

2017

1612F DATESTRA: a Database of Terrestrial European Stratigraphy

Project Leaders: Pierluigi Pieruccini (University of Siena, Italy), Markus Fiebig (University of Wien, Austria), Guzel Danukalova (Russian Academy of Sciences, Russia).

The IFG SEQS-DATESTRA for the 2016-2019 Intercongress period will aim to build a Database of Terrestrial European Stratigraphy (DATESTRA). This is seen as an European Geographic Database of the key-sites of Quaternary importance across Europe following the activities carried out by SEQS during the previous Intra-Congress periods.

DATESTRA aims to the creation of a common and shared geographic Database as a base-document finalized to the creation of a common base for all the Quaternary scientists who want to have a concise overview of the main Quaternary sites and related stratigraphical subdivisions across the boundaries of Europe. DATESTRA will summarize the main sites containing Terrestrial Quaternary deposits in Europe trying to bypass their fragmentary nature and giving rapid access to the sections, techniques and methods used for their study.

After the launch of DATESTRA occurred at the INQUA-SEQS 2016 Meeting in Armenia the activities concentrated on the design of the database (attributes and values), the assessment of the table for compilers, the harmonization of terminology to be used (following existing Quaternary glossaries and database such as i.e. IQUAME), the required contribution (table, text, figures) and the definition of the output for public consultation. Moreover, in order to provide to the contributors a model for the database compilation and the expected outcome, an Italian team (P.Pieruccini, M.Coltoiti, M. Palombo, A. Bertini, B. Sala, D. Magri, C. Ravazzi) already compiled 25 Quaternary sites for Italy that constitute the prototype presented to the SEQS audience at the 2017 SEQS-DATESTRA Workshop and Meeting held in Tautavel, France, 9-15 of September.

About 30 participants joined the Meeting dedicated to Wim Westerhoff memory, organized by Vincenzo Celiberti and his collaborators and hosted by EPCC CERP Centre Européen de Recherches Préhistoriques de Tautavel in collaboration with UMR 7194 "HNHP" du CNRS, MNHN-UPVD-CERP de Tautavel and UPVD Université de Perpignan.

Sunday the 10th of September 15 Quaternary European scientists participated to a DATESTRA Workshop where Pierluigi Pieruccini presented the advances in DATESTRA database design and structuring, including the output of the preliminary 25 sites compiled by the above mentioned Italian team. The structure of the database was discussed in terms of attributes and related values, terminology, type of table to be shared among contributors, format of text to be attached to each site and final output (Story Map). At the end of the Workshop the participants agreed on the final revision of database, table and related outputs.

35 oral and poster contributions authored by 125 young and experienced scientists were presented during the SEQS-DATESTRA Meeting the 11th and the 12th of September. The presentations focused on cross-disciplinary and cross-regional correlation of geological, paleontological, geochronological, geomorphological, archaeological, and environmental records in order to develop Quaternary stratigraphy all over the Europe and adjacent territories. Moreover, Mauro Coltoiti also presented the advances of the INQUA-Project CROSSTRAT pointed on the reliability of radiometric dating in a test-region like Sardinia, in Italy. The 12th of September, during a dedicated Session, the INQUA Funded International Focus Group DATESTRA (SACCOM IFG 1492) was presented to the whole audience the Database of the Quaternary European Sites of Stratigraphic interest, including the preliminary Italian sites and the possible contribution from Russia and Poland. The discussion was fruitful and many researchers agreed with their participation to DATESTRA for compilation of sites from their countries.

The 13th, 14th and 15th of September the Meeting continued with a 3-days Fieldtrip that allowed the participants to visit some of the most important Quaternary sites of eastern Pyrenees. The first day

we visited the Caune de l'Arago where, within a complex but well-exposed Middle Pleistocene sequence, the remnants of *Homo Heidelbergensis* (Arago XXI) were found. Christian Perrenoud, Anne Marie Moigne and Vincenzo Celiberti presented the geological, lithostratigraphical, biostratigraphical, morphostratigraphical, chronostratigraphical, palaeoanthropological and archaeological setting of the site and the participants were allowed to observe in detail the stratigraphical section opened on the excavations.

The fieldtrip continued with the visit of the Prehistory Museum of Tautavel and the European Research Centre of Tautavel, where Marie-Antoinette de Lumley showed the famous original palaeoanthropological collection.

The 14th of September the Fieldtrip moved to Les Orgues-Ille sur Tet where Marc Calvet and Magali Delmas (Université de Perpignan) showed us the litho-, morpho- and chronostratigraphical setting of the Pleistocene continental successions and their relationships with the coastal marine Pliocene record. Moreover, a long walk during a strong windy day allowed the visit of the staircase of alluvial terraces along the Roussillon.

The 15th of September bad weather conditions did not allow the forecasted visit to Arbreda Cave (Catalonia) and Olot volcanic sequences. However, the SEQS' people visited the Ramaldis cave, along the coast of the Lyon Gulf, where MIS 5 marine high stand was testified by the filling of the cave interlayered with cave sediments and associated archaeological finds. The fieldtrip ended with the visit of the Grottes Canalettes, in the Pyrenees, a karst complex that introduced the SEQS community to the next year activities.

In fact, the 2018 Meeting will be held under the organization of Andrej Mihevc at the Karst Research Institute, Postojna, Slovenia, 12-18 September, with two-days indoor-sessions followed by 4-days Fieldtrip across West and East Slovenia that allow the SEQS community to visit the main sites of Quaternary interests.

DATESTRA will continue the activities with the release, at the end of January 2018, of the guidelines for compilation of the tables and the texts to be included within the output of the database.

In the meantime, all the researchers who want to give their contribution are welcome and invited to contact Pierluigi Pieruccini (pieruccini@unisi.it) in order to have as many European countries as possible represented in the database.

The aim for 2018 activities is to present in Slovenia the contributions collected during the year, the output of the database and to discuss possible improvement of the DATESTRA database.