

# State of geomorphological research in 2022

## 3<sup>rd</sup> Circular

Invite you to the international conference

May 18–20, 2022 in Horní Bečva, Czechia



The forthcoming international conference **State of geomorphological research in 2022** will be held in Horní Bečva, town in hart of Outer Western Carpathians in the Czech Republic. The event is organised bilaterally and should be perceived as the common conference of both Czech Association of Geomorphologists and Association of Slovak Geomorphologists. After a 2-year pause, for the Czech Association of Geomorphologists it will be a round anniversary – 20<sup>th</sup> in the line of meetings, which started in 2000. For the Association of Slovak Geomorphologists, it will be the 11<sup>th</sup> biennial meeting.

We are very pleased to welcome **56 participants** from **5 countries** with contributions from geomorphology and related disciplines dealing with landscape development and its forming processes. We are also glad to welcome **1 winner of the student theses contest**. We hope the conference will be pleasant and inspiring for you, also thanks to **conference-evening** and **post-conference field trip** to the marvellous landscape in the heart of Czech Carpathians.

Conference will be preceded by the **workshop** “Methods in fluvial geomorphology” with **12 participants** and **5 lecturers**. More information is available in the workshop 3<sup>rd</sup> circular or on the **workshop website**.

Conference will be held under the auspices of the **Czech Geographical Society**.



As a part of the conference program, you will be able to see the exhibition **“Geographer and geomorphologist Jaromír Demek”** (in Czech), which was created and exhibited in January 2021 in Museum of the Boskovice Region.

### Important dates and deadlines

**May 17–18, 2022** pre-conference workshop

**May 18–20, 2022** conference

### Organizing committee

RNDr. Veronika Kapustová, Ph.D. | Ing. Anna Kidová, PhD.  
Prof. RNDr. Tomáš Pánek, PhD. | Mgr. Radek Tichavský, Ph.D.  
Doc. RNDr. Tomáš Galia, Ph.D. | RNDr. Jan Lenart, Ph.D.  
RNDr. Václav Škarpich, Ph.D. | Mgr. Michal Břežný, Ph.D.  
Doc. RNDr. Jan Hradecký, Ph.D. | Mgr. Miloš Rusnák, PhD.  
Mgr. Ján Novotný, PhD. | Prof. RNDr. Karel Šilhán, Ph.D.  
Mgr. Zuzana Poledníková | Mgr. Adriana Holušová  
Mgr. Lukáš Vaverka | Mgr. Vladimír Chalupa  
Mgr. Andrea Fabiánová | Mgr. Andrius Toločka

Conference website: [prf.osu.eu/geomorphology](http://prf.osu.eu/geomorphology)

Contact email: [geomorfologie@osu.cz](mailto:geomorfologie@osu.cz)

### Registration information

The registration, abstract submission and conference fee payments **are now closed**.

**Conference fee includes:** conference materials, coffee breaks and festive dinner.

**Invoices** will be issued at the registration desk.

### Cancellation policy

Sending the registration form to conference email, participants confirm that they agree with the cancellation policy.

All cancellations must be sent to the Conference organizing committee via **conference email**.

Refunds will be made after the conference as follows:

**Before and incl. April 30, 2022:** 100% of the registration fee

**May 1 - May 8, 2022:** 50 % of the registration fee

**After May 8, 2022:** no refunds

Participants who are unable to attend the conference at the last minute are advised to encourage another member of their staff to attend instead.

# General program

# Guidelines for authors



## Tuesday–Wednesday May 17–18, 2022

Pre-conference workshop

## Wednesday May 18, 2022

9:00–13:00 Participant registration

13:00–13:45 Conference opening, Best Thesis Contest Award ceremony

13:45–16:45 Oral presentations

17:00–18:00 Poster session 1

19:00 Plenary meeting of the Czech Association of Geomorphologists

19:00 Plenary meeting of the Association of Slovak Geomorphologists

## Thursday May 19, 2022

8:30–17:45 Oral presentations

18:00–19:00 Poster session 2

20:00 Closing ceremony, Festive dinner

## Friday May 20, 2022

9:00–16:00 Field trip

Detailed conference program is attached below.

