


Report of the 16th International Young Geomorphologists' Meeting, Bad Kreuznach, Germany June 24-26, 2022



After two years of online meetings,

the Young Geomorphologists held the 16th International Young Geomorphologists' Meeting in Bad Kreuznach, Germany (close to Mainz), on June 24-26, 2022, with an additional workshop on June 27. In total, 34 early career and student participants joined from Germany, Italy, Romania, Slovenia, Spain, Switzerland, and Poland. The diverse group included Bachelor's and Master's students, doctoral researchers, and postdocs from 22 different institutions. The atmosphere of this year's meeting was inspiring, joyful and social as the participants discussed scientific topics and academic life in the green hills of western Germany. The program included five sessions of oral presentations and spotlight talks, two evening poster sessions, a keynote talk, a panel discussion on academic life, and an excursion to a nearby outcrop and viewpoint (see attached program). The sessions for the oral presentations and spotlights were organized as follows:

Sessions I: Advances in permafrost research, with a talk by Rainer Gardeweg from Université de Fribourg, Switzerland.

Session II: Mass movements and soil geomorphology, with talks by Laura Paola Calderon Cucunuba from the Università degli Studi di Palermo, Italy, and Iosif-Otniel Lopatita from the West University of Timisoara, Romania.

Session III: Impacts of uplift, lithology and erosion on long-term landscape evolution, with a talk by Romano Clementucci Università degli Studi Roma Tre, Italy, and a spotlight presentation by Bastian Ringleb from Uni Gießen, Germany.



Session IV: Applied remote sensing and geomorphometry, with talks by Ettore Potente from Università degli Studi di Bari, Italy, Doris Hermle from the TU München, Germany, Natalie Barbosa from the Uni München, Germany, and Marcos Moreno-Sánchez from the University of Granada, Spain, and a spotlight presentation by Andreas Ruby from the GFZ Potsdam, Germany.

Session V: Transport and sedimentation in fluvial systems, with talks by Andrej Novak from the University of Ljubljana, Slovenia, and Andrei Ionita from the West University of Timisoara, Romania.

Proceedings

We were lucky to have the participants in person again at our meeting this year. After not seeing each other for a long time, there was some networking to catch up on for a lot of participants. The program started with an introductory game, "the Scales Game", in which the participants shortly introduced themselves and their research projects. After this introduction, the kitchen was ready for dinner. Then, the participants found a spot in the conference hall and the '30 second' poster session started: every presenter had 30 seconds to present their research. Afterwards, the poster session started. The discussions allowed for valuable feedback, and the presenters also had the possibility to check out the other posters, besides answering questions about their own work. The variety of topics was widespread and covered topics from glacial geomorphology in the Black Forest to dryland geomorphology in the Atacama Desert.

After this session, we had a panel discussion with Prof. Dr. Wilfried Haeberli (former University of Zürich) and PD Dr. Tobias Ullmann (University of Würzburg) about their academic paths and experiences in science. They gave interesting insights into what inspired them to pursue geomorphology, how the field of geomorphology has evolved over time, how to balance family and a scientific career, and also about the struggle of frequent work-related travel. Some takeaway points from this discussion are: for a career in academia, it's important to stay curious and to develop and maintain contacts with colleagues and other researchers. The first day ended with an open-ended gathering within the youth hostel.



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Survey of Rhine-
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t applications,
r LiDAR methods.
using a digital



the Tertiary



Investigating the stratigraphy of the Tertiary Mainz Basin

Feedback

In general, the feedback for this year's meeting was positive, and participants were happy to be able to meet in person again. However, we received some valuable constructive feedback, which is summarized here:

- Include a female guest speaker, in part to enable a discussion on the female-specific issues in an academic career. Also include diversity in background; for example, someone outside of academia.
- Invite YGs to send in discussion ideas for next year's panel discussion
- More icebreaker games on Day 1, and more evening activities such as PowerPoint Karaoke, or a Pub Quiz.
- Include a discussion on decolonizing science and fieldwork, including fair and respectful conduct when sampling in developing countries.
- Better explanation of Spotlight Presentations (pre-meeting).

With warm regards from the old and new board of Young Geomorphologists:

Andreas, Bastian, Doris, Emma, Janek, Johannes, Johanna, Jörn, Laura, Linda, Lukas, and Nina.

