

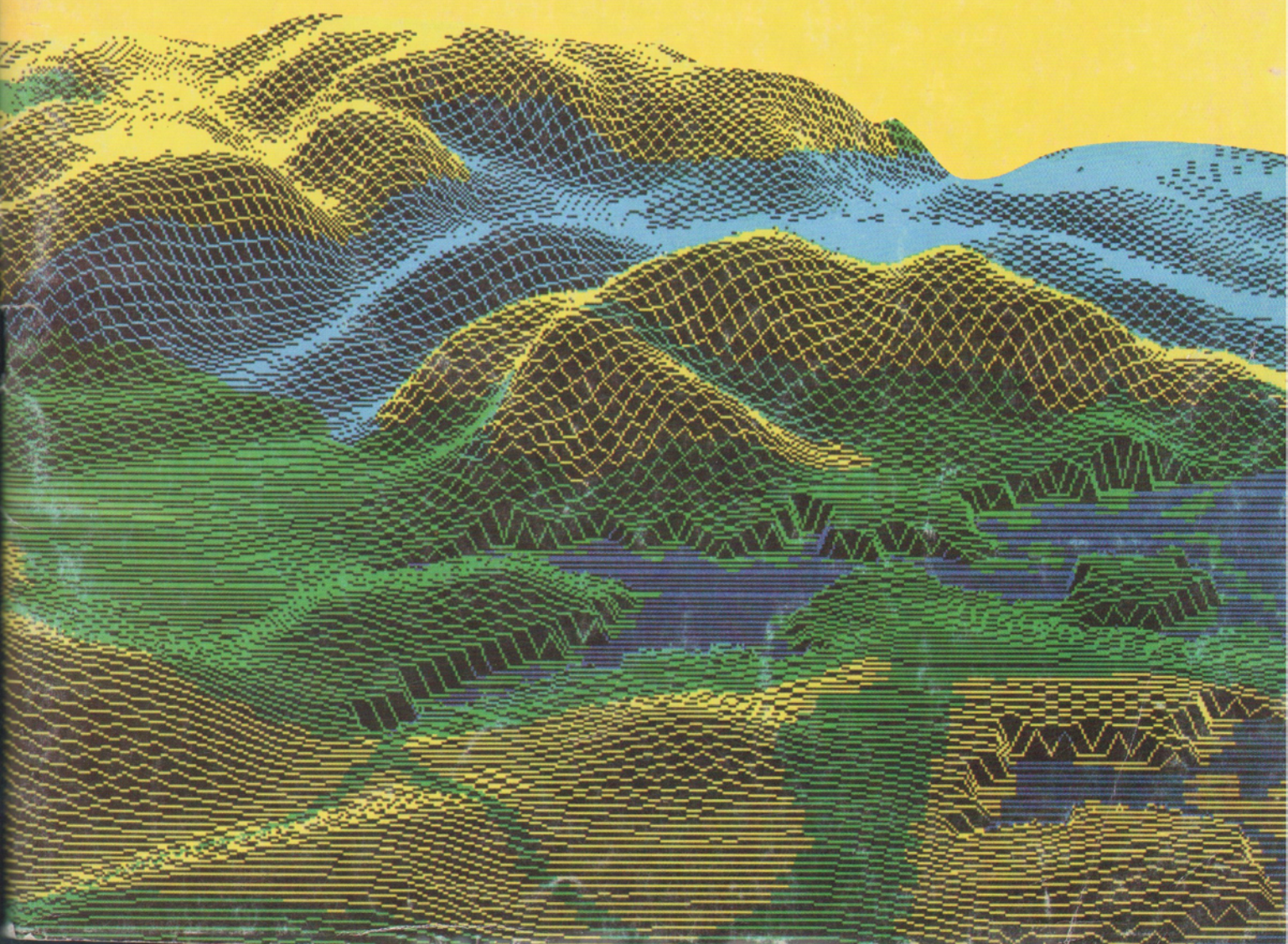
MORAVIAN GEOGRAPHICAL REPORTS



VOLUME I

NUMBER 1,2 1993

ISSN 1210 - 8812



MORAVIAN GEOGRAPHICAL REPORTS

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PRICE

Czech Republic, Slovakia 75 CZK

other countries 9.5 USD

mailing costs are counted separately

subscription (two numbers per year):

Czech Republic, Slovakia 145 CZK

other countries 17.5 USD

including mailing costs

MAILING ADDRESS

MGR, Institute of Geonics,

PO Box 29, 61300 Brno, Czech Rep.

(fax) 42 5578031

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ISSN 1210-8812

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A Brief Survey of Main Results Achieved by Institute of Geonics, Brno Branch Office, in 1993

Antonín Vaishar

The branch office in Brno came into existence on 1 May, 1993 through delimitation from the former Geographical Institute, Academy of Sciences, Czech Republic. In fact, its workers were engaged with a whole range of problems associated with liquidation of their former workplace, physical movement into the new premises as well as with formation of a new system of work at the new workplace as long as until winter months. This is why the results achieved in 1993 may seem rather modest.

