

AIR POLLUTION MAPS

As part of the NeuroSmog project, the Institute of Environmental Protection has created high-quality, high-resolution maps of particulate matter and nitrogen dioxide concentrations. These are the first maps of this kind in Poland. We are making them available for research purposes to other research centers.

The maps are suitable for use in epidemiological studies and provide an opportunity to assess individual exposure to a given air pollutant. They are developed taking into account a number of variables and data from various available sources, including measurement results and mathematical models. They are the result of statistical algorithms developed in the project that define hybrid models based on Land-Use Regression models (LUR) (see Kaczmarek-Majer).

We make available as high-resolution maps for 2018 (annual average value of pollutant concentration), made for the project domain, i.e. 3 provinces: Opole, Silesia and Lesser Poland. The highest resolution used in these maps is 125x125m.

In order to receive these maps (or parts of them, e.g. for a selected city, county or defined area), please read the terms and conditions ([link](#)) and the model agreement ([link](#)) and submit the relevant order to the indicated e-mail address.

Realizing that the exposure maps developed within Neurosmog do not have to correspond to the requirements of other epidemiological studies, the Institute of Environmental Protection - National Research Institute offers a service that allows commercialization of our knowledge acquired within the Neurosmog project, which can provide scientific and practical support to other researchers. This could be, for example, in the form of maps with higher temporal resolution, or maps for other areas. We will post the details, possibilities and general principles of cooperation with the Institute in creating exposure maps personalized to a specific epidemiological study soon.