

## Report

#### Report of the International Young Geomorphology Meeting 2025, Ökodorf Losheim, Saarland, Germany

Following the success of last year's meeting at Wanderheim Belchenblick in the Black Forest, the German Young Geomorphology organized the 2025 International Young Geomorphology Meeting at Ökodorf Losheim, located in Losheim am See, Saarland (Germany), just a few meters from the lake. The event took place from June 19<sup>th</sup> to 22<sup>nd</sup>, 2025. An excursion focusing on geomorphology, soil science, and geology in the vicinity of the Mosel Valley around Trier was held on June 20<sup>th</sup>.

Participants joined from Germany, Switzerland, France, Italy, and Egypt, forming a diverse group of 37 early-career professionals and students, ranging from Bachelor's students to post-doctoral researchers, representing a total of 17 institutions. The program was designed to encompass a broad spectrum of academic topics and activities, fostering a rewarding and enriching experience for all attendees. The meeting featured five sessions of oral presentations with brief discussions, an afternoon poster session, an inspiring keynote talk on the influence of climate on mountain erosion, and a candid panel discussion on life in academia and transitioning from academia to industry.

#### Proceedings

Most participants arrived on Thursday evening. Due to the remote location of the venue similar to 2024, a shuttle service was arranged from Merzig train station to facilitate group transportation. Prior to dinner, a short welcome speech and an icebreaker activity took place, where participants searched for their name badges on the necks of others. This was followed by the traditional Scale Game and a pub quiz, fostering a friendly atmosphere and promoting informal conversations that extended beyond research topics.

On Friday morning, after an early breakfast, the group departed for the greater Trier region to meet with our excursion guide, Dr. Raimund Schneider (University of Trier), and commence the field excursion. Following a brief introduction to the geology and geomorphology of the area surrounding our accommodation, we enjoyed an impressive overview of the abandoned Mosel valleys near Trier. The excursion included a discussion of a soil profile in the Hunsrück region on schist bedrock. Lunch was served at the University of Trier. In the afternoon, the field trip continued north of the Mosel River, where we examined a soil profile on Buntsandstein bedrock and concluded the excursion with a sediment-paleosol sequence in a former gravel pit between Hetzerath and Klüsselrath. The field trip was co-hosted by Lars Engelmann from the Young Geomorphology (YG) board. On the return journey, participants appreciated the scenic views of the Mosel Valley and its vineyards.

Upon returning to Ökodorf Losheim, we enjoyed a vegetarian barbecue dinner, after which we took the opportunity to present the activities of the Young Geomorphology and the responsibilities of the board. We also briefly introduced the DGGM (Deutsche Gesellschaft für Geomorphologie) as our parent organization, along with the DEUQUA, one of our sponsors. We emphasized that the Young Geomorphology encompasses not only the board members but also all meeting participants. To promote inclusive decision-making, last year we distributed a questionnaire soliciting opinions on the discipline, our meetings, and the group's name. One result, which was welcomed by this years participants, was the adoption of the name "Junge Geomorphologie"/"Young Geomorphology," reflecting gender-neutral language, replacing the previous German masculine form.

The evening featured a captivating panel discussion with Dr. Mario Kirchhoff, who shared his inspiring academic journey in geomorphology and his decision to leave academia. Mario provided insights into balancing private life with a scientific career, as well as the challenges associated with extended absences from home. The discussion highlighted internal conflicts regarding life inside and outside academia, networking, and building meaningful collaborations, alongside a passion for research. The day concluded with a relaxed gathering both inside and outside the Ökodorf.

Saturday commenced with a keynote lecture by Prof. Dr. Melanie Kranz (University of Bochum), who presented on the impact of Quaternary climate changes on mountain erosion, as revealed through trapped charge thermochronometry. Her talk offered innovative perspectives on ESR-dating techniques for understanding geomorphological processes and reconstructing Quaternary climatic conditions.

