



# OPAL Data Explorer User Guide

This guide provides an overview of how you can use the OPAL Data Explorer's interactive maps and graphs to explore the environmental data collected by OPAL participants across the UK.

View your results on a graph, learn more about your local area, analyse nationwide trends, or compare your survey results with thousands of others.

[www.opalexplornature.org/dataexplorer](http://www.opalexplornature.org/dataexplorer)



Please note that it may take up to 15 minutes for your survey data to appear on the OPAL Data Explorer following online submission. The survey data shown in the OPAL Data Explorer is displayed as submitted, before any filtering or post-submission verification has been conducted.

## Feedback

Please be aware that the OPAL Data Explorer is still in development. You can help us to improve the OPAL Data Explorer by reporting any issues and making suggestions or comments using our [feedback form](#) (or by emailing [opal@imperial.ac.uk](mailto:opal@imperial.ac.uk)). Where there are known issues, these have been noted in the following guide. Our software developers are working to fix these issues as soon as they can. Thank you for your patience.

## Stay updated

To be the first to hear about new features, training opportunities and other OPAL Data Explorer news, please [register with OPAL](#).

Registered users have access to additional functionality, including the ability to save survey results and graphs to their account, and analyse data from their local area (My Patch).

## About OPAL

We are a UK-wide network that empowers people to explore nature through science. [Find out more](#)

# The homepage

In the example below, the left and right hand panels have been closed using the green arrows and the map is zoomed in so that we can see some clusters of survey responses in more detail.

## OPAL Survey symbols



Air



NZ Flatworm



Tree Health



Biodiversity



Polli:Nation



Water



Bugs Count



Soil & Earthworm

These arrows will close or open the two side panels

Each individual survey is represented by a symbol like this. This symbol shows an individual Air Survey. You can click this symbol to find out more about this survey response.

Here is a cluster of two water surveys. You could continue to zoom in or click on the cluster to separate them out.

OPAL DATA EXPLORER

HOME SURVEYS LOG IN

Map Satellite

Welcome to the OPAL Data Explorer

More about responses

Surveys

- Air
- Biodiversity
- Bugs Count
- NZ Flatworm
- Polli:Nation
- Soil & Earthworm
- Tree Health
- Water

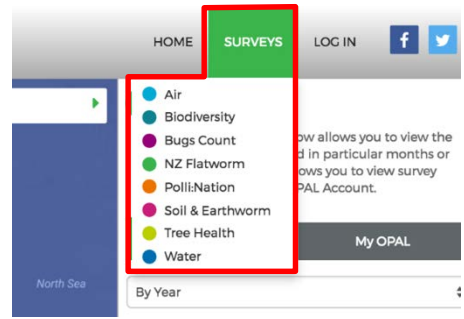
Map data ©2017 Google Imagery ©2017, DigitalGlobe, Getmapping plc, Infoterra Ltd & Bluesky, The GeoInformation Group | Terms of Use | Report a map error

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Occasionally you may find data points that appear in odd places, such as a shopping centre or the sea. Data is currently unverified but we are undergoing a process to check if these are survey responses that should not be on the Data Explorer, or have been entered incorrectly by user.

