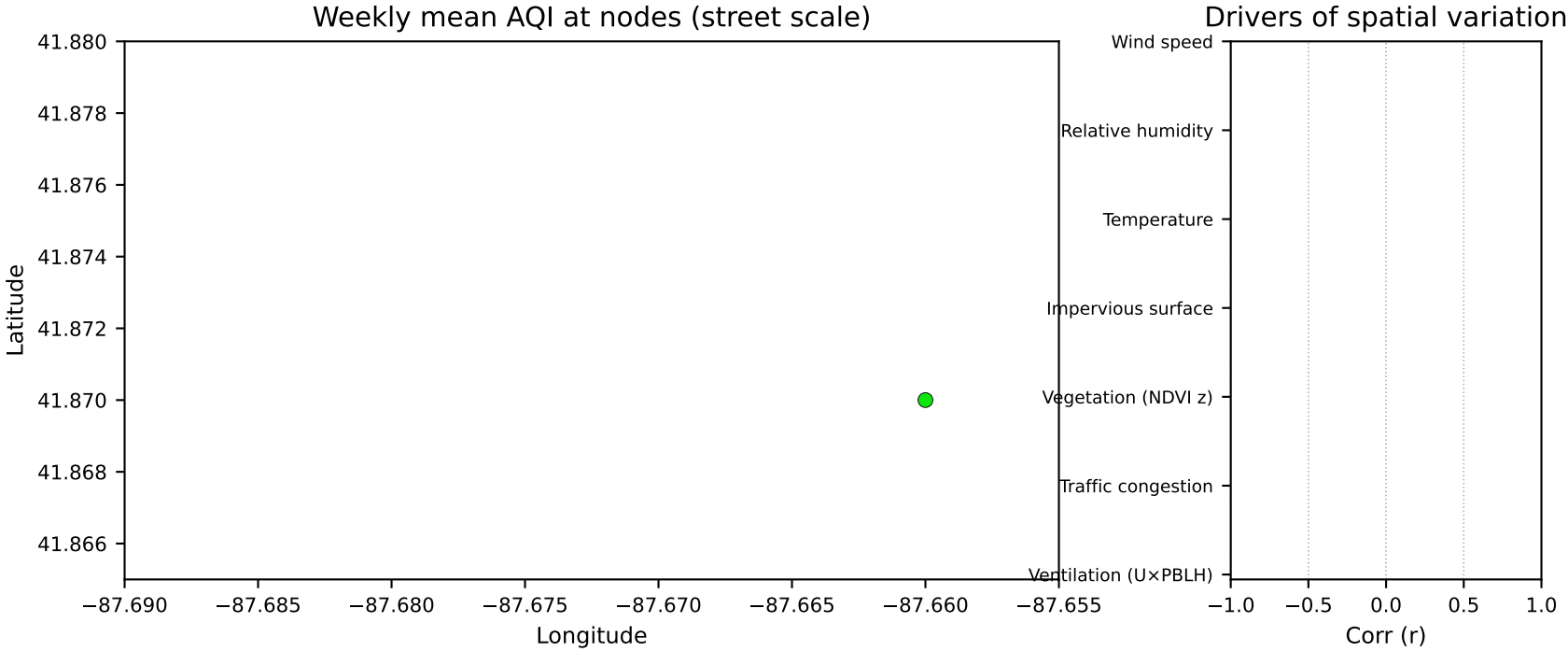
Local mean conditions: T≈5.9 °C, RH≈68%, U≈2.7 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-04-01 to 2024-04-07



Weekly inference:

Illinois Medical District, week 2024-W14 (2024-04-01–2024-04-07): street-level weekly AQI median ≈ 29 (P10≈29, P90≈29).

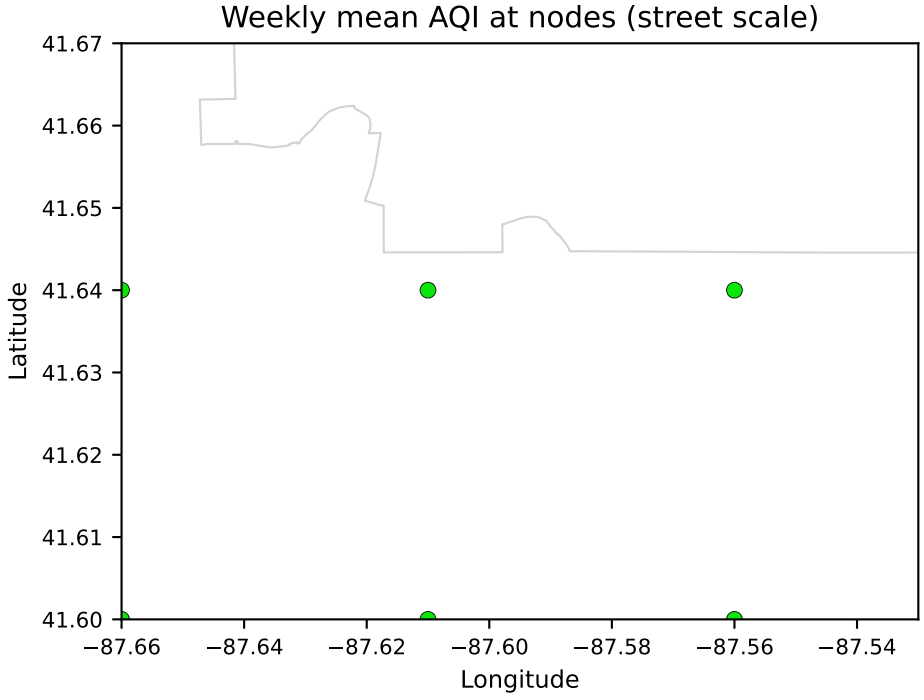
Local mean conditions: T̄≈4.6 °C, RH̄≈83%, Ū≈-0.8 m/s.

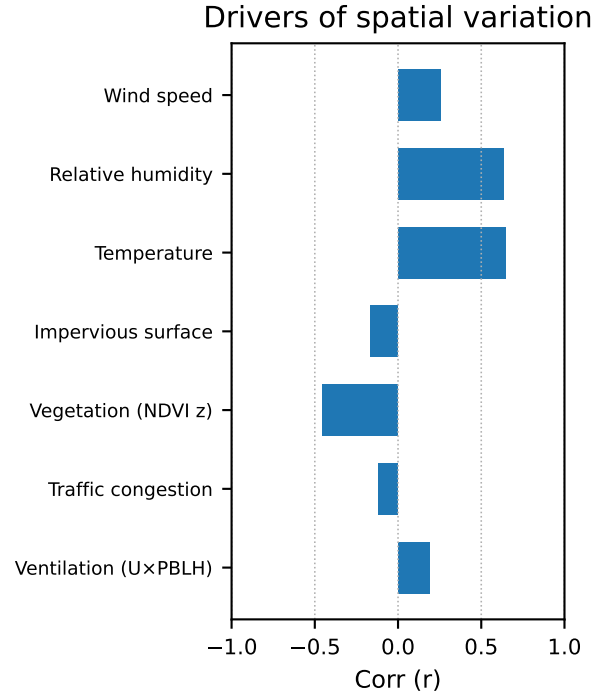
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-04-01 to 2024-04-07





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W14 (2024-04-01–2024-04-07): street-level weekly AQI median ≈ 33 (P10≈31, P90≈35).

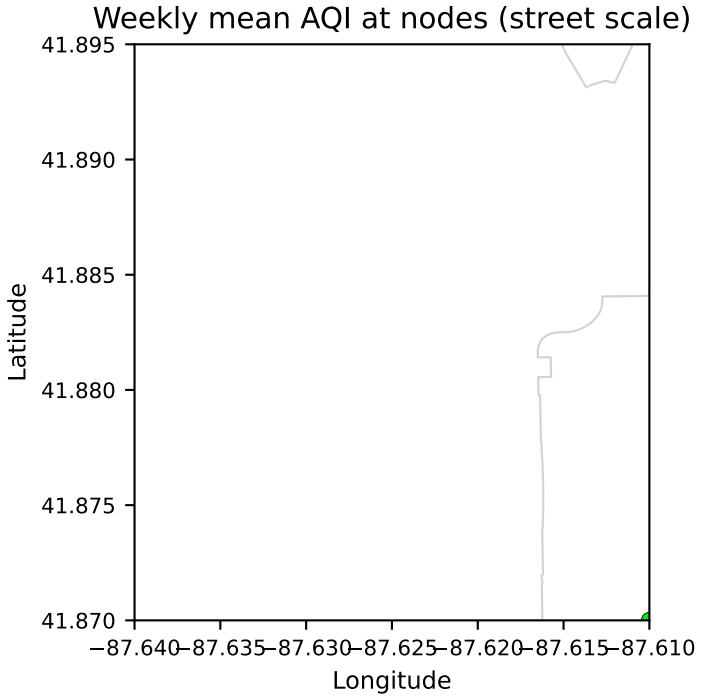
Local mean conditions: T≈5.1 °C, RH≈80%, U≈0.5 m/s.

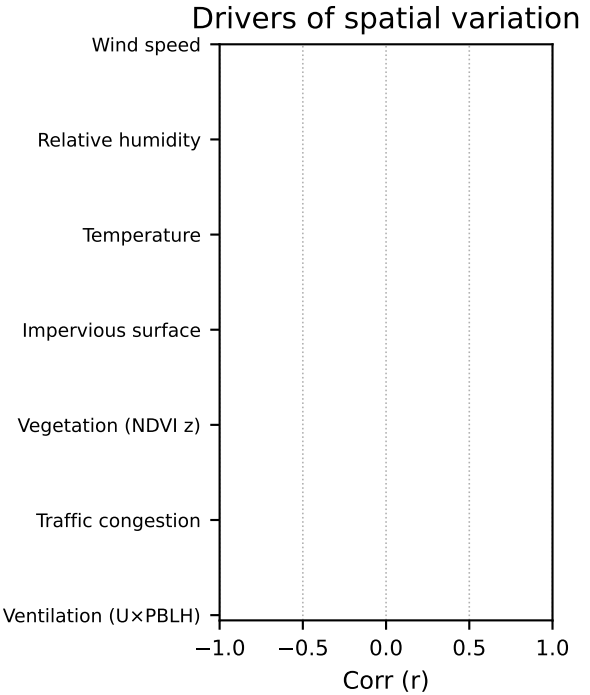
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak positive correlation (r≈0.19). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: weak negative correlation (r≈-0.12). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.45). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.16). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong positive correlation (r≈0.64). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-04-01 to 2024-04-07





Weekly inference:

Lakefront Downtown, week 2024-W14 (2024-04-01–2024-04-07): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

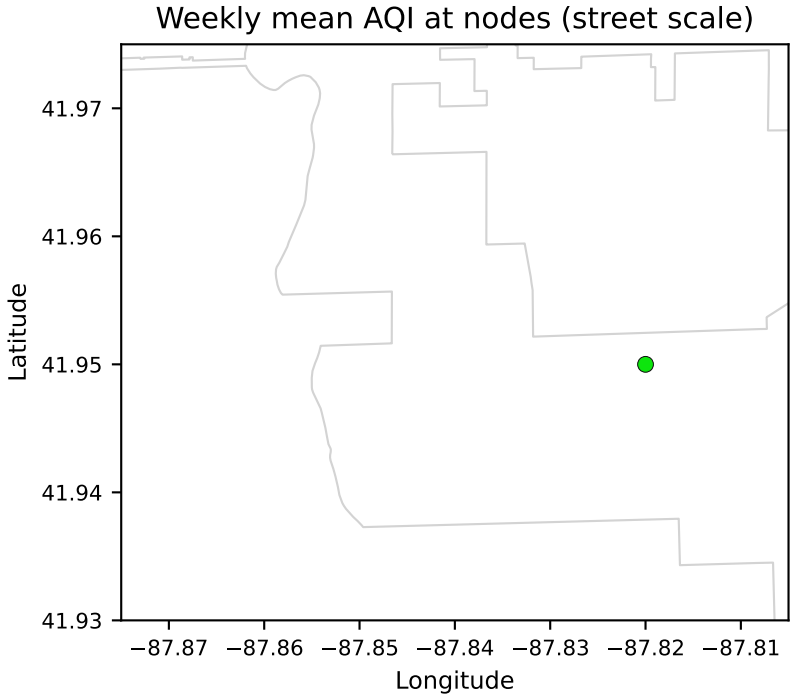
Local mean conditions: T≈4.7 °C, RH≈83%, U≈-0.8 m/s.

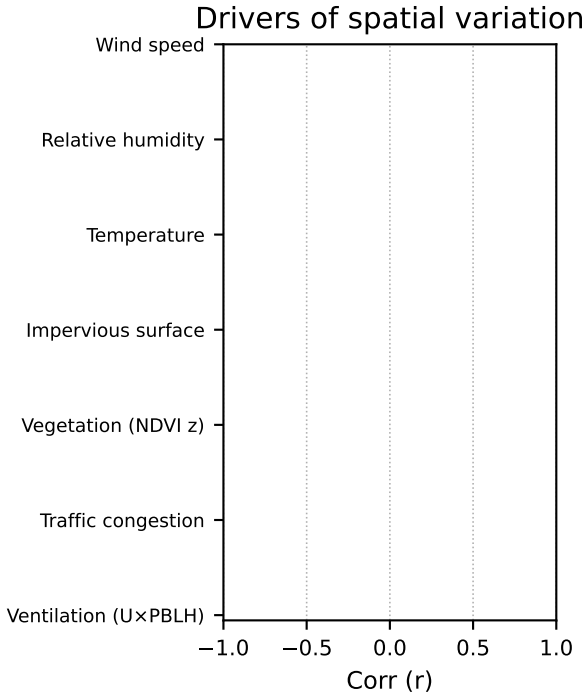
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-04-01 to 2024-04-07





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W14 (2024-04-01–2024-04-07): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

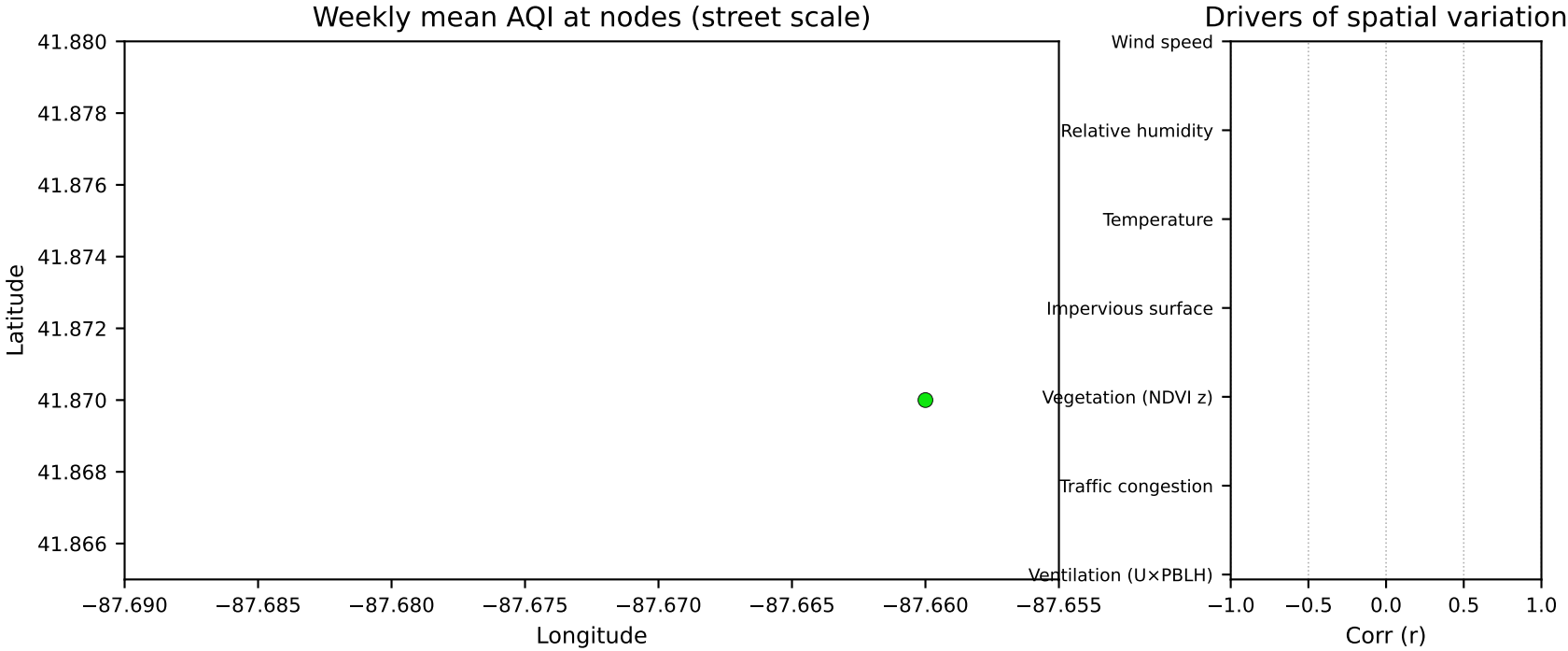
Local mean conditions: T≈4.5 °C, RH≈81%, U≈-1.0 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-04-08 to 2024-04-14



Weekly inference:

Illinois Medical District, week 2024-W15 (2024-04-08–2024-04-14): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

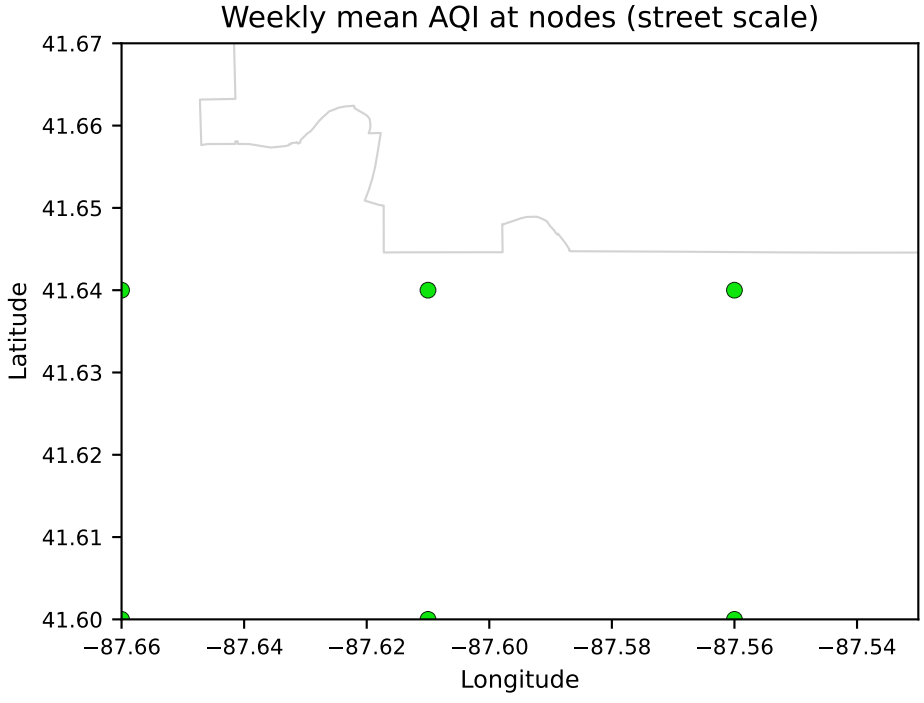
Local mean conditions: T̄≈12.1 °C, RH̄≈68%, Ū≈7.2 m/s.

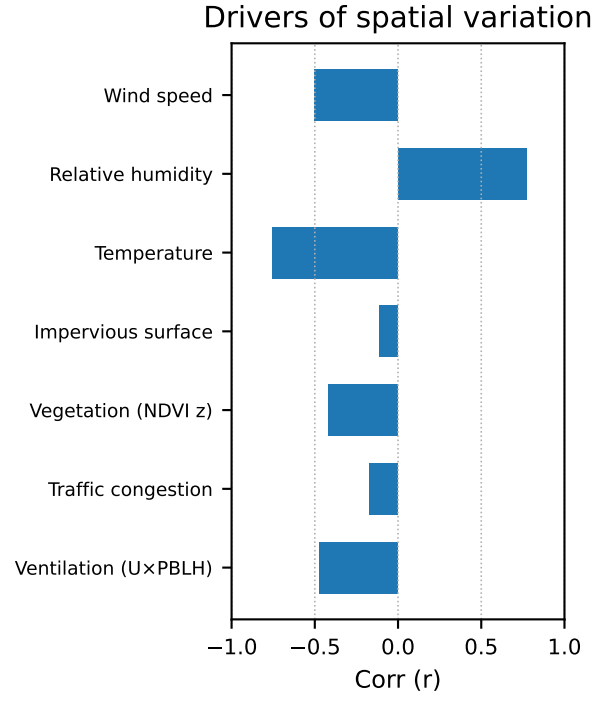
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-04-08 to 2024-04-14





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W15 (2024-04-08–2024-04-14): street-level weekly AQI median ≈ 36 (P10≈34, P90≈38).

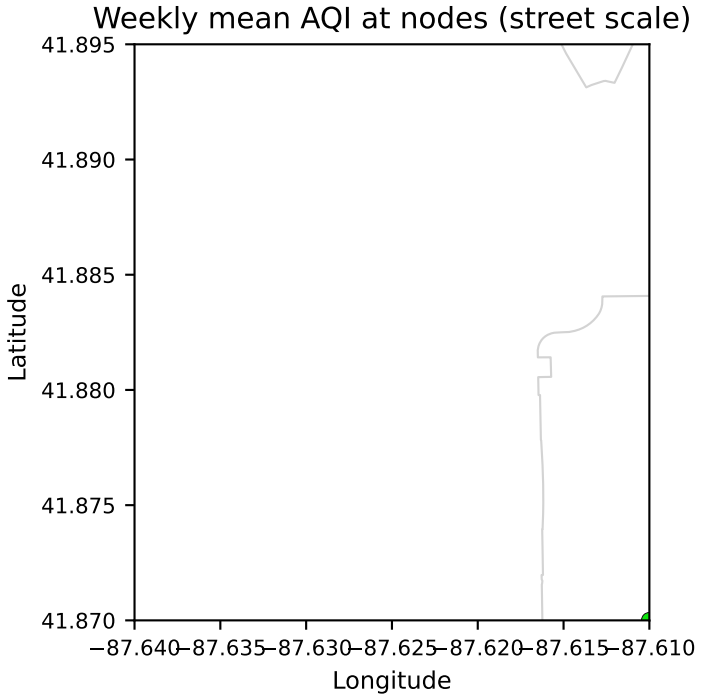
Local mean conditions: T̄≈12.7 °C, RH̄≈65%, Ū≈6.4 m/s.

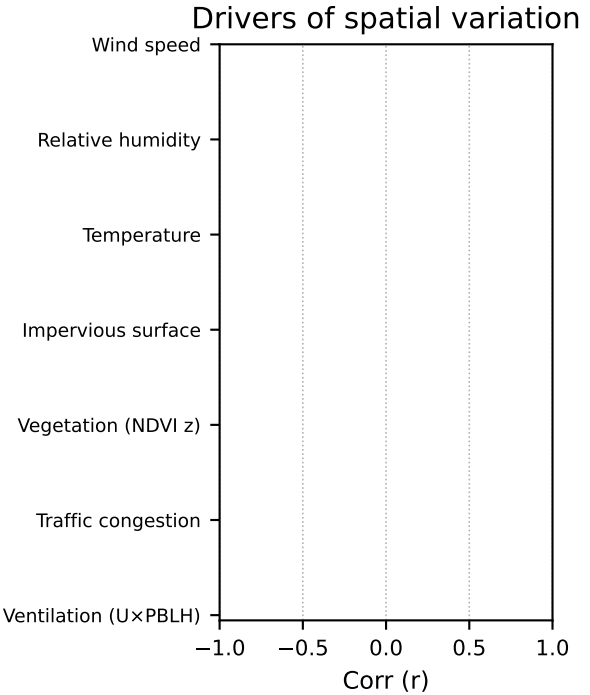
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.47). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak negative correlation (r≈-0.17). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.42). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.11). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong negative correlation (r≈-0.75). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-04-08 to 2024-04-14





Weekly inference:

Lakefront Downtown, week 2024-W15 (2024-04-08–2024-04-14): street-level weekly AQI median ≈ 37 (P10≈37, P90≈37).

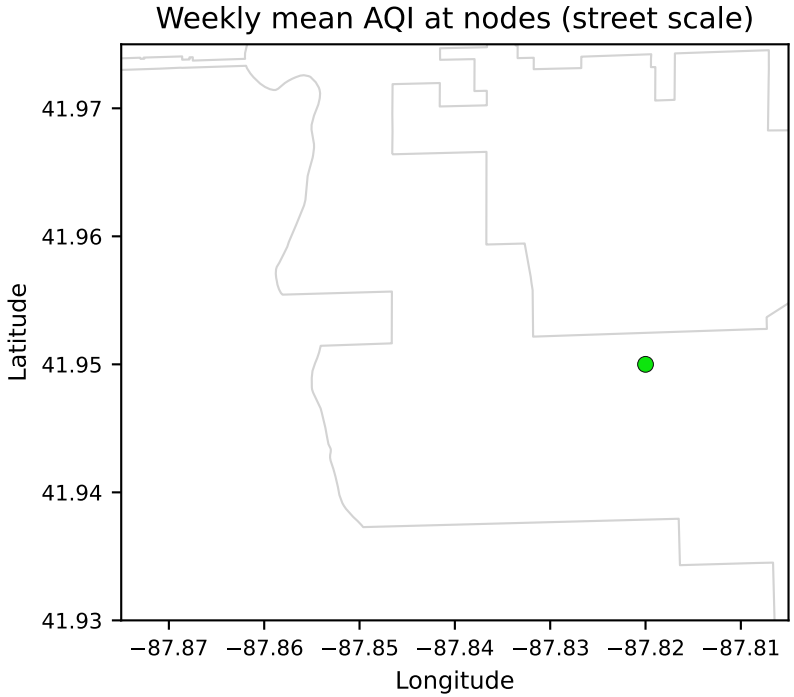
Local mean conditions: T≈12.2 °C, RH̄≈68%, Ū≈7.2 m/s.

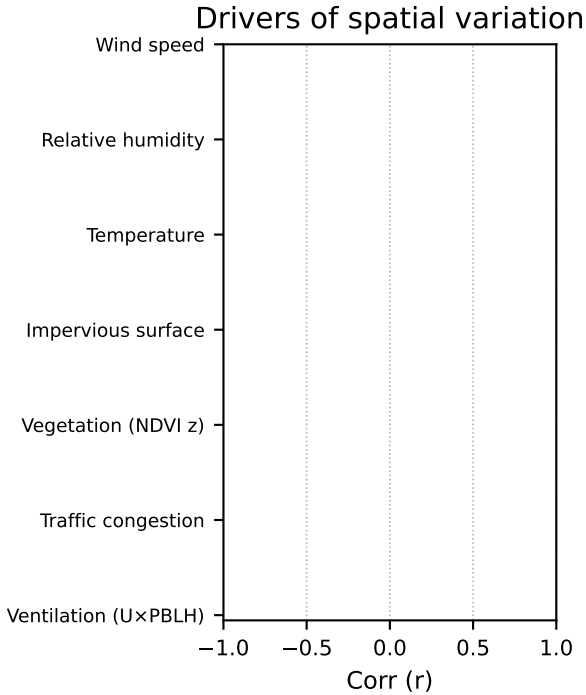
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-04-08 to 2024-04-14





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W15 (2024-04-08–2024-04-14): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

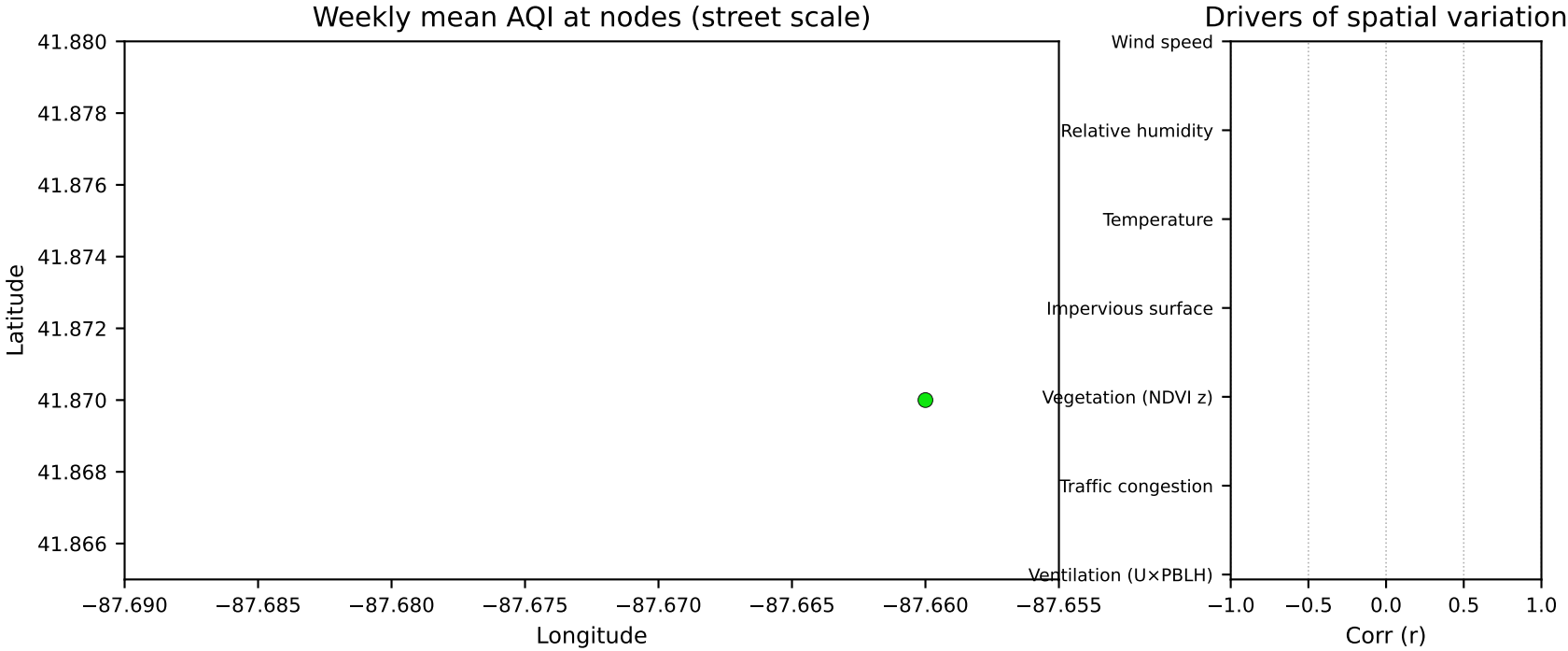
Local mean conditions: T≈12.8 °C, RH≈62%, U≈6.7 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-04-15 to 2024-04-21



Weekly inference:

Illinois Medical District, week 2024-W16 (2024-04-15–2024-04-21): street-level weekly AQI median ≈ 29 (P10≈29, P90≈29).

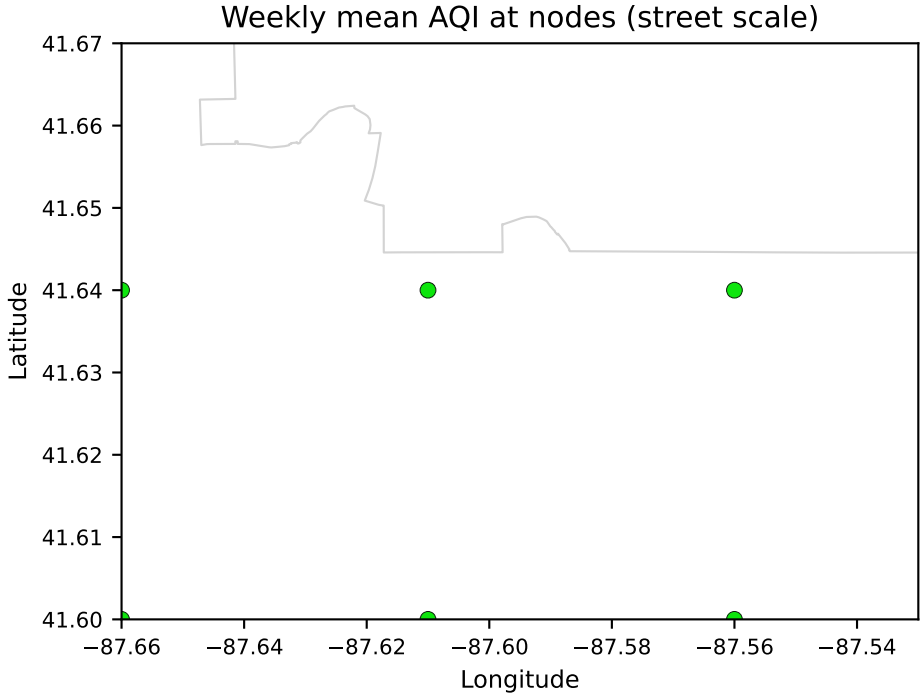
Local mean conditions: T̄≈10.3 °C, RH̄≈66%, Ū≈5.7 m/s.

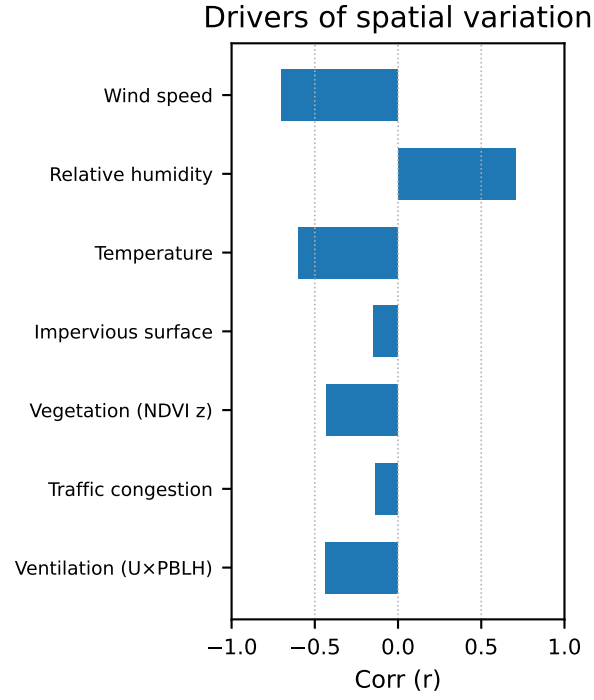
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-04-15 to 2024-04-21





Weekly inference:

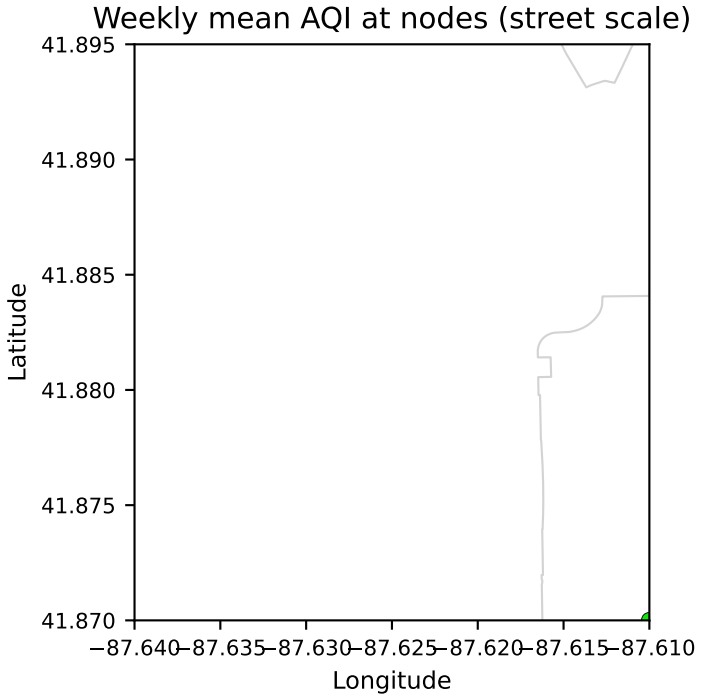
Southeast Industrial / Calumet Corridor, week 2024-W16 (2024-04-15–2024-04-21): street-level weekly AQI median ≈ 33 (P10≈31, P90≈34).

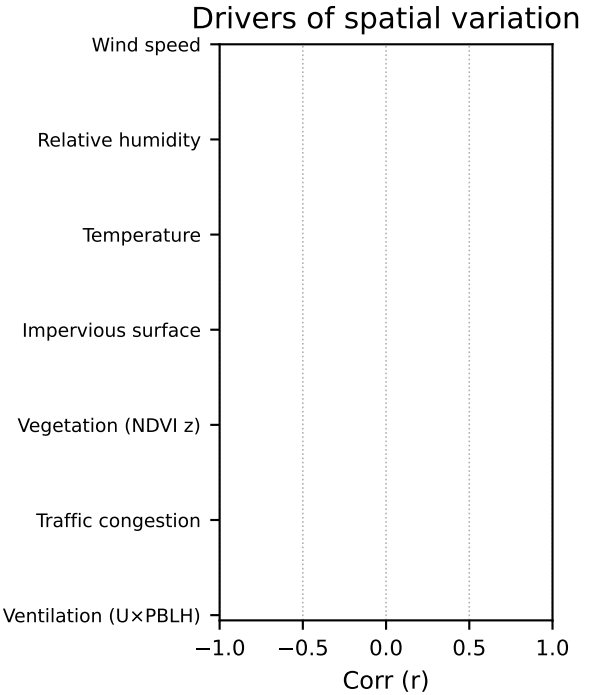
Local mean conditions: T≈11.2 °C, RH≈61%, U≈5.2 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.44). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak negative correlation (r≈-0.13). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.43). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.15). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.60). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-04-15 to 2024-04-21





Weekly inference:

Lakefront Downtown, week 2024-W16 (2024-04-15–2024-04-21): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

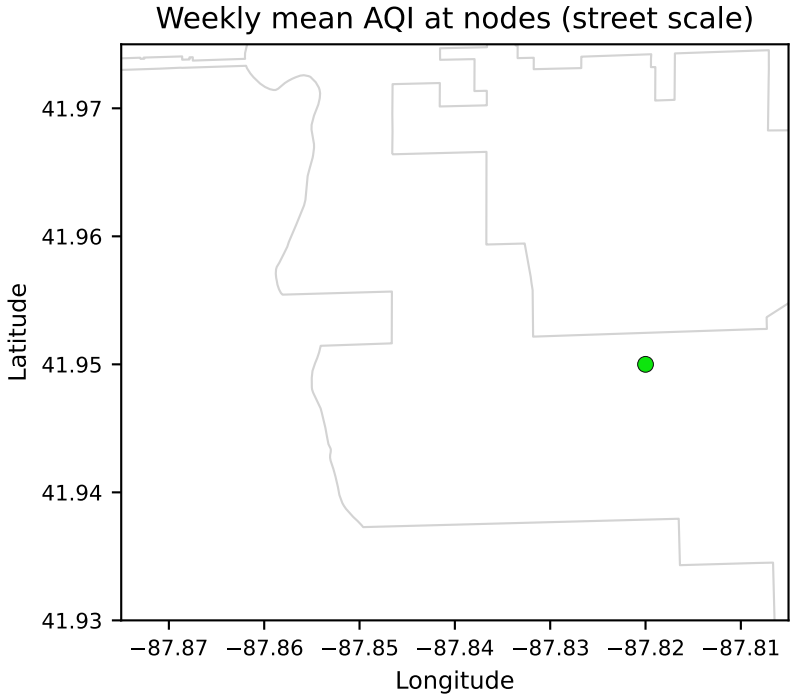
Local mean conditions: T≈10.4 °C, RH̄≈66%, Ū≈5.7 m/s.

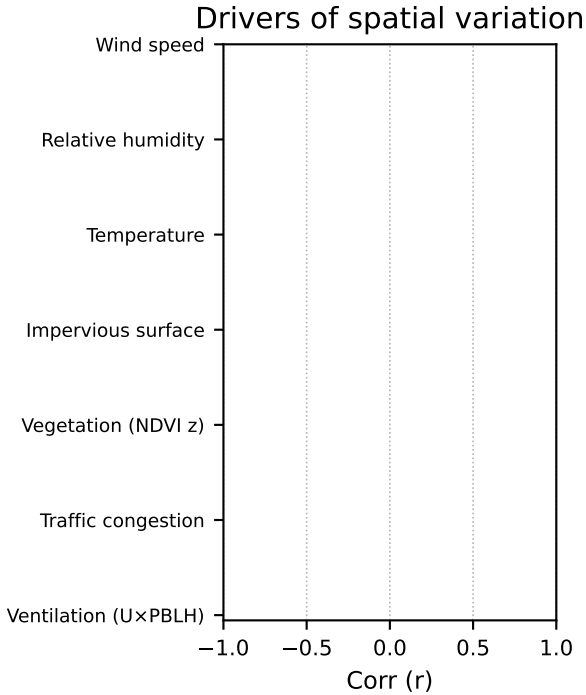
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-04-15 to 2024-04-21





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W16 (2024-04-15–2024-04-21): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

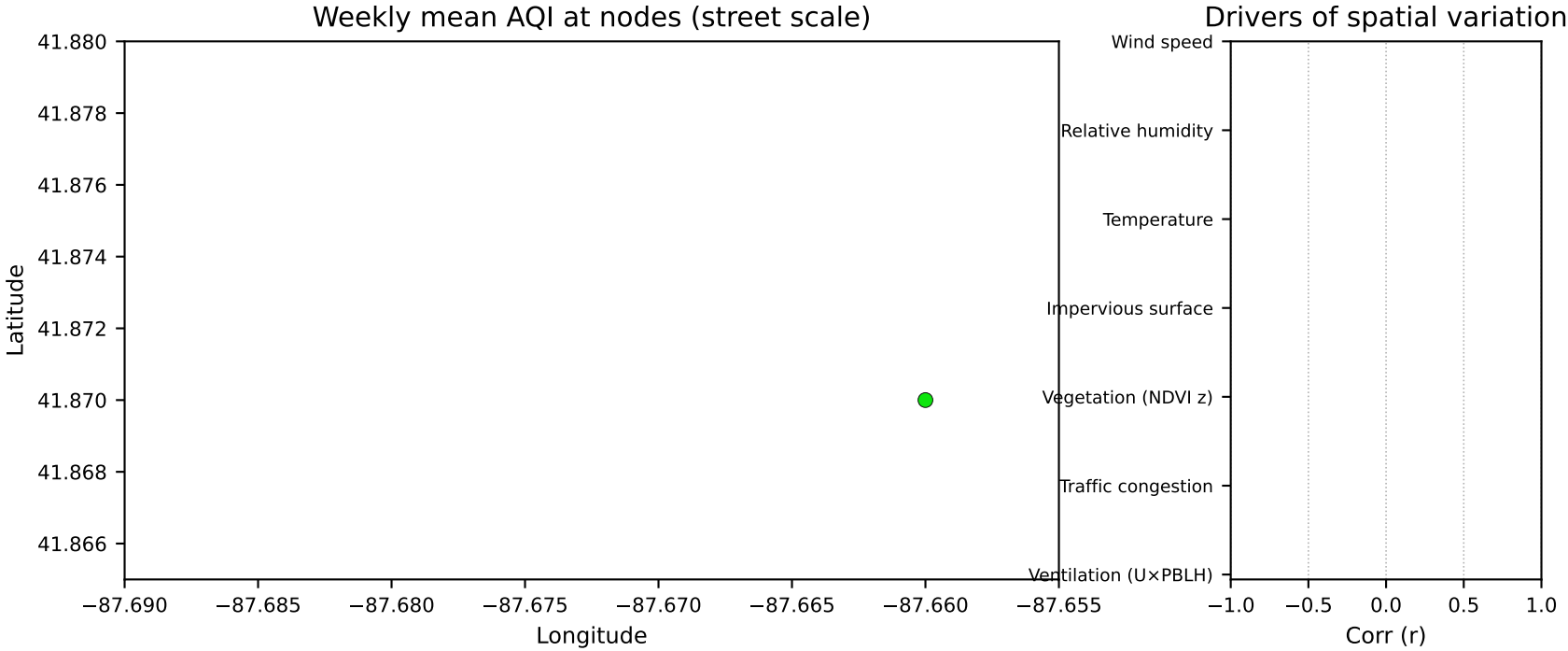
Local mean conditions: T≈10.7 °C, RH≈59%, U≈5.4 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-04-22 to 2024-04-28



Weekly inference:

Illinois Medical District, week 2024-W17 (2024-04-22–2024-04-28): street-level weekly AQI median ≈ 34 (P10≈34, P90≈34).

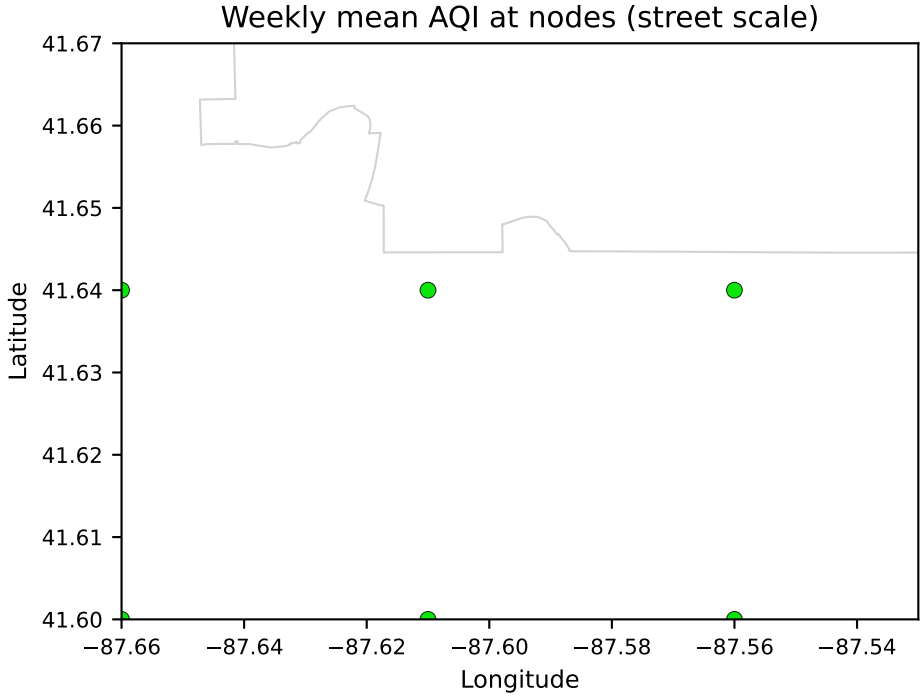
Local mean conditions: T̄≈11.9 °C, RH̄≈71%, Ū≈2.2 m/s.

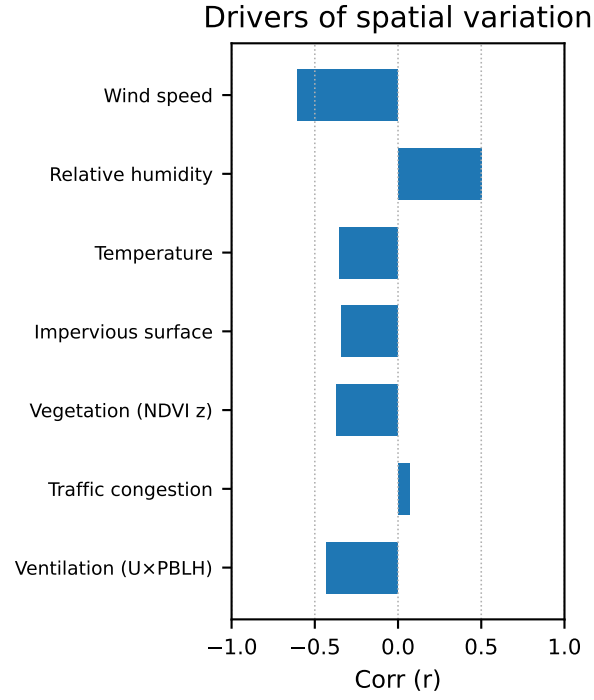
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-04-22 to 2024-04-28





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W17 (2024-04-22–2024-04-28): street-level weekly AQI median ≈ 40 (P10≈37, P90≈40).

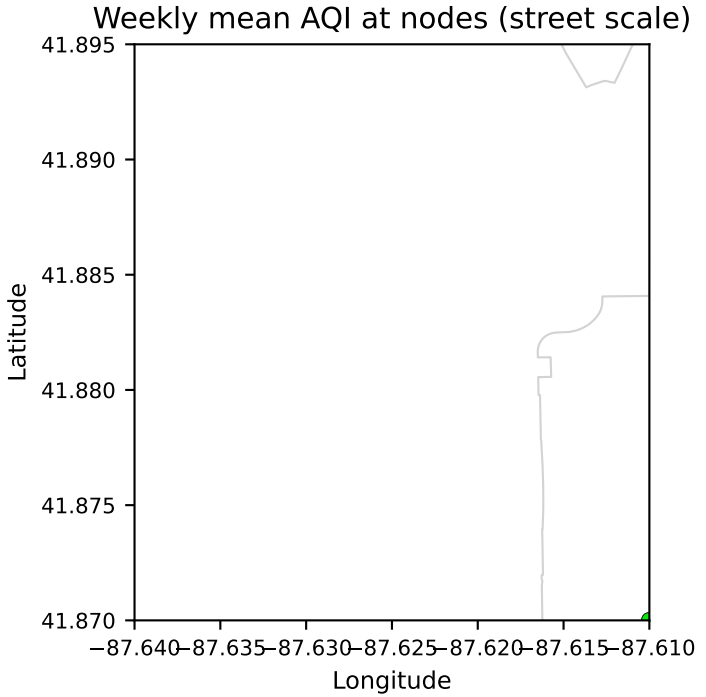
Local mean conditions: T≈12.2 °C, RH≈70%, U≈2.0 m/s.

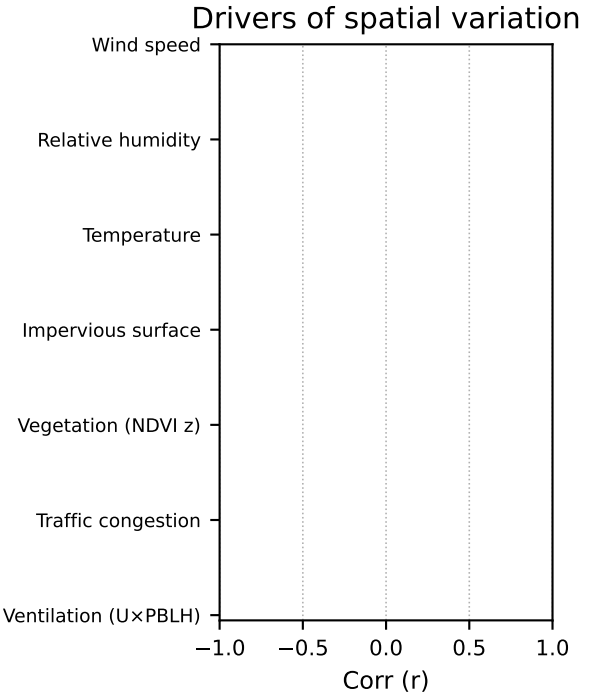
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.43). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.07). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.37). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.34). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.35). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-04-22 to 2024-04-28





Weekly inference:

Lakefront Downtown, week 2024-W17 (2024-04-22–2024-04-28): street-level weekly AQI median ≈ 38 (P10≈38, P90≈38).

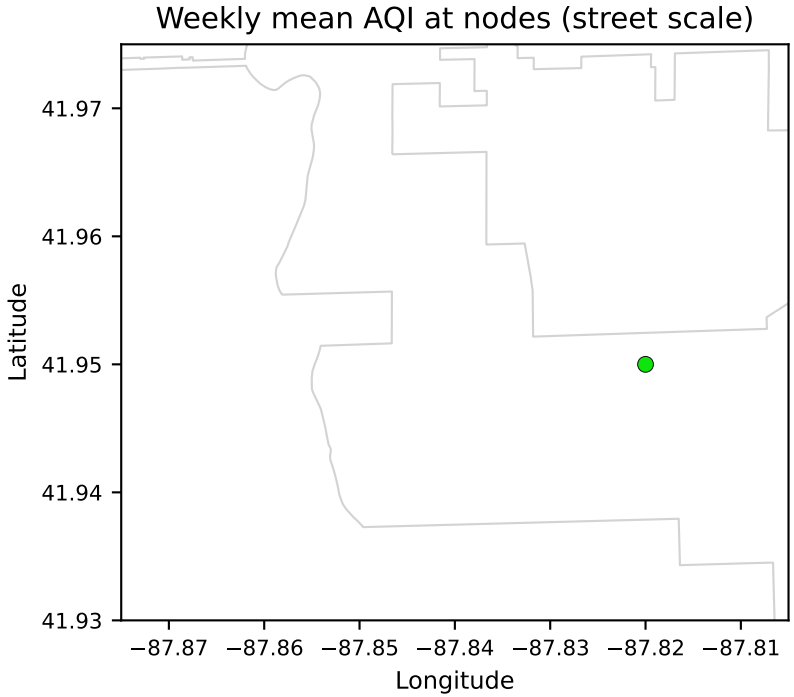
Local mean conditions: T≈12.0 °C, RH≈71%, U≈2.2 m/s.

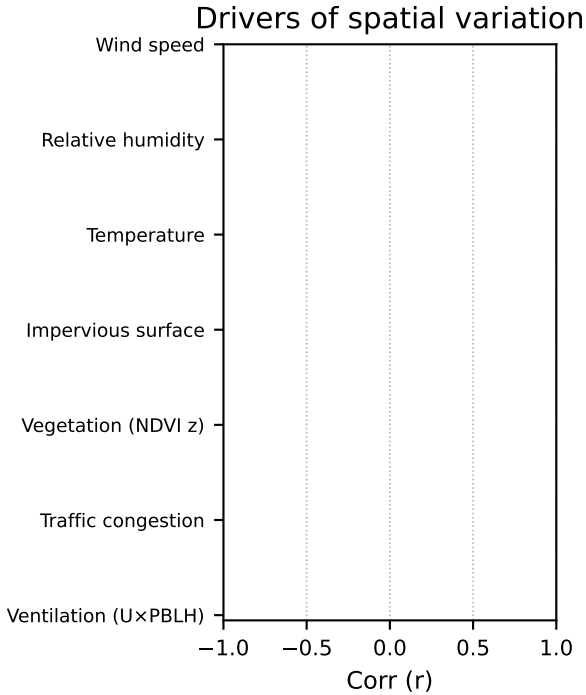
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-04-22 to 2024-04-28





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W17 (2024-04-22–2024-04-28): street-level weekly AQI median ≈ 39 (P10≈39, P90≈39).

