

Ground Level Particulate Notification Report - 12 December, 2025

Adelaide Brighton Cement, Birkenhead Works
62 Elder Road, Birkenhead, SA 501
EPA Licence No: 1126

Summary

The 24-hour average particulate matter monitoring data collected at the Community Park and Walton Street BAM monitoring sites during 12 December, 2025 is shown in [Table 1](#) below. The data indicates that:

- The 24-hour average PM_{10} concentration measured at Community Park BAM of $54.0 \mu\text{g}/\text{m}^3$ exceeded the EPP Air criterion of $50 \mu\text{g}/\text{m}^3$

Table 1: Monitoring Summary

| Monitoring Location | Pollutant | 24-hour average ($\mu\text{g}/\text{m}^3$) | EPP Air Criterion ($\mu\text{g}/\text{m}^3$) |
|---------------------|------------|--|--|
| Community Park BAM | PM_{10} | 54.0 | 50 |
| | $PM_{2.5}$ | 7.2 | 25 |
| Walton Street | PM_{10} | 35.9 | 50 |
| | $PM_{2.5}$ | 6.7 | 25 |

Dust was generated from earth works alongside the Northern side of the Port River Expressway in Gillman, which was carried by easterly winds directly across to the suburbs of Birkenhead and Peterhead directly to the west of Adbri's site. Dust levels started to drop when wind direction changed to the south/southwesterly directions.

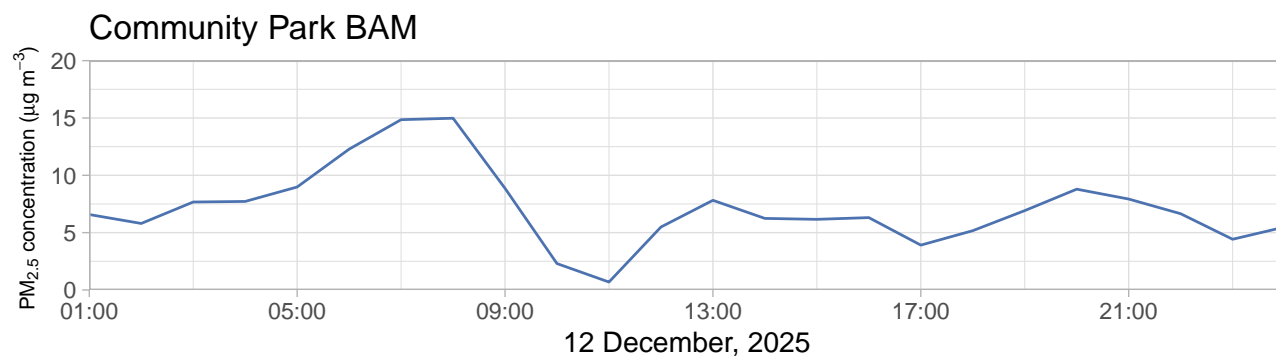
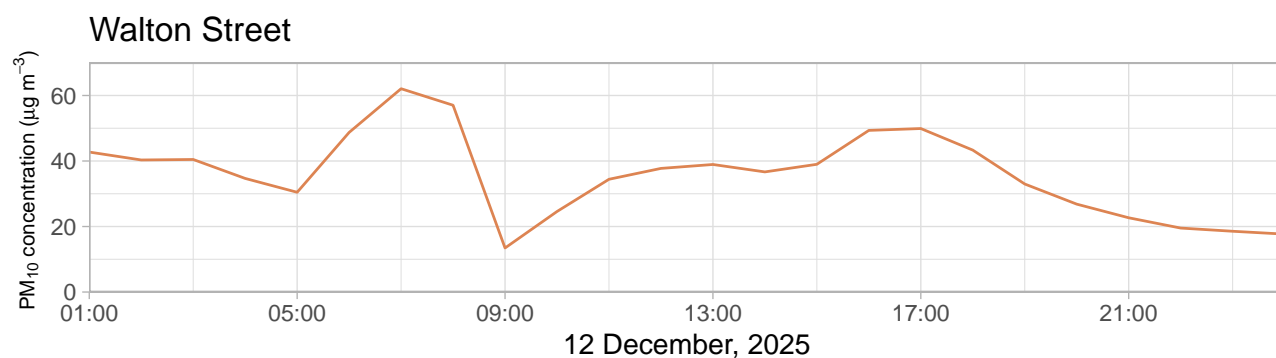
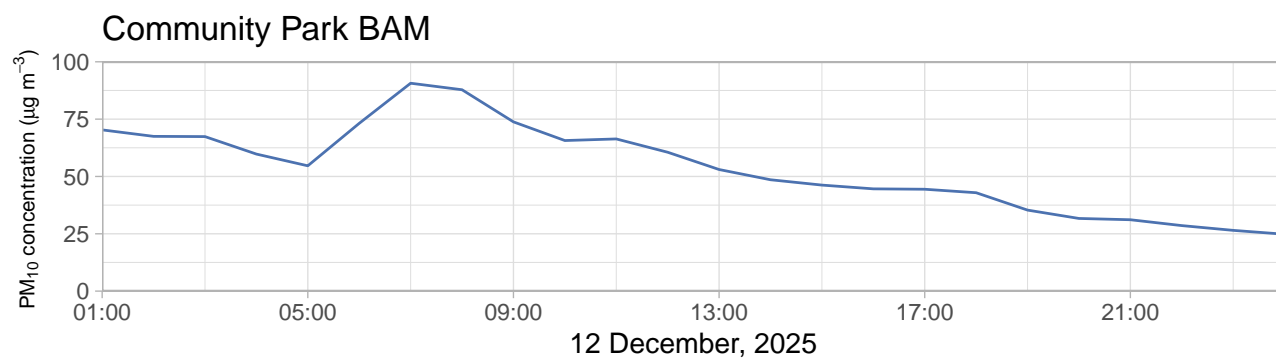
Community Monitoring

