

The latest updates, news and activities from the ISC

IASPEI Medallist



The ISC Honorary Seismologist, Robin Adams, receiving the first IASPEI Medal in Gothenburg, Sweden

In July 2013 the ISC Honorary Seismologist, Dr Robin D. Adams, was chosen to be the first recipient of the newly established IASPEI Medal, for merits in seismology.

Robin began his career in the Royal New Zealand Navy in 1953 and was assigned to the Defence Scientific Corps, which promoted the training of young people in fields that would be beneficial to the country. During the next three and half years Robin studied seismology at Cambridge University. Upon his return to New Zealand he began work at the Naval Research Laboratory and during this time visited the Antarctic. He served as Superintendent of the Seismological Observatory in Wellington where he was responsible for the operation of the New Zealand seismological network. He moved to the UK in 1978 and joined the ISC where he remained until his retirement in 1995. He also served as Secretary General of IASPEI from 1979-1991.

At the ISC, Robin was responsible for seismological matters relating to earthquake analysis and location. Having

travelled to approximately 45 countries during his career at the ISC and IASPEI, he is best known as an ambassador for the collection of global earthquake data, especially from developing countries. As a result he was an invaluable asset through his tireless efforts to encourage seismologists in countries worldwide not only to contribute their data to the ISC but also to improve their data processing.

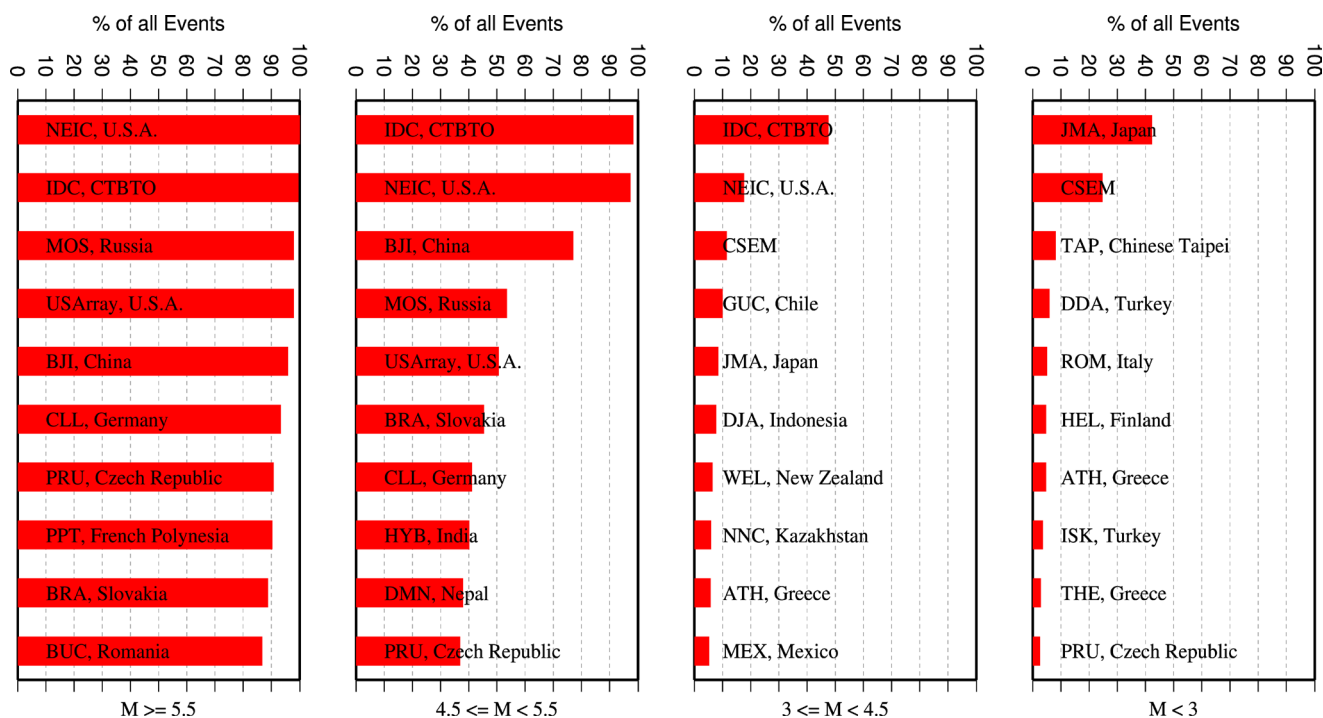
As an observational seismologist Robin has always ranked at the top of his peer group. His publications included studies of earthquake location, seismicity, earthquake hazard, reservoir-induced seismicity, field studies of earthquake effects, studies of after-shock sequences, structure of the Earth's core, use of core waves for mantle exploration and nuclear discrimination seismology. He worked in Antarctic geophysics and identified the first confirmed earthquake in continental Antarctica.