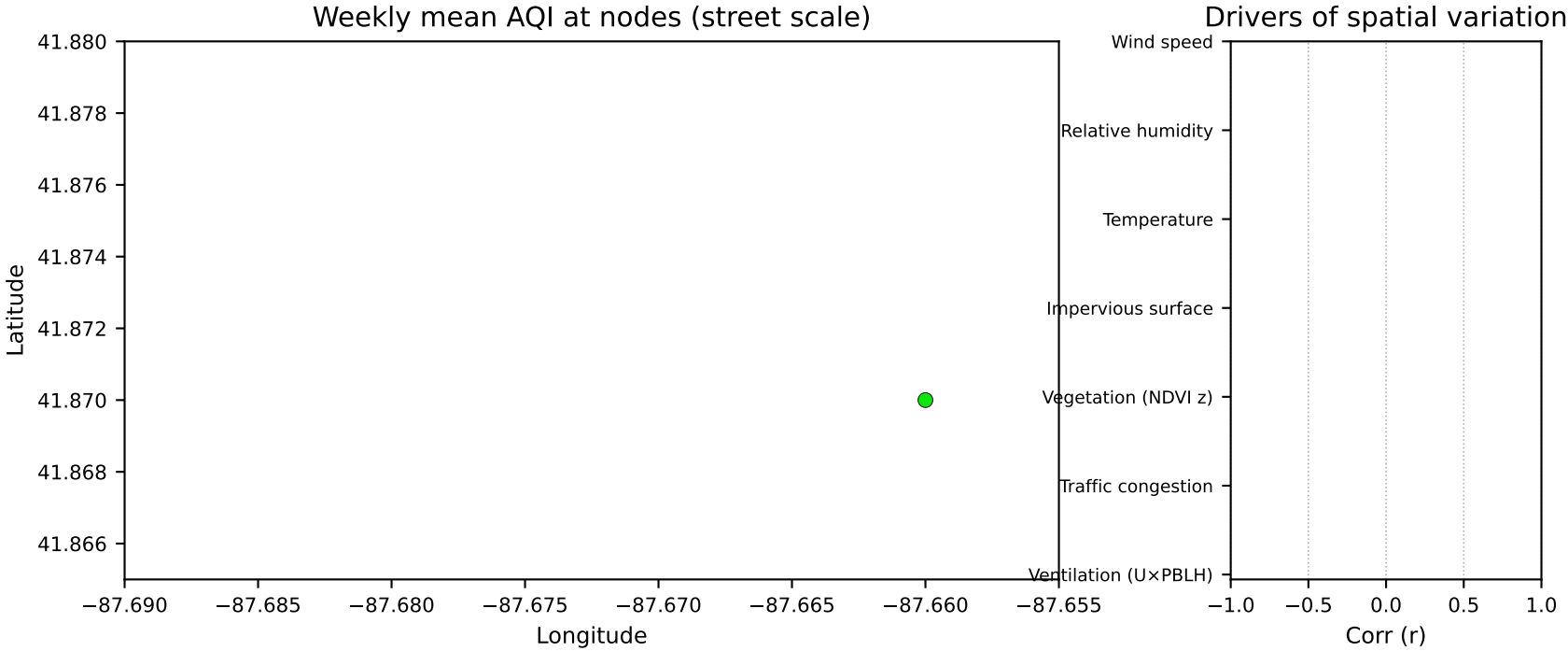
Local mean conditions: T≈12.1 °C, RH≈67%, U≈2.2 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-04-29 to 2024-05-05



Weekly inference:

Illinois Medical District, week 2024-W18 (2024-04-29–2024-05-05): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

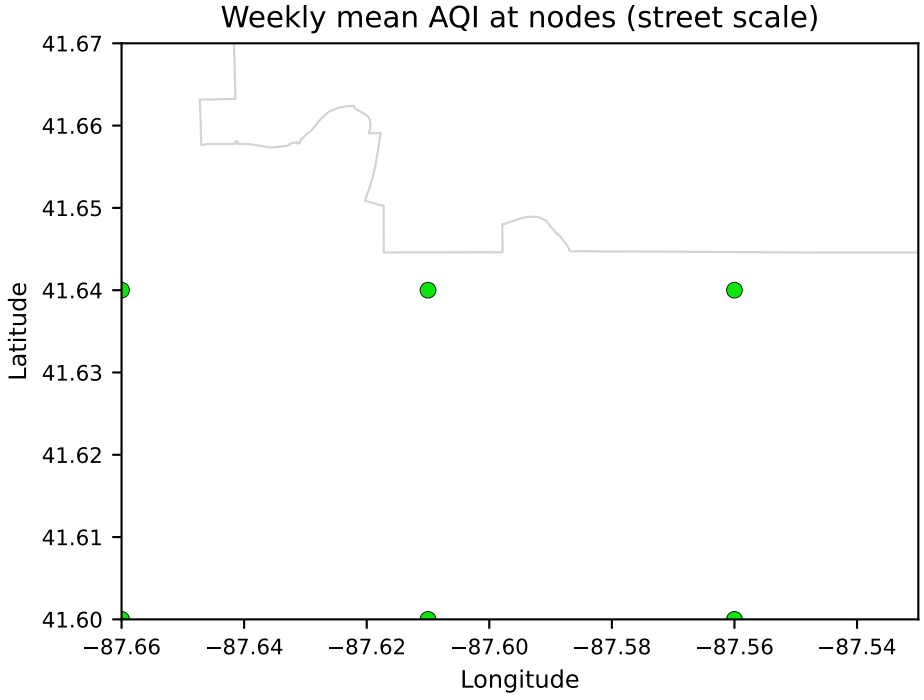
Local mean conditions: T̄≈15.7 °C, RH̄≈78%, Ū≈1.3 m/s.

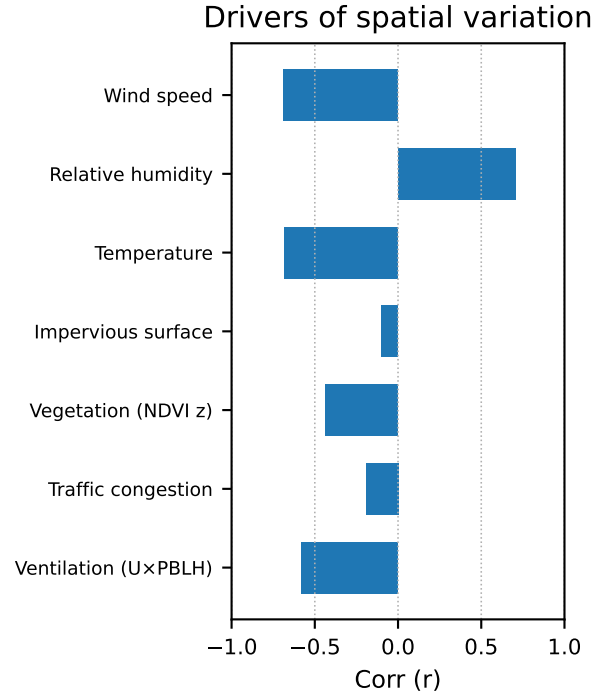
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-04-29 to 2024-05-05





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W18 (2024-04-29–2024-05-05): street-level weekly AQI median ≈ 42 (P10≈39, P90≈44).

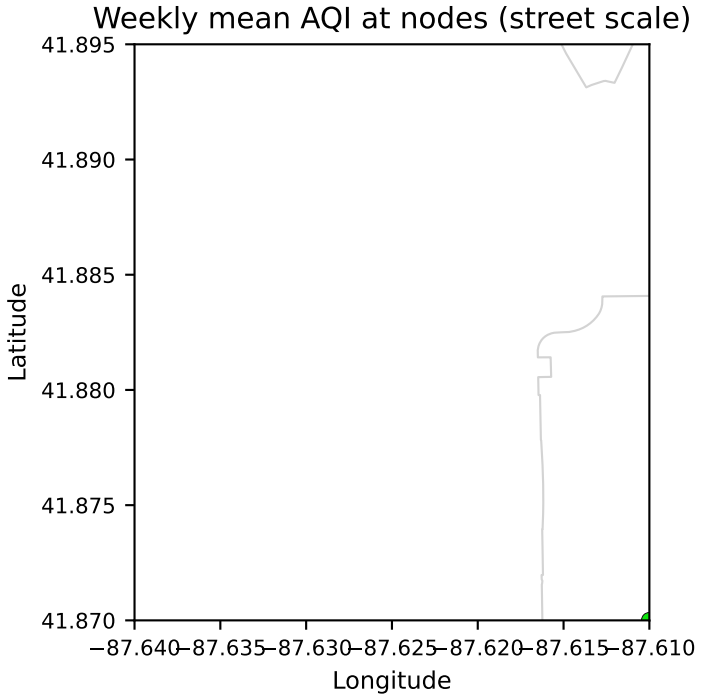
Local mean conditions: T≈16.6 °C, RH≈73%, U≈2.1 m/s.

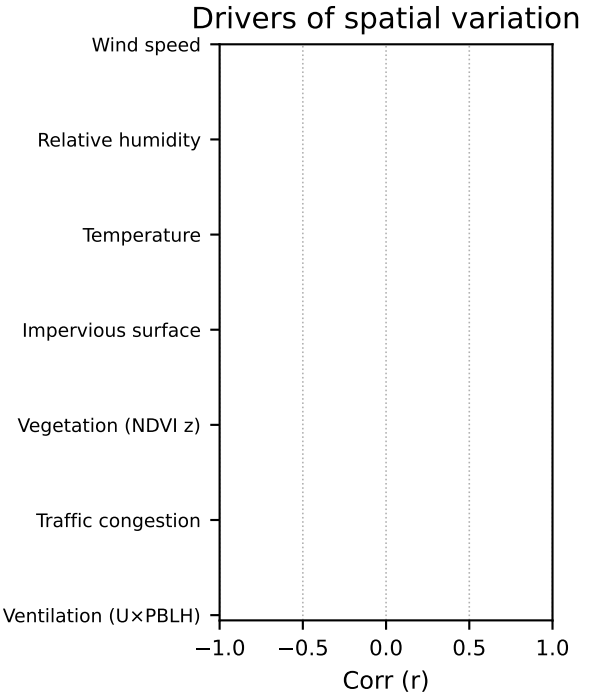
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.58). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak negative correlation (r≈-0.19). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.44). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: negligible negative correlation (r≈-0.10). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong negative correlation (r≈-0.68). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-04-29 to 2024-05-05





Weekly inference:

Lakefront Downtown, week 2024-W18 (2024-04-29–2024-05-05): street-level weekly AQI median ≈ 41 (P10≈41, P90≈41).

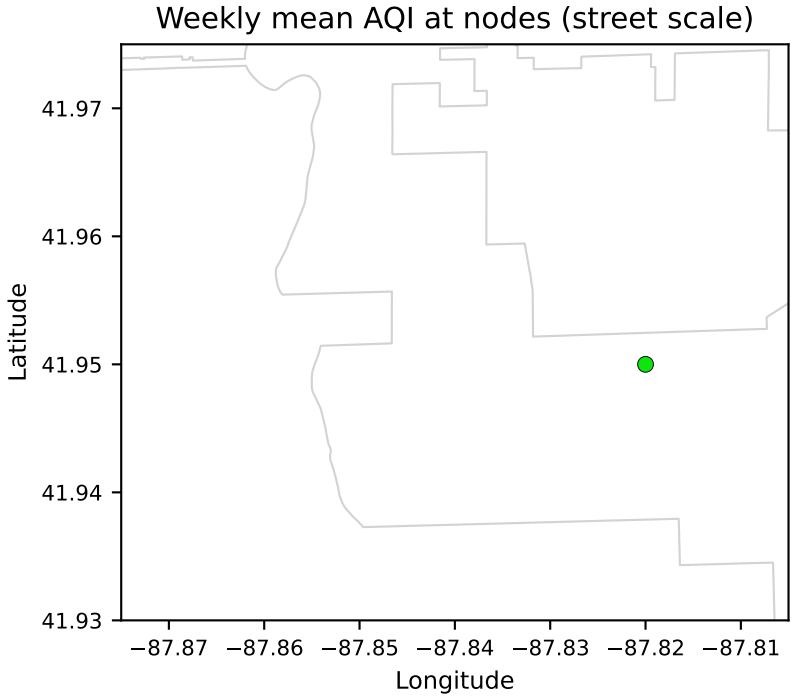
Local mean conditions: T≈15.8 °C, RH≈78%, U≈1.3 m/s.

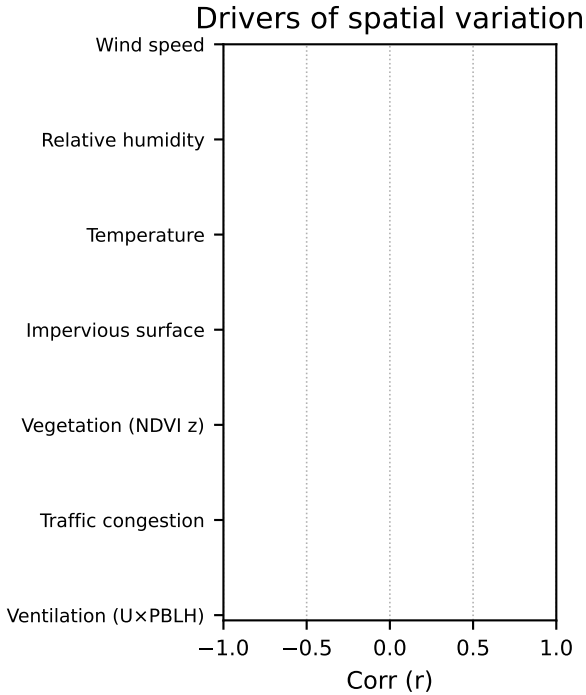
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-04-29 to 2024-05-05





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W18 (2024-04-29–2024-05-05): street-level weekly AQI median ≈ 38 (P10≈38, P90≈38).

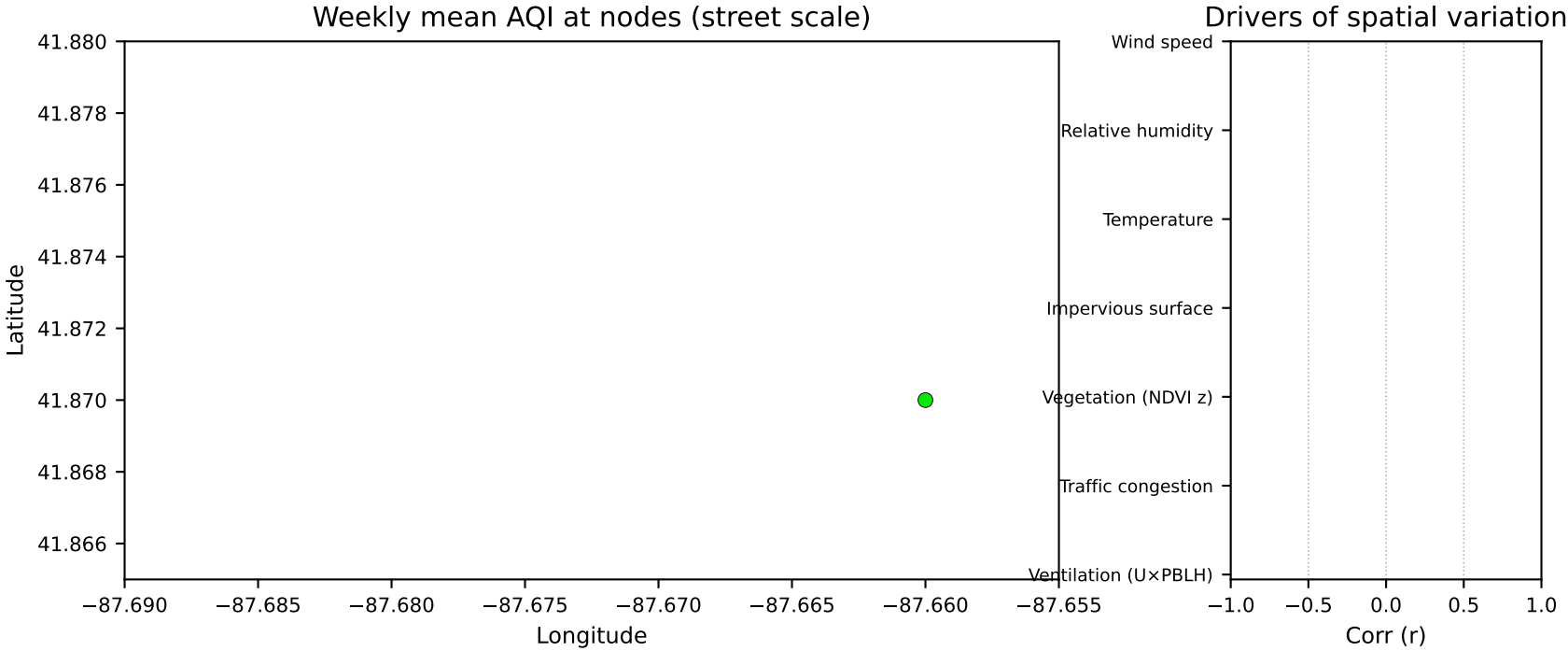
Local mean conditions: T≈16.3 °C, RH≈70%, U≈2.0 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-05-06 to 2024-05-12



Weekly inference:

Illinois Medical District, week 2024-W19 (2024-05-06–2024-05-12): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

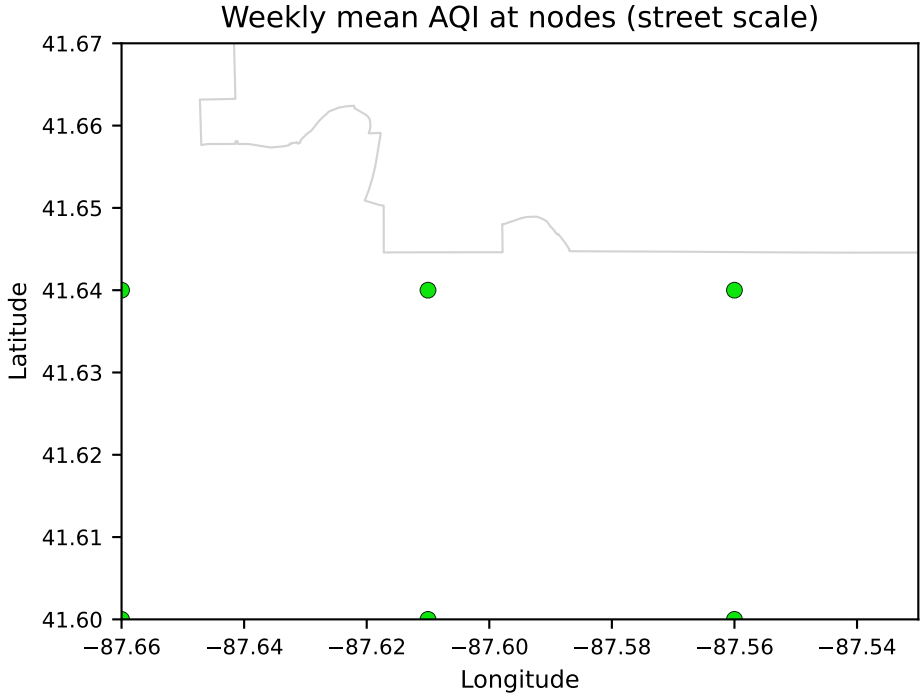
Local mean conditions: T̄≈14.4 °C, RH̄≈76%, Ū≈-1.3 m/s.

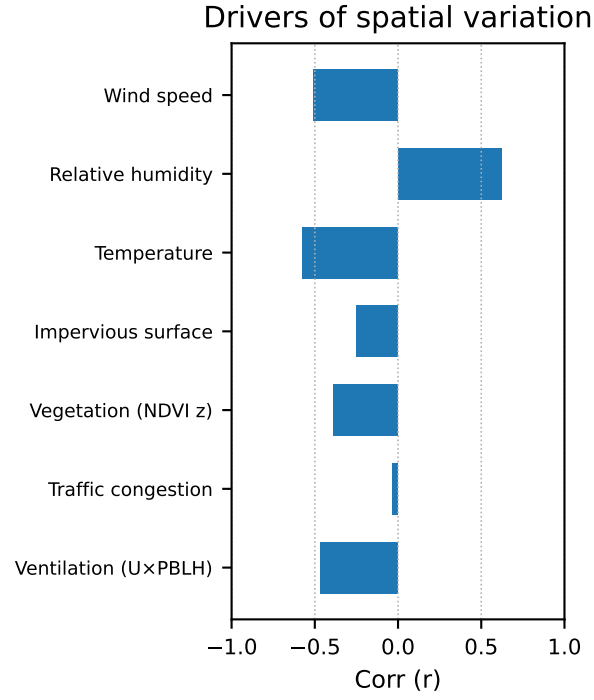
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-05-06 to 2024-05-12





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W19 (2024-05-06–2024-05-12): street-level weekly AQI median ≈ 39 (P10≈36, P90≈41).

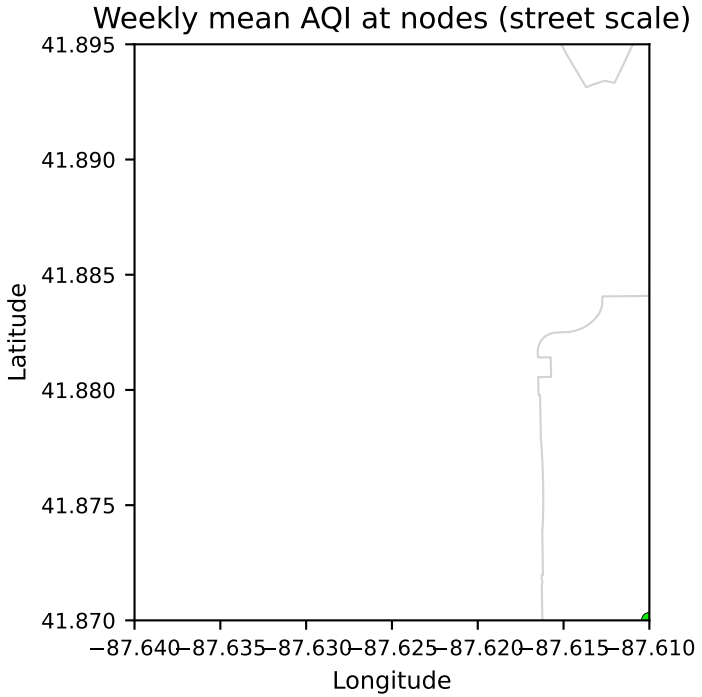
Local mean conditions: T≈15.2 °C, RH≈73%, U≈-0.5 m/s.

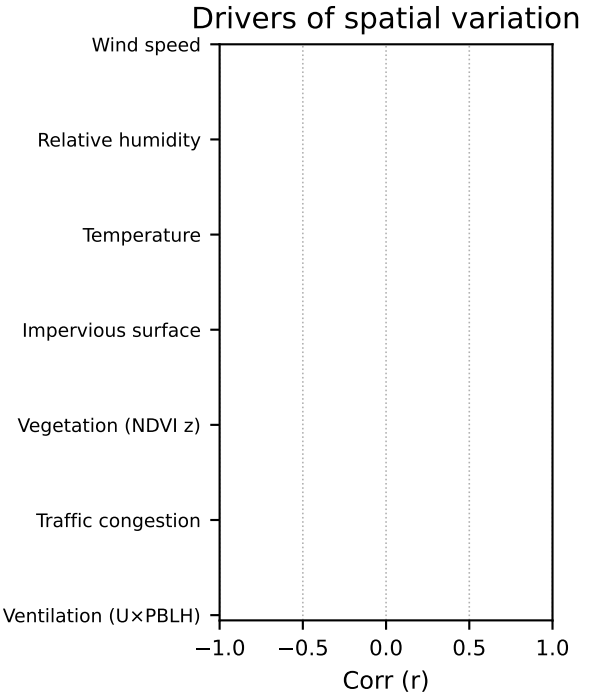
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.46). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.03). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.39). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.25). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.57). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-05-06 to 2024-05-12





Weekly inference:

Lakefront Downtown, week 2024-W19 (2024-05-06–2024-05-12): street-level weekly AQI median ≈ 38 (P10≈38, P90≈38).

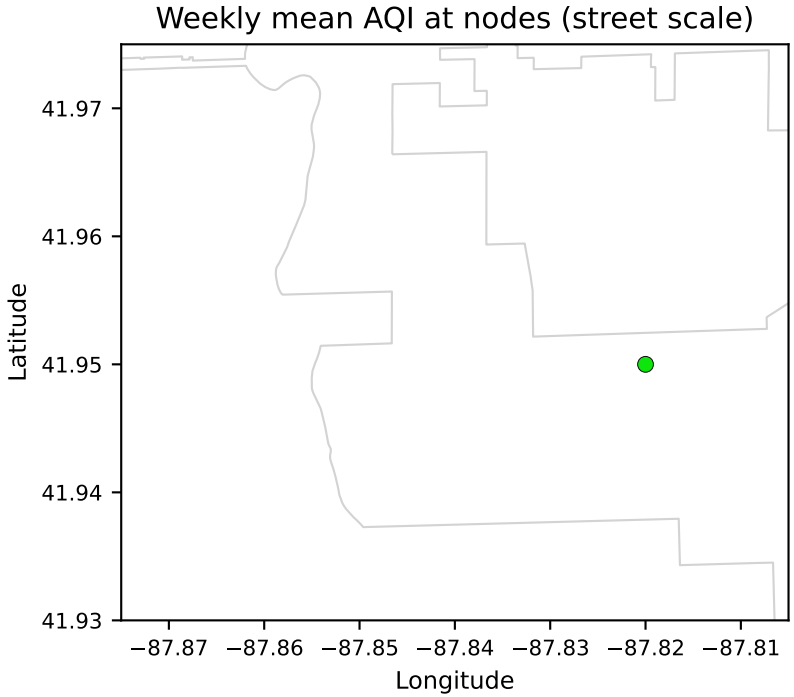
Local mean conditions: T≈14.5 °C, RH≈76%, U≈-1.3 m/s.

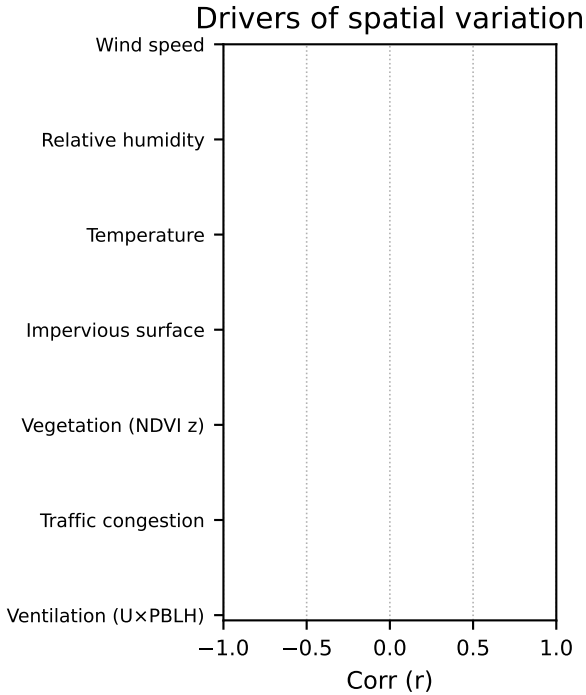
Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-05-06 to 2024-05-12





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W19 (2024-05-06–2024-05-12): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

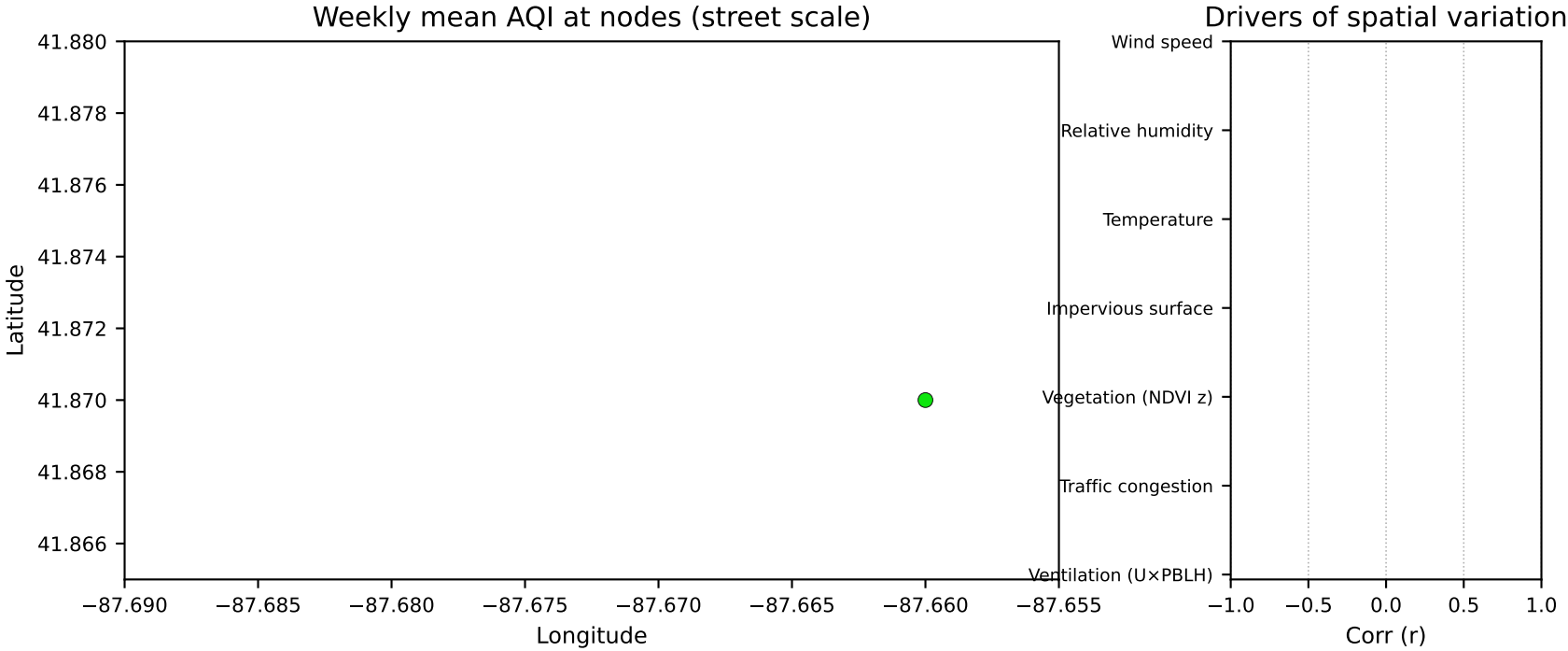
Local mean conditions: T≈14.6 °C, RH≈72%, U≈-0.2 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-05-13 to 2024-05-19



Weekly inference:

Illinois Medical District, week 2024-W20 (2024-05-13–2024-05-19): street-level weekly AQI median ≈ 39 (P10≈39, P90≈39).

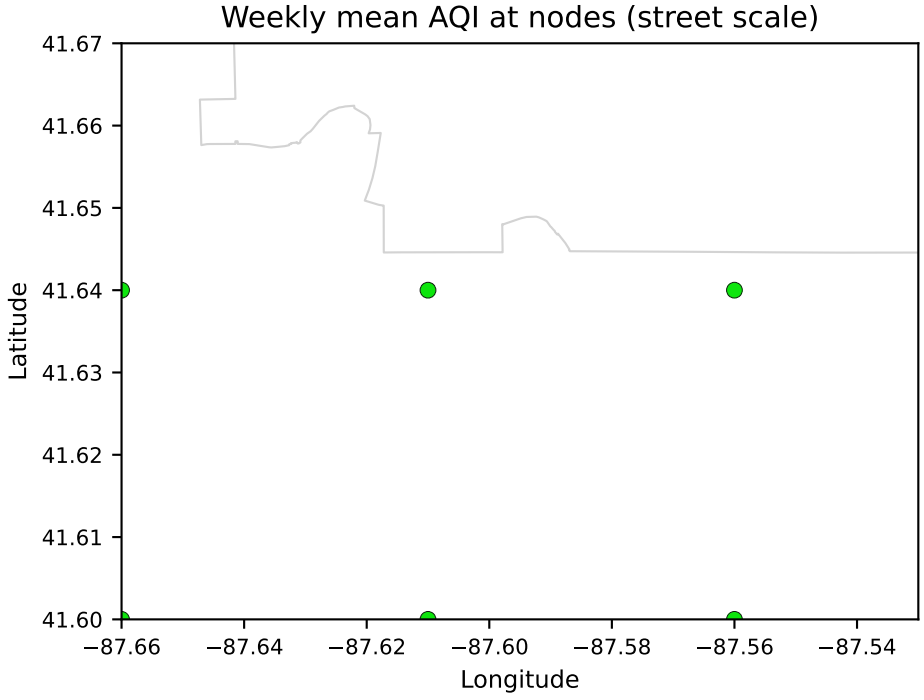
Local mean conditions: T̄≈16.3 °C, RH̄≈81%, Ū≈0.1 m/s.

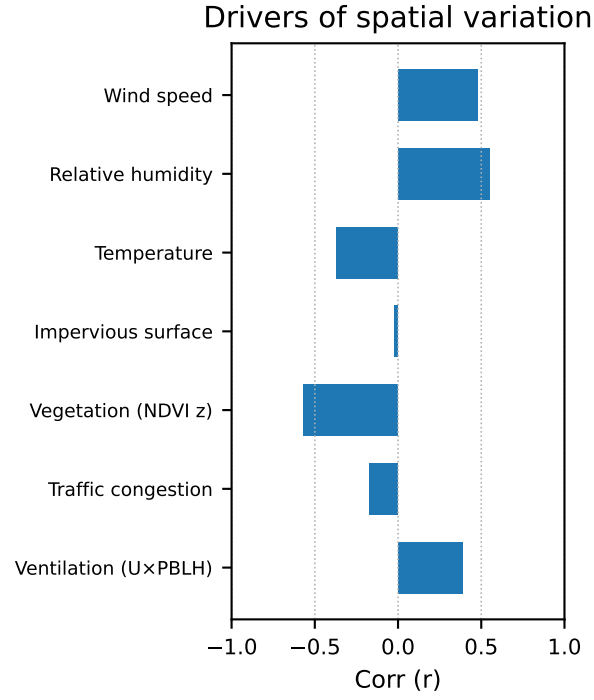
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-05-13 to 2024-05-19





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W20 (2024-05-13–2024-05-19): street-level weekly AQI median ≈ 46 (P10≈44, P90≈47).

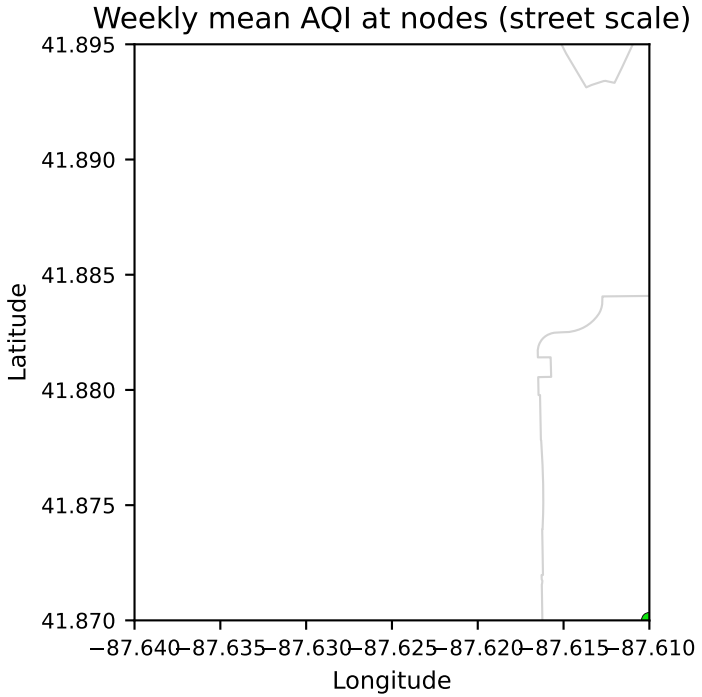
Local mean conditions: T≈17.3 °C, RH̄≈77%, Ū≈0.1 m/s.

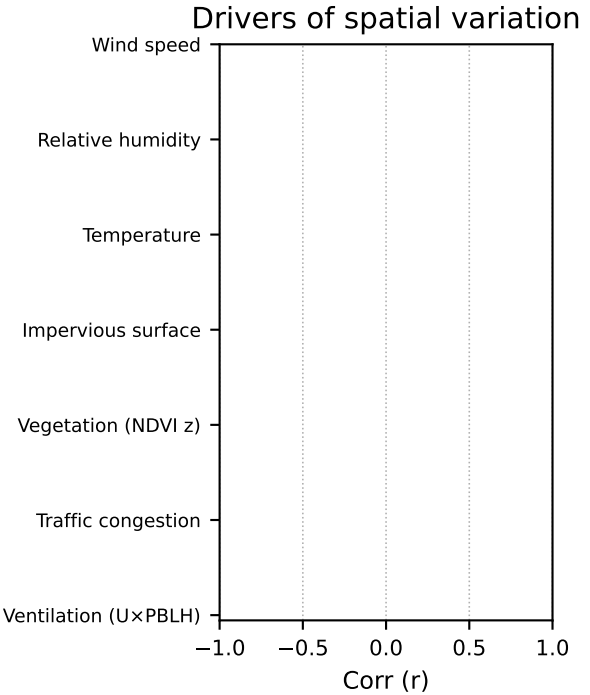
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate positive correlation (r≈0.39). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: weak negative correlation (r≈-0.17). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.57). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: negligible negative correlation (r≈-0.02). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.37). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-05-13 to 2024-05-19





Weekly inference:

Lakefront Downtown, week 2024-W20 (2024-05-13–2024-05-19): street-level weekly AQI median ≈ 44 (P10≈44, P90≈44).

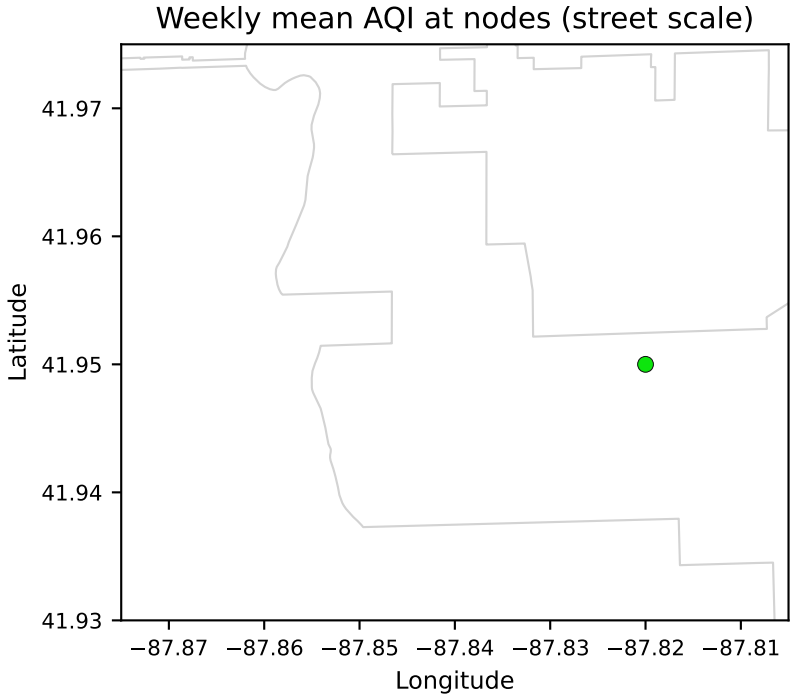
Local mean conditions: T≈16.4 °C, RH≈81%, U≈0.1 m/s.

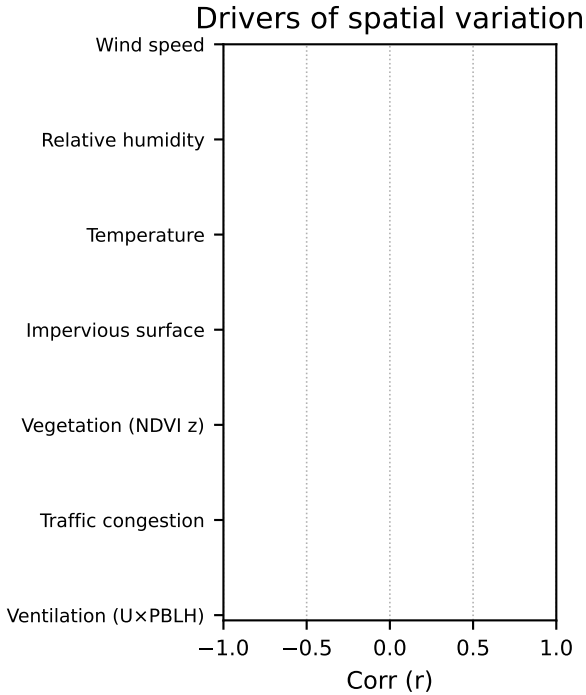
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-05-13 to 2024-05-19





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W20 (2024-05-13–2024-05-19): street-level weekly AQI median ≈ 45 (P10≈45, P90≈45).

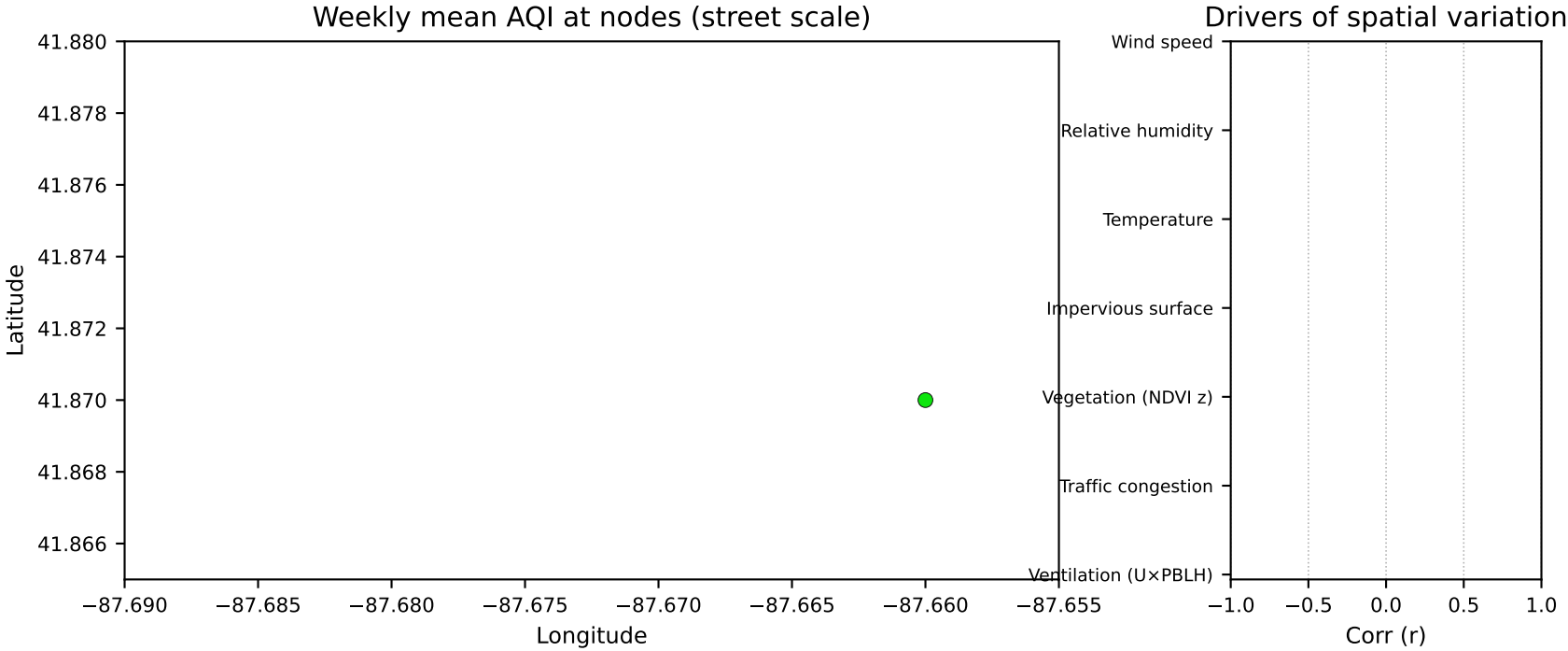
Local mean conditions: T≈16.6 °C, RH≈75%, U≈-0.0 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-05-20 to 2024-05-26



Weekly inference:

Illinois Medical District, week 2024-W21 (2024-05-20–2024-05-26): street-level weekly AQI median ≈ 37 (P10≈37, P90≈37).

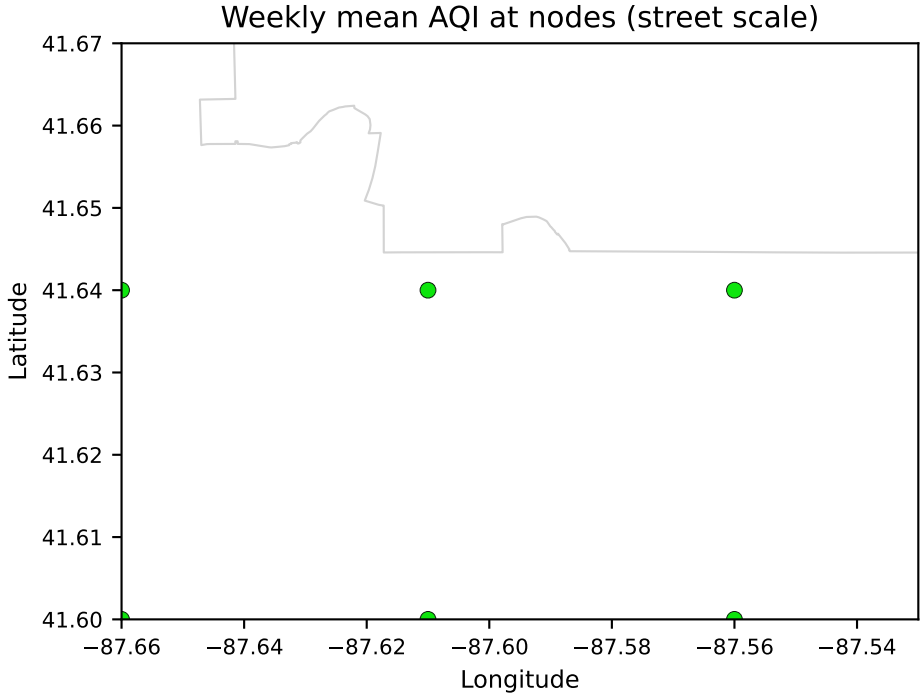
Local mean conditions: T̄≈20.0 °C, RH̄≈66%, Ū≈1.5 m/s.

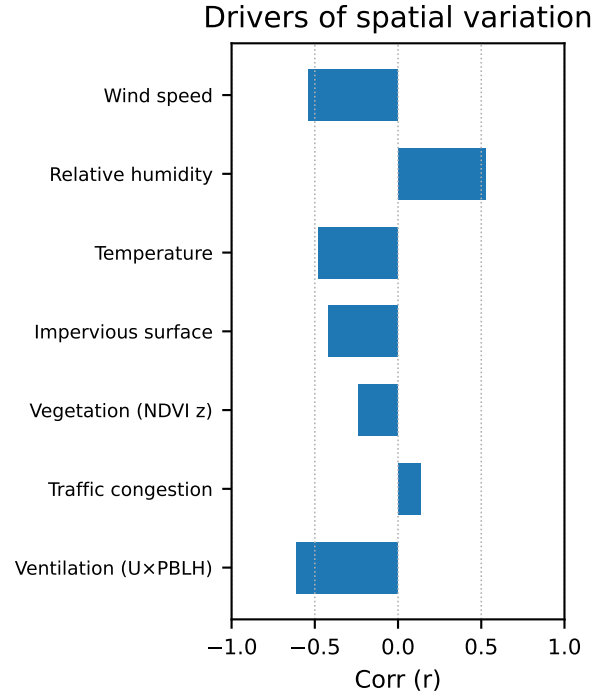
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-05-20 to 2024-05-26





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W21 (2024-05-20–2024-05-26): street-level weekly AQI median ≈ 45 (P10≈40, P90≈46).

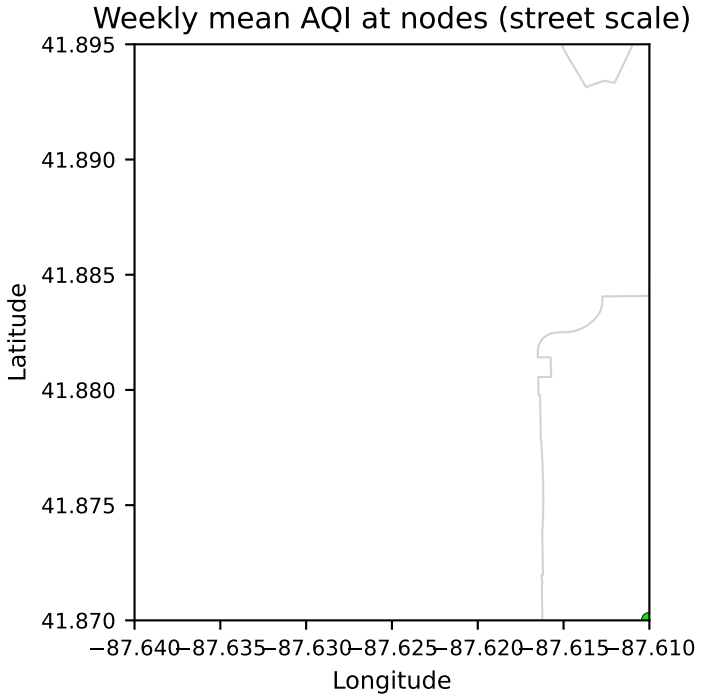
Local mean conditions: T≈20.0 °C, RH≈67%, U≈2.1 m/s.

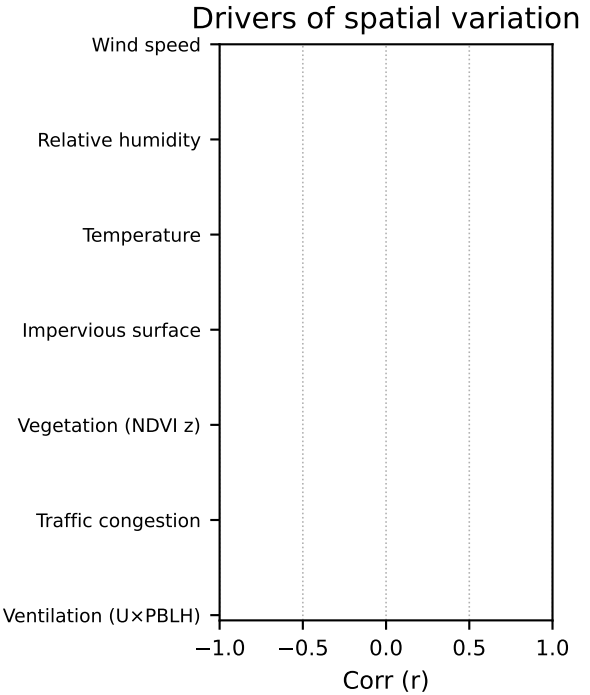
Driver-wise interpretation:

- Ventilation (U×PBLH): strong negative correlation (r≈-0.61). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.14). Streets with heavier traffic generally showed higher AQ, indicating a detectable roadway emission influence at the street scale.
- Vegetation (NDVI z): weak negative correlation (r≈-0.24). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.42). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.48). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Lakefront Downtown — Street-level AQI dashboard | 2024-05-20 to 2024-05-26





Weekly inference:

Lakefront Downtown, week 2024-W21 (2024-05-20–2024-05-26): street-level weekly AQI median ≈ 45 (P10≈45, P90≈45).

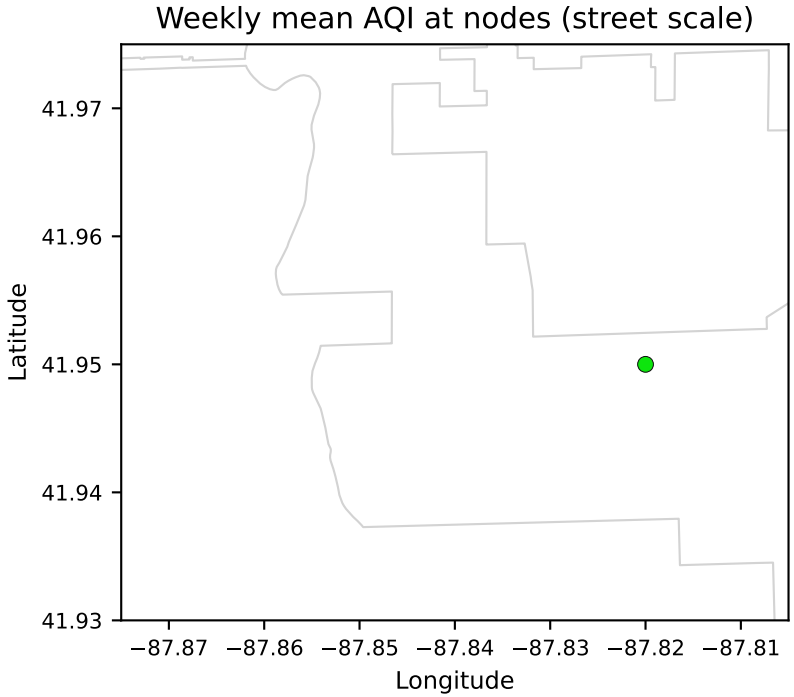
Local mean conditions: T≈20.1 °C, RH̄≈66%, Ū≈1.5 m/s.

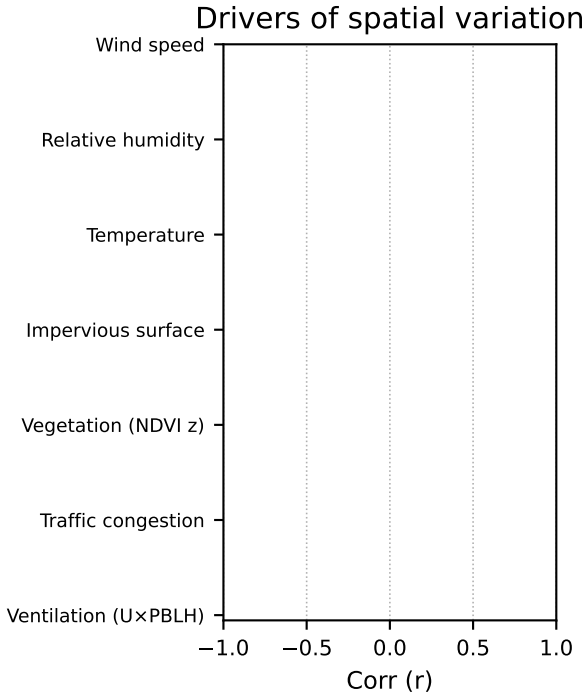
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-05-20 to 2024-05-26





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W21 (2024-05-20–2024-05-26): street-level weekly AQI median ≈ 41 (P10≈41, P90≈41).

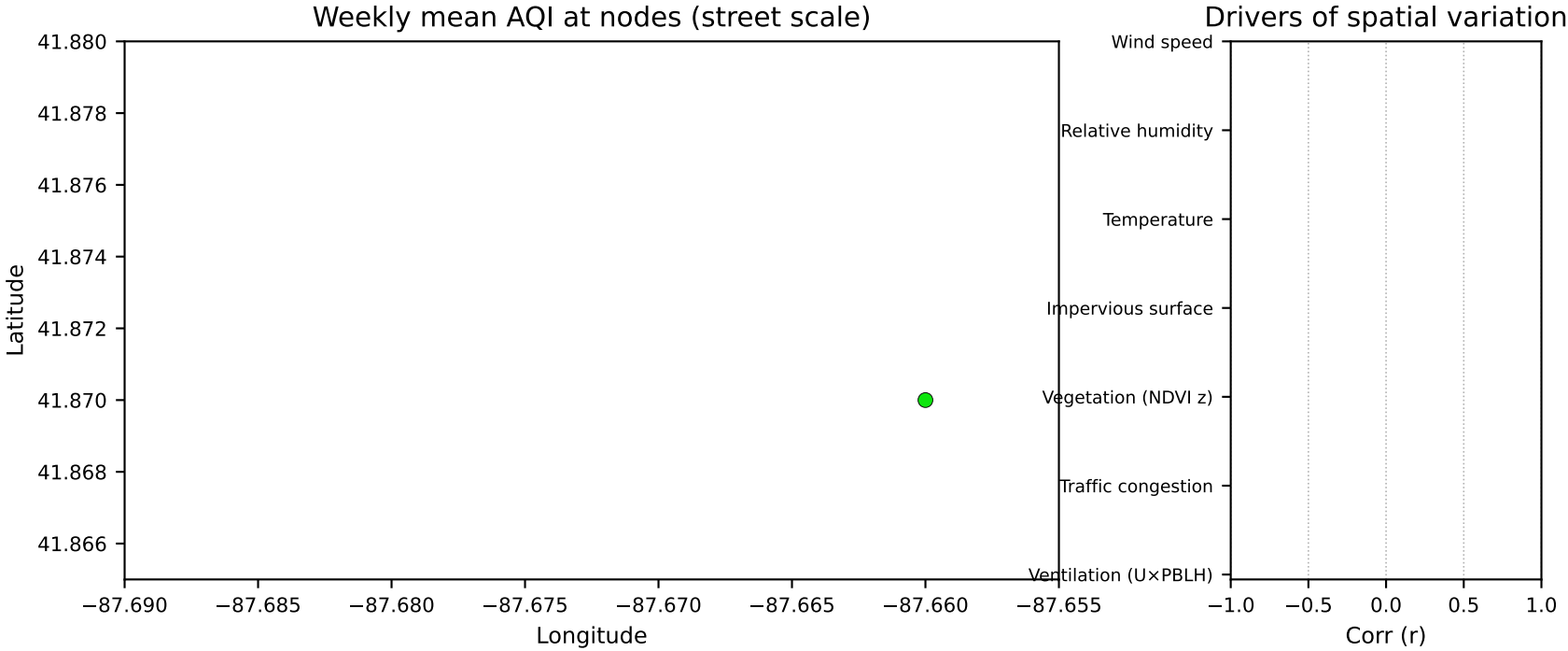
Local mean conditions: T≈19.9 °C, RH≈65%, U≈2.4 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-05-27 to 2024-06-02



Weekly inference:

Illinois Medical District, week 2024-W22 (2024-05-27–2024-06-02): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

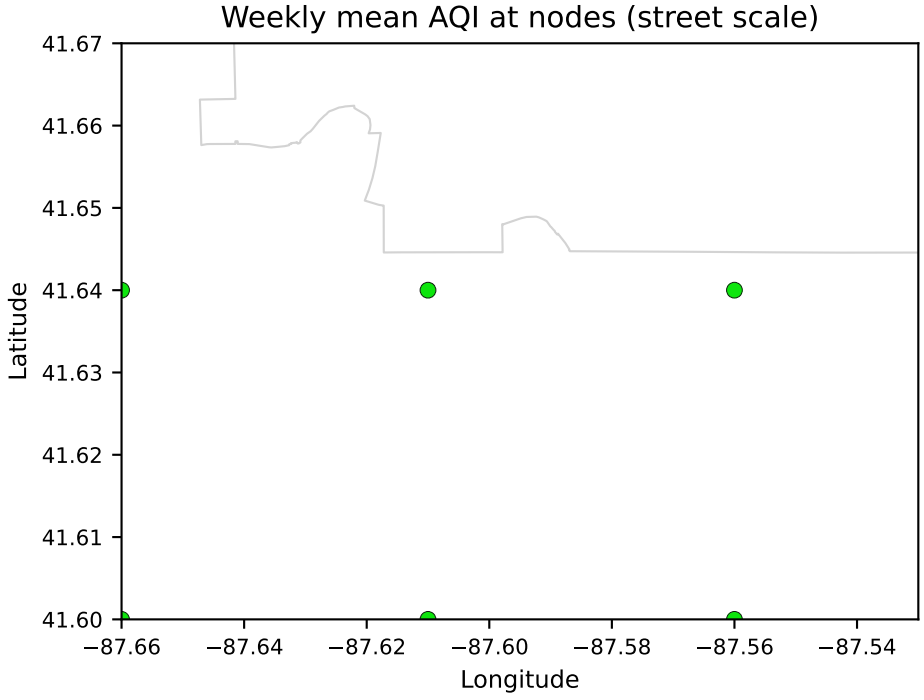
Local mean conditions: T̄≈15.7 °C, RH̄≈77%, Ū≈0.6 m/s.

