

ISCNEWS

April to June 2007 www.isc.ac.uk

Much of the period April to June was spent preparing for the IUGG XXIV 2007 Assembly held in early July. Several important decisions were reached during the meeting and are briefly described in this newsletter.



The latest updates, news and activities from the ISC

IUGG MEETING IN BRIEF

New Director elected

The IUGG XXIV 2007 assembly in Perugia, Italy provided several milestones in the development of the ISC operations. The headline, of course, was the election of Dr Dmitry Storchak as the new Director of the ISC. Dmitry will replace Avi at the end of 2007.

ISC staff attend

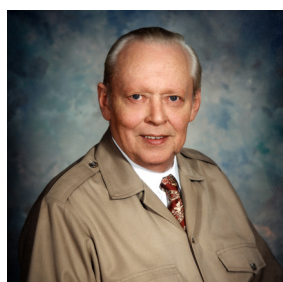
Thanks to the support of the organizing committee of the IUGG meeting and the Royal Society of London, the visibility of the ISC at the conference was exceptionally high where all ISC seismologists: Przemyslaw Kowalski, Baokun Li and Beatriz Vera were able to attend the meeting in addition to Avi Shapira and Dmitry Storchak and more than 10 papers were presented.

ISC Governing body hold meetings

Much of ISC activities during the reported period were associated with preparing for the IUGG meeting during which we held the biennial meeting of the ISC Governing Council (GC) and the annual ISC Executive Committee (EC) meeting. A. Shapira, D. Storchak, and M. Aspinwall attended both and J. Harris joined the EC meeting. It was a great pleasure to see so many members of the Governing Council in attendance.

New procedures at ISC

One of the highlights of the IUGG assembly and a very important issue for ISC, was the workshop on "Modernizing ISC analysis procedures", prepared and chaired by Johannes Schweitzer (NORSAR) and Dmitry Storchak (ISC). We again thank Johannes and Dmitry for their great efforts. All presenters in that workshop made a clear recommendation to the ISC to start using the AK-135 travel time model in the routine editing of ISC Bulletins. Implementation of those recommendations awaits the approval of the ISC Governing Council who will be contacted by email when a report of the proceedings is compiled. More about the meetings held during the IUGG assembly and their outcomes will be reported in our next newsletter.

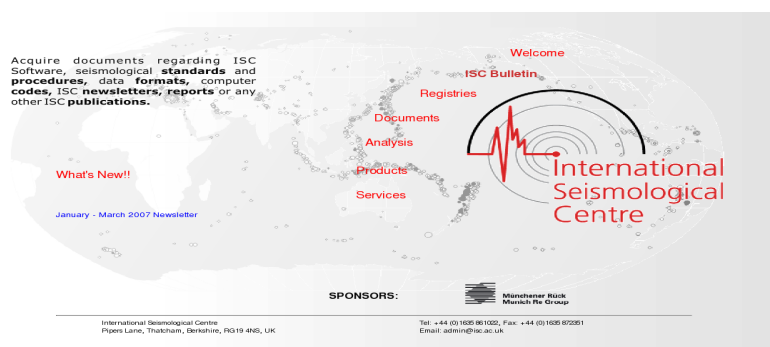


DEATH OF EDOUARD ARNOLD

We are sorry to learn that Dr Edouard P Arnold, Director of the ISC from 1970 to 1977, died last year in his hometown of Lakewood, U.S.A Dr Arnold was the second Director of the ISC and during his tenure made many improvements to the ISC computing systems, refining the data analysis system using high level compilers and successfully reduced the backlog of data from four years to two.

ISC'S NEW WEBSITE

The end of June 2007 marked a major achievement for the ISC, the launch of the new ISC website. This is the culmination of a long period of development that began in 2004 which included re-structuring the site, updating its content, re-designing the new website and adding new on-line services. Thanks are due to Maureen Aspinwall, Peter Dawson, Matthew Evans, James Harris, and Avi Shapira. Special thanks go to Oriol Gaspá Rebull for carrying out most of the programming and graphical design and to the Royal Society for providing a grant to begin the project. The new ISC website provides a variety of old and new services on-line.



ISC ON-LINE SERVICES OLD AND NEW

ISC Bulletin

The primary service provided on-line is the ISC Bulletin and Regional Catalogues (see e.g. <http://www.isc.ac.uk/search/bulletin/index.html>). We repeatedly emphasize the fact that although the reviewed ISC Bulletin, which includes ISC location solutions, is produced about two years after the occurrence of the events, earthquake information is available to the community as soon as it is made available to ISC. By on-line searching of the Comprehensive ISC Bulletin, one may find contributed location solutions and phase readings of recent events.

In this respect we would like to quote two recently adopted resolutions by IASPEI:

"Resolution 2:

RECOGNISING the long-term need for a broader set of standardized seismological phase and parameter data in seismological research and practice, especially amplitude, period, magnitude, moment and energy, IASPEI RECOMMENDS that steps be taken to develop common standards for the reporting of earthquake source parameters for use by national, regional and global data centers.

