

News at a Glance

1. News from IUGS Social media
 2. News from the 37th International Geological Congress in Busan
 3. IUGS President John Ludden delivered a talk at the inaugural ceremony of a new initiative and a new organization in affiliation with the China Geological Society (the national member of IUGS) held in Zhuhai, China
 4. News from IFG
 5. News from INHIGEO
 6. News from the Commission on Global Geochemical Baselines
-

1. News from IUGS Social media

Call for young geoscience reporters

Are you an enthusiastic and motivated geoscientist committed to our planet and willing to raise awareness of the geological challenges and hazards in your region and/or country? Then, this call is for you!

The International Union of Geological Sciences (IUGS) is the largest and most prestigious geological organization in the world (<https://www.iugs.org/>) and we are searching for young amateur reporters that can represent us in outreach activities. You don't need to have experience reporting news, with a smart phone and a desire to inform the public you can do it.

Your task:

- Send short videos (max. 4 minutes) with interesting news about the impact of climate change and natural disasters in your country and/or region (**in the case of natural disasters, remember that first and foremost, before reporting the news, you must help the victims**).
- Send short videos (max. 4 minutes) providing reports on how your country is managing under the stresses of climate change and the energy transition.
- Send short videos (max. 4 minutes) where you interview relevant authorities and the public on their views of geoscience and climate change.
- Send short essays (one-page written news including photos) on the above issues to be posted on our social media.

You are free to send your news in any of the above formats (video or essays). All incoming news will be verified by an IUGS panel before being published. Since IUGS is committed only to our planet and thus to a better future for mankind, we will not accept news that involve:

- Sensitive topics on internal politics of any country
- News containing racial, xenophobic or homophobic comments.

We will be selecting a number of young reporters per country and/or region and we will provide you

with contacts with key IUGS activities as part of this process. In addition, you will receive a certificate acknowledging you as IUGS young reporter and an IUGS reporter business card. The best stories will be selected and awarded at the end of each year.

If this call caught your attention write us expressing your interest and we will send you detailed information about the format to make the videos and report the news (iugs.socialmedia@gmail.com)

Visit us, subscribe to our channel and like us at:

<https://www.youtube.com/@theIUGS/featured>

<https://www.facebook.com/iugspage>

https://www.instagram.com/the_iugs/

Twitter: @theIUGS

2. News from the 37th International Geological congress

The first circular of 37th IGC is published online.

http://www.igc2024korea.org/2024/down/IGC2024_1st_Circular_Final_03141.pdf

http://www.igc2024korea.org/2024/english/main/index_en.asp



Figure 1. The 1st circular for IGC 2024

3. IUGS President John Ludden Delivered talk at the Inaugural Ceremony of a new initiative and a new organization in affiliation with the China Geological Society (the national member of IUGS) held in Zhuhai, China

On April 14th to 17th, 2023, a new group of Data-Driven and Earth Science Development (DDESD) in affiliation with Geological Society of China, a national member of IUGS, was established and its first National Academic Symposium was successfully held on the Zhuhai Campus of Sun Yat-sen University. The opening ceremony was chaired by professor Qiuming Cheng, the Past President of IUGS and the inaugural chair of the DDESD. Professor John Ludden (IUGS president), Professor Daekyo Cheong (Vice President of IUGS and the Chair of 37th IGC), and Professor David Cohen, President of the Australian Geosciences Council were invited and delivered speeches and presentations virtually at the opening ceremony.

About 850 delegates from China in the fields of geosciences and information/data sciences participated in the symposium, including 200 students from 78 top universities such as Tsinghua University, Peking University and University of Chinese Academy of Sciences. The technical program consists of 10 plenary presentations given by academicians of Chinese Academy of Sciences and Chinese Academy of Engineering and about 300 oral presentations in 30 parallel sessions. The topics of the presentations broadly cover developments and applications of digital technologies (big data and AI etc.) in basic science researches involved in solid earth, oceanography, atmospheric sciences, and geography as well as applied researches related to natural resources, geo-hazards, energy, ecological system, global change, and carbon issues etc.

The establishment of the new group and its successful symposium were witnessed and congratulated by leaders from various organizations of China, including Professor Chunsheng Chen, Chair of Senate of Sun Yat-sen University, Dr. Xueyi Xu, Deputy Director General of China Geological Survey, Dr. Zhenqian Zhou, Deputy Director General of the Natural Science Foundation of China (NSFC) and director of IGCP-China, Dr. Lixin Zhu, Deputy President and Executive Secretariat General of Geological Society of China, Dr. Fahu Chen, President of China Geographical Society, Dr. Ruizhong Hu, past president of China Society of Mineralogy Petrology and Geochemistry, and Dr. Qinyun Di, President of China Geophysical Society.

