

PM2.5, European air quality data for 2023, (interpolated data), June 2025

The data set provides values for the human health related indicator of PM2.5 (annual average concentration) at 1 km² grid combining monitoring air quality data, chemical transport model results and other supplementary data in a 'regression-interpolation-merging mapping' methodology. It covers Europe for the year 2023.

This data set is used to estimate population exposure to air pollution and for the health impact assessments published by the EEA (see, for example, Harm to human health from air pollution in Europe: burden of disease 2024 at <https://www.eea.europa.eu/en/analysis/publications/harm-to-human-health-from-air-pollution-2024>). The methodology can be found in the 2024 ETC HE report 2024/4 "Air quality maps of EEA member and cooperating countries for 2022. PM10, PM2.5, O3, NO2, NOx and BaP spatial estimates and their uncertainties", available at <https://www.eionet.europa.eu/etcs/etc-he/products/etc-he-products/etc-he-reports/etc-he-report-2024-4-air-quality-maps-of-eea-member-and-cooperating-countries-for-2022-pm10-pm2-5-o3-no2-nox-and-bap-spatial-estimates-and-their-uncertainties> (the corresponding 2025 report with the 2023 maps will be published at the end of 2025).

Simple

Date (Creation)	2025-05-01				
Date (Publication)	2025-05-28				
Edition	01.00				
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Point of contact	Organisation name		Individual name		
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Point of contact

No information provided.

Maintenance and update frequency	Annually
GEMET - INSPIRE themes, version 1.0	Atmospheric conditions Environmental monitoring facilities Human health and safety
Keywords	
Keywords	
GEMET	traffic troposphere atmospheric composition air quality monitoring atmospheric particulate air quality transboundary pollution atmospheric pollution
Continents, countries, sea regions of the world.	- San Marino - Andorra - EEA38 (from 2020) - Monaco
Spatial scope	European

INSPIRE priority data set	• Measurement and modelling data (Air Quality Directive) • Monitoring stations (Air Quality Directive) • Directive 2008/50/EC
EEA topics	• Air pollution
Temporal resolution	• Annually
Access constraints	Other restrictions
Other constraints	no limitations to public access
Use constraints	Other restrictions
Other constraints	EEA standard re-use policy: unless otherwise indicated, re-use of content on the EEA website for commercial or non-commercial purposes is permitted free of charge, provided that the source is acknowledged (http://www.eea.europa.eu/legal/copyright). Copyright holder: European Environment Agency (EEA).
Aggregate Dataset identifier	282ed4e9-d58a-44ae-8c48-e688bdfed281
Association Type	Cross reference
Spatial representation type	Grid

Spatial resolution

No information provided.

Distance	1 km
Language of dataset	English
Topic category	• Environment

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Begin date	2023-01-01		
End date	2023-12-31		
Coordinate reference system identifier	EPSG:3035		
Distribution format	GeoTIFF ()		
OnLine resource	Protocol EEA:FOLDERPATH WWW:URL	Linkage https://sdi.eea.europa.eu/webdav/datastore/public/eea_r_3035_1_km_aq-interpolated-pm25_p_2023_v01_r00 https://sdi.eea.europa.eu/data/57807f24-25dc-4df3-9468-dcff8cee5468	Name Direct download

OnLine resource

No information provided.

Hierarchy level	Dataset
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Conformance result

Title	Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08
Explanation	See the referenced specification

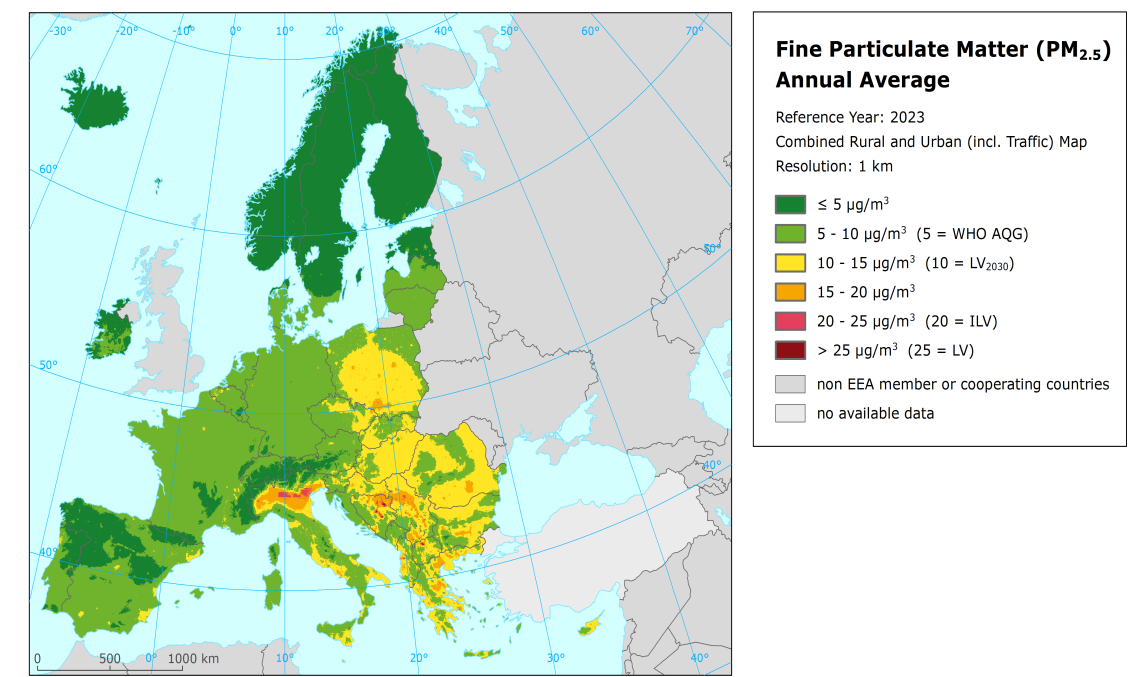
Statement	The data set and corresponding maps are derived primarily from the e-reporting Air Quality database, consisting of monitoring stations data reported to EEA, and some additional EMEP (European Monitoring and Evaluation Programme) station monitoring data, supplemented with, among others, altitude, meteorological ECMWF data, EMEP concentration modelling data and satellite data. These data sets and the corresponding maps are assessment tools for use at the European scale. They may show results which differ from assessments made at national scale and should not be used to check formal compliance with regulated standards. The methodology and the corresponding maps can be found in the 2021 Eionet report "European air quality maps for 2019. PM10, PM2.5, Ozone, NO2 and NOx Spatial estimates and their uncertainties" (ETC/ATNI Report 1/2021) available at https://www.eionet.europa.eu/etcs/etc-atni/products/etc-atni-reports/etc-atni-report-1-2021-european-air-quality-maps-for-2019-pm10-pm2-5-ozone-no2-and-nox-spatial-estimates-and-their-uncertainties; the references therein; and the successive Eionet reports for the following years available at https://www.eionet.europa.eu/etcs/all-etcs-reports.
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Metadata

File identifier	57807f24-25dc-4df3-9468-dcff8cee5468 XML
Metadata language	English

Character set	UTF8			
Hierarchy level	Dataset			
Date stamp	2025-05-28T14:15:52.354099Z			
Metadata standard name	ISO 19115/19139			
Metadata standard version	1.0			
Metadata author	Organisation name	Individual name	Electronic mail address	Website Role
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Overviews



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