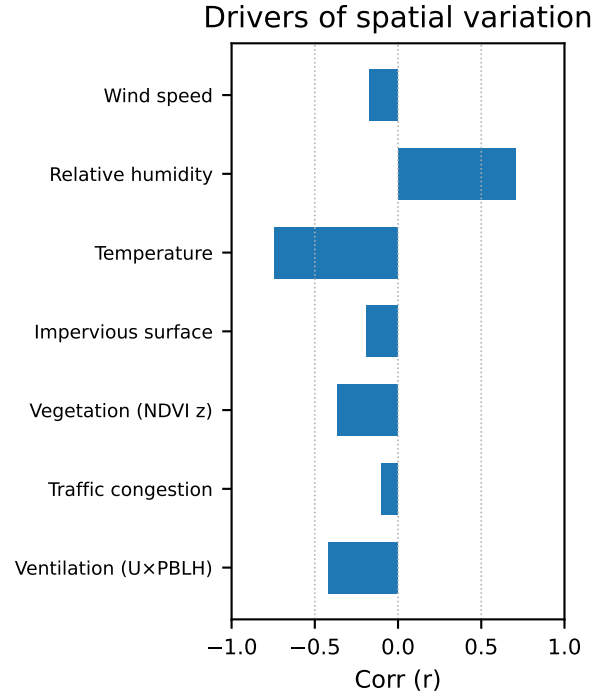
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-05-27 to 2024-06-02





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W22 (2024-05-27–2024-06-02): street-level weekly AQI median ≈ 39 (P10≈35, P90≈41).

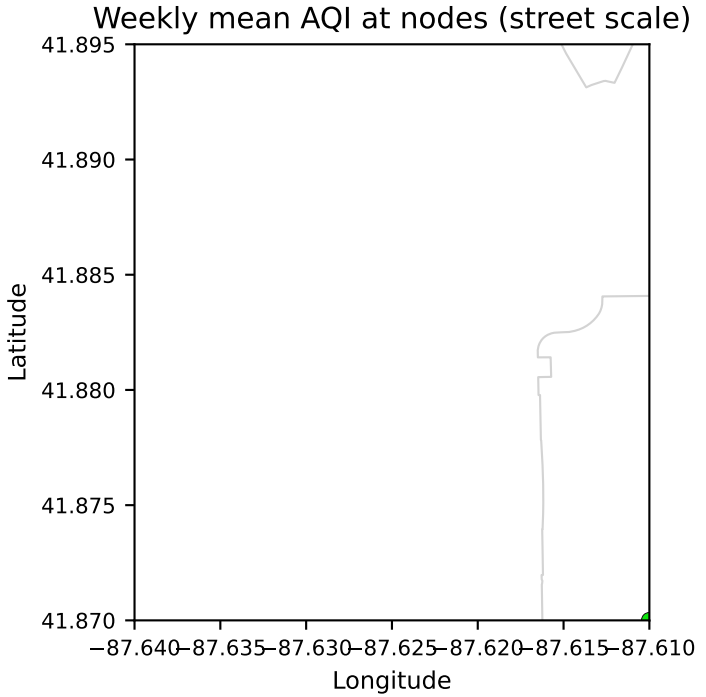
Local mean conditions: T≈16.1 °C, RH̄≈74%, Ū≈0.8 m/s.

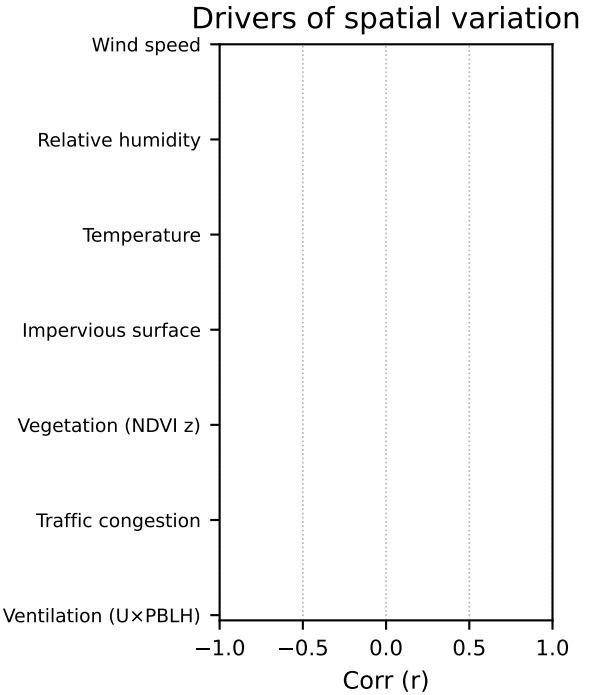
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.41). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.10). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.37). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.19). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong negative correlation (r≈-0.74). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-05-27 to 2024-06-02





Weekly inference:

Lakefront Downtown, week 2024-W22 (2024-05-27–2024-06-02): street-level weekly AQI median ≈ 39 (P10≈39, P90≈39).

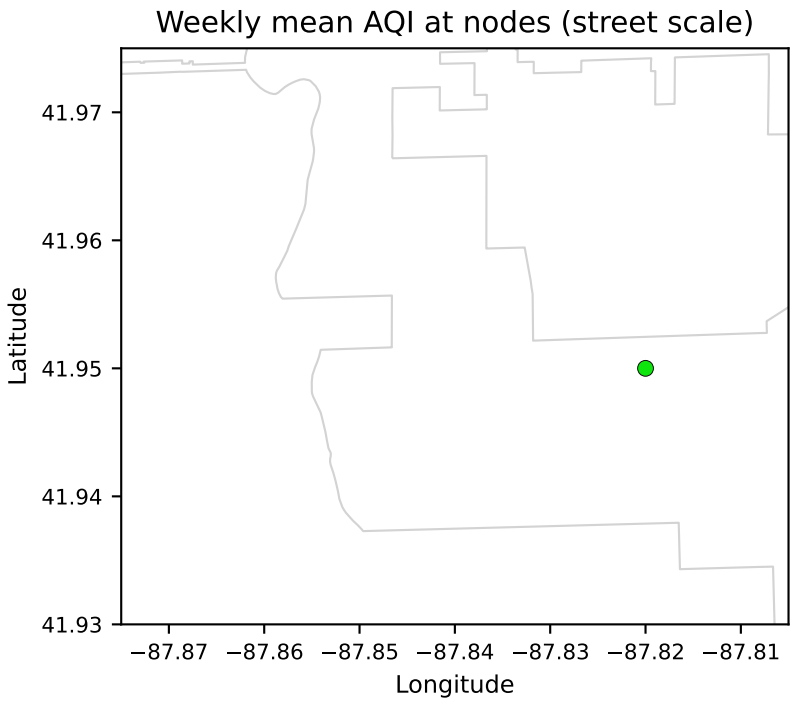
Local mean conditions: T≈15.8 °C, RH̄≈77%, Ū≈0.6 m/s.

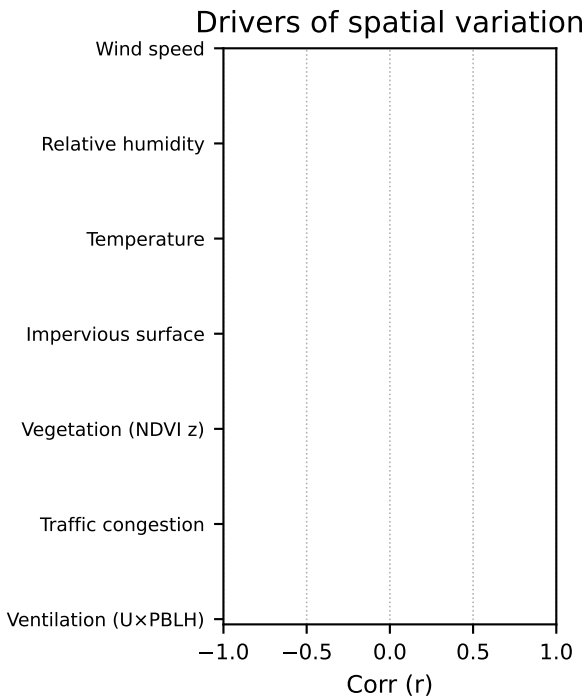
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-05-27 to 2024-06-02





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W22 (2024-05-27–2024-06-02): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

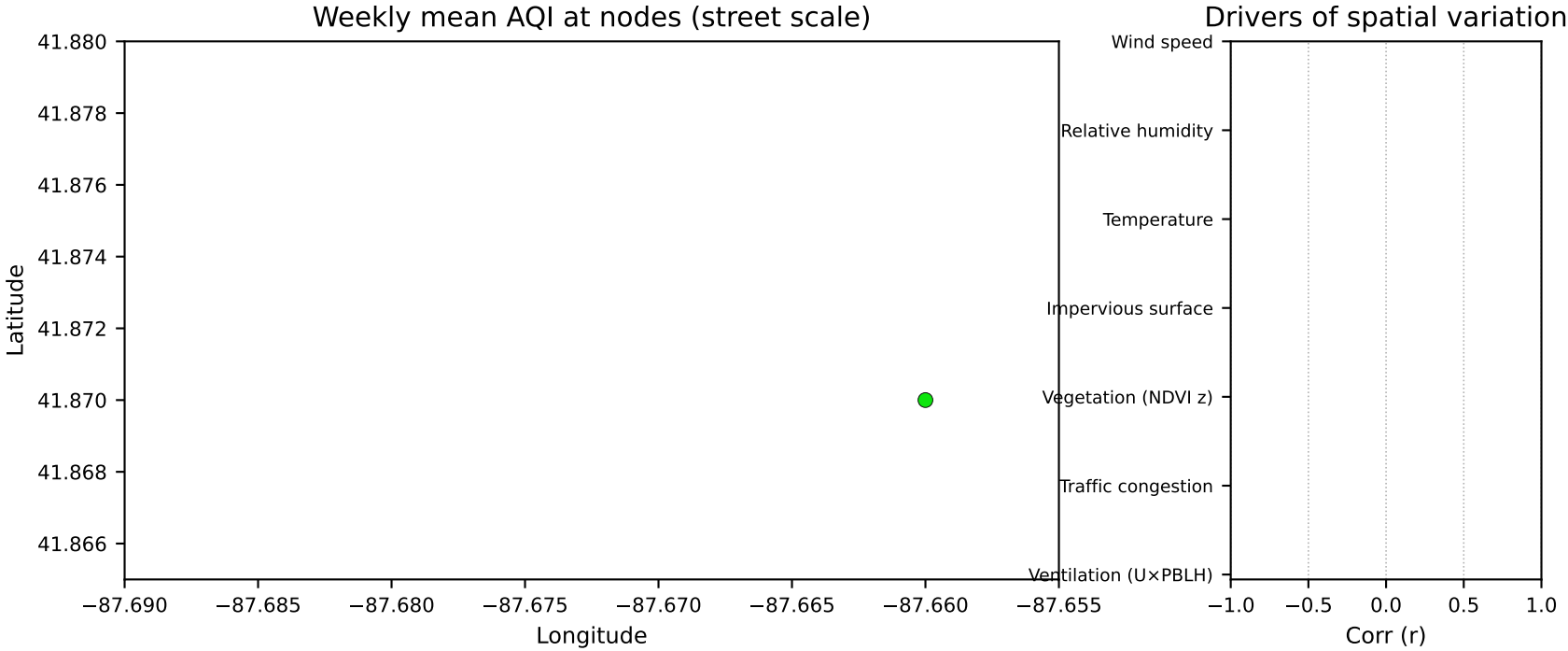
Local mean conditions: T≈15.9 °C, RH≈73%, U≈0.7 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-06-03 to 2024-06-09



Weekly inference:

Illinois Medical District, week 2024-W23 (2024-06-03–2024-06-09): street-level weekly AQI median ≈ 39 (P10≈39, P90≈39).

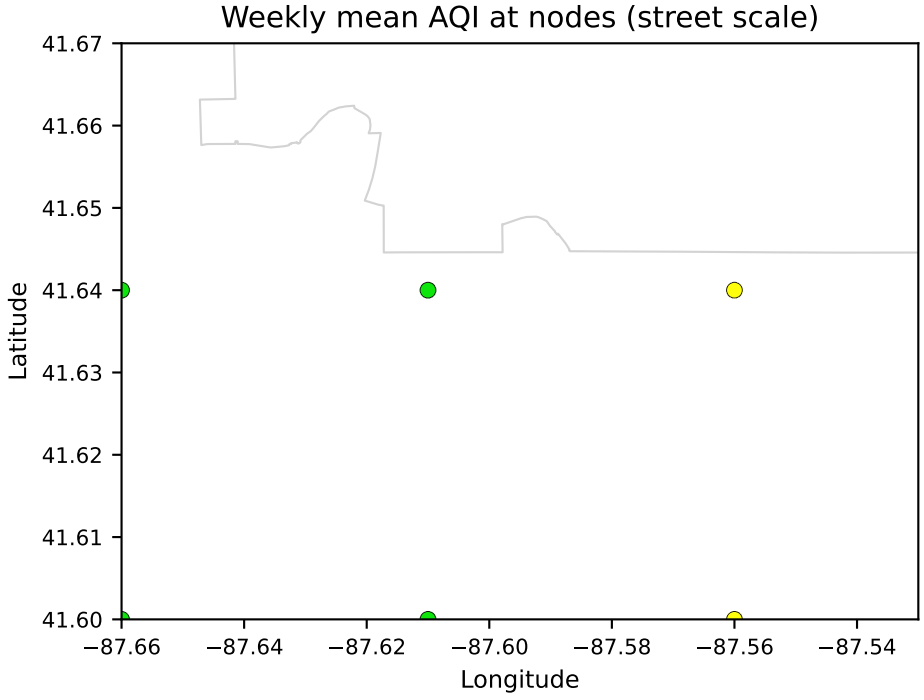
Local mean conditions: T̄≈20.4 °C, RH̄≈69%, Ū≈8.4 m/s.

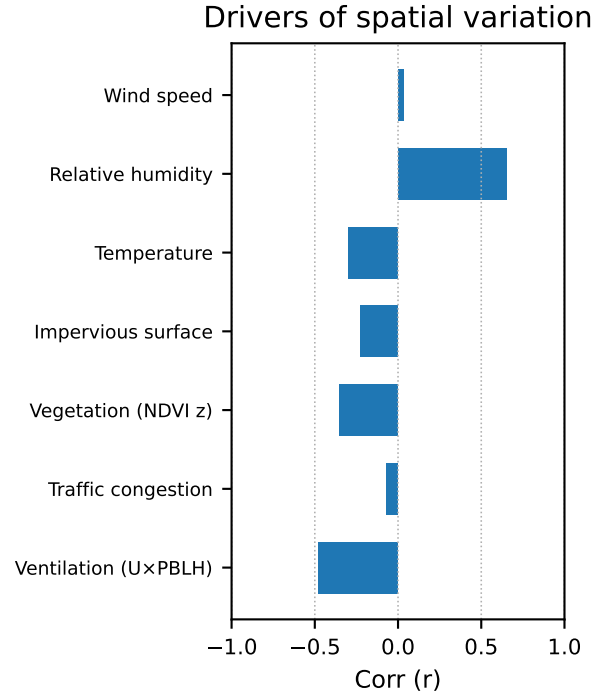
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-06-03 to 2024-06-09





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W23 (2024-06-03–2024-06-09): street-level weekly AQI median ≈ 48 (P10≈42, P90≈50).

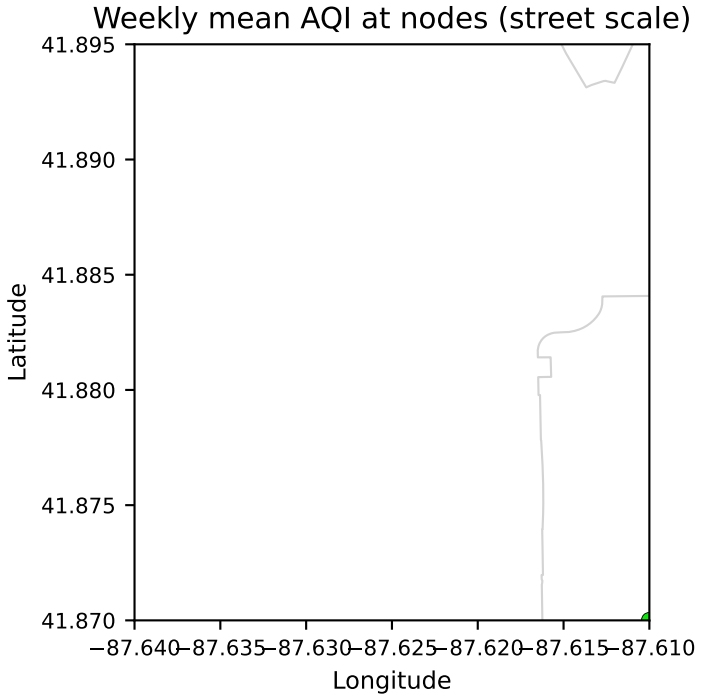
Local mean conditions: T≈20.5 °C, RH̄≈67%, Ū≈7.5 m/s.

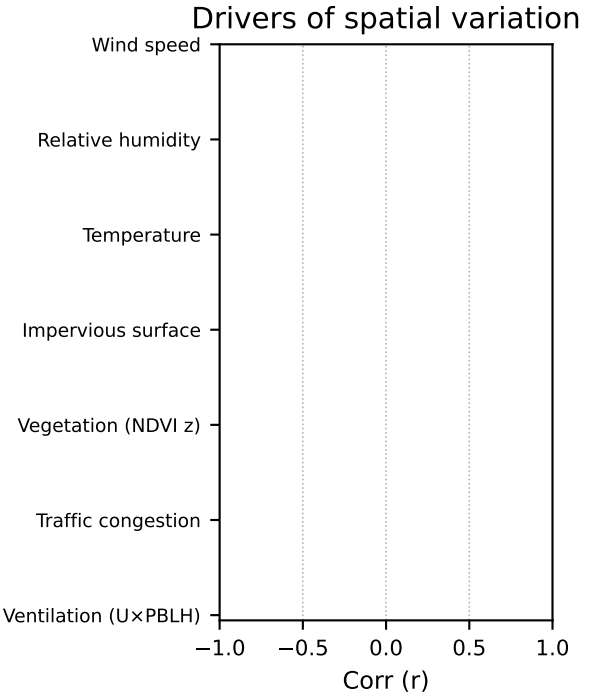
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.48). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.07). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.35). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.22). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: weak negative correlation (r≈-0.30). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-06-03 to 2024-06-09





Weekly inference:

Lakefront Downtown, week 2024-W23 (2024-06-03–2024-06-09): street-level weekly AQI median ≈ 46 (P10≈46, P90≈46).

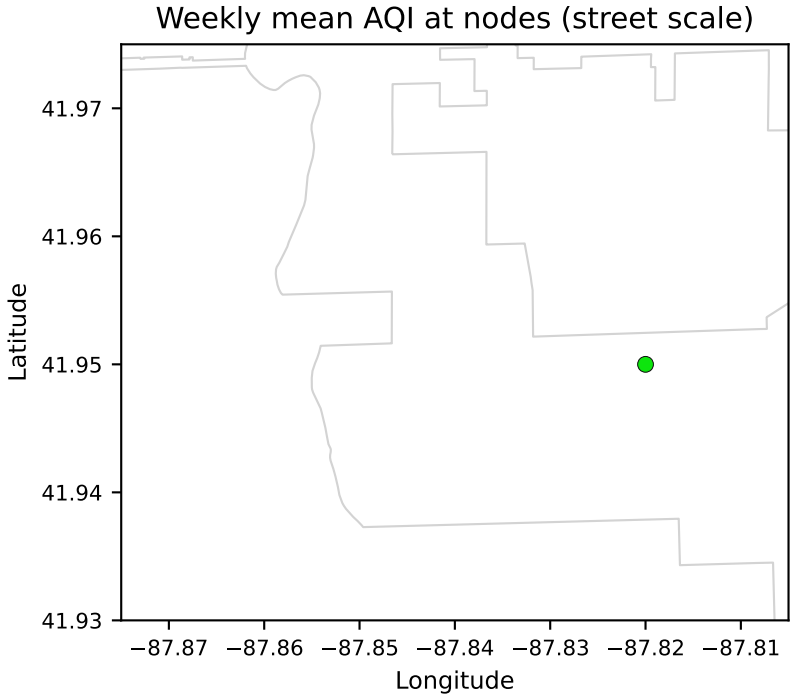
Local mean conditions: T≈20.5 °C, RH≈69%, U≈8.4 m/s.

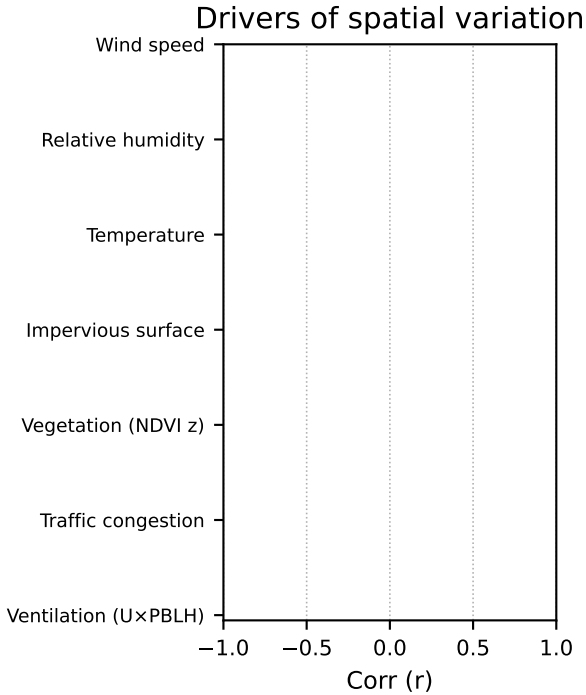
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-06-03 to 2024-06-09





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W23 (2024-06-03–2024-06-09): street-level weekly AQI median ≈ 44 (P10≈44, P90≈44).

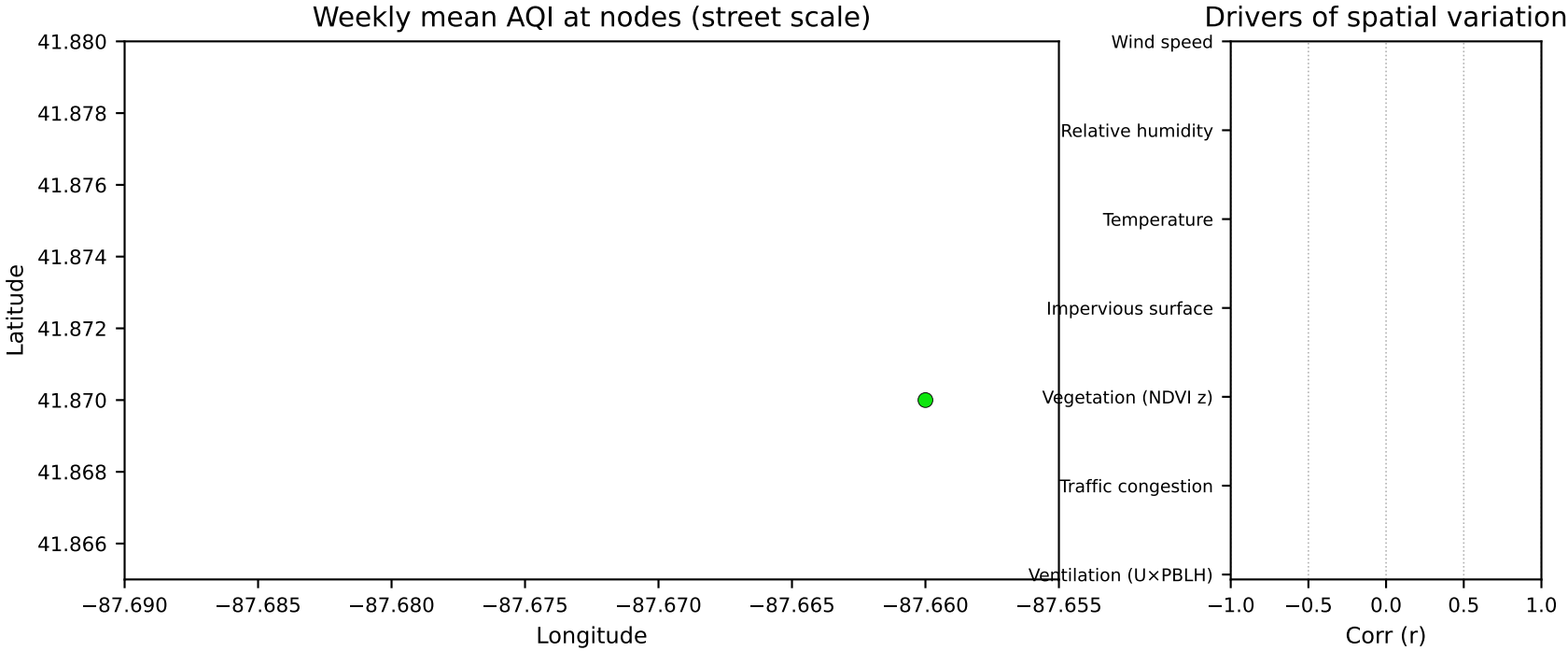
Local mean conditions: T≈20.5 °C, RH≈65%, U≈8.0 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-06-10 to 2024-06-16



Weekly inference:

Illinois Medical District, week 2024-W24 (2024-06-10–2024-06-16): street-level weekly AQI median ≈ 39 (P10≈39, P90≈39).

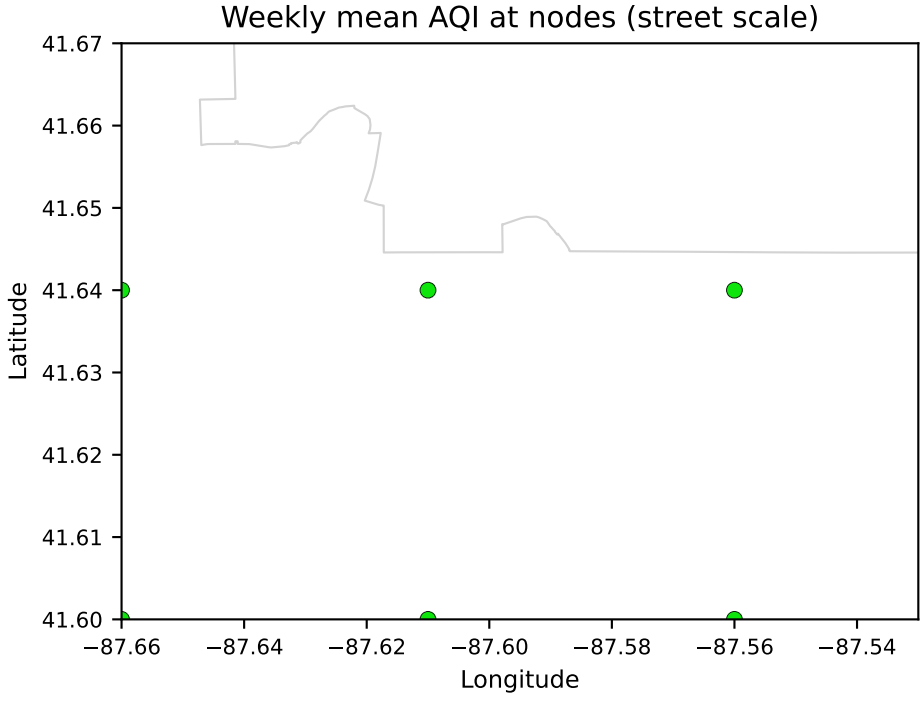
Local mean conditions: T̄≈21.6 °C, RH̄≈60%, Ū≈1.0 m/s.

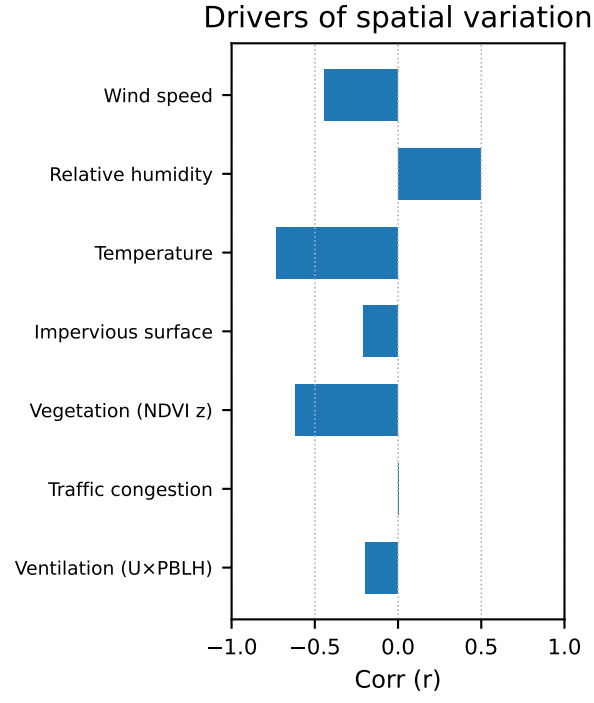
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-06-10 to 2024-06-16





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W24 (2024-06-10–2024-06-16): street-level weekly AQI median ≈ 47 (P10≈45, P90≈48).

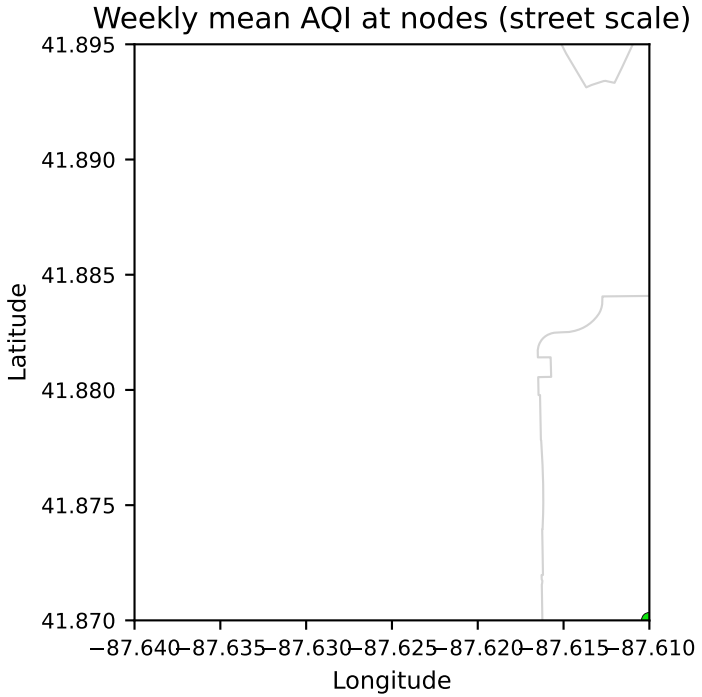
Local mean conditions: T≈21.5 °C, RH̄≈60%, Ū≈1.3 m/s.

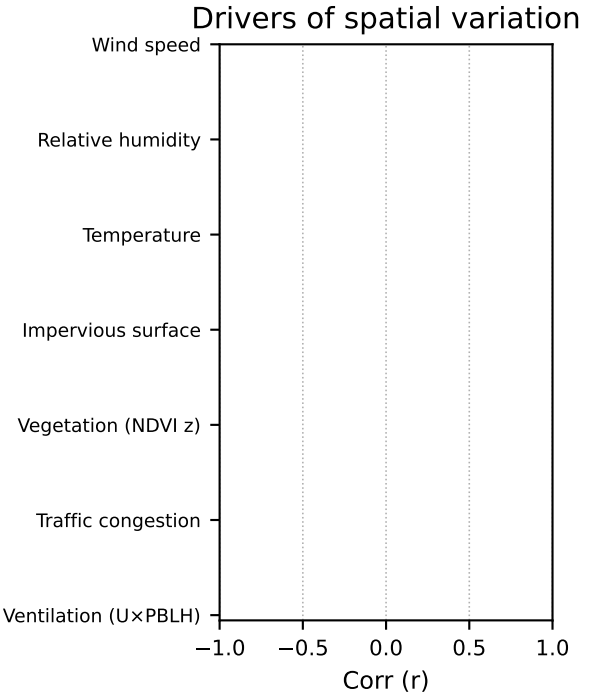
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak negative correlation (r≈-0.19). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.00). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): strong negative correlation (r≈-0.62). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.21). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong negative correlation (r≈-0.73). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-06-10 to 2024-06-16





Weekly inference:

Lakefront Downtown, week 2024-W24 (2024-06-10–2024-06-16): street-level weekly AQI median ≈ 45 (P10≈45, P90≈45).

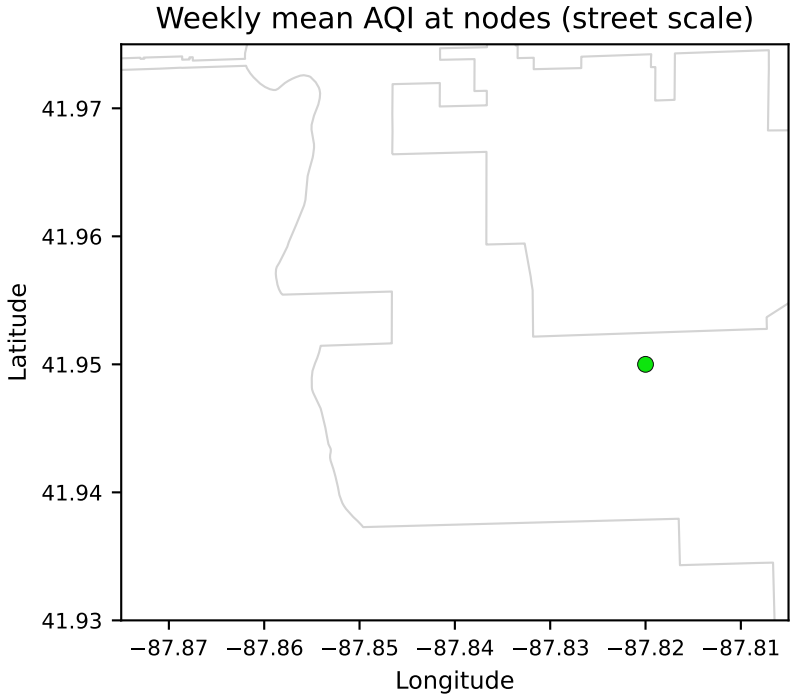
Local mean conditions: T≈21.7 °C, RH≈60%, U≈1.0 m/s.

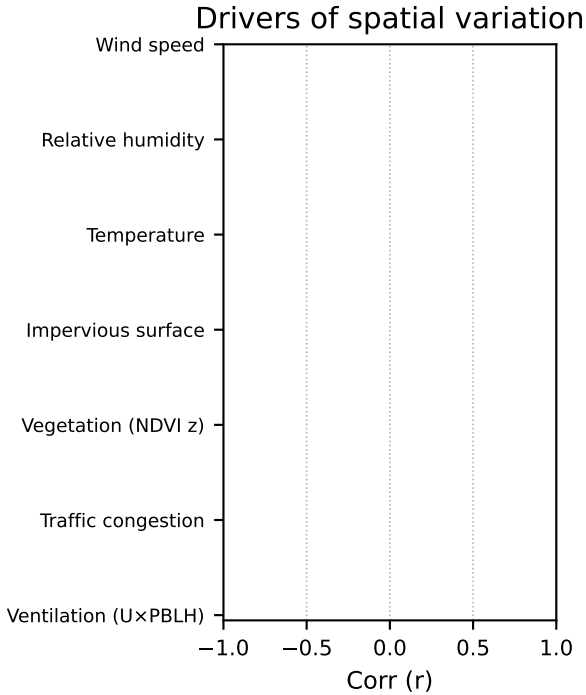
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-06-10 to 2024-06-16





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W24 (2024-06-10–2024-06-16): street-level weekly AQI median ≈ 46 (P10≈46, P90≈46).

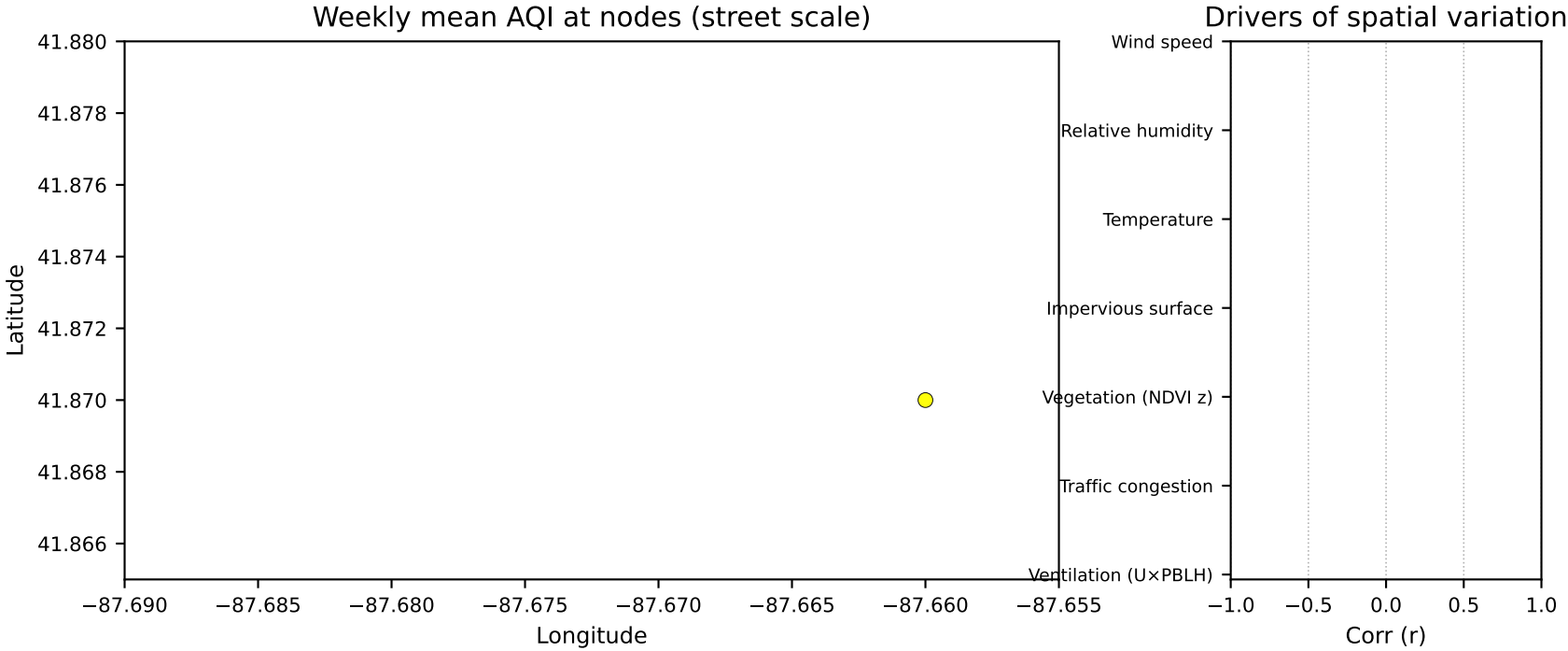
Local mean conditions: T≈21.6 °C, RH≈57%, U≈1.8 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-06-17 to 2024-06-23



Weekly inference:

Illinois Medical District, week 2024-W25 (2024-06-17–2024-06-23): street-level weekly AQI median ≈ 52 (P10≈52, P90≈52).

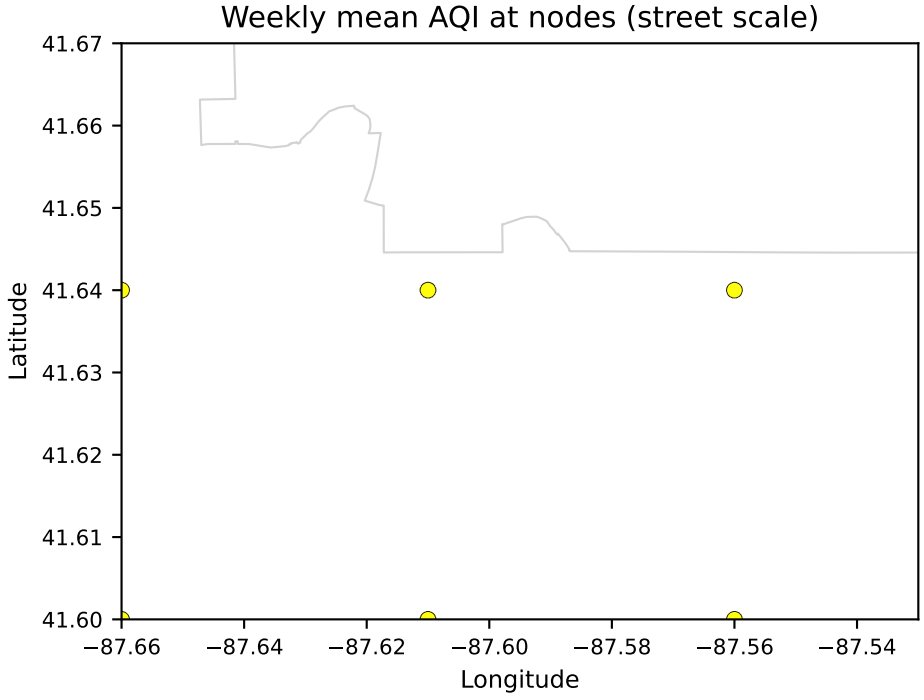
Local mean conditions: T̄≈26.6 °C, RH̄≈65%, Ū≈6.2 m/s.

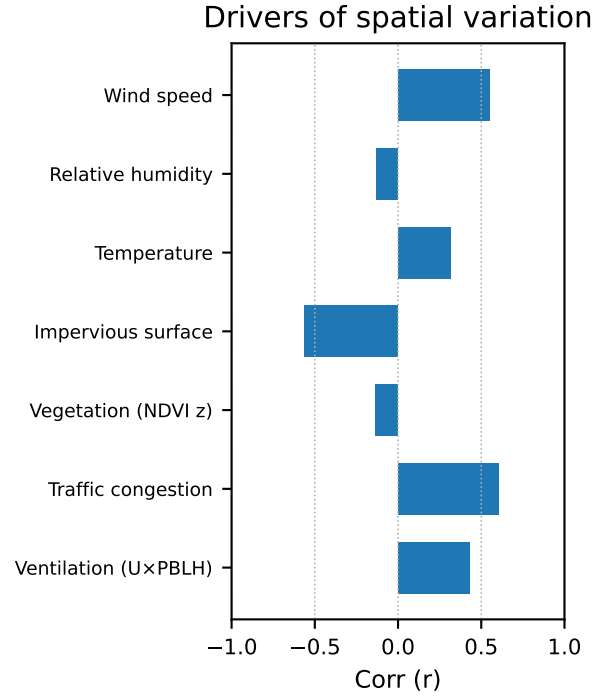
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-06-17 to 2024-06-23





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W25 (2024-06-17–2024-06-23): street-level weekly AQI median ≈ 60 (P10≈58, P90≈63).

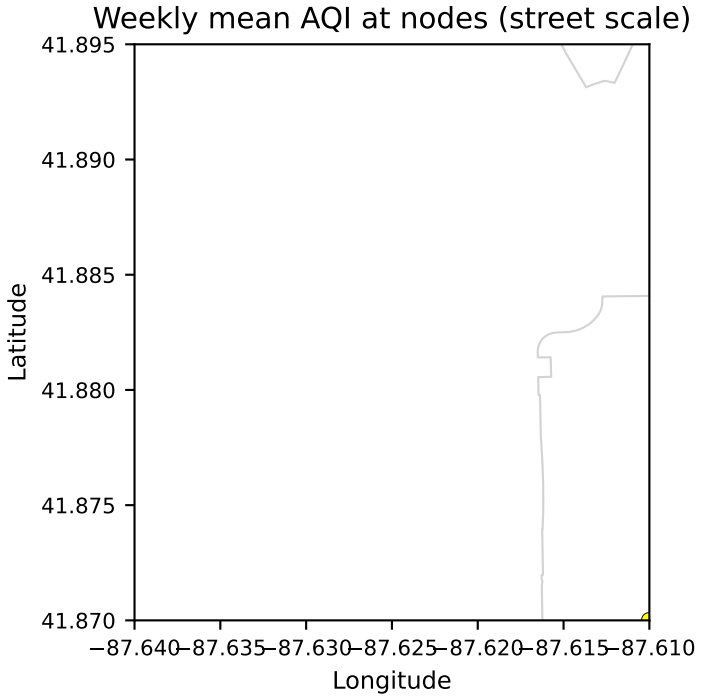
Local mean conditions: T≈27.0 °C, RH≈65%, U≈6.0 m/s.

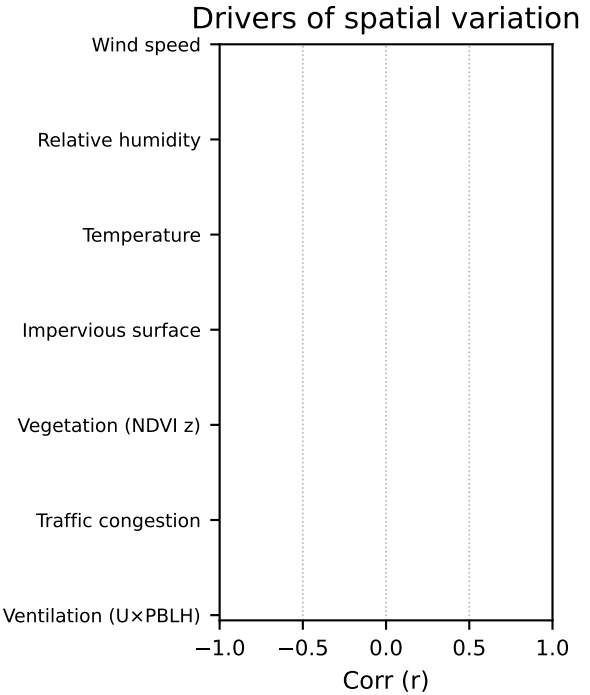
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate positive correlation (r≈0.43). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: strong positive correlation (r≈0.60). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): weak negative correlation (r≈-0.13). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.56). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate positive correlation (r≈0.32). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-06-17 to 2024-06-23





Weekly inference:

Lakefront Downtown, week 2024-W25 (2024-06-17–2024-06-23): street-level weekly AQI median ≈ 59 (P10≈59, P90≈59).

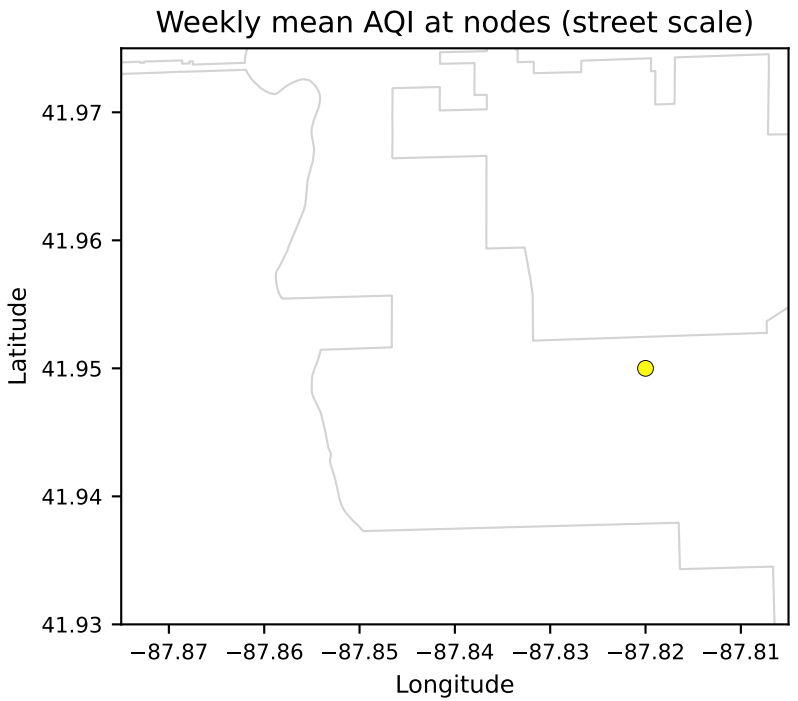
Local mean conditions: T≈26.7 °C, RH̄≈65%, Ū≈6.2 m/s.

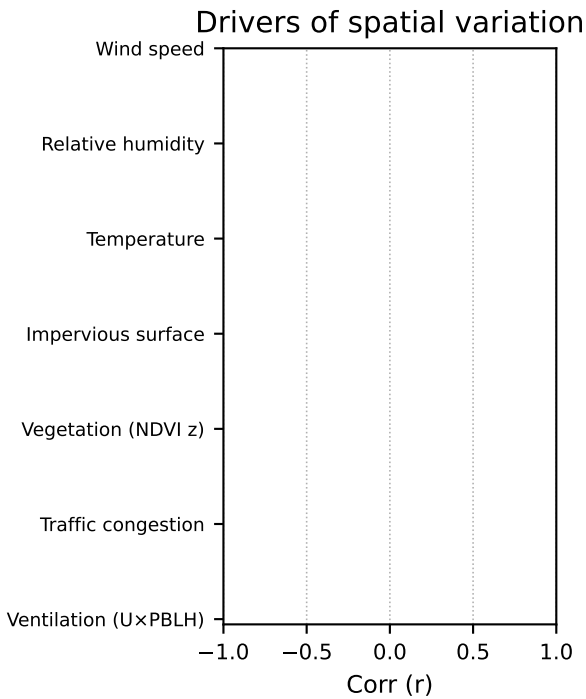
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-06-17 to 2024-06-23





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W25 (2024-06-17–2024-06-23): street-level weekly AQI median ≈ 61 (P10≈61, P90≈61).

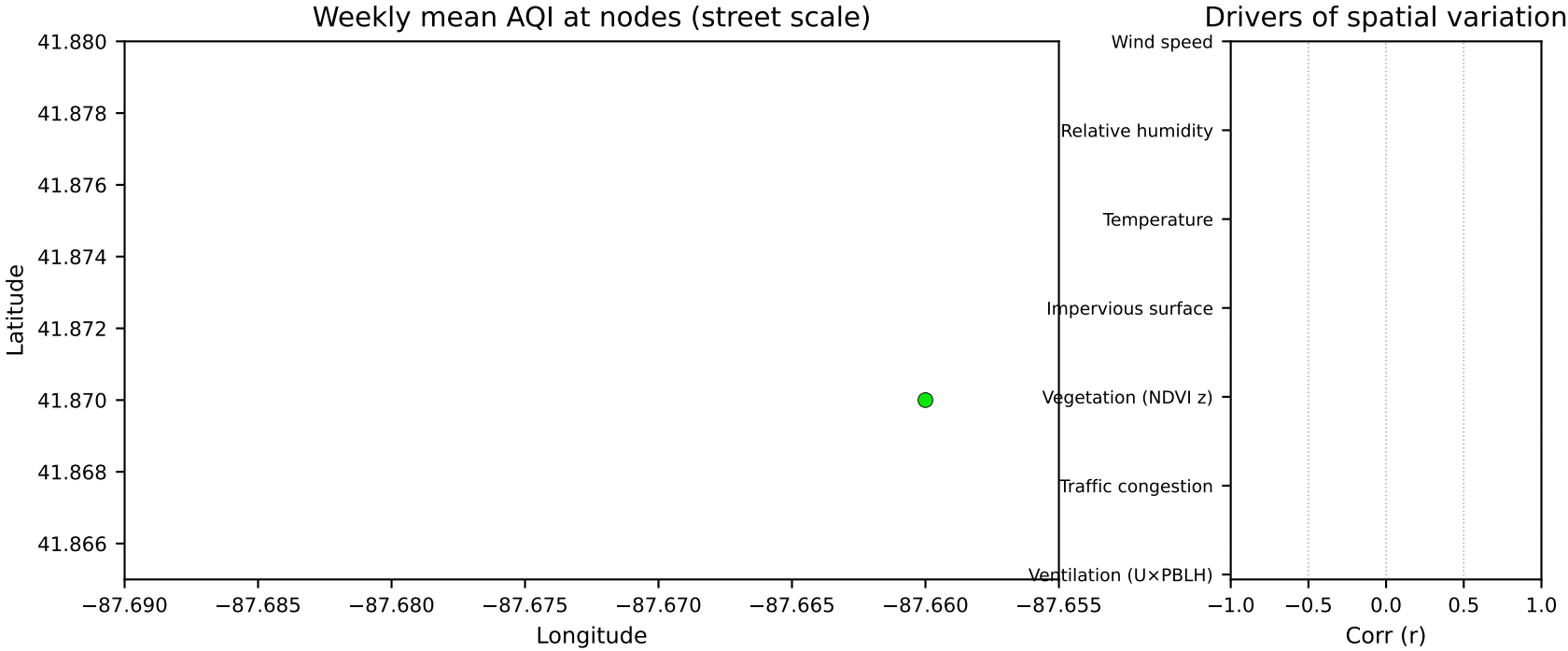
Local mean conditions: T≈26.8 °C, RH≈63%, U≈6.1 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-06-24 to 2024-06-30



Weekly inference:

Illinois Medical District, week 2024-W26 (2024-06-24–2024-06-30): street-level weekly AQI median ≈ 41 (P10≈41, P90≈41).

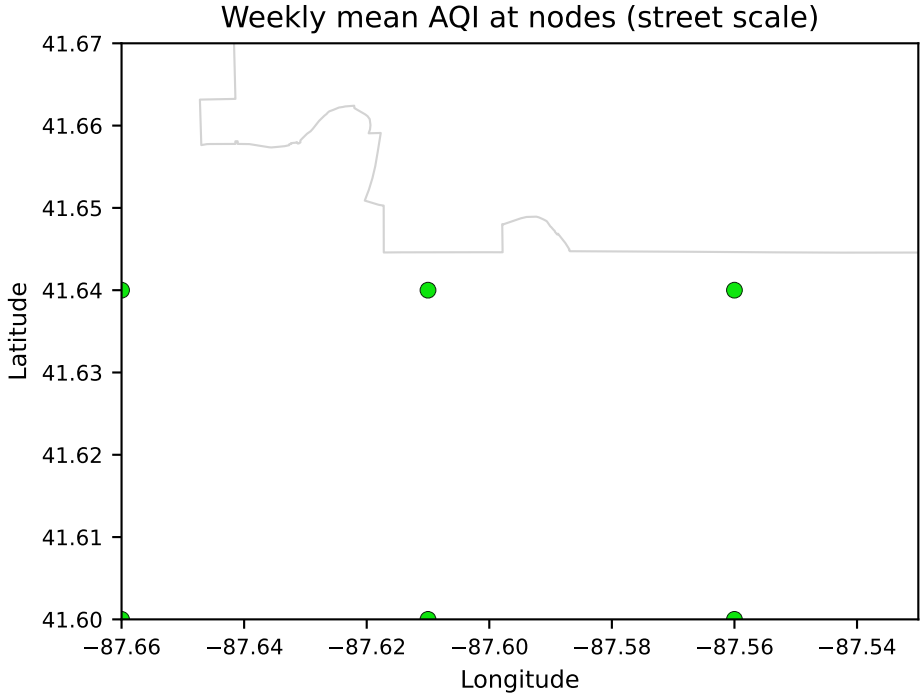
Local mean conditions: T̄≈22.3 °C, RH̄≈72%, Ū≈0.7 m/s.

