

Contents

EDITORIAL

ABSTRACTS – oral presentations

Investigations of fluvial geomorphic processes in laboratory conditions with modern GIS methods <i>László Bertalan</i>	1
The effect of foliar litter-fall at the formation of step-pool systems high gradient streams in Moravskoslezské Beskydy Mts. <i>Libor Borák</i>	2
Ascending speleogenesis of some Slovak and Czech caves <i>Pavel Bosák, Pavel Bella</i>	2
Two different kinds of case hardening on quartz sandstone exposures: characterization, strength, origin and effect on evolution of rock cities <i>Jiří Bruthan, Jana Schweigstillová, Jan Soukup, Daniel Světlík, Lukáš Falteisek, Jan Válek, Alan L. Mayo</i>	3
Pleistocene organic sediments from the Czech Republic <i>Eva Břízová</i>	4
Analysis of potential gully erosion on Hronská Hill Land <i>Libor Burian, Štefan Koco</i>	6
Possibilities of age determination of blown-sand movement in a sample area in the Nyírség, Hungary <i>Botond Buró, Gábor Négyesi, József, Lóki, Bence Andrási</i>	7
Pleistocene cryopediments of Hills Dunajovické vrchy (South Moravian Region, Czech Republic) <i>Jaromír Demek</i>	7
Geomorfologická analýza reliéfu a geodiverzita povodí Smědé <i>Viola Dítětová, Lucie Kubalíková</i>	8
Geomorphology and Global Environmental Change <i>Christine Embleton-Hamann</i>	9
Assessing the potential hazardousness of selected motaine-dammed lakes in Cordillera Blanca (Peru) <i>Adam Emmer, Vít Vilímek, Jan Klimeš</i>	10
Coarse bed sediments in headwater streams: imprints of slope-channel coupling and development of a channel. <i>Tomáš Galia, Václav Škarpich</i>	11
New approaches in fluvial sediment dynamics assessment: case studies from Šumava Mts. <i>Filip Hartvich, Jakub Langhammer, Zdeněk Kliment and Petr Tábořík</i>	12
Land use changes and anthropogenic relief forms in the District Hodonín <i>Marek Havlíček, Karel Kirchner</i>	13
Karstification of rock massif and propagation of deep-seated slope deformations – Crimea Mountains (Ukraine) <i>Jan Hradecký, Tomáš Pánek, Jan Lenart, Veronika Smolková, Václav Stacke</i>	13
Neotectonics of the Moravian Fault Zone and its influence on the Middle Svratka River Valley development <i>Mojmír Hrádek</i>	14

Anthropogenic intervention into the river pattern as a cause of the Olše River floodplain development change (with the use of magnetic susceptibility for the sedimentary record interpretation)	
<i>Monika Chudaničová, Jan Hradecký, Tomáš Pánek</i>	15
The role of the landslides, solifluction, alluvial deposits etc. in understanding the vegetation of the Last Glacial Period	
<i>Vlasta Jankovská</i>	15
Types of boulders in the area of Havlíčkův Brod (Bohemian-Moravian Uplands)	
<i>Jan Juráček</i>	16
Anthropogenic relief of the Karviná region and its evolution	
<i>Pavel Kadlečík</i>	17
Prehistoric settlement pattern against geomorphological and natural conditions in Lomas de Lachay (western slope of Central Andes, Peru)	
<i>Piotr Kalicki, Tomasz Kalicki, Piotr Kittel, Gabriela de los Rios, Patricia Diaz</i>	18
Main stages of the Cenozoic relief evolution of Lomas de Lachay (western slope of Central Andes, Peru)	
<i>Tomasz Kalicki, Piotr Kittel, Piotr Kalicki</i>	18
Recent morphological evolution of braided-wandering river	
<i>Anna Kidová</i>	19
The sediment sources in the Prudnik river valley; Zlatohorská vrchovina northern foreland	
<i>Kazimierz Klimek, Wioleta Górska</i>	20
Micromorphological variability of quartz grains from glaciofluvial sediments	
<i>Klára Krbcová, Marek Křížek, Lenka Křížová</i>	21
Terrestrial laser scanning applied to geomorphological and speleological research of the Locality Ledové sluje (Ice Caves) in Podyjí National Park, Czech Republic	
<i>František Kuda, Jan Divíšek, Karel Kirchner</i>	22
Frost erosion of Dunajec River sediments of different particle size distribution in the Orava Basin	
<i>Józef Kukulak, Karol Augustowski</i>	23
Morphometric characteristics of valley nets in the Blue Nile basin in the Ethiopian highlands	
<i>Michal Kusák, Marek Křížek</i>	23
Reconstruction of channel migration inferred from archaeological data (case study the Lower Váh River)	
<i>Milan Lehotský, Pavol Ištók</i>	24
Genesis, types and succession of crevice-type caves in the Flysch Belt of Western Carpathians	
<i>Jan Lenart, Tomáš Pánek</i>	25
Stream power in the Stryszawka river channel as an effect of natural and anthropogenic processes	
<i>Michal Lyp</i>	26
Research of slope deformations in the České Středohoří Mts. (Dolní Zálezly – Dubický Hill slope deformation)	
<i>Tomáš Marek, Jan Balek</i>	26
Morphostructural analysis of river terraces in Žiarska kotlina basin	
<i>Alžběta Medvedová, Ladislav Vitovič, Roberta Prokešová</i>	27
Overdeepening of cirques in the High Tatras	
<i>Peter Mida, Marek Křížek</i>	27

