

From: [Simon Nicholson](#)
To: [North Lincolnshire Green Energy Project](#)
Subject: Fwd: Plumes. Late submission.
Date: 22 February 2023 15:30:42
Attachments: [NOx-z12-0deg-r0.4-999 \(1\).png](#)
[NOx-z12-0deg-r0.4-999-2016-lec.png](#)
[NOx-z12-0deg-r0.4-999-2016-wad.png](#)
[NOx-z12-0deg-r0.4-999-2016-EGCN.png](#)

----- Forwarded message -----

From: **Simon Nicholson** [REDACTED]
Date: Wed, 22 Feb 2023, 12:47
Subject: Plumes. Late submission.
To: North Lincolnshire Green Energy Project
<northlincolnshiregreenenergyproject@planninginspectorate.gov.uk>

For the attention of the Examining Authority.

Good afternoon Sirs.

Further to your advice I am providing updated plumes using freely available data and created for me by [REDACTED]

These plumes are plotted from a selection of weather stations to give greater overall clarity as to the limited differences between data from these alternative sites. There are limiting factors in using Doncaster airport as it is now closed. Also Doncaster when open was not a "synoptic" site so limits the data used.

The available data and relevant years from other sites - Leconfield, Waddington and including Doncaster for comparison are below.

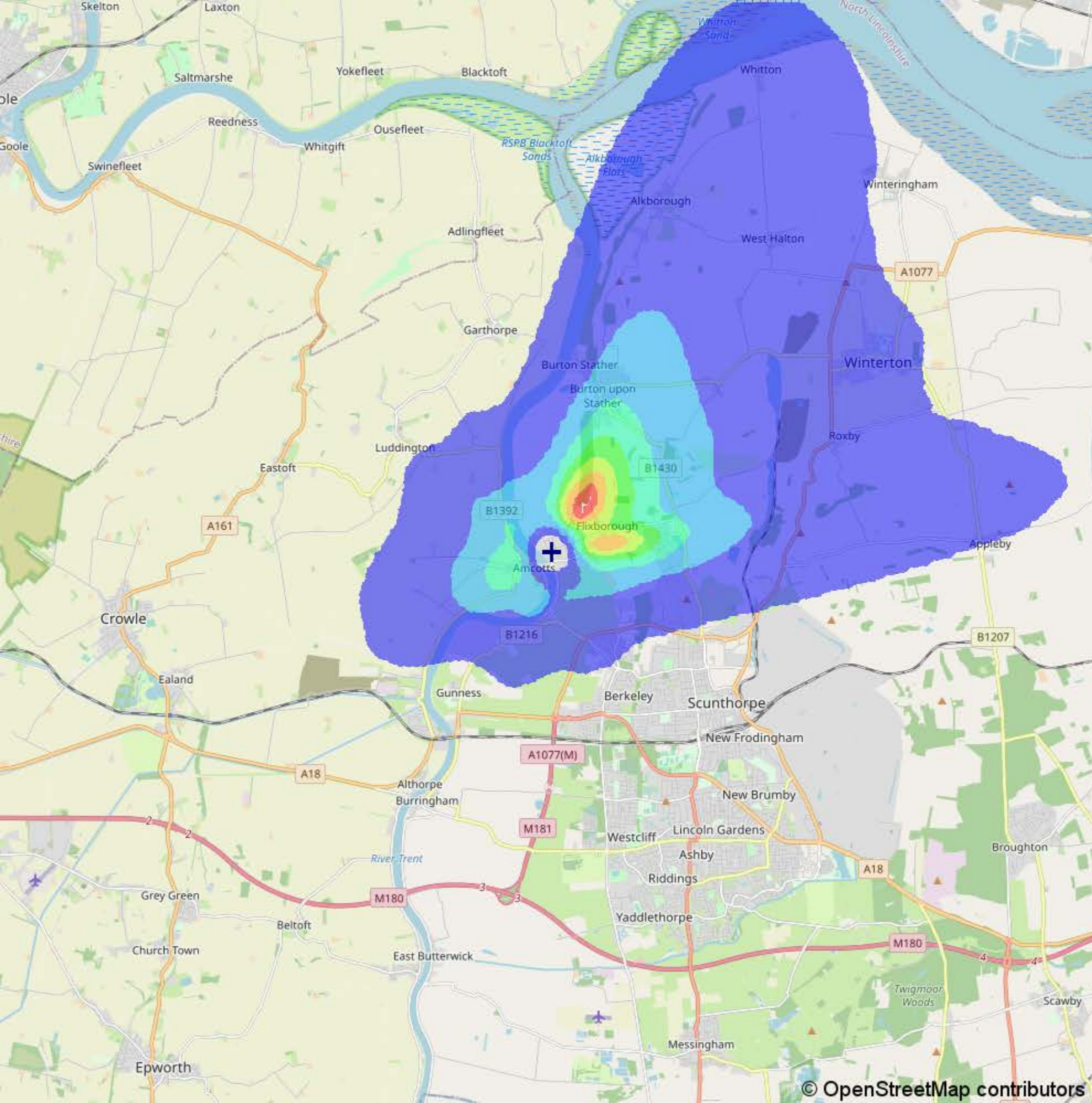
From this we can see the extreme hotspots for deposits of any pollutants as well as NOx as the data clearly shows is not "negligible" as the applicant states but clearly substantial.