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**WE THANK OUR SPONSORS
FOR THEIR SUPPORT!**

PROGRAM


Friday, June 24th, 2022

16⁰⁰ Arrival

17⁰⁰ Get to know the program and the group
Let's learn some names and share a drink!

 18⁰⁰ Dinner

 19⁰⁰ **"30 seconds madness" Poster Session** Convener: Laura

 You have 30 SECONDS to present your topic on one slide. After the short introductions we will continue discussing the posters with some cool drinks.

Felix Martin Hoffmann Uni Freiburg, Germany

Reconstruction of the Late Pleistocene glaciation of the southern Black Forest, Germany

Helen Werner GFZ Potsdam, Germany

Glacial and erosional contributions to late Quaternary uplift of the European Alps

Lukas Dörwald RWTH Aachen, Germany

Too easy to be good? - Dune height estimates from simple trigonometry

Bastian Grimm Uni Mainz, Germany

Lithostratigraphy and sedimentology of pliocene alluvial fan deposits at gravel pits near Gutenberg-Wallhausen, Rheinland-Pfalz, SW-Germany

Laura Kögler Uni Gießen, Germany

Terrace formation derived by fluvial erosion in the Baza Basin, Spain - a first overview

Janek Walk RWTH Aachen, Germany

Pedogenesis under coastal hyperaridity - soil formation since the Middle Pleistocene at Paposo, Atacama Desert, northern Chile

20³⁰ Talk with Prof. Dr. Wilfried Haeberli & PD Dr. Tobias Ullmann

 **Academic Paths & Experiences**

Conveners: Emma & Doris



Friday evening poster session



Panel discussion with Prof. Dr. Wilfried Haeberli and PD Dr. Tobias Ullmann



Saturday, June 25th, 2022



 **8⁰⁰ Breakfast**

 **9⁰⁰ Keynote** talk by Prof. Dr. Wilfried Haerberli
Geomorphology and new landscapes in high mountains - experiences and reflections

Convener: Johannes

 **10⁴⁰ Coffee break**

ORAL PRESENTATIONS AND SPOTLIGHTS

 You have 15 mn. for your topic, so make your talk short (~12 mn.) and leave enough time for discussion!
 **SPOTLIGHT:** You have 15 mn. for your topic, and your talk is limited to 5 mn. Get to the essence of your research topic or problem and have plenty of time for discussion and problem solving!

 **10⁰⁰ Session I: Advances in Permafrost research** Conveners: Johannes & Jojo

10⁰⁰ Rainer Gardeweg Université de Fribourg, Switzerland

Identifying mountain permafrost degradation by repeating historical ERT-measurements (with textile electrodes)

 **11⁰⁰ Session II: Mass movements and soil geomorphology** Conveners: Jojo & Johannes

11⁰⁰ Laura Paola Calderon Cucunuba Università degli Studi di Palermo, Italy

Landslide susceptibility assessment by using a stochastic approach: a case study from El Salvador (CA)

11²⁰ Iosif-Otniel Lopatita West University of Timisoara, Romania

Spatio-temporal reconstruction of active slope processes in the Sâmbăta Valley, Făgăraș Mountains (Romania) using tree-ring method

 **12⁰⁰ Lunch**

 **13⁰⁰ Session III: Impacts of uplift, lithology and erosion on long-term landscape evolution**

Conveners: Janek & Emma

13⁰⁰ Romano Clementucci Università degli Studi Roma Tre, Italy

Erosional dynamics and surface uplift in a rejuvenated landscape: insights from the Western Moroccan Meseta

13²⁰ Bastian Ringleb Uni Gießen, Germany

Impacts of geology when using landscape evolution models

14³⁰ Field trip to the surroundings (led by Basti)

 **19⁰⁰ Dinner**

20³⁰ Open-ended Poster Session II & Get together



Sunday, June 26th, 2022

 **8⁰⁰ Breakfast**



9⁰⁰ Session V: Applied remote sensing and geomorphometry Conveners: Lukas & Doris

9⁰⁰ Ettore Potente Università degli Studi di Bari, Italy

Unmanned aerial system for natural disaster scenario mapping and monitoring

9²⁰ Doris Hermle TU München, Germany

Performance testing of optical flow time series analyses based on a fast, high-alpine landslide

