ISCNEWS

July to September 2008 www.isc.ac.uk



The latest updates, news and activities from the ISC

NEW MEMBER OF STAFF

After finishing his work as a Senior Scientist at SAIC in Washington DC, **István Bondár** has joined the ISC to move forward the project of modernizing the ISC location procedures and consequently reprocessing the entire ISC dataset going back to 1964.

István earned his Ph.D. degree in Geophysics from Roland Eötvös University, Budapest, Hungary. He was the technical and managerial lead of two contracts to the US Air Force: "Global GT data set" and "Improved Event Location Uncertainties". He is an active member of the IASPEI/CoSOI working group on collecting Ground Truth events for improved event location. István also has experience of working at the IDC CTBTO. He is co-author of a number of well cited publications with Eric Bergman, Bob Engdahl, Hans Israelsson, Keith McLaughlin, Bob North, Anatoly Levshin and Mike Ritzwoller.



"István is a first rate seismologist with a track record of taking on research projects that have often proved daunting to others". Bob Engdahl

ISC MEMBERSHIPS



The Seismic Research Unit (SRU) of the University of West Indies at St. Augustine, Trinidad and Tobago, has been contributing its seismic bulletin data to the ISS/ISC since the 1950s. The SRU mission is to monitor and study earthquakes, volcanoes and tsunamis in the Eastern Caribbean and provide advice and information for emergency response, public safety and loss mitigation. Thanks to the efforts of Richard Robertson, the Head of SRU and Joan Latchman, a Research Fellow, the SRU recently joined the ranks of the ISC members in recognition of the high quality of the ISC data and SRU's wish to support the ISC mission. It is worth mentioning that at the end of 1980s Joan Latchman successfully contributed to the ISC as an ISC Bulletin editor.



Following our approach and presentation at the 39th Nordic Seismology Seminar in Oslo this June, NORSAR has decided to increase its existing ISC membership level three-fold to assist ISC in its drive for further development. We are grateful to NORSAR's Managing Director Anders Dahle, as well as Jan Fyen, Johannes Schweitzer, Hilmar Bungum, Svein Mykkeltveit, Conrad Lindholm and other colleagues at NORSAR for their generous support of the ISC.

NORSAR is an independent geoscientific research foundation established in 1968, specializing in software solutions and research activities in applied seismology. NORSAR operates some of the world's largest seismological observatories, and has more than 40 years experience in developing and supporting seismological data processing and analysis schemes. NORSAR is designated as the Norwegian National Data Center for verification of compliance with the Comprehensive Nuclear Test Ban Treaty. NORSAR is engaged in research in the field of geo hazards as well as seismic oil and gas prospecting. It is one of only 13 Norwegian Centres of Excellence.



Following the same meeting in Oslo, Uppsala University decided to increase its membership level two-fold to assist the ISC in its new initiatives. We are grateful to **Reynir Bödvarsson** for his generous support and understanding. Uppsala University is in charge of running the Swedish National Seismic Network (SNSN) and has been contributing data to the ISC for many tens of years.

Over the last few years a completely new permanent seismic network has been installed in Sweden. It currently consists of about 60 broad-band stations, using mostly 100 s Guralp sensors and digitizers, forming an array about 1400 km long and 400 km wide. Excellent recording conditions in Sweden, with little or no sedimentary cover and low ambient noise, contribute towards excellent quality of data. For events within the network, all events above about magnitude 0.5 are detected, located and have focal mechanisms estimated.



Peter making his escape plans

PETER DAWSON RETIRES

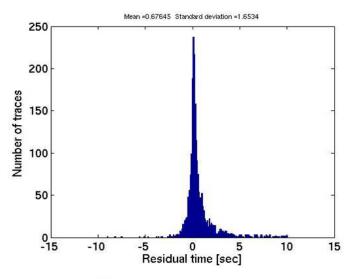
ISC collects data from 120 networks and data centres and seismologists all around the world will recognize the name of **Peter Dawson** despite almost never meeting him personally. After approximately 10 years of working for the ISC Peter decided to retire on July 31, 2008. He was originally hired by Ray Willemann to write temporary software that created a bridge between the old Fortranbased codes and a newly built relational database.

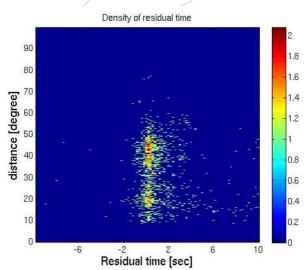
Later his most important duty became the ISC Data Collection. In parallel Peter was also responsible for maintaining the International Seismographic Station Registry. Peter always performed his duties in the most professional manner. It is thanks to Peter that the ISC data collection is completed just 14 months behind real time compared to the long-established 24.

During his career at the ISC Peter was also involved in the recovery of the un-associated station arrivals from the old binary files, putting together the scheduler - the program initiating routine processes run on the ISC computers during 24 hour cycle, as well as the program producing pdf-version of the ISC Bulletin and a set of graphical user interfaces used by the ISC analysts during the Bulletin review.

