



IAG/AIG Working Group
on Denudation and Environmental Changes
in Different Morphoclimatic Zones (DENUCHANGE)



Association
of Polish Geomorphologists



Institute of Geocology and Geoinformation
Adam Mickiewicz University in Poznań
Poland

1st Workshop of the IAG/AIG Working Group DENUCHANGE: Denudation and Environmental Changes in Different Morphoclimatic Zones Storkowo-Szczecinek (Poland), September 25-27, 2018

Introduction

There is general agreement that global environmental changes will have significant effects on Earth surface systems. The question how global environmental changes will affect our landscapes and the way we interact with it is therefore of highest importance. Denudation, including both chemical and mechanical processes, is of high relevance for Earth surface and landscape development and the transfer of solutes, nutrients and sediments from headwater system through main stem of drainage basin systems to the world oceans. Denudation is controlled by a range of environmental drivers and can be significantly affected by human activity.

The better understanding of possible effects of ongoing and accelerated environmental changes on present-day denudation requires systematic and quantitative studies (environmental monitoring) on the actual drivers of denudational processes in differentiated landscape controls. Only if we have an improved knowledge of drivers, mechanisms and rates of contemporary denudational processes across a range of different selected climatic environments, possible effects of global environmental changes on denudation can be better assessed. Special focus must be given to selected morphoclimatic zones that react particularly sensitive to ongoing climatic changes and human activities.

A systematic geomorphologic comparison of present-day denudation rates in different defined climatic zones combined with a coordinated analysis and compilation of the respective key controls of denudation that is presently occurring in the different selected morphoclimatic settings is still largely missing.

The working group on *Denudation and Environmental Changes in Different Morphoclimatic Zones (DENUCHANGE) (2017 – 2021)* will help to close this still existing key knowledge gap and shall contribute to a better understanding of the possible effects of global environmental changes on contemporary Earth surface systems.

The main aims and objectives of the working group are to:

- Define and select a range of different morphoclimatic zones that react particularly sensitive to ongoing climate change and human activities;
- Provide a systematic quantitative analysis (detailed compilation and comparison) of chemical and mechanical denudation rates in defined drainage basin systems in these different selected morphoclimatic zones worldwide;
- Provide a coordinated and integrated analysis and compilation of the respective key drivers of contemporary denudation occurring under the various present-day morphoclimates;
- Define and develop denudational models for different spatial scales of drainage basins and morphoclimatic zones;
- Define the morphometric signature of denudational processes for different spatial scales of drainage basins and morphoclimatic zones;
- Address the key question how climate changes are affecting contemporary denudation rates in different morphoclimatic zones;
- Address the key question how human activity is affecting contemporary denudation rates in different morphoclimatic zones.



Scientific Committee:

Achim A. Beylich (NO), Piotr Cienciala (US), John Dixon (US), Jasper Knight (SA), Andrzej Kostrzewski (PL), Katja Laute (NO), Luca Mao (CL), David Morche (DE), Marta Della Seta (IT), Zbigniew Zwoliński (PL).

Organizers: International Association of Geomorphologists, Adam Mickiewicz University in Poznań, Association of Polish Geomorphologists

Organizing Committee: Achim A. Beylich, Joanna Gudowicz, Mikołaj Majewski, Małgorzata Mazurek, Józef Szpikowski, Marcin Winowski, Zbigniew Zwoliński

Contact: Dr. Joanna Gudowicz (Gudowicz@amu.edu.pl)

Venue: Szczecinek – accommodation in hotel arranged by the organizers; Storkowo – presentation and poster sessions and field trip will be in the area of the Geoecological Station of the Adam Mickiewicz University in Poznań

Framework:

Day 0 (September 24, MON): arrival to Szczecinek (airports are located in Warsaw or Poznań or Goleniów) and icebreaker

Day 1 (September 25, TUE):

AM – introductory meeting and discussion of the WG (themes, matters, methods, basics, plans, informal meeting etc.) – keynotes:

Achim A. Beylich – The new I.A.G./A.I.G. Working Group on Denudation and Environmental Changes in Different Morphoclimatic Zones (DENUCHANGE): Scientific need, key research questions and planned activities

Olav Slaymaker – A global perspective on denudation rates: complexity compounded by contemporary anthropogenic and climatic changes

PM – invited lectures:

