

# Excursion of the young geomorphologists (SGmS) **Neogene evolution of the Molasse Basin** 12 and 13 October 2018

The Swiss Molasse Basin forms the subsurface of the densely populated Swiss Mittelland. The Molasse represents the Oligocene to mid Miocene foreland basin of the Alps that was subsequently uplifted. The Molasse wedge propagated the tectonic stresses from the Alps towards the Jura, where they caused a folding of the Mesozoic sediments. The Molasse basin itself was uplifted some 900 m by this wedge process. The drainage network in the Molasse Basin was strongly affected by the uplift, and with the drainage network the ability of sediment transport. The perturbations in the Molasse Basin changed the river network at a continental scale.

We will organize a two day excursion that visits the Uetliberg, the landmark mountain of Zürich. We will discuss the Neogene to Quaternary history of the region on a hike to Uetliberg. The top of Uetliberg offers not only a view of the geomorphology of the region but also remnants of the fluvial history of the Upper Sweetwater Molasse. The invisible erosional processes that accompany the uplift and the evolution of the river network (e.g.  $\chi$ -map) will be an additional focus during the excursion.

#### Program: Friday, 12.10.2018

Meeting 3.10 pm at the Meeting Point Zürich HB Visit of the earth science museum focusTerra at ETH Zürich (including earthquake simulator) City tour and dinner in Zürich Stay at a hostel in Zürich

#### Program: Saturday, 13.10.2018

Hike up to Uetliberg Hike along the Planetenweg to Fallätschen Topics of the day: Geomorphology, Molasse, Deckenschotter, erosion, uplift Return to Zürich HB ca. 5 pm Cost:The participation is free of charge for young geomorphologists members of the SGmS<br/>30.- CHF for non-SGmS membersIncluded:Accommodation (incl. breakfast)Not included:Lunch for the excursion day<br/>Dinner and drinks<br/>Travel to Zürich

## Registration

Register until 15<sup>th</sup> August via Email providing the following information:

- Name
- Swiss pass for train GA/halftax
- Do you need an accommodation for the night in Zürich: Yes / No
- Member of Swiss Youth Hostels: Yes / No
- Member of SGmS: Yes / No

Email the information to: julia.krawielicki@erdw.ethz.ch

#### **Further information**

The excursion is limited to 15 persons max. The registration is considered as soon as the application has been received. Non-SGmS members are also welcome as long as they become member in 2019.

## Organisers

Julia Krawielicki, Elisa Giaccone, Sascha Winterberg

## Kindly supported by:



Unil UNIL | Université de Lausanne



Cost