## Language

Conference language is **English**.

## Book of Abstracts

A **book of abstracts** from the conference has been released and you can download it from the [conference website](#).

## Oral presentations

The **allotted time** for oral presentation is **12 minutes + 3 minutes for discussion**. Please, bring your PowerPoint or Pdf presentation to the meeting on a USB flash drive in order to load it into the in-room notebook (no Mac). You will not be able to use your own notebook for your presentation. The in-room notebook will have internet connection.

You can load your presentation to the in-room notebook before the first session, or during the breaks preceding your presentation. There will be a support staff member in the conference room to help you.

## Conference room equipment

- Wi-Fi
- Video projector
- Notebook for the upload of presentations (OS Windows 10), including internet connection
- Bluetooth presenter to switch slides and laser-pointer
- Conference room software: standard software will be available (MS Office PowerPoint and Adobe Acrobat Reader)

## Poster presentations

Poster board size is 135 cm (height) x 100 cm (width), so preferred format of the poster is **portrait A0 or landscape A1**. Maximum is portrait A0.

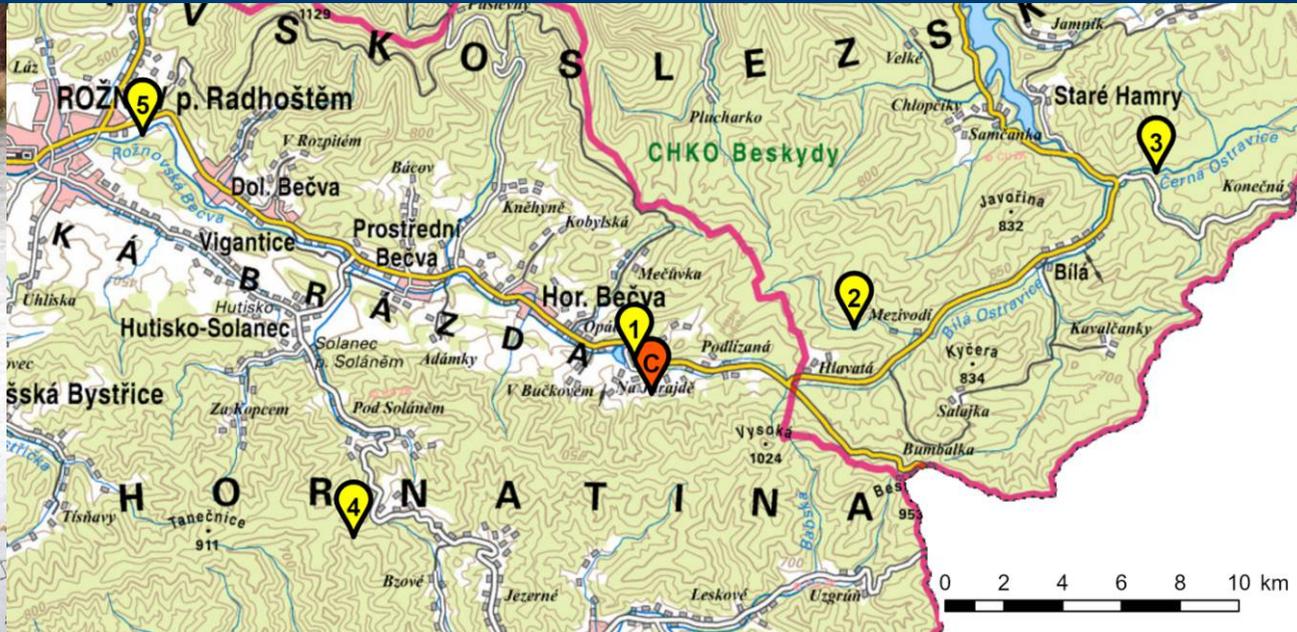
Authors are kindly asked to **put up their posters as soon as possible** during the day of scheduled poster display. All the material necessary for attaching the poster to the poster board will be available at the registration desk. There will be a support staff member to help you.