First printed Summary of the Bulletin

For 46 years the International Seismological Centre (ISC) has printed parameters of earthquakes and other seismic events that have occurred around the world. This printed Bulletin served as a major source of data for many researchers worldwide. Having been superseded by the availability of the data on the ISC website and annual CD-ROMs, this publication has mostly served as ISC visibility for the last 20 years. An unprecedented growth in the earthquake data volumes has made this work progressively less affordable despite a considerable tax incentive given by UK Government to all book publishers.

We have now converted the Bulletin of the ISC from a data-carrying publication to a media that provides a useful summary of the data. Naturally, the entire dataset for the period is on a DVD-ROM accompanying the book. The Summary contains information on the ISC, its status, Member-Institutions, sponsors, data contributors, staff and operational procedures. Also included are descriptions of IASPEI standards and procedures, a summary of the original network data collected by the ISC, and a list of the most prominent, punctual and consistent data contributors.

The first issue refers to the data months of January to June 2010 and includes invited articles on notable earthquakes kindly contributed on this occasion by researchers from USGS and NRCAN, Canada. A second issue for 2010 and further volumes will follow as the ISC reviewed Bulletin becomes available. The new Bulletin Summary will provide better value to researchers that use the ISC data and the benefits will outweigh the unfortunate delay in the publication of the first volume.

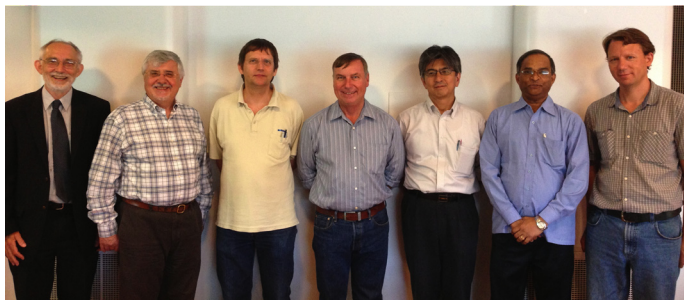


This graph, from the new Summary, shows the frequency of events in the 2010 (January-June) ISC Bulletin for which an agency has reported at least one item of data: a moment tensor, a hypocentre, a station arrival or an amplitude; the top ten agencies are shown for four magnitude intervals.

ISC Executive Committee & Governing Council meetings in Gothenburg

The ISC Executive Committee and the ISC Governing Council meetings were held in July during the joint IAHS-IAPSO-IASPEI General Assembly in Gothenburg, Sweden.

The Executive Committee meeting brought together Guy Masters (Chair, SIO UCSD, USA), Gary Gibson (SRC and University of Melbourne, Australia), Johannes Schweitzer (NORSAR, Norway), R.S. Dattatrayam (IMD, India), John Woodhouse (Oxford University, UK) and John Adams (Governing Council Chair, GSC, Canada). Apologies were received from Oleg Starovoit (IASPEI).



The ISC Executive Committee following the election in Gothenburg, left to right: John Adams, John Woodhouse, Johannes Schweitzer, Guy Masters, Kenji Satake, R.S. Dattatrayam, Bertrand Delouis. Apologies from Oleg Starovoit.

Dmitry Storchak reported to the Committee on the status of 2012/2013 standard operations and services, staff, income and expenditure. István Bondár, Domenico Di Giacomo and Dmitry Storchak described 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 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. The Committee has approved the 2012 Accounts and the 2013-2015 budget projection.

For the ISC Governing Council meeting, representatives from 25 Member Institutions were in attendance and John Adams, the Governing Council Chair, served as a proxy to six others.

