



IAG DENUCHANGE Core Member Business Meeting (Virtual Meeting)

13 October 2020, 15:00-16:45 CEST

Summary report

Business meeting participants: Achim A. Beylich (Norway), Antonio Cendrero (Spain), Piotr Cienciala (USA), Luis M. Forte (Argentina), Jasper Knight (South Africa), Katja Laute (Norway), Małgorzata Mazurek (Poland), Ana Navas (Spain), Olimpiu T. Pop (Romania), Juan Remondo (Spain), Nurit Shtober-Zisu (Israel), Zbigniew Zwoliński (Poland)

Welcome and introduction of business meeting participants

Achim A. Beylich opened the meeting and welcomed all business meeting participants, particularly the three new DENUCHANGE core group members Antonio Cendrero, Luis M. Forte and Juan Remondo. All meeting participants introduced themselves briefly.

Approval of the agenda

Achim A. Beylich presented the meeting agenda. The meeting agenda was approved by the meeting participants.

Third DENUCHANGE Workshop, 2021, Haifa, Israel

The Third DENUCHANGE Workshop was originally scheduled to take place 12-14 October 2020 in Haifa, Israel. Due to the ongoing COVID-19 pandemic the workshop was in early summer postponed until 2021. The workshop organizer Nurit Shtober-Zisu informed that the workshop shall take place as early as possible in 2021. The development of the global COVID-19 crisis is monitored and the decision on the new dates for the workshop will be taken as soon as the global situation will allow it. Information on the workshop and the connected field trips is available at the workshop webpage under

<https://denuchange.wixsite.com/denuchange2020>

Upcoming DENUCHANGE publications

Katja Laute informed about the status of the upcoming DENUCHANGE Virtual Special Issue (VSI) to the journal *Geomorphology* (Elsevier). The theme of the VSI is *Denudational processes and landscape responses to global environmental changes* and the VSI is edited by Katja Kaute (Managing Guest Editor), Ana Navas (Guest Editor) and Achim A. Beylich (overseeing Editor-in-Chief). The VSI includes selected paper contributions from the EGU General Assembly, 7-12 April 2019, Vienna, Austria, session GM7.2 on *Denudational hillslope and fluvial processes, sedimentary budgets, and landscape responses to global environmental changes*, from the Second IAG DENUCHANGE Workshop held in Calpe, Spain, 12-14 September 2019, and from the Session S04 on *Denudation in the Mediterranean Zone* at the IAG Regional Conference on Geomorphology in Athens, Greece, 19-21 September 2019. Eleven scientific papers are selected for the VSI after the peer-review process. The VSI also includes an editorial and an introductory paper on the IAG DENUCHANGE working group. The VSI is finally compiled in the end of October 2020.

Achim A. Beylich informed about the status of a Special Issue to the journal *Water*. The theme of this special issue is *Fluvial Processes and Denudation* and the special issue is edited by Achim A. Beylich. The special issue shall include invited feature papers from several DENUCHANGE core members and members. The special issue is still open for manuscript submissions and the final deadline for submission of manuscripts to this special issue is 31 January 2021.

Upcoming and planned DENUCHANGE conference sessions

Achim A. Beylich informed about the upcoming DENUCHANGE session at the EGU General Assembly, 25-30 April 2021. The topic of the session is *Denudational hillslope and fluvial processes, source-to-sink fluxes and sedimentary budgets under changing climate, anthropogenic impacts and other disturbances* and the session is convened by Achim A. Beylich, Katja Laute, Ana Navas, Olimpiu T. Pop and Zbigniew Zwoliński. The session is co-sponsored by IAG. Antonio Cendrero kindly accepted the invitation to provide a solicited talk in this session.

Achim A. Beylich informed about a proposed DENUCHANGE session at the 10th IAG International Conference on Geomorphology, 6-10 September 2021, Coimbra, Portugal. The scientific session on *Denudation and Environmental Changes in Different Morphoclimatic Zones (DENUCHANGE)* shall be convened by Achim A. Beylich, Luca Mao and Zbigniew Zwoliński.

Dependent on the question if the IAG Regional Conference on Geomorphology in Mashhad, Iran (originally scheduled to take place in October 2020 and postponed until 2021), can take place in 2021, the DENUCHANGE working group is planning to contribute to this conference (e.g., in form of a proposed conference session).

