

# Report of the 10<sup>th</sup> International Young Geomorphologists' Workshop, Werbellinsee, May 27-29, 2016

The 10<sup>th</sup> International Young Geomorphologists' Workshop, organized by the German Young Geomorphologists (YG) was held from May 27-29, 2015 at the Werbellinsee, northeast of Berlin. It was the third time after 2014 that international participants were explicitly invited. In total, 45 undergraduate, graduate, PhD students, and postdocs from 17 different Institutions and Universities (and 3 countries, including Poland, Austria and Germany) came together for a three-day workshop to discuss their own research, as well as topics of geomorphologic interest in general, in a rather informal environment.

The program for the three days included 7 oral work-in-progress reports as well as reports from advanced PhD-projects which were organized in two sessions (see attached program for details):

Session I: "Sediment – Surface – Erosion" featuring talks by Moritz Nykamp (FU Berlin), Jörn Profe (University of Bremen), Tobias Sprafke (University of Würzburg), Ugur Ötztürk (University of Potsdam), and Jesús Rodrigo Comino (University of Trier).

**Session II: "Transport – Interactions"** featuring talks by Anna Schoch (University of Bonn), and Bastian Dost (University of Trier).

In addition to the oral sessions, and as a result of the very successful poster sessions held in previous years, there were two poster sessions held, with a total of 18 posters presented on a broad variety of geomorphic topics.

After a casual introduction of the participants this year's program started in the evening (19:30 - 21:30) with a Keynote lecture on "The Geophysics and Geochemistry of Geomorphology: why surface processes matter in the big picture, and how we use scary tools to learn about them", presented by Prof. Niels Hovius (GFZ Potsdam). This was followed by a "Late-Night" poster session with accompanying 30 seconds introductory talks from all presenters (see attached program for further details). Even though it was already late at night, the poster session was a great success and participants kept on discussing until midnight.

On Saturday the workshop started with a session on "Sediment – Surface – Erosion", featuring 5 oral talks by participants between 09:00 and 11:00, before the group left for a field-trip to the surroundings of the Werbellinsee. The field trip was organized by Dr. Knut Kaiser (GFZ Potsdam), who introduced the group to the postglacial landscape features of the region. Returning from the field trip, the data acquisition for the workshop on on Unmanned Aerial Vehicles (UAV) was

accomplished at the lake side, where we also took the opportunity of taking nice group pictures. In the evening, the second poster session with accompanying 30 seconds introductory talks was held (see attached program for further details). Here, we took advantage of the nice weather conditions and held an outdoor poster session, which proved to be highly recommendable for future events.

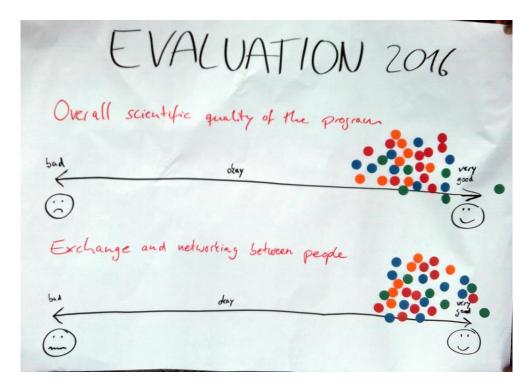


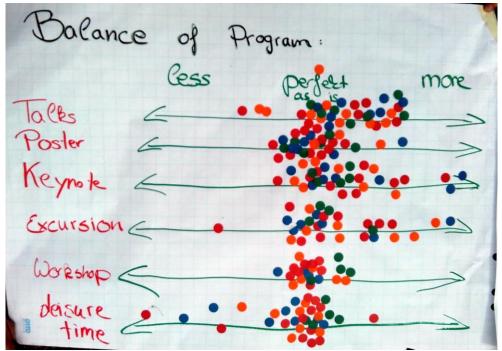


On Sunday morning the second session on "Transport – Interactions" was held, featuring two oral presentations. Following the oral block, Dr. Kristen Cook (GFZ Potsdam) gave a hands-on workshop on UAV data processing and Structure from Motion analysis, using the data collected at the lake shore on Saturday night.

