

General information regarding the use of this geodata set

About the creators of the concentration maps

Modelling of noise in all areas have been done by Mikael Ögren, Occupational and Environmental Medicine, School of Public Health and Community Medicine, Institute of Medicine, Sahlgrenska Academy, University of Gothenburg, Sweden, and Department of Occupational and Environmental Medicine, Sahlgrenska University Hospital, Gothenburg, Sweden

Air pollution modelling in Umeå, Linköping and Gothenburg have been done by Christian Asker, David Segersson, and Cecilia Bennet, at the Meteorology Research Unit, Swedish Meteorological & Hydrological Institute, Norrköping, Sweden.

Air pollution modelling in Malmö have been done by Mårten Spanne and Susanna Gustafsson at Environmental Department, City of Malmö, Malmö, Sweden.

Air pollution modelling in Stockholm and Uppsala have been done by Kristina Eneroth and Jenny Lindvall at SLB-analys, Environment and Health Administration, City of Stockholm, Stockholm, Sweden.

All files in this research dataset are made publicly available under the creative commons license: CC BY 4.0, International.

The use of the data must be referenced in any written or digital publication, as well as public presentations as:

Molnár, P., & Ögren, M. (2024). Air pollution and noise GeoTIFF files for SCAPIS environment (Version 1) [Data set]. University of Gothenburg. DOI: <https://doi.org/10.5878/8kd2-6091>

About the air pollution and noise maps

In this folder we have GeoTIFF files for annual mean modelled air pollution (PM2.5, PM10, NOx and NO2) for years 2000 to 2018. For noise we have mesh files for noise levels (expressed as Lden) for the years 2000, 2011, and 2018.

Projection

All files use the projection SWEREF 99 TM (EPSG:3006).

Air pollution files use a pixel resolution of 50 times 50 meters.

The noise files are in mesh format with a resolution varying from 25-100 meters. For further information about the use of the noise mesh files see the read me file in the noise folder.

The naming convention of the maps are as follows:

Area-name_Variable_Model-Year

Modelling areas

UM	The area around Umeå
S-U	The combined area of Stockholm and Uppsala county
LN	The area around Linköping
Gbg	The area around Gothenburg (Göteborg in Swedish)
Malmo	The area around Malmoe (Malmö in Swedish)

National map of Sweden and local area map for presentations

There is an accompanying dataset of maps in png-format that are suited for presentations (printed or electronic) that can be found via the DOI: <https://doi.org/10.5878/btxv-v698>.

Included in the above-mentioned dataset are two maps of Sweden with the modelled areas. In addition, there are png-files for total levels and local contributions as well as the contributions from major local sources (e.g. traffic, residential heating, and shipping).