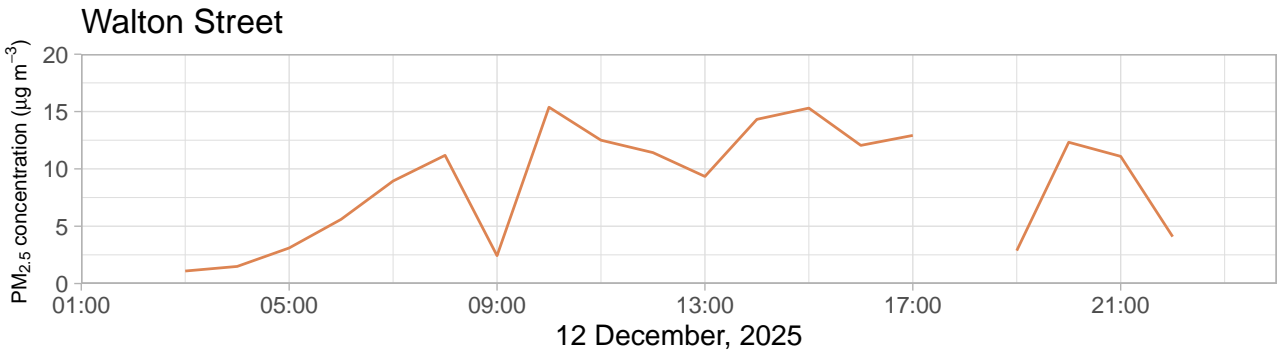
Monitoring data collected at the community monitoring sites is presented in this section.

The table below shows the proportion of PM₁₀ and PM_{2.5} measured at each monitor, according to the average wind direction at the time of monitoring.

| Monitoring Location | Direction | PM ₁₀ proportion (%) | PM _{2.5} proportion (%) |
|---------------------|----------------------------------|---------------------------------|----------------------------------|
| Community Park BAM | From direction of ABC (WD < 180) | 67 | 78 |
| Community Park BAM | From other direction (WD > 180) | 33 | 22 |
| Walton Street | From direction of ABC (WD < 180) | 56 | 47 |
| Walton Street | From other direction (WD > 180) | 44 | 53 |

