Responses to the on-line questionnaire of the UK National Air Quality Information Archive

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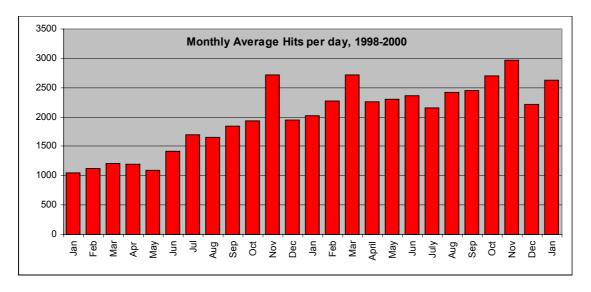
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Introduction

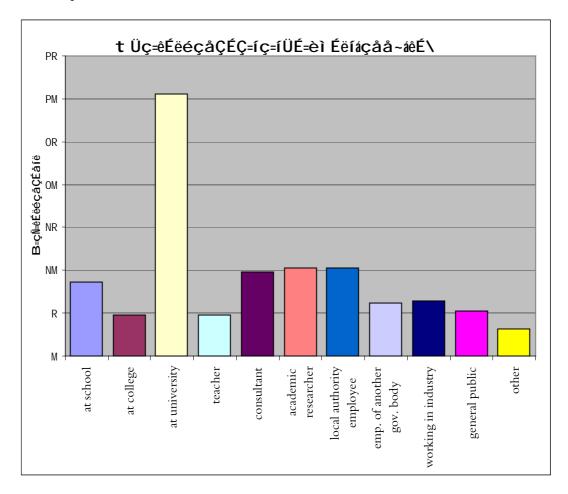
The UK National Air Quality Archive web site now has around 2500 'hits' per day. Usage statistics can tell us about which pages are visited and how often, but we rarely have information on who is using the site.

For this reason an electronic questionnaire was set up to gain information about users' views and origins. It was added to the site and remained there for eight weeks. The questionnaire was designed to appear on screen in a new window when a user entered the Air Quality Archive web site for the first time in the 8 week period but did appear up on subsequent visits by the same user. The questionnaire could also be accessed by all users through a link from the front page of the site. The 8 week period commenced on Monday 13th September.

456 people responded to the questionnaire, an average of almost 60 responses per week. There were no major pollution episodes nor significant publicity during the period. The number of 'hits' on the site during the survey was high. The graph below demonstrates how the number of hits to the site is generally increasing; December and January are weak months due to the academic holiday.



Who responded?



Nearly 60 percent of respondents were from educational establishments. 35 percent of respondents were at university or college and another 10 percent classified themselves as academic researchers. 14 percent were school teachers or pupils.

Over 30 percent of responses were from people working in industry or government bodies. 10 percent were local authority workers, 10 percent were consultants and 7 percent worked in industry.

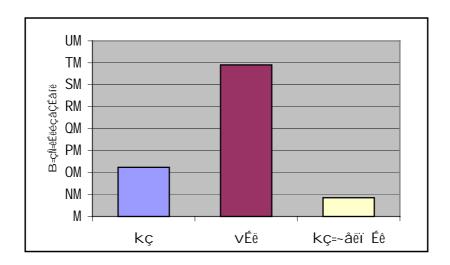
The general public and those who chose not to specify their work comprised 8 percent.

Where do they live?

Country/region	Percentage of respondents
UK - total	75%
England	37%
Scotland	8%
Wales	4%
Northern Ireland	3%
Region not specified	23%
North America	9%
European Union	6%
Unknown	6%
Australasia	2%
South America	<1%
South East Asia	<1%
Africa	<1%
Japan	<1%

Almost three quarters of those who responded to the questionnaire were from the UK, with two thirds of them specifying which region they were from. Over 6 percent of respondents were from other countries in the European Union (there were responses from almost every country). Many of the remaining responses came from the USA and Canada although there were responses from all over the world (the most far flung response was from the Northern Marianas Islands).

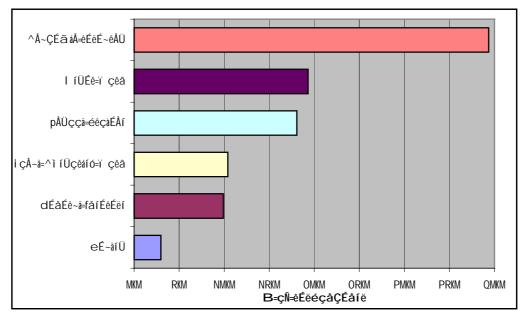
Do they use the site for their work?



The majority of people use the site for work purposes although there were a substantial number of responses from people using the site through personal interest.

What are they using the site for?