Owing to the sparse data supplied by the applicant the alignment of the main building and position of the stack or stacks (still to be determined as I understand it in the final design stage) will make some difference to this mapping surprisingly. Also the applicant, maybe mistakenly, submitted data using 200ktpa rather than 760ktpa when making their calculations regarding their plume model. I'm sure they will confirm the reason for this.

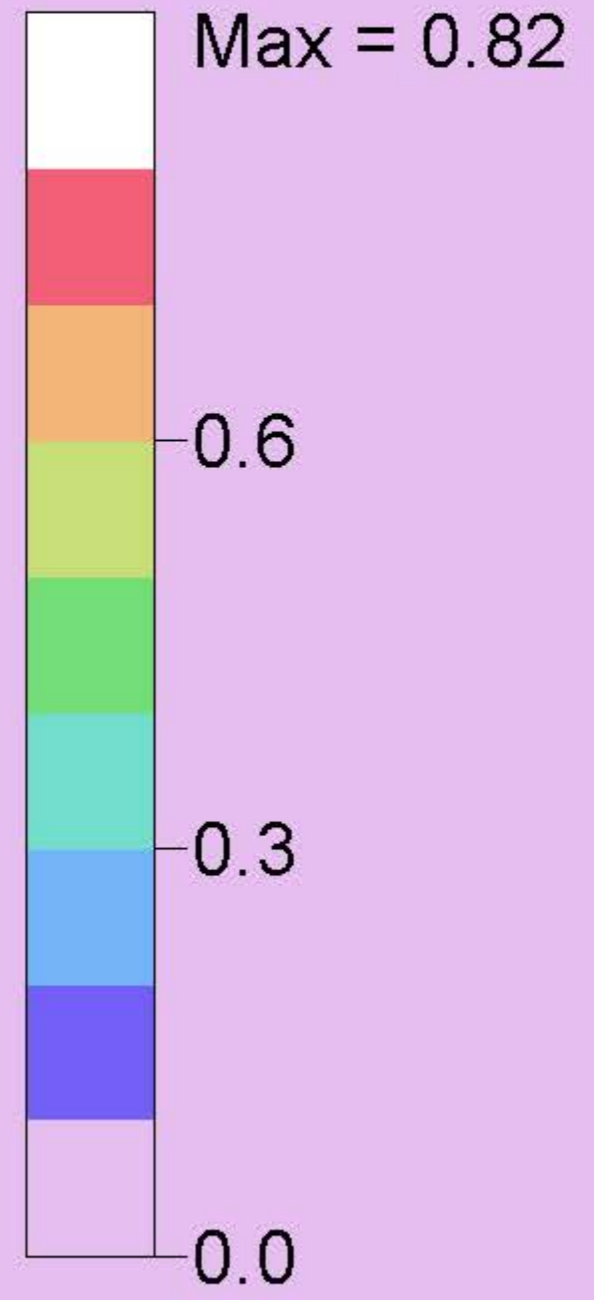
I am unable to provide the cumulative plume as the data used by the applicant as they only provides plume data for the application rather than a more realistic data set for EPR Energy, Keadby 1, Keadby 2 (under construction), the Steelworks and other pollution contributors from further afield like Drax, Ferrybridge et al.

