

Details of air quality monitoring, on plots 2A and 2B, in response to condition 7



RVTGROUP

Projects

Monitors

Air

Noise

Vibration

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Support

Craig Dixon

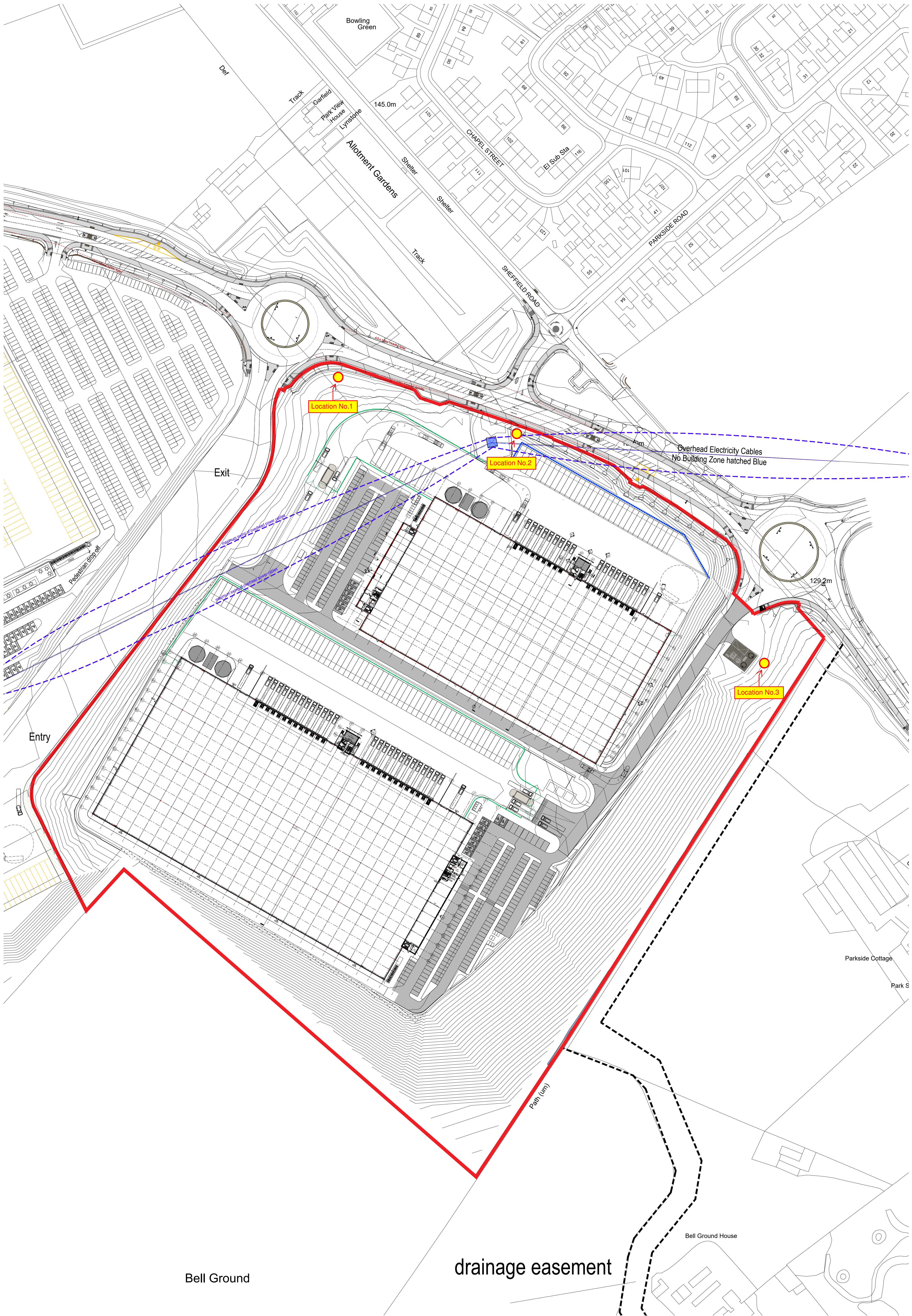
Monitors / Air

Air Monitors

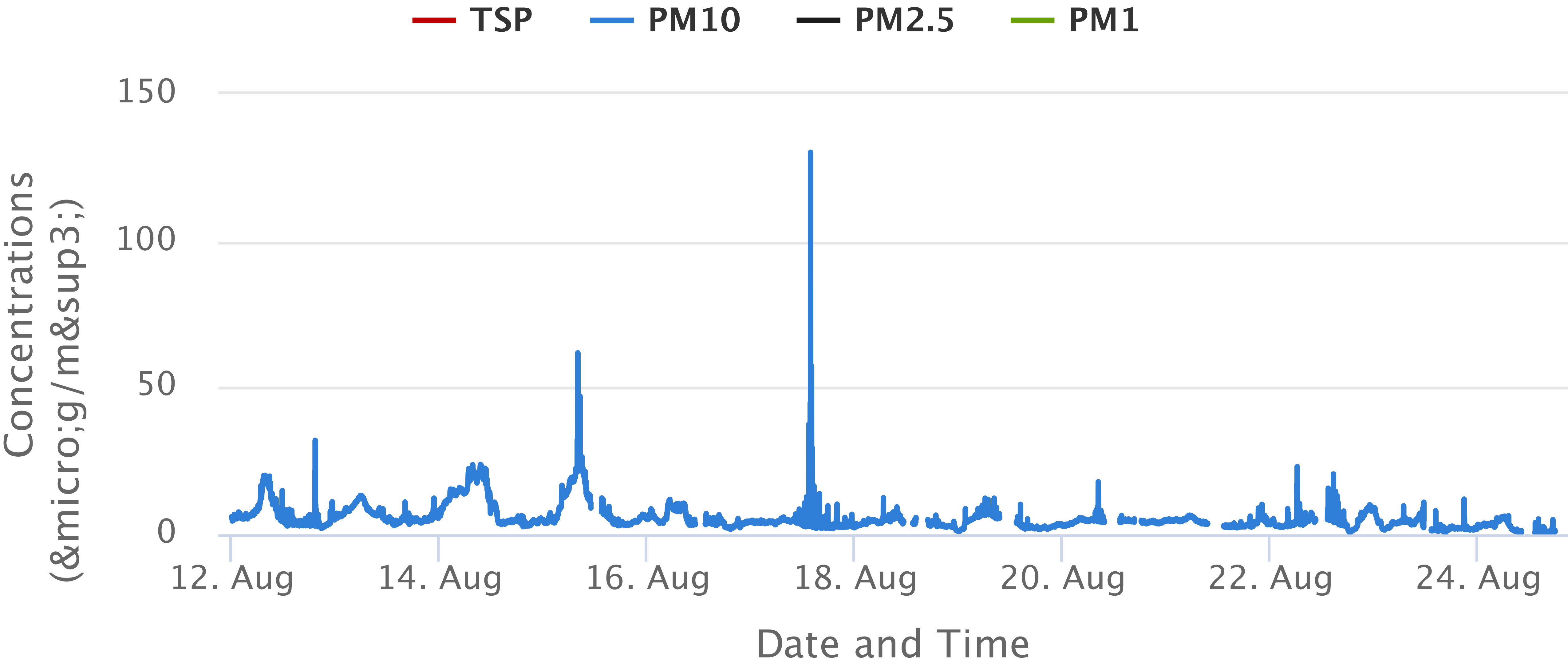
Search monitors...

| LABEL                        | MODEL       | LOCATION                | PROJECT                     | LIMITS | LATEST READING (PM10)  | STATUS      |
|------------------------------|-------------|-------------------------|-----------------------------|--------|------------------------|-------------|
| Dust Monitor s/n 730   #58   | Dust Sentry | Hoyland Plot 2 - Area 2 | 206147   Barnsley   574 OPY | 2      | 9.2 µg/m³ 9 mins ago   | <div></div> |
| Dust Monitor s/n 7688   #137 | Dust Sentry | Hoyland Plot 2 - Area 1 | 206147   Barnsley   574 OPY | 2      | 7.9 µg/m³ 9 mins ago   | <div></div> |
| Dust Monitor s/n 607   #225  | Dust Sentry | Hoyland Plot 2 - Area 3 | 206147   Barnsley   574 OPY | 2      | 10.3 µg/m³ 19 mins ago | <div></div> |

