Report on the 1st Workshop of the I.A.G./A.I.G. Working Group DENUCHANGE: Denudation and Environmental Changes in Different Morphoclimatic Zones, Storkowo-Szczecinek (Poland), 25-27 September 2018

The 1st Workshop of the I.A.G./A.I.G. Working Group on *Denudation and Environmental Changes in Different Morphoclimatic Zones (DENUCHANGE)* took place in Storkowo-Szczecinek (Poland), 25-27 September 2018.

The workshop was successfully organized by Zbigniew Zwoliński together with Joanna Gudowicz, Mikołaj Majewski, Małgorzata Mazurek, Józef Szpikowski, Marcin Winowski and Achim A. Beylich, and was kindly hosted by the Geoecological Station in Storkowo belonging to the Adam Mickiewicz University (AMU) in Poznań. The workshop included an introductory meeting with an introductory lecture by Achim A. Beylich on 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, followed by extended discussions on the organization and scientific key focus of DENUCHANGE, an invited keynote lecture by Olav Slaymaker on A global perspective on denudation rates: complexity compounded by contemporary anthropogenic and climatic changes as well as invited introductory lectures by Zbigniew Zwoliński on The pattern of morphoclimatic zones on the Earth, Wiesława E. Krawczyk on the Estimation of the chemical denudation rate, Adam Łajczak on Mechanical denudation of selected areas in Europe, and Małgorzata Mazurek on the Delivery of denudational material for fluvial transport in a lowland catchment. In addition, two practical workshops on the Estimation of the chemical denudation rate and on Denudation modelling with SWAT were organized by Wiesława E. Krawczyk and Joanna Gudowicz for the workshop participants.

Eight oral and nineteen poster presentations were given by workshop participants spanning a wide spectrum of aspects related to denudation in various morphoclimatic zones.

During the workshop the analytical laboratories, the meteorological station and the hydrological station of the AMU Geoecological Station in Storkowo were presented and a half-day fieldtrip introduced the workshop participants to the upper Parseta River catchment where fluvial denudation processes and soil/slope erosion within experimental and channel head catchments in a temperate environment were discussed.



Lecture on state environmental monitoring in Poland by Andrzej Kostrzewski (photo by Józef Szpikowski).



At the upper Parsęta river. Explanation of the monitoring programme by Zbigniew Zwoliński (photo by Józef Szpikowski).

The 28 participants from 8 different countries (Austria, Brazil, Canada, France, Israel, Norway, Poland, Romania) shared their ideas and discussed various aspects of denudation in a range of different morphoclimatic zones including cold regions, temperate regions, semi-arid / arid regions and tropical regions which were selected as morphoclimatic zones of particular interest for the DENUCHANGE working group. Selected oral and poster contributions from the workshop shall be published in a special issue to the journal Landform Analysis. Progress was made in defining a concisely formulated **DENUCHANGE working group objective** and in planning concrete collaborations with other I.A.G./A.I.G. working groups. Next years` DENUCHANGE activities will include a DENUCHANGE scientific session at the EGU Annual General Assembly 2019 taking place in Vienna (Austria) on 7-12 April 2019, a scientific session on Denudation in the Mediterranean Zone at the I.A.G./A.I.G. Regional Conference on Geomorphology (Geomorphology of Climatically and Tectonically Sensitive Areas) in Athens, Greece, 19-21 September 2019, concrete discussion meetings with other I.A.G./A.I.G. working groups, and the 2nd DENUCHANGE Workshop to be held in Spain (Alicante - Calpe) in mid-September 2019 with the presentation and discussion of a first compilation of contemporary and drainage-basin wide chemical and mechanical denudation rates from different morphoclimatic zones (as outlined in the DENUCHANGE working group objective).



Participants of the 1st DENUCHANGE Workshop during the field excursion (photo by Monika Domańska).

Further information on the 1st DENUCHANGE Workshop, including the Workshop Programme and the Book of Abstracts, as well as on the DENUCHANGE Working Group and on the defined DENUCHANGE working group objective is available at the DENUCHANGE website under http://www.geomorph.org/denuchange-working-group/.

Selbustrand and Poznań, 20 November 2018

Achim A. Beylich and Zbigniew Zwoliński