## Covid-19 information

As of 9<sup>th</sup> April 2022, the **protective measures** regarding the conditions of entry into the Czech Republic in relation to the epidemic of covid-19 **have been suspended**. Entry into the Czech Republic is no longer subject to any special epidemiological conditions to prevent the spread of the disease. The entry-ban for foreigners from third-countries and the obligation to prove infection-free status have been lifted.

# Conference venue

# Excursion



## Conference venue

The conference itself, accommodation and meals have been arranged to take place in the **Hotel Duo, Horní Bečva 216, Czechia**. No transfer to other facilities is required.

GPS location: 49.4145739N, 18.3233056E

You can find detailed [travel information](#), accommodation and meal prices on the [conference website](#).

In case you have questions or need assistance, please contact us on [conference email](#).

Accommodation and meals are **paid individually during your stay**.

The hotel accepts cash in CZK and credit cards.

Breakfast is included in the price of accommodation.

There is a **limited capacity for car parking** at the hotel. In case the hotel parking place will be full, there is another one approx. **0.5 km downhill** in an abandoned sandstone quarry.

## Conference field trip

**Friday May 20, 2022 (9:00 – 16:00) ...**  
**Geomorphic evolution of Outer Western Carpathians in the Holocene**

We prepared for you a full-day field trip in the surroundings of the conference venue. There is a possibility to pre-order a lunch pack, we will not stop in a restaurant. **The fieldtrip transport will be organised using your own cars.** We will take care of the participants without the car.

The field trip will be held in case of any weather. We recommend to check the forecast before your trip. In case of bad weather forecast, good boots, warm clothes and umbrellas or raincoats are recommended.

## Excursion itinerary (see the map above)

**C. Conference venue**

1. Viewpoint Horní Bečva – Spectacular and scary skywalk in the upper part of the abandoned sandstone quarry – view into the Rožnovská brázda Furrow
2. Lučovec landslide dam and related deposits – Dating of Holocene mass movements (2x 1.7 km walking)
3. Černá Ostravice River terraces – Landscape changes revealed in Holocene fluvial terraces (2x 0.5 km walking)
4. Soláň landslide – Multidisciplinary approach to study recent complex landslides
5. Rožnovská Bečva River – Attempts to decrease flood risk by gravel bar management in urbanised area

Map background: base map of the Czech Republic, published by Czech Office for Surveying, Mapping and Cadastre

## State of geomorphological research in 2022 - Detailed conference program

<b>Wednesday (May 18, 2022)</b>	9:00 - 13:00	Participant registration			
	12:00 - 13:00	<i>Lunch</i>			
	13:00 - 13:45	<b>Conference opening, Award ceremony for the best student theses contest</b>			
	13:45 - 15:00	<b>Talks session 1</b>	13:45 - 14:00	Michaleje, L.	Preliminary flood hazard assessment based on detailed LiDAR data
			14:00 - 14:15	Rusnák, M.	Fluvial habitat assessment using high-resolution 3D models
			14:15 - 14:30	Lieskovský, J.	Using Airborne Lidar Data For Detecting Anthropogenic Landforms In Poiplie Region
			14:30 - 14:45	Szypuła, B.	Analysis of bomb craters using LiDAR data (Kędzierzyn-Koźle, Poland)
		14:45 - 15:00	Mohsen, A.	Sediment discharge estimation of lowland rivers using Sentinel-2 images and machine learning algorithms	
	15:00 - 15:15	<i>Coffee break</i>			
	15:15 - 16:45	<b>Talks session 2</b>	15:15 - 15:30	Novotný, J.	Geodiversity assessment of the Western Carpathians
			15:30 - 15:45	Kubalíková, L.	Geomorphological heritage in urban areas: identification, conservation, management
			15:45 - 16:00	Kenderessy, P.	Erosion process and abandonment as main drivers of traditional vineyards degradation: a case study Vráble viticulture district, Slovakia
			16:00 - 16:15	Tichavský, R.	Dendrogeomorphic dating in the Ostrava-Karviná mining landscape: processes, events, responses
			16:15 - 16:30	Lenart, J.	The abandoned underground mine as a semi-natural ecosystem: the story of Flaschar's Mine
			16:30 - 16:45	Schuchová, K.	Can abandoned underground mines be equal in their diversity to the cave system?

