

ECMWF

ESoWC

Air Quality Quality Control software

User Manual

Milestone 2 Reliable stations and Visual Analytics

Aim

Search OpenAQ dataset

1. Go to the url in a browser

http://gordonrates.co.uk/Air_Quality/workshop/Apps/F_DATASTORE_A_IMPORT_SubFunct5_Attach_Compt1_AirQuality_Dataset/openaq-browser/src/index2_copy.html#/latest

The screenshot displays the OpenAQ Browser web application. At the top, a navigation bar includes links for 'OpenAQ Browser', 'Cities', 'Countries', 'Fetches', 'Latest' (which is highlighted), 'Locations', 'Measurements', 'Parameters', 'Sources', 'Graph', '3D Graph', and 'Docs'. Below the navigation bar, the browser's address bar shows the URL 'https://api.openaq.org/v1/latest'. The main interface is divided into three sections: 'Place & Parameter' on the left, 'Pagination' in the center, and 'Filters' on the right. The 'Place & Parameter' section contains four dropdown menus for 'Country' (All countries), 'City' (All cities), 'Location' (All locations), and 'Parameter' (All parameters). The 'Pagination' section has input fields for 'Page' (set to 1) and 'Limit' (set to 100). The 'Filters' section includes input fields for 'Coordinates' (latitude,longitude), 'Radius' (2500), 'Nearest', and a 'Geo Filter' dropdown set to 'Don't filter'. A blue 'Fetch Data' button is located at the bottom left of the 'Place & Parameter' section.

2.
 - a. To Choose openAQ stations attributes click on locations and complete the selection boxes that are similar to those used to choose the latest measurements

Or

- b. To choose the latest measurements using this page
3. Next complete the selection boxes on the left side called 'Place & Parameter'
 4. It is recommended to choose just one parameter to reduce loading time.
 5. i. Choose the limit of amount of measurements in the Pagination selection box

ii. Filters can be applied in the filters box of Latitude and Longitude with a Radius.

iii. When complete these selections click Fetch Data

It should find the latest measurements

OpenAQ Browser

Cities

Countries

Fetches

Latest

Locations

Measurements

Parameters

Sources

Graph

3D Graph

Docs

https://api.openaq.org/v1/latest?limit=10000&country=AE¶meter=pm25

Place & Parameter

Country

United Arab Emirates

City

All cities

Location

All locations

Parameter

PM 2.5

Pagination

Page

1

Limit

10000

Filters

Coordinates

latitude,longitude

Radius

2500

Nearest

Geo Filter

Don't filter

Fetch Data

Showing 4 of 4 measurements

location	country	city	measurements			
			parameter	value	unit	lastUpdated
Abu Dhabi	AE	N/A	pm25	24	µg/m³	2020-11-08T22:00:00.000Z
Dubai	AE	N/A	pm25	57	µg/m³	2020-11-06T05:00:00.000Z
			pm25	57	µg/m³	2020-11-06T05:00:00.000Z

It displays the latest measurements for the chosen openAQ stations and parameters

6. Use the openAQ measurements to find a higher bound of measurements.
7. i. Once identified use the chosen higher bound in the Pecos Quality Control evaluation

For the user manual for Pecos Quality control open the Milestone 3 User Manual Choose Search Criteria

ii. It can be a helpful to find the 'increment' amount and lower bound.