

Air Quality Report

Produced by AQDM on behalf of Bradford

BRADFORD TONG STREET 2018

These data have been fully ratified by AQDM to the LAQM (TG16) standards

Site Environment and Description

ROADSIDE: Tong Street, Bradford

Statistical Summary Report

This 2018 report contains all the statistics required for the LAQM reporting.

First table – Air Quality Statistics

The top four lines show the duration within the bands of the Daily Air Quality Index (DAQI). This was introduced by Defra on January 2012 and revised April 2013. The number of occasions within each band is summarised as follows.

DAQI Pollutant	Moderate	High	Very High
Gravimetric PM ₁₀	1 day	0	0
Gravimetric PM _{2.5}	4 days	1 day	0
NO ₂	0 hours	0	0

Gravimetric PM₁₀ was Moderate on 5th Nov with a daily mean reaching 73 µg m⁻³.

Gravimetric PM_{2.5} was Moderate on 3rd Mar, 22nd July, 6th 23rd Nov with a daily mean reaching 39 µg m⁻³.

High on 5th Nov with a daily mean reaching 70 µg m⁻³.

Data Captures

The annual data captures are shown on the bottom line. These were above the 85% target.

Second table – Air Quality Exceedences

Gravimetric PM₁₀ – annual data capture was 93.2 %

The maximum daily mean was 73 µg m⁻³ so the daily mean limit value of 50 µg m⁻³ was exceeded on 1 day. The annual allowance is 35 days so this Objective was not exceeded.

The annual mean was 16 µg m⁻³ which did not exceed the 40 µg m⁻³ Objective.

Gravimetric PM_{2.5} – annual data capture was 91.8 %

The annual mean was 10 µg m⁻³ which did not exceed the 25 µg m⁻³ Objective. Note, however, that the PM_{2.5} standard is not set in regulations.

There should be a 15% cut in urban background exposure (annual mean) for all Local Authorities from 2010 to 2020.

NO₂ – annual data capture was 97.2 %

The annual mean was 34 µg m⁻³ which did not exceed the 40 µg m⁻³ Objective.

The maximum hourly mean was 113 µg m⁻³ so there were no exceedences of the NO₂ hourly limit of 200 µg m⁻³. There is an annual allowance of 18 hours so this Objective was not exceeded.

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Air Quality Statistics

Pollutant	PM ₁₀ ⁺	PM _{2.5} [~]	NO ₂	NO	NO _x	Wind Dir	Wind Speed
Number Very High [#]	0	0	0	-	-	-	-
Number High [#]	0	1	0	-	-	-	-
Number Moderate [#]	1	4	0	-	-	-	-
Number Low [#]	340	333	8516	-	-	-	-
Maximum 15-min mean	-	-	136 µg m ⁻³	375 µg m ⁻³	667 µg m ⁻³	-	49.3 m/s
Maximum hourly mean	258 µg m ⁻³	279 µg m ⁻³	113 µg m ⁻³	339 µg m ⁻³	606 µg m ⁻³	-	46.4 m/s
Maximum running 8-hr mean	146 µg m ⁻³	143 µg m ⁻³	90 µg m ⁻³	177 µg m ⁻³	341 µg m ⁻³	-	37.8 m/s
Maximum running 24-hr mean	84 µg m ⁻³	81 µg m ⁻³	75 µg m ⁻³	102 µg m ⁻³	220 µg m ⁻³	-	28.4 m/s
Maximum daily mean	73 µg m ⁻³	70 µg m ⁻³	72 µg m ⁻³	101 µg m ⁻³	220 µg m ⁻³	-	27.0 m/s
Average	16 µg m ⁻³	10 µg m ⁻³	34 µg m ⁻³	19 µg m ⁻³	64 µg m ⁻³	-	-0.1 m/s
Data capture	93.2 %	91.8 %	97.2 %	97.2 %	97.2 %	0.0 %	97.3 %

[#] Daily Air Quality Index (DAQI) as defined by COMEAP January 2012 and revised April 2013

* PM₁₀ in gravimetric units µg m⁻³

⁺ PM₁₀ as measured by a FDMS using a gravimetric factor of 1

[~] PM_{2.5} as measured by a FDMS using a gravimetric factor of 1

Mass units for the gases are at 20°C and 1013mb

NO_x mass units are NO_x as NO₂ µg m⁻³

Air Quality Exceedences

Pollutant	Air Quality (England) Regulations 2000 & (Amendment) Regulations 2002	Max Conc	Number	Days	Allowed	Exceeded
PM ₁₀ Particulate Matter (Gravimetric)	Daily mean > 50 µg m ⁻³	73 µg m ⁻³	1	1	35 days	No
PM ₁₀ Particulate Matter (Gravimetric)	Annual mean > 40 µg m ⁻³	16 µg m ⁻³	0	-	-	No
PM _{2.5} Particulate Matter (Gravimetric) *	Annual mean > 25 µg m ⁻³	10 µg m ⁻³	0	-	-	No
Nitrogen Dioxide	Annual mean > 40 µg m ⁻³	34 µg m ⁻³	0	-	-	No
Nitrogen Dioxide	Hourly mean > 200 µg m ⁻³	113 µg m ⁻³	0	0	18 hours	No