# Survey pages

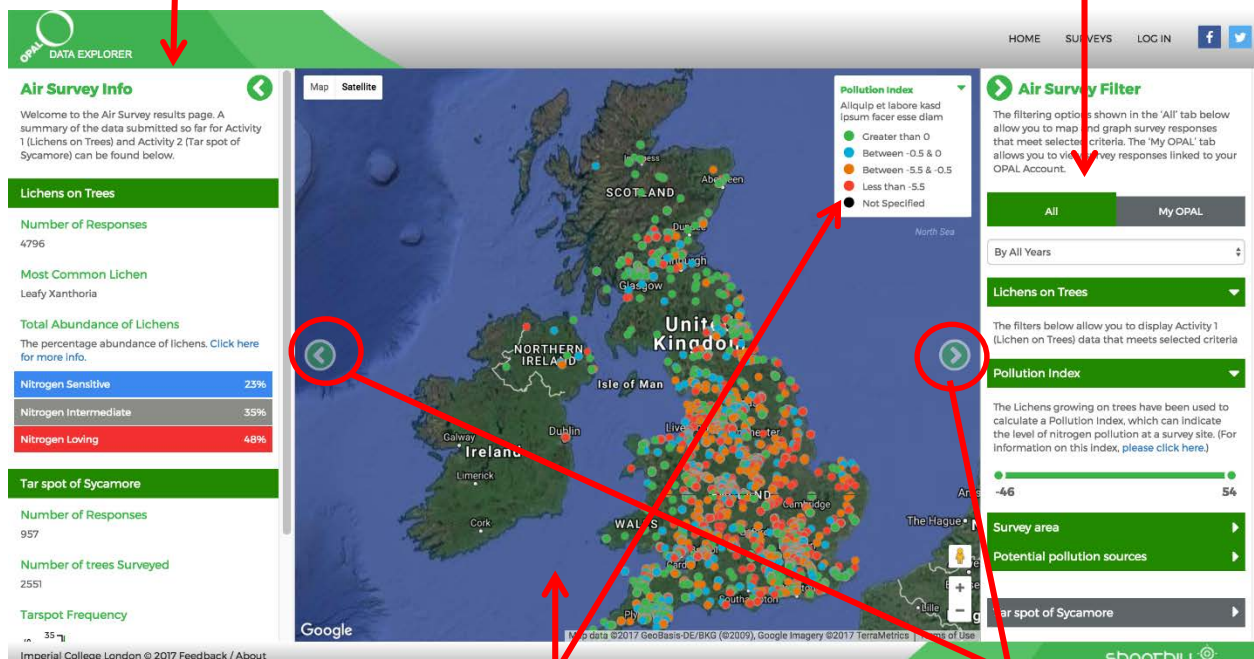
Each active OPAL Survey has its own page from which you can explore data for that survey in more detail. To go to the page for a survey, click on "SURVEYS" in the top navigation bar of the Data Explorer window and select it from the dropdown menu (shown in the screenshot, right).



All survey pages share some common features, which are highlighted using the Air Survey page example below.

The left-hand panel shows an overall summary of the results for the survey. In this case, summary results for the Air Survey activities are displayed.


The right-hand panel shows filters that allow you to select which results are displayed on the map according to date and different survey variables. For example you can choose to view only surveys completed in 2017, or only surveys completed on streets.



The map shows all the data collected for that survey, with the points coloured according to the factor detailed in the key. In this case, the Air Survey points are coloured according to the Air Pollution Index.

These arrows take you to graphs that show the air quality data in different ways. (Please note: not all surveys currently have graphs)

# Survey pages – graphs

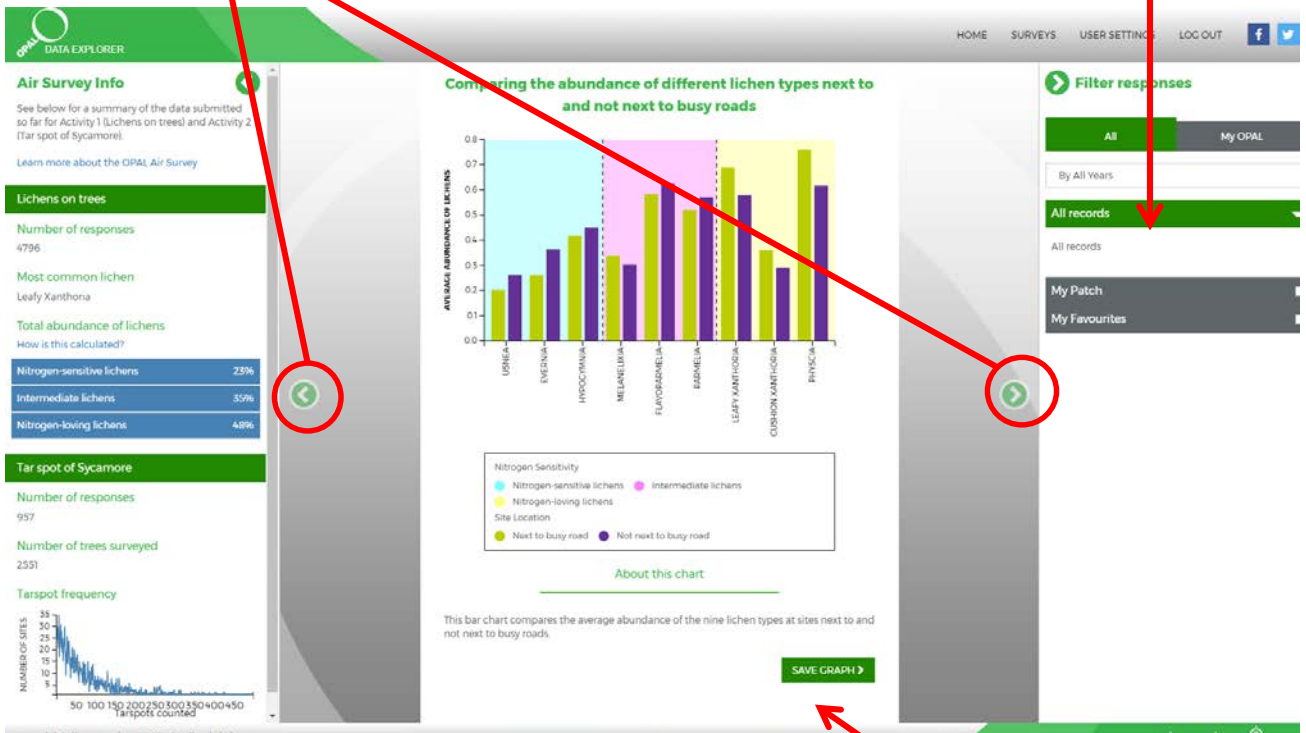
The Air, Bugs Count and Water Surveys have graphing functionality. To see the graphs, click the arrows at the side of the map. 