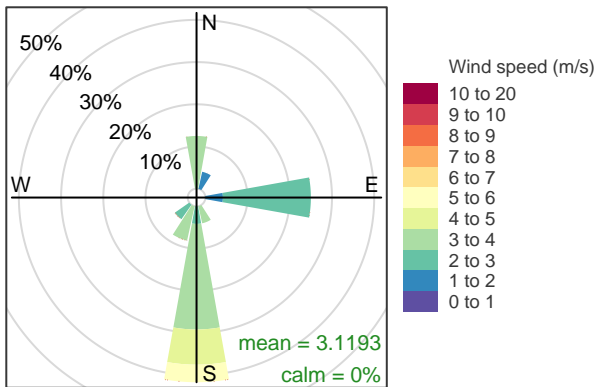
The figures below show the time series of 1-hour average measurements throughout 12 December, 2025





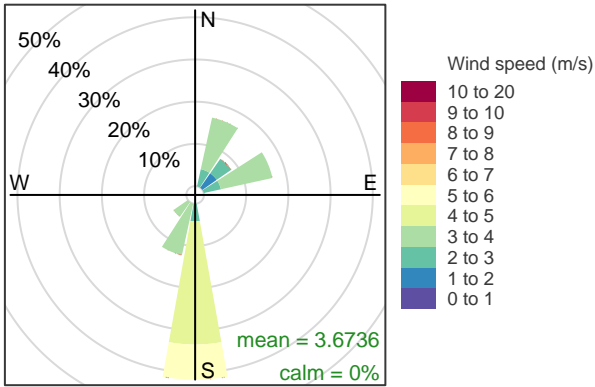
The figures below show wind roses summarising the period 12 December, 2025.

Community Park BAM



Frequency of counts by wind direction (%)

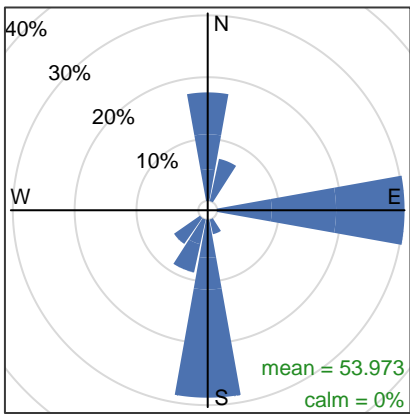
Walton Street



Frequency of counts by wind direction (%)

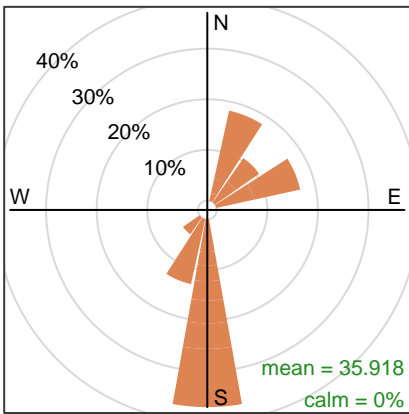
The figures below show dust roses summarising the period 12 December, 2025

Community Park BAM – PM₁₀



Proportion contribution to the mean (%)

