

Report on the Alpine Quaternary Workshop (INTIMATE & INQUA-CECLAP) Obergurgl, Austria, 3-7 October 2013

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ABSTRACT: We provide a short report on the Alpine Quaternary Workshop, held Tirol region (A). The discussion was aimed at illustrating suitable proxy records for correlations in the Alpine region for the time window 8 to 60 ka.

Keywords: INTIMATE, INQUA, Late Pleistocene, Alps.

On 3-7 October 2013 the Alpine Quaternary Workshop took place in Obergurgl (A) in the Central Alps of Tyrol and discussed climate change in the Alpine region over the last 60,000 years. 32 scientists, postdocs and PhD students from 7 different countries attended the workshop. This was a merger of two initiatives, INTIMATE-COST (<http://cost-es0907.geoenvi.org/>), focusing on the discussion and

compilation of climate proxy records from the greater Alpine region for the time window 8 to 60 ka and to make them eventually available to the paleoclimate and modelling community in an easy-to-access database, and INQUA-CECLAP (Circumalpine Events and Correlations during the Late Pleistocene), focusing on the correlation on Late Pleistocene records in the Alps.



Fig. 1 - Workshop participants at the Rotmoos type locality

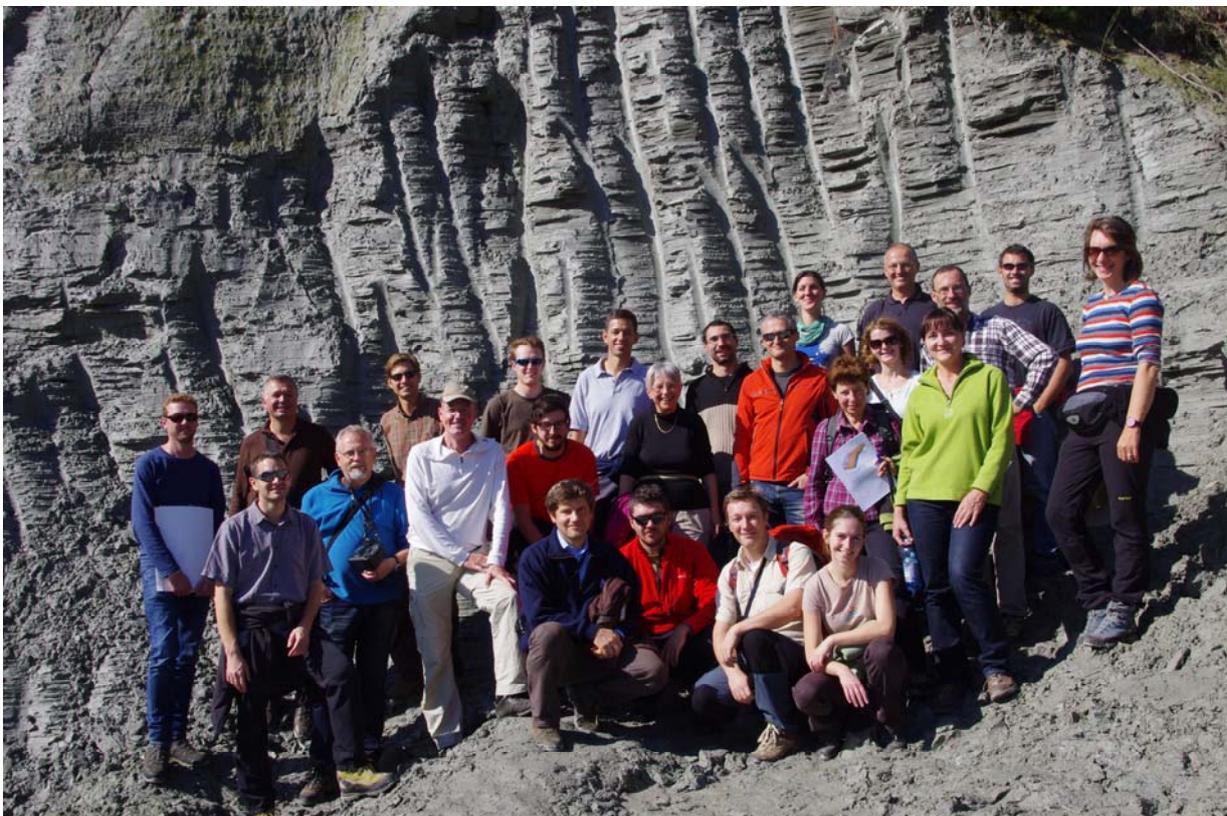


Fig. 2 - The lacustrine succession of the Baumkirchen clay pit (Middle Würmian, Inn Valley) was visited after the conference.

Two workshops held in 2012 preceded the Obergurgl meeting: Intimate Working Group 2 Workshop “Climate Records in the Austrian and Swiss Sectors of the Alpine Region”, which took place in Bludenz (A), and the CECLAP Workshop “The LGM in the Alps”, which took place in Udine (I).

The 2013 workshop encompassed proxy records from the entire Alps and their forelands, and the goal was to draw from as many sources of paleo-information as possible. A large part of the meeting was therefore spent on presentations by all attendants in order to get to know each other's research topics, which included lake sediments, cave deposits, fluvial and glacial systems as well as paleobiological and geoarcheological aspects. The discussion routinely expanded into the late evening with small groups sitting together and discussing data.

During the final session two groups were formed, one focused on the time frame 18-8 ka, the other concentrating on the older period from ca. 60-18 ka. The aim was to identify key topics of paleoclimate research in the Alps for the near future. Which are the most urgent questions? Which methodologies are needed to advance this research field? Which archives are unrepresented?

In addition to the plenary activities and presentation sessions, field trips were organized in order to promote on-site exchange of ideas on a range of topics concerning the last 60 ka of environmental change in the Alps. A mid-conference fieldtrip, held on October 4, led to the Rotmoos mire, the type locality of the mid-Holocene Rotmoos oscillations, recorded by the local vegetation history in the palustrine deposit.

A first post-workshop excursion took place on October 7 at the Baumkirchen pit, stratotype of the boundary between the Middle and Upper Würmian in the Alps (lead by Christoph Spötl, Sam Barrett and Reinhard Starnberger). This excursion provided fresh insights based on new drillings, their analysis and chronological data. This excursion had a late afternoon stop for an overview of slightly older paleolake and slope sediments in the Unterangerberg region, about 50 km downstream in the Inn Valley.

A following two-day field trip (led by Jürgen Reitner) examined field evidence, based partly on detailed geological maps, of the LGM glacier advance and Late Glacial oscillations in tributary valleys of the lower Inn valley and discussed ice-flow reconstructions and valley overdeepening. In this field trip, the lower Würmian successions of Hopfgarten were also visited and discussed.

The joint days both at Obergurgl and in the field triggered intense discussion and fostered the exchange of new ideas and concepts. The participants agreed to continue and expand these activities and plans are to convene again in 2014 to focus on the Western Alpine region.

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