Local Authority employees were using the site for input to Review and Assessment work, such as data from local monitoring sites and information in reports. The 'other work' category



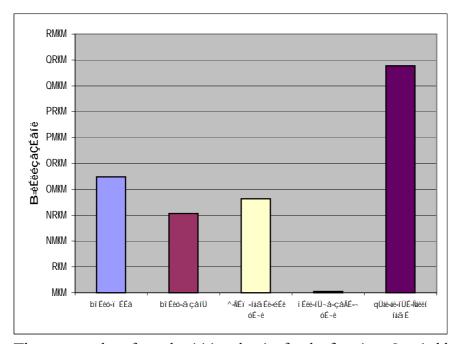
includes consultancy and government work other than local authority and this made up nearly 20 percent of responses.

Academic research comprises people working or studying at university. Many of these people were using the site for research towards a PhD thesis or a final year project.

Eighteen percent of people were using the web site in a school project. Almost all of the school students who responded to the questionnaire were visiting the site to find help with school projects. Almost 5% of people who responded to the questionnaire were teachers. They were using the web site as a source on which to base a lesson or project.

Twelve people were looking at the site for health information, including people living abroad who were planning to travel to the UK.

How often do they visit the site?

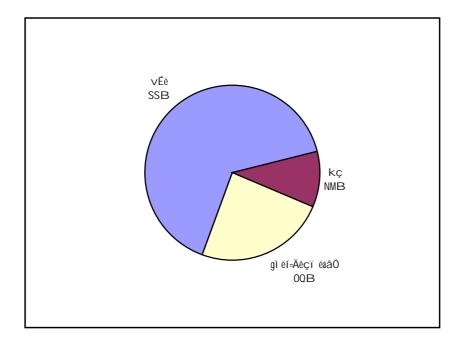


There were a lot of people visiting the site for the first time. Inevitably, as the period in which the questionnaire was on the web site progressed, the number of regular visitors responding decreased because they had either already filled the form in or had decided not to. Over 35% of respondents visit the site at least once a month, with half of these visiting every week.

Those using the site every week:

,	
at university	27 %
local authority employees	19 %
consultants	13 %
academic researchers	10 %
employees of another government body	8 %
at school	7 %
at college	7 %
members of the general public	3 %
working in industry	2 %
teachers	2 %
other	1 %

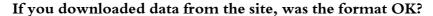
Do people find what they are looking for on the web site?

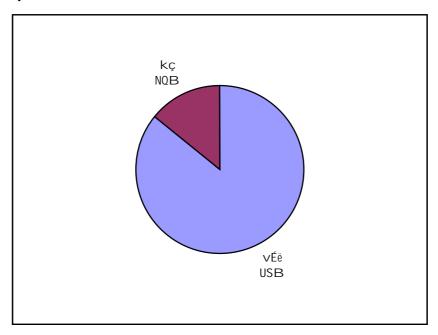


It is pleasing to see that the vast majority of visitors to the web site find what they are looking for. Only forty three people said that they could not find what they were looking for on the site; of this group, many were school students. It could be the case that school children do not find the information they would like as easily as adults because such a vast array of data and other information can be overwhelming. It may also be that they do not have a realistic expectation of what they may find. Their responses are discussed further in the 'dislikes' section.

Six academic researchers said that did not find what they were looking for. One could not find information on current air quality standards objectives (which **is** on the site). Another was looking NAQS technical guidance notes. Most of them did not specify what it was that they could not find.

Downloading data from the site

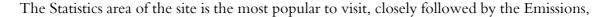


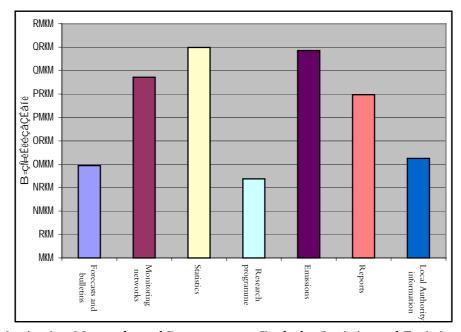


Most people who criticised the format of the data were consultants and academic researchers. There were requests for data to be in columns rather than rows. A small script **is** available to download from the website to do this conversion.

It was also highlighted that downloading statistics data using the newest Internet Explorer browser (version 5) was problematic. This problem is resolved by 'cut and paste' of the data rather than saving a file and it may be appropriate to write a note to this effect on the web site.

Which areas of the site do people use?





