

XIX Congress of the Carpathian Balkan Geological Association
INQUA TERPRO – Commission on Terrestrial Processes Deposits, and History

Focus Area on Paleoseismicity and Active Tectonics

MINUTE of the SESSION G01.III (sponsored by INQUA project 0811)

Thessaloniki, 23rd September 2010

Programme of the Session G01. Structural geology and Neotectonics III

Title: Active tectonics and paleoseismology (sponsored by INQUA project 0811)

Chairs: CHATZIPETROS A.A. and PAPANIKOLAOU I.

- 13:00-13:15 CHATZIPETROS A.A., PAVLIDES S., ZERVOPOULOU A. Urban paleoseismology: case studies from Thessaloniki, Greece.
- 13:15-13:30 ZYGOURI V., KOKKALAS S., XYPOLIAS P., KOUKOUVELAS I.K., PAPAPOPOULOS G.A. The role of paleoseismology in studying an emerging or blind fault: the case of Nisi fault, NW Peloponnese, Greece
- 13:30-13:45 GANAS A., PALLYVOS N., MAVRIKAS G., KOLLIAS S., TSIMI C. Geomorphological and geological observations at the coast of Tripiti Hill (Heraklion harbour, Crete), in relation to reported active faulting
- 13:45-14:00 LALECHOS S., METAXAS CH., KARVELA V., STEFOULI M. East Taygetos fault zone (Peloponnesus, southern Greece): dormant fault zone bordering awake neotectonic structure
- 14:00-14:15 PAPANIKOLAOU I., LEKKAS E., FOUNTOULIS I., FOUHELIS M., PARCHARIDIS I. Fault geometry, surface ruptures, damage pattern and deformation field of the 2009 L' Aquila earthquake. Findings and implications
- 14:15-14:30 KAYIN S., DOLMAZ M.N. Archaeo-geophysical investigations in Acmonia antique city (western Turkey) using magnetic methods
- 14:30-14:45 YİĞİT E., ÇAKMAK O., HURMUZLU B. Archeological investigation with geophysics method in Gonen Isparta/Turkey

Participants

About 50 people attended the Session. Among them the following scientists are actively involved in the INQUA project 0811: CHATZIPETROS, A.A., DELOGKOS, S., HOFFMANN, N., LEKKAS, E., LINDHORST, K., MICHAILEDI, A., PAPANIKOLAOU I., PAPAATHANASSIOU, G., PAVLIDES S., VALKANIOU S.

Main remarks of interests for the INQUA project 0811

The chairman PAPANIKOLAOU announced the next two meetings of the INQUA TERPRO Focus Area on Paleoseismicity and Active Tectonics.

The first one (5th Project Meeting) will be held in the frame of the XIX INQUA Congress, in Bern (Switzerland) in the period 20-27 July 2011. The following session will be sponsored by the INQUA Project #0811.

Title: Paleoseismology, megacities, and critical social infrastructures

Description: The environmental effects induced by earthquake ground motion and surface faulting, which are the subject of the INQUA Project #0811, typically generate serious societal consequences. The recent large seismic events in Haiti and Chile have once more brought this notion to the attention of the global public. In particular, the assessment of surface faulting hazards is vital when large metropolitan areas and critical facilities are located or planned near a Quaternary capable fault; this is quite relevant even during events of moderate earthquake magnitude. This has been dramatically illustrated by coseismic surface deformations during the July 16, 2007, Mw 6.6, Chuetsu-oki earthquake, which affected the largest Nuclear Power Plant site in the world (Kashiwazaki-Kariwa), and in Italy by the damage of downtown L'Aquila and the Gran Sasso Aqueduct due to the ground rupture along the Paganica Fault during the April 6th, 2009, Mw 6.3, earthquake. The paleoseismological and archaeoseismological research conducted in the past decades has clearly demonstrated that the study of Quaternary deposits and landforms is of critical value for reducing the uncertainties in seismic hazards analyses for seismic codes, land use planning, and critical social infrastructures.

This session invites contributions investigating the Quaternary records of earthquake environmental effects and surface faulting, case histories of the geological assessment of ground shaking / ground rupture for cities and industries located on Quaternary sediments, and their implications for the safety of existing or planned critical facilities, such as Nuclear Power Plants.

Deadline for abstract submission: 30 November 2010

For more information, <http://www.inqua2011.ch/>

The second appointment will be in the frame of the 2nd INQUA-IGCP567 Workshop on Active Tectonics, Earthquake Geology, Archaeology and Engineering, Corinth (Greece) in the period 19 - 24 September 2011.

Similarly to the 1st INQUA-IGCP Workshop (Baelo Claudia 2009), this workshop will be thematic and will include invited speakers, oral presentations, discussions and posters, as well as a 2 day field trip in the active Corinth Gulf area.

Deadline for abstract submission: 15 May 2011.

For more information, <http://www.paleoseismicity.org>