



## inqu section on european quaternary stratigraphy (seqs)

2012 meeting  
sardinia (italy)

*First Circular*

**at the edge of the sea: sediments, geomorphology, tectonics,  
and stratigraphy in quaternary studies.**

26-30th, September 2012  
Sassari, Sardinia, (Italy)



## AIMS OF THE MEETING

The geological record demonstrates that the transition from continental to marine environments is extremely vulnerable to the impact of global/climate change. Sea level changes either induced by climate change or tectonic movements have affected the coastal morphology in depositional as well as erosional geological systems. The investigation of the coastal processes and landforms in a variety of geological settings provide data on the influences of Quaternary climatic changes at local, regional and even global scales. During the Holocene it also shows the complex interplay with human occupation. Unravelling the local geological history is a major issue but well-dated sequences and sound stratigraphical correlations are needed to understand the wider significance of registered changes in the records.

The conference aims to bring together scientists carrying out research in the Late Quaternary stratigraphy of continental to coastal deposits in order to discuss the complex relationships between the fluvial, slope, aeolian and coastal environments and their response to Quaternary sea level changes. By coupling marine and terrestrial records the main topics are sedimentary and geomorphological processes, assessment of patterns of sea level change and (neo)tectonics, palaeontology and Quaternary geochronology.

The conference venue will be in Sardinia, one of the major Mediterranean islands. The island is well-known for its excellent outcrops of Late Quaternary deposits and attractive geomorphological setting and many of the sites have been studied by geoscientists from all over Europe. Recently geological, geomorphological, sedimentological and stratigraphical investigations have been carried out by University of Cagliari, Sassari and Siena, also within the frame of the new 1:50.000 scale geological mapping of Italy (CARG Project). New results diverge partly from previous concepts and will be presented during the Conference and Excursion. Important topics of the debate are the assumed tectonic stability of Sardinia and the expression of the Tyrrhenian Stage (MIS 5e) around the Sardinian coast. In the type-site near Cala Mosca – Is Mesas (Cagliari, southern Sardinia) coastal and marine successions are associated to the climatic optimum and related maximum marine transgression. In the Orosei gulf, a marine notch attributed to the MIS 5e is found for over 30 km along the coast. Locally the notch can be correlated to coastal and shallow marine deposits.

MIS 5e or Tyrrhenian coastal deposits are found around the Island and, due to its assumed tectonic stability, their elevation is generally used to infer the mean sea level during the Last Interglacial and the Holocene. This assumption has important consequences for the paleohydrology, the neotectonic movements recorded around the Mediterranean, and the prediction of future sea level changes. Moreover, all around the Sardinia, Last Interglacial coastal sediments are locally overlain by Late Pleistocene aeolian, slope, and fluvial deposits and due to the recent coastal erosion, their relationships can be assessed in many magnificent outcrops.

Based on sedimentological and stratigraphical approach in order to establish the chronology of the successions OSL, radiocarbon and other dating methods have been applied. However, the results are not necessarily consistent among the different working groups as well as earlier interpretations providing material for an ongoing scientific debate and improvement of our knowledge. It also became clear that integrating different dating methods still struggles with some fundamental problems.

Integrating data and knowledge from different fields of geosciences asks for multi-disciplinary approaches and therefore the conference will offer the opportunity for a broad exchange of new developments and data of continental and marine deposits and their response on Quaternary climate change. We welcome Quaternary

scientists working in these relevant fields also in the rest of Europe and other continents.

### LOCATION

Sassari, northern Sardinia, (Italy)

### INSTITUTIONS SUPPORTING THE CONFERENCE

INQUA Section on European Quaternary Stratigraphy (SEQS) – Associazione Italiana per lo Studio del Quaternario (AIQUA) – Associazione Italiana Geografia Fisica e Geomorfologia (AIGEO) -International Association of Sedimentologists (IAS) – Association Francaise Etude Quaternaire (AFEQ) – Centre National de la Recherche Scientifique (CNRS) – FLAG (Fluvial Geological Archives) –GeoSed (Associazione Italiana di Geologia del Sedimentario) - Groupe de Géomorphologues Français - Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA) – Agenzia Regionale per la Protezione dell'Ambiente della Sardegna (ARPAS) – Società Geologica Italiana (SGI)

### HONORARY COMMITTEE:

Cita M.B., Carobene L., Dramis F., Martini I.P., Vandenberghe J., Rose J.

### ORGANIZING COMMITTEE:

#### Organizer of the Meeting:

Coltorti Mauro, Università di Siena, Italy.  
Pascucci Vincenzo, Università di Sassari, Italy.  
Pirazzoli Paolo, CNRS, Lab. Géographie Physique – Meudon, France.