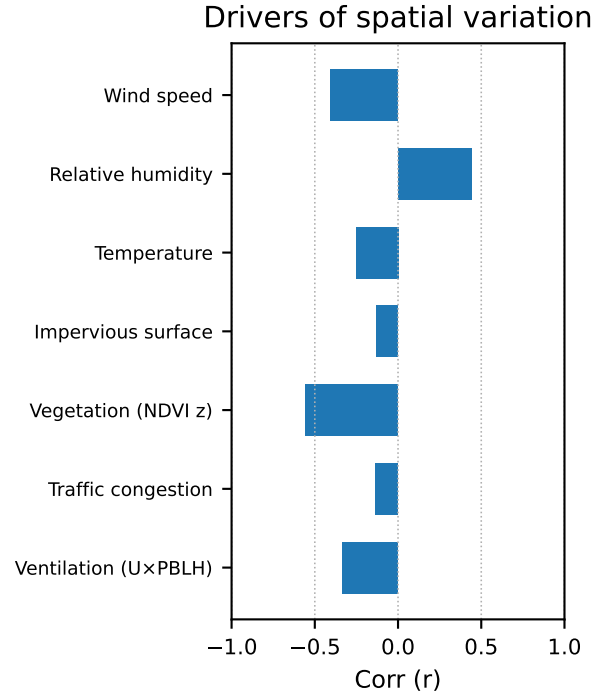
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-06-24 to 2024-06-30





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W26 (2024-06-24–2024-06-30): street-level weekly AQI median ≈ 48 (P10≈45, P90≈50).

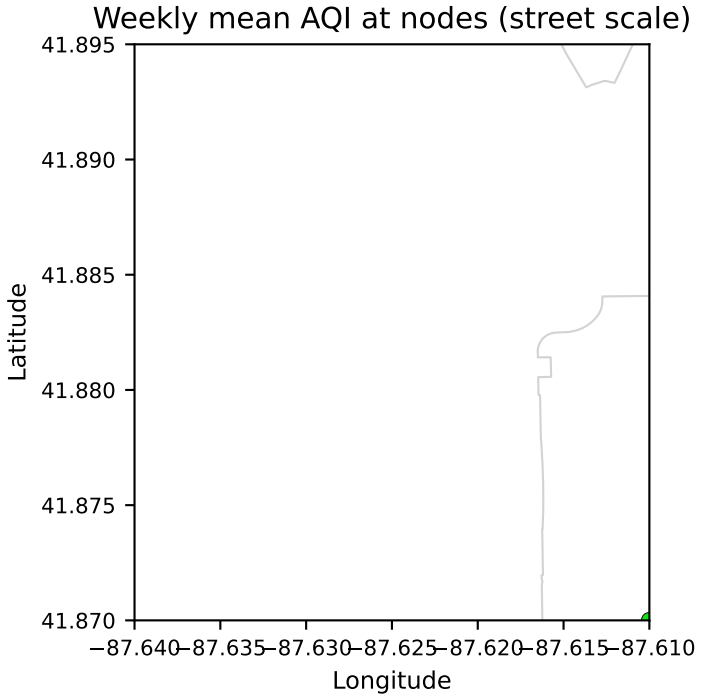
Local mean conditions: T≈22.8 °C, RH̄≈69%, Ū≈2.3 m/s.

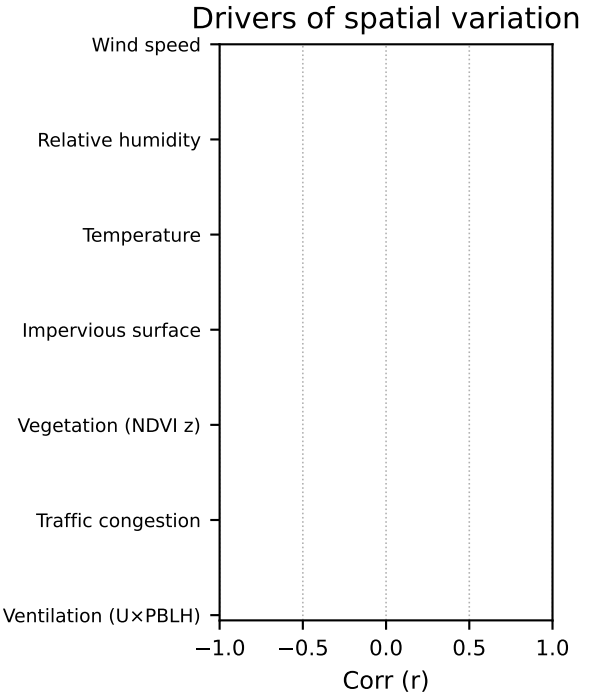
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.33). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak negative correlation (r≈-0.13). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.55). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.13). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: weak negative correlation (r≈-0.25). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-06-24 to 2024-06-30





Weekly inference:

Lakefront Downtown, week 2024-W26 (2024-06-24–2024-06-30): street-level weekly AQI median ≈ 46 (P10≈46, P90≈46).

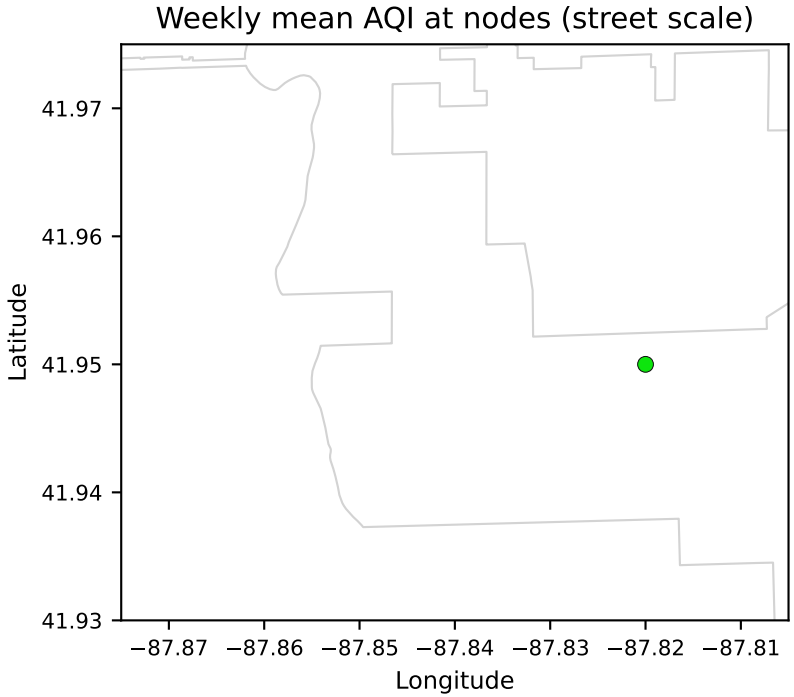
Local mean conditions: T≈22.4 °C, RH≈72%, U≈0.7 m/s.

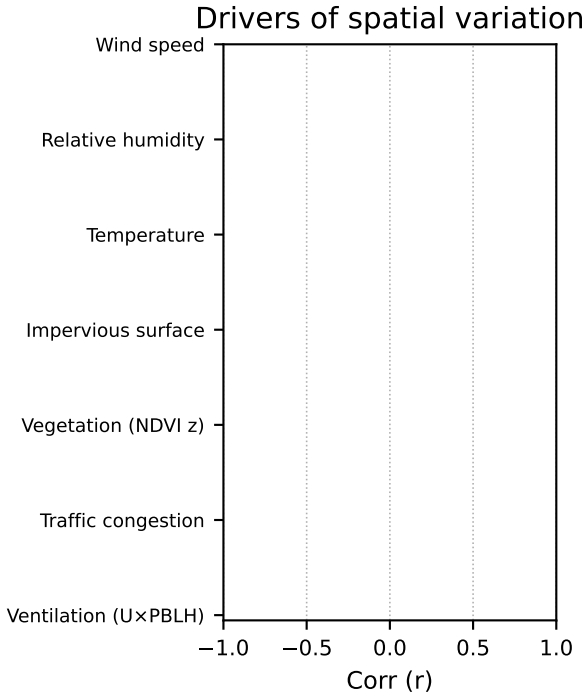
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-06-24 to 2024-06-30





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W26 (2024-06-24–2024-06-30): street-level weekly AQI median ≈ 46 (P10≈46, P90≈46).

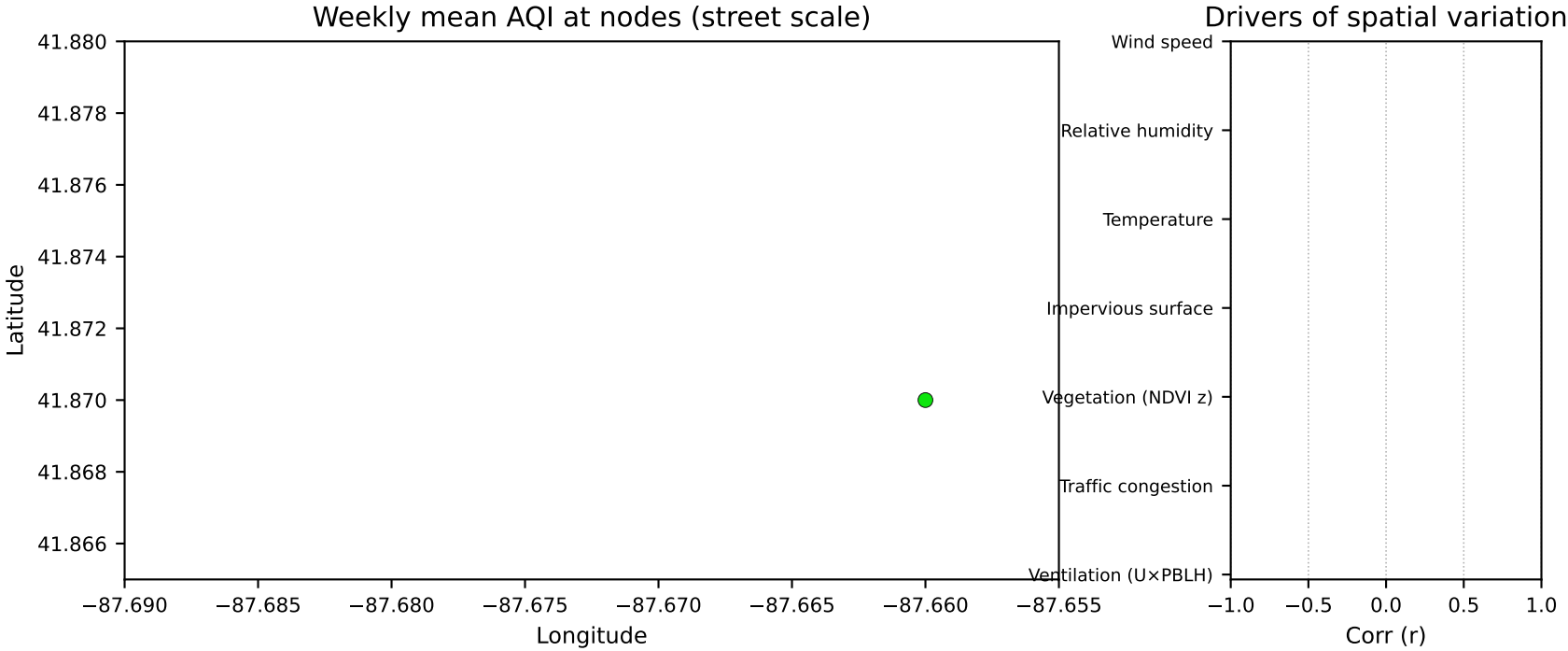
Local mean conditions: T≈22.4 °C, RH≈69%, U≈1.5 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-07-01 to 2024-07-07



Weekly inference:

Illinois Medical District, week 2024-W27 (2024-07-01–2024-07-07): street-level weekly AQI median ≈ 40 (P10≈40, P90≈40).

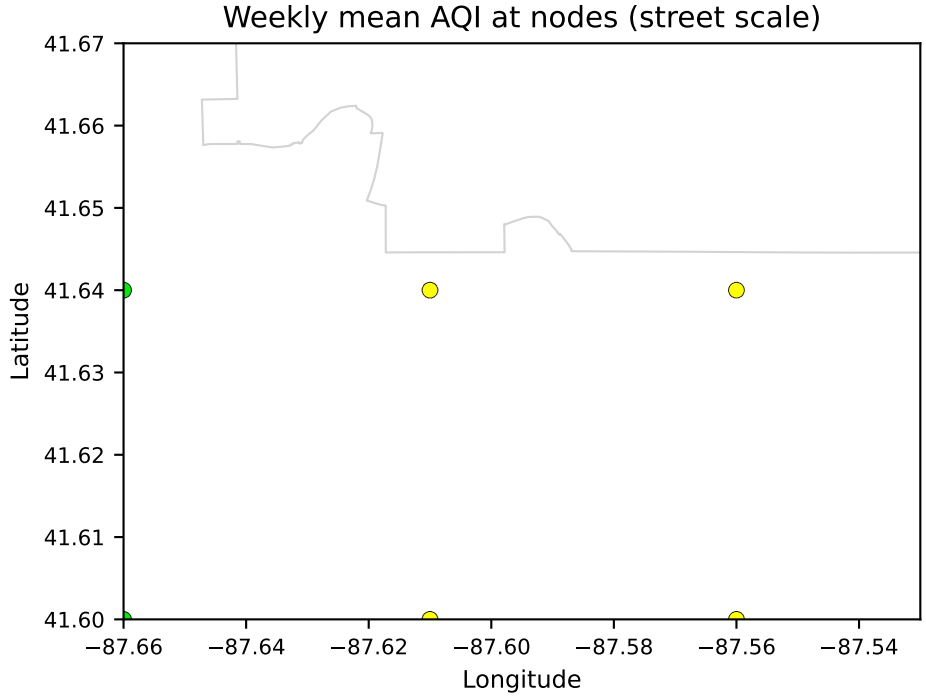
Local mean conditions: T̄≈22.3 °C, RH̄≈71%, Ū≈1.0 m/s.

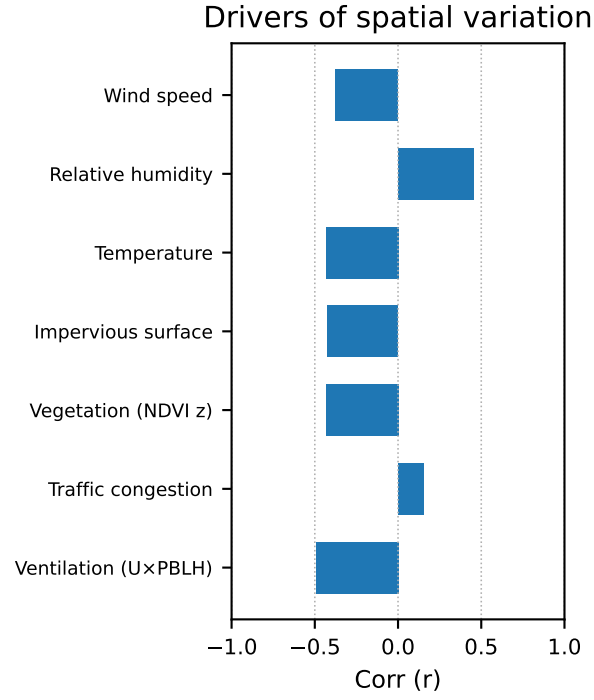
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-07-01 to 2024-07-07





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W27 (2024-07-01–2024-07-07): street-level weekly AQI median ≈ 53 (P10≈46, P90≈56).

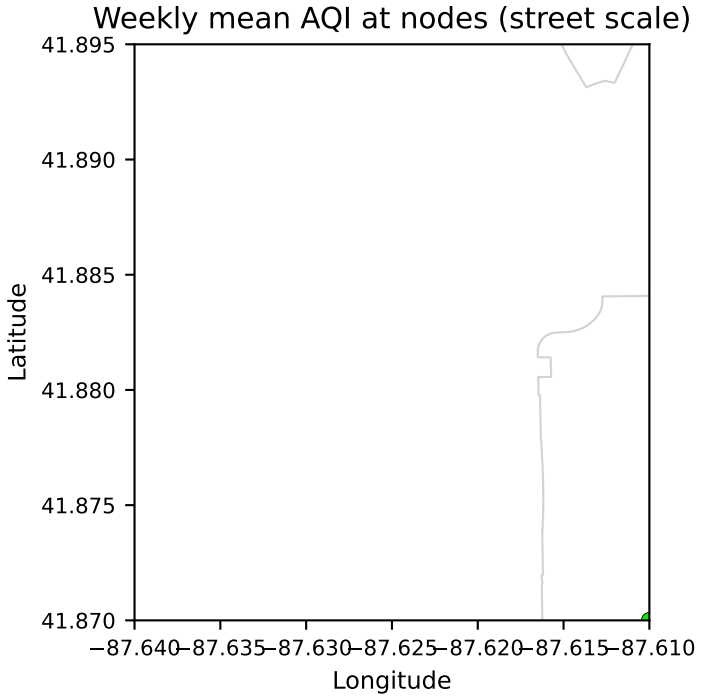
Local mean conditions: T≈22.4 °C, RH̄≈69%, Ū≈1.7 m/s.

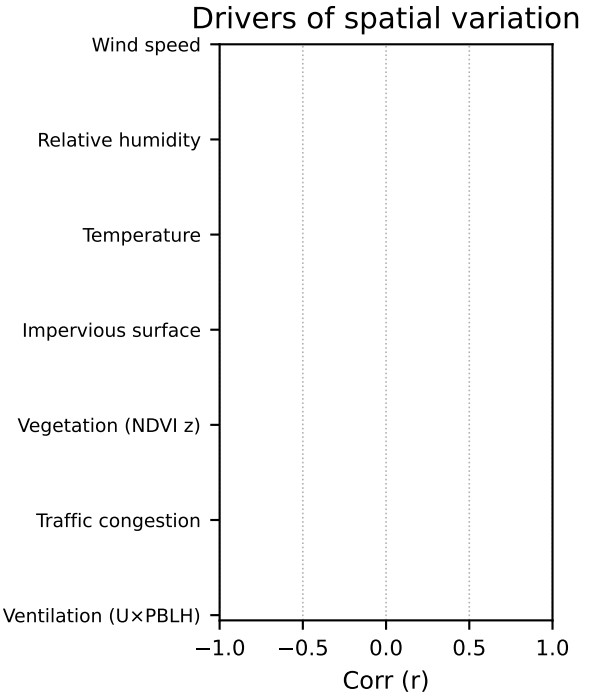
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.49). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.15). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.43). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.42). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.43). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-07-01 to 2024-07-07





Weekly inference:

Lakefront Downtown, week 2024-W27 (2024-07-01–2024-07-07): street-level weekly AQI median ≈ 49 (P10≈49, P90≈49).

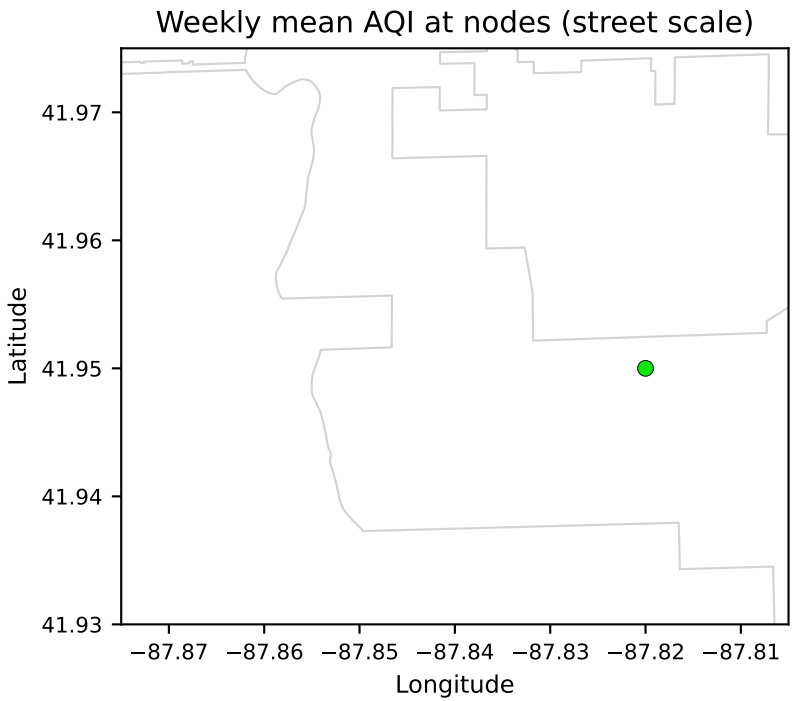
Local mean conditions: T≈22.4 °C, RH≈71%, U≈1.0 m/s.

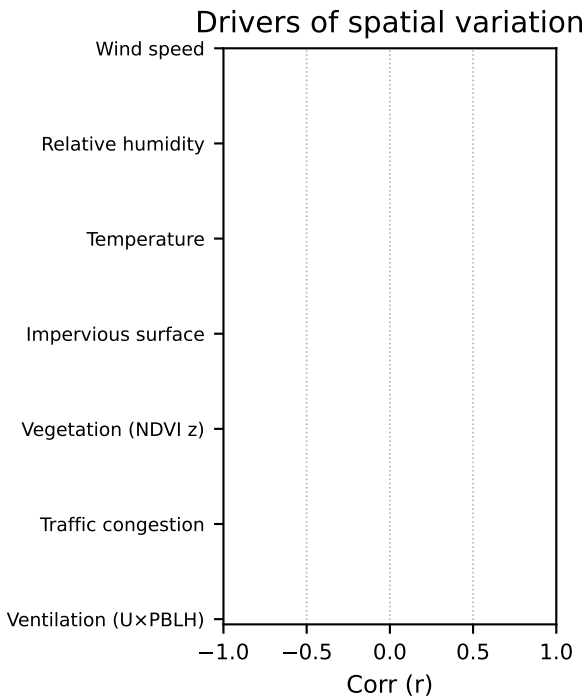
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-07-01 to 2024-07-07





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W27 (2024-07-01–2024-07-07): street-level weekly AQI median ≈ 47 (P10≈47, P90≈47).

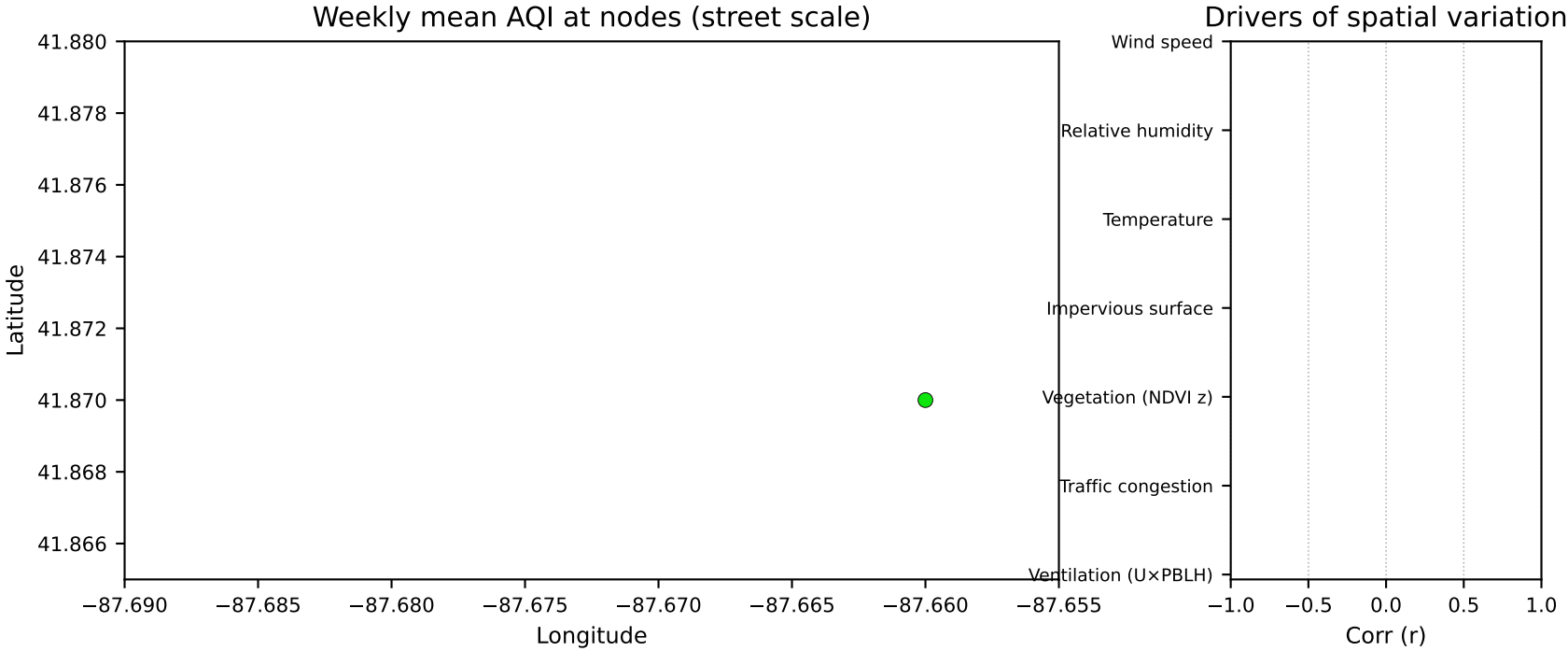
Local mean conditions: T≈22.2 °C, RH≈69%, U≈1.8 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-07-08 to 2024-07-14



Weekly inference:

Illinois Medical District, week 2024-W28 (2024-07-08–2024-07-14): street-level weekly AQI median ≈ 47 (P10≈47, P90≈47).

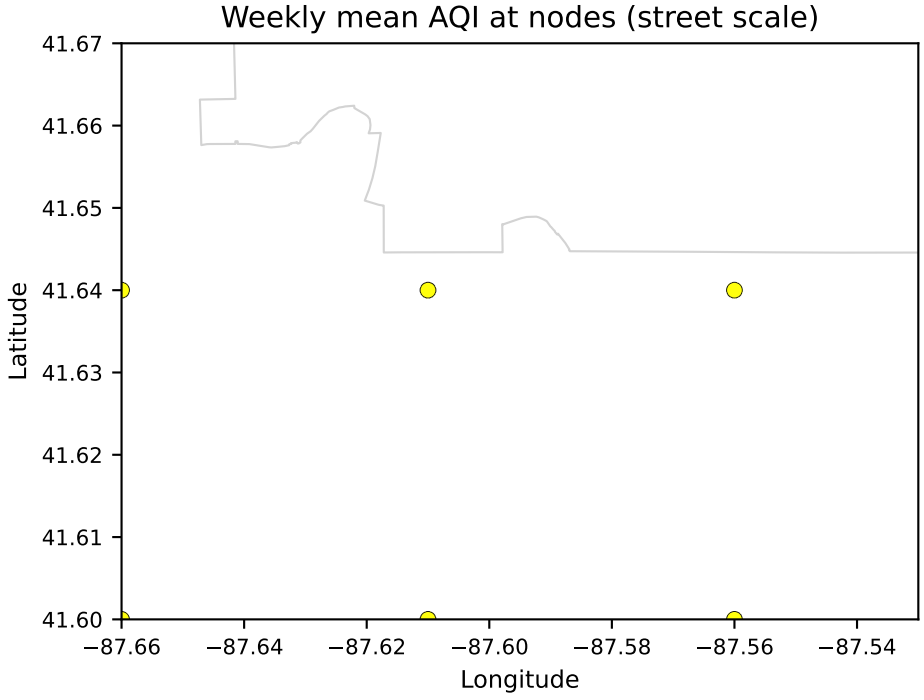
Local mean conditions: T̄≈23.0 °C, RH̄≈82%, Ū≈0.7 m/s.

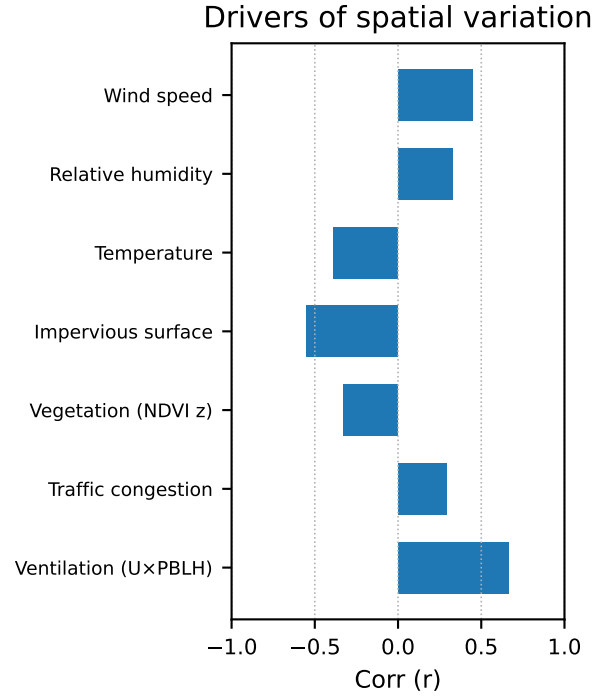
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-07-08 to 2024-07-14





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W28 (2024-07-08–2024-07-14): street-level weekly AQI median ≈ 61 (P10≈54, P90≈63).

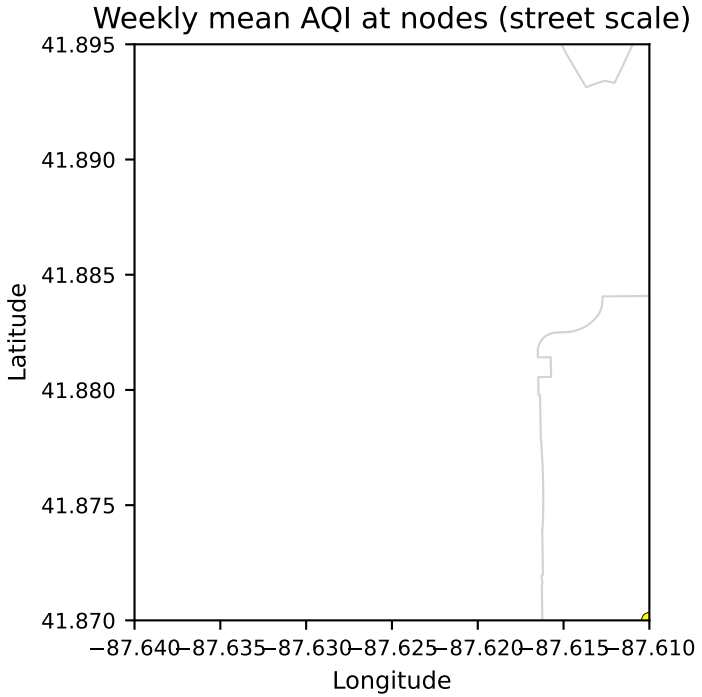
Local mean conditions: T̄≈23.0 °C, RH̄≈82%, Ū≈0.9 m/s.

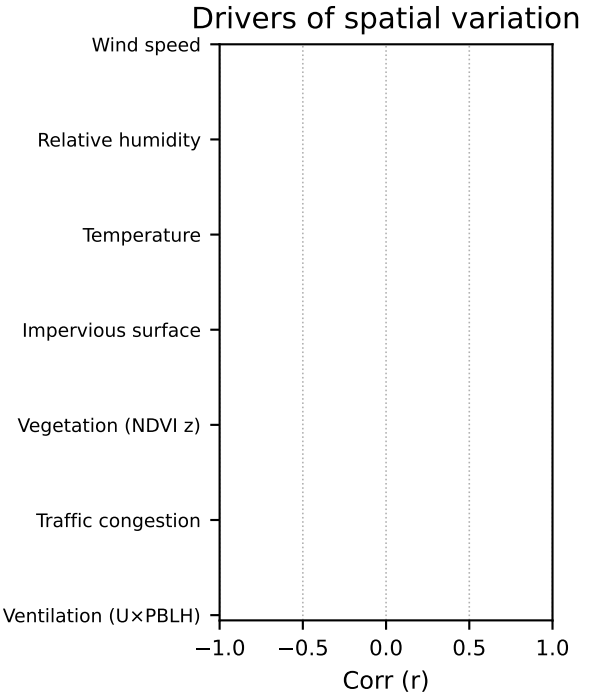
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): strong positive correlation (r≈0.66). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: weak positive correlation (r≈0.29). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.33). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.55). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.39). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-07-08 to 2024-07-14





Weekly inference:

Lakefront Downtown, week 2024-W28 (2024-07-08–2024-07-14): street-level weekly AQI median ≈ 55 (P10≈55, P90≈55).

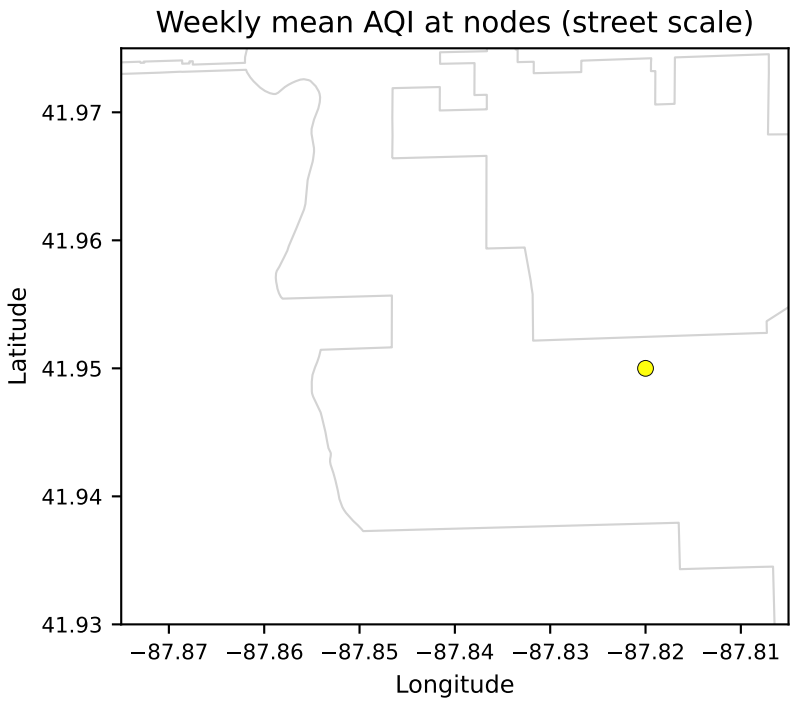
Local mean conditions: T≈23.1 °C, RH̄≈82%, Ū≈0.7 m/s.

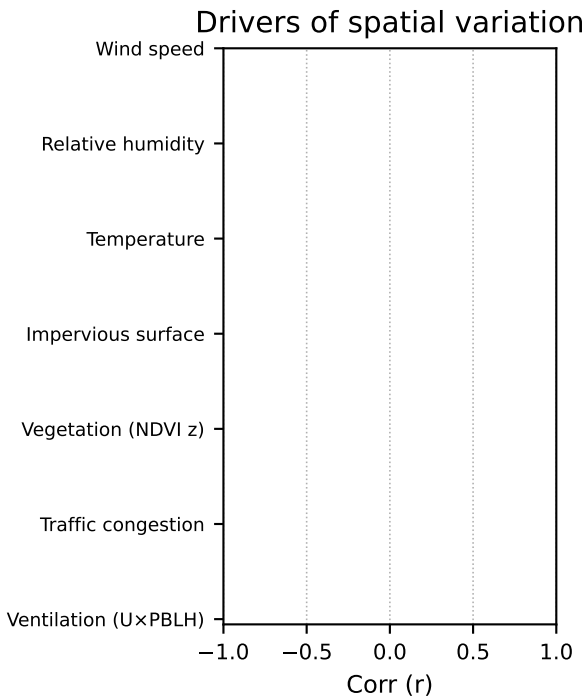
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-07-08 to 2024-07-14





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W28 (2024-07-08–2024-07-14): street-level weekly AQI median ≈ 59 (P10≈59, P90≈59).

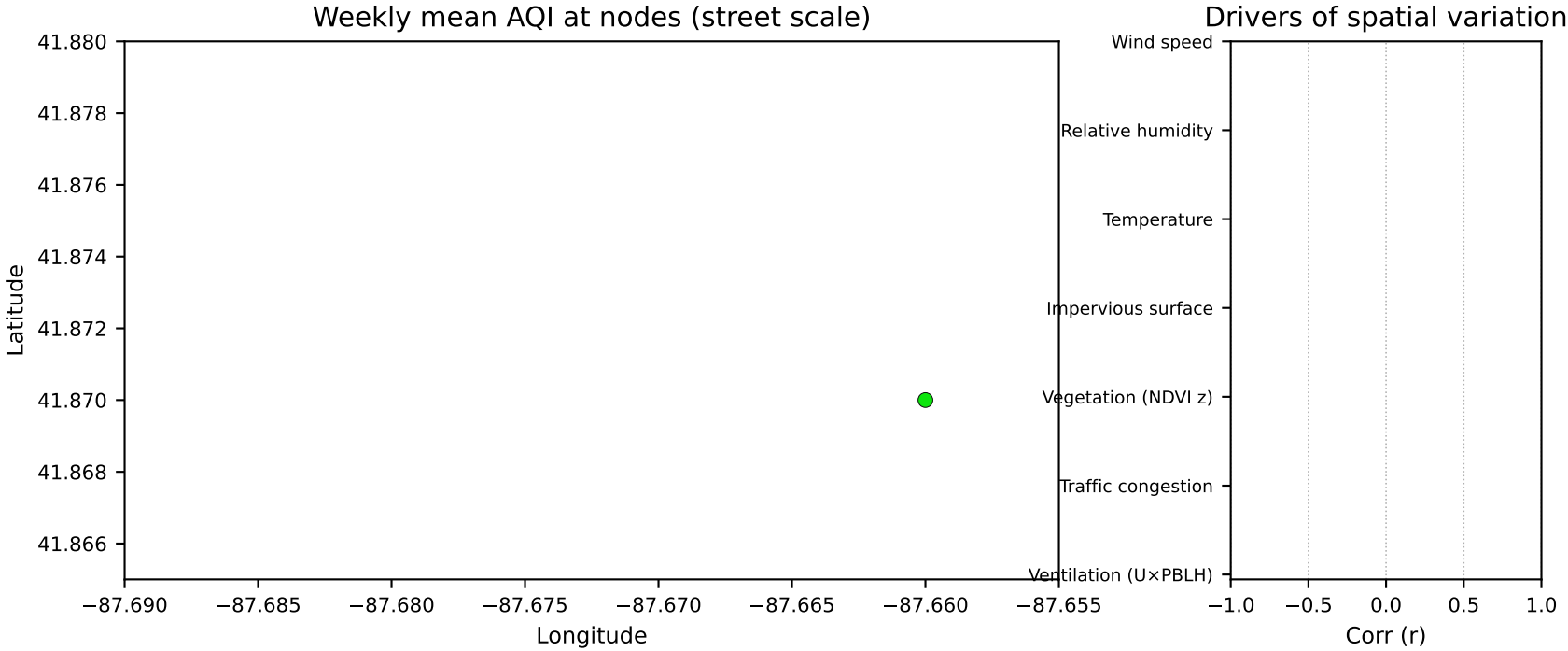
Local mean conditions: T≈23.0 °C, RH≈80%, U≈1.0 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-07-15 to 2024-07-21



Weekly inference:

Illinois Medical District, week 2024-W29 (2024-07-15–2024-07-21): street-level weekly AQI median ≈ 44 (P10≈44, P90≈44).

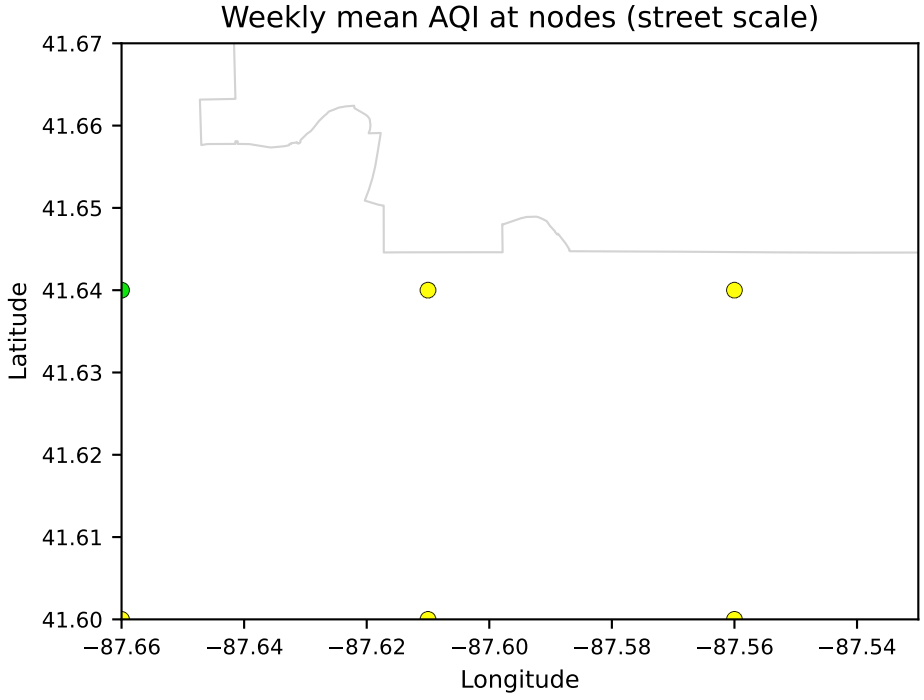
Local mean conditions: T̄≈22.0 °C, RH̄≈75%, Ū≈0.5 m/s.

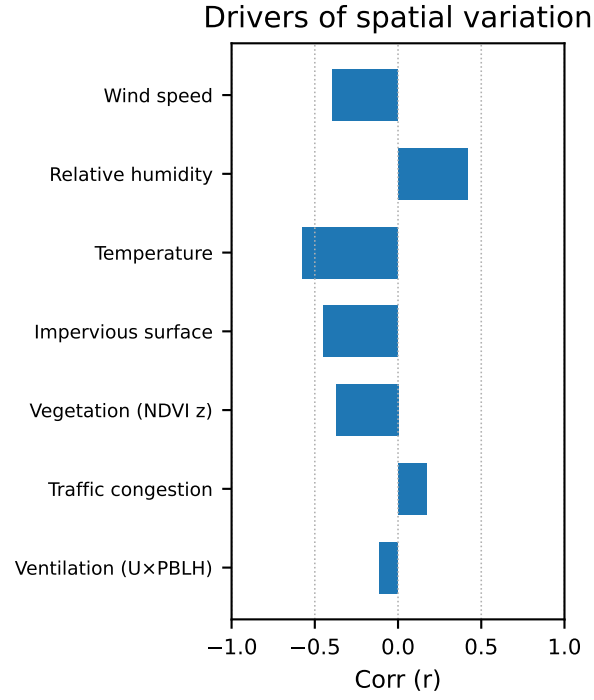
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-07-15 to 2024-07-21





Weekly inference:

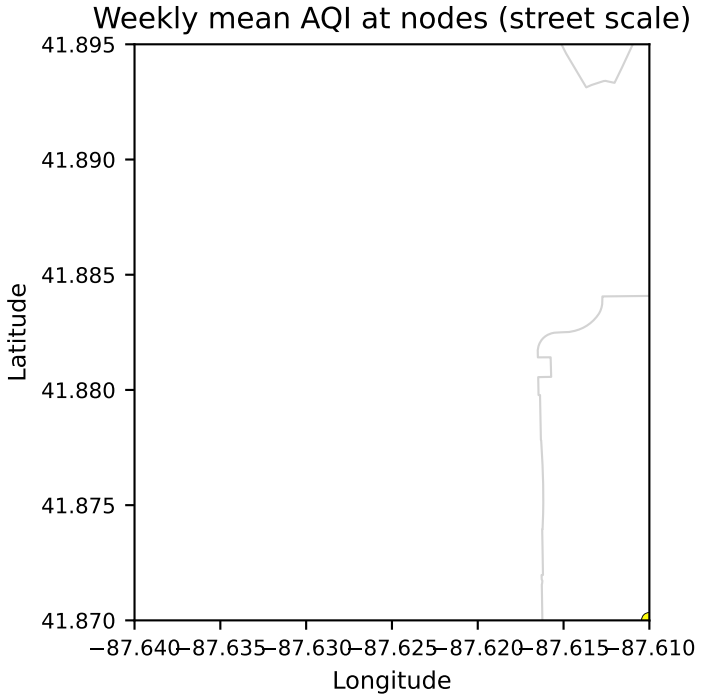
Southeast Industrial / Calumet Corridor, week 2024-W29 (2024-07-15–2024-07-21): street-level weekly AQI median ≈ 55 (P10≈49, P90≈56).

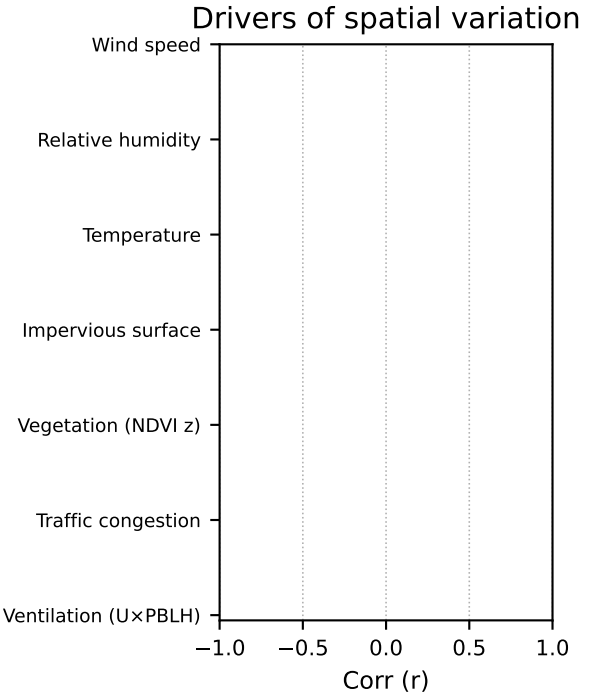
Local mean conditions: T≈22.0 °C, RH≈73%, U≈0.8 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): weak negative correlation (r≈-0.11). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.17). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.37). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.45). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.57). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-07-15 to 2024-07-21





Weekly inference:

Lakefront Downtown, week 2024-W29 (2024-07-15–2024-07-21): street-level weekly AQI median ≈ 50 (P10≈50, P90≈50).

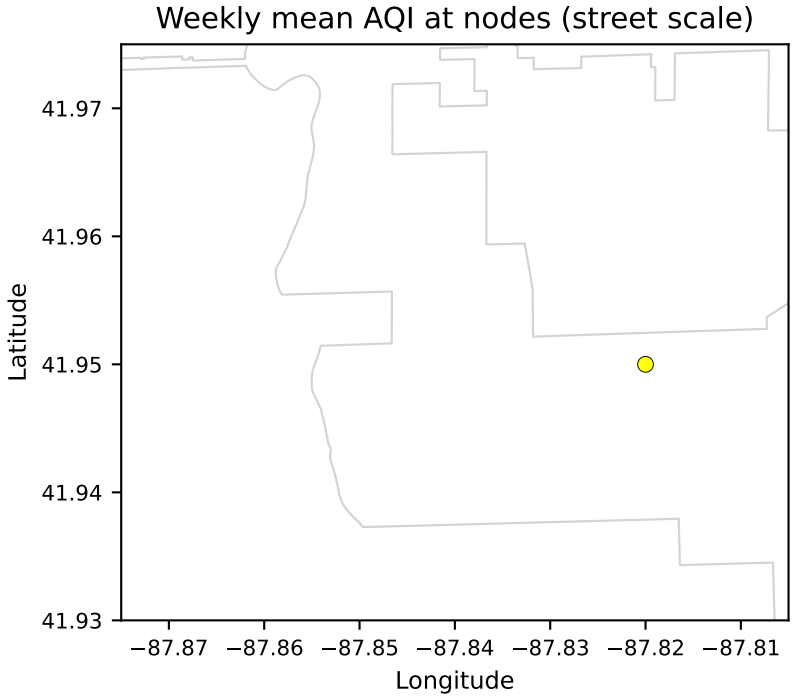
Local mean conditions: T≈22.1 °C, RH≈75%, U≈0.5 m/s.

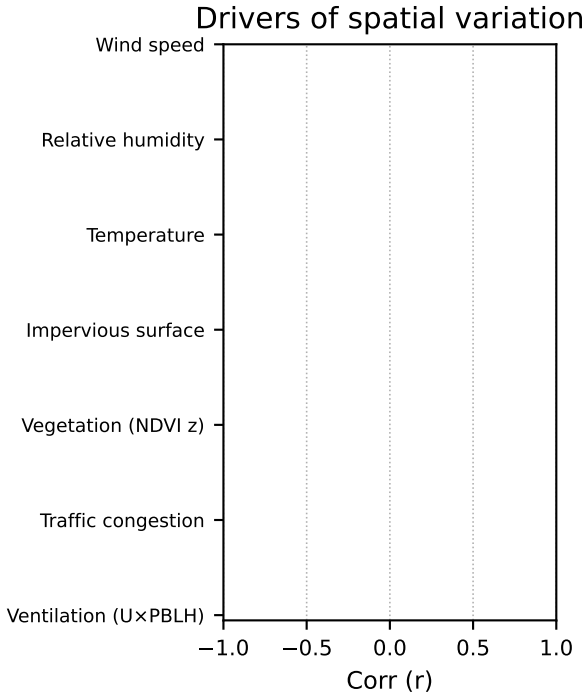
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-07-15 to 2024-07-21





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W29 (2024-07-15–2024-07-21): street-level weekly AQI median ≈ 50 (P10≈50, P90≈50).

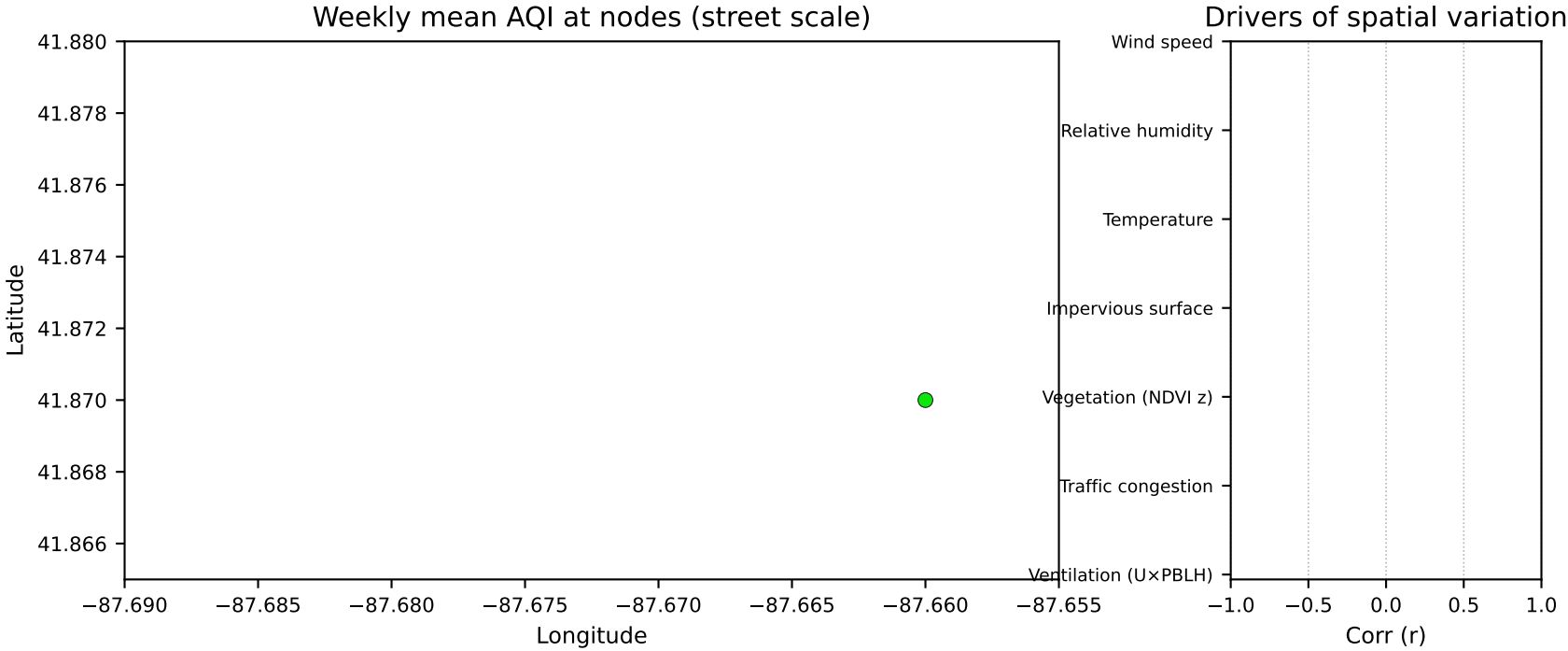
Local mean conditions: T≈22.0 °C, RH≈72%, U≈1.5 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-07-22 to 2024-07-28



Weekly inference:

Illinois Medical District, week 2024-W30 (2024-07-22–2024-07-28): street-level weekly AQI median ≈ 44 (P10≈44, P90≈44).

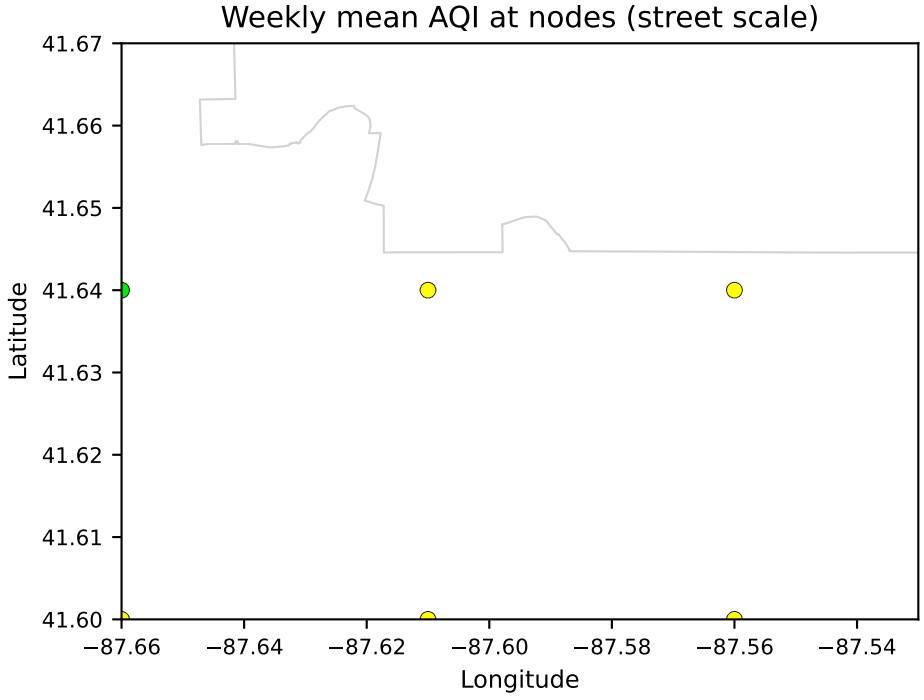
Local mean conditions: T̄≈21.9 °C, RH̄≈77%, Ū≈-4.6 m/s.

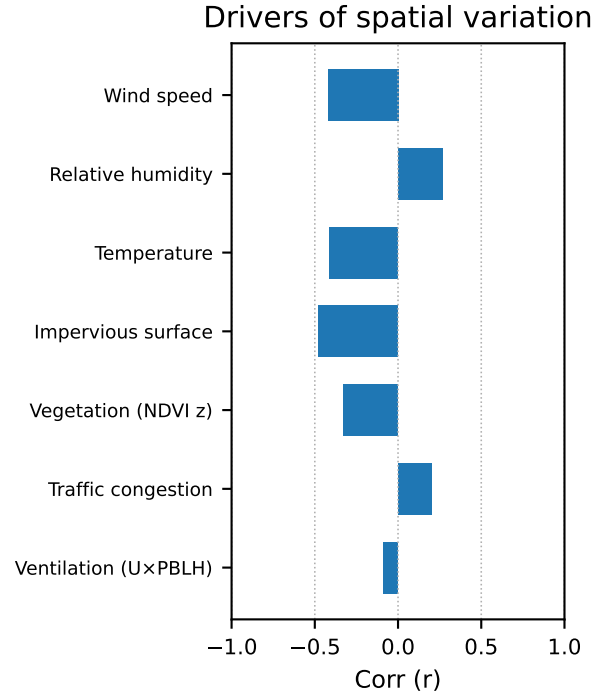
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-07-22 to 2024-07-28





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W30 (2024-07-22–2024-07-28): street-level weekly AQI median ≈ 59 (P10≈51, P90≈60).

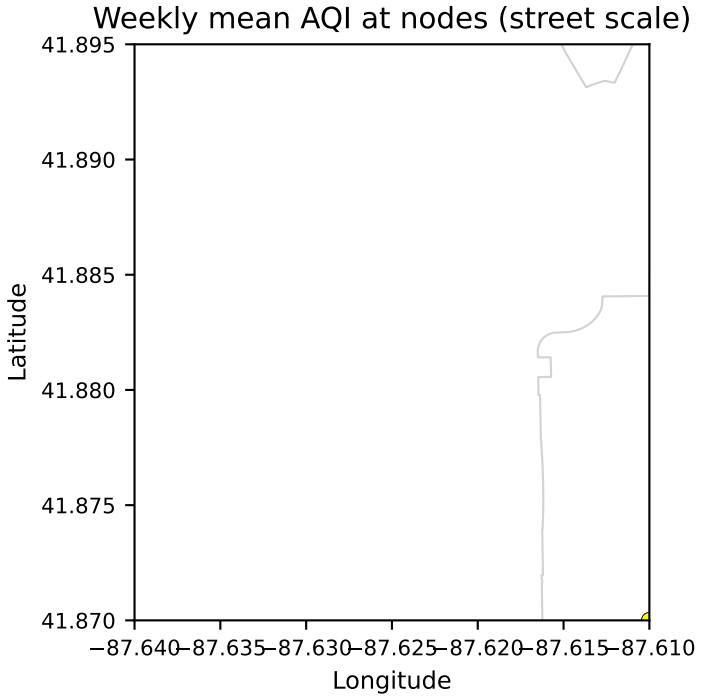
Local mean conditions: $\bar{T}$≈21.8 °C, $\bar{RH}$≈76%, $\bar{U}$≈-2.9 m/s.

