

The latest updates, news and activities from the ISC

Vacancies at the ISC

ISC is looking to fill the following two vacancies for Seismologists:

- Extending the ISC Data Collection
- Advancing the ISC Earthquake Location Methods

For details please see www.isc.ac.uk/news/vacancy/index.php

Notable earthquakes in your area?

We invite scientific articles on notable seismic events that occurred during the July-December 2011 period and beyond to be included into the reviewed Summary of the ISC Bulletin. Colour figures, no charges, distributed in print and on-line worldwide: <http://www.isc.ac.uk/iscbulletin/summary/>

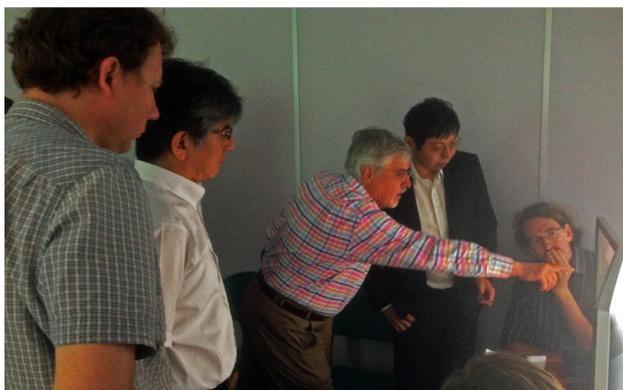
ISC Executive Committee meet at the ISC



Left-to Right: The Executive Committee meeting brought together Bertrand Delouis (CNRS, France), John Adams (Governing Council Chair, GSC, Canada), Guy Masters (SIO UCSD, USA), Johannes Schweitzer (Chair, NOR SAR, Norway), Kenji Satake (ERI, University of Tokyo) and John Woodhouse (Oxford University, UK). Unfortunately, R.S. Dattatrayam (IMD, India) and Oleg Starovoit (IASPEI) were not able to take part due to delays in UK entry visa processing.

Dmitry Storchak reported to the Committee on the status of 2013/2014 standard operations and services, staff, income and expenditure. James Harris and Emily Delahaye described the current state of the ISC database and Bulletin analysis. Domenico Di Giacomo, Wayne Richardson and Dmitry Storchak highlighted the new products that have emerged during this year such as the ISC-GEM Catalogue, the ISC Event Bibliography and the printed Summary of the ISC Bulletin. The Committee discussed the issues of the ISC data availability as well as the status of the development of the Visual Bulletin Analysis System. The Committee

delivered several recommendations on the continued availability of the EHB dataset, requested further encouragement of preliminary bulletin contributions by local operators and advised on the contents of the future printed volumes of the Summary. The Committee welcomed the idea of the ISC maintaining the IASPEI website for an initial period as a trial. The Committee suggested that the ISC continue to maintain and develop the ISC-GEM Catalogue and the ISC Event Bibliography and seek additional support for this purpose. They also approved the 2013 Accounts and the 2014-2016 budget projection.



The Executive Committee members gave useful advice to ISC developers of the Visual Bulletin Analysis System

NIPR

The ISC and the National Institute of Polar Research in Tachikawa, Japan signed a Memorandum of Understanding that describes terms of mutual cooperation. NIPR has been reporting seismic bulletin data to the ISC from its Antarctic station Syowa since 1967 and thus remains one of the active long-term contributors. Several generations of seismologists, starting with Dr Katsu Kaminuma, have reported seismic picks made at SYO that have been associated with regional and teleseismic events in the ISC Bulletin. Following an initiative from NIPR's current seismologist, Dr Masaki Kanao, the Director General of NIPR, Dr Kazuyuki Shiraiishi and Scientific Board have decided to join the ISC as a Member to make a small yet very welcome contribution towards sustaining the ISC operations. We are grateful to the Head of the International Affairs Section, Prof. Watanabe Kentaro and his colleagues for making necessary arrangements very efficiently.



NIPR
National Institute of Polar Research

At present, Dr Kanao and Mrs Ayuko Ibaraki are working with the ISC aiming to fill the occasional gaps in the history of SYO's contribution to the ISC Bulletin during 1960-1980s. These data will become available as part of the Rebuilt ISC Bulletin. Several scientific publications have also been prepared to describe mutual efforts.