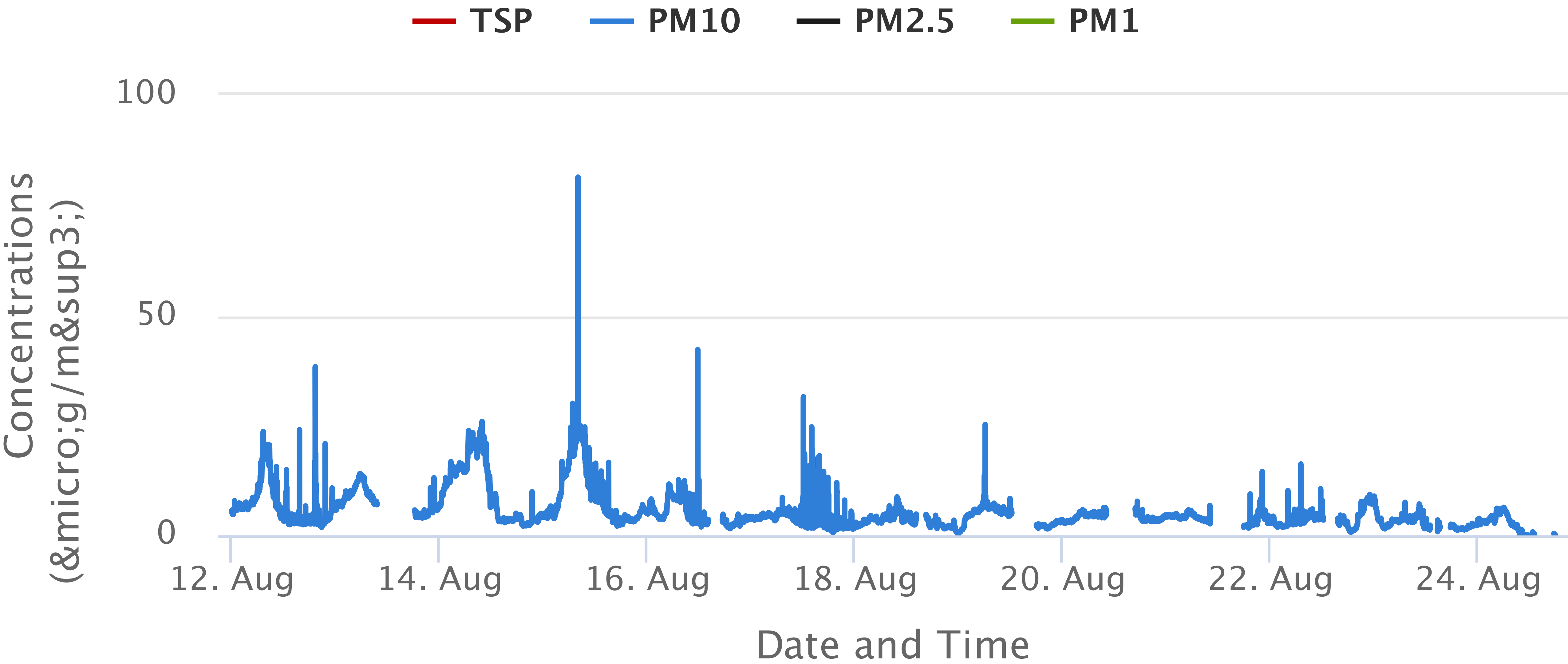
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