* Not set in regulations

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Monthly Data Captures %

Pollutant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PM ₁₀	89.0	99.4	96.2	92.5	99.6	96.4	95.8	90.9	88.9	72.7	99.4	98.3
PM _{2.5}	88.7	96.0	95.6	90.8	99.6	95.1	91.9	88.6	86.8	72.2	97.9	98.7
Nitrogen Dioxide	89.0	100.0	96.4	95.1	99.7	97.4	100.0	96.9	93.5	99.7	99.7	99.3

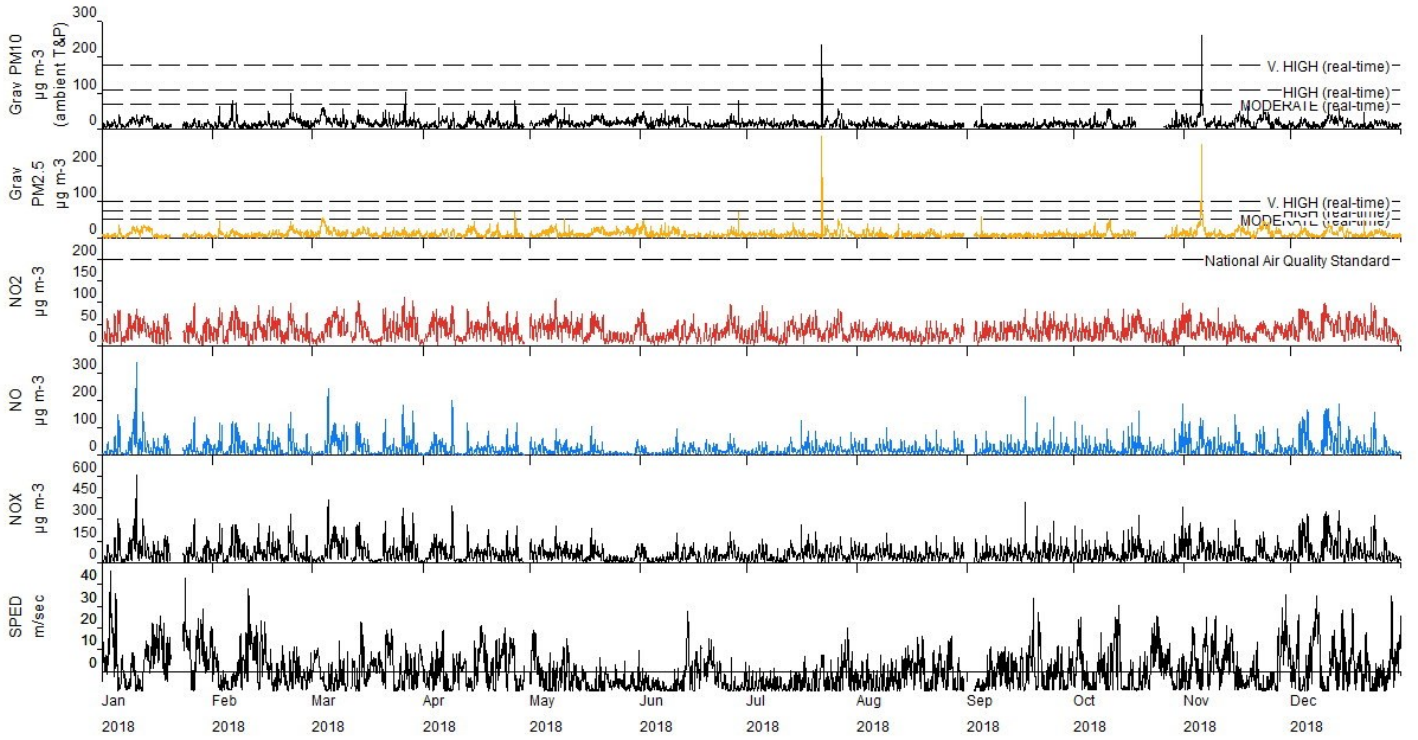
Monthly Means

Pollutant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PM ₁₀ $\mu\text{g m}^{-3}$	14	16	20	15	19	16	15	11	11	15	20	14
PM _{2.5} $\mu\text{g m}^{-3}$	9	9	12	9	13	10	11	8	6	9	16	10
Nitrogen Dioxide $\mu\text{g m}^{-3}$	32	36	36	34	34	29	32	28	35	33	34	41