Extension of the ISC-GEM catalogue

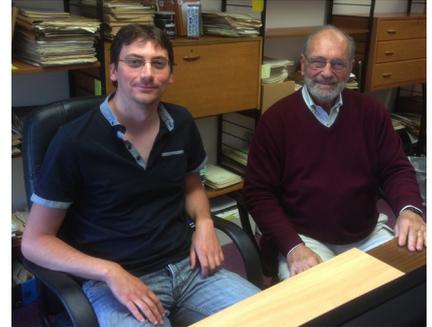


2014 GEM Outstanding Contribution Award given to the ISC-GEM Catalogue effort

The ISC-GEM Catalogue has been available from the ISC website for 15 months during which time over 4,000 downloads from ~1,000 unique IP-addresses have been made. Several scientific presentations and articles have been published based on the Catalogue. This explains why the 2014 Outstanding Contribution Award was given by the GEM Foundation to the Team that prepared the Catalogue during the initial 27-month period.

At present the Team is working on an extension of the ISC-GEM catalogue. The catalogue will include the data years 2010-2011. We shall also lower the magnitude cut-off threshold to MW 5.5 during the 1950-1959 period. We are currently digitizing the bound volumes of the International Seismological Summaries (ISS). Notably, the ISS do not contain any magnitude information, therefore we are sourcing and digitizing the original station amplitude and period measurements from numerous volumes of historical paper-based station bulletins stored in the ISC warehouse.

Domenico Di Giacomo (ISC) and Bob Engdahl (University of Colorado in Boulder) inspecting locations of earthquakes in the 1950s during Bob's visit to the ISC in Thatcham.



In addition to the core funding from GEM Foundation, this work is currently supported by FM Global, the Earthquake Hazard Program of USGS and Lighthill Risk Network. Lighthill is backed by Aon Benfield, Catlin, Guy Carpenter & Lloyd's.

News from the ISC Host Institution

For over 16 years, Prof. John Woodhouse has been overseeing the ISC progress from the ISC Executive Committee where he represents the Earth Sciences Department of Oxford University, the ISC host institution in UK. In March, the University held a "30 years of Global Seismic Tomography" symposium to celebrate John's 65th birthday. The symposium was an exciting demonstration of the progress made during these years from the time when John made his first contributions in the field whilst working in Harvard. The symposium brought together many leading scientists in the field, including Adam Dziewonski, Don Anderson, Barbara Romanowicz, Guy Masters, Jeroen Tromp, Jeannot Trampert, Keith Priestley, Goran Ekstrom, Jean-Paul Montagner, Shamita Das, Andrea Morelli, Tom Jordan and many others. Dmitry Storchak made a presentation describing the timeline of ISC developments under John's watch.

Prof. John Woodhouse during the "30 years of Global Seismic Tomography" symposium held in his honour at Oxford University in March.



Oxford University student, Andrew Heard, receives the 2014 ISC Prize in Mathematics and Geophysics



Every year the Earth Sciences Department of Oxford University nominates the best 1st year student to take a small ISC Prize in Mathematics and Geophysics. Other awards are given by AWE Blacknest, BP, Shell and Schlumberger. This year, the award was given to Andrew Heard for his outstanding results in the subject.



International
Seismological
Centre

International Seismological Centre

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

Staff Changes

István Bondár joined the ISC as a Senior Seismologist in June 2008. During almost six exciting years at the ISC he has made a major contribution to the ISC's developments. István's most impressive input was the design and compilation of the new earthquake location algorithm. The new locator has allowed ISC to deal with a number of current challenges, including the uneven distribution of seismic stations with large concentrations of stations in some areas and lack of them in others. István also initiated and carefully maintained a new ISC service – the IASPEI Reference Event List that encompasses almost 8,000 seismic events, earthquakes and anthropogenic events recorded teleseismically, for which epicentre parameters are known to a very high degree of confidence. Together with Bob Engdahl, István relocated all earthquakes in the current version of the ISC-GEM Catalogue and designed the EHB bulletin as a service available from the ISC website. He also contributed



István Bondár, the author of the current ISC earthquake locator and the founder of the IASPEI Reference Event List service

his expertise to the CTBTO Link to the ISC database. Due to family reasons, István left the ISC and moved to Hungary, his home country, at the beginning of April. The ISC is currently looking for his replacement which is proving to be a difficult task.

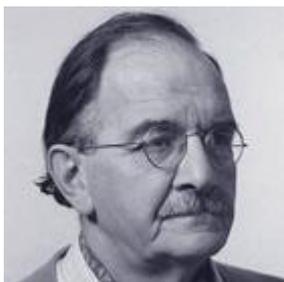
In the middle of February, the ISC Lead Analyst, Mrs Emily Delahaye returned from maternity leave. This was a very welcome event as Emily was able to pick up her management role in production of the ISC Bulletin as well as overseeing the design of the Visual Analysis Bulletin System. She is also looking forward to a review of the Rebuilt ISC Bulletin scheduled for release in the middle of 2015.

Our Analyst from Croatia, Ivana Jukić has completed her career at the ISC and is planning to return to scientific research.