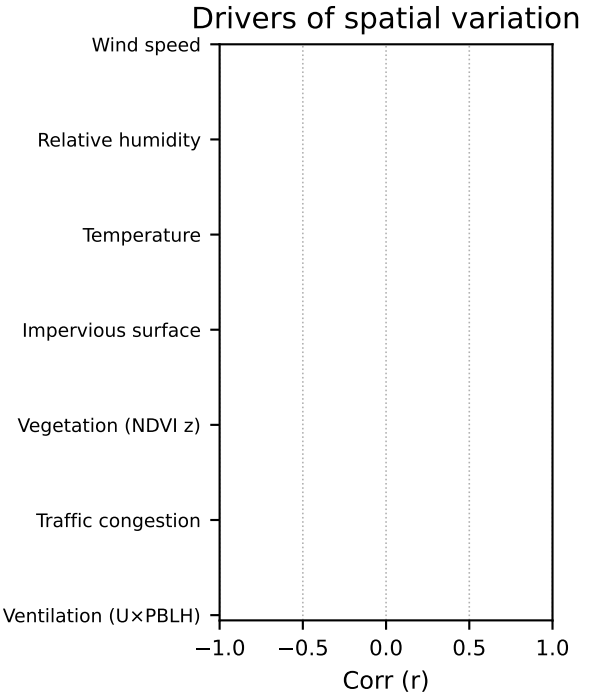
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): negligible negative correlation (r≈-0.09). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.20). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.33). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.48). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.41). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-07-22 to 2024-07-28





Weekly inference:

Lakefront Downtown, week 2024-W30 (2024-07-22–2024-07-28): street-level weekly AQI median ≈ 51 (P10≈51, P90≈51).

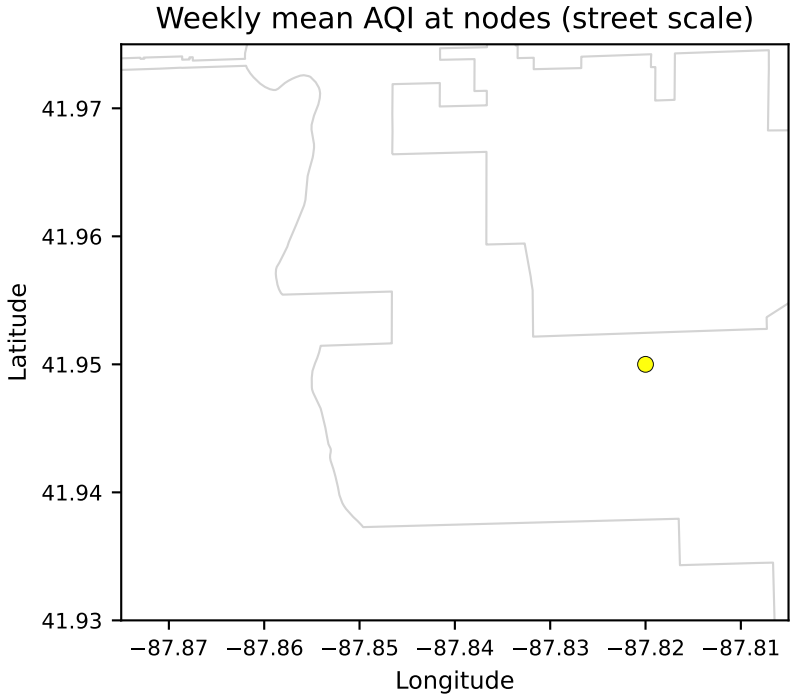
Local mean conditions: T≈22.0 °C, RH≈77%, U≈-4.6 m/s.

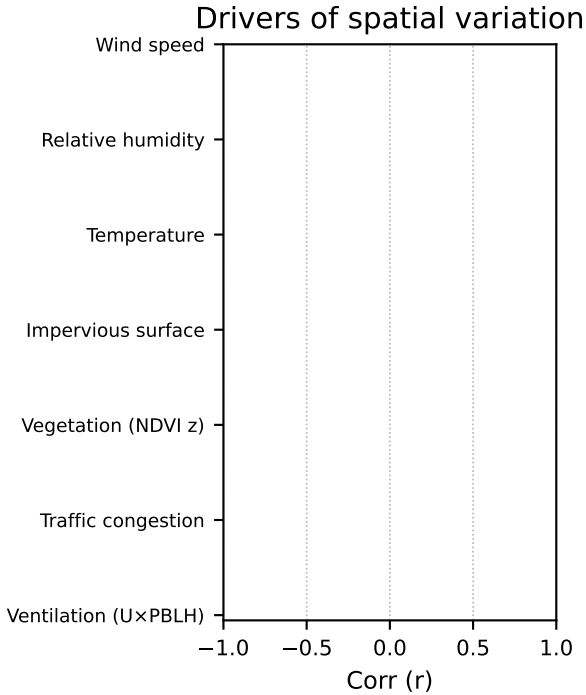
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-07-22 to 2024-07-28





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W30 (2024-07-22–2024-07-28): street-level weekly AQI median ≈ 53 (P10≈53, P90≈53).

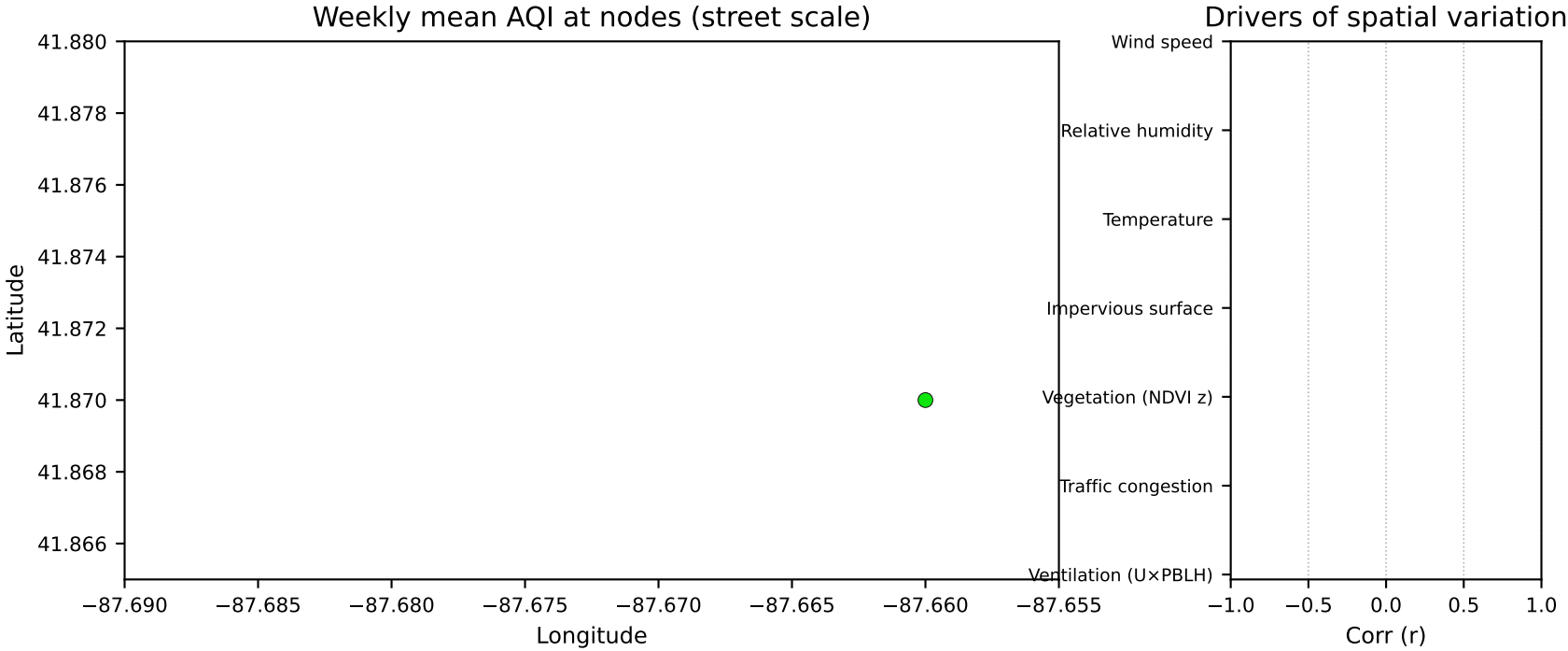
Local mean conditions: T≈21.8 °C, RH≈75%, U≈-3.0 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-07-29 to 2024-08-04



Weekly inference:

Illinois Medical District, week 2024-W31 (2024-07-29–2024-08-04): street-level weekly AQI median ≈ 48 (P10≈48, P90≈48).

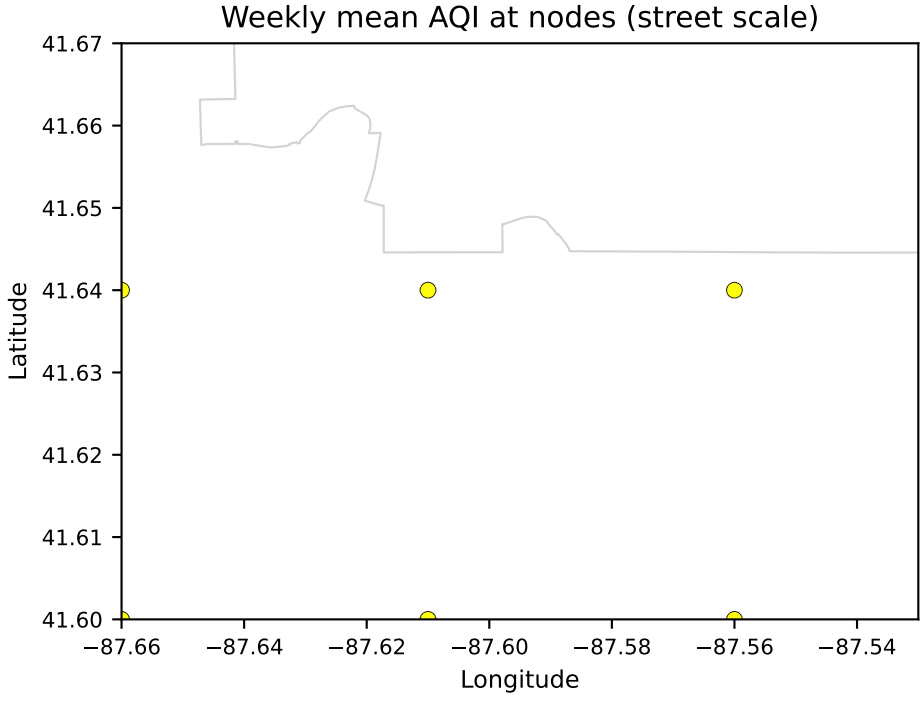
Local mean conditions: T̄≈24.7 °C, RH̄≈81%, Ū≈2.7 m/s.

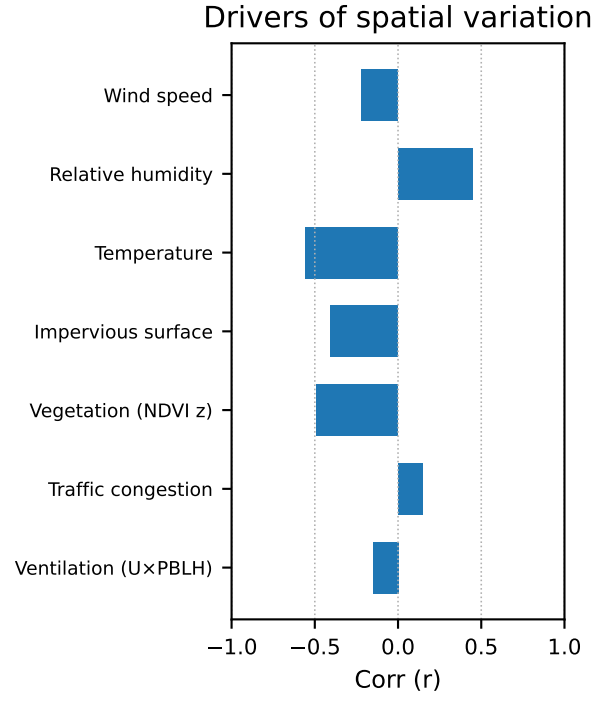
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-07-29 to 2024-08-04





Weekly inference:

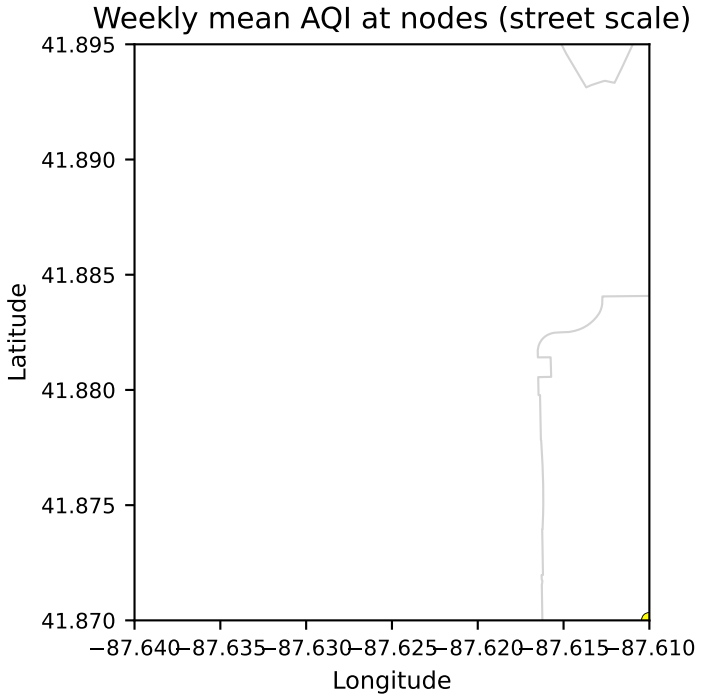
Southeast Industrial / Calumet Corridor, week 2024-W31 (2024-07-29–2024-08-04): street-level weekly AQI median ≈ 67 (P10≈60, P90≈70).

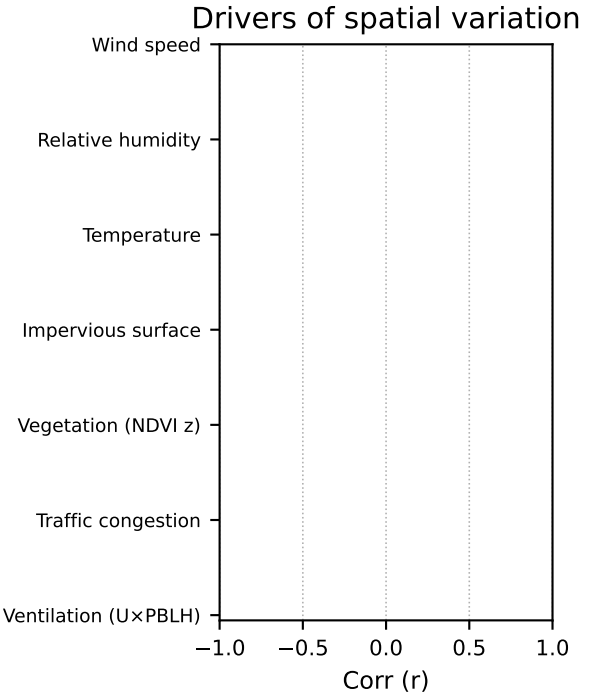
Local mean conditions: T≈24.9 °C, RH≈78%, U≈3.6 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): weak negative correlation (r≈-0.15). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.15). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.49). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.41). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.56). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-07-29 to 2024-08-04





Weekly inference:

Lakefront Downtown, week 2024-W31 (2024-07-29–2024-08-04): street-level weekly AQI median ≈ 59 (P10≈59, P90≈59).

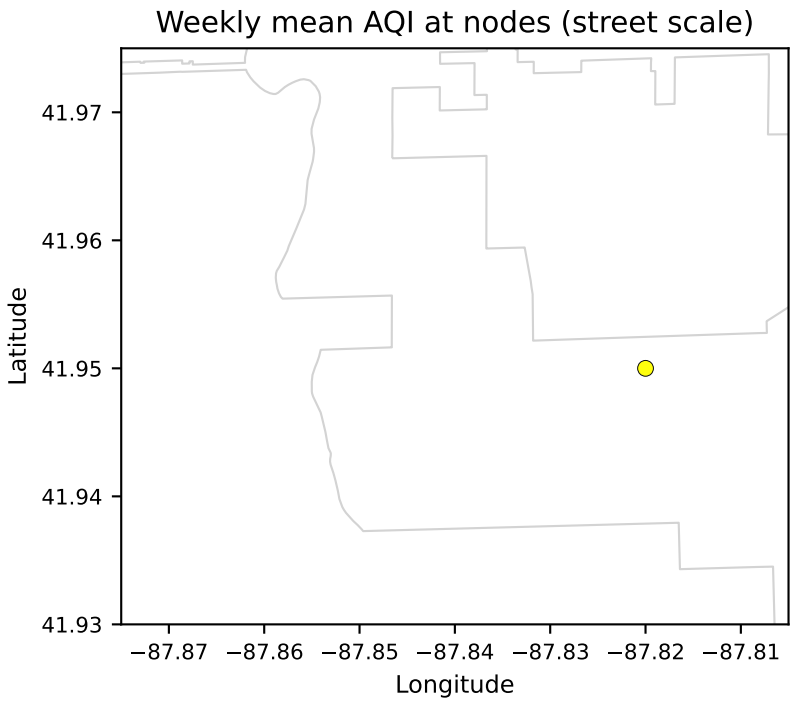
Local mean conditions: T≈24.8 °C, RH≈81%, U≈2.7 m/s.

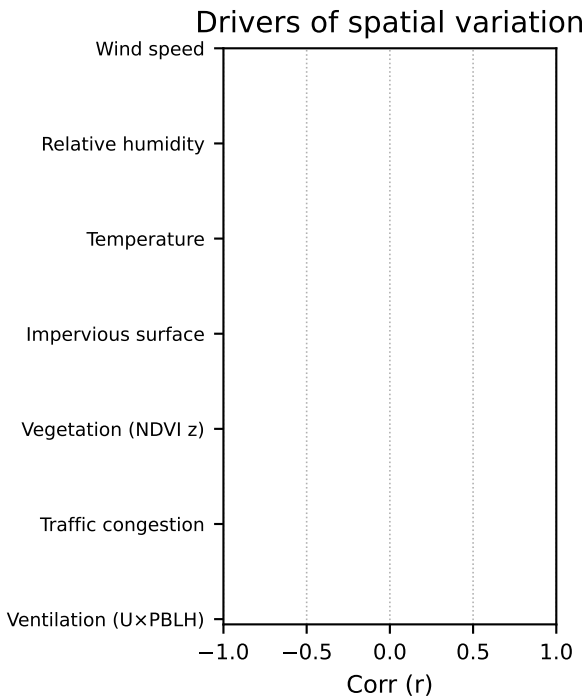
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-07-29 to 2024-08-04





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W31 (2024-07-29–2024-08-04): street-level weekly AQI median ≈ 59 (P10≈59, P90≈59).

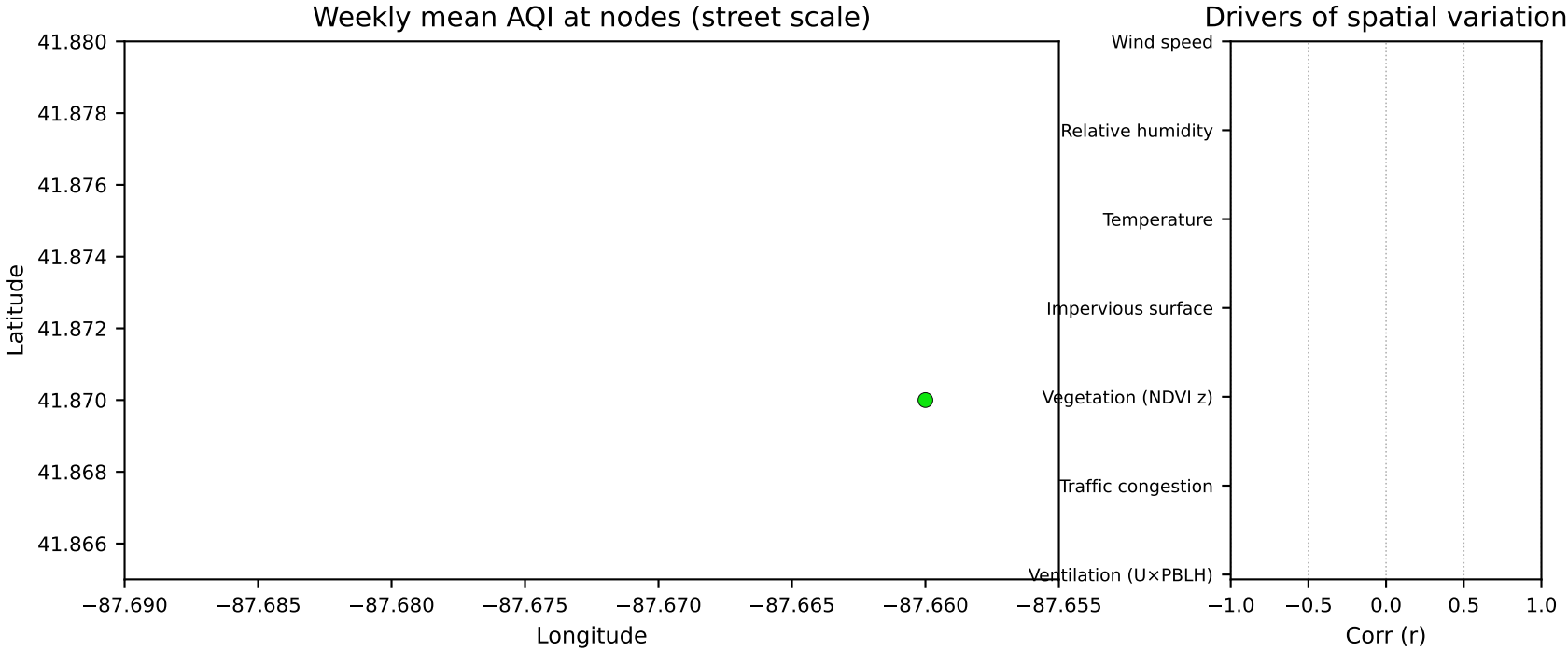
Local mean conditions: T≈25.0 °C, RH≈77%, U≈3.1 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-08-05 to 2024-08-11



Weekly inference:

Illinois Medical District, week 2024-W32 (2024-08-05–2024-08-11): street-level weekly AQI median ≈ 38 (P10≈38, P90≈38).

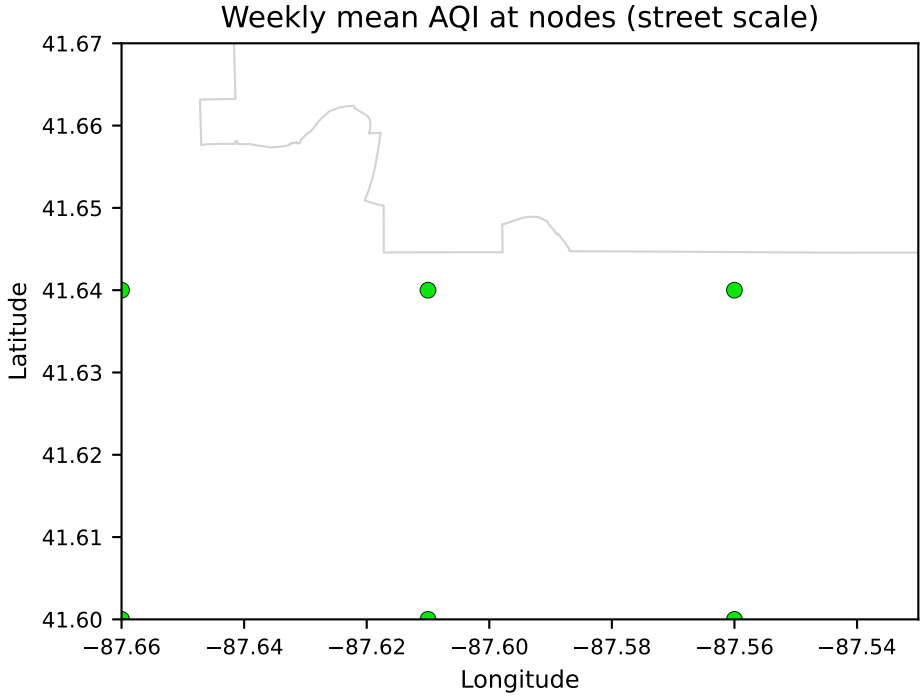
Local mean conditions: T̄≈21.5 °C, RH̄≈67%, Ū≈4.7 m/s.

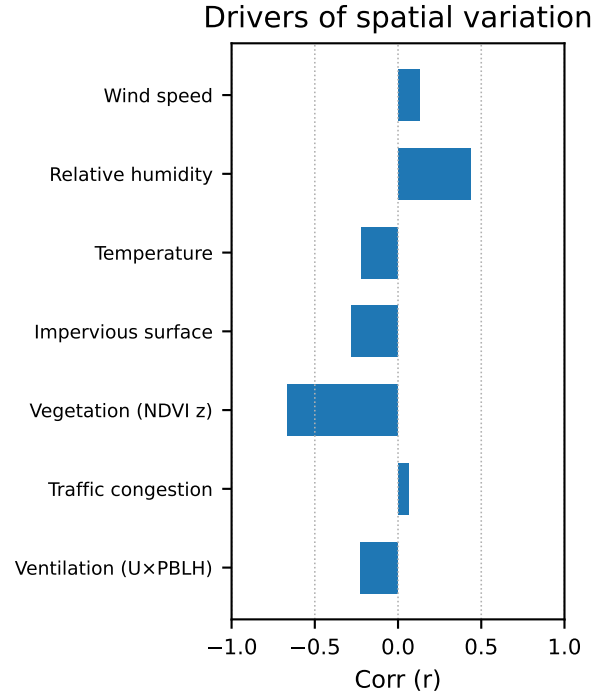
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-08-05 to 2024-08-11





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W32 (2024-08-05–2024-08-11): street-level weekly AQI median ≈ 47 (P10≈45, P90≈50).

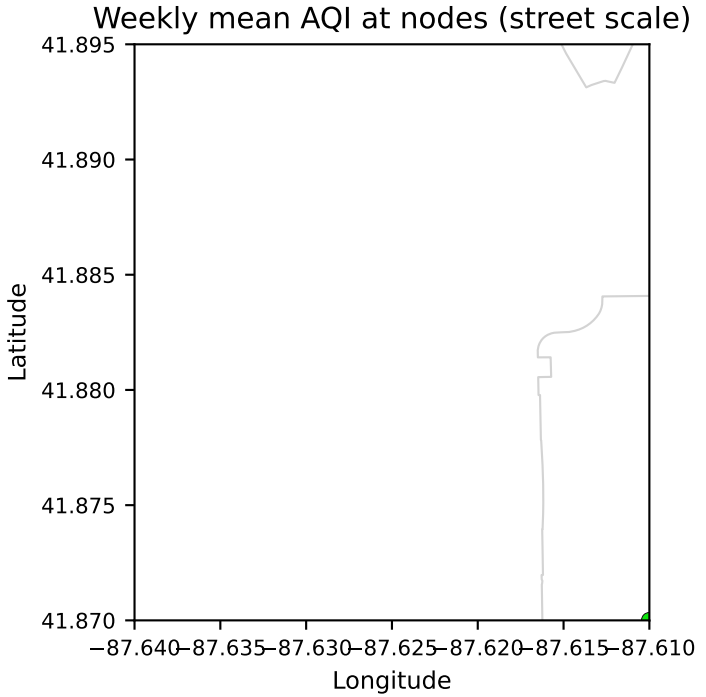
Local mean conditions: T≈21.5 °C, RH≈68%, U≈4.8 m/s.

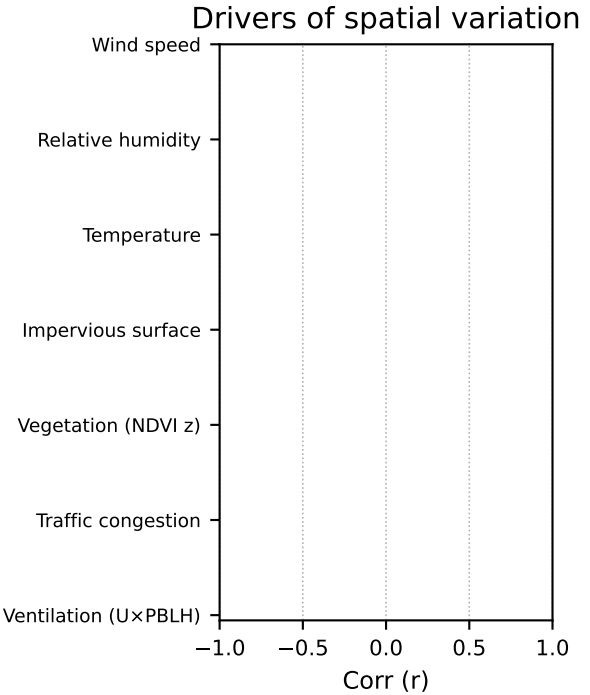
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak negative correlation (r≈-0.22). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.06). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): strong negative correlation (r≈-0.66). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.28). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: weak negative correlation (r≈-0.22). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-08-05 to 2024-08-11





Weekly inference:

Lakefront Downtown, week 2024-W32 (2024-08-05–2024-08-11): street-level weekly AQI median ≈ 43 (P10≈43, P90≈43).

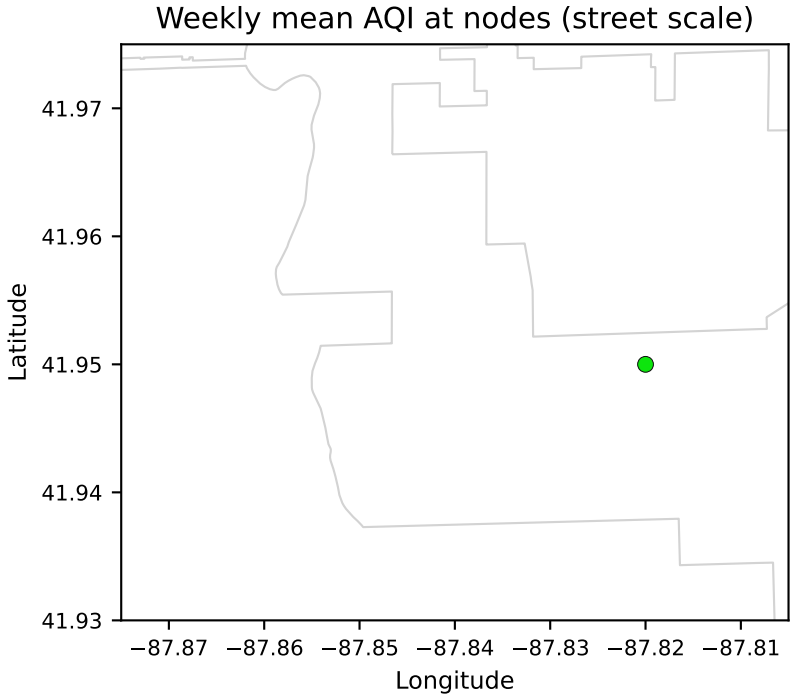
Local mean conditions: T≈21.6 °C, RH≈67%, U≈4.7 m/s.

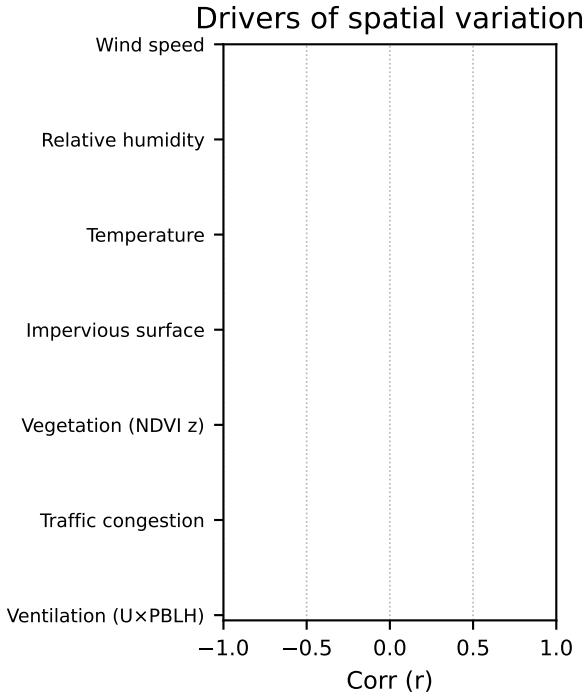
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-08-05 to 2024-08-11





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W32 (2024-08-05–2024-08-11): street-level weekly AQI median ≈ 43 (P10≈43, P90≈43).

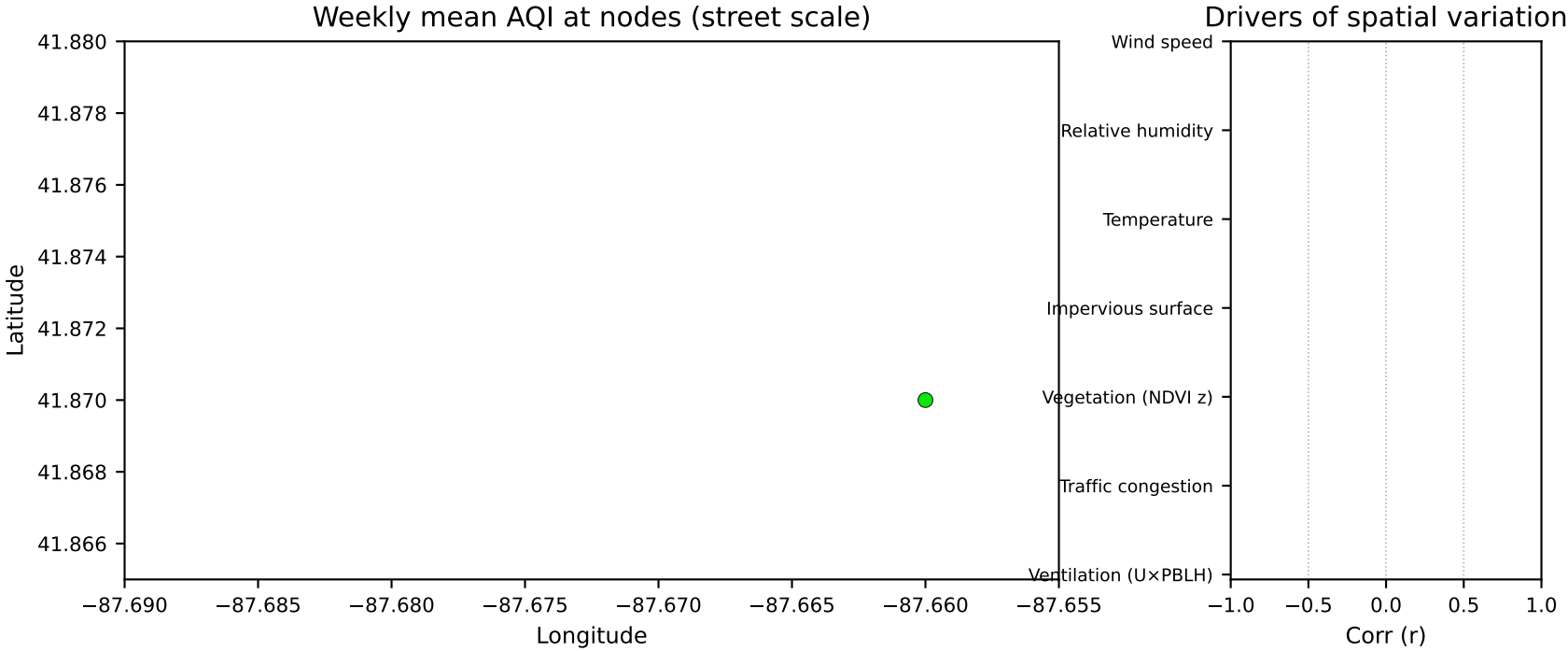
Local mean conditions: T≈21.2 °C, RH≈65%, U≈4.5 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-08-12 to 2024-08-18



Weekly inference:

Illinois Medical District, week 2024-W33 (2024-08-12–2024-08-18): street-level weekly AQI median ≈ 41 (P10≈41, P90≈41).

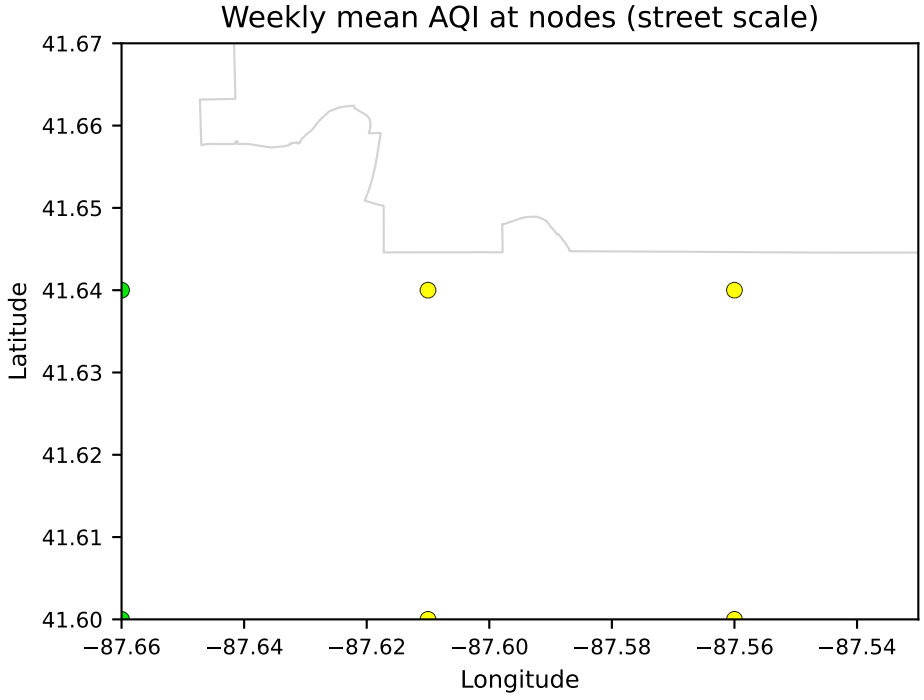
Local mean conditions: T̄≈22.3 °C, RH̄≈74%, Ū≈1.1 m/s.

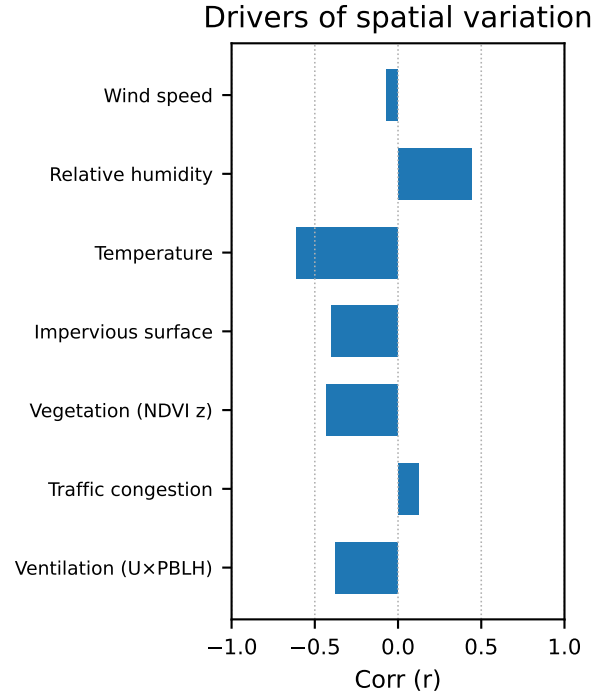
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-08-12 to 2024-08-18





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W33 (2024-08-12–2024-08-18): street-level weekly AQI median ≈ 56 (P10≈48, P90≈58).

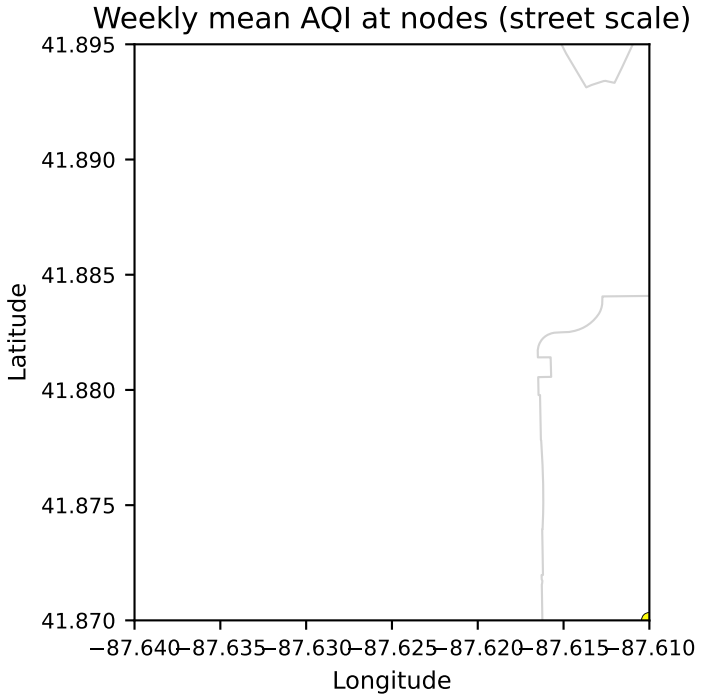
Local mean conditions: T≈21.8 °C, RH≈75%, U≈1.4 m/s.

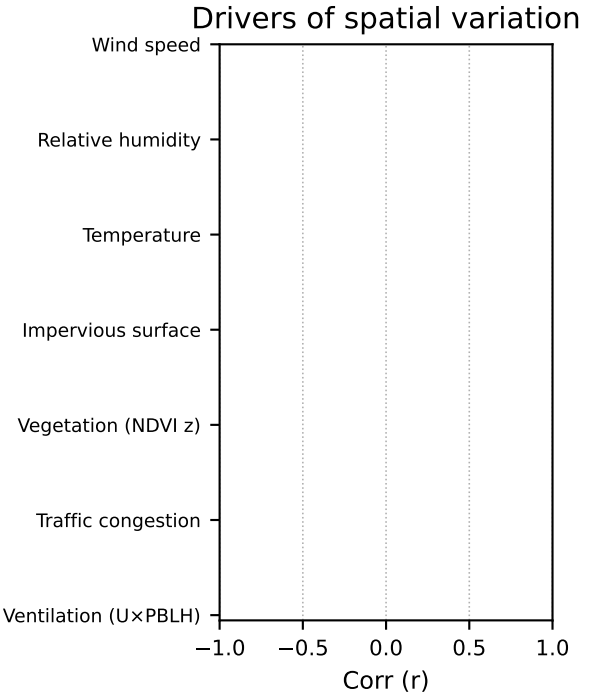
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.38). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.12). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.43). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.40). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong negative correlation (r≈-0.61). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-08-12 to 2024-08-18





Weekly inference:

Lakefront Downtown, week 2024-W33 (2024-08-12–2024-08-18): street-level weekly AQI median ≈ 51 (P10≈51, P90≈51).

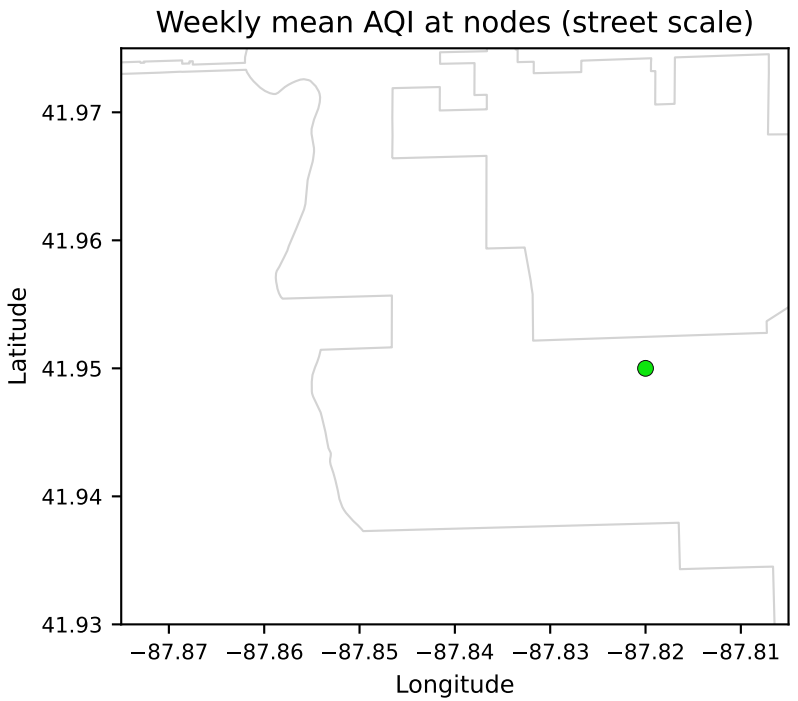
Local mean conditions: T≈22.4 °C, RH≈74%, U≈1.1 m/s.

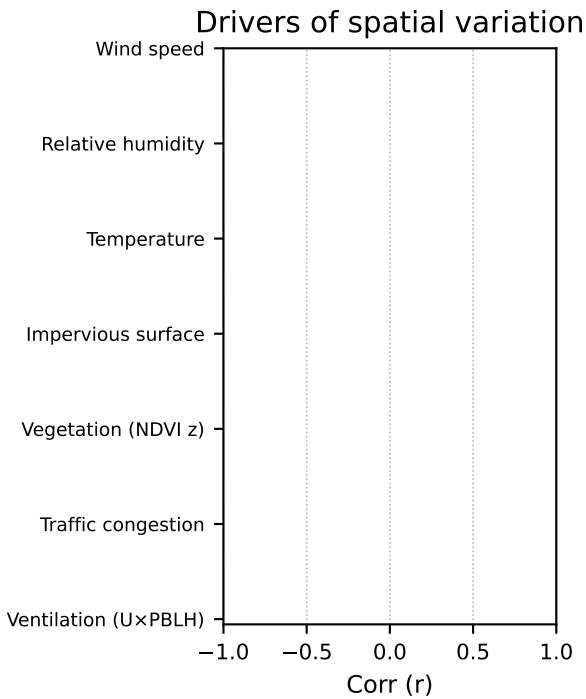
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-08-12 to 2024-08-18





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W33 (2024-08-12–2024-08-18): street-level weekly AQI median ≈ 50 (P10≈50, P90≈50).

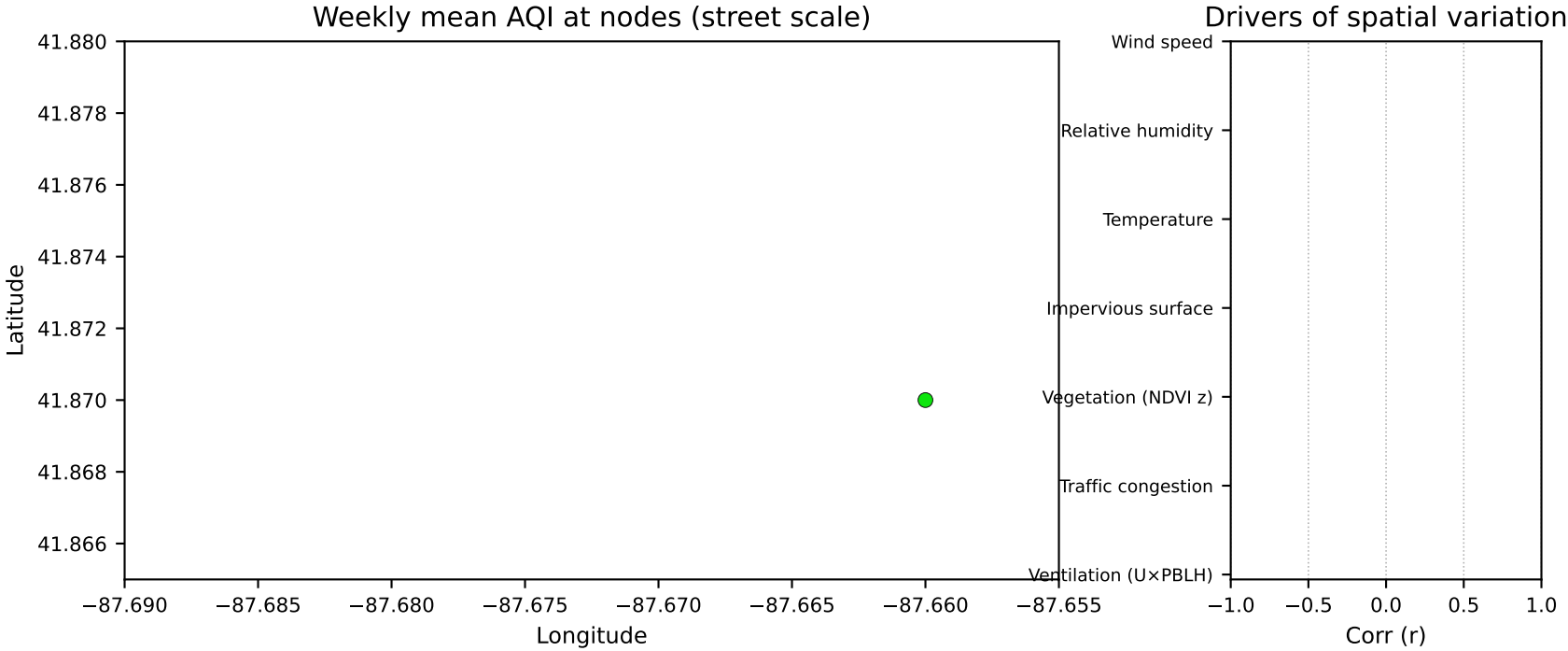
Local mean conditions: T≈22.1 °C, RH≈74%, U≈1.1 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-08-19 to 2024-08-25



Weekly inference:

Illinois Medical District, week 2024-W34 (2024-08-19–2024-08-25): street-level weekly AQI median ≈ 41 (P10≈41, P90≈41).

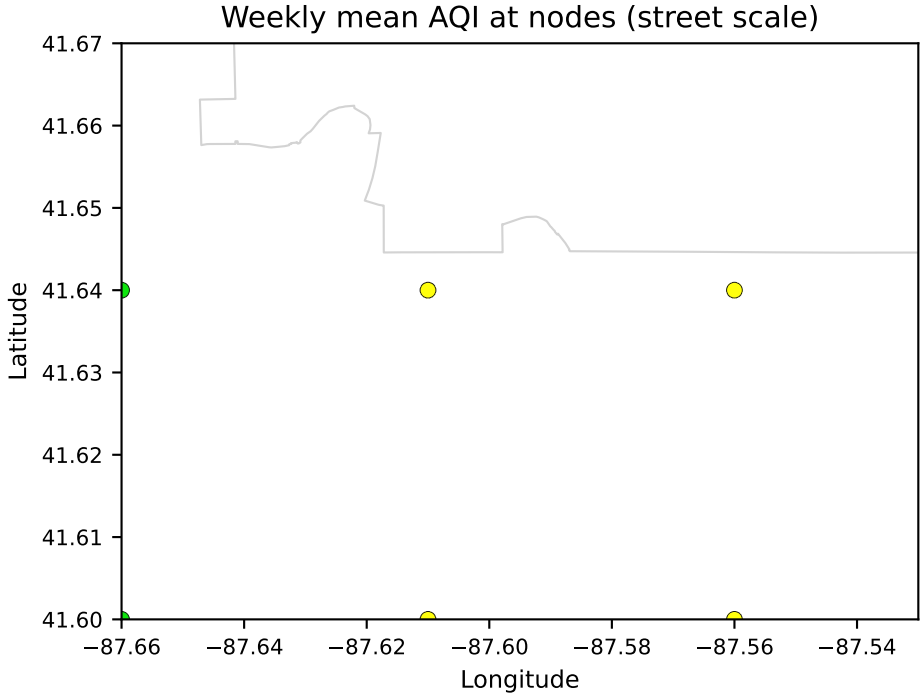
Local mean conditions: T̄≈20.6 °C, RH̄≈69%, Ū≈-2.1 m/s.

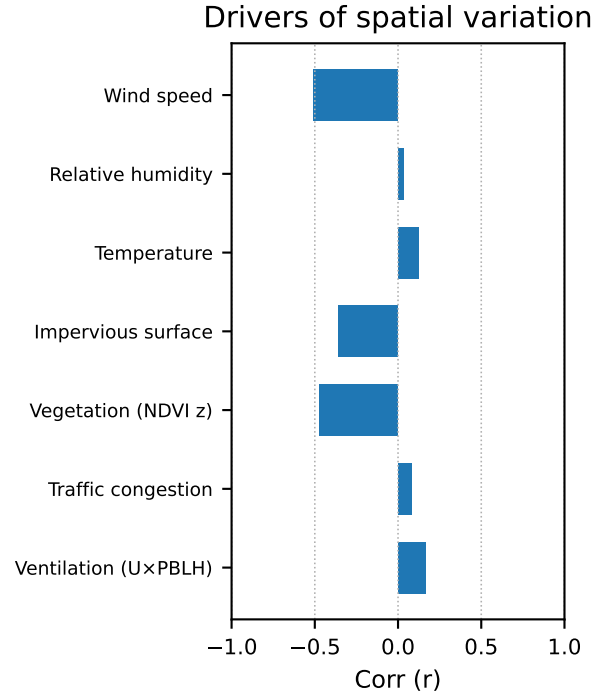
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-08-19 to 2024-08-25





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W34 (2024-08-19–2024-08-25): street-level weekly AQI median ≈ 52 (P10≈47, P90≈53).

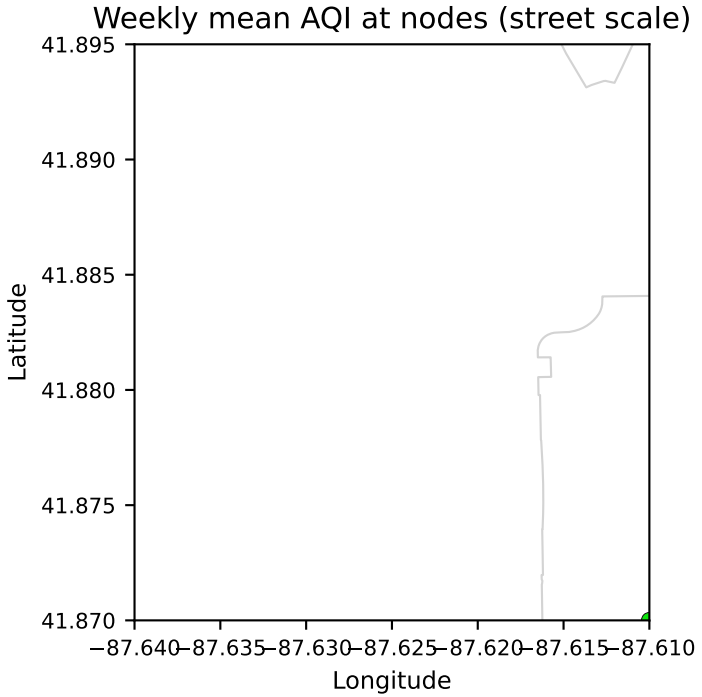
Local mean conditions: T≈20.3 °C, RH≈68%, U≈-1.0 m/s.

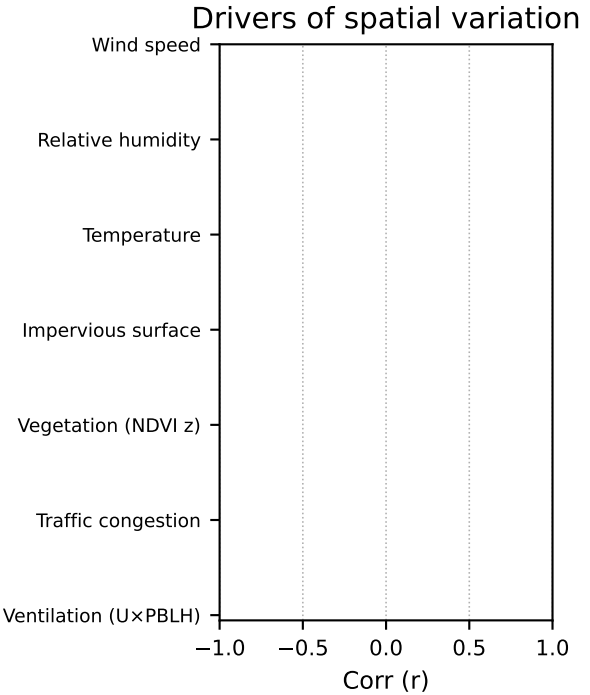
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak positive correlation (r≈0.17). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: negligible positive correlation (r≈0.08). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.47). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.36). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: weak positive correlation (r≈0.12). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-08-19 to 2024-08-25





Weekly inference:

Lakefront Downtown, week 2024-W34 (2024-08-19–2024-08-25): street-level weekly AQI median ≈ 48 (P10≈48, P90≈48).