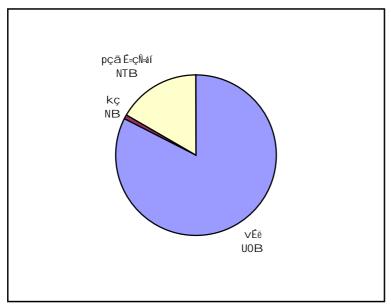
Monitoring Networks and Reports areas. Both the Statistics and Emissions areas of the site provide basic information that does not require a great deal of specialist knowledge, as well as more detailed information that may be of use to researchers and consultants. It is encouraging to see that these areas are very popular because, along with the Forecasts and Bulletins section, are the most comprehensible to the casual, inexperienced visitor.

The Research Programme information is the least commonly visited. This information is mainly of interest to potential and present DETR contractors and would not be expected to be of interest to the majority of other visitors to the site.

Almost one third of visitors to the site only look at one area. These people are most likely to be researchers and consultants who use the site regularly for one thing only. Almost half of the respondents visit two or three areas of the site and around one fifth visit more than three.

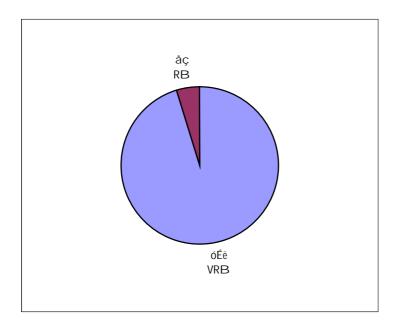
Number of areas	Percentage of respondents
of the site visited	
1	32 %
2-3	46 %
4–7	21 %

Do people understand what they find?



It is an encouraging response that so few people told us that they did not understand the information that they found. The main groups of people that understood only 'some of it' were school children (6 %), university students (3 %), the general public(2 %) and those working in industry (2 %).

Are they happy with the length of the text/graphic?



There was only one person, a local authority employee who gave specific criticism of the length of text or graphic: 'Hourly data tables are not easy to view on screen'
These data are presented in columns in a simple .csv format. The format facilitates two methods of use:

- 1) For people who want the entire data file:
 - The file can be downloaded quickly.
 - The format makes it easy to insert the data into a spreadsheet.
- 2) For people who only want to extract a small amount of data from the table:
 - The data is formatted in colums so that it can be read on the screen. However, this does result in the table being quite wide and it is often necessary to scroll across or down to view some data.

What do people like about the web site?

190 people responded to this question.

'USER FRIENDLY'

The most popular comment was that the site was clear and easy to use (56 responses). The phrase 'User friendly' was commonly used. Some examples:

Easy to use (school student)

Lots of information, easily accessible, clearly presented (local authority employee)

Easy to navigate, set out clearly with lots of information (academic researcher)

Clear, concise, accurate info. Fast and easy to use (university student)

Easy to find things and move around (university student)

Well designed layout (local authority employee)

Easy to navigate site (teacher)

'GOOD QUALITY DATA'

The quick, detailed provision of data was praised by 36 respondents:

Very informative and gave a lot of information on my project (school student)

Comprehensive information. Not overly digested (academic researcher)

The easy availability of data with scientific and local interest (teacher)

Ready access to large database of archive data (consultant)

'SITE MAP USEFUL'

Map of site very useful (university student)

I like the site guide (consultant)

DESIGN

Colourful (employee of another government organisation)

It is very fun (school student)

Graphics. Information. Layout (local authority employee)

Nice appearance (academic researcher)

WHAT DID STUDENTS AND TEACHERS LIKE?

It has a lot of easy to understand information. I've visited a lot of pages and this is one of the best and most complete (college student)

Clear maps (teacher)

I like the charts (school student)

WHAT DID ACADEMICS LIKE?

The main praise from researchers was the quantity and quality of the data available.

Speed of access for data

Excellent access to useful data I wish other agencies did the same for their public register data

Good starting page

WHAT DID GOVERNMENT EMPLOYEES LIKE?

Loads quickly. Simple layout (local authority employee)

The amount of detailed information. Not too much jargon. (local authority employee)

Good layout, user friendly. (local authority employee)

I found the info I needed. (employee of another government organisation)

OTHER POSITIVE COMMENTS

It's a one stop shop for emissions data (working in industry)

I like the breakdown of pollution at rural, urban and roadside locations (member of the general public)

I could find what I was looking for (employee of another government organisation)

Reports available i.e. not just a description and a phone number to order (consultant)

What do people dislike about the site?

134 people replied to this question.

PROBLEMS IN FINDING THE DESIRED DATA

Some people had trouble finding the data that they wanted. Some acknowledged the problems in providing so much information in a user friendly way.

It took me a while to find the data I wanted (teacher)

Starting from www.aeat.co.uk very large number of clicks to destination, and difficult to remember where to find things on the site (academic researcher)

Sometimes difficult to navigate even with the map (at college)

Sometimes a bit tricky to find the bit of information you want. Probably due to the amount of information on there (consultant)

ISSUES WITH THE SEARCH ENGINE

A number of people were under the impression that there was no search engine for the site.