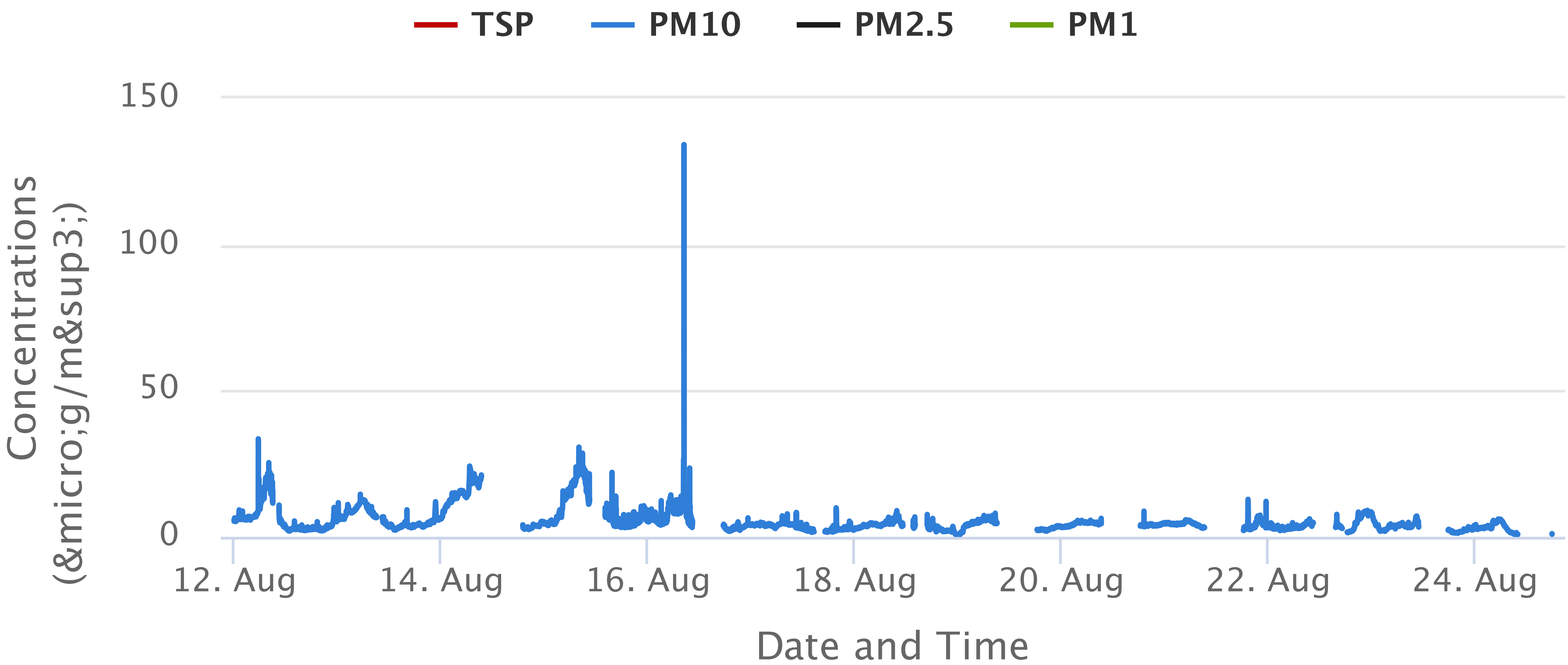
# Air Quality Levels at Dust Monitor s/n 768B | #137: Hoyland Plot 2 – Area 1