Discussions at the symposium among delegates from academia such as Chinese Academy of Sciences, Chinese Academy of Geological Sciences, China Petroleum Exploration and Development Research, government sectors such as China Geological Survey, China Earthquake Administration, and Surveying and Mapping Academy as well as industries such as Beijing Supermap, Aerospace Hongtu, and Zhongdi Digital have concluded that big data and AI will have an important impact on all aspects of earth sciences, and this has brought possibilities with essential technologies to the interdisciplinary integration and innovation of earth system sciences. It is hoped that with the joint efforts of everyone, DDESD should develop into an Asia-Pacific academic organization and eventually become an international society and a member of the IUGS family. More information can be found at

<http://www.ddemr.org/news>



Figure 2. Qiuming Cheng chaired the opening session



Figure 3. John Ludden presenting at the opening session



Figure 4. A group photo taken in front of Haiqin building#4, Sun Yat-sen University, Zhuhai

4. News from the IUGS Initiative on Forensic Geology (IFG)

MDPI Forensic Science Journal: Special Issue on Forensic Geology

The MDPI Forensic Science Journal has agreed a 'Special issue on Forensic Geology'. Information on the special issue or the submission of a paper can be found on the link below or by contacting the IUGS-IFG Crime Scene Adviser (Prof Pier Matteo Barone).

[MDPI Forensic Sciences journal](#)

<https://docs.google.com/document/d/1mEOOdPS09enWmWT52lkL32ZSJ5uM4RPe/edit?usp=sharing&ouid=114453841720862417062&rtpof=true&sd=true>
p.barone@aur.edu

British Delegation Visits the Clean Gold Program in Brazil

On 17 April 2023, the Clean Gold Program was visited by a British delegation. Headed by the UK's Minister of Overseas Territories, Commonwealth, Energy, Climate and Environment at the Foreign, Commonwealth & Development Office; Lord Zac Goldsmith and Stephaine Al-Qaq UK's Ambassador to Brazil. The delegates were provided with an overview of the Clean Gold Program and examined gold samples recently collected at the Yanomami Indian Territory, in Amazonia, Brazil.

Crime Museum and Forensic Soil Analysis, USA

The Crime Museum, in Washington DC, USA, provides an educational resource on forensic science, crime history and law enforcement, and also contains information on forensic soil analysis to aid criminal investigations

<https://www.crimemuseum.org/crime-library/forensic-investigation/forensic-soil-analysis/>

Questionnaires on Geophysical Methods Applied in Criminal Investigation

The FBI Laboratory is conducting web-based questionnaires to gather information on the use of metal detectors and advanced geophysical methods (such as ground penetrating radar and electrical resistivity) to search for hidden or buried targets (clandestine graves, weapons, etc.) in criminal investigations. The intent of these questionnaires is to better understand how geophysical methods are deployed for law enforcement investigations and how effective the method was under case specific conditions. The questionnaires are anonymized and providing personal information is optional. Links to the questionnaires and contact details are below.

Geophysical Service Providers in Support of Law Enforcement:

<https://govsurvey.us/survey/808748715106959361>

Law Enforcement use of Geophysical Methods: <https://govsurvey.us/survey/806500985499025409>

Metal Detectors use in Crime Scene Investigations: <https://govsurvey.us/survey/809910645015576577>

Contact email: geophysics@fbi.gov.

Research Questionnaires

These surveys aim to gather information on **metal detectors** and advanced methods (such as **ground penetrating radar, magnetometry, & others**) applied to aid in criminal investigations.

For Law Enforcement Personnel:	For Those Conducting Geophysical Surveys:
Metal Detectors use in Crime Scene Investigations https://geosurvey.us/survey/809910645083529627	Geophysical Service Providers assisting in Criminal Investigations https://geosurvey.us/survey/806748715106959361
Law Enforcement use of Geophysical Methods https://geosurvey.us/survey/806500985496025409	Methods included: Ground Penetrating Radar Electrical Resistivity & Others! Magnetometry Electromagnetic Induction
Not applicable to you? Pass along this information to individuals or groups who may have conducted these types of investigations!	Contact Geophysics@fbi.gov For More Information

Figure 5. FBI Research Questionnaires.

Forensic Geology and the Geological Society of America

On 19 March 2023, the 2023 Northeastern/Southeastern Geological Society of America meeting held a session on 'Geoscience for National Security and Law Enforcement'. IUGS-IFG was represented and included; the goals and methods of forensic soil analysis, environmental DNA in dust and soil, a forensic palynology cautionary tale, standards development, remote sensing (SAR) for detection of illegal dredging, remote sensing for validation of the Kimberly process and the ongoing activities of IUGS-IFG.