Walton Street – PM₁₀



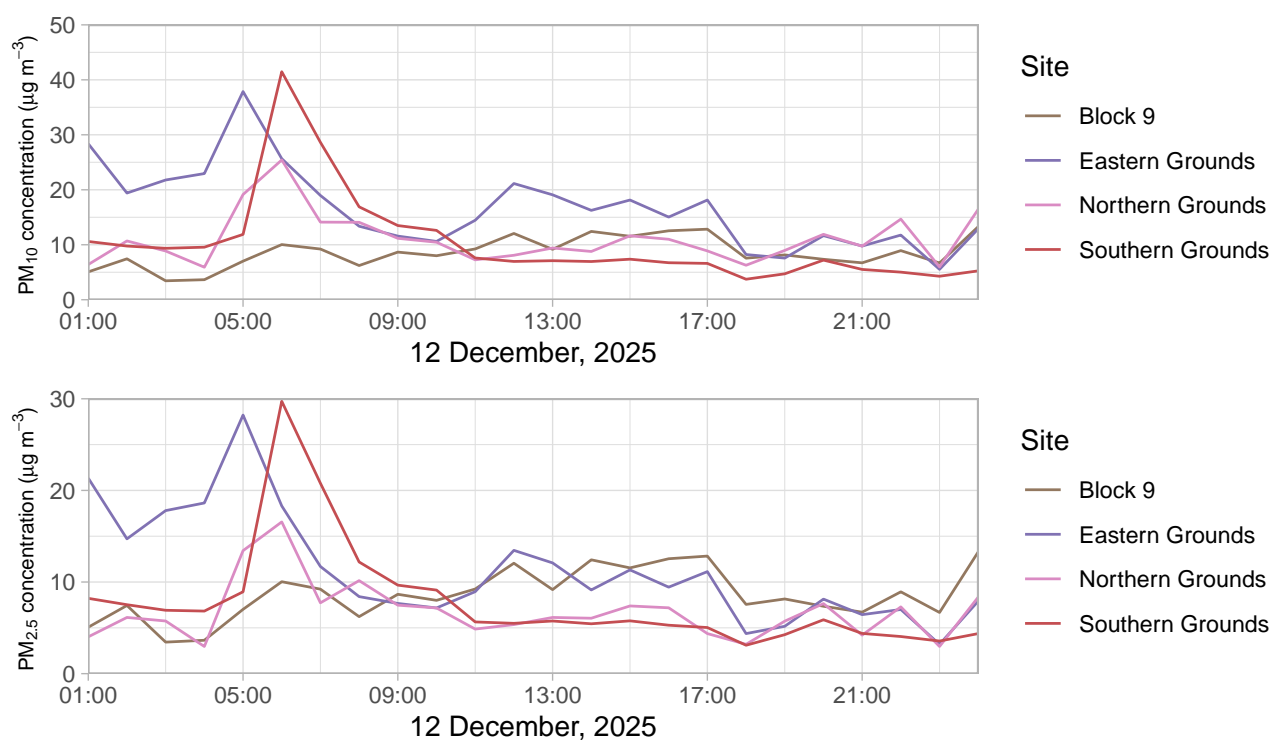
Proportion contribution to the mean (%)

Onsite Monitoring

Monitoring data collected at ABC's onsite monitors is presented in this section. The table below shows the 24-hour average concentrations measured at the onsite monitors.

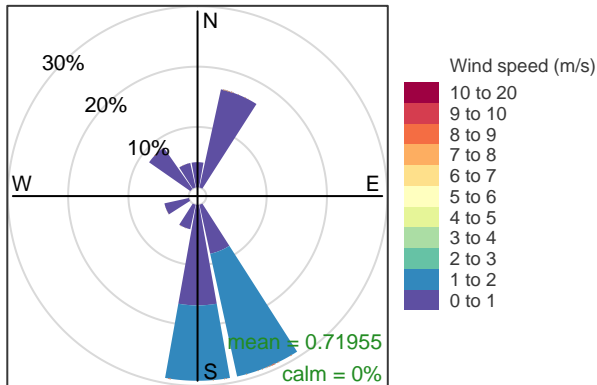
| Monitoring Location | PM ₁₀ ($\mu\text{g}/\text{m}^3$) | PM _{2.5} ($\mu\text{g}/\text{m}^3$) |
|---------------------|---|--|
| Southern Grounds | 10 | 8 |
| Eastern Grounds | 17 | 11 |
| Block 9 | 9 | 9 |
| Northern Grounds | 11 | 7 |

The figure below shows the time series of 1-hour average measurements throughout 12 December, 2025 for each onsite monitor.



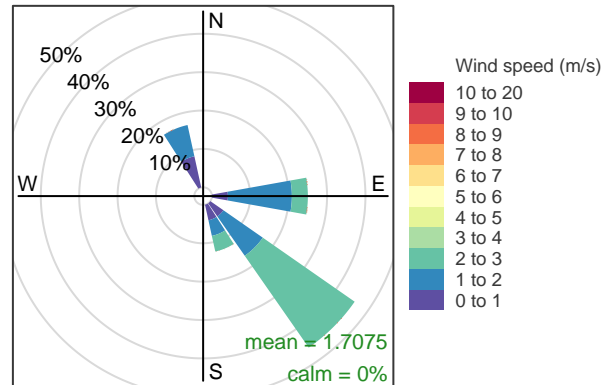
The figures below show wind and dust roses summarising the period 12 December, 2025 for each onsite monitor.