The Council received the biennial report from Dmitry Storchak on the operations, staff and new products and developments. The Council reviewed and approved the four-year Development Plan. With minor amendments, the Council approved the 2012 and 2013 Accounts, 2013-2015 budget projections and the membership subscription rates. The Council raised concerns over specific individual members in Europe "taking holidays" in financial support of the ISC. This was seen as inappropriate in view of the long-term uninterrupted operation of the ISC. The Governing Council Chair has been instructed to write a letter of concern to those involved. The Council has discussed proposed changes to the ISC Working Statutes and made necessary amendments, bringing the constitution of the ISC to the realities of current time. The Council thanked Gary Gibson for his invaluable input to steering the ISC during his double-term in the ISC Executive Committee. Gary's expertise in the area of seismic hazard assessment was exceptionally useful. Two new Members of the ISC Executive Committee were elected: Bertrand Delouis, CNRS, France and Kenji Satake, ERI, University of Tokyo, Japan. They will bring to the Committee considerable scientific expertise in earthquake source parameterization and tsunami generation.

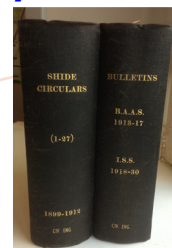
Work placement

Charis Horn, pictured below, has both British and Australian citizenship and currently studies Earth Sciences at Oxford. In her first year she particularly enjoyed studying the modules on crystals and minerals, chemistry, igneous petrology and sedimentology. She nevertheless wanted to broaden her exposure to other Earth Sciences and volunteered for a work placement at the ISC during her summer holidays. Despite a long and complicated commute, she enjoyed working with the historical global seismic bulletins of the British Association for the Advancement of Science (BAAS) for the years 1914-1915. Her work greatly contributed towards the improvement of the ISC-GEM Catalogue.



Help from Mrs Ambraseys

The ISC's work on the ISC-GEM Catalogue has been boosted by the materials received from the late Prof Nicolas Ambraseys collection of historical seismic station bulletins. With permission and kind help of Mrs Xenia Ambraseys, Dmitry Storchak brought a full car-load of bulletins from Prof Ambraseys's London flat to the ISC. We also thank Prof James Jackson of Cambridge University and Robin Adams for alerting us to these data. Our Historical Data Entry Officers have already started working on the bulletins.



Oxford Prize Winner

Every year the Earth Science Department of Oxford University nominates the best 1st year student to take a small ISC Prize in Mathematics and Geophysics. Guy Paxman, a student at St Edmund Hall, Oxford, was nominated for this year's prize. Guy was not able to pick up the prize during the traditional party as he was involved in a six-week independent mapping exercise in the Strath district on the Isle of Skye in Scotland. His current areas of interest include geophysics (continental deformation, earthquakes and faulting, geodynamics and active tectonics) as well as physical oceanography and climate.

Guy Paxman, Oxford University student, the winner of this year's ISC Prize in Mathematics and Geophysics



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VBAS project begins

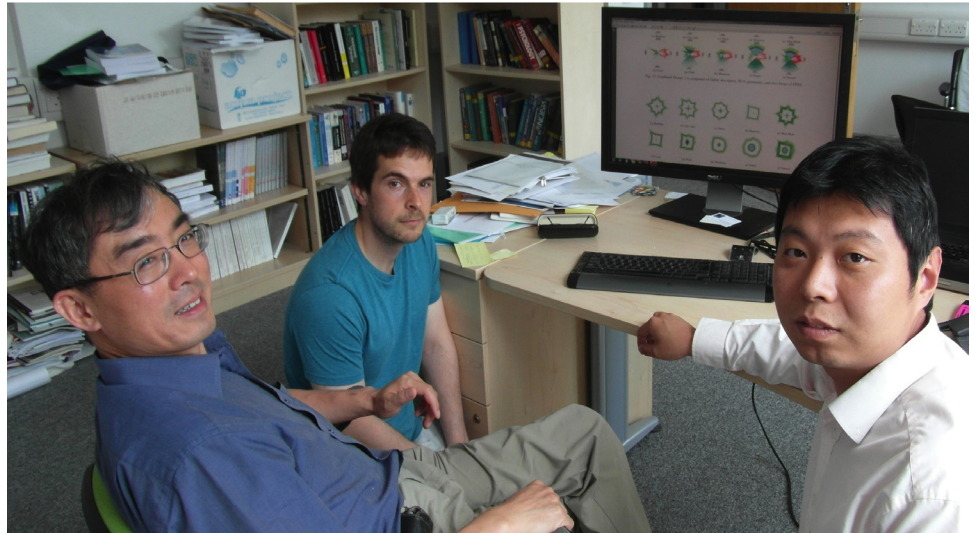
In July, the ISC started the development of the Visual Bulletin Analysis System (VBAS) together with the Oxford e-Science Research Centre (OeRC) part-funded by the UK Government Knowledge Transfer Programme (KTP) for three years. The system will be used by the ISC analysts reviewing the ISC Bulletin. Mr Hui Fang has been employed, formally by Oxford University, to act as the main computer developer, assisted by OeRC specialists in computer visualization, Prof Min Chen and Simon Walton and many members of the ISC staff.