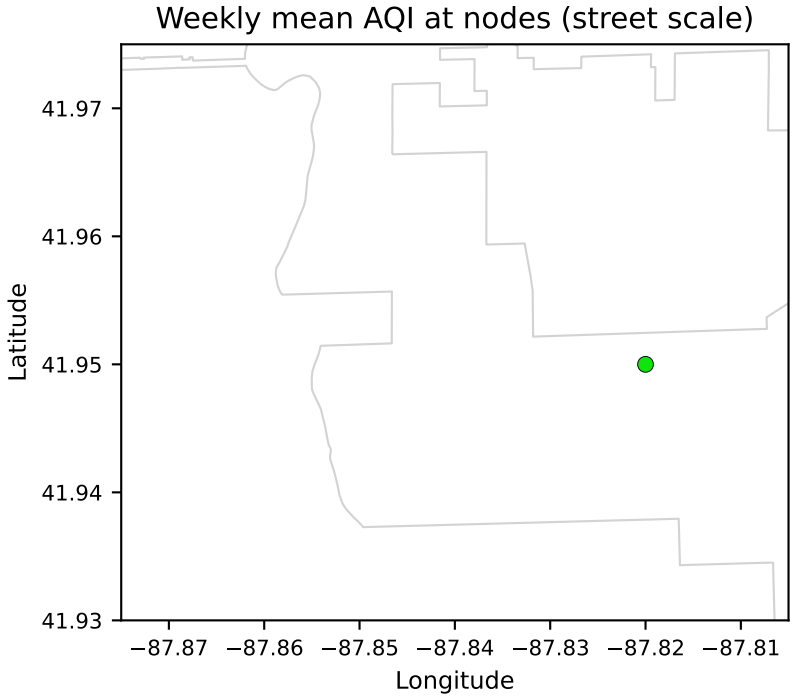
Local mean conditions: T≈20.7 °C, RH≈69%, U≈-2.1 m/s.

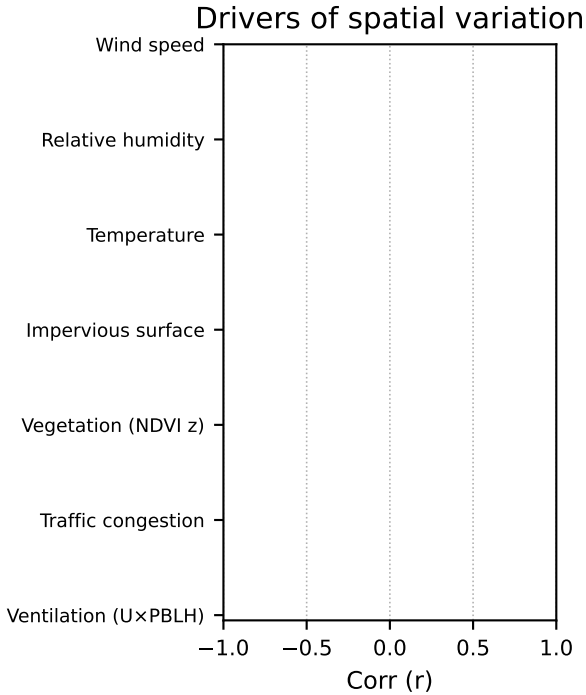
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-08-19 to 2024-08-25





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W34 (2024-08-19–2024-08-25): street-level weekly AQI median ≈ 50 (P10≈50, P90≈50).

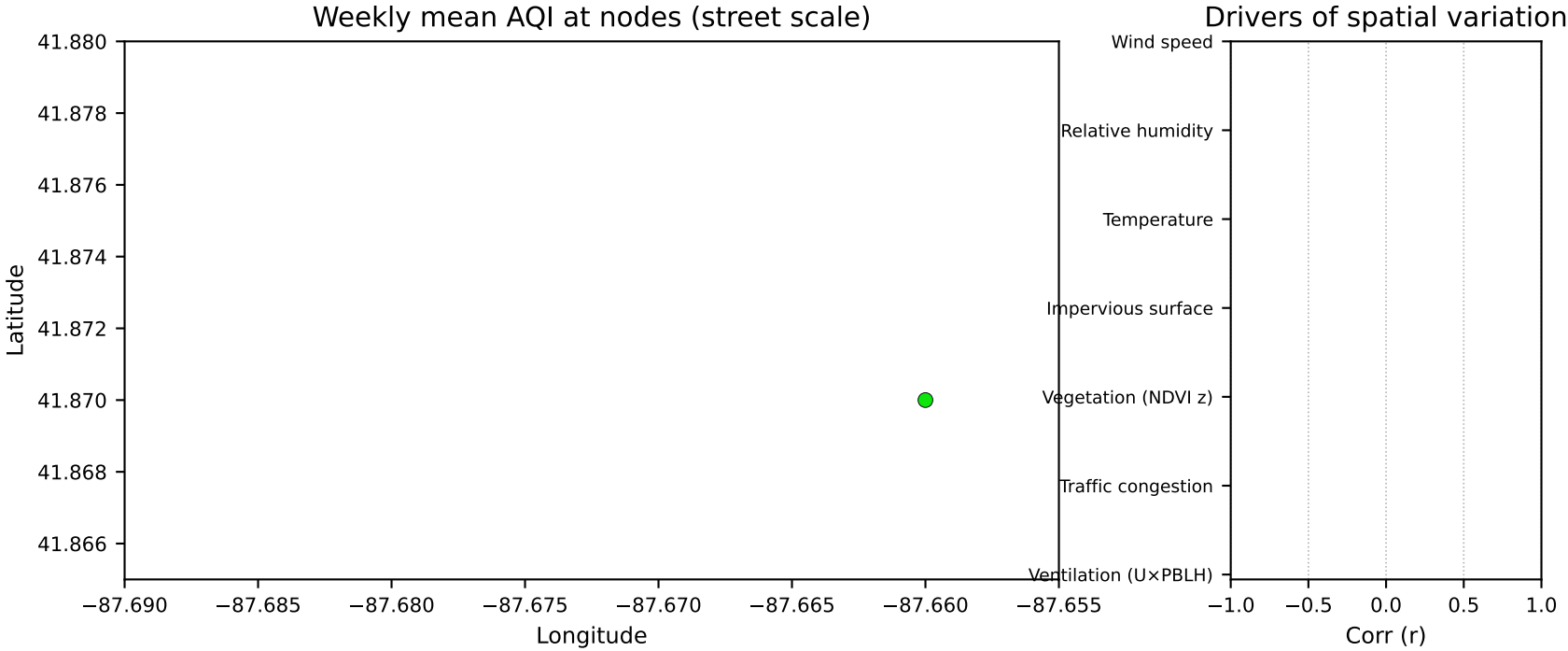
Local mean conditions: T≈20.6 °C, RH≈65%, U≈-0.9 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-08-26 to 2024-09-01



Weekly inference:

Illinois Medical District, week 2024-W35 (2024-08-26–2024-09-01): street-level weekly AQI median ≈ 48 (P10≈48, P90≈48).

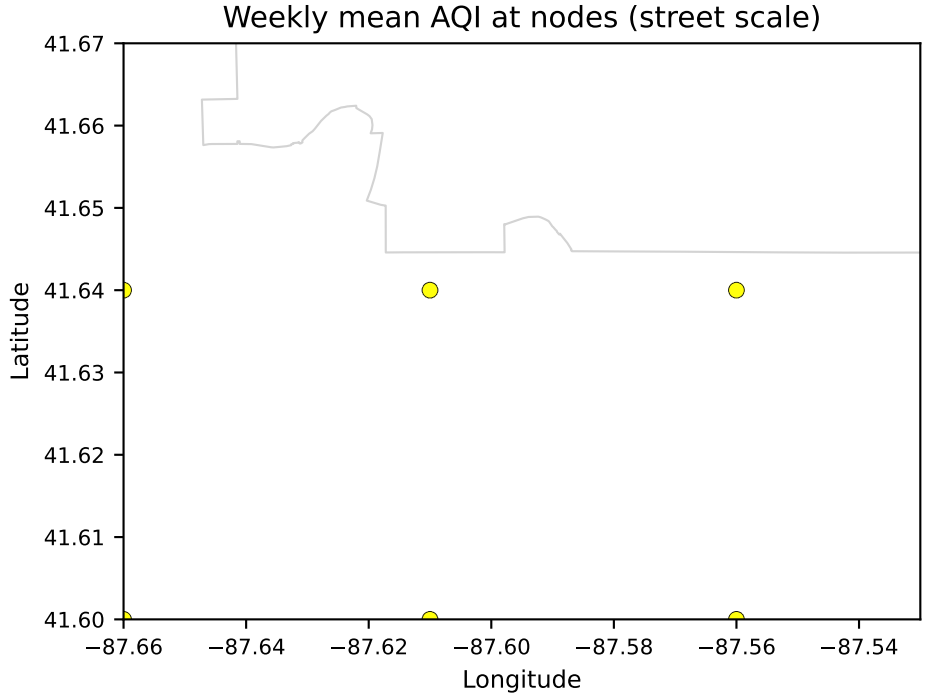
Local mean conditions: T̄≈25.2 °C, RH̄≈70%, Ū≈1.6 m/s.

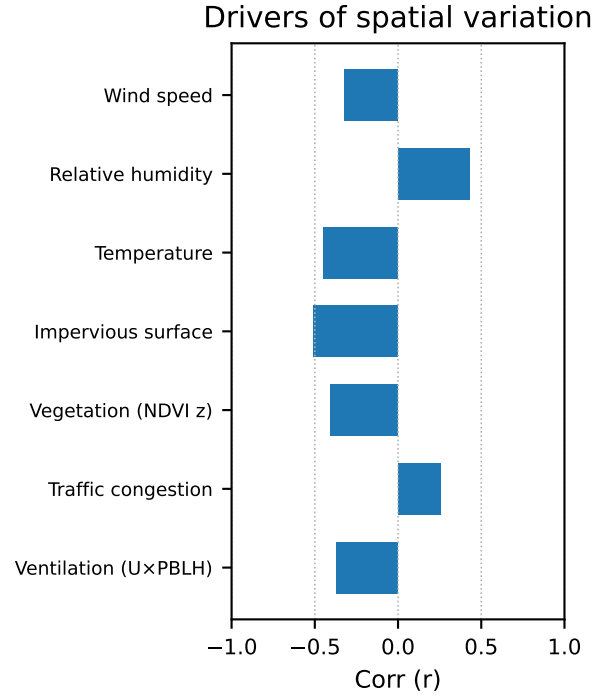
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-08-26 to 2024-09-01





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W35 (2024-08-26–2024-09-01): street-level weekly AQI median ≈ 63 (P10≈55, P90≈65).

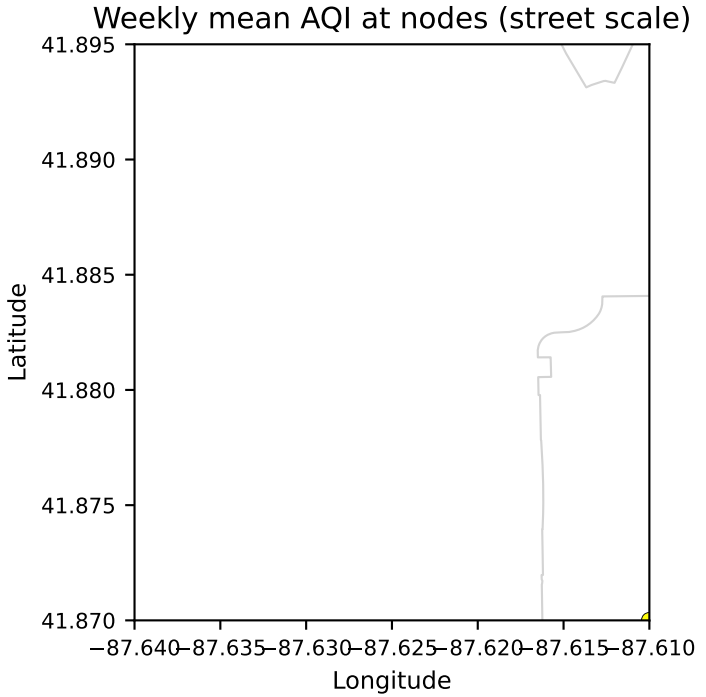
Local mean conditions: T≈25.1 °C, RH≈70%, U≈1.7 m/s.

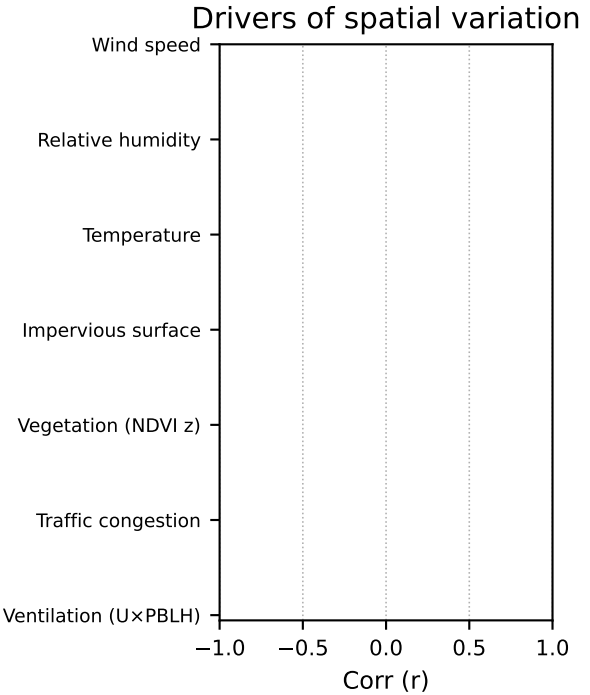
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.37). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.25). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.41). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.51). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.45). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-08-26 to 2024-09-01





Weekly inference:

Lakefront Downtown, week 2024-W35 (2024-08-26–2024-09-01): street-level weekly AQI median ≈ 58 (P10≈58, P90≈58).

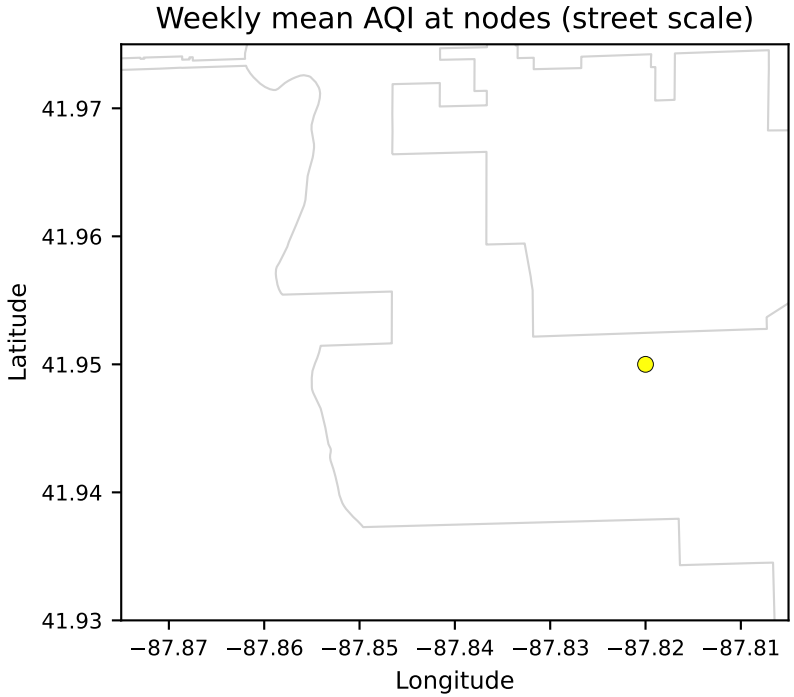
Local mean conditions: T≈25.3 °C, RH≈70%, U≈1.6 m/s.

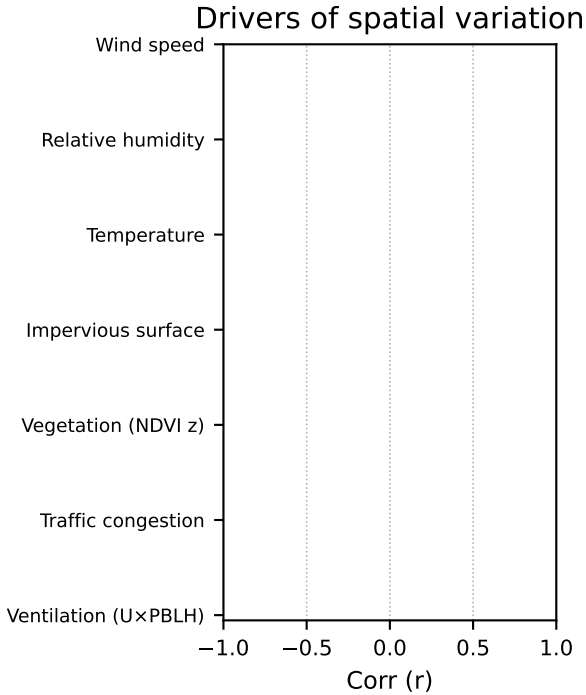
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-08-26 to 2024-09-01





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W35 (2024-08-26–2024-09-01): street-level weekly AQI median ≈ 57 (P10≈57, P90≈57).

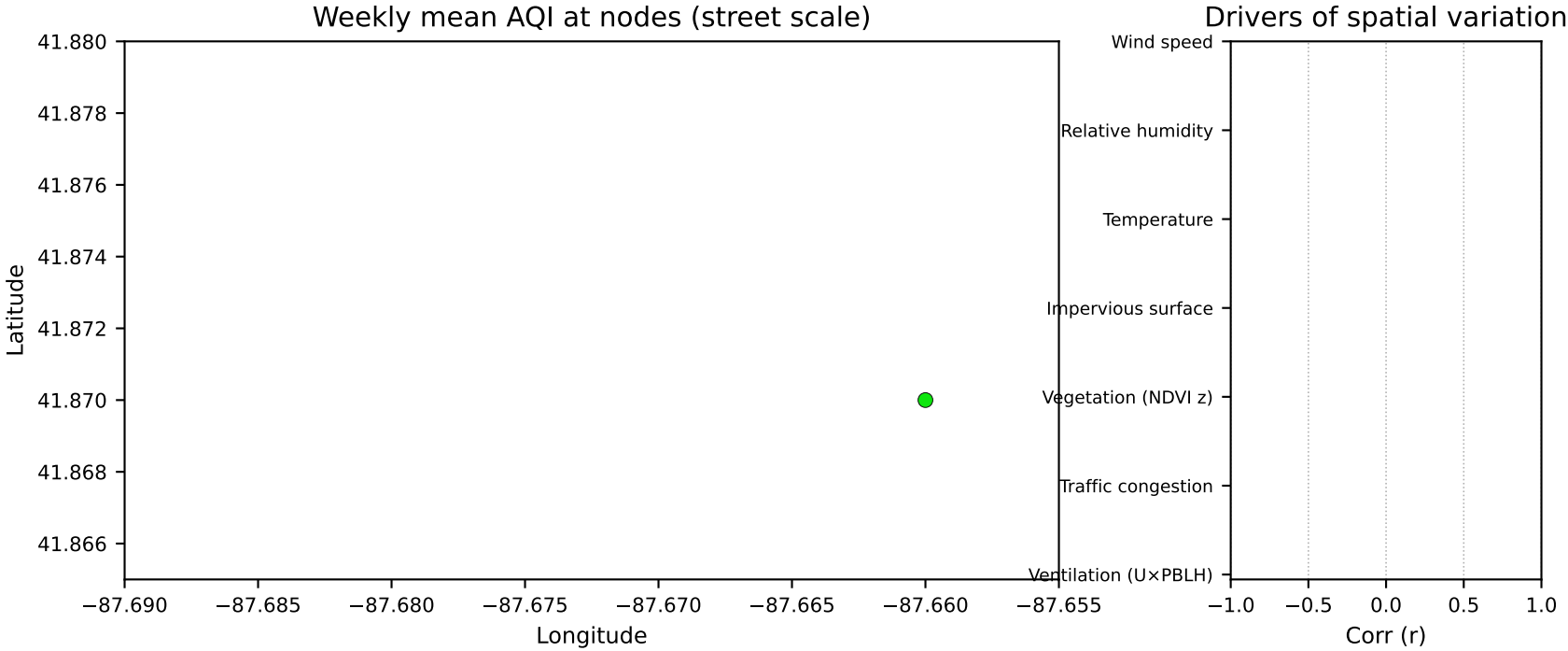
Local mean conditions: T≈25.2 °C, RH≈68%, U≈2.7 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-09-02 to 2024-09-08



Weekly inference:

Illinois Medical District, week 2024-W36 (2024-09-02–2024-09-08): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

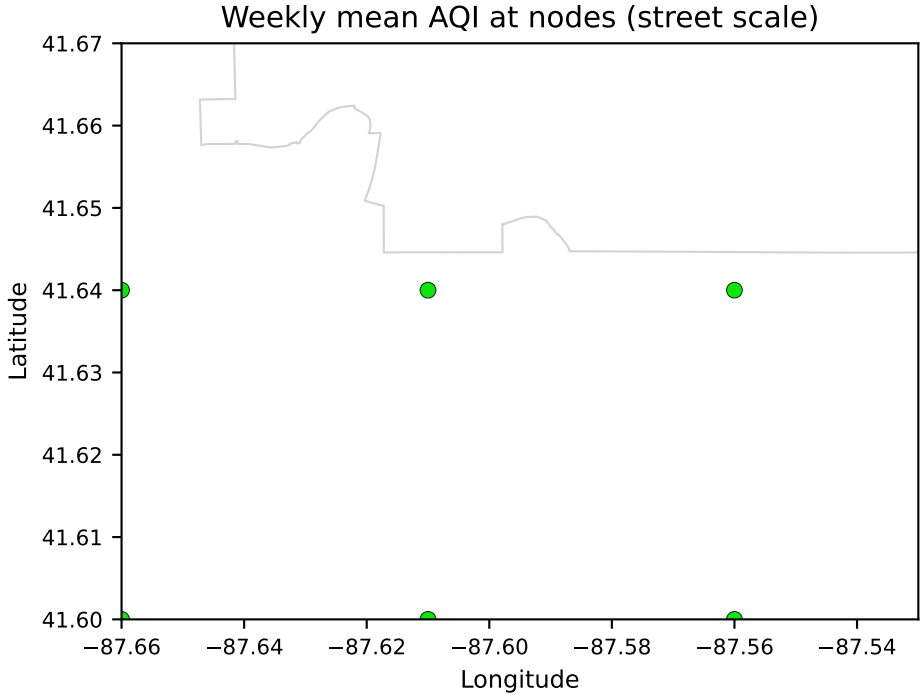
Local mean conditions: T̄≈18.6 °C, RH̄≈63%, Ū≈-0.2 m/s.

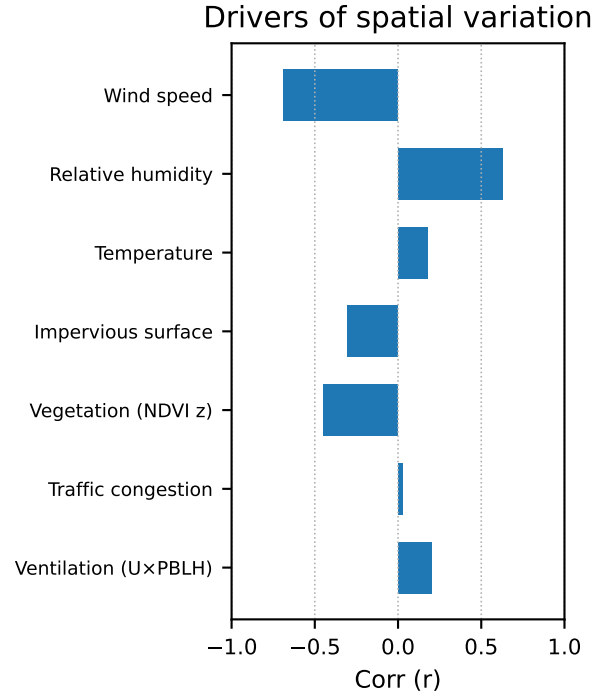
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-09-02 to 2024-09-08





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W36 (2024-09-02–2024-09-08): street-level weekly AQI median ≈ 42 (P10≈38, P90≈43).

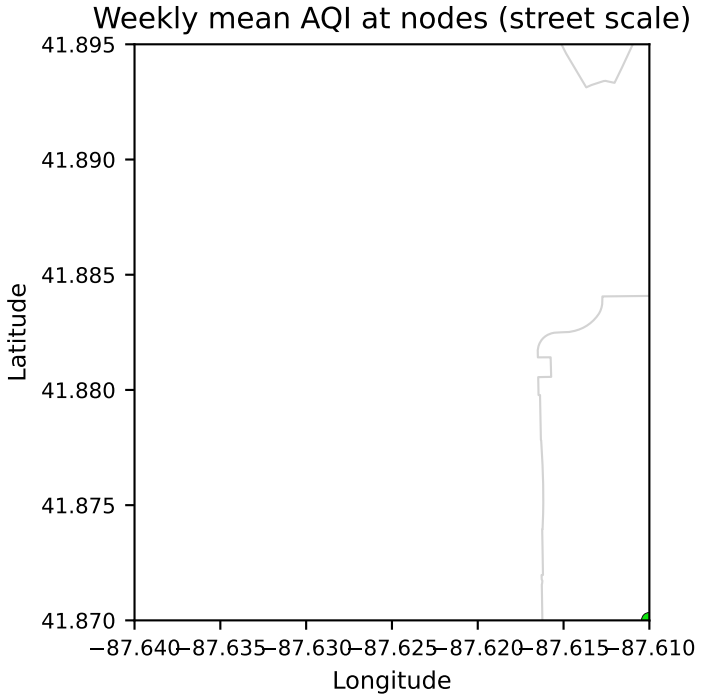
Local mean conditions: T≈18.0 °C, RH≈65%, U≈-0.4 m/s.

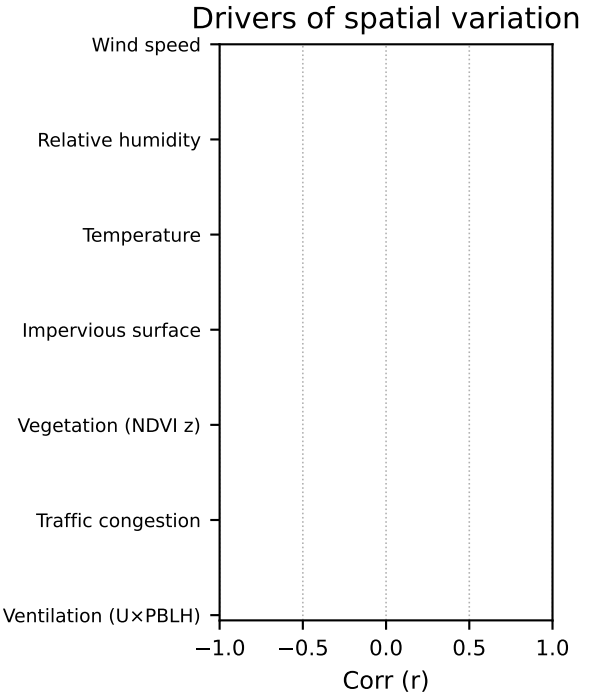
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak positive correlation (r≈0.20). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: negligible positive correlation (r≈0.03). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.45). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.30). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: weak positive correlation (r≈0.18). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-09-02 to 2024-09-08





Weekly inference:

Lakefront Downtown, week 2024-W36 (2024-09-02–2024-09-08): street-level weekly AQI median ≈ 40 (P10≈40, P90≈40).

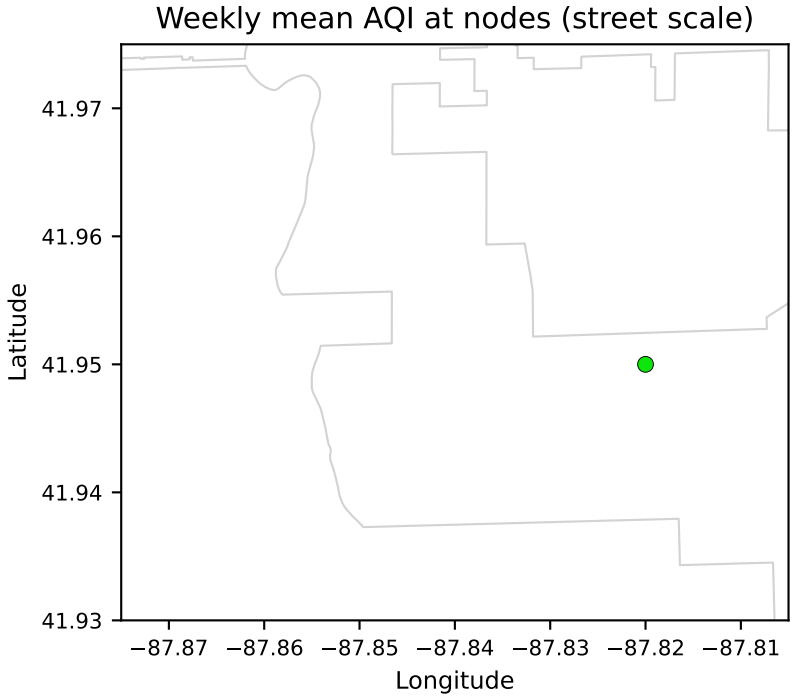
Local mean conditions: T≈18.7 °C, RH≈63%, U≈-0.2 m/s.

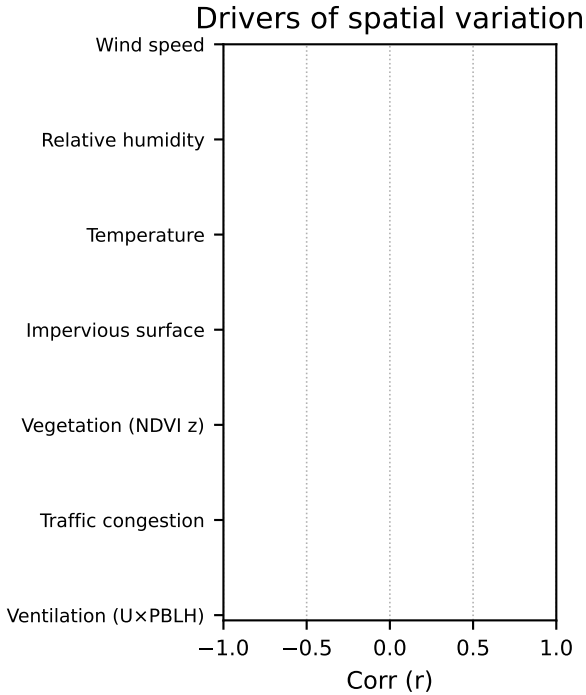
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-09-02 to 2024-09-08





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W36 (2024-09-02–2024-09-08): street-level weekly AQI median ≈ 40 (P10≈40, P90≈40).

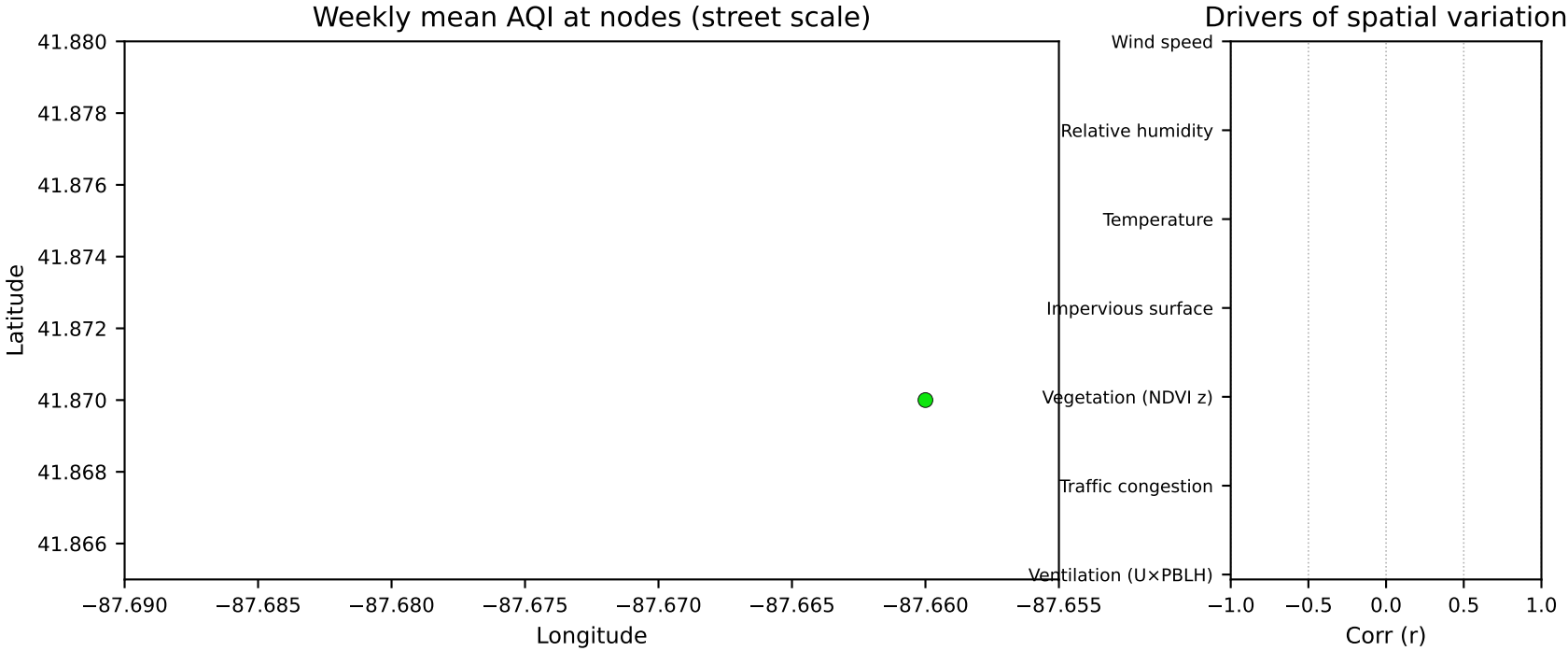
Local mean conditions: T≈18.1 °C, RH≈63%, U≈0.6 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-09-09 to 2024-09-15



Weekly inference:

Illinois Medical District, week 2024-W37 (2024-09-09–2024-09-15): street-level weekly AQI median ≈ 43 (P10≈43, P90≈43).

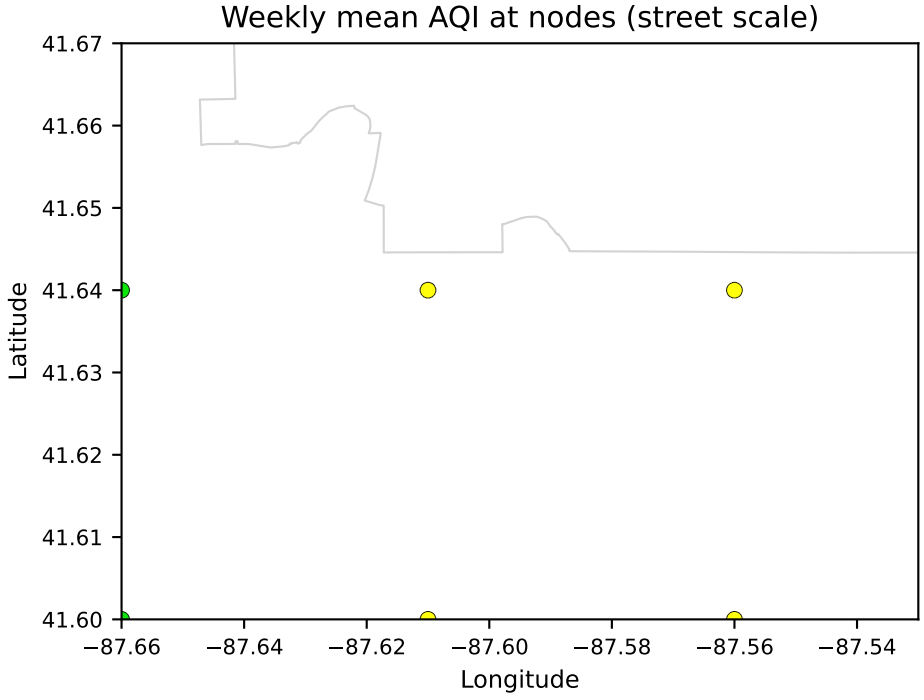
Local mean conditions: T̄≈22.3 °C, RH̄≈59%, Ū≈-4.5 m/s.

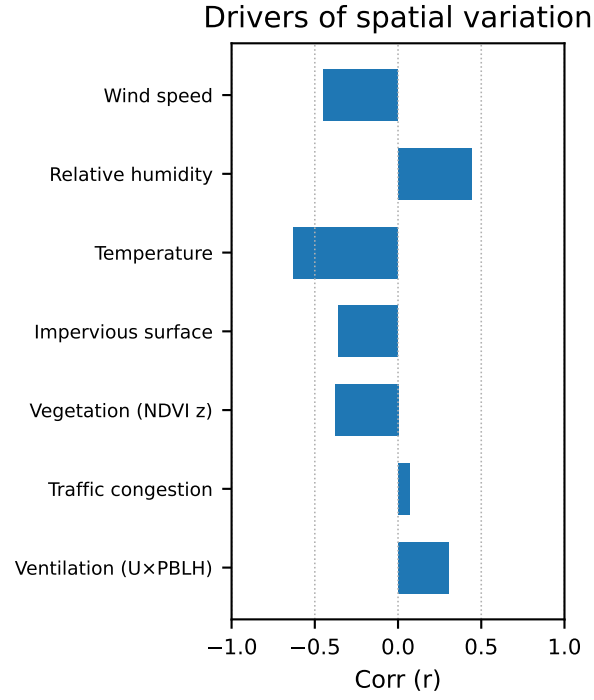
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-09-09 to 2024-09-15





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W37 (2024-09-09–2024-09-15): street-level weekly AQI median ≈ 56 (P10≈46, P90≈58).

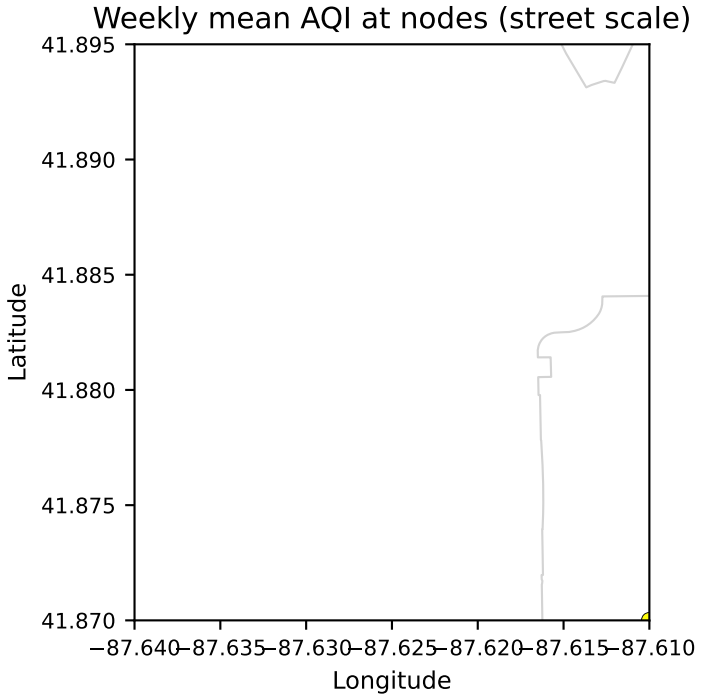
Local mean conditions: T≈21.9 °C, RH≈58%, U≈-3.2 m/s.

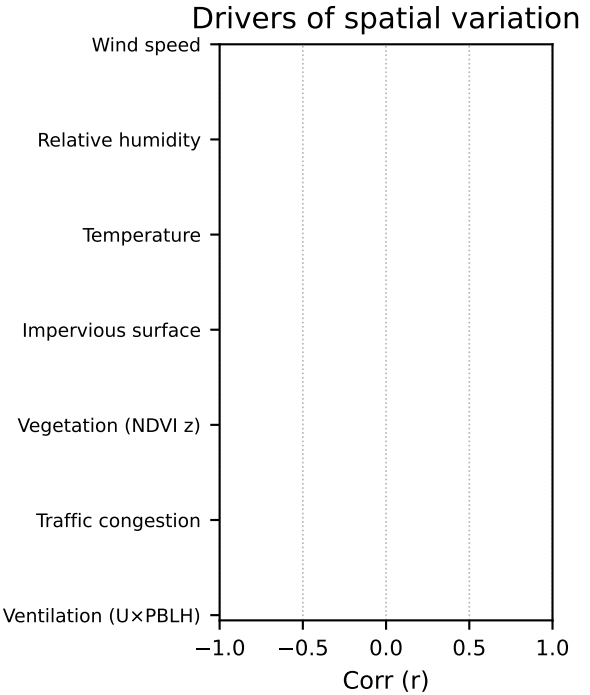
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate positive correlation (r≈0.30). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: negligible positive correlation (r≈0.07). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.38). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.36). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: strong negative correlation (r≈-0.63). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-09-09 to 2024-09-15





Weekly inference:

Lakefront Downtown, week 2024-W37 (2024-09-09–2024-09-15): street-level weekly AQI median ≈ 54 (P10≈54, P90≈54).

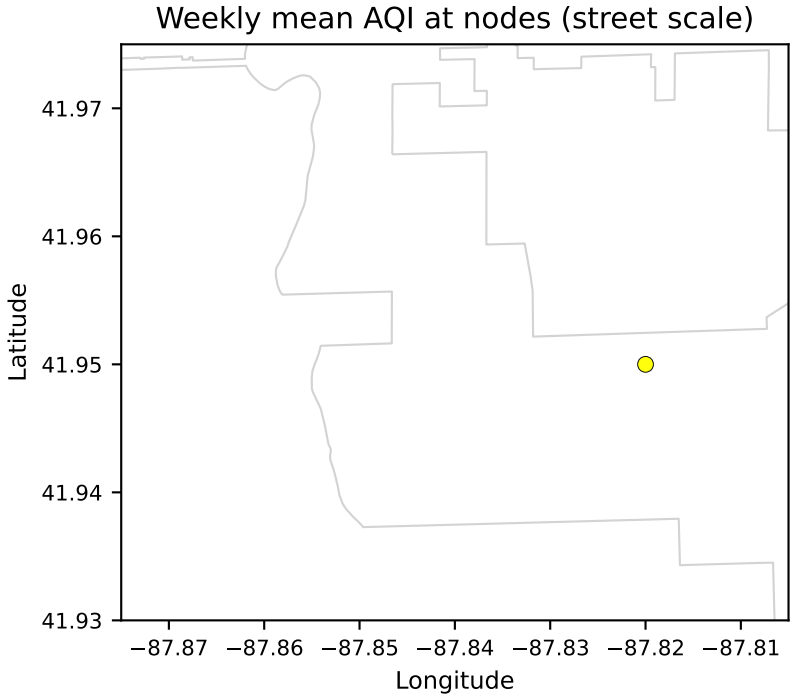
Local mean conditions: T≈22.4 °C, RH≈59%, U≈-4.5 m/s.

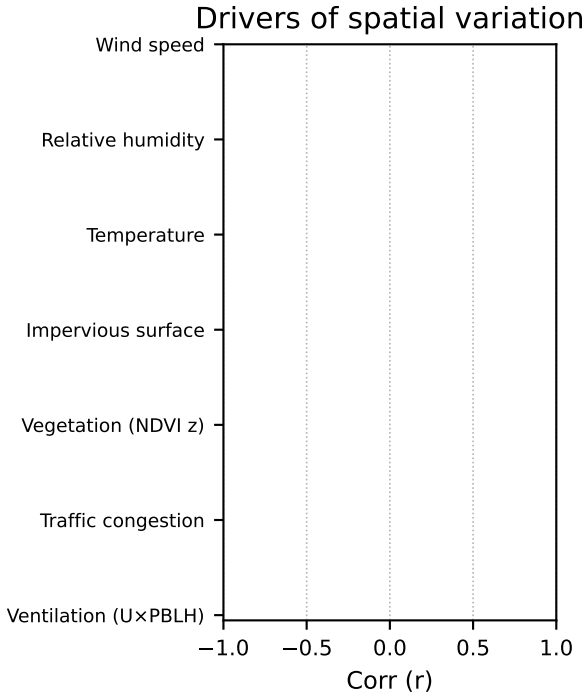
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-09-09 to 2024-09-15





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W37 (2024-09-09–2024-09-15): street-level weekly AQI median ≈ 51 (P10≈51, P90≈51).

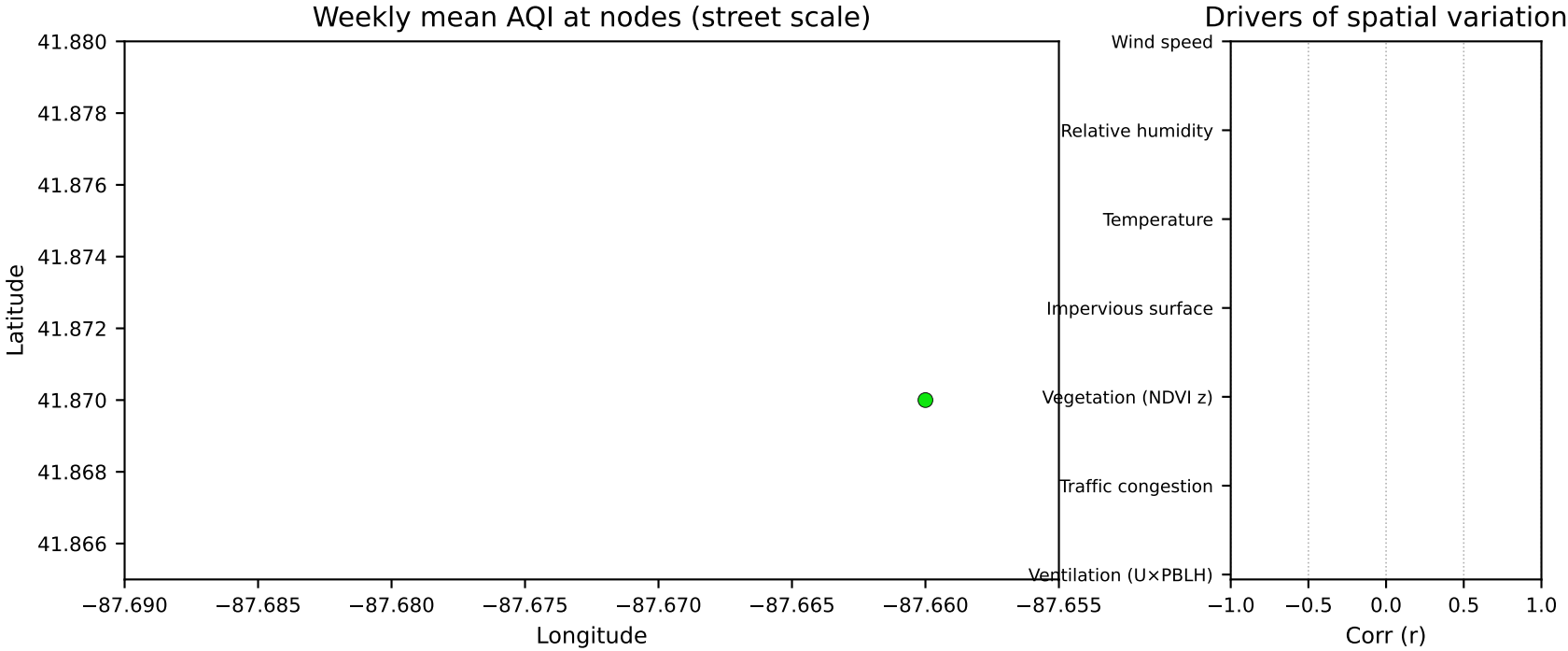
Local mean conditions: T≈22.3 °C, RH≈57%, U≈-3.2 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-09-16 to 2024-09-22



Weekly inference:

Illinois Medical District, week 2024-W38 (2024-09-16–2024-09-22): street-level weekly AQI median ≈ 42 (P10≈42, P90≈42).

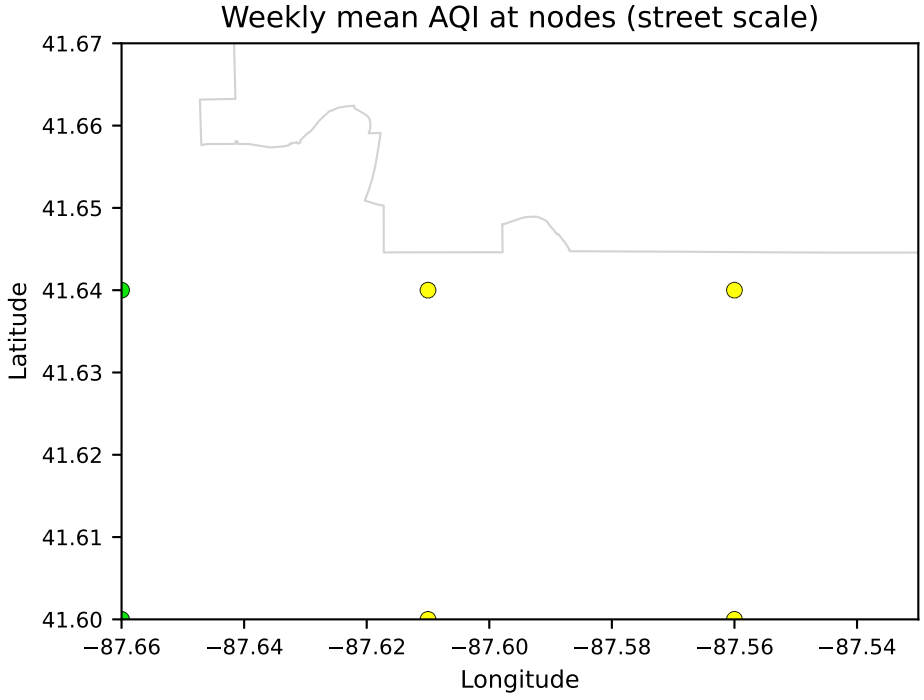
Local mean conditions: T̄≈22.7 °C, RH̄≈65%, Ū≈-3.8 m/s.

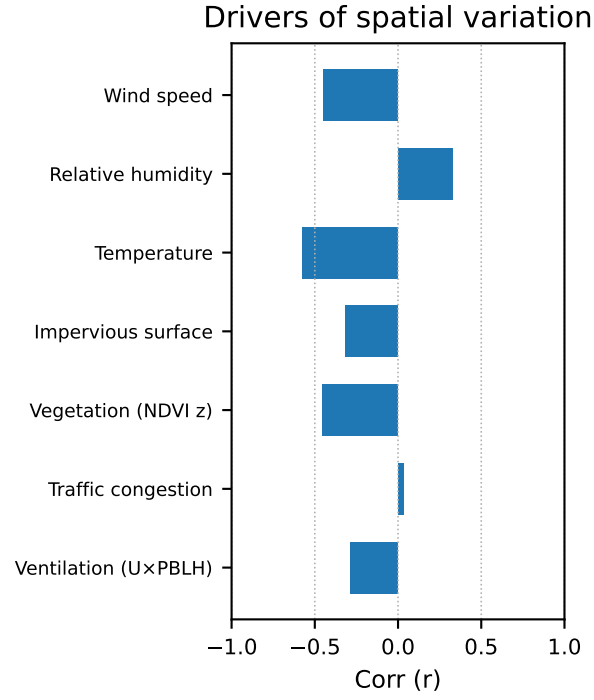
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-09-16 to 2024-09-22





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W38 (2024-09-16–2024-09-22): street-level weekly AQI median ≈ 56 (P10≈47, P90≈58).

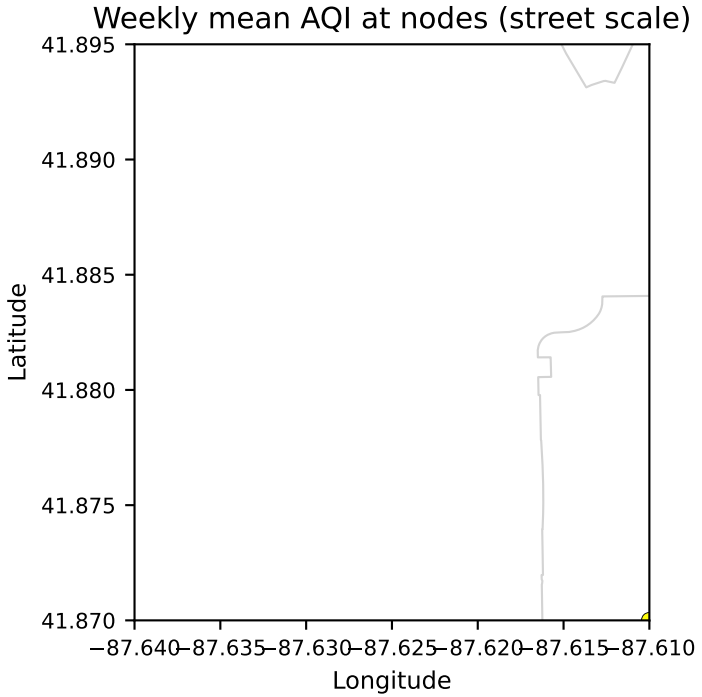
Local mean conditions: $\bar{T}$≈22.6 °C, $\bar{RH}$≈62%, $\bar{U}$≈-1.5 m/s.

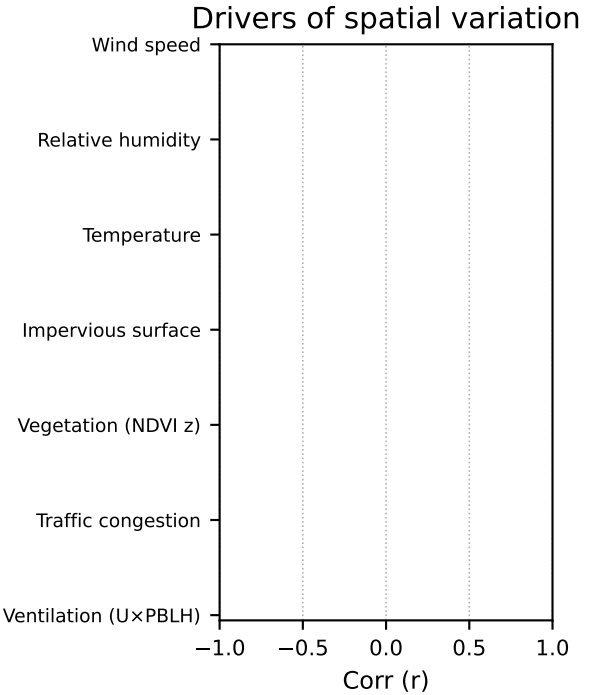
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): weak negative correlation (r≈-0.29). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.03). Streets with heavier traffic generally showed higher AQI, indicating near-roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.46). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.32). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.58). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-09-16 to 2024-09-22





Weekly inference:

Lakefront Downtown, week 2024-W38 (2024-09-16–2024-09-22): street-level weekly AQI median ≈ 53 (P10≈53, P90≈53).

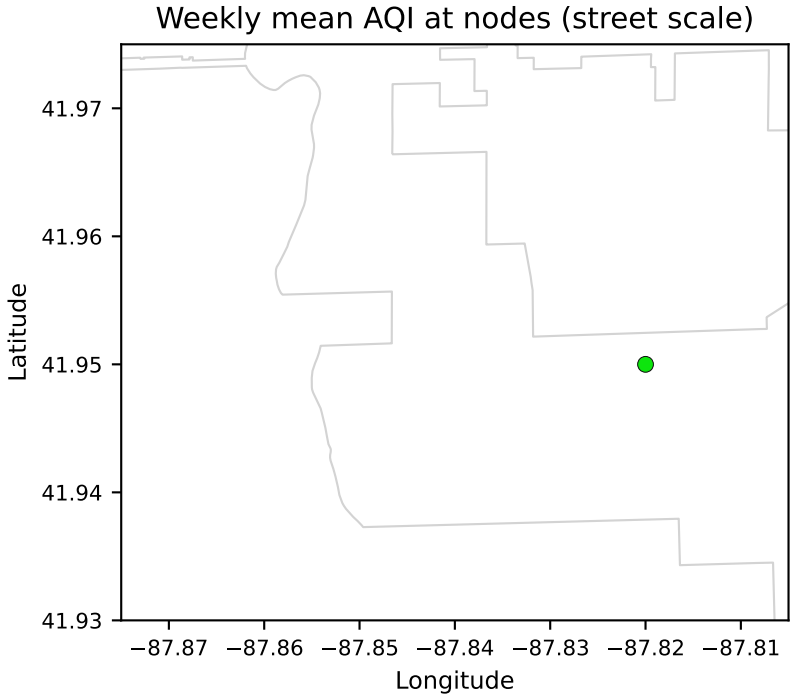
Local mean conditions: T≈22.8 °C, RH≈65%, U≈-3.8 m/s.

