

European air quality data for 2019 (interpolated data and station points), Mar. 2022

The data set provides air pollutants concentrations at 1 km and 2 km grids combining monitoring air quality data in a 'regression-interpolation-merging mapping' methodology and the observational values of the air quality monitoring stations used in the interpolation. It covers Europe for the year 2019. It provides estimates for human health related indicators of pollutants PM10 (annual average, 90.4 percentile of daily means), PM2.5 (annual average), ozone (93.2 percentile of maximum daily 8-hour means, SOMO35, SOMO10) and NO2 (annual average), and vegetation related ozone indicators (AOT40 for vegetation and for forests) for the year 2019. The data set contains also Phytotoxic ozone dose (POD) for wheat, tomato and potato and NOx annual average grids for 2019.

This data set is used to estimate population and vegetation exposure to air pollution, as an input to the indicator AIR004 (Exposure of Europe's ecosystems to ozone: <https://www.eea.europa.eu/ims/exposure-of-europes-ecosystems-to-ozone>) and for the health impact assessments published in the Air Quality in Europe reports (https://www.eea.europa.eu/publications/#c7=en&c11=5&c14=air-quality-reports&c12=&b_start=0). 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>

This data set includes the station values and the gridded interpolated values in Shapefile format and the interpolated values in OVR and GeoTIFF formats. It can also be downloaded in Spatialite-Rasterlite. For convenience, the data set also includes the maps in TIFF and PNG format included in the report.

Simple

Date (Creation)	2021-07-02		
Date (Publication)	2022-03-31		
Edition	01.00		
Citation identifier	eea_v_3035_1_km_aq-interpolated-2019_p_2019_v01_r00		
Point of contact	Organisation name	Individual name	Electronic mail address Website Role
	European Environment Agency		sdi@eea.europa.eu http://www.eea.europa.eu Point of contact
	European Environment Agency		sdi@eea.europa.eu Custodian
Maintenance and update frequency	Annually		
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> • Human health and safety • Environmental monitoring facilities • Atmospheric conditions 		
Keywords			
Keywords			
GEMET	<ul style="list-style-type: none"> • atmospheric pollution • atmospheric particulate • tropospheric ozone • nitrogen oxides • atmospheric composition • troposphere • nitrogen dioxide • traffic 		

	<ul style="list-style-type: none"> • air quality monitoring • air quality • transboundary pollution • ozone
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • Andorra • San Marino • United Kingdom • Monaco • EEA38 (from 2020)
Spatial scope	<ul style="list-style-type: none"> • European
INSPIRE priority data set	<ul style="list-style-type: none"> • Measurement and modelling data (Air Quality Directive) • Directive 2008/50/EC • Monitoring stations (Air Quality Directive)
EEA topics	<ul style="list-style-type: none"> • Air pollution
Temporal resolution	<ul style="list-style-type: none"> • 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 DatasetIdentifier	282ed4e9-d58a-44ae-8c48-e688bdfed281
Association Type	Cross reference
Spatial representation type	Vector

Spatial resolution

No information provided.

Distance	1 1 km
Distance	2 2 km
Language of dataset	English
Topic category	<ul style="list-style-type: none"> • Environment

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Begin date	2019-01-01		
End date	2019-12-31		
Coordinate reference system identifier	EPSG:3035		
Distribution format	<ul style="list-style-type: none"> • SHP () • Spatialite () 		
OnLine resource	Protocol EEA:FOLDERPATH EEA:FOLDERPATH WWW:URL	Linkage https://sdi.eea.europa.eu/webdav/datastore/public/eea_v_3035_1_km_aq-interpolated-2019_p_2019_v01_r00/SHP/ https://sdi.eea.europa.eu/webdav/datastore/public/eea_v_3035_1_km_aq-interpolated-2019_p_2019_v01_r00/spatialite/ https://sdi.eea.europa.eu/data/3c72b3a2-af82-4595-82b2-b205e74a90cf	Name Shape- and raster files Spatialite Direct download
Hierarchy level	Dataset		

