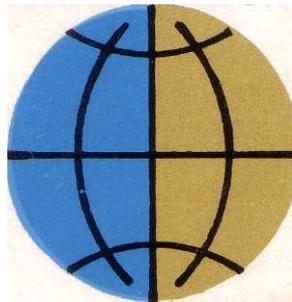


CZECHOSLOVAK ACADEMY OF SCIENCES  
INSTITUTE OF GEOGRAPHY  
BRNO

**MAIN TRENDS IN USE COMPUTERS  
IN GEOGRAPHY**

EDITOR: ŠTEFAN POLÁČIK



STUDIA GEOGRAPHICA

74

BRNO 1982

**STUDIA GEOGRAPHICA**

**Publisher: Institute of Geography Academy of Sciences Brno**

**Editorial Board:**

**Břetislav Balatka, Jan Bína, Tadeáš Czudek, Miroslav Macka, Alois Matoušek (chief editor), Jaroslav Raušer, Stanislav Řehák (Managing Editor), Vladimír Vahala (Chairman)**

**Editorial Office: Institute of Geographical Sciences, Mendlovo náměstí 1, 662 82 Brno, Czechoslovakia**

<b>CONTENTS</b>	
FOREWORD	4
Š. Poláčik I. Computers in geography	61
J. Paulov, Š. Poláčik: II. Interaction model: calibration and testing	88
Š. Poláčik, J. Oľahel': III. Landscape structures measurement: On example, areas of Liptov	131
Š. Poláčik: IV. Trend surface analysis: Study of employment rate in major branches of national economy in Slovakia in 1961 and 1970.	166
REFERENCES	176

### **Foreword**

Owing to technology progress in electronics, the first already quite fast, though still rather complicated equipment capable of solving even complicated mathematical tasks according to certain algorithms appeared in the fifties. As time passed by also geographers began pondering the thought of exploiting these readily improving computer systems. Nowadays, they are being used in the world on a large scale. The situation is still rather negative in the CSSR with regard to this approach, especially when considering the type of problems being solved by our geographers nowadays and the problems they want to and will have to solve in the coming future.

An important step towards the improvement was the establishment of the computer laboratory at the Geographic Institute SAV equipped by the WANG 2200 C calculator. This was also the first presumption regarding the origin of our publication. The fact of continuous cooperation deepening, amongst the Geographical Institute SAV on one and the Faculty of Natural Sciences Comenius University at Bratislava, especially the Department of Regional Geography, and the Geographical Institute ČSAV at Brno on the other side too, is not of secondary importance.

Though, the WANG 2200 C is a rather small computer system we will try to prove that it is big enough to solve even for more complicated problems. Since, all the calculations contained in the submitted studies were realized using this computer it is evident that it is usable for either geographic problem modeling or exploitation of descriptive mathematics methods. The hardware enables also automatic drawing of certain types of maps.

The compendium is enriched by the survey of literature dealing with utilization of computer technology in geography and by the survey appropriate software and hardware.

Authors