

Best wishes for a happy and prosperous 2007 to all

The latest updates, news and activities from the ISC

New Seismologists at ISC



Baokun Li (M.Sc.) is a graduate of the Xian Geology College. In recent years she served at the Institute of Geophysics of the China Earthquake Administration. Her last position was the head of a group of seismologists that were analysing and editing the seismological bulletins of the national seismic network of China.

We are very happy to welcome two new seismologists, Mrs. Baokun Li and Mr. Przemyslaw Kowalski who joined the ISC in October 2006.

Both Baokun and Przemyslaw have gained much experience in editing seismological bulletins in their home institutes and began their training in ISC procedures upon their arrival.

Training of new seismologists requires great efforts and time from the already experienced ISC seismologists and especially from our Chief Seismologist, Dmitry Storchak. This, in turn, may result in a slow down in the routine analysis and editing of the ISC Bulletin, further compounded at this time by the huge amount of data associated with the 2004 Sumatra-Andaman earthquake. However, with the significant reinforcement by Baokun and Przemyslaw, we hope to close the gap in a relatively short time.



Przemyslaw Kowalski (M.Sc.) graduated from the Warsaw University, Faculty of Geography and Regional Studies. In the last 7 years, prior to joining the ISC, Przemyslaw edited the seismological bulletin of Department of Seismology of the Institute of Geophysics of the Polish Academy of Science.

ISC staff visit Asia

The last quarter of 2006, gave us great opportunities to meet with many of our Asian and Oceania colleagues. A. Shapira, D. Storchak and B. Vera took active parts in the general assembly of the Asian Seismological Commission in Bangkok where they presented the activities of the ISC and demonstrated added value of the ISC Bulletin to the bulletins of local networks.

In November and in December 2006, A. Shapira participated in regional meetings of the RELSAR (Reducing Earthquake Losses in South Asia Region) and of the RELEMR (Reduce Earthquake Losses in the Extended Mediterranean Region), helping to implement ISC Bulletin data in the projects carried out by these two initiatives. ISC participation in those meetings provided an opportunity to help

the IASPEI Working Group on Magnitudes by introducing the standards for amplitude measurements and magnitude determinations recently recommended by IASPEI. We were also able to explain the importance of reporting to ISC the procedures currently employed by the individual seismological agencies in their magnitude determinations.

We also described the initiative of the IASPEI Working Group on Reference Events for Improving Location (WG-REIL) to nominate more seismic events to be included in the database of reference events. ISC, in collaboration with WG-REIL, is currently in the process of designing a web-page to facilitate on-line nominations of reference events.

Help for the editors

The ISC is privileged to have experienced seismologists able to identify the needs and means to further improve the tools to analyse and edit the ISC Bulletin. The present system uses the Netscape browser to modify and edit data on the screen. Work has commenced by Peter Dawson to improve interactive editing by converting these screens to Perl/Tk which is fast and platform-independent and provides a full range of features - menus, buttons, text-entry fields etc. - all in a Graphical User Interface environment. When these new screens are integrated into the editor's system, later this year, they will help to improve the speed and efficiency of the editing process at ISC.

Modernizing the ISC Procedures: Model Evaluation 2nd Workshop SW004, IUGG General Assembly, Perugia, Italy, 2007

The first workshop on Modernizing ISC Location Procedures was held during the 2005 Santiago IASPEI General Assembly studying the effects of different location algorithms on location accuracies, using a list of 156 well-located test events (GT0/GT5) selected from the IASPEI collection of Ground-Truth events. The first workshop participants recommended that the ISC considers changing from the currently used Jeffreys-Bullen (JB) velocity model to a modern spherical Earth model with consistent travel-time tables for all major seismic phases. In particular the AK135 velocity model was recommended as the best candidate for this purpose.

To ensure that the introduction of new travel times into the ISC operation does not cause unwanted or unforeseen biases, the ISC was asked to produce its bulletin for 2 or 3 data months using the AK135 tables as well as JB. These two bulletin versions, covering the period of Aug-Oct 2004 will soon be made available. We encourage seismologists to use their local knowledge of different geographic and tectonic regions to review the results obtained by using the AK135 model.

Those wishing to participate should submit abstracts to IUGG General Assembly: SW004 and contact the conveners so that the workshop can be planned in advance.

Conveners: Johannes Schweitzer, NORSAR email: Johannes.schweitzer@norsar.no Dmitry Storchak, ISC, email: dmitry@isc.ac.uk



Visitors to ISC

During November 2006, ISC was honoured by the visits of two delegations from the China Earthquake Administration. The delegations were headed by Professor Liu Ruifeng, Chief Engineer of the China Earthquake

Network Center (CENC) and by Mr Du Wei from the Department of Earthquake Disaster Prevention at CEA and included the participants from CENC and Institute of Geophysics at CEA. A. Shapira and other ISC staff were happy to describe the work of the ISC to the CEA delegates, elaborate on the services provided by ISC to the seismological community and use this opportunity to thank the CEA for its valuable contribution to the ISC.

The CEA delegates and ISC have agreed to collaborate on designing and maintaining an on-line service of Bibliography of Seismology. This service will focus on

collecting bibliographic information from local/national and regional journals rather than globally distributed journals. The information will be collected by CEA with the help of ISC, and maintained on CEA servers and made available on-line to the seismological community. Visitors to the ISC website will be able to link to CEA and retrieve required information.

We appeal to readers of this newsletter to recommend local journals and periodicals that might be willing to provide information and if possible, indicate the name and address of the contact personnel. Please send this information to avi@isc.ac.uk.

~

We were pleased to greet at ISC Dr. Graziano Ferrari of Storia Geofisica Ambiente, Bologna, Italy. Dr. Ferrari was invited to view the archives of ISC to learn about documents and other data that ISC may have that will be useful for on-going projects of collecting historical information about earthquakes and for the working groups in Europe and elsewhere on historical seismology.

New GC Member

The Physics of the Earth Dept. of Uppsala University, Sweden has become a member of the ISC Governing Council. We take this opportunity to thank the University of Uppsala for many years of collaboration and for the useful and important data provided to the ISC Bulletin.

Computer Modernisation

We would like to congratulate ISC's IT team; James Harris, Peter Dawson and Oriol Gaspa for performing the tests regarding the proposed transfer from the existing system to one based on Linux, the main benefits being cost cuts and performance improvement. The ISC currently uses a system based on an Oracle database and Sun hardware for most of its key operations and we have considered the implications of a move to open source software for operations, that is, an open source relational database running on PC-based

Linux Hardware. Linux and relational databases such as MySQL are used in many institutions and the mature nature of the software should now provide adequate reliability for use at the ISC.

The ISC has already switched its fileserver to a Linux system and will shortly swap the aging Sun webserver for a Linux machine. Both are considerably cheaper than those in current use. An assessment has shown that in a short space of time a MySQL database could be set up on a Linux workstation and the ISC code ported to run on the system and provide a major increase in speed. The IT department anticipates a great deal of time and effort will be needed once the final decision to change is made.



International Seismological Centre

Tel: +44 (0) 1635 861022

Fax: +44 (0) 1635 872351

Email: admin@isc.ac.uk

www.isc.ac.uk