





Second Workshop of the I.A.G/A.I.G. Working Group DENUCHANGE (Denudation and Environmental Changes in Different Morphoclimatic Zones), 12-14 September 2019, Calpe (Spain)

First Circular (25 March 2019)

Dear colleagues,

The Second Workshop of the I.A.G./A.I.G. Working Group DENUCHANGE (Denudation and Environmental Changes in Different Morphoclimatic Zones) will be held 12-14 September 2019 in Calpe, Spain. Detailed information on the I.A.G./A.I.G. Working Group DENUCHANGE (2017-2021) is available at http://www.geomorph.org/denuchange-working-group/. The defined DENUCHANGE Working Group Objective is found below.

All colleagues working in different morphoclimatic environments worldwide on denudational earth surface processes and on controls, rates and spatiotemporal variability of denudation at different temporal and spatial scales are kindly invited to participate in this workshop. The workshop will include oral and poster presentations, working group discussions and group works related to our defined **DENUCHANGE Working Group Objective** (see below) and a half-day fieldtrip in the Mediterranean landscape of the Calpe region. The nearest international airport is located in Alicante (Alicante airport, 77 km south of Calpe).

If you are interested to participate in the Second I.A.G./A.I.G. DENUCHANGE Workshop please send a pre-registration email informing about your participation together with working title(s) of your oral or/and poster presentation(s) to the workshop organizer achim.beylich@gmail.com (Achim A. Beylich) before 15 May 2019.

All colleagues that express their interest in participation by 15 May 2019 will receive all necessary further information on the workshop (binding registration with payment of registration fee and abstract submission, travel information, information on accommodation in Calpe being available for booking) shortly after 15 May 2019.

Workshop information

Second I.A.G./A.I.G. DENUCHANGE (Denudation and Environmental Changes in Different Morphoclimatic Zones) Workshop

Location: Calpe, Spain

Duration: 12-14 September 2019 (full workshop days on 12 and 13 September 2019,

departure on 14 September 2019)

Venue: Suitopia Hotel, Calpe

Binding registration with payment of registration fee and submission of abstract(s): before 30 June 2019

Registration fee (covering workshop materials, lunches, coffee breaks and half-day fieldtrip): 120,00 Euros



Views of Calpe and the surrounding landscape (Photos: K. Laute)

We are looking forward to meeting you in Calpe in September!

With kind regards and on behalf of the DENUCHANGE Steering Committee,

Achim A. Beylich

Chair of I.A.G/A.I.G. DENUCHANGE and Organizer of the Second DENUCHANGE Workshop

I.A.G./A.I.G. DENUCHANGE Working Group Objective

The key question of DENUCHANGE is:

What are the contemporary chemical and mechanical denudation rates in different morphoclimatic zones on the Earth?

Denudation, including both chemical and mechanical processes, is of high relevance for Earth surface and landscape development and the transfer of solutes and sediments from headwater systems 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 anthropogenic activities.

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. Only if we have an improved knowledge of drivers and quantitative rates of contemporary denudational hillslope and fluvial processes as well as of the connectivity in landscapes and between hillslope and fluvial systems across a range of different selected climatic environments, possible effects of global environmental changes on denudation can be better assessed. Special focus will be given to selected morphoclimatic zones that are expected to react particularly sensitively to ongoing and accelerated environmental changes, and the key focus of DENUCHANGE will therefore be on (i) cold regions (including glacierized, glaciated and unglaciated cold climate environments), (ii) temperate regions, (iii) arid / semi-arid regions and (iv) tropical regions. The different morphoclimatic zones are defined by morphometric characteristics/signatures detected in the various zones.

DENUCHANGE will

- Provide a detailed compilation and comparison of contemporary chemical and mechanical (drainage-basin wide) denudation rates in selected and clearly defined drainage basin systems in selected cold regions, temperate regions, arid / semi-arid regions and tropical regions worldwide. As denudation is scale-dependent, the selected drainage basin systems will be of a defined and comparable size to allow direct comparisons between the drainage basin systems situated in the different morphoclimatic zones. The existing/available and compiled data on contemporary chemical and mechanical denudation must be based on comparable sampling periods, sampling frequencies, and on comparable monitoring methods and techniques applied.
- Provide a process-oriented, coordinated and integrated analysis and compilation of the respective key drivers of contemporary denudation occurring under the different present-day morphoclimates.

 Based on the previous two compilations: Address the key question how environmental changes are affecting contemporary denudation rates in different morphoclimates. This also includes human activities in different morphoclimatic zones, in the context of environmental changes in the Anthropocene.

Selected papers from the First DENUCHANGE Workshop that was held in Storkowo-Szczecinek, Poland, 25-27 September 2018, have been published in the journal *Landform Analysis*, vol. 36, 2018 (Ed. Z. Zwoliński) (http://sgp.org.pl/la/).