**Secretary:** Dr. Pieruccini Pierluigi  
Dipartimento di Scienze della Terra, Università di Siena, Via Laterina  
8, 53100 Siena (Italy)  
[pieruccini@unisi.it](mailto:pieruccini@unisi.it) Fax +390577233938

### SCIENTIFIC COMMITTEE:

Antoine P. (CNRS, Lab. Géogr.Physique, AFEQ, France)  
Antonioli F. (ENEA, Rome)  
Bardají Azcárate T. (Universidad de Alcalá, Spain)  
Bridgeland D. (Durham University, UK and FLAG)  
Carmignani L. (Siena University, Italy)  
Clemmensen L. (Copenhagen University, Denmark)  
De Waele J. (Bologna University, Italy)  
Doglioni C. (Roma "La Sapienza" University, Italian Geological Society)  
Ferranti L. (University of Napoli, Italy)  
Fort M. (Paris University, Groupe de Géomorphologues Français, France)  
Frechen M. (Leibniz Institute, Germany)  
Fredi P. (Rome La sapienza University, AIGEO, Italy)  
Funder S. (University of Copenhagen, Denmark)  
Funedda A. (Università di Cagliari, Italy)  
Kolfshoten T. (Leiden University, the Netherlands)  
Gibbard P. (Cambridge University, UK)  
Graciotti R. (ISPRA-ARPA Roma, Italy)  
Mastronuzzi G. (University of Bari, Italy)  
Mozzi P. (Padova University, Italy and AIQUA)  
Oggiano G. (University of Sassari, Italy)  
Orri P. (University of Cagliari, Italy)  
Melis R. (University of Cagliari, Italy)  
Palombo M.R. (Roma la Sapienza University, Italy)  
Sarria E. (ARPAS, Sardegna, Italy)

Penkman K. (York University, UK)  
Westerhoff W. (Geological Survey of the Netherlands, TNO and SEQS)

### **CONFERENCE FOCUS:**

The conference will include 2 days of oral and poster presentations and 3 days field excursions. The main topics will focus on:

1. Eemian to Holocene sea level changes and tectonics.
2. The Middle-Late Pleistocene transition, type sequence and GSSP.
3. Relationships between coastal, fluvial, aeolian and slope deposits and landforms in the interior and at the transition from continental to marine environments.
4. Correlating land-sea evidence of Late Quaternary climatic change.
5. Paleontological records as evidence for environmental change and biostratigraphic correlation.
6. European Quaternary geochronology.
7. Problems with Quaternary dating methods.

### **OBJECTIVES OF THE SCIENTIFIC EXCURSIONS:**

Will be visited and described for scientific debate:

- Type Section of the Tyrrhenian Stage
- Characteristic Last Interglacial coastal deposits and morphologies (i.e. tidal notches)
- Last Glaciation aeolian, slope, fluvial deposits and paleosols and their relationships with MIS 5e successions
- "problematic" beach ridges, marine notches, terraces, and fluvial terraces attributed either to the MIS 5e/Tyrrhenian or to the Holocene.

### **PROVISIONAL PROGRAMME:**

*Wednesday, September 26<sup>th</sup>* Registration, opening ceremony, keynote lectures, scientific sessions, poster session, Social Dinner

*Thursday, September 27<sup>th</sup>*: scientific sessions, posters session, general discussion.

*Friday, September 28<sup>th</sup>*: Field trip to Alghero and S.Giovanni di Sinis (Capo S.Marco); overnight in Cala Gonone, Orosei Gulf

*Saturday, September 29<sup>th</sup>*: Field trip to Orosei quaternary sites (Cala Luna, Bue Marino Cave, S'Abba Meica, Margheddie); overnight in Cala Gonone, Orosei Gulf

*Sunday, September 30<sup>th</sup>*: Field trip to Cagliari (Cala Mosca, Is Arenas; Sa Illetta)

### **TALKS / POSTER PRESENTATION:**

Contributions may be presented as oral presentations or posters. Presentations should closely follow the topics of the meeting. Other themes may be presented as posters, which will be displayed throughout the conference. Details about presentations and poster format will be disseminated with the second circular.

### **CONFERENCE LANGUAGE**

The official language of the conference is English.

### **TRANSPORT:**

Sassari is located 20 minutes away from the Alghero Airport that is connected to many European airports.