I hope this is of use and any further information I can source if required.

Kind regards
Simon Nicholson
Interested party No. 200319442

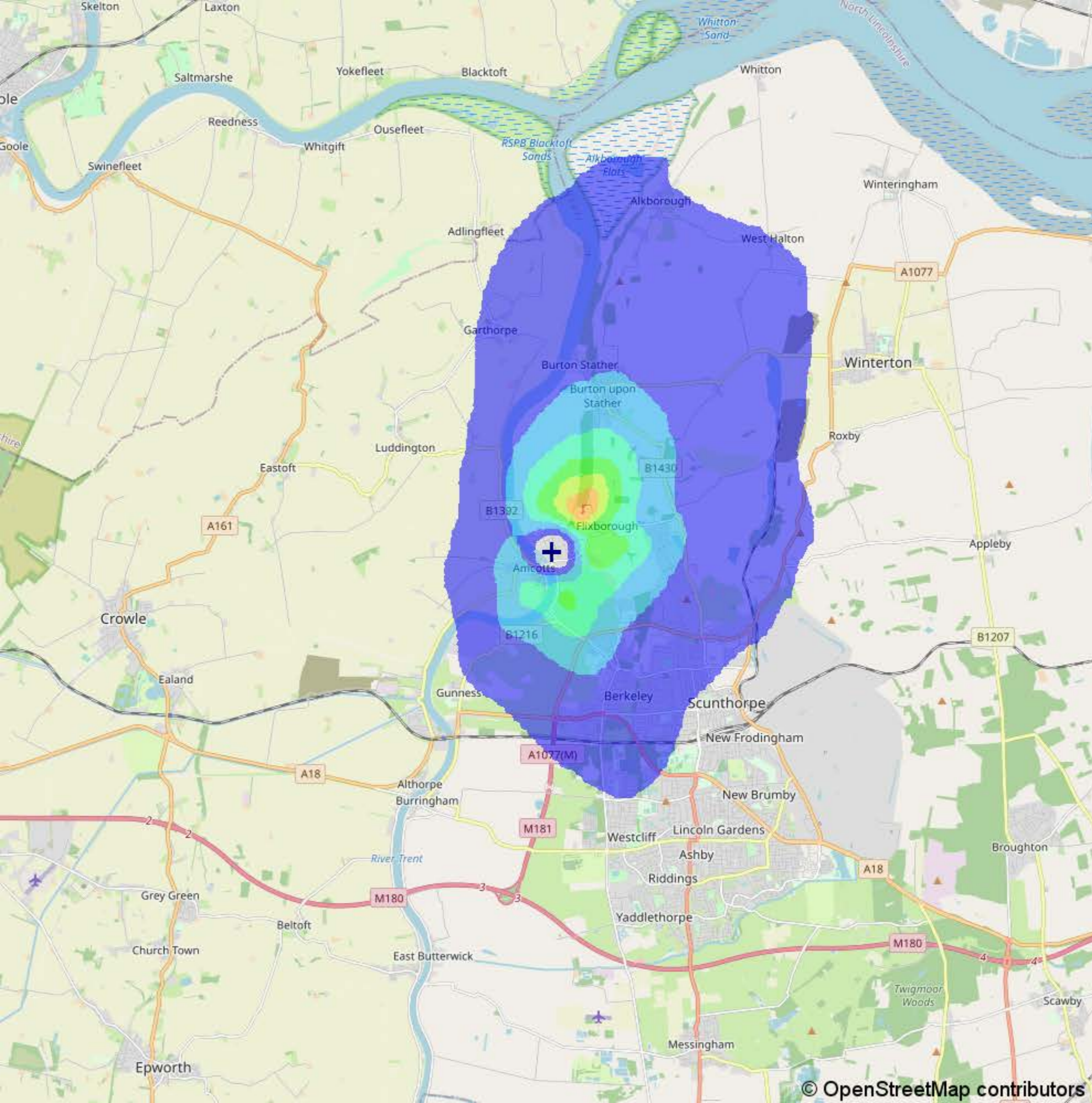


NLGEP
Nitrogen oxides
Average
2022

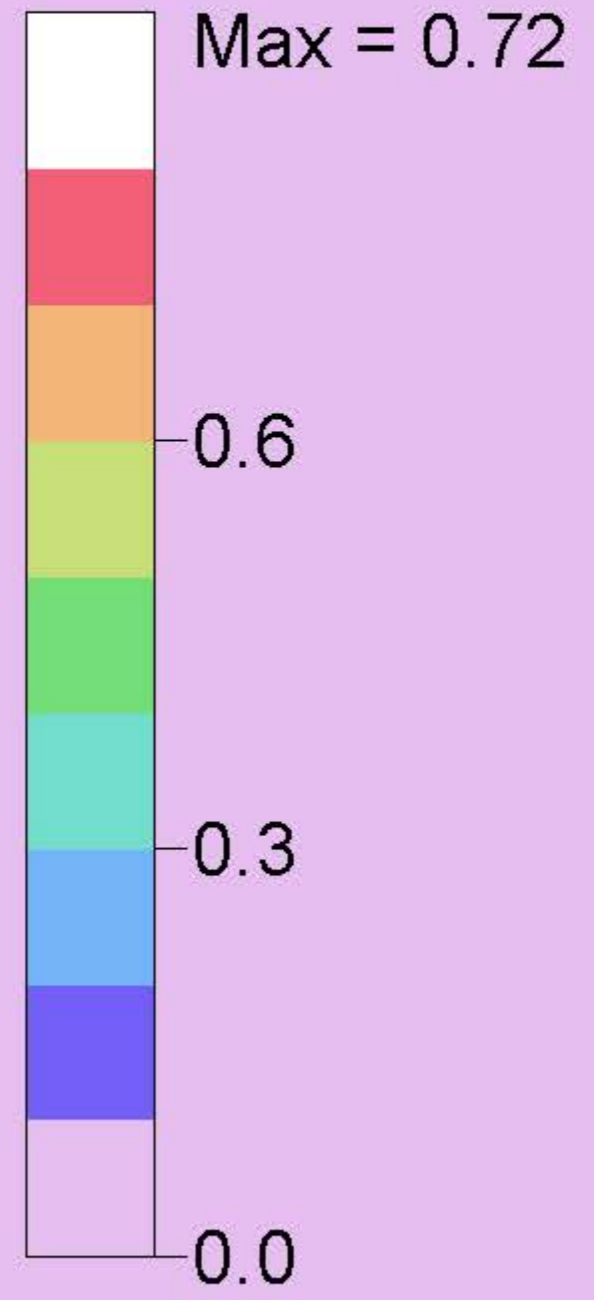


($\mu\text{g}/\text{m}^3$)