Zbigniew Zwoliński – The pattern of morphoclimatic zones on the Earth

Wiesława E. Krawczyk – Calculation the rate of chemical denudation

Adam Łajczak – Mechanical denudation in Poland

Małgorzata Mazurek – Fluxes in tropical rivers

Day 2 (September 26, WED):

AM – half-day field trip around the upper Parsęta River catchment (fluvial denudational processes) and experimental catchment (soil/slope erosion) – Andrzej Kostrzewski, Mikołaj Majewski, Małgorzata Mazurek, Alfred Stach, Grażyna Szpikowska, Józef Szpikowski, Zbigniew Zwoliński

PM – presentations and posters by participants

Day 3 (September 27, THU):

AM – workshop: denudation modelling with SWAT – Joanna Gudowicz

workshop: calculation of the chemical denudation – Wiesława E. Krawczyk

PM – presentations and posters by participants

general discussion – Achim A. Beylich

Day 4 (September 28, FRI): departure from Szczecinek

Arrival to Poland:

The nearest workshop airports are in Poznań (<https://www.airport-poznan.com.pl/en/>) and Goleniów (<http://www.airport.com.pl/en/>). From Poznań to Szczecinek can be reached by train (<https://www.intercity.pl/en/> or <http://rozklad-pkp.pl/en/>) within approx. 3 hours. At the airport in Poznań there are 12 offices of the Rent-a-car (<https://www.airport-poznan.com.pl/en/for-passengers/arrival/rent-a-car>). There are another 9 Rent-a-car offices at the airport in Goleniów (<http://www.airport.com.pl/en/transport-and-parking/car-rental/>). We do not recommend train connections from Goleniów due to numerous transfers. In the registration form no. 2, mark where and when you are coming to Poland. If you need help in organizing your arrival, then write, we will be contacting you individually. If you need additional accommodation in Poznań on the way to/from Szczecinek, write the appropriate dates in the registration form. Of course, it is also possible to come to Warsaw and continue flight either to Poznań or Goleniów or by train (definitely longer route). Another airport is in Berlin.

Accommodation in Szczecinek:

Hotel Viki, T.Kościuszki St. 76, Szczecinek

Make a reservation by e-mail (hotelviki@gmail.com) with the code "IAG" on a first come first served basis:

Single room (breakfast, wifi and parking) - 145 PLN (34 Euro *) per night

Twin room (breakfast, wifi and parking) - 180 PLN (42 Euro *) per night or 90 PLN (21 Euro *) per person per night

* Rate for June 23, 2018

Workshop in Storkowo:

Oral, poster and field sessions will be held at the Geoecological Station in Storkowo (ca. 20 km from Szczecinek – we will organize transfer). The conference room is equipped with audiovisual equipment. Prepare presentations in PowerPoint (or in PDF format). Preferred format for posters is A0 in the vertical version.

Please send an abstract of your oral or poster presentation before August 31, 2018.

The abstract should contain the following information:

- title
- author (s), affiliation (s)
- text

The abstract should have up to 500 words.

In Storkowo there is a full-board catering as part of the registration fee.

Take hiking shoes on a field trip.

Weather:

Averages from monitoring 1994-2017: Air temperature - 10-11°C, atmospheric precipitation - 0-7 mm with a probability of 30%, wind - 0.2-1.2 ms⁻¹

Fees (accommodation, lunches, dinners, workshop materials):

Late registration after July 31, 2018 – 400 €

Registration fees should be sent to the account:

Account holder name: STOWARZYSZENIE GEOMORFOLOGÓW POLSKICH (POLISH GEOMORPHOLOGICAL ASSOCIATION)

Account holder address: Krygowskiego 10, 61-680 Poznań, Poland

Account number - IBAN: PL 76 1090 1359 0000 0001 1678 1568 (account in Euro)

BIC (SWIFT code): WBKPPLPP

Account currency: EUR

Bank name: Bank Zachodni WBK S.A.

Bank address: Rynek 9/11, 50-950 Wrocław, Poland

Beneficiary's bank's country: POLAND PL

Deadlines:

Late registration – August 31, 2018

Workshop – September 25-27, 2018

If you have any questions please don't hesitate to contact us.

The registration form should be sent to Dr. Joanna Gudowicz Gudowicz@amu.edu.pl before August, 31 2018.

