IASPEI Working Group "Historical Seismology"

Commission on Seismological Observation and Interpretation (CoSOI)

Activity Report (July 2007-December 2008)

Foreword

Established in October 2005, the WG "Historical Seismology" aims at building up an Open Access Archive of Worldwide Historical Earthquake Studies. The relevance of such an archive for the seismological community has been acknowleged as an important basis for improving the knowledge of the seismicity of the past centuries. A first activity report was delivered in July 2007 (Albini and Ishibashi, 2007).

First WG Historical seismology meeting

The most important international activity of the Working Group in 2007 has been the IASPEI Workshop SW001 "Earthquake data in archaeological and historical studies", conveners Paola Albini (INGV, Italy), Katsuhiko Ishibashi (University of Kobe, Japan) held on 10 July 2007 in the framework of the IUGG General Assembly 2007, Perugia (Italy). The twelve presentations covered the state-of-the-art of the ongoing efforts in archiving direction in Europe (M. Stucchi and the NERIES project), in USA (P. Dunbar and the NOAA's National Geophysical Data Center-NGDC), and in some of the most seismic areas of the world, from Japan (K. Ishibashi and the historical earthquake documents archive), to New Zealand (G. Downes), Mexico (G. Suarez for historical earthquakes 1469 to 1912). The similar activity of storing and then interpreting historical seismograms in the framework of the SISMOS project (A. Michelini) contributed an interesting perspective. Methodological aspects were also debated, such as how the historical approach helps in clearing previous misunderstandings in the location and size of earthquakes (R. Musson and Western The second part of the session focused mostly archaeoseismological studies, in Greece (R. Caputo) and the Dead Sea region (S. Marco and M. Meghraoui).

The introductory presentation (P. Albini and K. Ishibashi, Albini et al., 2007) highlighted the aims and first achievements of the WG's activity since its establishment, including a description of the prototype website and how it works. In all, the session was a success according to the comments of the participants, and it was considered a first important step towards the establishement of a network of researchers of the archive.

Further steps towards the archive of Historical Earthquake Studies

Notwithstanding the success of the Perugia Workshop, with respect to the actual implementation of the website the activity slowed down between Autumn 2007 and Autumn 2008. The parallel commitments of the main WG actors in the ongoing project NERIES, and in particular the Networking Activity-NA4 "Distributed Archive of Historical Earthquake Data", are the main reasons of the delay in accomplishing the steps described in the schedule included in the July 2007 report. At the 2009 IASPEI General Assembly, there will be a presentation of the results achieved with respect to the three main aims of the WG:

- i) to inventory the published and unpublished material supplying historical earthquake data, supplemented by an annotated bibliographical list;
- ii) to collect and preserve as many inventoried items as possible, both on hard copy and in digital format;
- iii) to disseminate the material through a dedicated web-site.

A demo (still so, but improved with respect to July 2007) version of the web-site will be presented in January 2009, at the IASPEI General Assembly.

The WG's responsibles have been active in raising the awareness of the importance of the topic and issues related, and in keeping in touch with the relevant international connections and proposals. In fact, what was clear from the first steps moved by the WG is that the interest in collaborating might be high, but that the actual type and amount of activity requested when collecting and archiving historical earthquake studies cannot but be occasional if not supported by an ad hoc funding.

Thus P. Albini took the opportunity of participating in the formulation of a preproposal to Global Earthquake Model (GEM), a project supported by IASPEI, towards the preparation of a global historical earthquakes archive (*confidential* document, August 2008). On 23 and 24 February 2009, at Pavia (Italy) an expert meeting on the "Global historical earthquake catalog" will be held, and the responsibles of this WG, or representatives, will actively participate.

Concluding remarks

As previously remarked, the success of this initiative will depend very much on the interest this activity will raise and the cooperation of the researchers active in this field. The collaboration with the NERIES and GEM project should positively reflect on the WG, but if it should stay alive for two more years from now it is for the CoSOI members to decide.

Paola Albini (INGV, Milano, Italy) and Katsuhiko Ishibashi (University of Kobe, Japan) 2 December 2008

References

- Albini P. and Ishibashi K., 2007. A report on the activity done and planned to build up "An Open-Access Archive of Historical Earthuake Studies", 8 July 2007, 2pp.+presentation
- Albini P., Ishibashi K., Locati M., Migliavacca P., 2007. Historical Earthquake Studies in an Open-Access Archive. IASPEI SW001 "Earthquake data in archaeological and historical studies", XXIV IUGG General Assembly, 2-13 July, Perugia (Italy). Oral presentation.
- IUGG, 2007. IASPEI SW001 Earthquake data in archaeological and historical studies. Conveners: P. Albini and Katsuhiko Ishibashi, XXIV IUGG General Assembly, 2-13 July, Perugia (Italy).