

CARTOGRAPHIC FORMULATION OF ECOLOGICAL  
MONITORING DATA IN A CITY

Great urban agglomerations needs permanent control as a environmental monitoring because from one side there is a small territory with great number of population and from the other side exist different threats. The systematic measurements are been made which next could be elaborated as a cartographic form. In Cracow and his region the state of environment is registered in following range:

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

As a results of this registrations are: graphs, computer cartographics print-outs and isoline maps for defined situations and time (yearly, monthly, daily and the moments) also syntetic maps showing the complex conditions of environment (such a map of the Cracow area will be presented by author). Another type of data concerning of environmental monitoring are remote sensing data, which give informations about spatial range of smoke plumes from industry but without quantitative data. One of the map, which will be presented, uses three series of LANDSAT images to show the situation under three different prevailing weather conditions. It is based on visual observation and microphotometric sample measurements within smoke trails visible on satellite images. The author made an attempt to unite statistic (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.