Wednesday (May 18, 2022)	16:45 - 17:00	<i>Coffee break</i>			
	17:00 - 18:00	Poster session 1	Blahůt, J.	Novel landslide mapping in selected areas of northern Czechia within the framework of the RENS project	
			Bouda, T.	Half year of ground microexhalations temperature monitoring on landslides in Moravian-Silesian Beskids	
			Dlabáčková, T.	Chronology and morphology of rock glaciers in the Western Tatra Mts., Western Carpathians	
			Fabiánová, A.	Development and recent dynamics of rockslide in the Hercynian orogeny (the Rudohorský potok basin; the Hrubý Jeseník Mts.)	
			Kieniewicz, M.	Macroplastic debris in a mountain river: Does geomorphology matters?	
			Kozák, M.	Activity of landslide processes in the area of Hřebečský hřbet	
			Kusák, M.	3D rockfall modeling, natural hazard and risk assessment for rockfall protection in Hřensko (Czechia)	
			Racek, O.	In-situ rock surface strain changes determination: use of resistance strain gauges	
			Szypuła, B.	Interpretation of the small water-filled bomb craters morphology based on LiDAR data (Kožle Basin, Poland)	
	18:00 - 19:00	<i>Dinner</i>			
	19:00 - 21:00	Plenary meeting of the Czech Association of Geomorphologists			
		Plenary meeting of the Association of Slovak Geomorphologists			
Thursday (May 19, 2022)	7:30 - 8:30	<i>Breakfast</i>			
	8:30 - 10:15	Talks session 3	8:30 - 8:45	Loche, M.	Land surface temperature controls stability in gentle clay slopes
			8:45 - 9:00	Hartvich, F.	Stability of cultural heritage objects: a phantom menace?

<b>Thursday (May 19, 2022)</b>	<b>8:30 - 10:15</b>	<b>Talks session 3</b>	9:00 - 9:15	Chalupa, V.	Low-topography deep-seated gravitational slope deformation: Slope instability of flysch thrust fronts (Outer Western Carpathians)
			9:15 - 9:30	Baroň, I.	Coseismic slope failures due to 2009 Mw 6.2 EQ near Poas, Costa Rica and their relevance for landslide research in Outer Western Carpathians
			9:30 - 9:45	Pánek, T.	Large landslides along the eastern margin of Patagonian Ice Sheet: distribution, causes and timing
			9:45 - 10:00	Břežný, M.	Landslides and rockfalls in Antarctica: preliminary results of surface exposure dating from James Ross Archipelago
			10:00 - 10:15	Dostálík, M.	Deglaciation in Kazbegi high mountain region in Georgia and its impact on the activation of catastrophic debris flows
	<b>10:00 - 10:15</b>	<b><i>Coffee break</i></b>			
	<b>10:15 - 11:45</b>	<b>Talks session 4</b>	10:15 - 10:30	Ondráčková, L.	Practical experience of a fluvial geomorphologist in the context of landscape changes
			10:30 - 10:45	Wyžga, B.	Changes of fluvial processes caused by the restoration of an incised mountain stream
			10:45 - 11:00	Labaš, P.	Human intervention and flood events as key factors affecting the recent degradation of the Hornád River
			11:00 - 11:15	Pavlek, K.	The impact of river engineering works and flood events on channel migration rates on the Orlava River (the Pannonian Basin, Croatia)
			11:15 - 11:30	Horáčková, Š.	Geomorphic-sedimentary adjustment of a river reach with groynes to channel bypassing
			11:30 - 11:45	Kidová, A.	The impact of the river training on the multi-thread river system as a part of the Natura 2000 protected area
	<b>12:00 - 13:30</b>	<b><i>Lunch</i></b>			
	<b>13:30 - 15:00</b>	<b>Talks session 5</b>	13:30 - 13:45	Kiss, T.	Local geomorphological factors influencing flood hazard, Lower Tisza, Hungary
			13:45 - 14:00	Holušová, A.	Spatiotemporal dynamics of gravel bars and vegetation cover of two Carpathian rivers
			14:00 - 14:15	Labaš, P.	Identification of benches and ledges within the braided-wandering floodplain formation