Southern Grounds



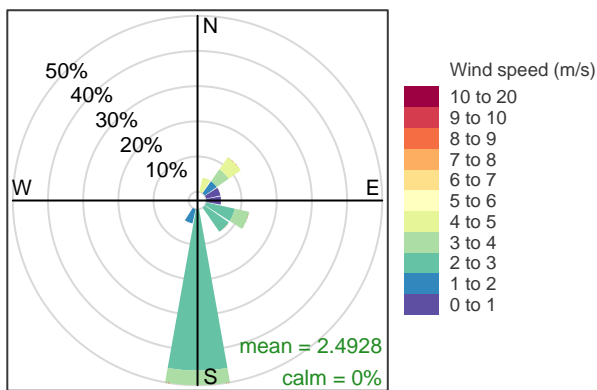
Frequency of counts by wind direction (%)

Eastern Grounds



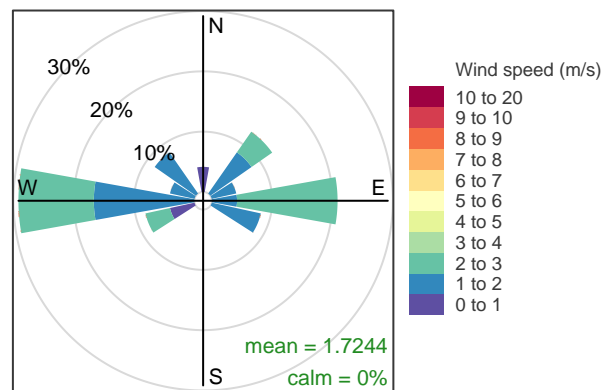
Frequency of counts by wind direction (%)

Block 9



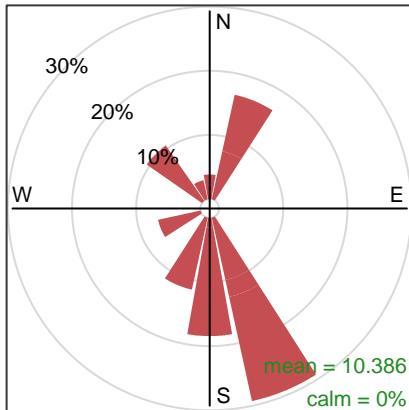
Frequency of counts by wind direction (%)

Northern Grounds

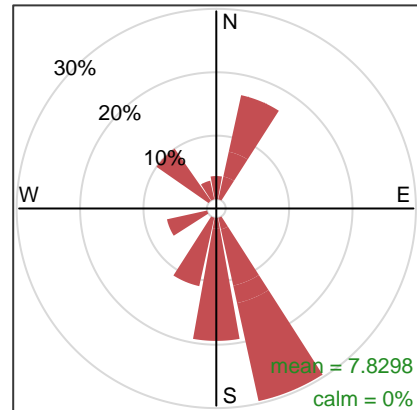


Frequency of counts by wind direction (%)

Southern Grounds – PM₁₀



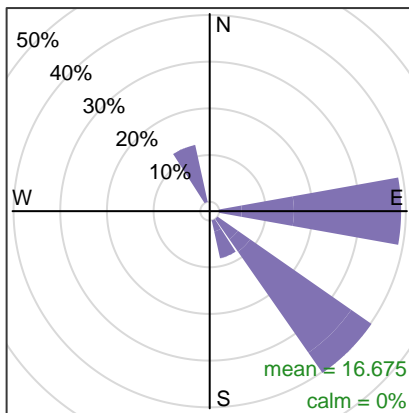
Southern Grounds – PM_{2.5}



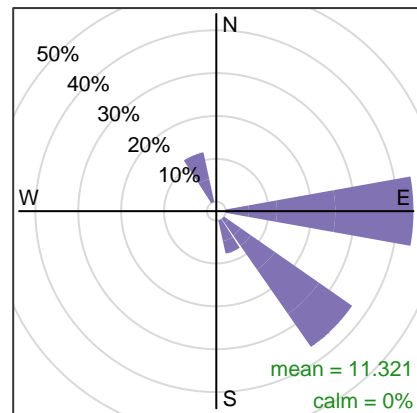
Proportion contribution to the mean (%)