# Air Quality Levels at Dust Monitor s/n 730 | #58: Hoyland Plot 2 – Area 2



# Air Quality Levels at Dust Monitor s/n 607 | #225: Hoyland Plot 2 – Area 3





### Area Dust Monitor

The Monitex® Area Dust Monitor is designed for those who need to monitor and manage dust and particle emissions continuously and in real-time.

This Area Dust Monitor is a nephelometer-based instrument that delivers affordable and accurate measurement of PM10, PM2.5, PM1, or TSP. This unit is ideal for use indoors and outside.

#### Key Product Features

- ✓ Physical measurement of TSP, PM10, PM2.5 or PM1 mass fractions (not particle counting)
- ✓ Measures and reports data in 1 minute intervals with user selectable averaging
- ✓ MCERTS certified accuracy and repeatability
- ✓ On board storage for over 20 years of data
- ✓ Rugged weatherproof enclosure with solar shielding for very hot climates
- ✓ Quick set up and relocation in under 10 minutes
- ✓ Email / SMS alerts and FTP data export (optional)

#### Key Applications

- ✓ Urban and national air monitoring networks
- ✓ Industrial perimeter monitoring: construction and waste sites, quarries and mines, ports and bulk handling terminals, transport hubs
- ✓ Near road: motorways, traffic information systems
- ✓ Short term monitoring of 'hot spots'
- ✓ Community exposure: epidemiological studies, microenvironment, residential, schools, hospitals
- ✓ Environmental Impact Assessments



## Area Dust Monitor

Compared to reference-equivalent monitors like TEOMs and BAMs the Monitex® Area Dust Monitor reports accurately at 1 minute interval.

In addition, the Area Dust Monitor weighs less than 13 kg, is mobile and able to run off remote power systems.

Unlike other continuous real-time dust monitors the Area Dust Monitor is built tough for long-term outdoor monitoring. It has: a robust enclosure with integrated solar shielding, 20 years of on-board data storage, a wide range of outputs for flexible integration, and a suite of optional environmental sensors e.g. wind, noise, weather, solar to choose from.

Now the Area Dust Monitor comes with two powerful cloud based software systems with no additional charge. Instrument operating software opens in your browser so there is no software to install or update. Data recording software allows you to remotely access data on any device even when your instrument is offline.



Webbased data & diagnostics software.

| Technology   | Sizes                                                         | Range                       | Accuracy                                | Flow Rate | Lower Detectable Limit (2σ) |
|--------------|---------------------------------------------------------------|-----------------------------|-----------------------------------------|-----------|-----------------------------|
| Nephelometer | PM <sub>1</sub> , PM <sub>2.5</sub> , PM <sub>10</sub> or TSP | 0 to 2000 µg/m <sup>3</sup> | <±(2 µg/m <sup>3</sup> + 5% of reading) | 2.0 LPM   | <1 µg/m <sup>3</sup>        |

| System Specifications         |                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control System                | Embedded fanless PC, Intel Atom N2600, 1.6GHz, 2GB RAM, 32GB SSD, Ubuntu Linux                                                                                                                                                                                                                                                                   |
| Communications                | Standard: WIFI, Ethernet (LAN) Optional: Cellular IP GPRS modem                                                                                                                                                                                                                                                                                  |
| Software                      | Connect: Runs on embedded PC, accessed via web browser (IE, Firefox, Chrome, Safari)<br>Cloud: Runs on secure 'cloud' servers, accessed via web browser Connect / Cloud Features: configuration, diagnostics, journal, calibration and data acquisition, plus SMS and email alerts (optional), and auto data export via FTP and email (optional) |
| Data logging                  | 32GB Hard Drive (>20 years data storage)                                                                                                                                                                                                                                                                                                         |
| Averaging period              | 1 min, 5 min, 10 min, 15 min, 30 min, 1 hr, 2hr, 4 hr, 8 hr, 12 hr, 24 hr                                                                                                                                                                                                                                                                        |
| Outputs                       | • RS232 (legacy mode) • 2 x Relay (optional) • 4 x 4-20mA (optional)                                                                                                                                                                                                                                                                             |
| Power requirements            | • 100-260VAC (standard): 15W / 24W* • Regulated 12VDC (if required): 15W / 24W*                                                                                                                                                                                                                                                                  |
| Enclosure                     | Lockable IP65 GRP cabinet with integrated aluminium solar shield armour Inlet: 36cm heated inlet                                                                                                                                                                                                                                                 |
| Dimensions                    | 483H x 330W x 187D mm (including solar shield armour & mounting brackets)                                                                                                                                                                                                                                                                        |
| Weight                        | <13 kg*                                                                                                                                                                                                                                                                                                                                          |
| Environmental operating range | -10°C to +50°C                                                                                                                                                                                                                                                                                                                                   |
| Mounting                      | Pole, tripod and wall mounting brackets included                                                                                                                                                                                                                                                                                                 |

\*Configuration used for power and weight calculations: base unit, PM10 sharp cut, modem, heater off / heater on.



# MONITEX®

## Area Dust Monitor

Examples of the Area Dust Monitor on site.

This unit can also be solar-powered. Please ask us for more information



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