DENUCHANGE Test Site Fact Sheets: Status and further steps

Achim A. Beylich gave a detailed overview over the process of developing the DENUCHANGE Test Site Fact Sheets, the distribution of the DENUCHANGE Test Site Fact Sheets to the global community and the feedback received by today. Building on the DENUCHANGE Working Group Objective (defined, formulated and published on 20 November 2018), the DENUCHANGE Test Site Fact Sheets were developed to their current form during the Second DENUCHANGE Workshop in Calpe, Spain, 12-14 September 2019 (Fact Sheets Table 1 compiled by Achim A. Beylich and Fact Sheets Table 2 compiled by Joanna Gudowicz, Małgorzata Mazurek and Zbigniew Zwoliński) and were distributed to DENUCHANGE members and the global geomorphology community (through Geomorphlist) shortly after the workshop. The deadline for the submission of completed DENUCHANGE Test Site Fact Sheets was 30 September 2020. By today, completed and accepted DENUCHANGE Test Site Fact Sheets with catchment information and quantitative data from 18 catchment systems have been received. It was decided during the business meeting that the call for contributions to the DENUCHANGE Test Site Fact Sheets shall be renewed. Several DENUCHANGE core group members indicated during the meeting that they could contribute to the fact sheets with additional data. The current fact sheets include requests for information/data on both contemporary denudation rates and longer-term rates (e.g., based on information on natural or artificial storage elements/sediment sinks within the drainage basin systems). Jasper Knight suggested adding requests for other types of data on denudation (e.g., remote sensing data) to the existing fact sheets. Piotr Cieniala suggested adding a request for information on environmental change (kind of environmental changes; e.g., nature of climatic changes and the dominant types of land use) to the existing fact sheet data tables. Achim A. Beylich has made these additions to Table 1 of the current fact sheets and Zbigniew Zwoliński has revised (shortened) Table 2 of the fact sheets. Achim A. Beylich prepares an additional call for contributions to the revised DENUCHANGE Test Site Fact Sheets with a due date in early February 2021.

Further steps and directions with DENUCHANGE

There was general agreement during the business meeting that DENUCHANGE (2017-2021) shall apply for a prolongation of the working group by four more years (2021-2025). The working group has significantly developed during the last three years and a number of new core group members have been integrated in the group during this time. The prolongation of the working group by four more years will give the opportunity to continue, further expand and finish the activities that have been started during the first three years (since 2017) of the working group.

Possible key outputs/products of the working group were suggested by Achim A. Beylich and discussed by the group, including a potential DENUCHANGE synthesis book (an invitation from Elsevier for a possible book project was received earlier this year), one or more DENUCHANGE synthesis paper(s) (being focussed on relevant scientific key issues

related to the theme of the working group), and one or more review papers (e.g., review paper(s) being (partly) based on the material collected with the DENUCHANGE Test Site Fact Sheets (Tables 1 and 2) and being focussed on evaluating (e.g., modelling – SWAT, see Table 2) the key drivers of contemporary denudation and the effects of ongoing and accelerated environmental changes on contemporary denudation in different morphoclimatic settings – see also the defined DENUCHANGE Working Group Objective (see above) and DENUCHANGE Test Site Fact Sheets Tables 1 and 2).

The DENUCHANGE core group members were invited to provide feedback on how they could (in addition to their already ongoing activities and contributions) contribute with ideas and concrete actions to one or more of these possible DENUCHANGE key outputs/products. By today, comments and concrete suggestions for contributions have been formulated by Antonio Cendrero, Luis M. Forte, Juan Remondo, Małgorzata Mazurek, Zbigniew Zwoliński, Katja Laute, Piotr Cienciala and Jasper Knight.

Olimpiu T. Pop presented the idea of developing a possible funding proposal for a defined DENUCHANGE research project and evaluates the general possibilities for that.

Next DENUCHANGE core group member business meeting

The next DENUCHANGE core group member business meeting will take place as a virtual meeting in February 2021. Achim A. Beylich will invite to this meeting in December. The goal of this upcoming DENUCHANGE core member business meeting in February 2021 is to take further the discussions and to monitor concrete actions and progress. First preliminary outlines for three (or more) defined and multi-authored DENUCHANGE synthesis and/or review key papers will be presented and discussed during the business meeting.

Selbustrand, 28 October 2020

Achim A. Beylich