Proportion contribution to the mean (%)

Eastern Grounds – PM₁₀



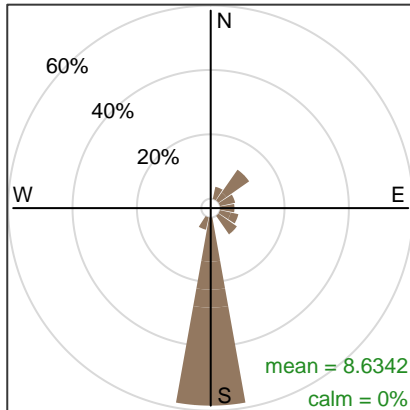
Eastern Grounds – PM_{2.5}



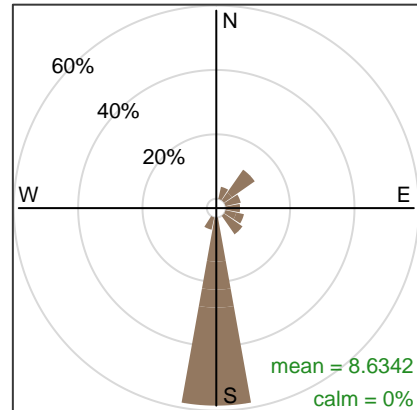
Proportion contribution to the mean (%)

Proportion contribution to the mean (%)

Block 9 – PM₁₀



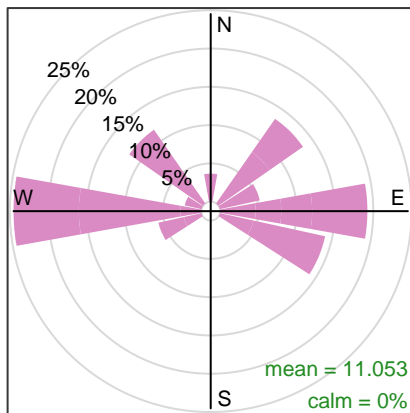
Block 9 – PM_{2.5}



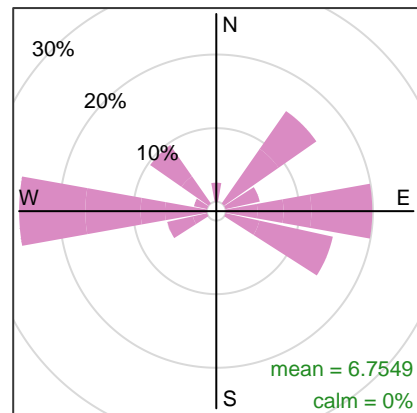
Proportion contribution to the mean (%)

Proportion contribution to the mean (%)

Northern Grounds – PM₁₀



Northern Grounds – PM_{2.5}



Proportion contribution to the mean (%)

Proportion contribution to the mean (%)

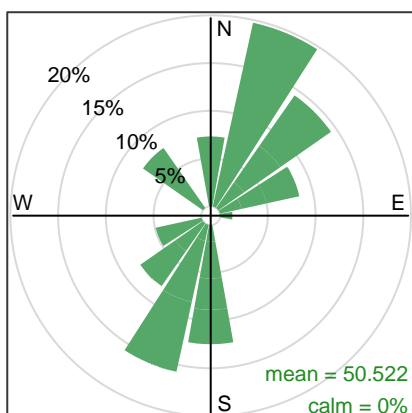
EPA Monitoring

The 24-hour average PM₁₀ and PM_{2.5} concentrations measured at the EPA monitoring sites are shown in the table below. Note that the data has not been validated.