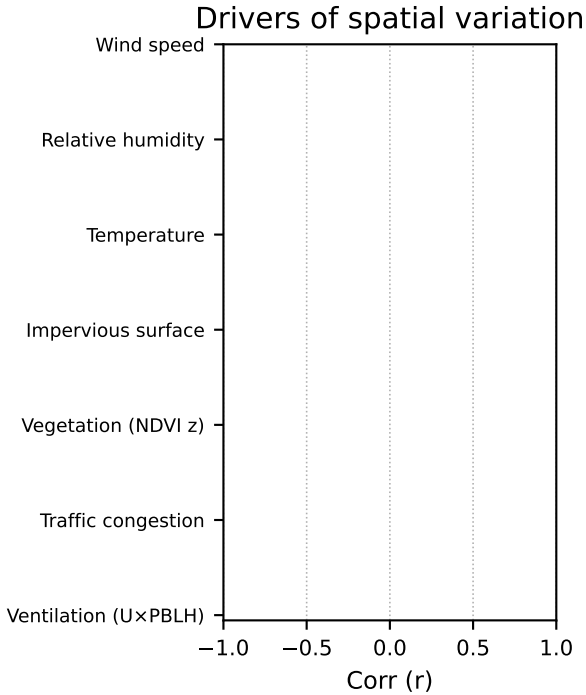
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-09-16 to 2024-09-22





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W38 (2024-09-16–2024-09-22): street-level weekly AQI median ≈ 49 (P10≈49, P90≈49).

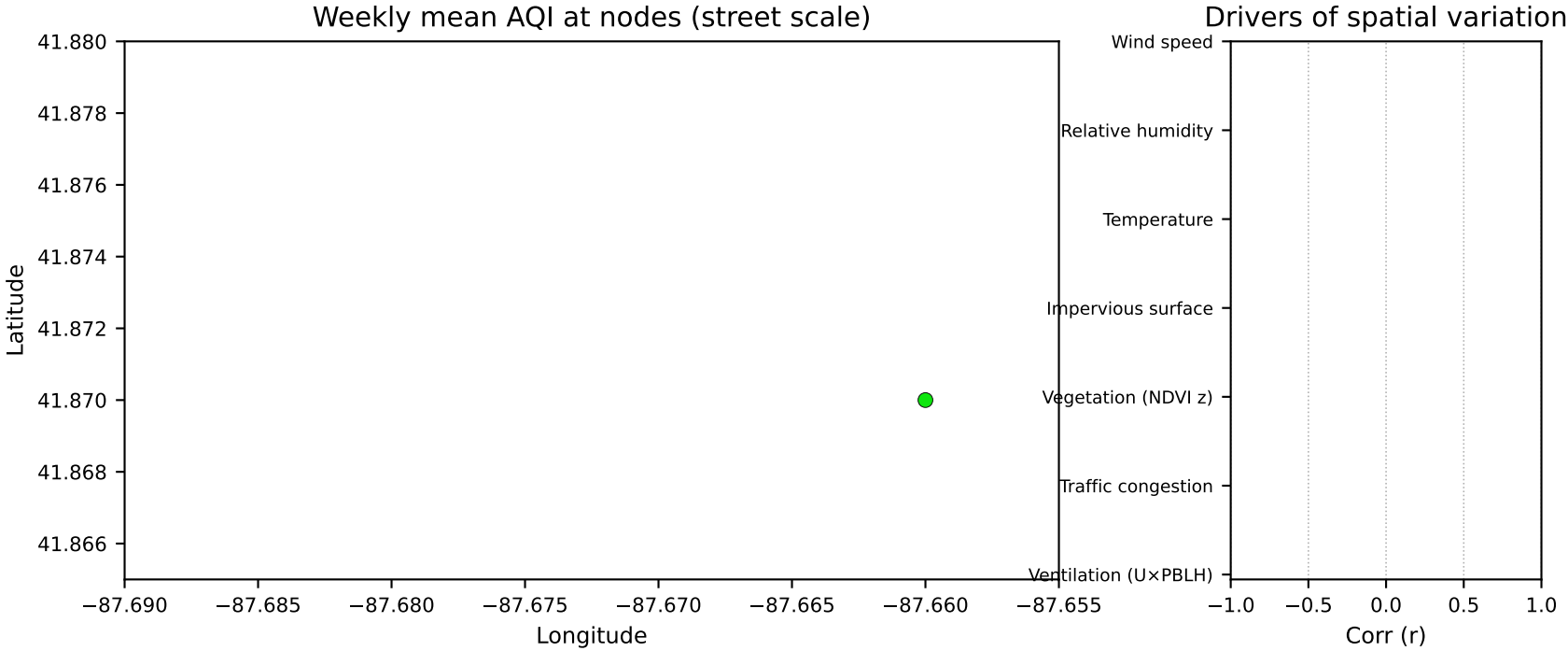
Local mean conditions: T≈22.8 °C, RH≈61%, U≈-1.8 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-09-23 to 2024-09-29



Weekly inference:

Illinois Medical District, week 2024-W39 (2024-09-23–2024-09-29): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

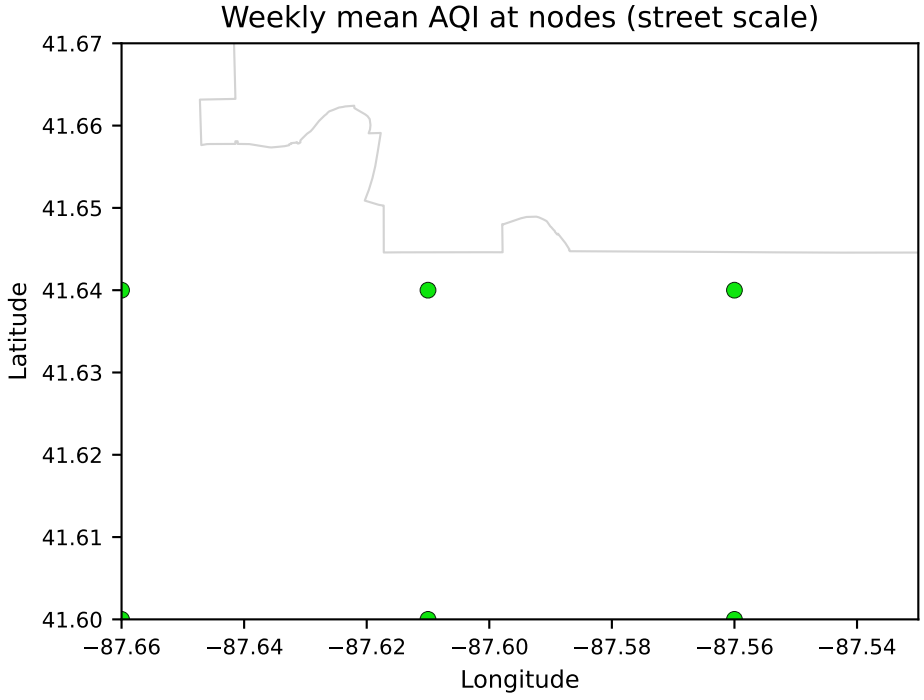
Local mean conditions: T̄≈17.9 °C, RH̄≈82%, Ū≈-7.2 m/s.

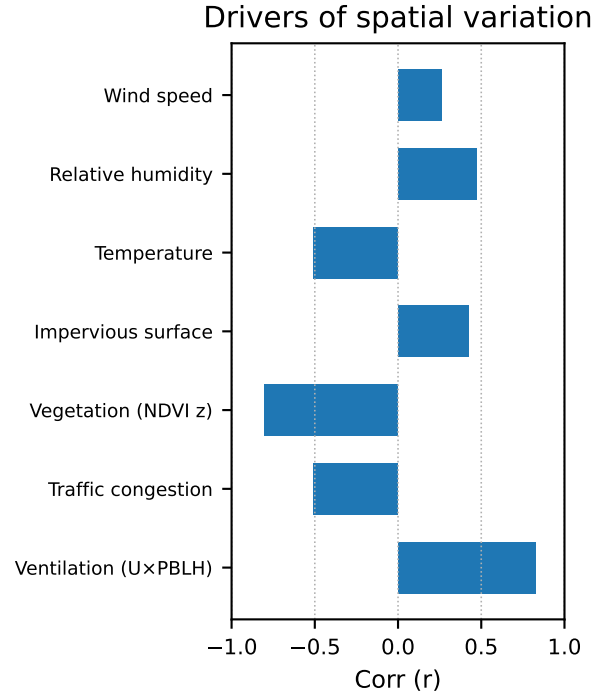
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-09-23 to 2024-09-29





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W39 (2024-09-23–2024-09-29): street-level weekly AQI median ≈ 40 (P10≈39, P90≈41).

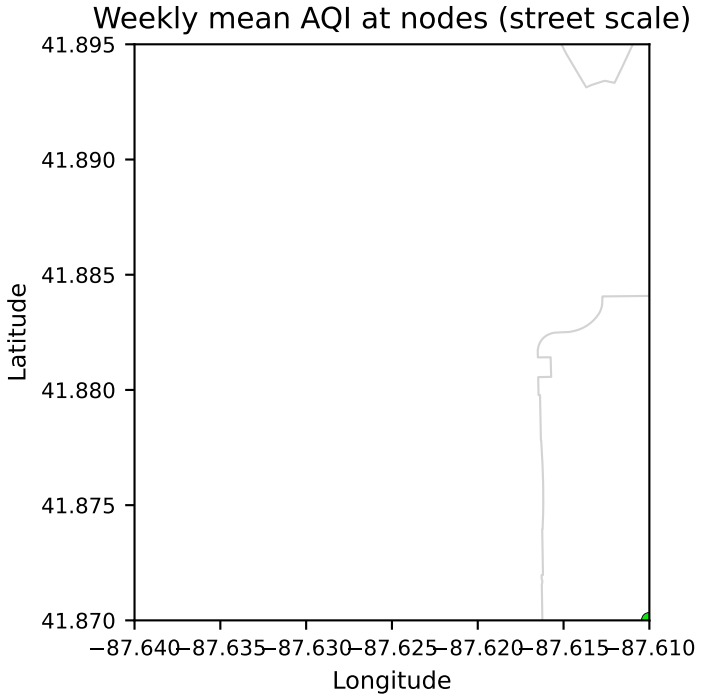
Local mean conditions: T≈18.1 °C, RH≈80%, U≈-5.5 m/s.

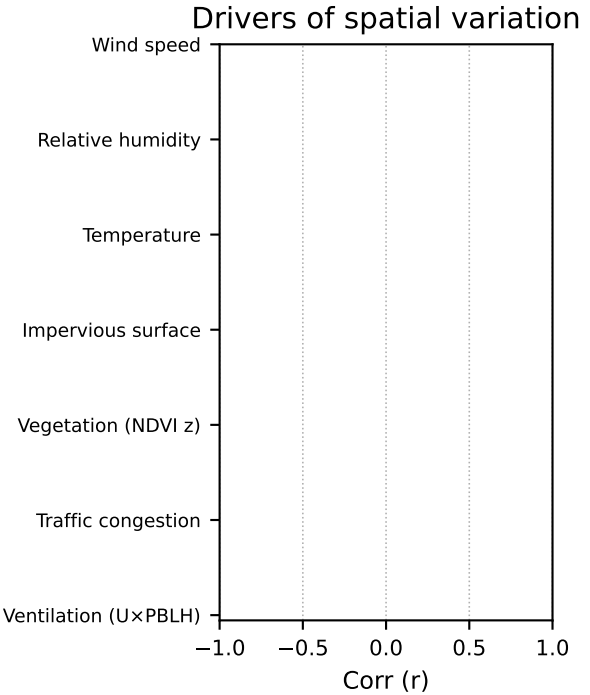
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): strong positive correlation (r≈0.83). Higher AQI co-occurred with stronger ventilation, suggesting advection of pollution from upwind corridors outweighed local dilution.
- Traffic congestion: moderate negative correlation (r≈-0.51). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): strong negative correlation (r≈-0.80). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate positive correlation (r≈0.43). More impervious, built-up surfaces coincided with elevated AQI, aligning with dense emission sources and reduced near-surface mixing.
- Temperature: moderate negative correlation (r≈-0.51). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-09-23 to 2024-09-29





Weekly inference:

Lakefront Downtown, week 2024-W39 (2024-09-23–2024-09-29): street-level weekly AQI median ≈ 38 (P10≈38, P90≈38).

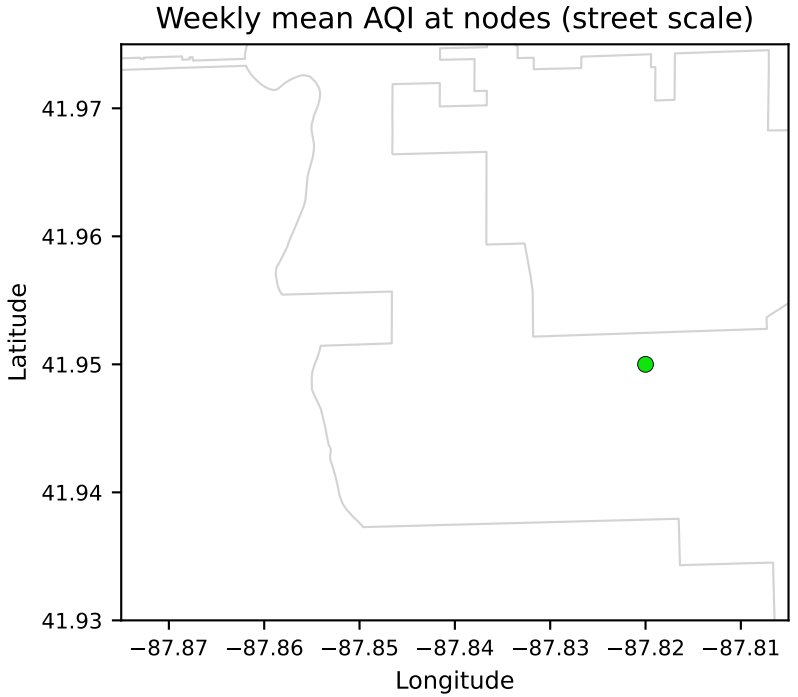
Local mean conditions: T≈18.0 °C, RH≈82%, U≈-7.2 m/s.

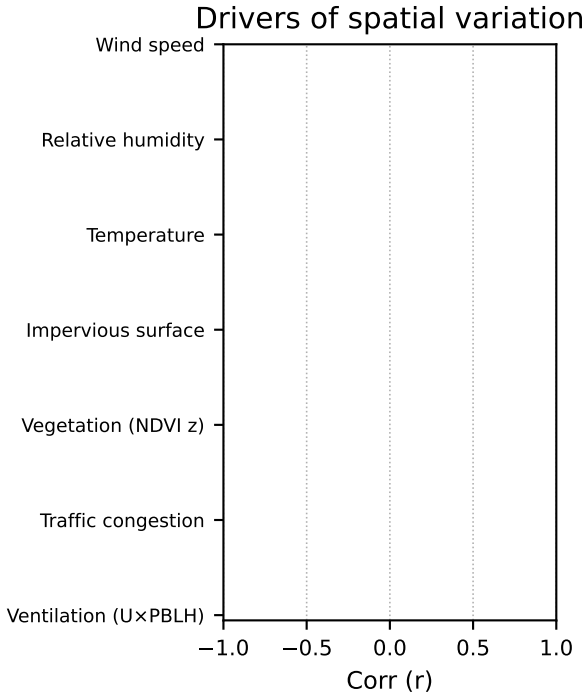
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-09-23 to 2024-09-29





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W39 (2024-09-23–2024-09-29): street-level weekly AQI median ≈ 39 (P10≈39, P90≈39).

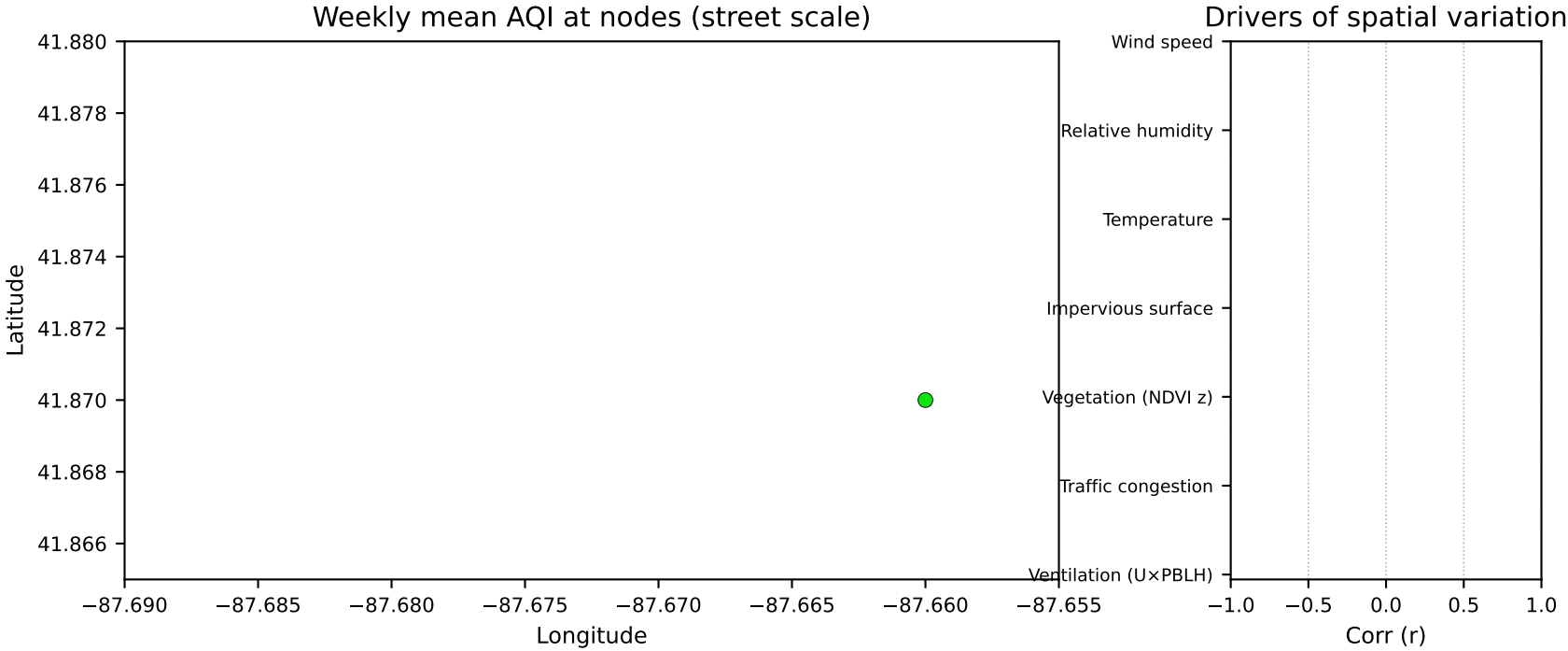
Local mean conditions: T≈18.1 °C, RH≈77%, U≈-5.6 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-09-30 to 2024-10-06



Weekly inference:

Illinois Medical District, week 2024-W40 (2024-09-30–2024-10-06): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

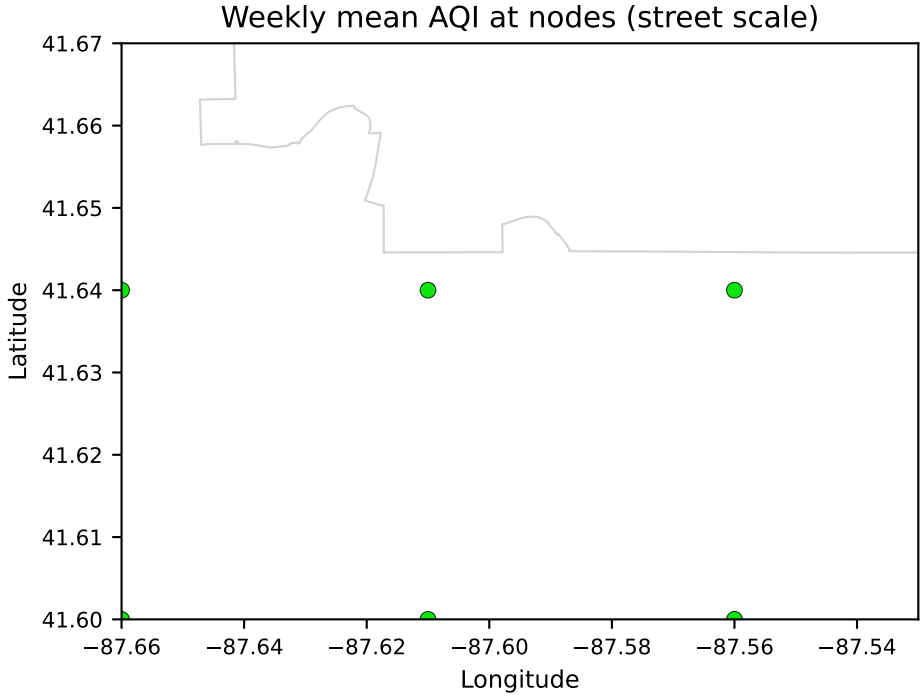
Local mean conditions: T̄≈17.9 °C, RH̄≈65%, Ū≈1.1 m/s.

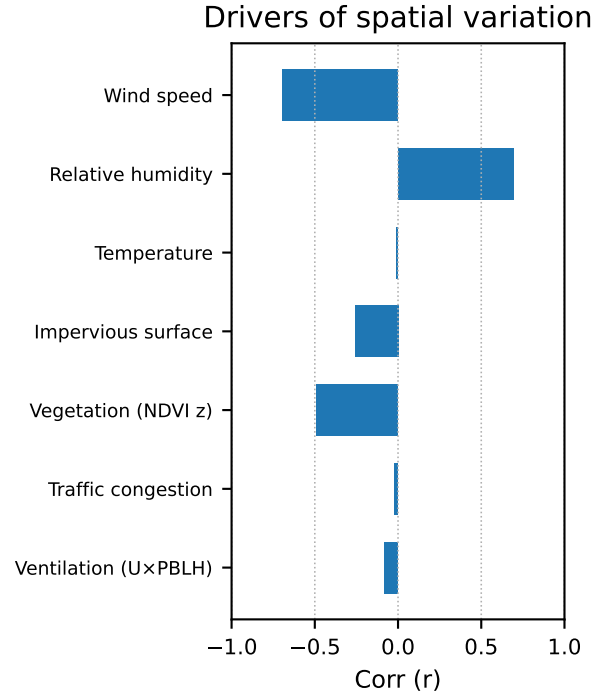
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-09-30 to 2024-10-06





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W40 (2024-09-30–2024-10-06): street-level weekly AQI median ≈ 39 (P10≈35, P90≈40).

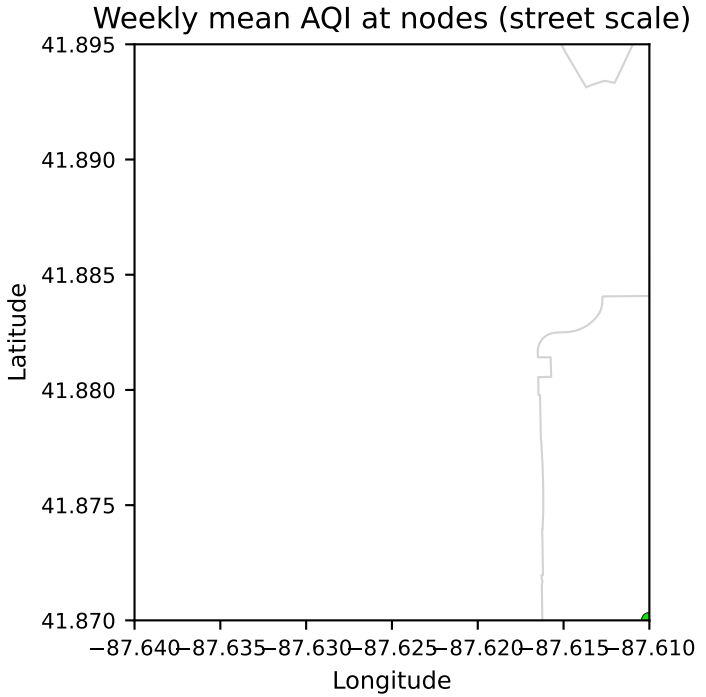
Local mean conditions: T≈17.9 °C, RH≈64%, U≈1.4 m/s.

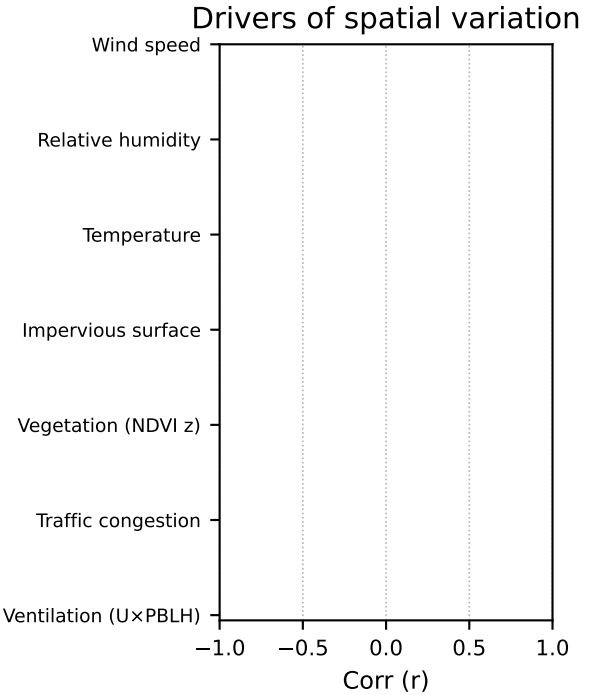
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): negligible negative correlation (r≈-0.08). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.02). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.49). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.26). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: negligible negative correlation (r≈-0.01). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-09-30 to 2024-10-06





Weekly inference:

Lakefront Downtown, week 2024-W40 (2024-09-30–2024-10-06): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

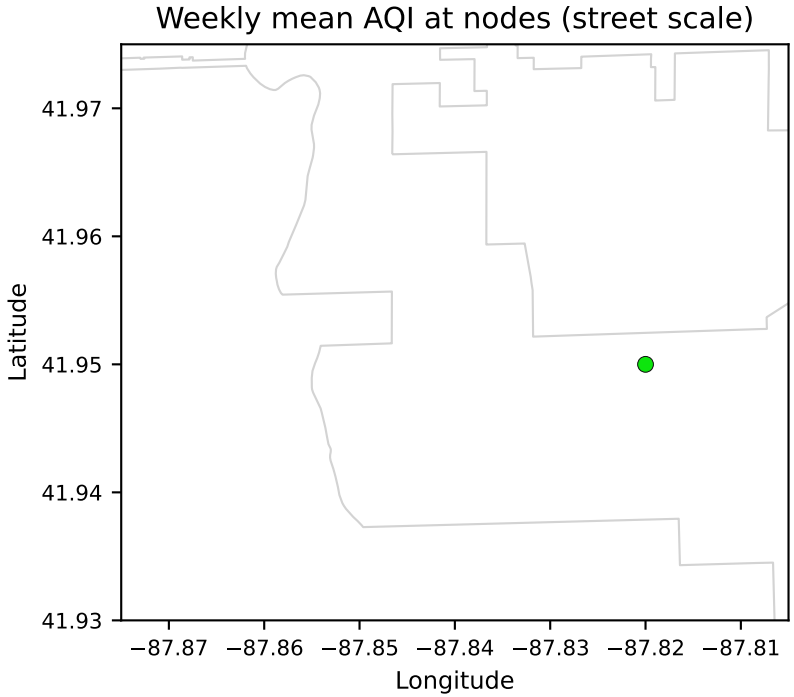
Local mean conditions: T≈18.1 °C, RH̄≈65%, Ū≈1.1 m/s.

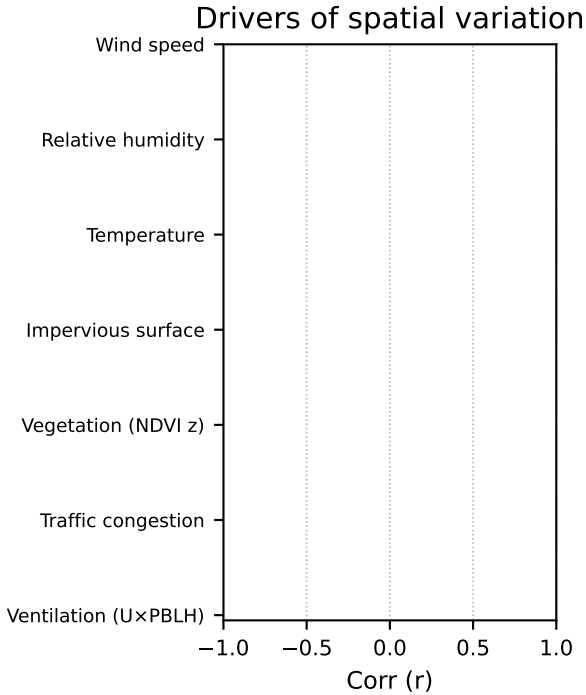
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-09-30 to 2024-10-06





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W40 (2024-09-30–2024-10-06): street-level weekly AQI median ≈ 34 (P10≈34, P90≈34).

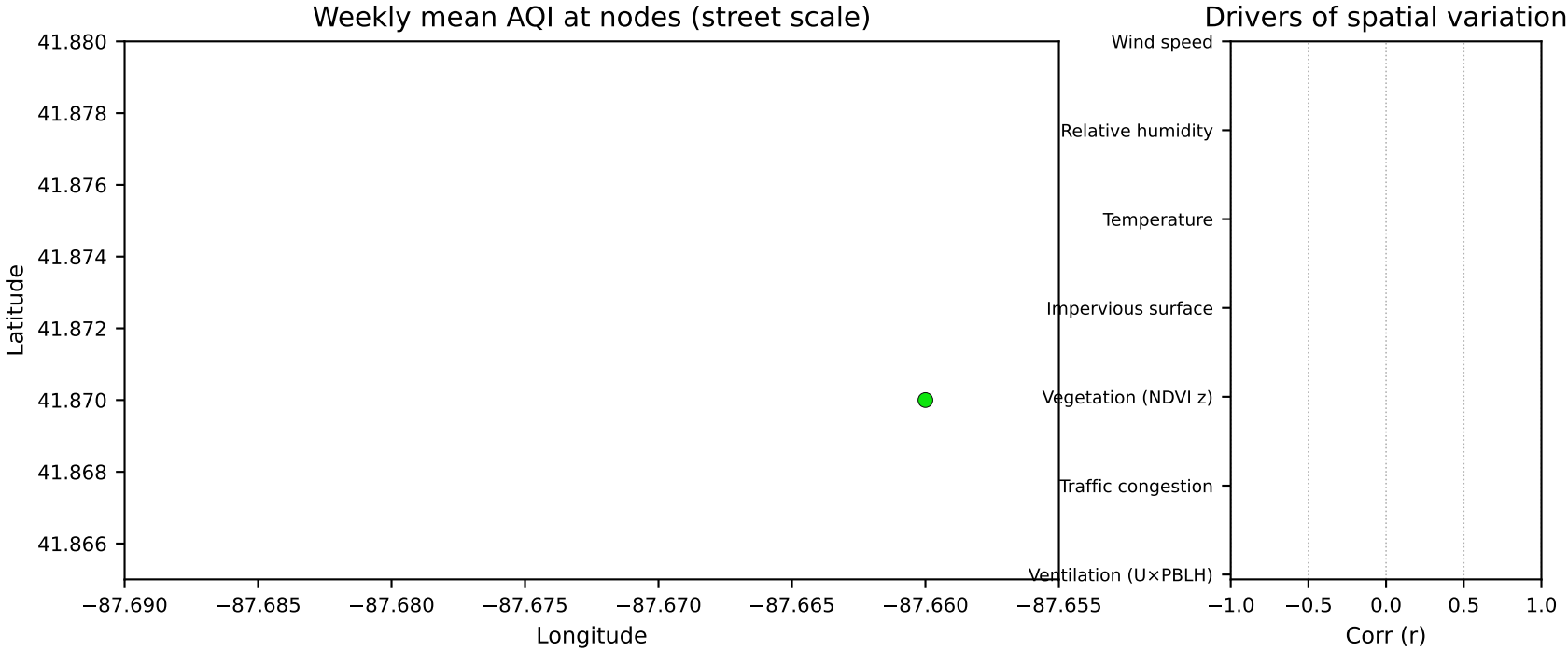
Local mean conditions: T≈18.1 °C, RH≈59%, U≈1.6 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-10-07 to 2024-10-13



Weekly inference:

Illinois Medical District, week 2024-W41 (2024-10-07–2024-10-13): street-level weekly AQI median ≈ 30 (P10≈30, P90≈30).

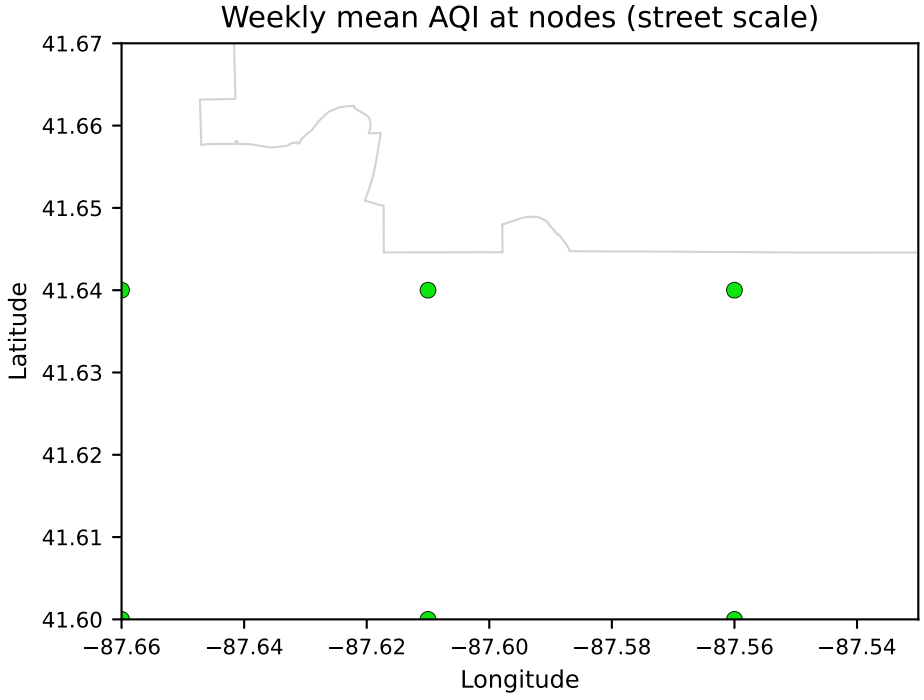
Local mean conditions: T̄≈15.6 °C, RH̄≈62%, Ū≈1.9 m/s.

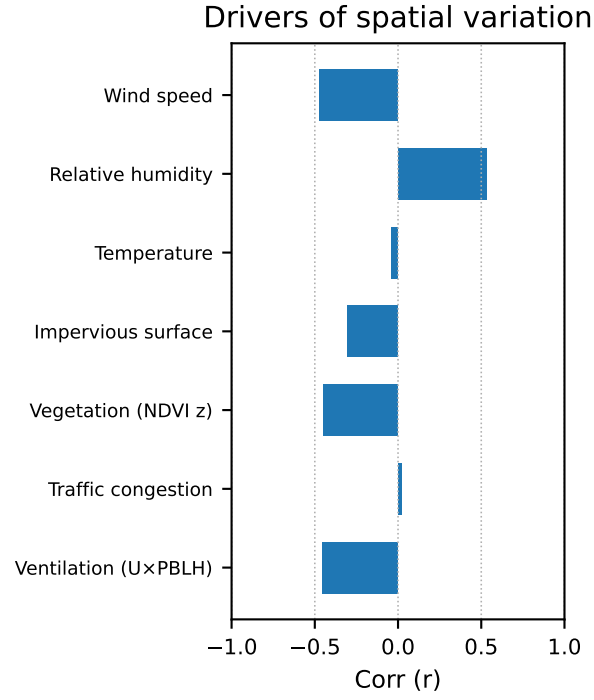
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-10-07 to 2024-10-13





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W41 (2024-10-07–2024-10-13): street-level weekly AQI median ≈ 36 (P10≈32, P90≈37).

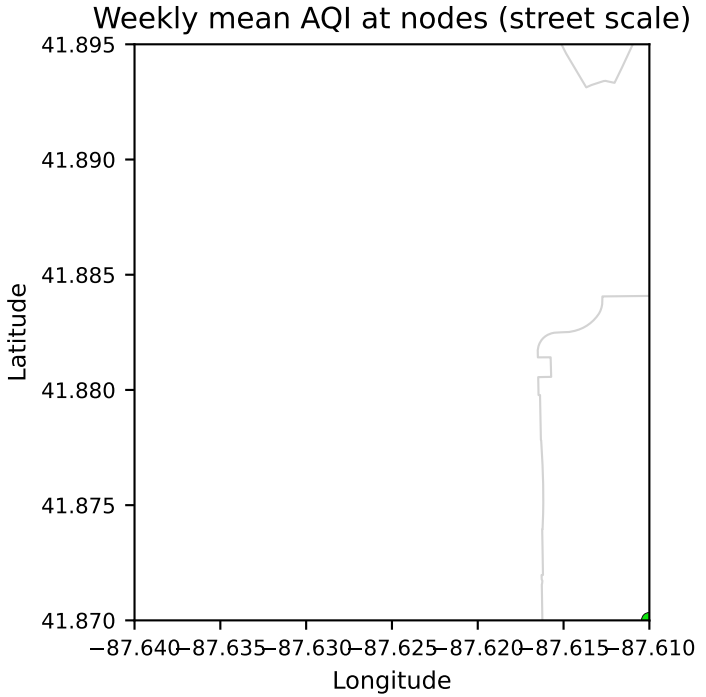
Local mean conditions: T≈15.2 °C, RH≈62%, U≈2.2 m/s.

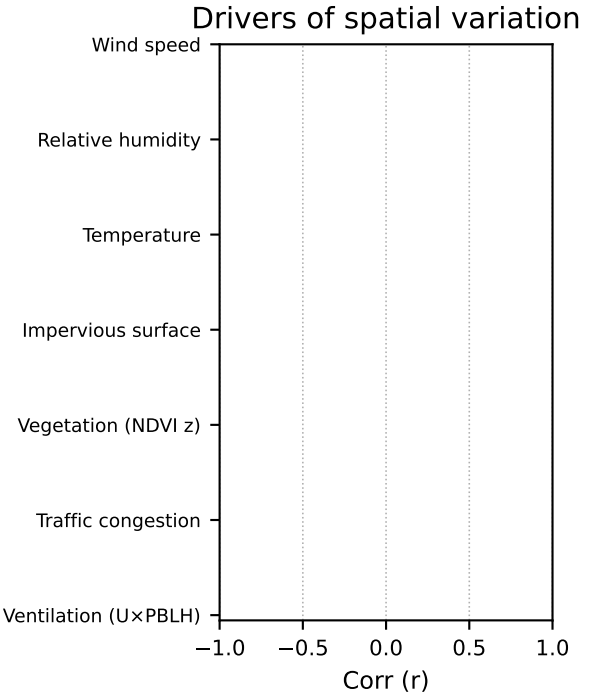
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.46). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.02). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.45). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.30). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: negligible negative correlation (r≈-0.04). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-10-07 to 2024-10-13





Weekly inference:

Lakefront Downtown, week 2024-W41 (2024-10-07–2024-10-13): street-level weekly AQI median ≈ 34 (P10≈34, P90≈34).

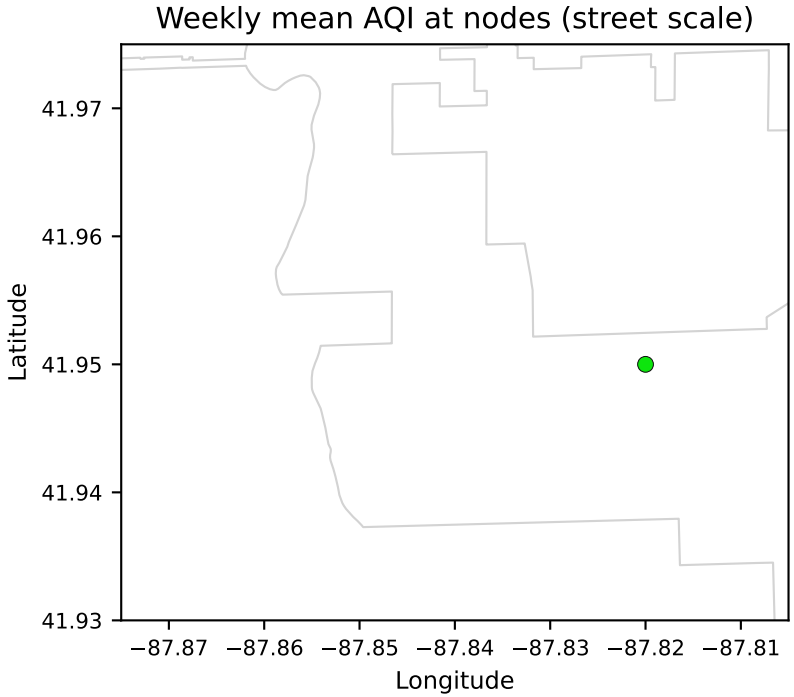
Local mean conditions: T≈15.7 °C, RH≈62%, U≈1.9 m/s.

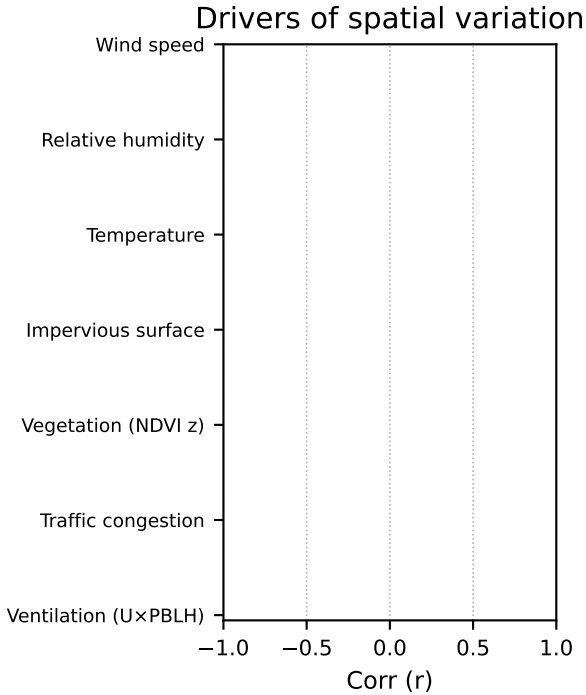
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-10-07 to 2024-10-13





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W41 (2024-10-07–2024-10-13): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

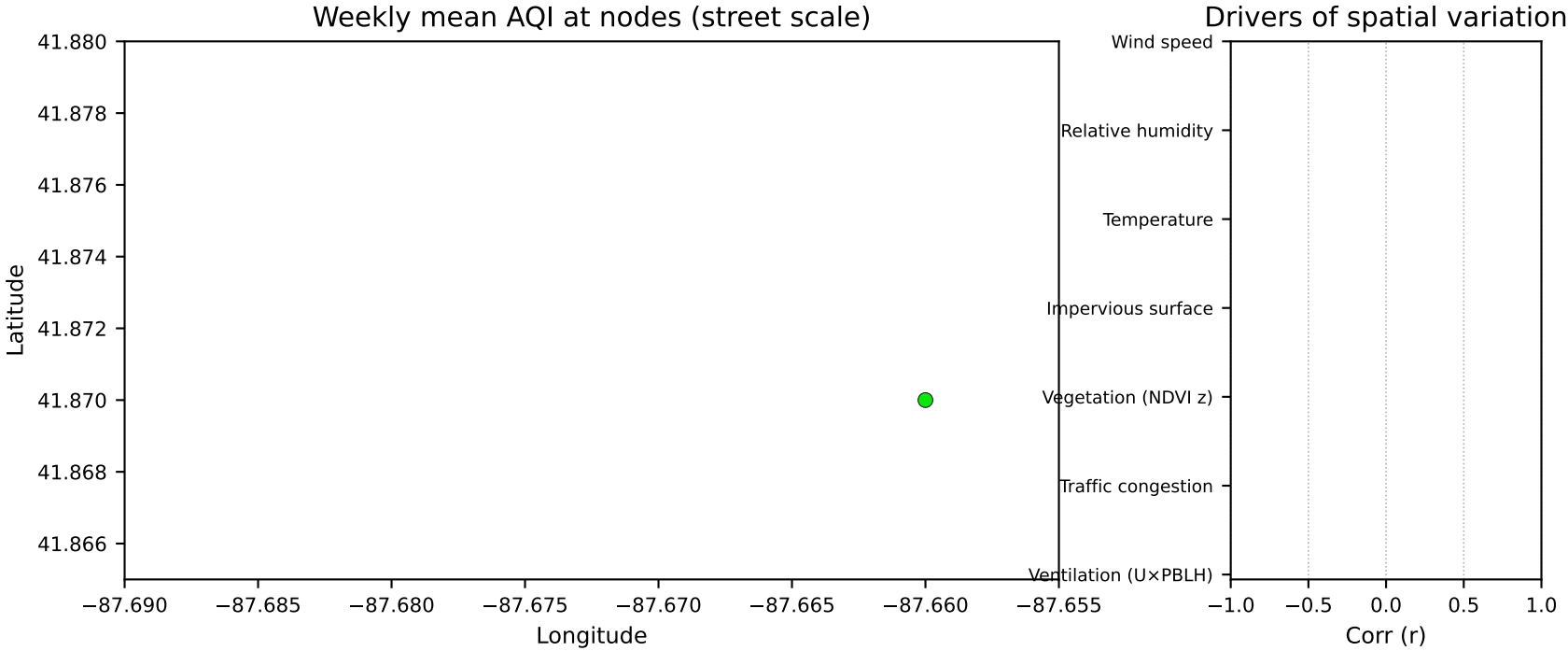
Local mean conditions: T̄≈15.4 °C, RH̄≈59%, Ū≈2.3 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-10-14 to 2024-10-20



Weekly inference:

Illinois Medical District, week 2024-W42 (2024-10-14–2024-10-20): street-level weekly AQI median ≈ 28 (P10≈28, P90≈28).

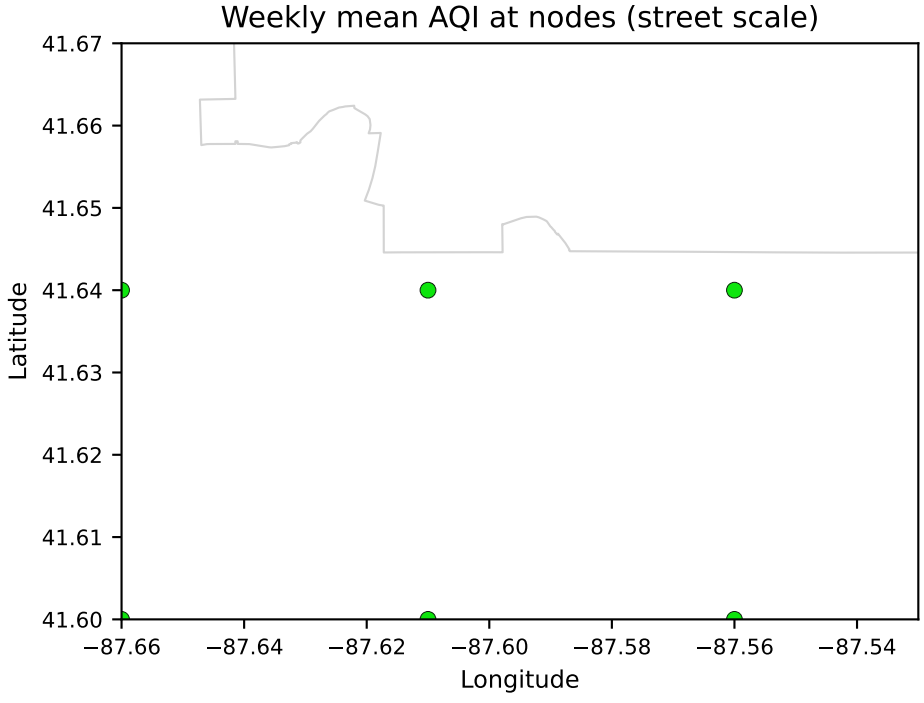
Local mean conditions: T̄≈10.5 °C, RH̄≈63%, Ū≈5.8 m/s.

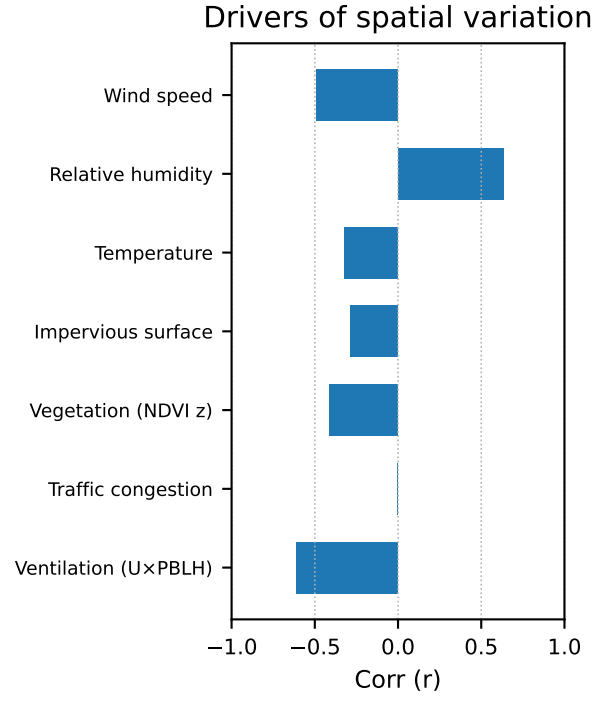
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-10-14 to 2024-10-20





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W42 (2024-10-14–2024-10-20): street-level weekly AQI median ≈ 34 (P10≈30, P90≈36).

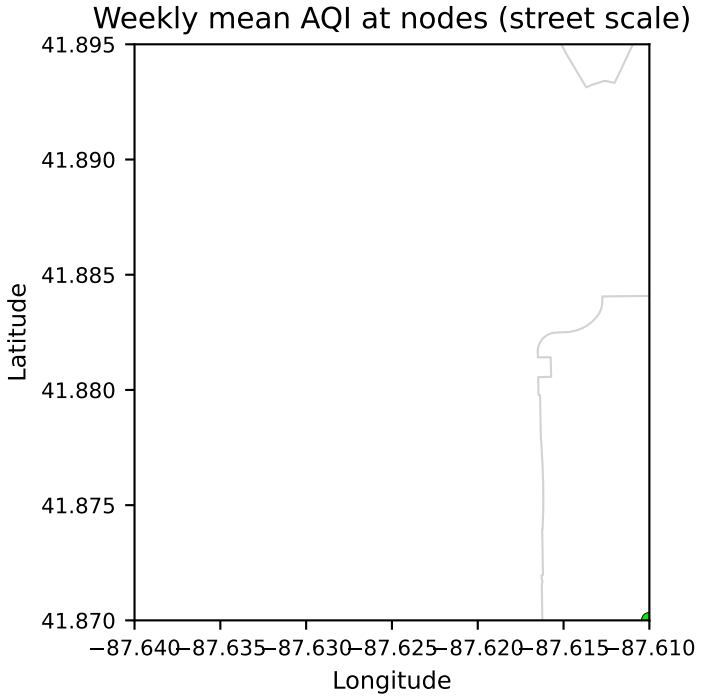
Local mean conditions: T≈10.6 °C, RH̄≈59%, Ū≈4.5 m/s.

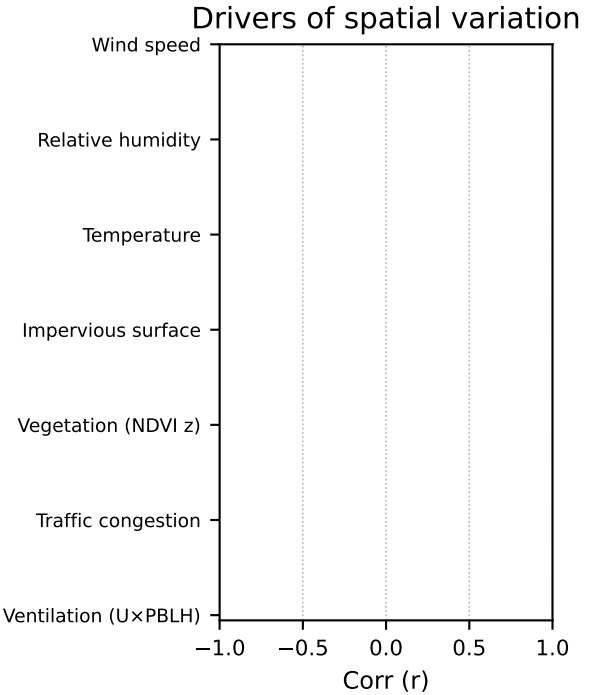
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): strong negative correlation (r≈-0.61). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.00). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.41). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.29). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.32). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-10-14 to 2024-10-20





Weekly inference:

Lakefront Downtown, week 2024-W42 (2024-10-14–2024-10-20): street-level weekly AQI median ≈ 34 (P10≈34, P90≈34).

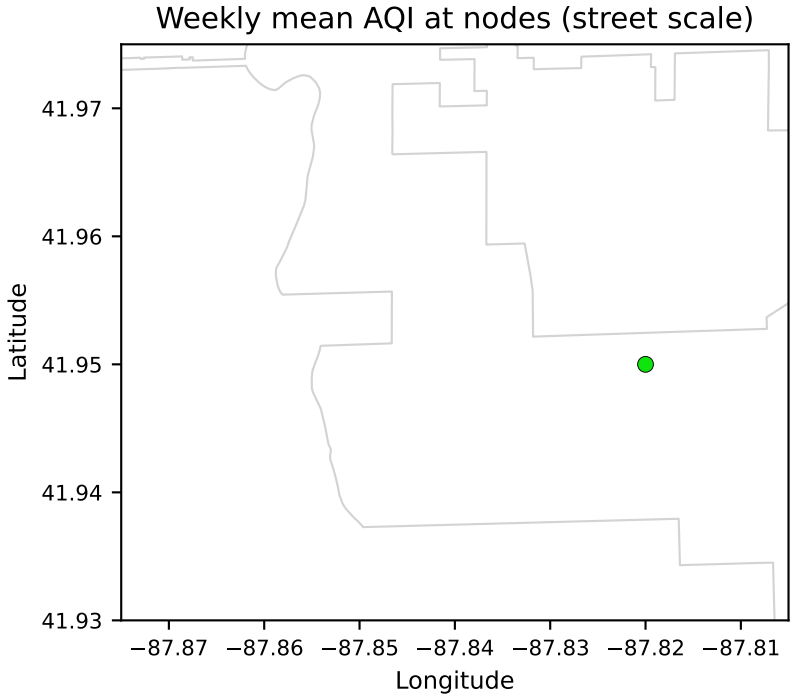
Local mean conditions: T≈10.6 °C, RH≈63%, U≈5.8 m/s.