Conformance result

Date (Publication)	2010-12-08
Explanation	See the referenced specification

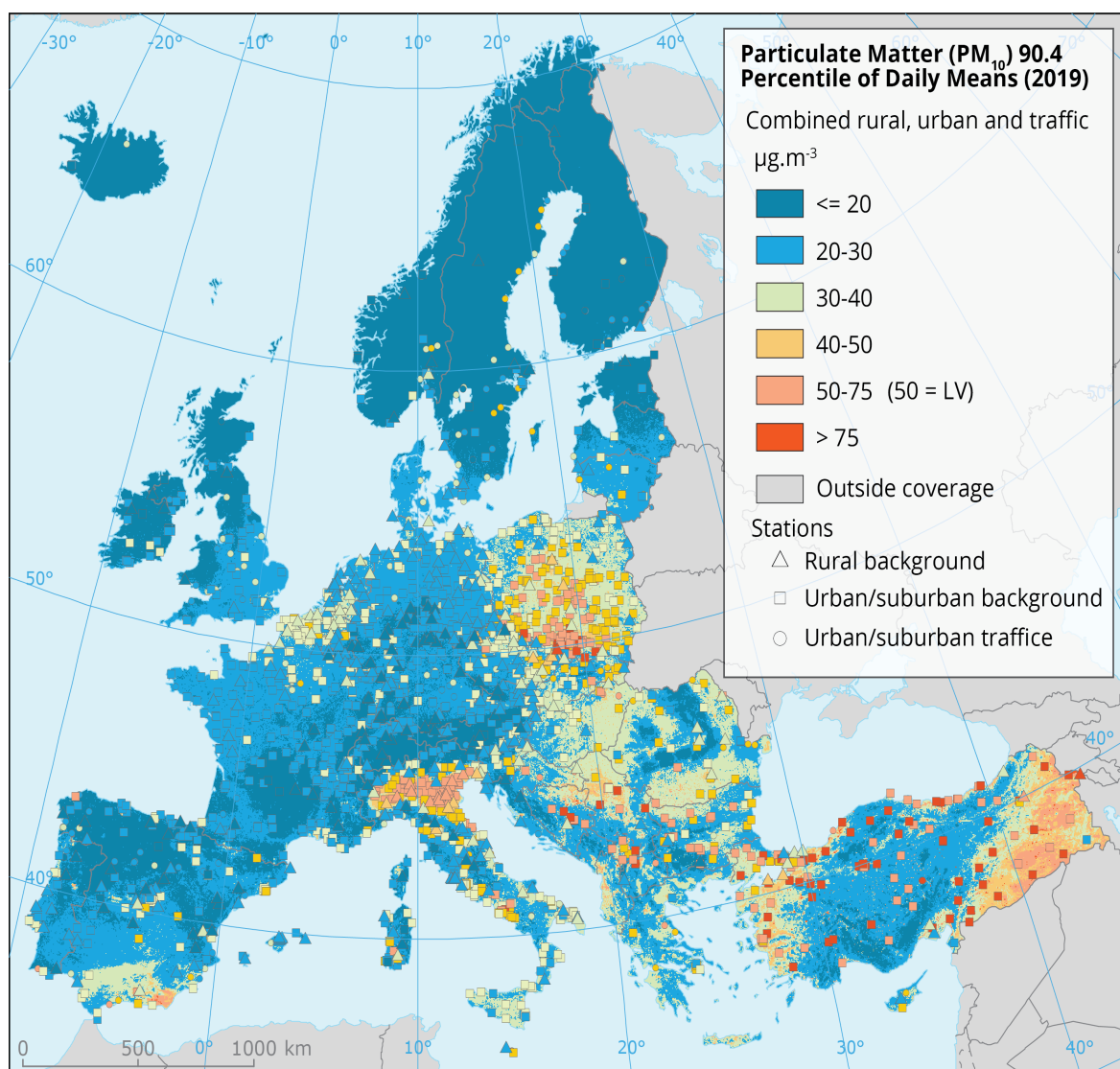
Statement	<p>The data set and corresponding maps are derived primarily from the e-reporting Air Quality database, consisting of monitoring stations data reported to EEA, and some additional EMEP (European Monitoring and Evaluation Programme) station monitoring data, supplemented with, among others, altitude, 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.</p> <p>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 .</p>
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Metadata

File identifier	3c72b3a2-af82-4595-82b2-b205e74a90cf XML
Metadata language	English

Character set	UTF8										
Hierarchy level	Dataset										
Date stamp	2022-04-01T05:45:19.676Z										
Metadata standard name	ISO 19115/19139										
Metadata standard version	1.0										
Metadata author	<table border="1"> <thead> <tr> <th>Organisation name</th> <th>Individual name</th> <th>Electronic mail address</th> <th>Website Role</th> </tr> </thead> <tbody> <tr> <td>European Environment Agency</td> <td></td> <td>sdi@eea.europa.eu</td> <td>Point of contact</td> </tr> </tbody> </table>	Organisation name	Individual name	Electronic mail address	Website Role	European Environment Agency		sdi@eea.europa.eu	Point of contact		
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Overviews



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