ESC GENERAL ASSEMBLY, CRETE, GREECE

Thanks to prolonged spell of good weather elsewhere nobody visited the ISC in July-September period. Instead Dmitry Storchak took the opportunity to popularise the ISC at the ESC meeting in Crete in September. The meeting was preceded by the Young Seismologist Training Course. Dmitry was delighted to participate in taking classes to teach the next generation of seismologists attending this course. Fellow tutors included Ina Cecic from Environmental Agency of the Seismology and Geology of Slovenia and Filippos Vallianatos and George Hloupis from the Technological and Educational Institute of Crete in Chania. The Institute kindly supported Dmitry's travel to Crete. A number of papers presented at the conference were notable from the ISC's point of view. For example a talk by Lee J., Küperkoch L., Meier T., Friederich W., all from Ruhr University in Bochum, Germany, contained details of a technique used for the detection of regional and teleseismic P-waves using skewness and kurtosis. This talk was yet another example of the ISC Bulletin data being used to assess the quality of automatic phase pickings.







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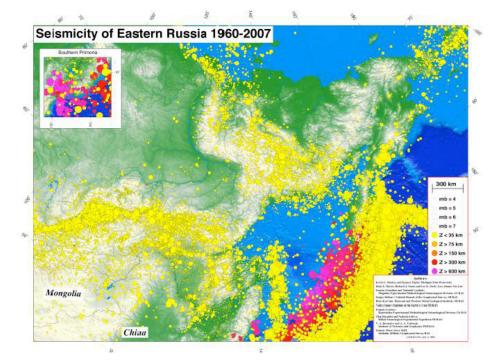
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CONFERENCE ON SEISMICITY OF NORTHERN EURASIA, OBNINSK, RUSSIA

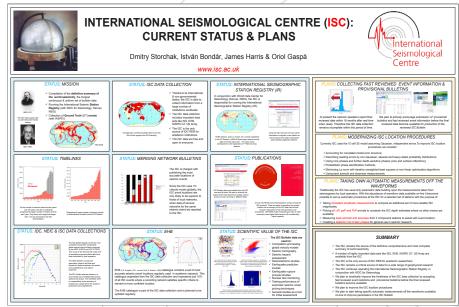
At the end of July, at the invitation of the Geophysical Survey of Russian Academy of Sciences (GS RAS), Dmitry Storchak took part in the Conference on Seismicity of Northern Eurasia in Obninsk in Kaluga Region, the hometown of GS RAS and the first industrial Nuclear Power Plant in Russia. Dmitry presented the ISC and its existing state of data collection from Northern Eurasia alongside talks given by Alexey Malovichko, the Director of GS RAS, Oleg Starovoit, his Deputy and the ISC Executive Committee member, and representatives of many regional branches of Geophysical Survey and geophysical institutions from Belarus, Moldova, Ukraine, Armenia, Kazakhstan & Tajikistan.

It is apparent that despite a sharp decline in the 1990s, seismic networks in the Northern Eurasia are growing at rather steady pace. A good reflection of that was a seismicity map (above right) presented by Kevin Mackey from Michigan State University, who spent a number of years working with his Russian colleagues in Eastern Siberia. The map shows that there is an abundance of bulletin data available in the region and indeed the ISC data collection has room for improvement. A number of useful contacts and data exchange agreements made at this conference are likely to improve the situation.



LRSPS WORKSHOP, DENVER, US

The National Science Foundation (NSF) has directed the IRIS Consortium to assist the seismological research community in the US in preparing a Long-Range Science Plan for Seismology (LRSPS) by the end of this year. The fundamental LRSPS process is to explore and document the most exciting directions for seismology on a decadal time frame with the community. As part of this process, IRIS organized a 2-day NSF-funded workshop to gather community input that will help an LRSPS writing group to prepare a set of key scientific questions and recommendations for future research directions. Guy Masters, ISC Executive Committee member, presented the poster "International Seismological Centre (ISC): Current Status & Plans" at the workshop that took place in Denver, Colorado. This poster is one of several invited by the workshop organizers to illustrate missions and development plans of existing facilities currently operating with NSF funding. The poster is available at http://www.isc.ac.uk/doc/analysis/2008p01/poster-isc-iris 2008 web.pdf





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NEIC-EMSC-ISC CO-ORDINATION MEETING, BRUYERES LE CHATEL, FRANCE

This year the NEIC-EMSC-ISC co-ordination meeting took place at EMSC premises provided by CEA. On the agenda were the urgent matters of mutual real time and bulletin data exchange including its timeliness and formats, co-operation on joint initiatives as well as an update on the new directions taken by each organization that are likely to affect another partner.



Participants at the co-ordination meeting from left to right- back row: Bruno Feignier, Sébastien Gilles, István Bondár, Bruce Presgrave, Stuart Sipkin, Rémy Bossu, Dmitry Storchak, James Harris - front row: Stéphanie Godey, Gilles Mazet-Roux, Sophie Merrer, Phetaphone Thomy

ISC PRIZE WINNERS AT OXFORD UNIVERSITY

On the recommendation of Prof. Shamita Das and Prof. Philip England (HoD), the ISC has established an annual Prize in Mathematics and Geophysics for a best first year student at the Earth Science Department of its home institution – the University of Oxford. The prize is given to a student with the best exam results in geophysics and mathematics. This year the Department could not distinguish between two students who had identically excellent results, so Luke Sheldon and Cai Durbin have been nominated to share the prize. Each of them will receive the annual ISC Bulletin CD-ROM and a cheque for £100. By setting this prize the ISC hopes to attract Oxford University students to take note of the ISC services right from the first year, support the ISC in the future and perhaps even help the ISC in fulfilling its mission.





ISC Prize Winners Luke Sheldon and Cai Durbin



This newsletter can be viewed online at: www.isc.ac.uk/doc/newsletter/2008q3/2008q3.pdf

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