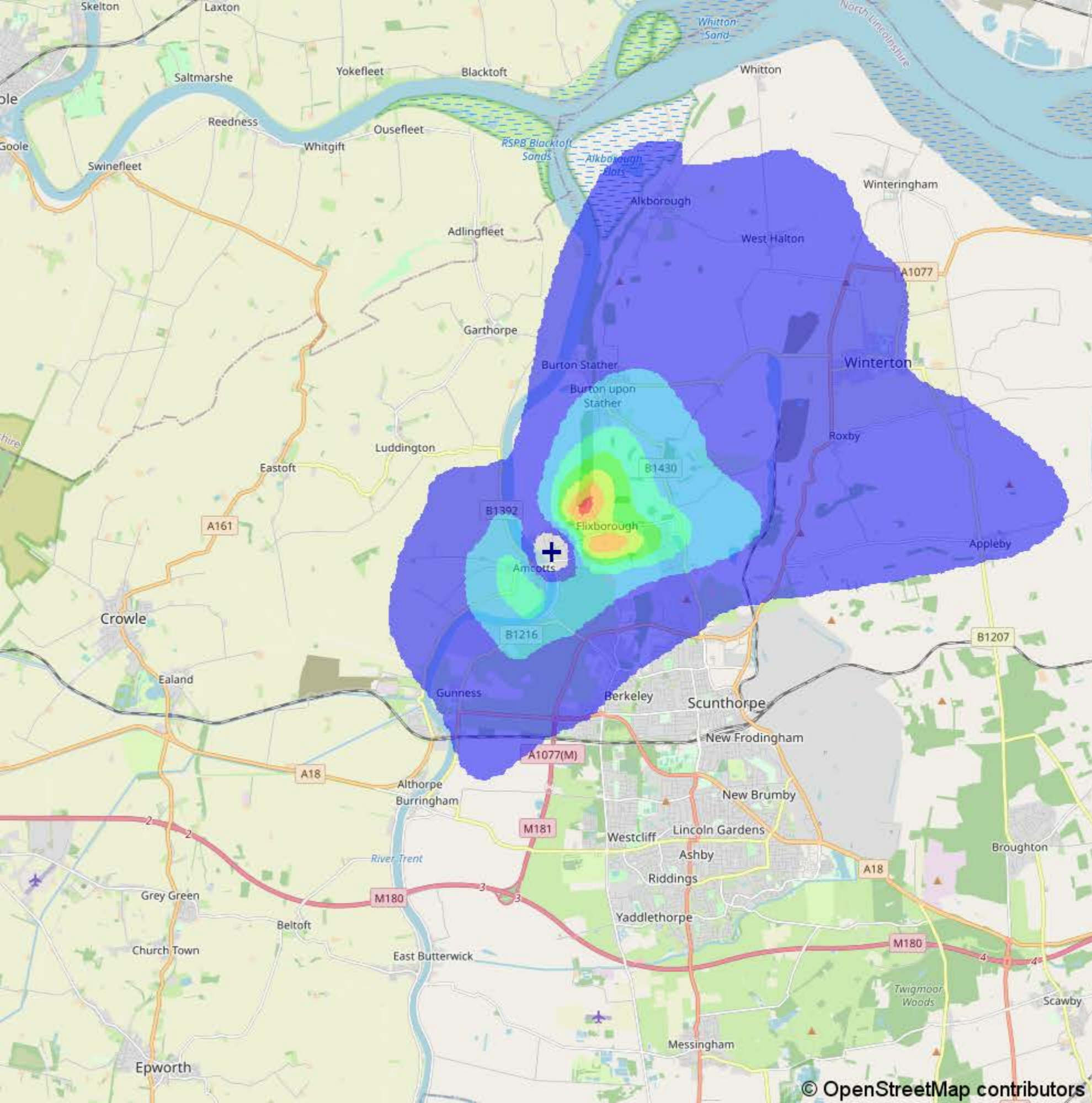
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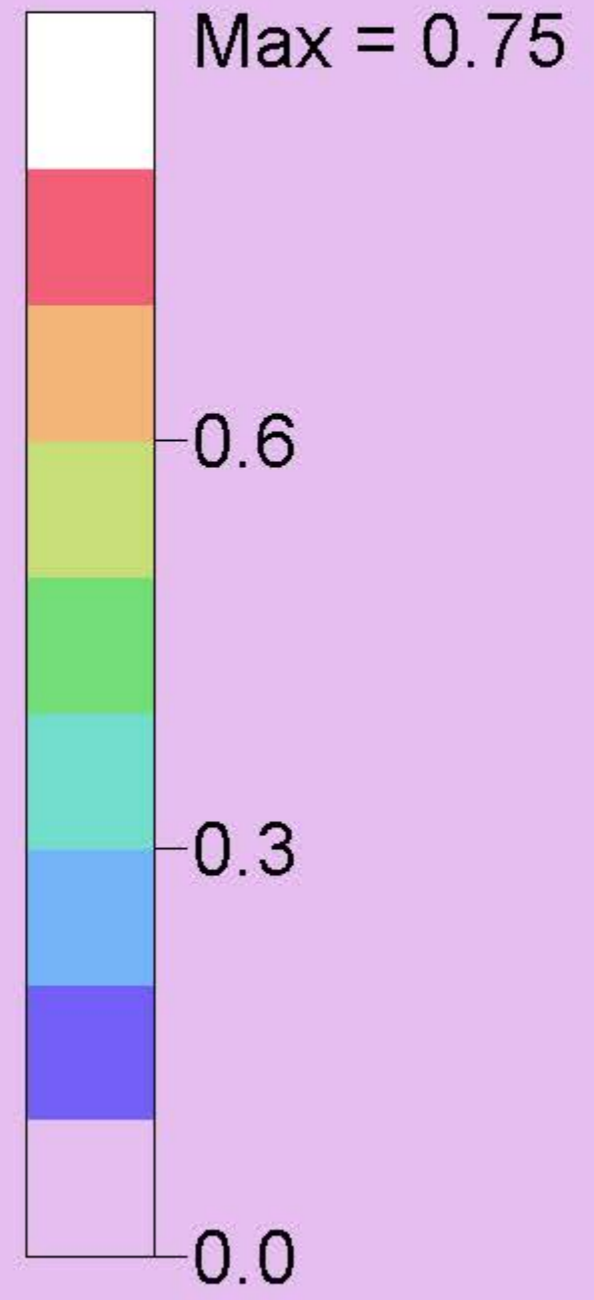
NLGEP
Nitrogen oxides
Average
2016