The screenshot below is of a graph available for the Air Survey, annotated to highlight some key features of the graphing tools.

This graph shows the average amount of the 9 different lichens observed at sites next to busy roads and not next to busy roads.


These arrows toggle between the graphs and the map of survey points

Here you can filter the survey results that go into the graph, including the options to graph only the survey records in your "Patch" or those that you have favoured.



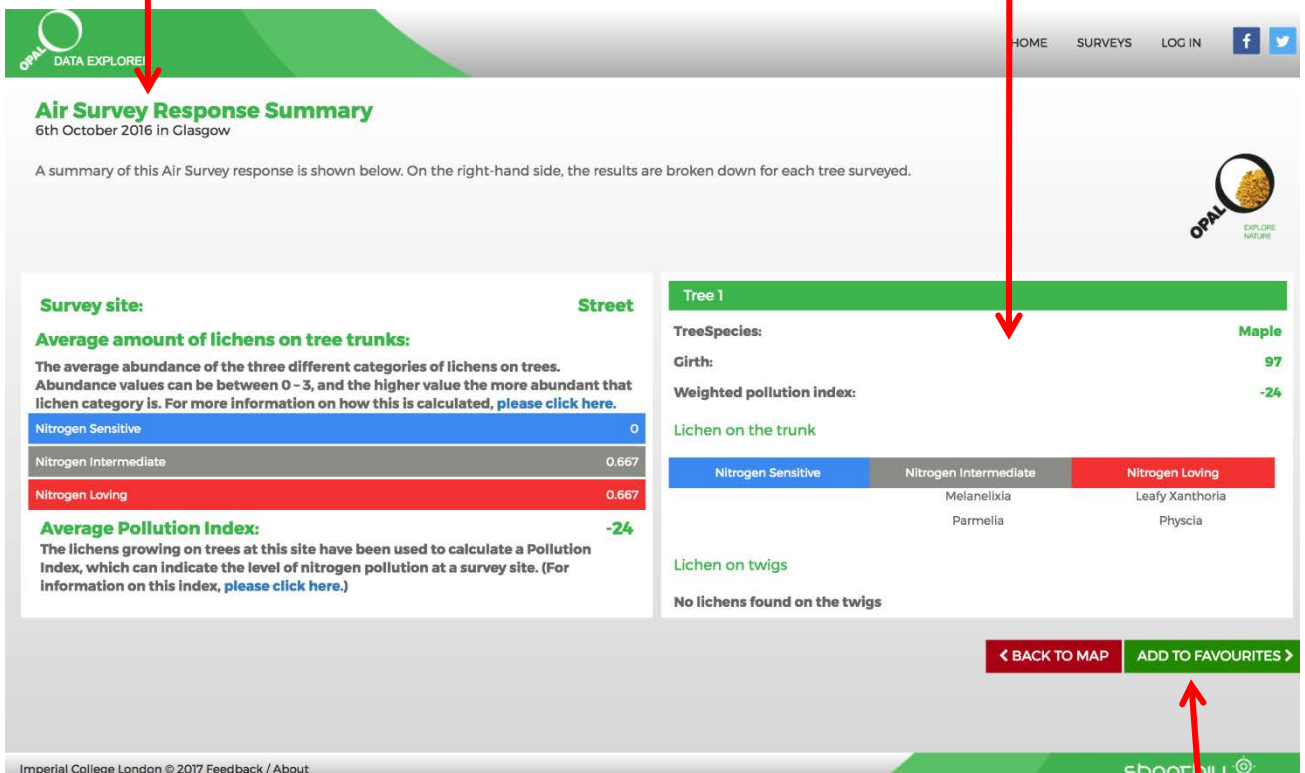
At the bottom of the page (not shown in this view, you have to scroll down a bit more) there is a "Save view" button so that you can save the graph to your user account. To view your "Saved views", Click on the "My OPAL" tab in the right-hand panel of the Data Explorer.