The day continued with engaging sessions on uplift and erosion rates in the Tianshan Mountains, part of the "Earth in Motion" session, followed by presentations on sediment sequences and their implications for paleoclimatology in the "Climate Signals" session. After lunch, participants attended further talks on coastal sedimentation processes, storm impacts, and sea-level changes during the final session, titled "What happens at the coast: From process to human influence."

A highlight was the "30 Seconds Poster Madness," where each presenter had 30 seconds to introduce their work. The subsequent poster session around the venue showcased 12 diverse posters, provoking stimulating discussions and knowledge exchange on topics ranging from human-environment interactions in fluvial systems to snow cover dynamics in the Rhoen Mountains.

Following dinner, a "Failure Session" was held at the lakeside – a rather new format introduced some years ago, opening the floor for discussions about scientific failures and mishaps. The session aimed to share the inevitable challenges and setbacks encountered during research, helping participants learn from each other's experiences and normalize failure as part of scientific progress. This year's anecdotes covered fieldwork, laboratory experiments, and data analysis. The day concluded with informal discussions on scientific and personal aspects of research, both at the lake and around the Ökodorf.



On the final day, Sunday, we gathered for our last two sessions, which focused on "Fluvial archives" and on UAV photogrammetry as well as climate reconstruction in the "Hot and Cold" session. After our last shared lunch, it was time to say goodbye for the participants and leave some feedback for next year.

#### Feedback

We received overwhelmingly positive feedback regarding this year's meeting, especially praising the program structure and the remote lakeside setting. The panel discussion, the pubquiz, and the extensive excursion were highly appreciated, as they facilitated rapid and meaningful social interactions among participants.

Overall, the International Young Geomorphology Meeting at Ökodorf Losheim proved to be an inspiring, and socially enriching experience. We hope we were able to offer lasting memories, strengthened connections, and renewed enthusiasm for geomorphology.

With warm regards from the old and new board of the German Young Geomorphology, Andreas, Bastian, Charlotte, Dennis, Felix, Isabel, Jannik, Katharina, Lars, Lingxiao, Lisa, Niklas, Philipp and Salome

#### Supported by:

Deutsche Gesellschaft für Geomorphologie e.V.





International Young Geomorphology Meeting Ökodorf Losheim, June 19-22<sup>nd</sup> 2025



### Programme

#### Thursday 19th

Arrival + Shuttle service (shuttle service times are approximate, please refer to the time you booked during registration) 7:30 PM: Dinner (there will be some snacks for later arrivals) Evening: Get together, games

#### Friday 20<sup>th</sup>

Morning: Breakfast

9 AM – 5 PM: Dr. Raimund Schneider

Guided excursion in the surrounding Mosel valley

Lunch: individual choice in Trier (not included)

- 5 PM: Arrival + Shuttle service
- 6:30 PM: Vegetarian Barbeque
- Evening: Welcome (convener: Basti, Salo)
  - A word from our sponsors DGGM & DEUQUA

Results from the Questionnaire 2024

8 PM: Panel discussion with Dr. Mario Kirchhoff (convener: Isa, Lisa)

Perspectives from science outside of academia

#### Saturday 21st

#### Morning: Breakfast

10 AM: Keynote lecture by Dr. Melanie Kranz (convener: Dennis)

Revealing the impact of Quaternary climate on mountain erosion: new insights from novel trapped charge thermochronometry

#### 11-11:30 AM: Coffee break

11:30-12:00 AM: Session I: Tian shan: From Mountain Building to Desert Formation (convener: Isabel, Andi)

Gong, Lingxiao: Building and Carving mountains: Uplift, Erosion and Surface processes in the Central Tian Shan, Kyrgyzstan

# Wang, Fujun: The Role of Late Cenozoic Pamir–Tianshan Convergence in the Onset of the Taklamakan Desert

#### 12:00-12:45 AM: Session II: Climate Cycles in sedimentary Records (convener: Andi, Dennis)

Vinnepand, Mathias: Loess-Palaeosol-Sequences at the westernmost part of the Eurasian loess belt – First results from the Nantois cliff close to Saint Brieuc, Brittany and their potential considering European perspectives

