How to cite the database and corresponding publication

Data from the COVID-AQS database are provided with free and unrestricted access for scientific (non-commercial) use. It is our philosophy to maximize the scientific use of the data collected in this database. Users of the COVID-AQS data agree to the following:

(i) Include the following acknowledgments in publications: "COVID-19 Air Quality Data Collection (2021), version XX, last updated YYYY-MM-DD from: https://covid-aqs.fz-juelich.de was used in this work."

(ii) Cite the dataset and following original reference of the database: Gkatzelis et al. (2021). "The Global Impacts of COVID-19 Lockdowns on Urban Air Pollution: A Critical Review and Recommendations", Elementa, 10.1525/elementa.2021.00176

Disclaimer: Every effort is made to provide the most accurate and complete data collection possible. We are not responsible for results and conclusions based on the use of these data.

File Format: UTF-8 encoded CSV with semicolon as delimiter

Column Headers Description

StudyStartDate:	The start date of the reported study period in ISO format (YYYY-MM-DD).
StudyEndDate:	The stop date of the reported study period in ISO format (YYYY-MM-DD).
FirstAuthor:	The first author of the publication.
DOI:	The online DOI of the paper. An example format would be 10.1016/j.scitotenv.2020.139022
AdditionalDetails:	Details regarding the location of the measurements, or modeling studies e.g., urban, rural, multiple cities, etc.
City:	The name of the city for which data is provided.
Country:	The name of the country for which data is provided. This column refers to countries following the United Nations definition and classification, as well as dependencies and other territories as found here.
GeographicalRegion:	The name of the region for which data is provided. This includes Africa, Central Asia, East Asia, West Asia, South Asia, Southeast Asia, Europe, North America, South America, Oceania, Antarctic, Global, or other (please define).
Methods:	Methods used to compare the lockdown period to a reference period. This includes: Direct Comparison to a Reference Period, Direct Comparison to a Reference Period: Meteorology discussed, not quantified, Accounting for Effects

	of Meteorology, Atmospheric Chemistry, and Long-term Trends, Air Quality Modeling and Emission Inventories Constrained by Observed Changes, or other.
Platform:	Which platform was used for the observations or to validate the model results? This includes ground-based, satellite, both, or other (please define).
StringencyIndex:	Stringency Index is an indicator for the severity of lockdown measures imposed by each country. Details can be found here.

Pollutant abbreviations sorted in alphabetical order

AOD:	Aerosol Optical Depth.
AQI:	Air Quality Index. Please define the function used to determine this parameter.
BC:	Black Carbon.
CO:	Carbon Monoxide.
NH3:	Ammonia.
NO2:	Nitrogen dioxide.
NOX:	Nitrogen oxides (NO+NO2).
O3:	Ozone.
PM10:	Particulate matter smaller than 10 micrometers.
PM25:	Particulate matter smaller than 2.5 micrometers.
SO2:	Sulphur Dioxide.
VOCS:	Volatile Organic Compounds. Please indicate which compounds are studied.

Other abbreviations

relative_change:	Headers with this ending indicate the pollutant percent change during the lockdown compared to a reference period following the equation: relative change = 100 x (lockdown_concentration – reference_concentration) / reference_concentration
ugm3:	Indicates the units in micrograms per cubic meter
mgm3:	Indicates the units in milligrams per cubic meter
Reference:	Headers with this ending indicate the pollutant concentration during the reference period.
Lockdown:	Headers with this ending indicate the pollutant concentration during the lockdown period.
avg:	Headers with this ending indicate the average pollutant concentration in the studied time period

sd: Headers with this ending indicate the 1 sigma standard deviation of the pollutant concentration or percent change.