9⁴⁰ Natalie Barbosa Uni München, Germany

Reconstruction of morphometric changes using UltraCam aerial imagery



10⁰⁰ Andreas Ruby GFZ Potsdam, Germany

Periodic climate signals preserved as alluvial river terraces

10²⁰ Marcos Moreno-Sánchez University of Granada, Spain

Surface and roughness indices calculations with Python: new tools for the Topopy package



10⁴⁰ Short break



11⁰⁰ Session VI: Transport and sedimentation in fluvial systems Conveners: Laura & Basti

11⁰⁰ Andrej Novak University Ljubljana, Slovenia

Holocene sedimentation processes on alluvial fans in the Planica Valley (NW Slovenia)

11²⁰ Andrei Ionita West University of Timisoara, Romania

Estimating sediment budget and transport in the Râul Mare watershed for managing the Râul Mare-Retezat hydropower system



12⁰⁰ Lunch

13⁰⁰ Give us what we deserve!

We need your opinion on what you liked and disliked!

13³⁰ Goodbye and some final remarks





LIST OF PARTICIPANTS

	LAST NAME	FIRST NAME	AFFILIATION
1	Barbosa	Natalie	Uni München
2	Bazzucchi	Chiara	University of Roma Tre
3	Behl	Martin	Uni Würzburg
4	Bitzan	Simon	FU Berlin
5	Buckel	Johannes	TU Braunschweig
6	Calderon Cucunuba	Laura Paola	Università degli Studi di Palermo
7	Clementucci	Romano	Università degli Studi Roma Tre
8	Dörwald	Lukas	RWTH Aachen
9	Gardeweg	Rainer	Université de Friburg
10	Geis	Anna-Lena	Uni Gießen
11	Grimm	Bastian	Uni Mainz
12	Grüner	Laura	Uni Würzburg
13	Hermle	Doris	TU München
14	Hofmann	Felix Martin	Uni Freiburg
15	Ionita	Andrei	West University of Timisoara
16	Kaerger	Lauretta	University of Florence
17	Kögler	Laura	Uni Gießen
18	Lodes	Emma	GFZ Potsdam
19	Lopatita	Iosif-Otniel	West University of Timisoara
20	Maßon	Linda	Uni Köln
21	Moreno-Sánchez	Marcos	University of Granada
22	Novak	Andrej	University Ljubljana
23	Potente	Ettore	Università degli Studi di Bari
24	Profe	Jörn	Uni Gießen
25	Rehn	Lisa	Uni Freiburg
26	Ringleb	Bastian	Uni Gießen
27	Ruby	Andreas	GFZ Potsdam
28	Ryzner	Kamila	University of Wroclaw
29	Scherg	Jana	none
30	Schwenkler	Ronja	TU Braunschweig
31	Vinnepand	Mathias	Leibniz Institute for Applied Geophysics
32	Walk	Janek	RWTH Aachen
33	Werner	Helen	GFZ Potsdam
34	Wolf	Tom	Uni Würzburg



GERMAN YOUNG GEOMORPHOLOGISTS WORKSHOP: DIGITAL TERRAIN METHODS IN APPLIED GEOSCIENCES

Field work is getting increasingly complicated these days, with the wide variety of available methods and lack of time.

Many field measurement devices are expensive, and we have to carefully select the best methods for fieldwork...

However, many methods can easily be done with a smartphone, tablet, or small digicam. Even the local geoscientific authorities are going digital these days!

Join this workshop if you want to learn how to best use your smartphone/tablet and your small digicam during field work. You will also learn some easy methods in the field, which can be adopted in your own field work!



WHEN & WHERE:
June, 27th 2022, after the 16th
International Young Geomorphologists Meeting
in Bad Kreuznach, ca. 10:00 AM to 3:00 PM (CET)

COST:
30 € incl. accommodation
(from the 26th to the 27th + dinner & breakfast)

GUEST SPEAKER:
Andreas Eberts
(Geological Survey of Rhineland-Palatinate),
supported by Bastian Grimm
(from the German Young Geomorphologists)

REGISTER BY:
13th of May, 2022
To register send an e-mail to:
jgtreffen@googlemail.com