| Site | Region | PM ₁₀ (µg/m ³) | PM _{2.5} (µg/m ³) |
|------------------------|-----------------------|---------------------------------------|--|
| CBD | Adelaide CBD | 20 | 6 |
| Christies | Southern Adelaide | 28 | - |
| Elizabeth | Northern Adelaide | 26 | 6 |
| Le Fevre 1 | Northwestern Adelaide | 50 | 6 |
| Le Fevre 2 | Northwestern Adelaide | 26 | 3 |
| Port Pirie Oliver St | Spencer Gulf | 38 | - |
| Whyalla Schulz Reserve | Spencer Gulf | 27 | - |
| Whyalla Walls St | Spencer Gulf | 27 | - |

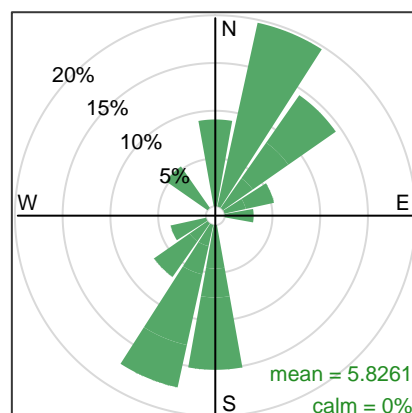
The dust roses below show the distribution of PM₁₀ and PM_{2.5} measured at Le Fevre 1 for the period 12 December, 2025 .

Le Fevre 1 – PM₁₀



Proportion contribution to the mean (%)

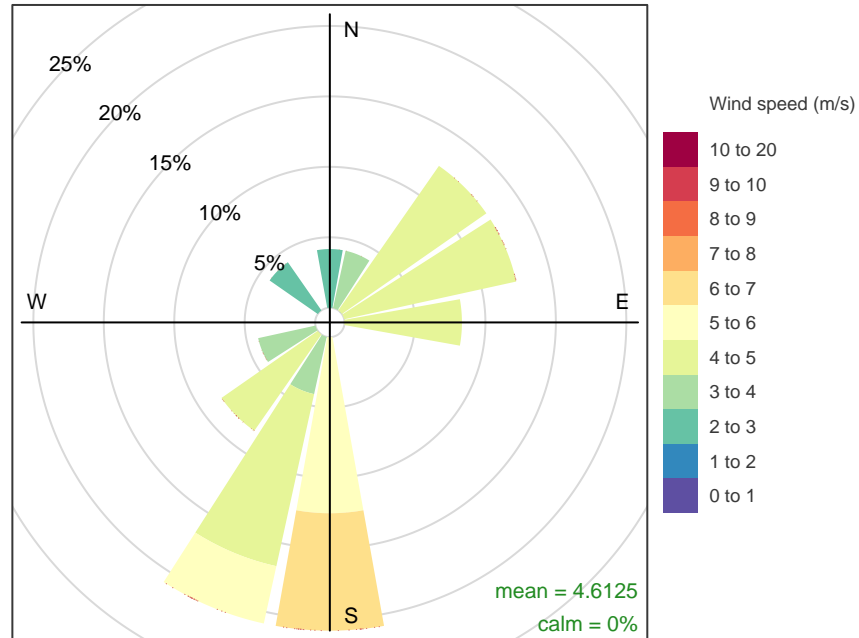
Le Fevre 1 – PM_{2.5}



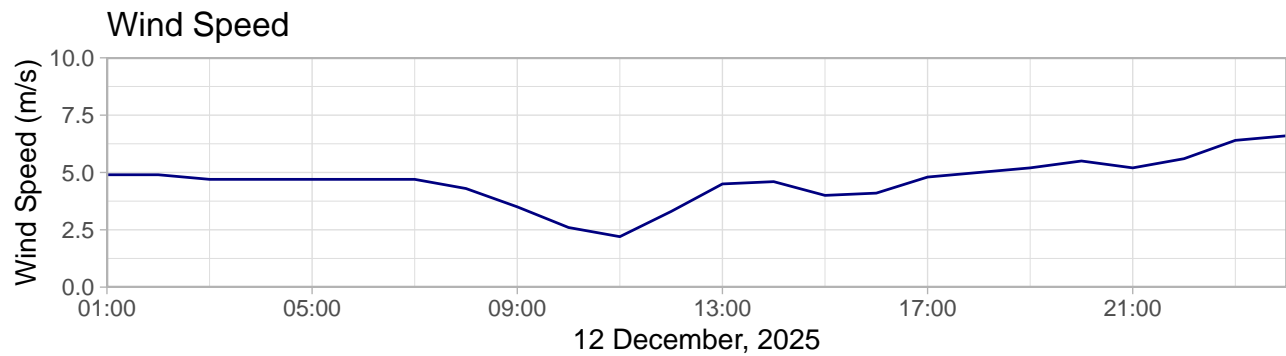
Proportion contribution to the mean (%)