### Feedback round

During the past years it has become a tradition to close the meeting with a feedback round, during which the participants are asked to give their general comments on the organization of the entire meeting, as well as to grade the meeting according to different aspects (see pictures below). Overall, the participants were very satisfied with the organization of the meeting. Constructive comments and suggestions will help the YG team to improve the organisation of future activities. The internationalisation of the meeting is received very positively and was felt to have increased the quality of the meeting. Furthermore, the poster session (introduced two years ago) was mentioned as a great success by several participants, though they wished to allow more time for the session.





Other suggestions involved to allow for more talks during the meeting, even though the emphasis should be placed on the poster sessions. The workshop on UAVs and SfM by Dr. Kristen Cook from the GFZ Potsdam was a great success and evaluated very positively. Many participants expressed their wish to keep a workshop as part of the program for the next meetings. It will be up to the elected team to incorporate these suggestions in the organization of the coming YG meeting in 2017. As also has been discussed in the feedback rounds of previous years, the organization of a field trip during the annual meetings is very limited in time. It was shortly discussed whether to prolong the entire meeting, in order to allow for more time for a field trip, but most participants valued the convenience of a weekend-meeting of only 2 ½ days.

# **General points**

The two chairpersons and a support team of 7 young geomorphologists were elected in 2015: Jan Blöthe (Uni Bonn) and Julia Meister (FU Berlin) will chair the YG for a two-year period until the 2017 meeting. They are supported by Christoph Kappler (GFZ Potsdam), Anna Schoch (Uni Bonn), Andrea Junge (Uni Gießen), Phillip Schulte (RWTH Aachen), Veit Nottebaum (RWTH Aachen), Steffen Pötsch (EMAU Greifswald), and Karoline Meßenzehl (Uni Bonn) in the upcoming tasks.

The next Young Geomorphologists' Workshop is scheduled for May 2017 and will probably be held near Munich (Ammersee), where in 2007 the first annual meeting of the YG was held.

The YG group expresses their thanks to the AK Geomorphologie for financial support of the annual meeting. We also thank Christoph Kappler (GFZ Potsdam) for organising the venue and Anna Schoch (Uni Bonn) for handling participant communication. Finally, we are grateful for the excellent presentation of the keynote speaker Niels Hovius, the great excursion guided by Knut Kaiser, the workshop held by Kristen Cook and the AK Geomorphologie and the sponsoring companies (see attached) for their financial support of the event.

## Kind regards

Julia Meister, Jan Blöthe, Christoph Kappler, Anna Schoch, Veit Nottebaum, Andrea Junge, Phillip Schulte, Steffen Pötsch, and Karoline Meßenzehl

#### **PROGRAM**

# Friday, 27/05/2016

16:00 Arrival

17:00 Get to know the program and the group

Let's learn some names and share a drink

**18:00** *Dinner* 

19:30 Keynote: Prof. Niels Hovius (GFZ Potsdam): The Geophysics and Geochemistry of

Geomorphology: why surface processes matter in the big picture, and how we use scary tools to

learn about them.

21:00 Late night shorts ("30 second madness") and poster session – Convener: Julia Meister

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

Fabian Becker (Berlin): Geomorphology of iron smelting on Elba Island, Tuscany.

Hannah Berger (Bonn): Quantifying an active landslide on the Swabian Alb.

*Verena Czarnowsky* (Leipzig): Characterization of perennial and episodic springs with stable isotope signatures in the Kaunertal Valley, Austria.

Malgorzata Frydrych (Łódź): Extreme glacifluvial processes in record of Rzymsko esker sediments.

Chris Halla (Bonn): Morphology and internal structure of the Morenas Coloradas rock glacier complex, Central Andes, Argentina.

Jacob Hardt (Berlin): The Frankfurt phase - Geomorphological and geochronological investigations to reassess a "classical" ice marginal position in NE Germany.

Sarah Ißelhorst (Berlin): Traditional water management in a semi-arid environment, SE-Spain

Andrea Junge (Gießen): Pre-occupation – occupation – post-occupation: Dating sediments associated with ancient settlement structures in Israel to reconstruct human activity.