Search facility was not very useful e.g. it did not provide information on the No search facility (consultant)

The search engine can in fact be found from the top navigation bar at all times. Others were frustrated when they couldn't find what they wanted. This was often because the information is not on the site.

Design Manual for Roads and Bridges Air Quality Assessment Method (consultant)

WHAT DID STUDENTS AND TEACHERS DISLIKE?

There were very few criticisms from teachers. Those that did comment said it took a long time to find the data they required. Most of the responses from school students were very general and often flippant comments (e.g. 'Everything'). They had problems finding the data they were looking for. As discussed above, perhaps they find the volume of information available confusing.

Not very clear (school student)

I am looking for a specific data statistic and I don't know where to start (school student) Couldn't find the data I was looking for. Complicated (school student) Difficult to find everything I wanted (teacher)

WHAT DID ACADEMICS DISLIKE?

The criticisms were quite specific and can be represented by the following:

There is no information concerning how much the data has changed since ratification Trying to find it in the first place

Not too keen on the frames, which don't tell you which page you are actually looking at.

Can be a bit hard to find what you are looking for, although most of the time, ok. Can't get e.g. data for CO emissions from one source for a period of years.

WHAT DID GOVERNMENT WORKERS DISLIKE?

Some data sets not very up to date

Sometimes I find things and I have trouble finding them again

Data download and convert takes a long time as have to get each pollutant and year seperately and then convert from columns to rows. I am also having problems converting the 1999 data

Not enough e mail links to get in touch with people

WHAT ABOUT THE GENERAL PUBLIC?

Generally the criticisms were that people found the information supplied difficult to understand.

Need to be a chemist to understand some of the information presented.

Anything else they wanted to tell us?

There were very few negative comments to this question and a large number of people took the opportunity to thank us for the site.

All in all a great resource (local authority employee)

Am grateful that the information is available (consultant)

An invaluable resource (academic researcher)

Deserves its excellent reputation, but could perhaps be easier to navigate around (academic researcher)

Good information (working in industry)

It is a very important source of information for us (local authority employee) It s a useful site and whilst I realise it's purpose is to inform the general public it would be useful to have further information for industrial sectors (working in industry)

Keep up the good work (academic researcher)

Thank you for helping me to find low pollution areas to live. I have C.F. (general public)

Thanks for providing info vital to my course. It's far easier than ploughing through hundreds of out of date books (university student)

This site has been extremely useful in the last 3 years and continues to provide an excellent service. Thanks (Academic researcher)

Conclusions and Recommendations

The UK National Air Quality Information Archive has rapidly grown in popularity since its launch in 1996. On average, almost 3000 pages are accessed each day – a total of over 1.5 million 'hits' in the last 2 years. The number of visitors is still growing and December 1999 was the busiest month so far.

Almost one third of users of the site are university students. Consultants, researchers and local authority workers each make up around 10 percent of users. The remainder of users are very diverse. They include teachers, school children and members of the general public. Three quarters of users of the site are in the UK and other users are spread far and wide across Europe and the world.

The majority of people use the site for work purposes. This work is often academic research, local authority review and assessment work and school and university projects. People find what they are looking for in 90 percent of cases. Often when they do not find what they want it is because the information is not on the web site (e.g. pollen forecasts).

Of those who downloaded data from the site, 86 percent were happy with the format. There were some requests for data to be provided in a single column rather than rows, and it is now possible to download a convertion script from the web site.

The most commonly accessed areas of the site were the Statistics and Emissions areas. One third of people look at only one area of the web site, and the majority look at two or three areas.

Only 1 percent of respondents told us that they did not understand the information on the site. Five percent of people were unhappy with the length of the text and graphics, but only one person explained their criticism more precisely.

Praise for the data content and comprehensiveness of the site was frequently repeated. The site is greatly valued by academics and local authority workers in particular.

The group of people who had the highest number of criticisms of the site was school children. They were most likely not to find what they wanted, and not to understand what they found. They were usually searching the site for information for a school project.

The site map is seen to be a useful tool. Many people acknowledged the challenge presented in making such a large site easy to navigate. Comments on the navigation and accessibility of the site were generally very positive, although a minority of people found it difficult to find what they were looking for. This is an aspect of the site that would benefit from being reviewed.

Several people were not aware that there was a search engine for the site so it may be helpful to make the 'search' button more prominent.

The site is used heavily by academics and the majority are very happy with the site. It may be worth increasing the site's appeal to the general public by adding some very general information which is accessible directly from the home page.

Some people were looking for reports that are not available on this web site. It would be valuable to increase the number of hypertext links to DETR reports that feature on other web sites.