# Individual survey responses

Clicking on one of the survey symbols on the homepage or survey page maps (an Air Survey symbol in the example below ) brings up details about this survey entry. You could use this to compare other sites with yours after completing a survey, or investigate how factors such as tree species affect results in similar areas. You could even use already completed surveys to plan your own survey, e.g. searching for a certain type of habitat or tree species to survey.

The date and rough location of this survey entry are displayed here.

You can see which lichen were found on which trees, allowing you to make direct comparisons with your own survey data.



**Air Survey Response Summary**  
6th October 2016 in Glasgow

A summary of this Air Survey response is shown below. On the right-hand side, the results are broken down for each tree surveyed.

Survey site:		Street
<b>Average amount of lichens on tree trunks:</b>		
The average abundance of the three different categories of lichens on trees. Abundance values can be between 0 - 3, and the higher value the more abundant that lichen category is. For more information on how this is calculated, <a href="#">please click here</a> .		
Nitrogen Sensitive	0	
Nitrogen Intermediate	0.667	
Nitrogen Loving	0.667	
<b>Average Pollution Index:</b>		<b>-24</b>
The lichens growing on trees at this site have been used to calculate a Pollution Index, which can indicate the level of nitrogen pollution at a survey site. (For information on this index, <a href="#">please click here</a> .)		

Tree 1		
TreeSpecies:	Maple	
Girth:	97	
Weighted pollution index:	-24	
<b>Lichen on the trunk</b>		
Nitrogen Sensitive	Nitrogen Intermediate	Nitrogen Loving
	Melanelixia	Leafy Xanthoria
	Parmelia	Physcia
<b>Lichen on twigs</b>		
No lichens found on the twigs		

[< BACK TO MAP](#) [ADD TO FAVOURITES >](#)

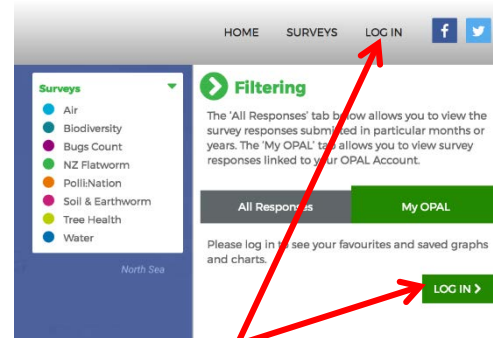
If you are logged in, you can add this survey to your favourites, allowing you to easily return to it later.

# Registered users' features

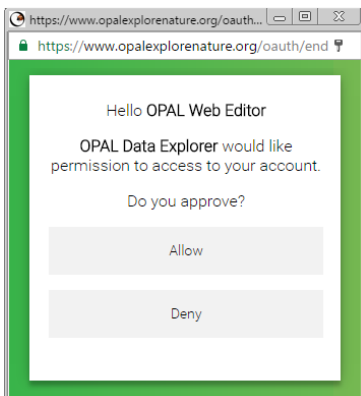
By signing in to the OPAL Data Explorer using an OPAL website account, users can access several customised tools. If you do not have an OPAL web account yet, you can [register on the OPAL website](#).

## Log in

To sign into your OPAL, either click on "LOG IN" in the top-right of the Data Explorer window, or click the "LOG IN" button under the "My OPAL" tab of the right-hand panel (both options are shown right)



You can log in to your OPAL account from these two locations



Enter your OPAL login details in the pop-up window. Then click 'Allow'.

*Please note: your user data will remain private, is stored securely and will not be shared with any third parties.*

## Customised tools

Once signed in to the Data Explorer, users can:

- 1. 'Favourite' survey responses:** Link survey responses to your user account.
- 2. Define a 'Patch' of interest:** Define a 'patch' / area of interest.
- 3. Graph and map selected survey responses:** Graph and map the survey responses in your 'patch' or those in your list of favourites.
- 4. Save graphs:** You can save graph views to your user account.

## Defining your 'Patch'

The 'My Patch' tool enables you to map and graph OPAL survey data collected within a specific area that you are particularly interested in, such as your local town.

Once signed in to the Data Explorer, you can define "your patch" by clicking on "USER SETTINGS" in the top right of the Data Explorer window. This will bring up the page below.