($\mu\text{g}/\text{m}^3$)
Made by Plumescape

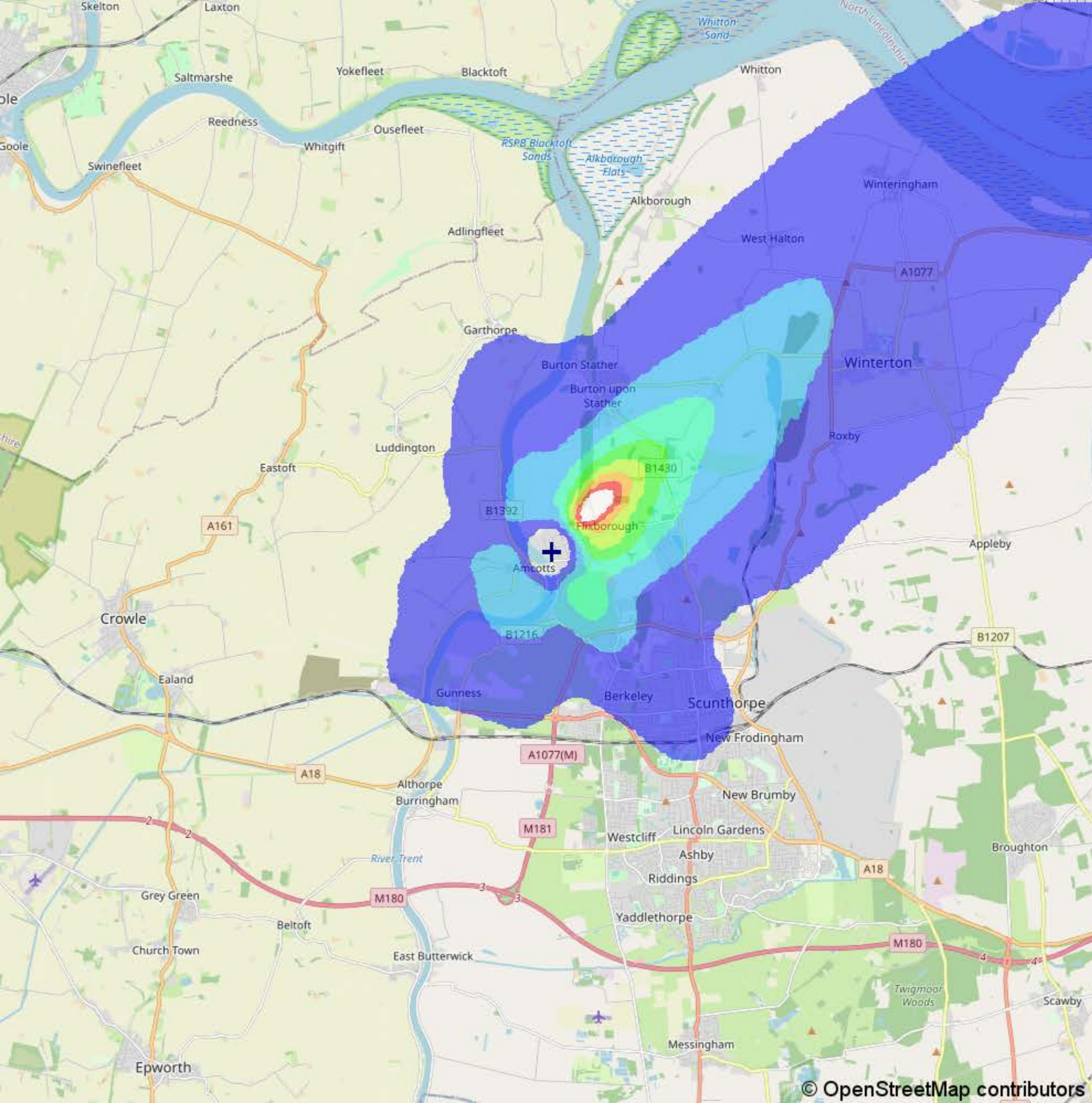


NLGEP
Nitrogen oxides
Average
2016

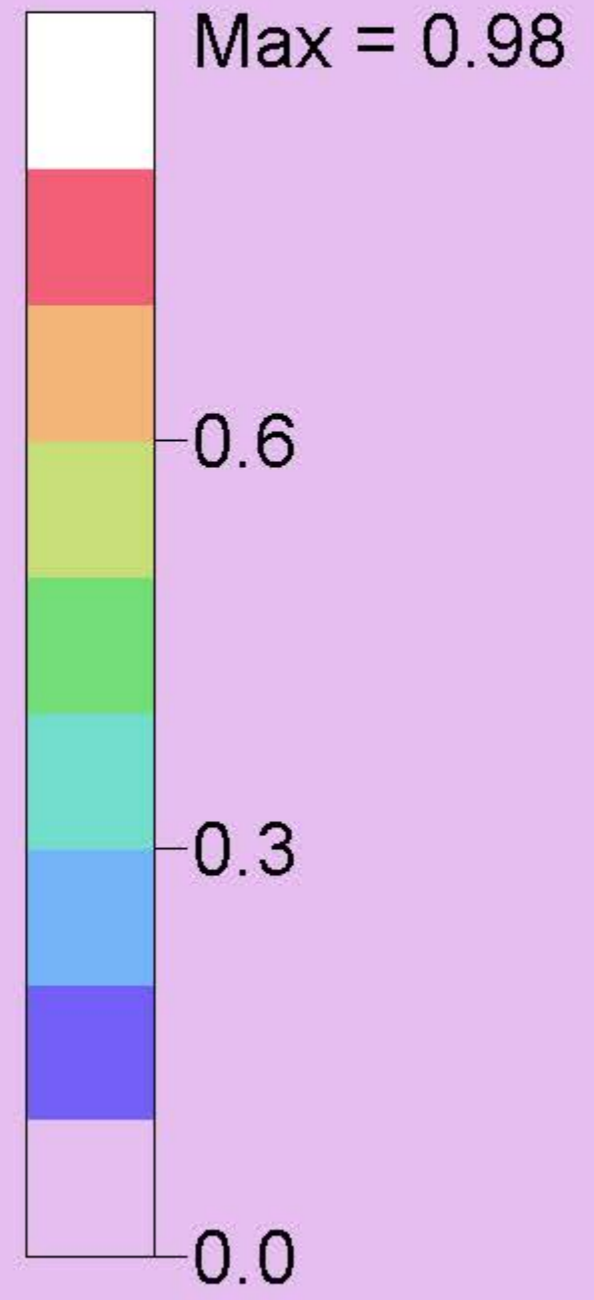


($\mu\text{g}/\text{m}^3$)

Made by Plumescape



NLGEP
Nitrogen oxides
Average
2016



($\mu\text{g}/\text{m}^3$)
Made by Plumescape