Hui previously worked on image processing and data visualization at the Computer Science Department of Swansea University. He now shares an office with the ISC analysts who review the ISC Bulletin and are on hand to advise Hui with this development.

Left to right: Prof Min Chen, Dr Simon Walton and Hui Fang discussing design options for the graphical representation of an earthquake hypocentre and appreciating the meaning of an earthquake magnitude.

Visitor from Namibia

The details of operations at the ISC remain a subject of interest for many of our colleagues that run local seismic networks. In June we received a visit from Bufelo Lushetile, who recently started reporting seismic bulletin data from the Geological Survey of Namibia. Bufelo has been studying for his MSc at the University of Leeds, UK and is now back in Namibia.



OSC 100th Anniversary

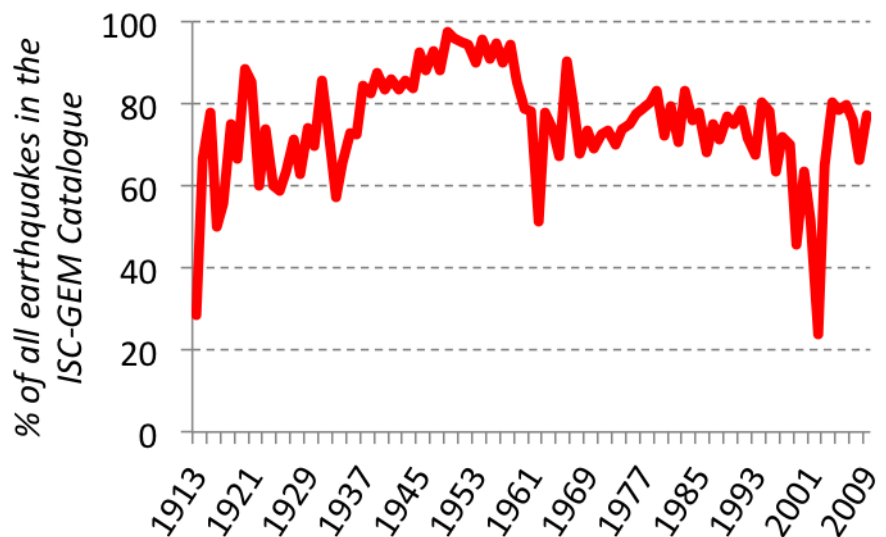
The Observatory of San Calixto, Bolivia (OSC) was established by the Jesuit brothers of the Society of Jesus and began seismological observations in 1913. The Observatory commemorated its 100th anniversary with a workshop held in La Paz in April-May. To mark this date, the ISC has prepared a poster describing the OSC's contribution to the ISC-GEM Global Instrumental Earthquake Catalogue (1900-2009). http://colossus.iris.washington.edu/docs/papers/download/ISC-GEM_OSC100.pdf The OSC is one of the three most important observatories worldwide that has conducted almost continuous recording and standard processing of large earthquakes throughout the 100 year period.



Blessing Shumba (right) shows Bufelo Lushetile his analysis methods

International Meetings

During this period, the ISC was represented in Algeria taking part in the symposium organized by CRAAG in commemoration of the Bourmedes earthquake of May 2003. ISC staff also took part in the AGU Meeting of Americas and CTBTO RSTT workshop in Cancun, Mexico as well as the biennial CTBTO Science and Technology conference in Vienna. Several presentations were delivered during the IASPEI meeting in Gothenburg, and an ISC-GEM Catalogue conference booth was set up at both the semi-annual GEM Reveal meeting in Pavia, Italy and at the Insurance Modelling and Data Expose (IMDE) exhibition in London.



Over a period of almost 100 years a very large fraction of all earthquakes in the ISC-GEM Catalogue were recorded by the OSC, Bolivia



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