Main results

The most significant outcome can be seen in a study made into the protected landscape area Žďárské vrchy (Hills) – problems of environment. (Updating some landscape segments, confrontation issues of natural environment).

The study includes an analysis of conflicts between anthropogenic activities and biotic values of the Protected Landscape Area Žďárské vrchy with special emphasis being put on ecologically important landscape segments as well as on an analysis into confrontation issues of environment. It tackles issues of the present condition of biocoenoses, anthropogenic forms of relief, erosion problems, the conflict of interests between protection of water resources and air pollution. The study is supplemented by a collection of cartographical enclosures made at a scale of 1 : 25 000 and illustrating geomorphological situation (anthropogenic forms of relief, erosion, hydrogeographical problems), biogeographical situation (skeleton of landscape ecological stability), and meso-climatic situation. The study was made for Czech Ministry of Economy.

Other outputs — with no regard to their importance — were as follows: Geomorphological inventory of some relief forms in the National Park Podyjí (Dyje River Catchment Area).

A geomorphological inventory was made of rocky micro- and mesoformations and accumulations which came into existence namely through periglacial processes, mechanical and chemical weathering, and moving away slopes in the zone of Vranov nad Dyjí – Hardegg which is built by rocks of the Dyje river dome. Attention was also paid to basic geomorphological features of incised river meanders, defining pattern of the Dyje valley. The study was made for Czech Ministry of Environment.

Definition of environmentally susceptible areas and areas of environmental degradation in the catchment basin of Morava River.

The map includes identification of potential geomorphological hazards as well as identification of areas afflicted with severe erosion, loaded with airborne pollution substances, endangered groundwater resources, and degradation of vegetation cover. The study was ordered by Research Institute of Water Management of T.G. MASARYK.

Protection of floodplain shallow groundwater resources from negative impacts of water streams on their ampeness and namely on water quality.

The study was a part of the project named "Ensuring good standard drinking water for inhabitants" which was integrated in the complex Programme of Environmental Protection led by the Czech Ministry of Environment. It contains a report on observation of shallow subsurface watertables in the floodplain of Morava river and water situations in its relief arm, sample analyses, maps of hydroisohypes with using a mathematical model.

A set of works named Physio-geographical characteristics of some water reservoirs.

The studies tackle problems of water reservoirs at Letovice, Boskovice and Těrlícko, analyzing their physical and geographical conditions, namely characteristics of their vegetation cover as a basis to define extreme fluctuation of water level within the space of reserves and buffer zones. Contents summarize the present situation, recommended measures and suggestions for further research. The project was ordered by HYDROEKO Ltd.

Grant Projects

The following grant projects supported by the Grant Agency of the Academy of Sciences of Czech Republic were terminated in 1993:

No. 31406, Anthropogenic Activities: Their Impact on Regime and Properties of Karst Waters,

No. 31411, Anthropogenic Transformations of the Relief and Possibilities of Their Assessment,

No. 31425, Prognoses of Subsurface Water Regime as Related to Altering Geographical Conditions,

No. 31451, Evaluating the Elements of Spelaeous Environment and Their Positive Influence on Child Organism,

No. 31459, A Complex Geomorphological Analysis into Relief of the National Park Podyjí.

Foreign Relations

There were no valid agreements with workplaces in foreign countries to be passed on the Brno Branch Office from the dissolved Geographical Institute of Czech Academy of Sciences. The foreign relations are being built here practically from the beginning and are mostly based on personal contacts with abroad. A cooperation agreement has been signed with the Institute of Geography and Spatial Organization, Polish Academy of Sciences, Warsaw.

The Kiev meeting has confirmed a coordination role entrusted to the Branch Office at implementing the international programme, Regional Fundaments of Eco-development, appointing it with a task to find some legal forms for cooperating as joint workplaces. An author's original of the "Map of Landscape Use of Central Europe" for the Czech Republic, was finished within the programme (coordinator being Prof. RICHLING – Warsaw) and data

gathered for the map of "Effects of political and economic transformation in Central and East Europe up to 1992", (coordinator being dr. NEFIODOVA – Moscow). Both maps are to be published by the Austrian Institute for Eastern and Southeastern Europe in 1994.

Experts from the Brno Branch Office are deeply involved in preparing the regional conference IGU 1994 in Prague by ensuring organization and contents of workshops for individual committees. The Branch Office has also started organizational work at preparing the meeting of IGU Commission "Health, Environment and Development".

Altogether eleven business trips abroad were made by fourteen workers of the Branch Office in the second half of 1993, of which 6 were to conferences held in foreign countries, 2 were study stays, and 3 concerned concrete discussions on collaboration. At the same period of time, the Brno Branch Office was visited by three foreign experts, ie. from France, People's Republic of China, and Poland.