Meteorological Monitoring

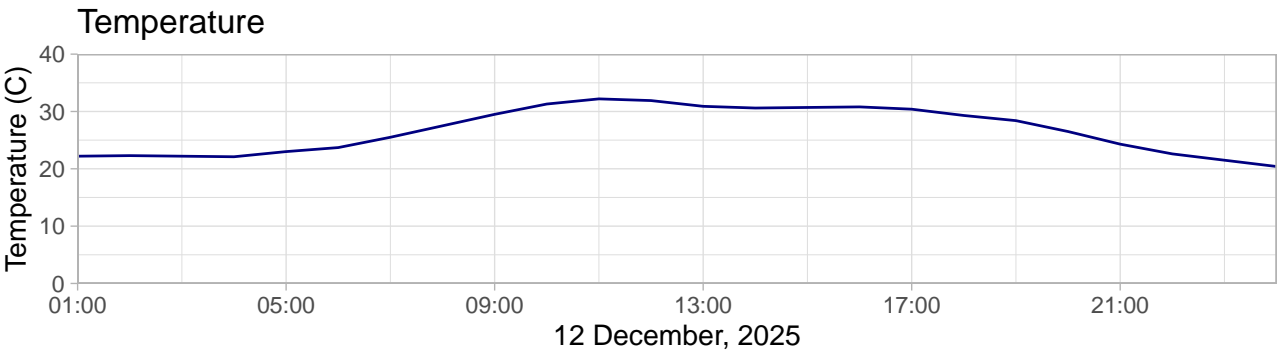
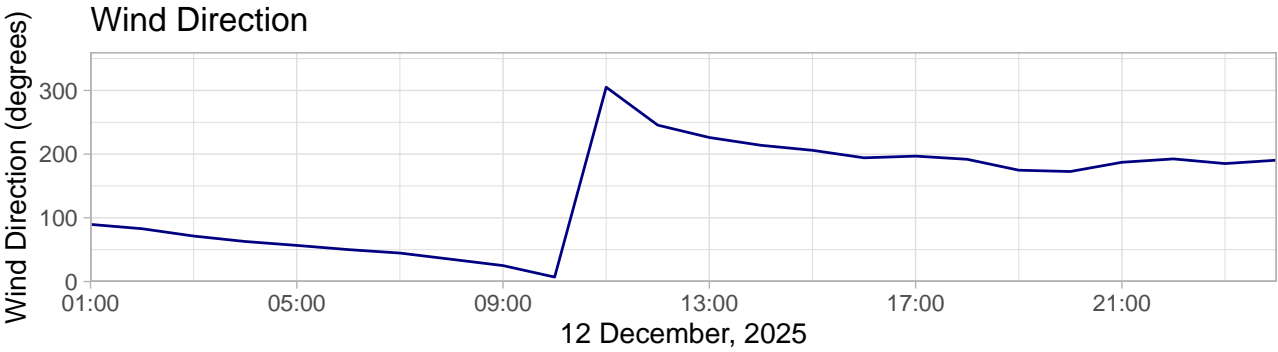
The following figures show meteorological parameters measured¹ throughout the day.



Frequency of counts by wind direction (%)



¹Powered by [Meteomatics](#)



Recent air quality data measured by ABC or EPA is indicative only and may be affected by instruments not working correctly, power failures and the like. Data is published directly from the monitors and will be validated at a later date.