

## **User Guide**

CALIOPE dashboard, where you'll be able to explore the Air Quality Forecast for the next 48 hours for the Iberian peninsula and the Canary Islands. Whether you're a data enthusiast, researcher, or industry professional, CALIOPE empowers you to navigate the complexities of air quality data.







## http://caliope.bsc.es

# Index

- 1. Navigate through AQI & Pollutants
- 2. Geographical Resolutions
- 3. Zoom in/out/Fullscreen
- 4. Layers
- 5. Average/Max values maps
- 6. TimeSlider
- 7. Select Date
- 8. Download image/gif map
- 9. Value of pollutant concentration
- 10. Explore timeseries
- 11. Download image TimeSerie
- 12. Air Quality Index / Value of AQI

- a. Max values
- b. Average values



### 1. Navigate through AQI & Pollutants



Select **AQI** or one of the **pollutants** to visualise the data on the map.



#### 2. Geographical Resolutions





Change the geografical domain displayed, selecting among Iberian Peninsula (4 x 4 Km2), Catalonia(1x1km2 ) or Barcelona( 20x20m2 ).

#### Note 1: N

12

LOM

**JELY POOR** 

**FIA** 

Mar

Mer

SARDINIA

In the second

CALIOPE only offers

nitrogen dioxide (NO2) data

for Barcelona

MONACO

Sassari .

Annaba

Batna .

ote that CALIOPE - URBAN for Barcelona domain, only offers data of Nitrogen dioxide (NO2)

#### Note 2:

As you zoom in on the map, you'll automatically access the highest available resolution, and you can adjust this by selecting a different domain from the dropdown menu.

#### 3. Zoom in/out-Fullscreen



Zoom **in** Zoom **out** 

## CALIOPE Fullscreen

#### 4. Layers

Air Quality Forecast	Forecast		<sup>①</sup> Ibe
Air Quality Index (AQI)	CALIOPE Forecast NO <sub>2</sub> Surface Concentration (µg/m <sup>3</sup> )		FRANCE
AQI Daily	Iberian Peninsula (4km x 4km) 00UTC 04 May 2023		Limoges*
Pollutants			AQUITAINE Bordeaux
Nitrogen dioxide (NO2)Image: Comparison of the sector of the			Toulouser OCCITANIE
	FORECAST ISSUED ON	Vision   Vision     Setubal   Vision	Algiers Stations Provinces
	04 MAY 2023 🕞 🕞 🔥	6h 12h 18h 0h 6h 12h 18h UTC	Maximum Inouat*





Add layers of information in the base map: **Air quality** stations / Provinces

#### 5a. Average/Max values maps



CALIOPE

Select the date and view its **daily maximum data** on the map.

#### 5b. Average/Max values maps



Select the date and view its **daily average data** on the map.

CALIOPE

Note: Maximum and Average are static maps. In order to get back to the daily data click on the "return" button.



#### 6. Timeslider

**Air Quality Forecast** 

Air Quality Index (AQI)		CALIOPE Forecast NO <sub>2</sub> Surface Concentration (µg/m <sup>3</sup> )		
AQI Daily	0	Iberian Peninsula (4km x 4km) 00UTC 04 May 2023		
Pollutants				
Nitrogen dioxide (NO <sub>2</sub> )	۲			
Sulfur dioxide (SO <sub>2</sub> )	$\bigcirc$			PRINCH
Particulate Matter 10µm (PM10)	$\bigcirc$			ASTU
Particulate Matter 2.5µm (PM2.5)	$\bigcirc$			GALICIA
Ozone (O <sub>3</sub> )	$\bigcirc$		Vigo	Currense
Carbon monoxide (CO)	$\bigcirc$			
Benzene (C <sub>6</sub> H <sub>6</sub> )	$\bigcirc$		Porto	
			PO	RTUCAL
		FORECAST ISSUED ON	04 May	05 Ma
		OH WINT 2020 Of Oh	6h 12h 18h	0h 6h 12

Forecast

**CALIOPE** Forecast

Press the **play/pause button** to view the data animation of the forecast during the day selected.

#### 0 Iberian Peninsula (4km x 4km) 🗸





#### 7. Select Date

Air Quality Index (AQI)		CALIOPE NO <sub>2</sub> Surfa	Forec	ast ncentr	ation (	µg/m³)				
AQI Daily	0	Iberian P 00UTC 04	eninsu 4 May 2	la (4kr 2023	n x 4kı	n)				
Pollutants										
Nitrogen dioxide (NO <sub>2</sub> )	۲									
Sulfur dioxide (SO <sub>2</sub> )	0									PRINCIPALITY
Particulate Matter 10µm (PM10)	0								A Coruña 1	OF ASTURIAS
Particulate Matter 2.5µm (PM2.5)	0								GALICIA	
Ozone (O <sub>3</sub> )	0								Vigo	CASTILE
Carbon monoxide (CO)	0									AND LEÓN
Benzene $(C_{e}H_{e})$	0								Porto	
										MADE
			1						PORTOGA	
		← May 2023								
		Su	Мо	Tu	We	Th	Fr	Sa	ubart	
		30	1	2	3	4	5	6	LE. V	Córdoba
		7	8	9	10	11	12	13	7	ANDALUS
		14	15	16	17	18	19	20	and the second s	Cádiz
		21	22	23	24	25	26	27		Ceuco
		28	29	30	31	1	2	3		Them

Select Day, Month, Year to view the forecast issued data.





#### 8. Download image/gif



Download the selected displayed data in **image** or **animation**.

### 9. Value of pollutant concentration





Click on the map to view the **value of the pollutant** concentration.



10. Explore timeseries

Click on the **"EXPLORE TIMESERIES" button** to view the evolution of the pollutant concentration during the forecast period.



#### 11. Explore timeseries





#### Click on the **"DOWNLOAD IMAGE" button** to download the timeserie image.



Click on the map of AQI to view the value of Air Quality Index

### 12. Air Quality Index / Value of AQI



# CALIOPE Thank you