Resolution 3:

RECOGNISING that the ISC provides an on-line compilation of parametric data contributed by observatories and data centres, available to all soon after they are contributed, IASPEI URGES all ISC contributors to report epicentres, magnitudes, phases and focal mechanisms to the ISC as quickly as possible."

Links to Rapid Earthquake Information

The ISC mission is to systematically collect all available earthquake information, which is necessarily a time-consuming process. ISC provides links to other seismological agencies whose mission is to rapidly display information about earthquakes via <http://www.isc.ac.uk/links/realtime.html>. Please let ISC know if your agency is not on the list and should be included.

Contact list of Seismological Institutions and Seismologists

The list was prepared and posted on ISC web site in 2005. It is however very important that the agencies check and ensure that the information is up-to-date. Be reminded that the list includes names of seismologists who agree to be contacted at the time of earthquake related emergencies. Please visit <http://www.isc.ac.uk/contact/index.html>. PLEASE CHECK AND UPDATE.

Practice of Magnitude Determinations

It is of utmost importance that researchers who refer to agency magnitudes know how they are determined. ISC distributed a questionnaire asking for information on your practice of determining magnitude. We would very much appreciate receiving information about magnitude determinations at your agency as well as the information on the amplitudes you measure and send to ISC. The questions and examples of reported answers may be found in http://www.isc.ac.uk/magnitude/mag_info.html. PLEASE SEND US THE INFORMATION.

International Registry (IR) of Seismic Stations and Station Book

The International Registry of Seismic Stations is maintained jointly by the ISC and by the World Data Center for Seismology, Denver, which is operated by US National Earthquake Information Center (NEIC). The ISC, NEIC and the European-Mediterranean Seismological Centre encourage registration of all stations, regardless of whether or not the data seems likely to be widely distributed. The Federation of Digital Seismograph Networks recognises identification of parametric data with station codes from the International Registry and network code 'IR'. The ISC website <http://www.isc.ac.uk/IR/reg.html> makes it simple and convenient for network operators to add stations to the Registry.

An on-line Station Book service <http://www.isc.ac.uk/IR/stationbook.html> added during 2004, complements the on-line station registration service. The web-based station book is in addition to the existing distribution of an ASCII text file of the station book through the FTP site and on the ISC CDs.

Lists of agency codes

ISC, like NEIC and EMSC, assigns codes to the seismological agencies who contribute data. These codes are used by the data centres to properly credit the contributing agency. We have assembled the code names that are listed in the ISC

database and where possible, identified the agency behind the code and other codes used by NEIC and EMSC. The list is shown at http://www.isc.ac.uk/IR/agency_mapping.html. We invite you to CHECK and COMPLETE the information relevant to your institution.

Please note that the IASPEI working group for Networks and Station Codes plans to suggest a new scheme for coding stations, seismic deployments and agencies.

Analysis of contributed data

One of the major services of the ISC to the seismological community is the collection of all available source parameters and phase readings, grouping the different location results, associating phase readings and where applicable and possible, provide an ISC solution for the location, origin time and magnitudes mb and Ms. These ISC solutions are potentially more reliable than those provided individually by local agencies. ISC solutions and the comprehensive ISC Bulletin may serve as a reference to evaluate the performance of individual agencies. The service that ISC provides at <http://www.isc.ac.uk/search/contributed/index.html> enables a comparison between ONE month of data contributed by an agency and ISC Bulletin data. It includes a comparison of the location and magnitude results, highlighting cases when the discrepancy exceeds a predefined level. It can also list events reported to ISC but not reported by the agency and vice versa.

Reference events

The ISC prepares and maintains a database of a set of earthquakes and explosions for which hypocentre information (Latitude, Longitude, Depth) is known with high confidence (to 5km or better (GT5)) and whose seismic signals have been recorded at regional and/or teleseismic distances. We want to facilitate and accelerate a global effort to build and validate a significantly large set of reference events that, in turn, will be used for better visualization of the structure of the Earth, better modelling of velocities of seismic waves, more accurate travel time determinations and increased accuracy of hypocentre locations. The web page <http://www.isc.ac.uk/reference/reference.html> is designed to receive information about candidate seismic events to be included in the database of reference events. The information will be reviewed by members of the IASPEI Working Group on Reference Events for Improved Location.

Further on-line features will be highlighted in our next newsletter.

VISITORS TO THE ISC

From April to June the ISC received several visitors, Margaret Wiggins-Grandison from University of West Indies, Jamaica and Joan Latchman from University of West Indies, Trinidad, Mark Chadwick, Kevin Fenaughty and Martin Reyneers from GNS, New Zealand. A delegation from MicroSeismic Studies Programme, (MSSP) Pakistan visited in June, headed by Muhammad Qaisar, and included Muhammad Daud Shah, Shahzad Alta Shaheen and N. Tanreer.

It is always a pleasure to welcome visitors and to discuss data collection and analysis with data providers.



International Seismological Centre

Tel: +44 (0) 1635 861022
Fax: +44 (0) 1635 872351
Email: admin@isc.ac.uk
www.isc.ac.uk