Click "CREATE MY PATCH", then click on the map to draw a polygon around the area you are interested. Click 'SAVE MY PATCH'.

OPAL DATA EXPLORER

HOME SURVEYS **USER SETTINGS** LOG OUT

**User Settings**

Hello OPAL Web Editor

You have created your patch. If you want to change or remove it, click here. If you cannot see your patch because it covers a very small area, this will help you find it.

**CHANGE MY PATCH** **CLEAR MY PATCH**

**FIND MY PATCH**

To define your patch, click "CREATE MY PATCH". If you would like to change your patch, click "CHANGE MY PATCH"

The polygon on the map shows your patch once it has been selected.

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To view or graph results in your patch, click on 'My Patch' in the right hand panel when viewing a map or graph.



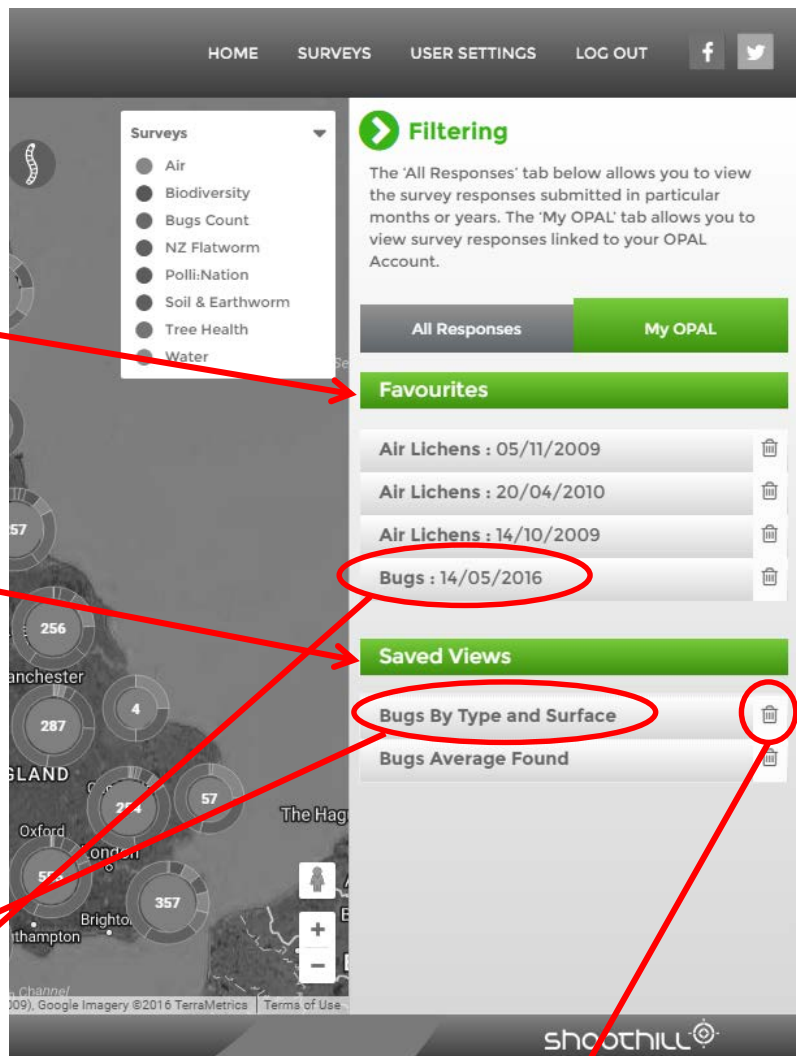
# 'My OPAL'

When logged in, you can view and edit the survey responses in your 'favourites' and your 'saved views' in the 'My OPAL' tab. The 'My OPAL' tab can be found in the right-hand panel of the OPAL Data Explorer, as shown in the screenshot below. This allows the user to have the data they are most interested close to hand.

The survey responses you have added to your favourites are listed here. If you can't see them, try clicking on this green 'favourites' bar

Any graphs that you have saved will be listed here. If you can't see your saved views, try clicking on this green 'saved views' bar.

To view details of a survey response in your list of favourites, or to see a saved graph view, click on the text of that record.



To remove a survey response or saved view, click on the waste bin icon next to the record.

## Technical requirements

The OPAL Data Explorer is optimised for Internet Explorer 11 and above as well as current versions of Edge, Chrome, Firefox and Safari.

It also functions on Apple and Android mobile devices using default web browsers in iOS 6 and above, and Android 4 and above.

If you experience any technical issues or bugs, please report them using our [feedback form](#).