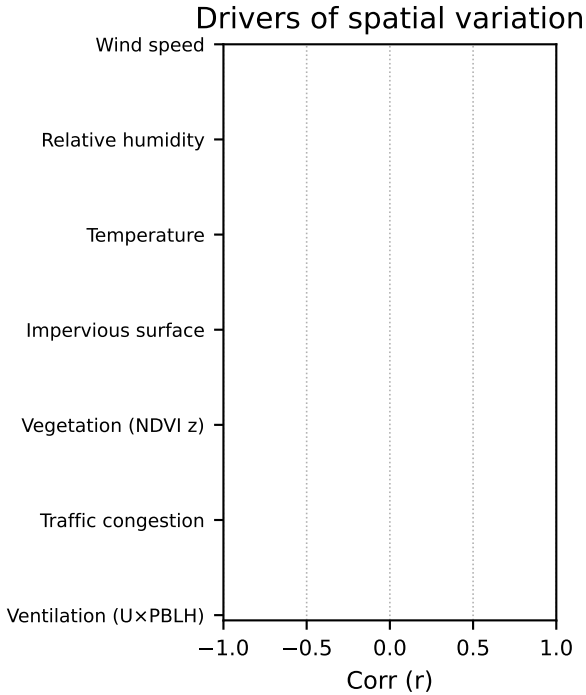
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-10-14 to 2024-10-20





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W42 (2024-10-14–2024-10-20): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

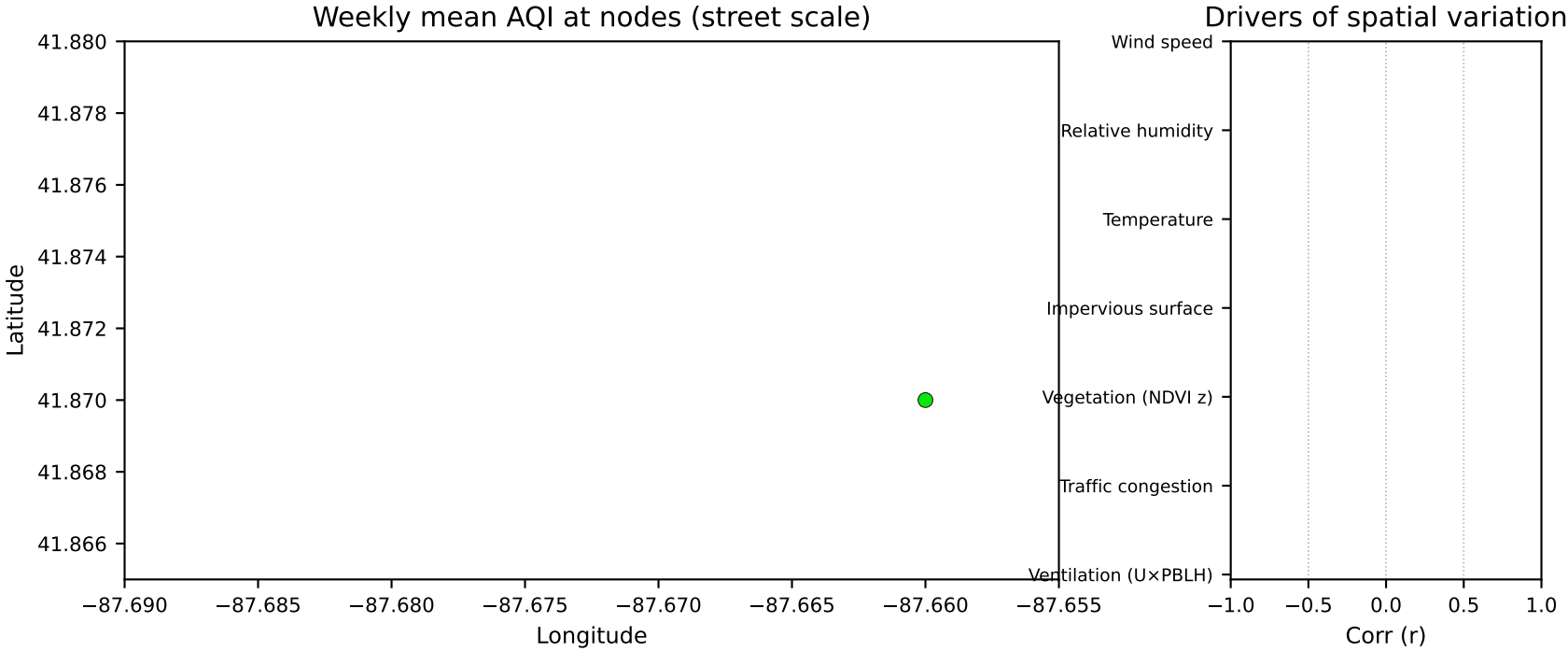
Local mean conditions: T≈10.5 °C, RH≈58%, U≈5.6 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-10-21 to 2024-10-27



Weekly inference:

Illinois Medical District, week 2024-W43 (2024-10-21–2024-10-27): street-level weekly AQI median ≈ 28 (P10≈28, P90≈28).

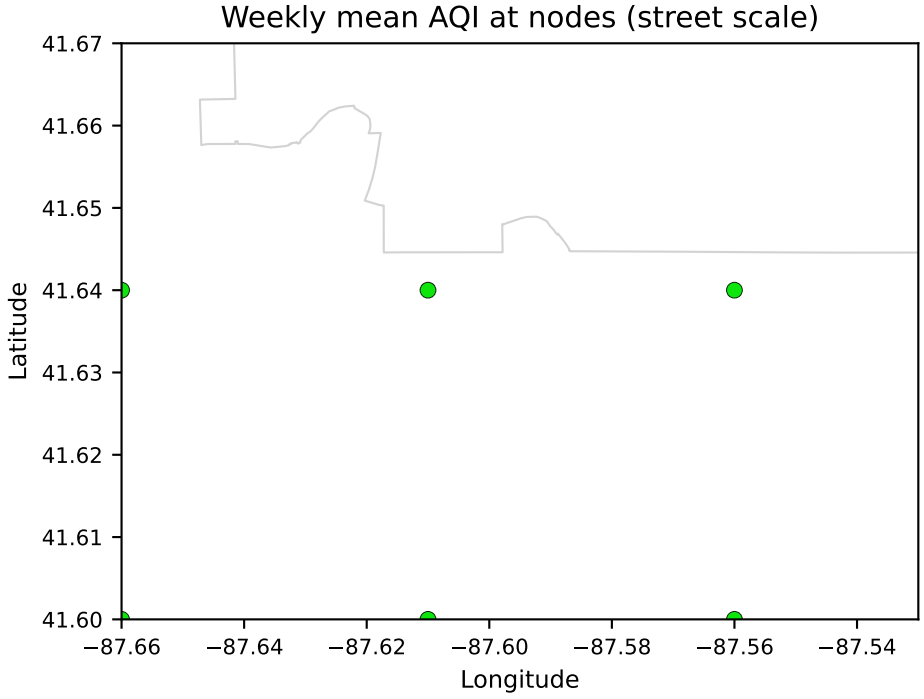
Local mean conditions: T̄≈12.8 °C, RH̄≈61%, Ū≈5.2 m/s.

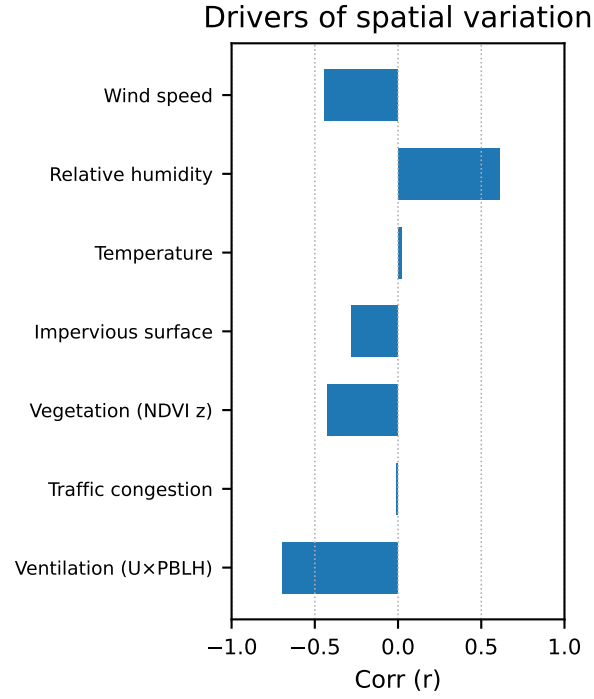
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-10-21 to 2024-10-27





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W43 (2024-10-21–2024-10-27): street-level weekly AQI median ≈ 35 (P10≈31, P90≈37).

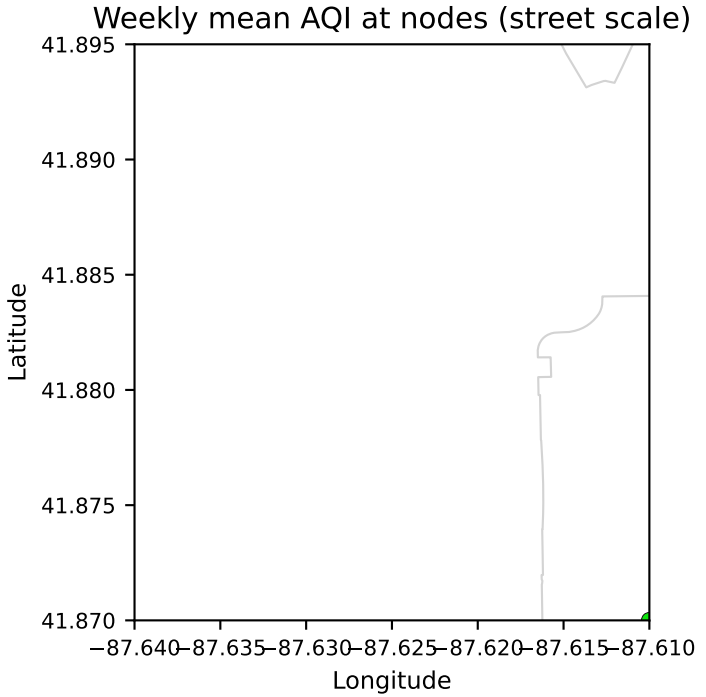
Local mean conditions: T̄≈13.0 °C, RH̄≈58%, Ū≈3.8 m/s.

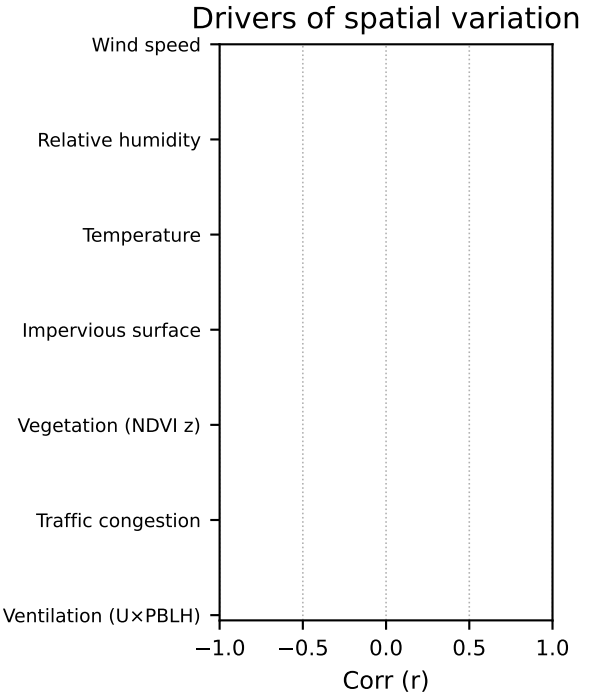
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): strong negative correlation (r≈-0.69). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible negative correlation (r≈-0.01). AQI did not systematically increase with congestion, implying regional background or meteorology dominated over local traffic this week.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.43). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: weak negative correlation (r≈-0.28). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: negligible positive correlation (r≈0.02). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-10-21 to 2024-10-27





Weekly inference:

Lakefront Downtown, week 2024-W43 (2024-10-21–2024-10-27): street-level weekly AQI median ≈ 34 (P10≈34, P90≈34).

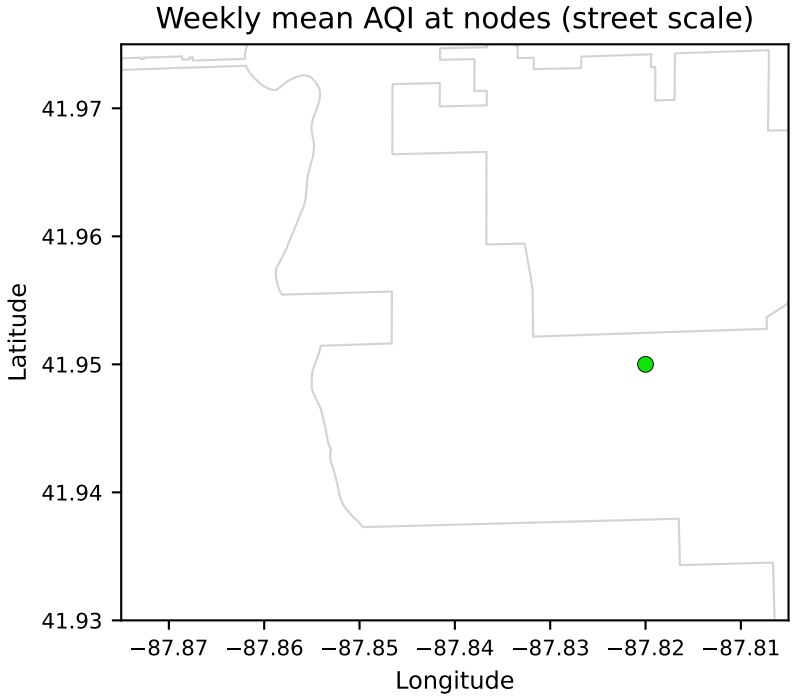
Local mean conditions: T≈12.9 °C, RH≈61%, U≈5.2 m/s.

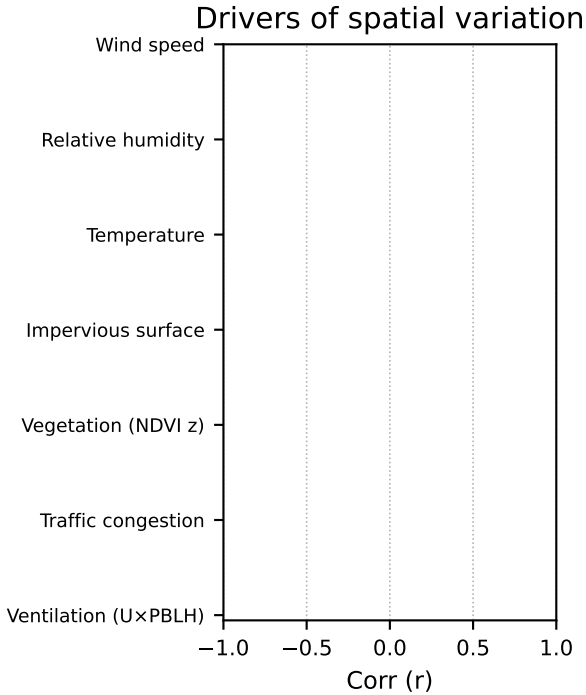
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-10-21 to 2024-10-27





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W43 (2024-10-21–2024-10-27): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

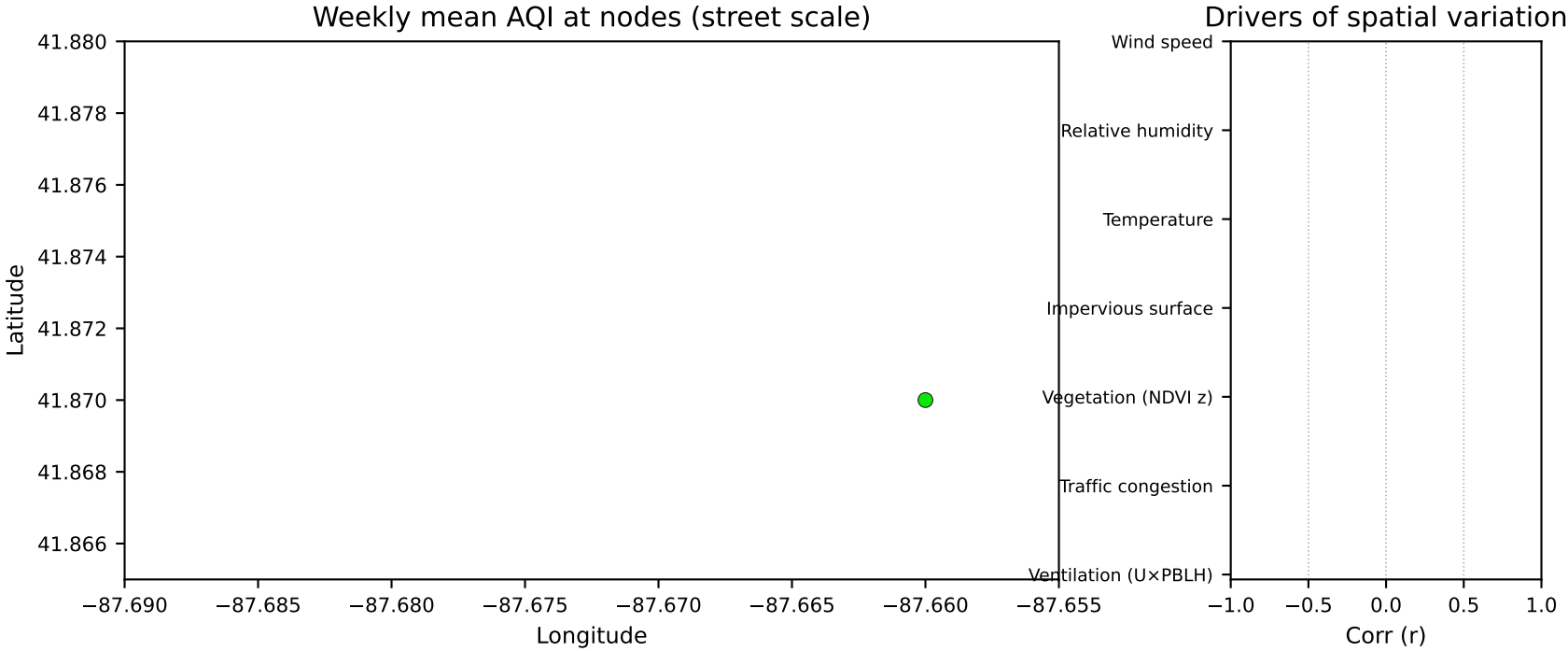
Local mean conditions: T≈12.8 °C, RH≈57%, U≈4.8 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-10-28 to 2024-11-03



Weekly inference:

Illinois Medical District, week 2024-W44 (2024-10-28–2024-11-03): street-level weekly AQI median ≈ 31 (P10≈31, P90≈31).

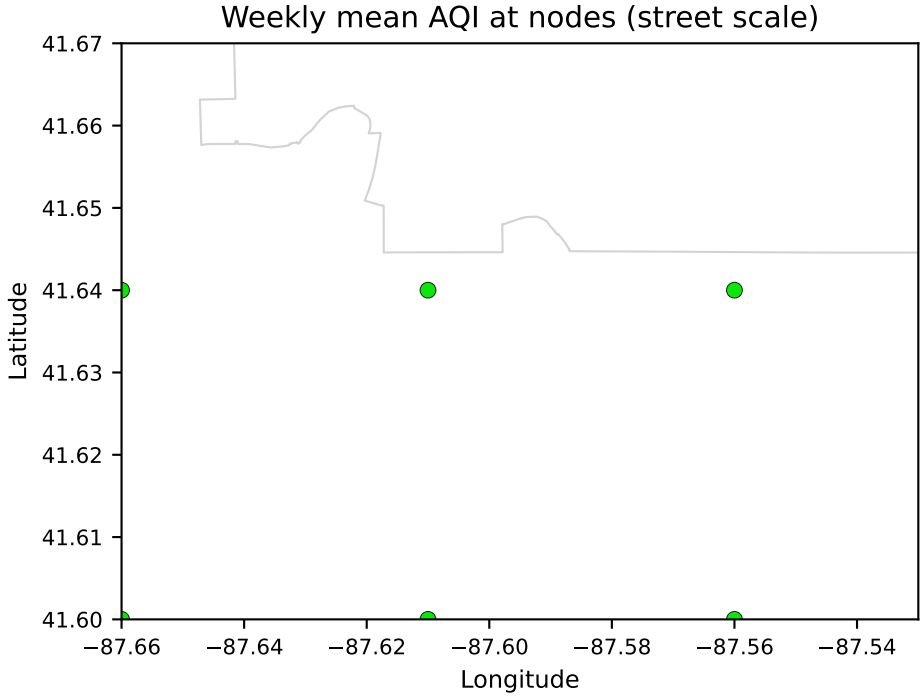
Local mean conditions: T̄≈14.0 °C, RH̄≈67%, Ū≈4.1 m/s.

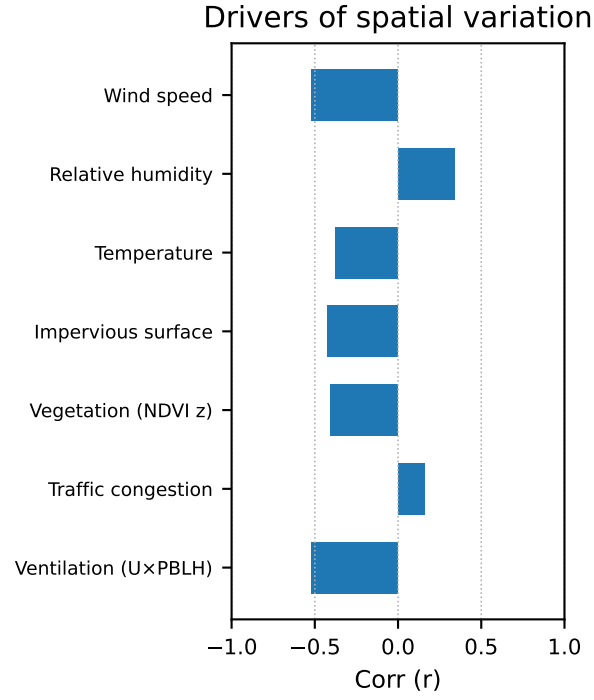
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-10-28 to 2024-11-03





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W44 (2024-10-28–2024-11-03): street-level weekly AQI median ≈ 36 (P10≈32, P90≈36).

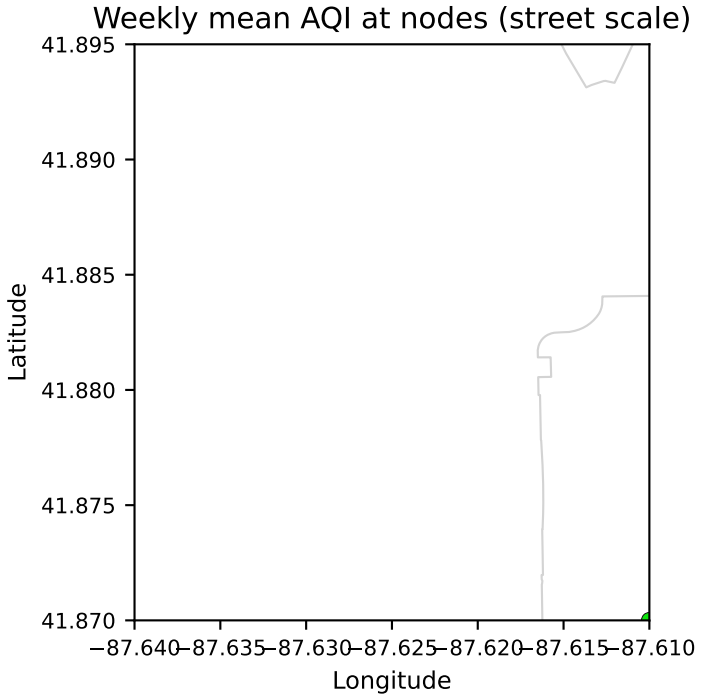
Local mean conditions: T≈14.2 °C, RH̄≈63%, Ū≈3.2 m/s.

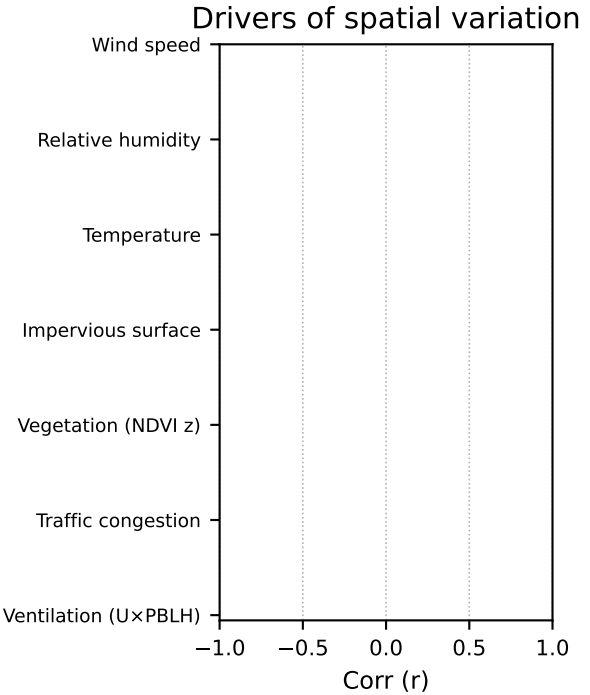
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.52). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: weak positive correlation (r≈0.16). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.41). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.43). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate negative correlation (r≈-0.38). Cooler areas showed marginally higher AQI, pointing to stagnation-dominated episodes rather than heat-driven photochemistry.

Lakefront Downtown — Street-level AQI dashboard | 2024-10-28 to 2024-11-03





Weekly inference:

Lakefront Downtown, week 2024-W44 (2024-10-28–2024-11-03): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

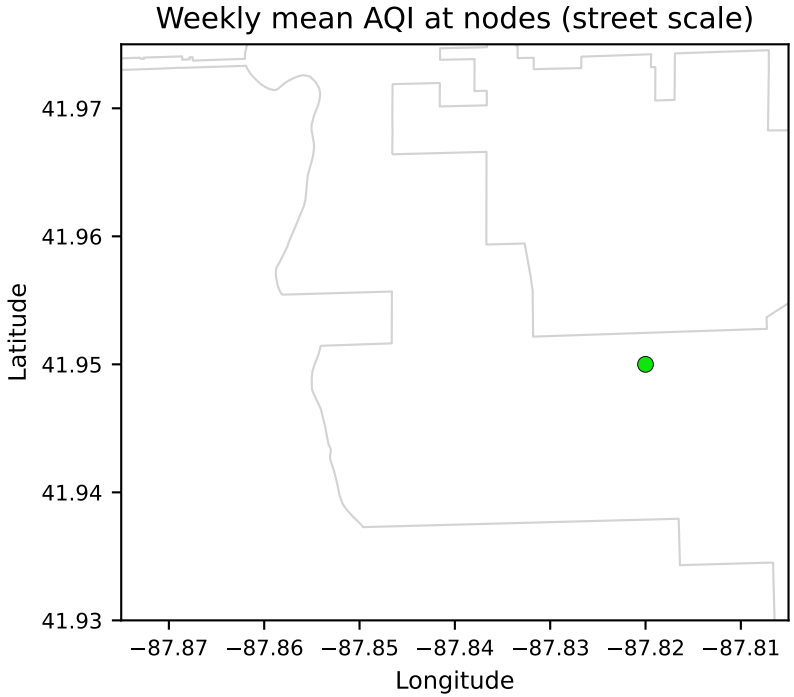
Local mean conditions: T≈14.1 °C, RH≈67%, U≈4.1 m/s.

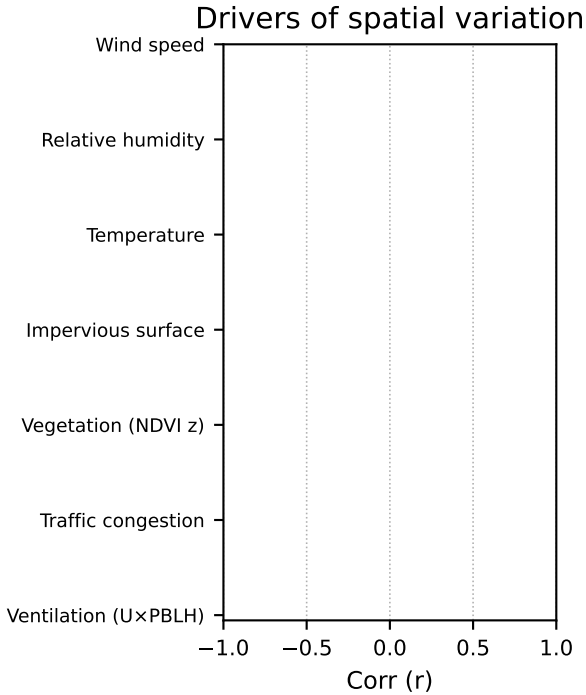
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-10-28 to 2024-11-03





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W44 (2024-10-28–2024-11-03): street-level weekly AQI median ≈ 34 (P10≈34, P90≈34).

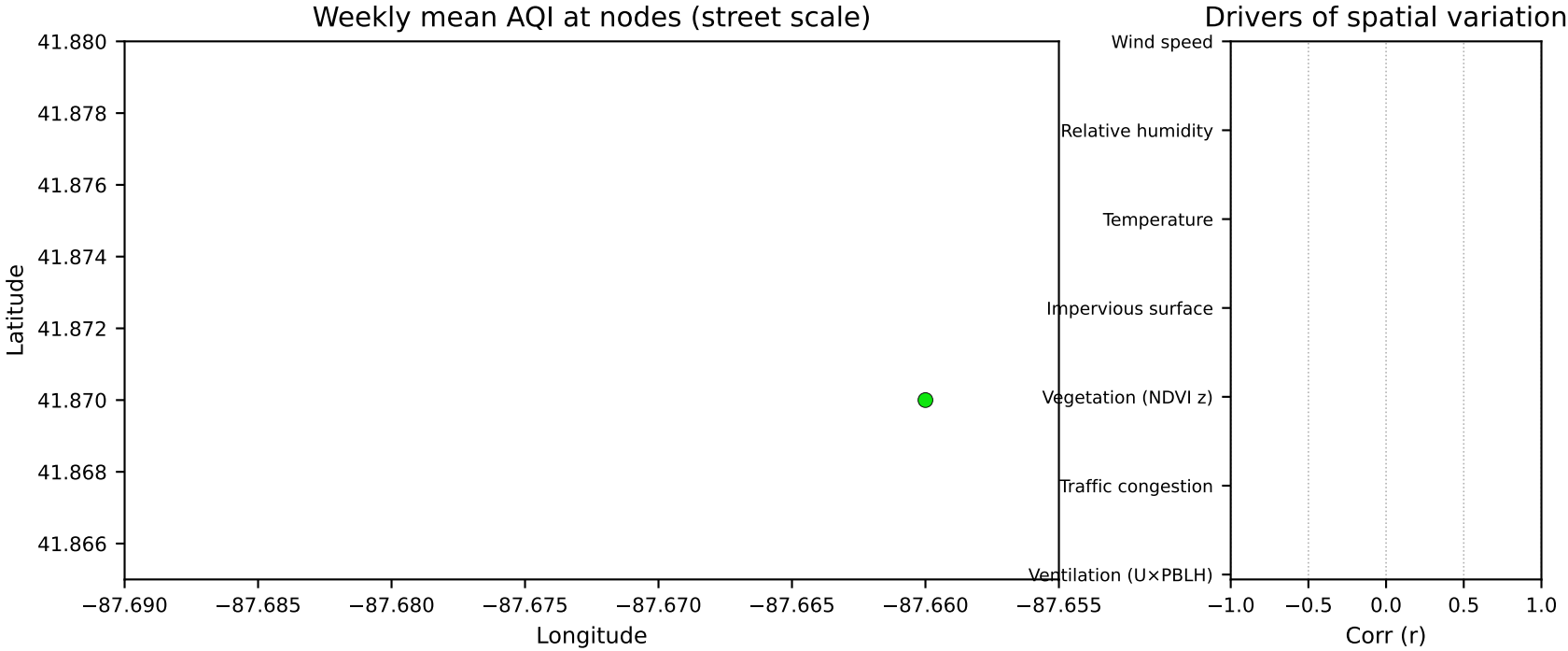
Local mean conditions: T≈14.2 °C, RH≈63%, U≈4.2 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-11-04 to 2024-11-10



Weekly inference:

Illinois Medical District, week 2024-W45 (2024-11-04–2024-11-10): street-level weekly AQI median ≈ 32 (P10≈32, P90≈32).

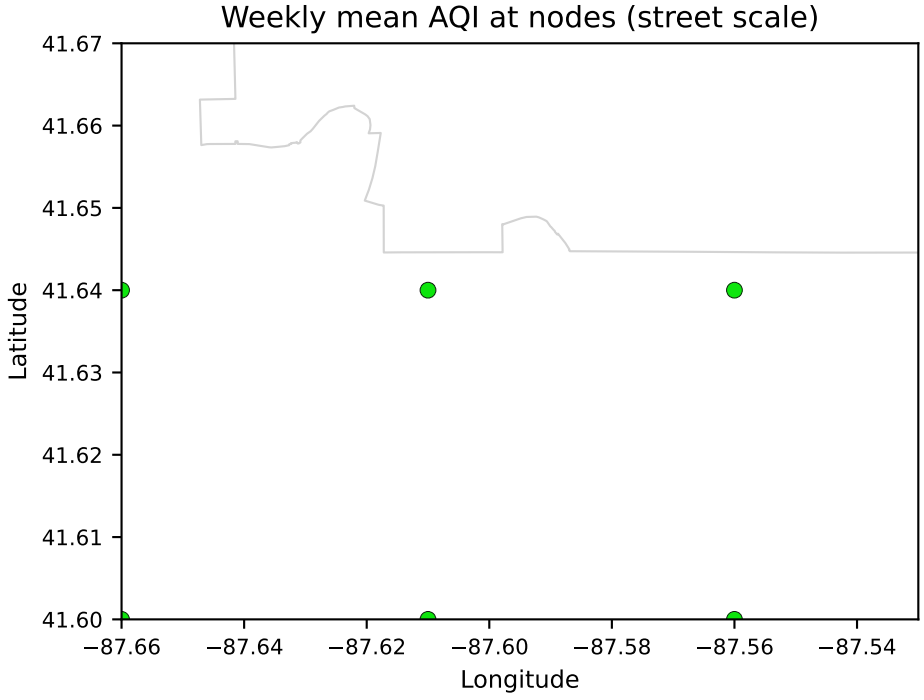
Local mean conditions: T̄≈12.7 °C, RH̄≈81%, Ū≈4.8 m/s.

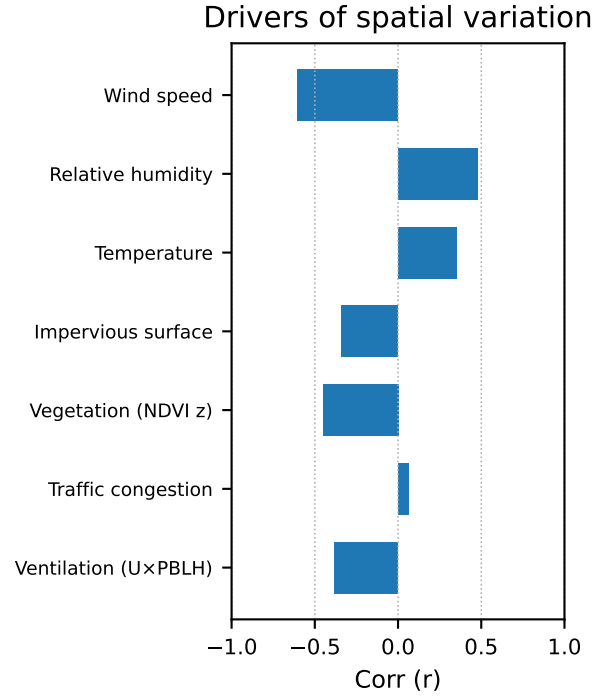
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-11-04 to 2024-11-10





Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W45 (2024-11-04–2024-11-10): street-level weekly AQI median ≈ 40 (P10≈35, P90≈41).

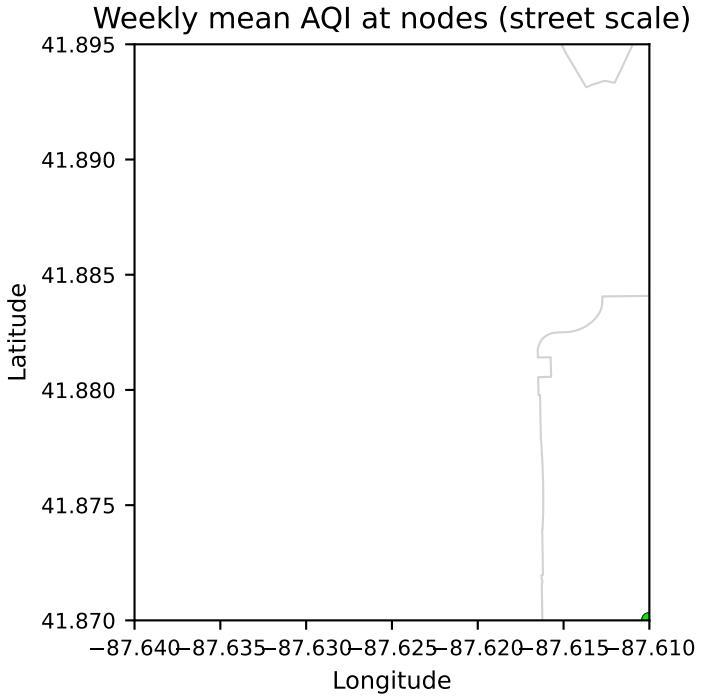
Local mean conditions: T≈12.7 °C, RH≈80%, U≈4.4 m/s.

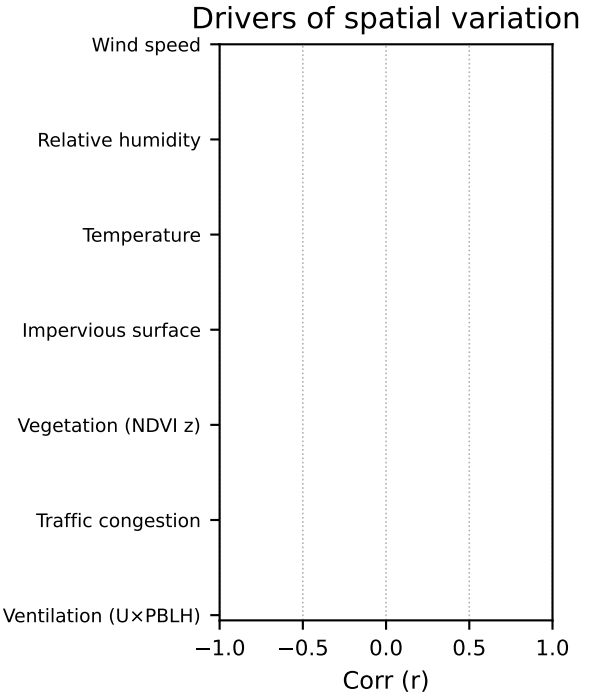
Good (0-50)
Moderate (51-100)
USG (101-150)
Unhealthy (151-200)
Very Unhealthy (201-300)
Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.38). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.06). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.45). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.34). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate positive correlation (r≈0.35). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-11-04 to 2024-11-10





Weekly inference:

Lakefront Downtown, week 2024-W45 (2024-11-04–2024-11-10): street-level weekly AQI median ≈ 38 (P10≈38, P90≈38).

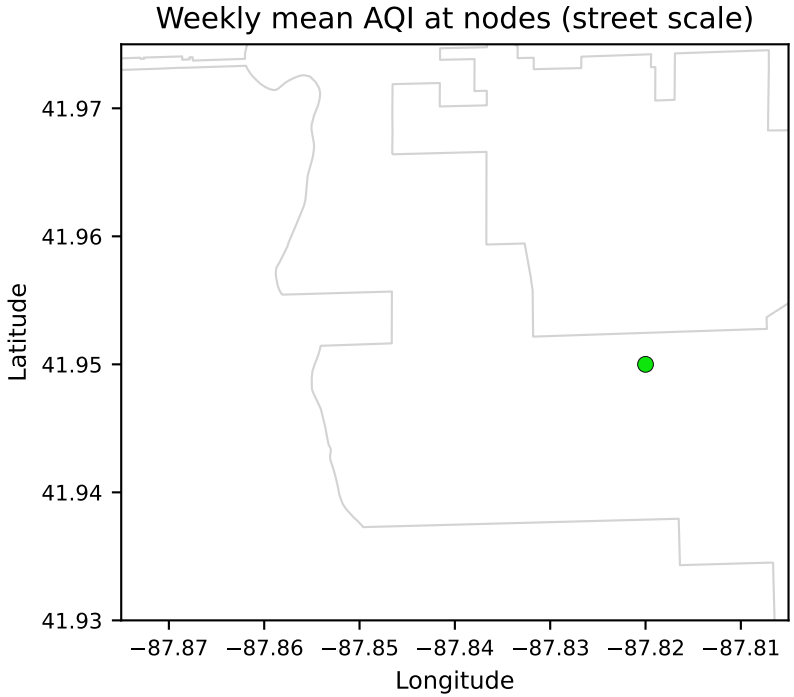
Local mean conditions: T≈12.8 °C, RH≈81%, U≈4.8 m/s.

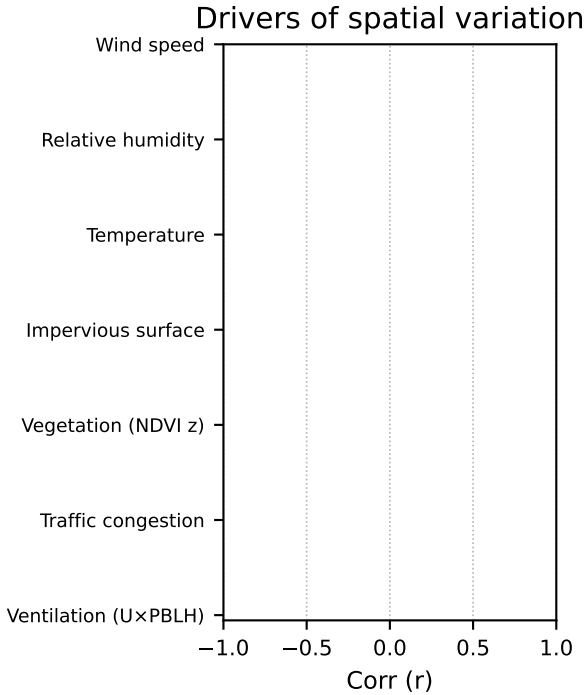
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-11-04 to 2024-11-10





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W45 (2024-11-04–2024-11-10): street-level weekly AQI median ≈ 36 (P10≈36, P90≈36).

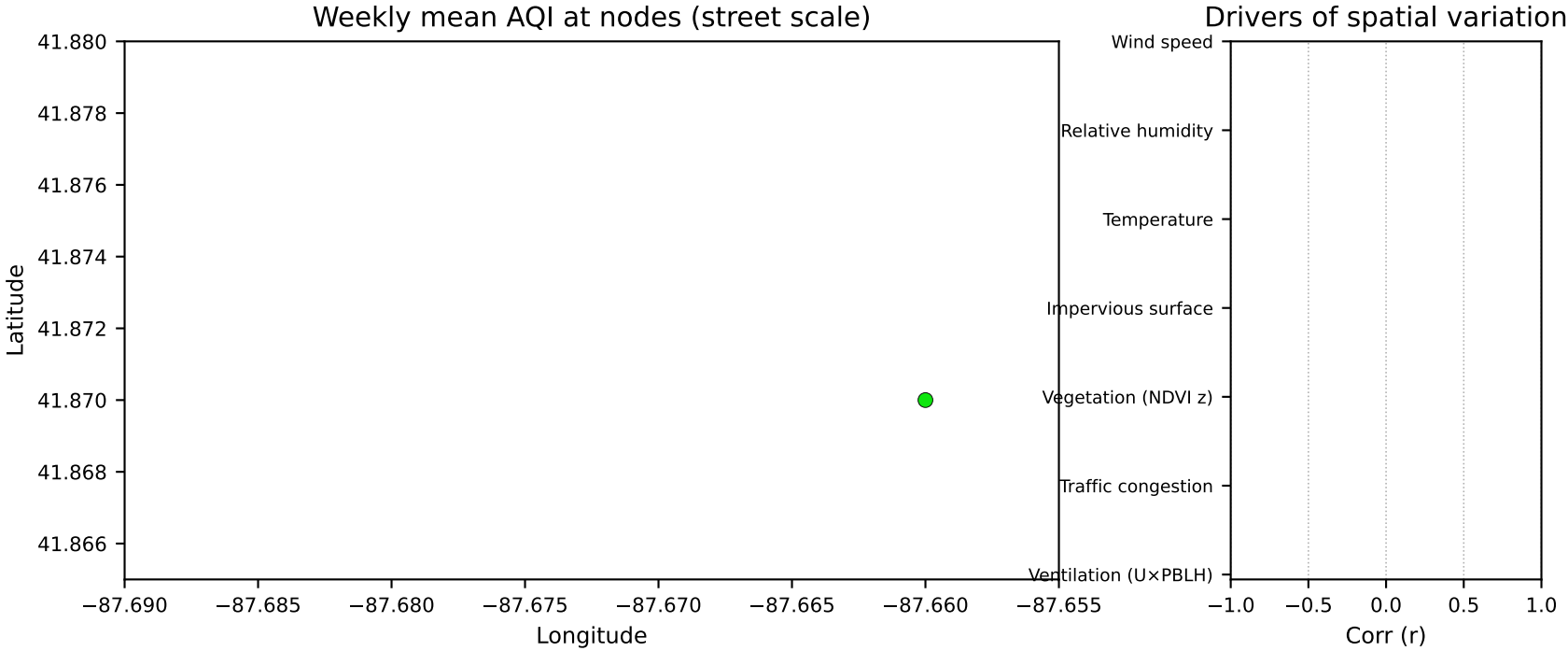
Local mean conditions: T≈12.5 °C, RH≈80%, U≈4.5 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Illinois Medical District — Street-level AQI dashboard | 2024-11-11 to 2024-11-17



Weekly inference:

Illinois Medical District, week 2024-W46 (2024-11-11–2024-11-17): street-level weekly AQI median ≈ 29 (P10≈29, P90≈29).

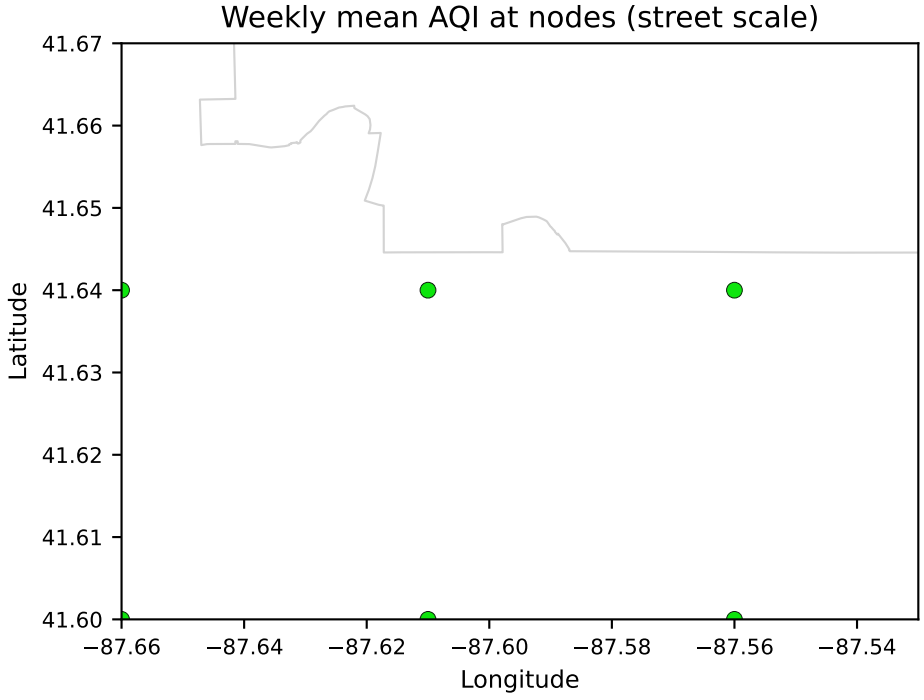
Local mean conditions: T̄≈8.8 °C, RH̄≈79%, Ū≈-0.5 m/s.

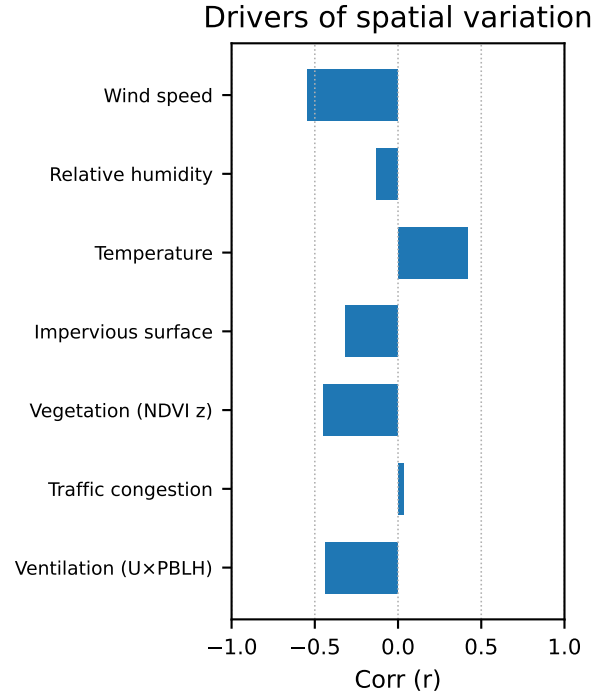
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

Southeast Industrial / Calumet Corridor — Street-level AQI dashboard | 2024-11-11 to 2024-11-17

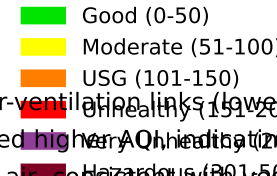




Weekly inference:

Southeast Industrial / Calumet Corridor, week 2024-W46 (2024-11-11–2024-11-17): street-level weekly AQI median ≈ 37 (P10≈31, P90≈38).

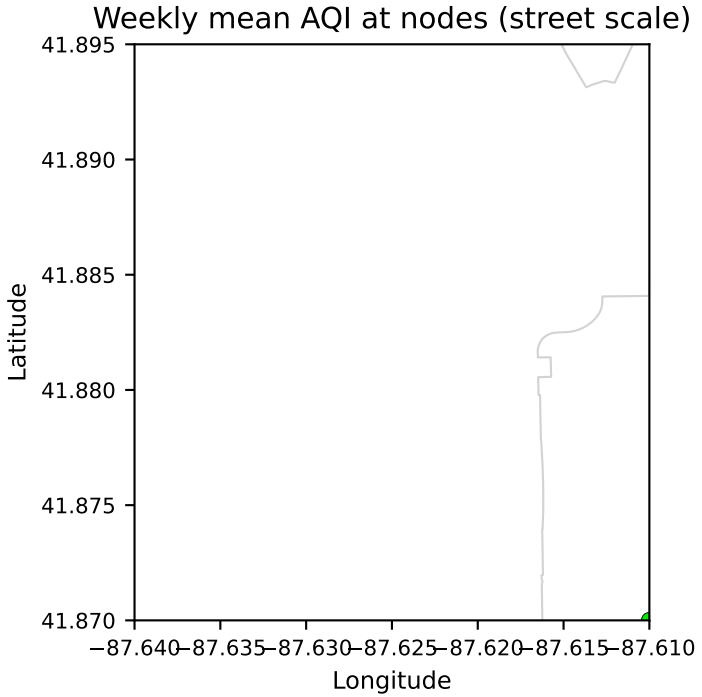
Local mean conditions: T≈8.7 °C, RH≈78%, U≈-0.2 m/s.

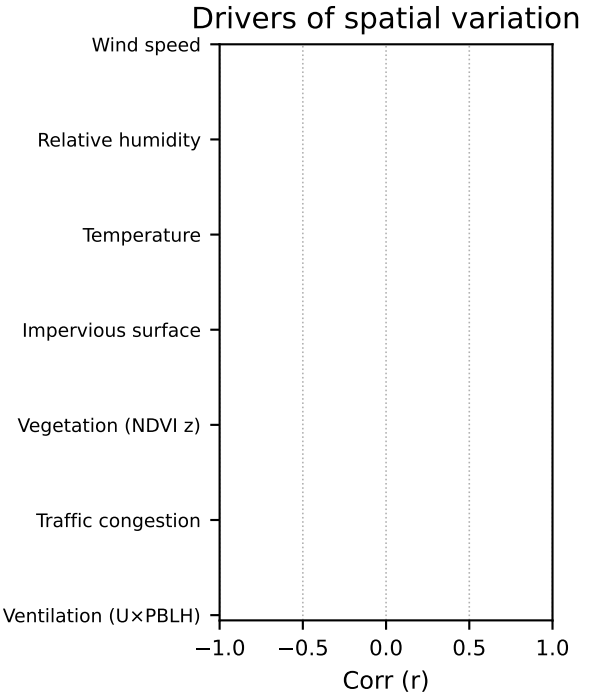


Driver-wise interpretation:

- Ventilation (U×PBLH): moderate negative correlation (r≈-0.44). Higher AQI tended to occur on weaker-ventilation links (lower wind speed × shallower PBL), consistent with local stagnation.
- Traffic congestion: negligible positive correlation (r≈0.03). Streets with heavier traffic generally showed higher AQI, indicating a clear roadway emission influence at the street scale.
- Vegetation (NDVI z): moderate negative correlation (r≈-0.45). Greener blocks tended to have cleaner air, consistent with vegetated corridors buffering emissions and enhancing dispersion.
- Impervious surface: moderate negative correlation (r≈-0.32). Impervious cells did not show systematically higher AQI, suggesting a more homogeneous pollution field across urban fabrics.
- Temperature: moderate positive correlation (r≈0.41). Warmer street segments tended to have higher AQI, consistent with photochemical enhancement and urban heat-island effects.

Lakefront Downtown — Street-level AQI dashboard | 2024-11-11 to 2024-11-17





Weekly inference:

Lakefront Downtown, week 2024-W46 (2024-11-11–2024-11-17): street-level weekly AQI median ≈ 35 (P10≈35, P90≈35).

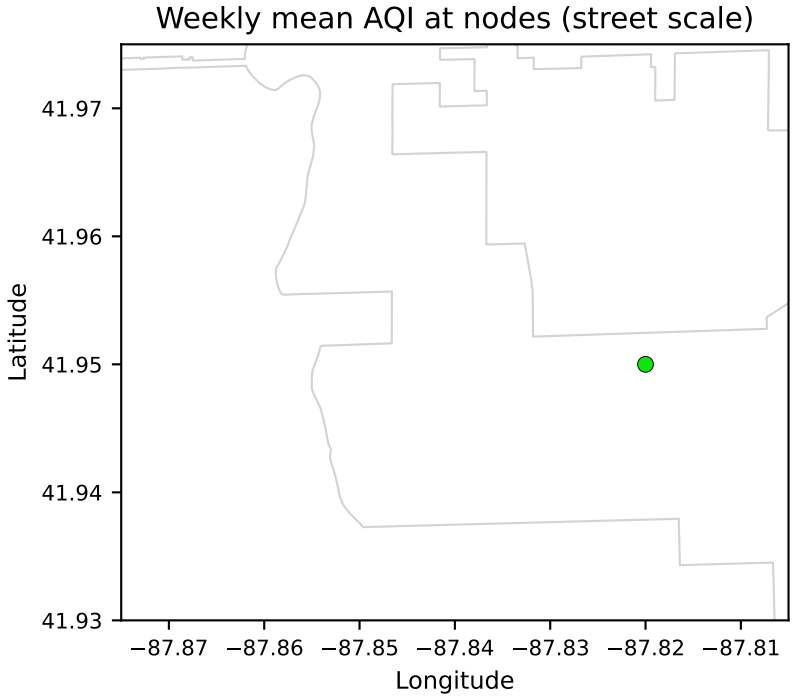
Local mean conditions: T≈8.9 °C, RH≈79%, U≈-0.5 m/s.

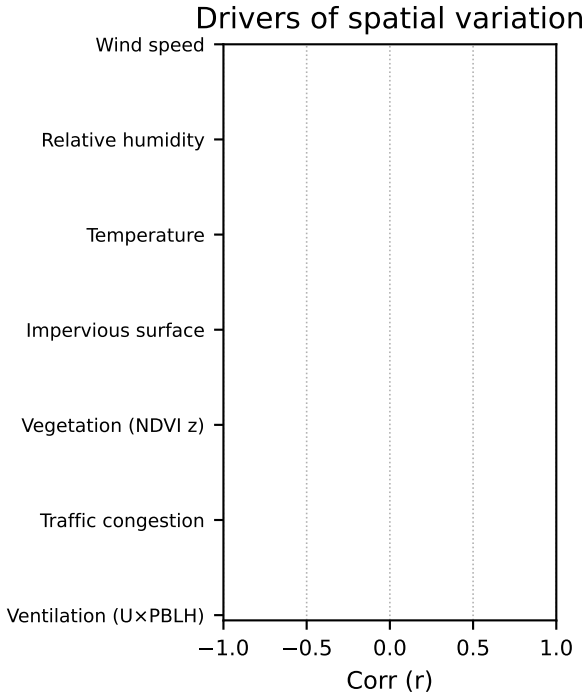
- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

High-vegetation Area (Schiller Woods) — Street-level AQI dashboard | 2024-11-11 to 2024-11-17





Weekly inference:

High-vegetation Area (Schiller Woods), week 2024-W46 (2024-11-11–2024-11-17): street-level weekly AQI median ≈ 33 (P10≈33, P90≈33).

Local mean conditions: T≈8.5 °C, RH≈78%, U≈-0.1 m/s.

Driver-wise interpretation:

- Ventilation (U×PBLH): data were insufficient to assess spatial influence in this neighbourhood.
- Traffic congestion: data were insufficient to assess spatial influence in this neighbourhood.
- Vegetation (NDVI z): data were insufficient to assess spatial influence in this neighbourhood.
- Impervious surface: data were insufficient to assess spatial influence in this neighbourhood.
- Temperature: data were insufficient to assess spatial influence in this neighbourhood.

- Good (0-50)
- Moderate (51-100)
- USG (101-150)
- Unhealthy (151-200)
- Very Unhealthy (201-300)
- Hazardous (301-500)