<b>Thursday</b> <b>(May 19, 2022)</b>	<b>13:30 - 15:00</b>	<b>Talks session 5</b>	14:15 - 14:30 Vaverka, L. Spatial characteristics of a confluence hydrodynamic zones of the Vsetínská Bečva River (Javorníky Mts.): a relationship between watershed and reach scale morphology 14:30 - 14:45 Bartyík, T. Temporal relationship of deglaciation phases and palaeodischarges on the catchment of River Maros, Central Europe 14:45 - 15:00 Jančovič, M. Geomorphological approach to identification of flood hazard hotspots within marginalized Roma communities in Slovakia
	<b>15:00 - 15:15</b>	<b><i>Coffee break</i></b>	
	<b>15:15 - 16:15</b>	<b>Talks session 6</b>	15:15 - 15:30 Balla, A. Deposition and mobilization of microplastics in a low-energy fluvial environment 15:30 - 15:45 Mikuš, P. Long-term monitoring of the recruitment and dynamics of large wood in Kamienica Stream, Polish Carpathians 15:45 - 16:00 Galia, T. Transport, retention and geomorphic impact of large wood in a meandering river 16:00 - 16:15 Poledniková, Z. Large wood in contrast fluvial landscapes: A tale of different ecosystem services
	<b>16:15 - 16:30</b>	<b><i>Coffee break</i></b>	
	<b>16:30 - 17:45</b>	<b>Talks session 7</b>	16:30 - 16:45 Štěpančíková, P. Late Pleistocene activity of Central European Fault driven by ice loading as revealed by geological data and modeling 16:45 - 17:00 Šuťjak, M. Structure of active faults revealed from 2D deep-reflection seismic profiles in the flysch belt of Outer Western Carpathians 17:00 - 17:15 Findžová, L. Verification of the "Čirá - Kopanina" fault zone using morphostructural analysis and geophysical methods 17:15 - 17:30 Tábořík, P. Special resistivity survey for imaging the sub-aquatic geology 17:30 - 17:45 Kusák, M. How not to lose young researchers from science fields?
	<b>18:00 - 19:00</b>	<b>Poster session 2</b>	Dostalík, M. CGS development cooperation project "Georgia 2021" - assessment of geological hazards in the Kazbegi area Klimeš, J. Application of tree-ring microscopic anatomy for landslide hazard assessment – perspectives and limitations

<b>Thursday</b> <b>(May 19, 2022)</b>	<b>18:00 - 19:00</b>	<b>Poster session 2</b>	Kubalíková, L.      Linking geomorphological and archaeological research at geoarcheological site Holedná Hill in Brno, Czech Republic Patrnčíak, L.      Morphometry of Železné Hory Mts. Fault Rusinko, A.      Flash Flood Simulation In The Urbanised Catchment: A Case Study Of Bratislava – Karlova Ves Stemberk, J.      From repeated measurements to early warning systems: DAEMON resistivity system in landslide monitoring Šilhán, K.      Laboratory of Dendrogeomorphology (dendroman.cz): overview and offers Tábořík, P.      Joint interpretations of geophysical measurements as the key to understand slope evolution Wąs, J.      Impact of flood events and Eurasian beaver (Castor fiber) activity on spontaneous renaturalization of Łososina River in the Polish Western Carpathians
	<b>20:00</b>	<b><i>Conference closing, Festive dinner</i></b>	
<b>Friday</b> <b>(May 20, 2022)</b>	<b>7:30 - 9:00</b>	<b><i>Breakfast, Check-out</i></b>	
	<b>9:00 - 16:00</b>	<b>Conference field trip: Geomorphic evolution of Outer Western Carpathians in the Holocene</b>	