### **ABSTRACTS:**

Abstracts for all contributions, including posters, will be published in the conference volume. Abstracts should be submitted electronically (by e-mail) in word format. The text should be in correct English, with a maximum of two A4-sized pages, including figures, captions and references. Please, use the attached format for font size etc.

Please underline the name of the speaker when more than one author is involved in the contribution. Authors should indicate their preference for oral or poster presentations.

### CONFERENCE PROCEEDINGS:

The volume of Conference Proceedings is planned. It will be published as a special issue of *Quaternary International*.

### REGISTRATION

To register please fill the enclosed form and send it by e-mail to:  
Pieruccini Pierluigi, Dipartimento di Scienze della Terra, Via di Laterina, 8 – 53100  
Siena  
Email: [pieruccini@unisi.it](mailto:pieruccini@unisi.it)  
Fax +39 0577-233938

### CONFERENCE FEES

**The conference fees** will cover scientific sessions, the abstract volume and field guidebook, other scientific materials, coffee breaks, lunches and the social dinner that will be held the 26<sup>th</sup> of September. The conference fee is **€200,00** for ordinary participants and **€100,00** for students and accompanying persons. We are looking for grants to support the participation of students and colleagues from low budget countries.

The conference fees does not cover accommodation expenses, the September 27<sup>th</sup> dinner and field excursion.

**Field trip fees** are **€250,00** and include transportation (by bus or minivan), 2 overnights, packed lunches and dinners, excursion service, ticket entrance and/or boat fares to Bue Marino cave.

**Both Conference and Fieldtrip fees must be paid before 15<sup>th</sup> of June 2012.**

The Fieldtrip ends in Cagliari, late in the evening (ca. 6 pm) of Sunday the 30<sup>th</sup> of September. Participants may decide to leave Sardinia from the Cagliari-Elmas Airport late in the evening or spend the night in Cagliari. The overnight accommodation in Cagliari is not included. However, the bus and minivans will be back in Sassari ca. at 9 pm, participants may also plan to flight back from Sassari-Alghero Airport. Overnight in Sassari-Alghero is not included.

### PAYMENT DETAILS

BANK TRANSFER TO:

Postal Account 77554806, Ufficio Postale Jesi 3 - Via del Lavoro, 1bis 60035 Jesi (AN) Italy.

Holder: Mauro Coltorti

IBAN IT86 Z076 0102 6000 0007 7554 806

Bic/Swift BPPIITRRXXX

In the payment order please specify: "Name/Surname SEQS 2012 Conference Fees".

### DEADLINES

May 30<sup>th</sup> 2012 – Abstracts submission

June 15<sup>th</sup> 2012 - Conference and Fieldtrip payment

June 30<sup>th</sup> 2012 – Second circular

Early July 2012 – Third circular (with the Final program).

### ACCOMODATION

The town of Sassari is plenty of Hotels with all ranges of costs and the town of Alghero, 30 minutes away, is also well organized being a touristic location and our Congress occurs during the touristic low season. There are also a series of Bed & Breakfast in Sassari, Alghero or in the countryside near these localities. A more detailed list will be provided with the second Circular.

### FOR FURTHER INFORMATION PLEASE CONTACT:

The Conference Secretary, Dr. Pierluigi Pieruccini ([pieruccini@unisi.it](mailto:pieruccini@unisi.it))

## REGISTRATION FORM

2012 annual meeting SEQS  
INQUA-SEQS

26-30 September, 2011, Sassari, Sardinia, Italy

**AT THE EDGE OF THE SEA: SEDIMENTS, GEOMORPHOLOGY, TECTONICS, AND STRATIGRAPHY IN QUATERNARY STUDIES.**

Female   
Male

Surname  
First Names  
Academic title  
Institution  
Department  
Address  
Post Code / City  
Country  
E-mail  
Phone  
Fax  
Co-author(s)  
Accompanying person(s)

Preliminary title of presentation (if any):

### Proposed sessions (tick where appropriate):

- 1 Eemian to Holocene sea level change and tectonics.
- 2 The Middle-Late Pleistocene transition, type sequence and GSSP.
- 3 Relationship between coastal, fluvial, aeolian and slope deposits and landforms in the interior and at the transition from continental to marine environments.
- 4 Correlating land-sea evidence of Late Quaternary climatic change  
Paleontological records as evidence for environmental change and biostratigraphic correlation.
- 5 European Quaternary geochronology.
- 6 Problems in Quaternary dating methods.

### Presentation

oral   
poster

I am interesting to take part in the field trip YES/NO

Letter of invitation needed:

Yes   
No

I would like to have a hotel reservation:

Yes   
No