Wild, Amanda: Capturing or Shredding Milankovitch Climate Cyclicity within Death Valley Alluvial Fans
Pandey, Ananya: Sediment Dynamics in Response to Alpine Glacier Retreat under a Changing Climate

1 PM: Lunch

#### 2:30-3:30 PM: Session III: What happens at the coast: From process to human influence

#### (convener: Lars, Basti)

- Heß, Katharina: Coastal sediment records of Holocene storm variability in north-west Europe A synoptic review
- Nußberger, Nel: Hydrodynamics inferred from heavy mineral and grain size analyses of late Holocene tsunami sediments from Dury Voe, Shetland Islands (UK)
- Moustafa, Samah: Geoarchaeological indicators of sea level change during the Roman period in Graias Gony submerged Roman harbour site between Ras Hawala and Ras Alam El-Rum areas, NW coast of Egypt Using the diagram PADM (the Palaeoenvironmental Age - Depth Model)
- └┘ Chatterjee, Debayan: Controls on lateral river migration over decadal timescales

3:45 PM: 30 second madness followed by Poster Session (convener: Jannik)

6:30 PM: Dinner

Evening: Failure Session (convener: Lisa)

#### Sunday 22<sup>nd</sup>

#### Morning: Breakfast

10:00 -11:00 AM: Session I: Fluvial archives (convener: Salo, Philipp)

Geis, Anna-Lena: Multi-method luminescence dating of late Cenozoic northern Upper Rhine Graben fluvial sediments

Kögler, Laura: Pleistocene river terrace evolution in the Guadix/Baza basin, Spain: Processes and chronology.

 $\Box$  Grimm, Bastian: Late Holocene sediment dynamics in the human-dominated fluvial catchment of the Wiesent River (Northern Franconian Alb, SE-Germany)

<sup>©</sup> Bäckmann, Felix: Soil erosion models for the amazon basin - comparision and validation

#### 11:00-11:15 AM: Coffee Break

#### 11:15-12:00 AM: Session II: Hot and Cold (convener: Katharina, Lingxiao)

🖵 Engelmann, Lars: "Fertile islands from above": Utilizing UAV photogrammetry to map fertile forest patches in a UNESCO biosphere reserve

 $\Box$  Oehler, Salome: Advances in Thermoluminescence based Temperature Reconstruction

#### 12:15 AM: Lunch

Afternoon: Shuttle service + Departure

#### **Poster contributions:**

| Engelmann, Charlotte |  |  |  |
|----------------------|--|--|--|
| Grimm, Bastian       | Ain't No River Wild Enough – How to get a chronology to the overbank         |  |  |
| Keßels, Johannes     | deposits in different catchment areas  |  |  |
| Garbe, Philipp       | Holocene paleovegetation reconstruction in the vicinity of ancient           |  |  |
|                      | Bubastis, southeastern Nile Delta (Egypt)                                    |  |  |
|                      | Reconstructing the Late Holocene fluvial landscape of the Wiesent River      |  |  |
| Merz, Janina         | in the Northern Franconian Alb: A sedimentological and geophysical           |  |  |
|                      | approach   |  |  |
| Pauly, Niklas        | From Field to Lab: First Insights into OSL Dating of the Leinleiter River in |  |  |
|                      | the Northern Franconian Alb (Bavaria, Germany)                               |  |  |
| Rehn, Lisa           | Tracking Long-Term Rock Glacier Evolution with Archival Imagery              |  |  |
| Ruby, Andreas        | Tectonic and Climatic controls on river long-profile evolution – Naryn,      |  |  |
| nuby, / indicate     | Kyrgyzstan   |  |  |
| Schönfeld, Jannik    | From One Lake to Two: Investigating the Evolution and Damming                |  |  |
| Schonicta, Jannik    | Mechanisms of Proglacial Lakes in a Glacier Forefield in the Swiss Alps      |  |  |
| Wapenhans, Isabel    | Quaternary glacial erosion recorded by low-temperature                       |  |  |
|                      | thermochronology in the Tauern Window, Eastern European Alps                 |  |  |
| Wiegand, Tim         | Monitoring Snow Cover Dynamics in the Rhoen Mountains using Close-           |  |  |
|                      | Range Sensing Techniques   |  |  |
|                      | Using paleolake shorelines to estimate lithospheric response rates: Field    |  |  |
| Wolf, Dennis         | observations and flexural isostatic modeling of Lake Khyargas, western       |  |  |
|                      | Mongolia   |  |  |