Christoph Kappler (Potsdam): Evaluating the timing of Late Quaternary geomorphodynamics and soil formation: a review of geochronological data from northeastern central Europe.

*Mario Kirchhoff* (Trier): Argan woodlands in South Morocco as an area of conflict between degradation and sustainable land use.

### Saturday, 28/05/2016

08:00 Breakfast

09:00 Session I: "Sediment – Surface – Erosion" Convener: Christoph Kappler

You have 20 minutes for your topic, so make your talk short and to the point and have plenty of time for discussion!

09:00 *Moritz Nykamp* (Berlin): Quantification of wind-driven soil erosion of a loess-like sediment

and its implications on the occurrence of archaeological surface and sub-surface finds.

09:20 *Jörn Profe* (Bremen): Insights into paleoclimate and sediment dynamics: Element log ratios

derived from X-Ray fluorescence scanning of discrete samples from the loess-paleosol

sequence Schwalbenberg II, Germany.

09:40 Tobias Sprafke (Würzburg): Morphodynamic activity and stability in polygenetic loess

paleosols.

10:00 Break

10:20 Ugur Öztürk (Potsdam): Predicting Rainfall-Induced Landslides Applying Complex Networks

Based on Event Synchronization.

10:40 Jesús Rodrigo Comino (Trier): Actual geomorphological processes on steep hillslope

vineyards. A comparison of Ruwertal (Germany) with the Montes de Málaga (Spain).

11:00 Leisure time and lunch

14:00 Field trip to the surroundings (Dr. Knut Kaiser, GFZ Potsdam)

18:00 Return from field trip

19:00 Dinner

20:00 Late night shorts ("30 second madness") and poster session – Convener: Anna Schoch

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

*Lisa Luna* (Potsdam): Multi-isotope comparison of 3He, 21Ne, and 36Cl moraine ages from the high-altitude central Puna Plateau, NW Argentina.

*Eric Pohl* (Freiberg): Identifying climate forcing on suspended sediment transport in the high Pamir Mountains.

*Anne Schuchhardt* (Halle): The effects of large wood on longitudinal sediment connectivity – first results from small Central European mountain streams.

Raphael Steup (Gießen): The loess sequence at Münzenberg (Wetterau/Germany): A reinterpretation based on new luminescence dating results.

Stefanie Tofelde (Potsdam): Eccentricity-driven fluvial fill terrace formation in the southern-central Andes, NW Argentina.

Renee van Dongen (Potsdam): Testing biotic controls on erosion and sediment transport in the Chilean coastal cordillera with cosmogenic 10Be-derived erosion rates.

*Georg Veh* (Potsdam): Towards an improved inventory of Glacial Lake Outburst Floods in the Himalayas.

*Tilmann Wolpert* (Gießen): Fine grain OSL-dating of specific marker horizons of the Nussloch loess section Heidelberg/Germany.

#### 21:30 Party / Get together

# Sunday, 29/05/2016

08:00 Breakfast

09:30 Session II: "Transport – Interactions" Convener: Steffen Pötsch

You have 20 minutes for your topic, so make your talk short and to the point to have plenty of time for discussion!

09:30 Anna Schoch (Bonn): Postglacial sediment evacuation from the tributaries of the Upper

Rhone, Switzerland.

09:50 Bastian Dost (Trier): Smartstones - Technique and Applications.

10:10 Coffee Break

10:30 Workshop UAVs by Dr. Kristen Cook (GFZ Potsdam)

> In a short hands-on workshop, Kristen will show you how easy and straightforward it can be to generate a 3D model from just a bunch of pictures collected with an unmanned aerial vehicle (UAV). You can bring your laptop and install Agisoft Photoscan professional on it. You can get a

free 30 day trial of Agisoft at <a href="http://www.agisoft.com/downloads/request-trial/">http://www.agisoft.com/downloads/request-trial/</a>.

12:30 Lunch

13:30 Give us what we deserve!

We need your opinion on what you liked and disliked!

14:00 Goodbye and some final remarks

# **List of Participants:**

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