# **ISCNEWS**

April to June 2021 www.isc.ac.uk

Up and running, despite the worldwide calamity



# **ICM-CSIC** joins as Member

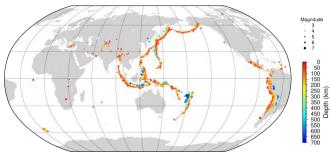
# Institut de Ciències del Mar

The <u>Institute of Marine Sciences</u> (ICM-CSIC), Barcelona, Spain joined the ISC as a Member. We are grateful to Dr. Antonio Villaseñor, the ISC's long term data user and supporter, for his help in this development.

# **Data Reporting for 2019**

An up-hill struggle continues with collection of seismic bulletins for the 2<sup>nd</sup> half of 2019. A number of reporting agencies have difficulty processing data. At the same time, ISC Analysts are trying to bring production of the Bulletin back to 24 months behind real time. Sadly, the ISC will now have to spend a considerable fraction of its precious resources to rectify corresponding data gaps at a later point.

# 3Y of depth phase picking at ISC



Three data years ago, we started picking depth phases (pP, sP, pwP) at the ISC, using waveforms freely available at IRIS and EIDA. For the period from April 2016 till April 2019, ~83,000 of such phases, picked at 165 stations, were used for source depth determination of ~3,600 earthquakes with mbNEIC≥4.8. In 2,400 cases shown on the map, the ISC picks were critical for constraining the earthquake depth in the ISC Bulletin.

# **Vacancy in Analysis Team**

We are looking for Analysts/Seismologists to strengthen the ISC Bulletin Analysis Team. The application deadline is the 22<sup>nd</sup> of August 2021. For details, see the News on the <u>ISC website</u>.

#### ISC-GEM Ver. 8 released

On April 6, Version 8.0 of the ISC-GEM catalogue was released. For the period 1991-1999, we added ~1900 earthquakes that included both continental events with  $M_W$  5.0-5.5 and events around the  $M_W$  cut-off threshold of 5.5 that were not selected before. We also added 448 source mechanisms from the literature. In addition, 543 earthquakes in 2017 with  $M_W$  5.5 and above plus continental earthquakes with  $M_W$  5.0-5.5 were included.

#### CTBTO Link Ver.2.1 released

To help the CTBTO Preparatory Commission and the National Data Centres (NDC), the ISC is running the IDC Link to the ISC database service. We recently released Ver.2.1 of this service that benefitted from major review, testing and update of all existing database searches by Ryan Gallacher, the new ISC staff member responsible for the Link. As part of this work, all help links and descriptions have also been re-written and updated. The Link was further publicised at the 2021 CTBTO Science & Techology Conference. Further training sessions for interested NDC staff are currently planned together with CTBTO.

#### 2021 Exec Com and Gov Council

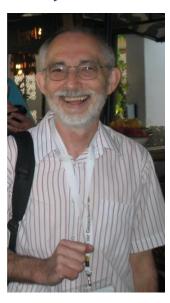
The ISC Executive Committee and the ISC Governing Council both met on-line this June to review the ISC reports on operations, funding and expenditure as well as to consider future development plans. We have seen the best attendance as compared to in-person meetings, yet everyone was really looking forward to the

return of normality next year because many essential discusssions common during such meetings were impossible this year.

Both governing bodies shared their satisfaction with the results of ISC work during this difficult period which included major releases of ISC-GEM and ISC-EHB datasets, notable accelleration of the ISC Bulletin production, release of the ISC-PPSM (probabilistic point source model) and ISC-FM (first motion based fault mechanisms).

The Governing Council voted on the adoption of the ISC Bye-laws that spell out previously unwritten rules and approaches to every day issues dealt with by the ISC now acting as a charitable incorporated organization (CIO). They also voted on the rotation of the Chair of the Governing Council and members of the Executive Committee.

# John Adams steps down



After 16 years of selfless and impeccable service to the ISC as the Chair of the ISC Governing Council, Dr. John Adams decided to step down. John took over from Prof. Adam Dziewonski in 2005 and presided over many eventful years, including the change of business model to that of a CIO. His

wisdom, patience, quick response to issues and sense of humour were most appreciated.

We are grateful to Natural Resources Canada (NRCAN) for allowing John to combine his usual work responsibilities with the ISC duty.

# M. Assumpção leaves ExecCom

In his six years on the ExecCom, Prof. Marcelo



Assumpção (University of São Paulo) has built the new Brazilian network, organised routine earthquake monitoring (including regional and teleseismic) with the results sent regularly to the ISC. This contribution also included stations of

neighbouring countries: Bolivia, Uruguay and Paraguay. Marcelo successfully encouraged both data contributions and Memberships from other Brazilian institutions (University of Brasilia and National Observatory) as well as countries in Latin America and the Caribbean. He made a notable contribution to the IASPEI Ground Truth (GT) List that ISC maintains.