How high-resolution DEM based on airborne LiDAR helped to reinterpret landforms – examples from the Sudetes	
<i>Piotr Migoń, Marek Kasprzak, Andrzej Traczyk</i>	28
Morphology and origin of dolines; examples from Classical Karst, SW Slovenia	
<i>Andrej Mihevc</i>	29
A new remote sensing methodology for detailed international mapping in the V4 region	
<i>Monika Šulc Michalková, Jakub Miřijovský</i>	30
Pedogenic and lithogenic memory of alluvial soils	
<i>Adam Michalski</i>	30
Third-order geomorphometric variables and their utilization in geomorphology	
<i>Jozef Minár, Marián Jenčo, Ian S. Evans, Jozef Minár Jr., Martin Kadlec, Jozef Krcho, Ján Pacina, Libor Burián, Alexandra Benová, Lucian Drăguț, Ovidiu Csillik</i>	32
Wind erosion measurements in Hungary	
<i>Gábor Négyesi, Botond Buró</i>	33
Photo-granulometry of slope deformations	
<i>Michal Norbert, Veronika Smolková</i>	34
Spatial variability and evolution of the Váh River fluvial system morphology	
<i>Ján Novotný, Milan Lehotský</i>	35
Giant landslides at Late Pleistocene highstands of the Caspian Sea (Kazakhstan)	
<i>Tomáš Pánek, Jan Hradecký, Jozef Minár</i>	35
Electrical resistivity tomography of the depletion zone of the Girová catastrophic landslide	
<i>Renáta Pyszková</i>	36
Landslides at Vaňov-Čertovka and Koží vrch by the Ústí nad Labem city: research approaches and state of the art	
<i>Pavel Raška, Filip Hartvich, Vilém Zábranský, Jakub Melich</i>	36
Important geological localities of the Pohořská hornatina Mts. (Novohradské hory Mts.)	
<i>Jiří Rypl</i>	37
Industrial pollution in the Outer Western Carpathians (Czech Republic) inferred from physical and geochemical properties of landslide-related sediments	
<i>Veronika Smolková, Tomáš Pánek, Simon Hutchinson, Jan Hradecký</i>	38
Controlled relief in Górzno area (Northern Poland)	
<i>Marcin Sobiech</i>	39
Reconstruction of depositional settings in the Bečva River floodplain using multidisciplinary geophysical survey	
<i>Václav Stacke, Petr Tábořik, Zuzana Lašková, Jan Gebauer, Roman Duras</i>	40
Recognition of geological structure of the Sadowa Góra quarry (Southren Poland)	
<i>Dominika Stan, Iwona Stan-Kleczek</i>	40
Valley evolution of the Biala Łądecka river – Preliminary results from upper part of the basin	
<i>Jakub Stemberk, Petra Štěpančíková</i>	41
Sediments Trend Analysis (STA) in reconstruction of accumulation conditions of overbank deposits on the crevasse splay (Świniary, the Vistula river valley – case study)	
<i>Jacek B. Szmańda, Piotr J. Gierszewski</i>	42
Contemporary sedimentation in the abandoned channels of the Danube river multiple-channels system (Slovakia)	
<i>Jacek B. Szmańda, Piotr J. Gierszewski, Milan Lehotský, Małgorzata Luc, Jarosław Kordowski, Ján Novotný</i>	44

