4 Post - LGM glacial and glaciofluvial environments in a tectonically active area (southeastern Alps)

Excursion Leaders: Giovanni Monegato, Paolo Mozzi, Alessandro Fontana, Maria Eliana Poli, Lukas Rettig, Sandro Rossato.

Proposed Excursion Dates: 21st- 23rd July


Definitive cost per head: € 400

Minimum number of participants: 15

Maximum number of participants: 20

Accommodation arrangements: Hotel

Proposer Contact Details:

Giovanni Monegato
Institution and Address: CNR-IGG, via G. Gradenigo 6, Padova
Phone: 3397769052   Email: giovanni.monegato@igg.cnr.it

Paolo Mozzi
Institution and Address: Department of Geosciences, University of Padova, via G. Gradenigo 6, Padova
Phone: 3316133898   Email: paolo.mozzi@unipd.it

The field trip will take place along the southeastern Alpine foothills, from the outlet of the Piave River to the Tagliamento end moraine system. This area was interested by the spread of the piedmont lobes of the Piave and Tagliamento glaciers during Pleistocene glaciations. The stratigraphic successions of the end moraine systems and outwash fans and megafans yielded important information about the development of Alpine glacier lobes and their interaction with local catchments. The outermost Alpine mountain ranges also hosted local independent glaciers, which provided important paleoclimate information on the LGM.

The area belongs to the Plio-Quaternary active front of the eastern Southern Alps, a polyphase S-SE-verging fold-and-thrust belt in activity since Middle Miocene onward. Active faults of the front of the eastern Southern Alps displaced older Pleistocene successions and created small local basins of lacustrine/palustrine environments. Some destructive earthquakes (Mw 6.0-6.5) took place in the last Millennium and recurrent historical tectonic activity of the external front was testified by paleoseismological investigations.

Participants will have the possibility of visiting key stratigraphic sites and discuss the peculiar interaction between major glaciations and tectonic activity in shaping this scenic landscape and in defining local sedimentary basins.