Air Pollution Obsevatory - manual

This section will briefly explain you how to use our Air Pollution Observatory, based on the open source Sensor Observation System.

Tutorial

An introductory tutorial is accessible by clicking the ❓ icon, this only works in the **full screen version**. The following elements will guide you through that tutorial. It is important to note that **throughout the Observatory pollutants are named "Phenomenon"**.
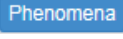
Map view

You can access the map view by clicking the 🌐 icon.

Open the air quality monitoring network that you want to navigate by clicking the folder icon 📁. You can currently select the following networks:

- SOS of IRCEL-CELINE: Belgian monitoring network
- SOS of RIVM/Geonovum – The Netherlands: Dutch monitoring network
- University of Leicester: Sensor Observation Service: Joaquin's UK based monitoring stations

The map view provides you with an Openstreet map containing markers (📍) or marker groups for monitoring stations in the selected database.

By clicking the Phenomena button you are able to filter the monitoring stations on display based on the air pollutants that are monitored at any location. This action also changes the appearance of the map markers to transparent discs with the colour indicating the level of the selected pollutant (phenomenon).

Selecting a time series

There are two ways of viewing the time series for pollutants in the Observatory, selection through a list or through the map markers.

Through a list (only full screen):

Click the 📋 icon and select the appropriate station, phenomenon (pollutant) and sensor. You can also start by filtering the station list based on a pollutant category. There might be significant loading times on the larger databases.
This will show you the time series for one pollutant at single location.

Through a map marker:

Click a map marker (📍) to open that station's dialogue box. The dialogue box shows you the various phenomena (pollutants) that are monitored at that specific location, including the technical sensor codes. Once all pollutant time series have loaded (🔄 disappears), you can select the one(s) of interest to you an click OK. This will show you the selected time series. Please note that through the map marker you can immediately select multiple pollutants at a single location.

Diagram view

Selecting one or multiple pollutant time series through the above steps will bring you to the diagram view. You can switch from map view to diagram view by clicking the 📊 button.

In its standard configuration the chart will show you today's evolution of the selected pollutant(s). You can scroll through the available time series by using the ❮ or ❯ arrows. Clicking the date range in between will allow you to select a number of pre-set timeframe (e.g. yesterday, last week, last month) or specify your own timeframe. To access the raw data for the chart, just click on the ☰ icon.

You can add time series to the chart by repeating the "selecting a time series steps" either through the list or map markers.

The legend provides an overview of all currently loaded time series and offers some options for altering the chart:

- Clicking ⟨⁄⟩ will hide/unhide the specific time series in the chart
- Clicking 📍 will take you to the map view centred on the location where the specific time series was measured
- Clicking ✎ will allow you to alter the appearance of the time series
- Clicking ⓘ will bring up a button (⊕ get data as CSV-File) allowing you to download the time series as a .csv file
- Clicking ✖ will unload a specific time series.

Favourites list

Additionally for quicker access to time series in the future you can add them to a favourites list by clicking the ☆ icon behind a time series name during either the "selecting a time series" process or in the legend of the Diagram view. At any time you can access your list of favourite time series by clicking the ★ button.

The favourites list allow you to quickly add a time series to a chart by clicking the 📊 icon. Naming a specific time series is done through the ✎ icon and deleting a time series from your favourites list through the 🗑 icon. You can save your favourites list to your computer by clicking the Export button and load a saved list by clicking the Import button.