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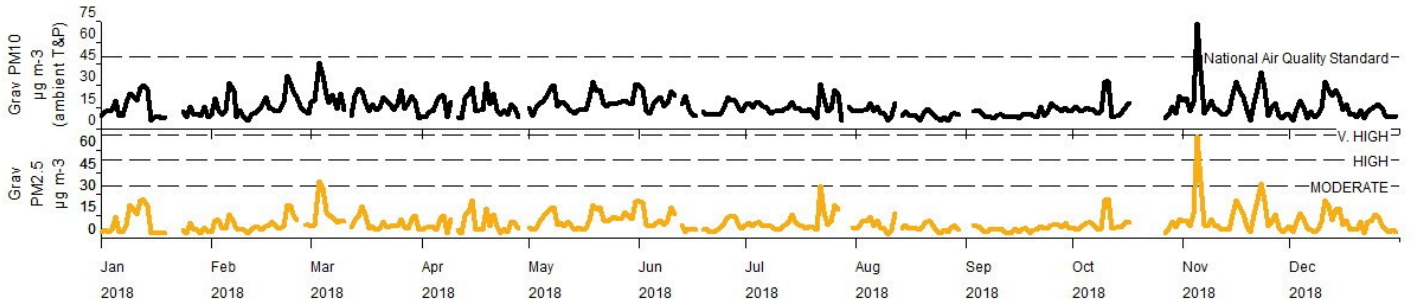
Hourly Means



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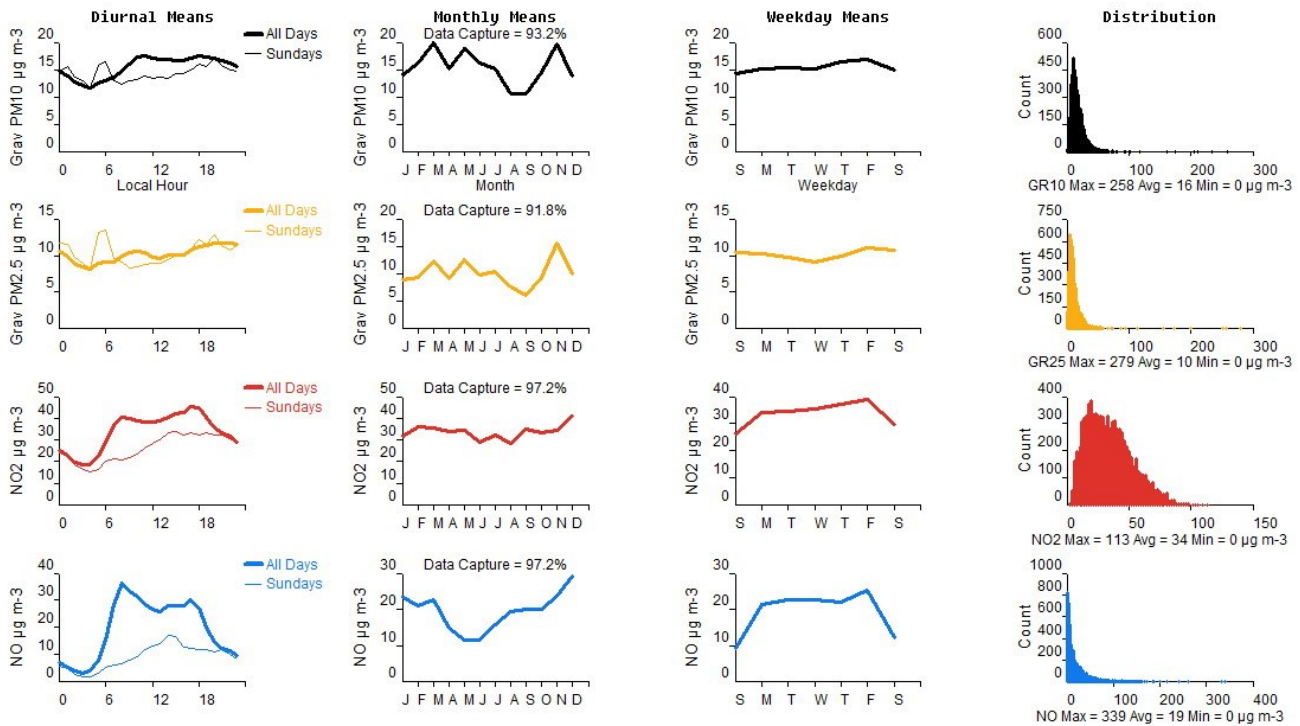
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Daily Means



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