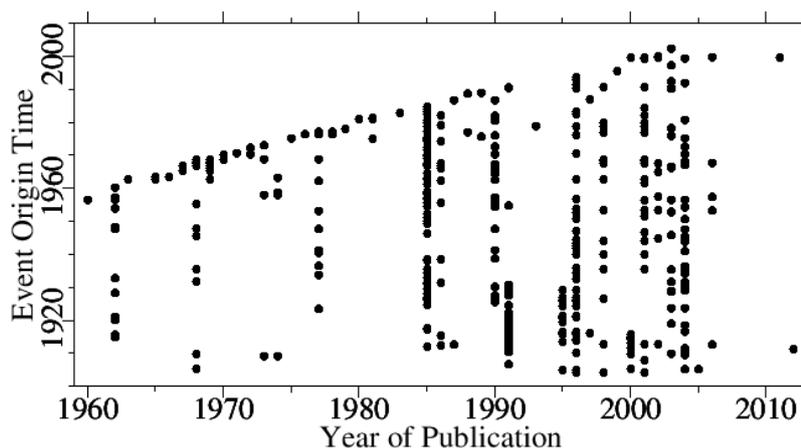
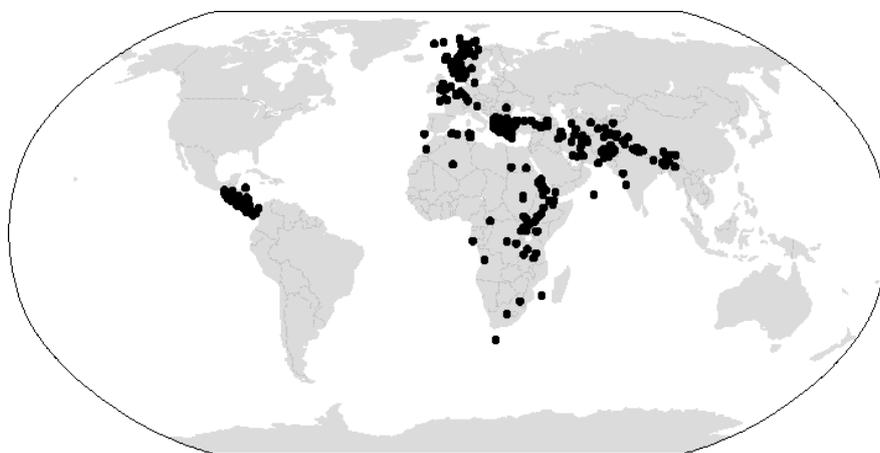
Publicizing the ISC Event Bibliography

Already a well-known and well used ISC service – the Event Bibliography has received a further boost after the recent publication in *Seismological Research Letters*: *Di Giacomo, D., Storchak, D.A., Safronova, N., Ozgo, P., Harris, J., Verney, R. and Bondár, I., 2014. A New ISC Service: The Bibliography of Seismic Events, Seismol. Res. Lett., 85, 2, 354-360*

The service has also been publicised by the ISC at a variety of professional meetings. One of them was the memorial symposium of late Prof. Nicholas Ambraseys who published an impressive 89 scientific articles related to specific Earthquakes in the Middle East, Europe, Africa and Central America. The meeting was organised by Imperial College at the Royal Geographical Society, where Dmitry Storchak and Domenico Di Giacomo presented their snapshot of the work of Prof. Ambraseys to a large number of seismic engineers.



The map and timeline of 89 scientific articles of late Prof. Nicholas Ambraseys, above, that relate to ~500 specific earthquakes listed in the ISC Event Bibliography.



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

Improvements in the ISC warehouse bulletin collection

Following the initial stage of the ISC-GEM catalogue works, many of historical station bulletins used in the project have been scanned by the SISMOS project at INGV in Italy and are now available at <http://storing.ingv.it/bulletins/ISC-GEM/>. Users are encouraged to give references to the ISC and SISMOS when using these materials.

We are happy to report that two major steps have been made to improve the ISC's historical paper-based station bulletin collection, both through the initiative of the former BGS Seismologist, Dr Roger Musson. We received two lorry-size loads from Eskdalemuir, Scotland and from Edinburgh, Scotland. The latter is especially valuable as it contains many bulletins that are filling gaps in the ISC collection. These bulletins have been collected and used by Dr Musson during many tens of years of his career at BGS. As BGS is moving its operations from Murchison House to a smaller size building on the outskirts of Edinburgh, it was decided that the bulletins will be better used at the ISC.



Over a hundred large boxes arrived from the BGS office in Edinburgh to complement the existing ISC collection of historical seismic station bulletins. We thank Dr Roger Musson, above, for this generous gift to the ISC. These bulletins have already been used for extension of the ISC-GEM Global Instrumental Earthquake Catalogue.



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