Supported by:

Deutsche Gesellschaft für Geomorphologie e.V.





#### International Young Geomorphology Meeting Ökodorf Losheim, June 19-22<sup>nd</sup> 2025



# List of participants

| No     | Name         | First Name | Affiliation                              |
|--------|--------------|------------|--|
| 1      | Pauly        | Niklas     | Justus Liebig University Gießen          |
| 2      | Engelmann    | Charlotte  | University of Freiburg                   |
| 3      | Keßels       | Johannes   | RWTH Aachen University                   |
| 4      | Bieber       | Kathrin    | University Bayreuth                      |
| 5      | Geis         | Anna-Lena  | Justus Liebig University Gießen          |
| 6      | Vinnepand    | Mathias    | Géosciences Rennes                       |
| 7      | Merz         | Janina     | Justus Liebig University Gießen          |
| 8      | Reize        | Felix      | University Koblenz/Bonn                  |
| 9      | Moustafa     | Samah      | Alexandria University                    |
| 10     | Roth         | Isa-Yael   | University of Freiburg                   |
| 11     | Wiegand      | Tim        | University Würzburg                      |
| 12     | Tinapp       | Jakob      | University Würzburg                      |
| 13     | Umlauf       | Antonia    | FU Berlin                                |
| 14     | Schneider    | Vera       | FU Berlin                                |
| 15     | Wild         | Amanda     | RWTH Aachen University                   |
| 16     | Gehl         | Katharoina | Trier University                         |
| 17     | Pandey       | Ananya     | University of Pavia                      |
| 18     | Winter       | Lucy       | Trier University                         |
| 19     | Bäckmann     | Felix      | University Würzburg                      |
| 20     | Traica       | Enrico     | University Würzburg                      |
| 21     | Chaterjee    | Debayan    | FU Berlin                                |
| 22     | Wang         | Fujun      | University of Potsdam                    |
| 23     | Nußberger    | Nel        | Heidelberg University                    |
| 24     | Schmidt      | Ben        | Heidelberg University                    |
| 25     | Egermann     | Alina      | Heidelberg University                    |
| 26     | Kögler       | Laura      | Justus Liebig University Gießen          |
| 27     | Heß          | Katharina  | Heidelberg University                    |
| 28     | Wolf         | Dennis     | RWTH Aachen University                   |
| 29     | Ruby         | Andreas    | GFZ Potsdam                              |
| 30     | Engelmann    | Lars       | Trier University                         |
| 31     | Grimm        | Bastian    | Justus Liebig University Gießen          |
| 32     | Wapenhans    | Isabel     | University of Potsdam                    |
| 33     | Gong         | Lingxiao   | University of Potsdam                    |
| 34     | Rehn         | Lisa       | University of Freiburg / University Lund |
| 35     | Oehler       | Salome     | University of Lausanne                   |
| 36     | Garbe        | Philipp    | University Würzburg                      |
| 37     | Schönfeld    | Jannik     | University Würzburg                      |
| Invite | ed speakers: |            |  |
| 37     | Kranz        | Melanie    | Ruhr University Bochum                   |
| 38     | Kirchhoff    | Mario      |  |