The ISC Event Bibliography launched

Seismologists often need to identify and review scientific articles related to specific earthquakes or other seismic events that occurred at particular times or in specific regions. Most advanced bibliographical searches such as Google Scholar would require them to type a text string containing a commonly used name for the earthquake or the region and date it occurred. The search may need to be repeated several times to account for all possible transliterations of a place name in English, several different ways of specifying a date and a variety of names of the area where the earthquake has occurred. The results then have to be merged and the unavoidable duplicates removed. The procedure is daunting and often leads to unstable results.

The ISC Event Bibliography allows web users to search for references to scientific publications linked to both natural and anthropogenic events that have occurred in the geographical region of their interest by performing an interactive search based on earthquake (location, time, magnitude, etc.) and/or publication parameters (author name, journal, year of publication, etc.).

The ISC-GEM Catalogue released

After three years of intensive work, the ISC-GEM Global Instrumental Earthquake Catalogue (1900-2009) has been released for non-commercial use (www.isc.ac.uk/iscgem). The Catalogue is the result of a special effort to adapt and substantially extend and improve currently existing bulletin data to serve the requirements of specific user groups who assess and model seismic hazard and risk. The Catalogue will also have a multidisciplinary use in a wide range of areas such as studies of global seismicity, inner structure of the Earth, tectonics, nuclear monitoring research, rapid determination of hazard etc.

This global Catalogue was also designed to serve as a reference to be used for calibration purposes by those compiling regional seismicity catalogues that contain events of much smaller magnitudes. This way the catalogues prepared by other teams for different regions may contain comparable earthquake locations and magnitude parameters, especially in border regions.

The work was funded by the GEM Foundation as part of the Global Hazard Components. The project was led by the ISC and performed by a team of international experts in accordance with the requirements of the Scientific Board of GEM and following recommendations of a team of IASPEI Observers.

The Catalogue is already well used. Several updates have been introduced following suggestions from Alexey Ivashchenko from the Tsunami Lab of the Institute of Oceanology, Russian Academy of Sciences, Moscow; Helene Lyon-Caen from the Laboratoire de Géologie, Ecole Normale Supérieure in Paris; Natalia Mikhailova from the National Data Center of Kazakhstan.

First past the post

This year the Council of Geosciences of South Africa was the first Member to pay its 2013 dues to the ISC. We invite other Members to follow this great example. It is rather unfortunate that the ISC staff members often have to spend a considerable amount of their limited time resources chasing up the unpaid membership fees.

Seismologists/App/Developer required

Notable seismic events in your area in July-Dec 2010? Consider submitting a short article to the ISC Bulletin Summary

The ISC-GEM Catalogue is now available from www.isc.ac.uk/iscgem
2010 Addition to the GT List

205 GT events were added to the IASPEI Reference Event List for data year 2010. The list includes earthquakes and explosions, for which hypocentral information (lat, lon, depth) is known with high confidence (to 10 km or better (GT10)) with seismic signals recorded at regional and/or teleseismic distances. Unfortunately, the large majority of these events have been identified in the northern hemisphere. Jointly with the CTBTO and other institutions we are engaged in collecting information on potential candidate events in the southern hemisphere under the new RSTT (Regional Seismic Travel Times) initiative. The forthcoming RSTT session during the AGU Meeting of Americas in Cancun, Mexico will assist this cause.

ISC Prize winner visits ISC

Five years ago, the ISC established a modest annual prize in Mathematics and Geophysics for the best first year student at the Earth Science Department of its home institution – the University of Oxford. Last year’s prize winner, Ms Rebecca Morgan, set a good example by coming to visit the ISC in early February. During her visit she learned about the ISC operations and development projects and also gave a talk on her current work at the University related to the structure and stratigraphy of the Cardigan Bay basin. At the end of her visit, Rebecca was treated to a friendly lunch with the ISC staff members.

CTBTO Link to ISC db contract extended

The Contract to provide a Link for the CTBTO to the wealth of the ISC data has been further extended by one year. We are grateful to the Director of the IDC, Dr Lassina Zerbo, for his support of this development. The web-services designed by the ISC under this project are well used by the IDC and National Data Centres. We also acknowledge the help of Dr Jerry Carter and Dr Mikhail Rozhkov in providing advice, assistance and critical suggestions for this high-profile ISC project.

New Member of the ISC Bulletin Analysis Team

At the start of 2013, Rebecca Verney moved into the ISC Analyst’s office to begin her new job as Trainee Analyst. Rebecca had previously worked at ISC as a data entry officer on the ISC-GEM Catalogue and the ISC Event Bibliography. To enhance her training programme in seismology, Rebecca visited the Earth Science Department of Bergen University in Norway that has been a keen data contributor to the ISC for more than 50 years.

From left to right: Berit Marie Storheim, Jens Havskov and Rebecca Verney

Work experience at the ISC

As part of the work within the local community, the ISC is often engaged in giving work experience to students of local secondary schools. This winter Tom Malthouse (Downs School, Compton) and Aleksy Storchak (Pangbourne College) spent a week each helping to digitise the paper-based bulletins of the British Association for Advanced Sciences dating back to the beginning of the 20th century. This work will contribute towards further improvement of the ISC-GEM Catalogue. Both young men were thrilled to learn that their small contribution will actually be helpful towards the accurate assessment of global seismic hazard and consequently, for saving lives from potential disasters.

International meetings

During the first four months of 2013, the ISC staff took part in several international meetings. The ISC Bulletin Analyst, Blessing Shumba, went to the January Africa Array meeting in Johannesberg where he continued his successful work of encouraging African colleagues to exchange bulletin data with the ISC.

Domenico Di Giacomo and Dmitry Storchak presented the newly released ISC Products (the ISC-GEM Catalogue and the ISC Event Bibliography) at the SSA meeting in Salt Lake City. Dmitry held conversations with the members of the SSA Publication Board aiming to automate further updates of the ISC Event Bibliography as far as the numerous BSSA and SRL articles are concerned. Dmitry Storchach also attended the 8th Gulf Seismic Forum in Oman, helping to resolve the issues with data contributions from the region.

István Bondár and Dmitry Storchak went to the LDG/CEA in Bruyeres-Le-Chatel in France to discuss further co-operation with LDG, present new developments at the ISC, familiarise ourselves with the work of the French Tsunami Working Centre and to hear about the developments under the RESIF project that brings together the data from several seismic networks in Metropolitan France. Finally, Dmitry Storchak was invited to give a lecture at the Young Geophysicist’s School in Perm, Russia, just west of Ural Mountains, not far from the site of the recent meteor explosion.