Comparison of the Danube and the Vistula rivers multiple-channel patterns with the use of Brice methods	
<i>Jacek B. Szymańda, Malgorzata Luc, Piotr J. Gierszewski</i>	45
A reconstruction of debris-flow activity on the southern slopes of Crimean Mts., Ukraine	
<i>Karel Šilhán, Tomáš Pánek, Jan Hradecký, Markus Stoffel</i>	46
Contemporary state of regulated river channels in the Moravskoslezské Beskydy Mts and its forefield	
<i>Václav Škarpich, Tomáš Galia</i>	46
Using provenance of alluvial fan deposits to constrain long-term horizontal offsets along the Elsinore fault in the Coyote Mountains, Imperial Valley, California	
<i>Petra Štěpančíková, Eulália Masana, Rockwell Thomas</i>	47
Resistivity imaging of tectonic structures verified by trenching	
<i>Petr Tábořik, Petra Štěpančíková, Filip Hartvich, Tomáš Fischer</i>	48
Recent development of floodplain forms in the Upper Tisza region (Bodrozug, Hungary)	
<i>Csaba Tóth, Róbert Vass, József Szabó</i>	48
Spatial and temporal changes in water quality in the Upper-Tisza region, Hungary	
<i>Gábor Türk, Szilárd Szabó</i>	49
Dendrogeomorphological analysis of active landslide area by Skalice Village (the Morávka River basin)	
<i>Ondřej Turský</i>	50
Thermal and moisture regime of earth hummocks in the High Sudetes and High Tatras	
<i>Tomáš Uxa, Marek Křížek, Blanka Pechačová</i>	50
Characteristic of karst sink-holes in Jasny Staw region (Niecka Nidziańska, Poland)	
<i>Artur Zieliński</i>	51
Thickness lacustrine deposits of the “Duży Staw” in the “Golejowskie Forests” near Staszów based on the georadar research (Niecka Nidziańska, Poland)	
<i>Artur Zieliński, Jerzy Ziętek</i>	52
Quaternary evolution of the Czarna river valley based on Rytwiany profile (Polish Uplands)	
<i>A. Zieliński A., I. Olszak., T. Kalicki.</i>	53
Age of karst and caves in Slovenia	
<i>Nadja Zupan Hajna, Andrej Mihevc, Petr Pruner, Pavel Bosák</i>	54
 ABSTRACTS – posters	
Biogeomorphological mapping of naturally recovered reach of the Bečva River in the vicinity of Hustopeče nad Bečvou	
<i>Ján Babej, Zdeněk Máčka</i>	55
Geodiversity – an important subject of environmental education	
<i>Aleš Bajer</i>	55
Exodynamic processes and their ecogeomorphologic risks on the example of Republic of Armenia	
<i>Hasmik Balyan</i>	56
Holocene evolution of the soils of supra-flood terrace of Slupia River near Slupsk (northern Poland)	
<i>Jerzy Jonczak, Ireneusz Olszak, Anna Łazarczyk</i>	57
Artistic impact and transformation of the georelief	
<i>Jan Juráček</i>	57

Lower Moravian Basin - late glacial and Holocene lake, fluvial and eolian processes <i>Jaroslav Kadlec, Gary Kocurek, David Mohrig, Filip Stehlik, Ashok Kumar Singhvi, Helena Svobodová-Svitavská, Votěch Beneš, Ivo Světlík, Michal Rybníček</i>	58
Integration of LiDAR data and electrical resistivity tomography – example from Izerskie Mts. <i>Marek Kasprzak, Petr Tábořík, Andrzej Traczyk</i>	59
Geomorphological mapping of the selected glacial valleys in the Cordillera Blanca, Peru <i>Jan Klimeš, Vít Vilímek</i>	59
Geodiverzita a ochrana neživé přírody <i>Lucie Kubalíková</i>	60
Karst denudation data from the Northern Calcareous Alps (Austria) <i>Rudolf Pavuza, Pauline Oberender</i>	61
Historical water mills in Bohemia and their effect on stability of fluvial systems <i>Pavel Raška, Alena Hrbáčová, Tomáš Strnad</i>	62
Using of low cost micro UAVs in geomorphology <i>Ján Sládek, Miloš Rusnák</i>	63
Shallow slope deformations triggered by extreme rainfall: case studies in Smědava, Jizerské hory Mts. and Lemešná, Javorníky Mts. <i>Jana Smolíková, Jan Blahůt, Daniel Žížala, Vít Vilímek</i>	64
Monitoring of erosion and slope deformation on agricultural land <i>Jana Smolíková, Jiří Kapička, Daniel Žížala, Věra Váňová</i>	65
GEOLOGICAL EVOLUTION AND GRAVITATIONAL BREAK-UP PROCESS IN THE PAVLOVSKÉ VRCHY HILL (Extended abstract of the oral presentation with relevance to the region of the conference place) <i>Oldřich Krejčí, Ivan Poul</i>	67
JESKYNĚ BRADLA TUROLD U MIKULOVA (Exkurze, 24. dubna 2013) <i>Pavel Bosák</i>	73
PÁLAVA (Informace k Chráněné krajině oblasti Pálava) <i>Jiří Matuška</i>	76
EXKURZNÍ PRŮVODCE (Exkurze, 26. dubna 2013) <i>Aleš Bajer, Pavel Bosák, Jaromír Demek, Marek Havlíček, Karel Kirchner, Peter Mackovčín, Martin Novák, Jiří Svoboda, Jan Vitek</i>	80