

## THE CARTOGRAPHIC TECHNIQUE FOR THE STUDY OF CHEMICAL COMPOSITION OF THE URBAN AIR ENVIRONMENT

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The article deals with the problem of reducing of oxygen concentration in the urban air environment. A hypothesis was put forward on the relationship between a decrease in oxygen levels and a reduction of urban green spaces. It was decided to use the cartographic technique to gather more complete information about reducing of urban gardening over a long period of time. The results of a statistical analysis of oxygen concentration in the atmospheric air of Sochi for 50 years are presented. The fact of a steady long-term trend of a decrease in the concentration of oxygen in the atmospheric air of Sochi in comparison with the values in Moscow and on average in Russia is confirmed. The sequence of collection and processing of free data multi-temporal cartographic data for 50 years is presented. The stages of GIS-analysis of gathered materials are described. Preliminary conclusions are made about the validity of the hypothesis. The lack of modern accurate cartographic data of Sochi is noted. Prospects for further research are outlined.

**Key words:** statistical analysis, cartographic technique, oxygen concentration, settlements, urban landscaping, digital maps, topographic maps, GIS, GIS technologies.

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