

## **CARTOGRAPHIC PRESENTATION OF RESULTS OF GREAT CITY ECOLOGICAL MONITORING**

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Great urban agglomerations need permanent control of their environment because from one side they usually occupied a small territory on which a great number of population live and from the other side such territory has been treated by various factors. These factors have been measured and the results can be presented in cartographic form. In Cracow and its region the following parameters describing the state of environment have been registered:

- air pollution (dust fallout, suspended dust, heavy metals, sulphur dioxide, nitrogen oxides, carbon oxide and carbon dioxide, fluor) in the frame of automatic systems of 8 stations;
- soil pollution (69 research fields);
- concentration of heavy metals in vegetables;
- traffic and industrial noises (43 objects).

Results of these measurements have been presented in forms of graphs, computer cartographic print-outs, and isoline maps for specified situations and time (year, month, day, moment). They can be also presented in the form of synthetic maps showing the complex conditions of environment.

Remotely sensed data are another type of information concerning environmental monitoring. They provide qualitative information about spatial range of smoke plumes emitted from industrial factories. The remotely sensed data in the form of a series of Landsat images have been used to present the propagation of smokes during three various prevailing conditions. The information was derived from satellite images by visual observation and microphotometric measurements within smoke trails visible in satellite images. Author has made an attempt to combine statistics (from monitoring) and remote sensing data for presenting the problems of air pollution as a special diagram based on the wind rose for particular meteo-stations. There is also possibility of dynamic presentation which shows improvement or deterioration of ecological conditions.