#### **New Chairs**





At the last meeting of the Governing Council, Prof. Göran Ekström of LDEO at Columbia University, USA (left) was elected to serve as the new Chair of the Governing Council. At the ISC, Göran represents the National Science Foundation (NSF).





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At the last meeting of the Executive Committee, John Woodhouse (right), Emeritus Professor at the University of Oxford and Fellow of the Royal Society, was elected to serve as a Chair of the Executive Committee. At the ISC, John represents the Royal Society.

#### **New ExecCom Members**





According to the new Bye-laws, in selection of the elected members of the ExecCom the ISC aims to achieve a wide range of professional expertise and geographical representation. To fulfil these principles, the Governing Council unanimously voted in two new members of the ISC ExecCom: Dra. Xyoli Perez-Campos (left, representing UNAM, Mexico) and Assoc. Prof. Yanru An (right, representing CEA, China).

# **New Oxford Representative**



In April, Prof. Mike Kendall replaced Prof. Karin Sigloch as Representative of the University of Oxford (ISC Host Institution). In the past, Mike

already had experience of working with the ISC on a shear-wave splitting project funded by NERC. He now joined the ExecCom on his first meeting in June and is looking forward to working with the ISC on other relevant projects.

Karin Sigloch has moved to the University of Côte d'Azur in France and is planning to continue cooperating with the ISC, this time - on the use of floating seismometers that are likely to help fill a huge gap in station coverage from territories covered by world oceans.

#### Natalia Poiata is hired



In April, we saw the "virtual arrival" of Dr. Natalia Poiata whose primary role will be developing applications that use freely available waveforms to constrain the

earthquake parameters in the ISC Bulletin.

Natalia received a bachelor and master's degrees in Geophysics from the University of Bucharest in Romania and PhD from the University of Tokyo in Japan, where she worked at the ERI under the supervision of Prof. Kazuki Koketsu and Dr. Hiroe Miyake. Her PhD thesis was focused on the complexity of earthquakes sources and their relation to the observed damaging ground motions.

After PhD, Natalia worked as a postdoc at the Institut de Physique du Globe de Paris (IPGP), France, and later, also joined the seismic network team at the National Institute for Earth Physics (NIEP), Romania. During this period, she continued working on seismic source characterization by developing a new data intensive method for the detection and location of seismic sources using advanced signal processing techniques.

In her free time, Natalia enjoys running and kayaking. We were told that she also likes baking, which ISC staff are rather eager to test, once we are all back in the office on July 19.

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#### **Peter Franck heads to Norway**



At the end of May, we paid a zoom-farewell to one of our outstanding analysts, Dr. Peter Franek, originally from Slovakia, who worked at the ISC from February 2018. Sadly, in these three years there came no chance for his wife, also a professional, to join him in England. Prompted by the need for isolation during the pandemic and repercussions of Brexit on his wife's job-hunting chances, Peter has finally decided to leave UK and re-join his wife in Tromsø in northern Norway, where she works and where they both feel happy. He is now trying to find another employment as a Seismologist there.

Peter has done a great job as an ISC Bulletin Analyst. He also made a large impact on the development and implementation of the ISC depth phase picking service described earlier in this Newsletter.

#### **Edgar Kausel passes away**

We were informed by the Representative to the ISC from the Chilean National Centre for Seismology, Dr. Sergio Barrientos, that in January, at the age of 86, Dr. Edgar Kausel, a renowned Chilean seismologist, passed away. Dr. Kausel was a big supporter of the ISC and was once part of the ISC ExecCom, whilst representing the University of Chile.

After receiving his degree in mining engineering at the University of Chile he continued his studies in Geophysics at LDEO at

Columbia University. Upon returning to Chile, he was part of the initial group of full-time professional scientists at the Faculty of Mathematical and Physical Sciences of the University of Chile, where his contributions included studies of Chilean seismotectonics and earthquake hazard, induced seismicity in mines, and large Chilean earthquake rupture processes. He served as Director of the Department of Geophysics for several periods between 1965 and 1999, and Vice Dean of the same faculty between 1981 and 1983. Dr. Kausel was instrumental during the 1970s and early 1980s in maintaining geophysical activities in Chile with the help of the scientific diaspora from the University of Chile. He was a full member of the Chilean Academy of Sciences and the Third World Academy of Sciences. In 2004, he received the Gold Medal from the Chilean Institute of Engineers, and in 2006 he was distinguished with the National Prize for Applied and Technological Sciences. He was a member of the IASPEI Executive Committee from 1979 to 1987 the Executive Committee of the ISC from 1981 till 1989.



Dr. Kausel also excelled as a gifted athlete in high school. He held the national school record for three-stroke relay swimming, in which he

contributed with freestyle. At less than 18 years of age, in 1952, he was part of the team that made the first sporting ascent of "Las Tortolas", a 6323-m high Andean mountain. He also stood out as a brilliant amateur football player, particularly because of his fast pace.

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