Figure 6. IUGS-IFG FBI Adviser (Jodi Webb), presenting at the Geological Society of America (Source: GSA).

Not All Gold is Equal: The Clean Gold Program

IUGS-IFG have been supporting and working in collaboration with the Clean Gold Program in Brazil. The Clean Gold Program was launched in 2019 to enable Federal Police create chemical fingerprints of samples, used to as a baseline to cross-reference the provenance of illegal or suspicious gold. This is aimed at the tackling the growing problem of illegal gold trade by criminal gangs and cartels. An article on the Clean Gold Program can be found on the link below, and a link on the IUGS-IFG involvement: <https://news.mongabay.com/2023/04/gold-library-helps-brazil-crack-down-on-amazons-illegal-mining/> <https://geoscientist.online/sections/news/forensic-geology-and-the-clean-gold-program/>

5. News from INHIGEO

Occasion: Hypothesizing mega-flooding 100 years ago

Author: Victor R. Baker (USA)

Title: J Harlen Bretz and the cataclysmic late Pleistocene mega-flooding origin of the Channeled Scabland

At the beginning of the nineteenth century a great debate emerged between two opposing groups of geologists in their study of the past causes operating on the Earth: “catastrophists” versus “uniformitarians.” The uniformitarian fluvial paradigm began to be questioned in 1923 with the publication of two papers by J Harlen Bretz on the Channeled Scabland.

To know more, open the link below:

<http://www.inhigeo.com/anniversaries.html>

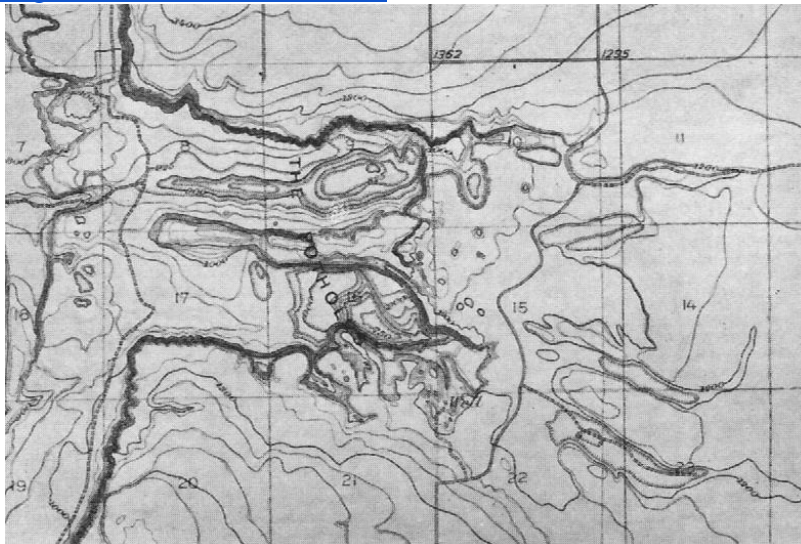


Figure 7. 1910 topographic map of the Potholes cataract published by Bretz (1923a). The contour interval is 7.6 m, and each numbered section square measures about 1.6 x 1.6 km.

6. News from the Commission on Global Geochemical Baselines

The Geochemistry Group of the [Asociación de Servicios de Geología y Minería Iberoamericanos](#) (ASGMI) at their meetings in the beginning of 2023 decided to start the planning of the continental-scale geochemical mapping of Latin American countries by using to begin with readily available data from each country. ASGMI has compiled a general inventory of the existing geochemical data sets of each country, which are included in the ASGMI Geochemical Manual entitled "*Manual de Metodologías Geoquímicas de Países Iberoamericanos: Información Geoquímica para la Sociedad*" (in Spanish). Each country must thoroughly review the available geochemical data for inclusion in the proposed geochemical map based on agreed unit cell size, sample media, analytical methods, etc. This first Latin America and Iberian Peninsula Atlas aims to draw attention to the importance of geochemistry at continental-scale and to open new frontiers of knowledge as achieved in Europe. In the future, the Group hopes to carry out the global-scale geochemical mapping according to the instructions and specifications of the recently published "[International Union of Geological Sciences Manual of Standard Methods for Establishing the Global Geochemical Reference Network](#)".

After the last meeting, the Group contacted Alecos Demetriades (Chair of Sampling Committee) for assistance, i.e., the provision of (a) the shape file of the Latin American Global Terrestrial Network grid cells of 160x160 km, and (b) the Excel files of 5, 8 and 16 random points for future purposes. All requested files were provided (an example is presented in Figure 1).

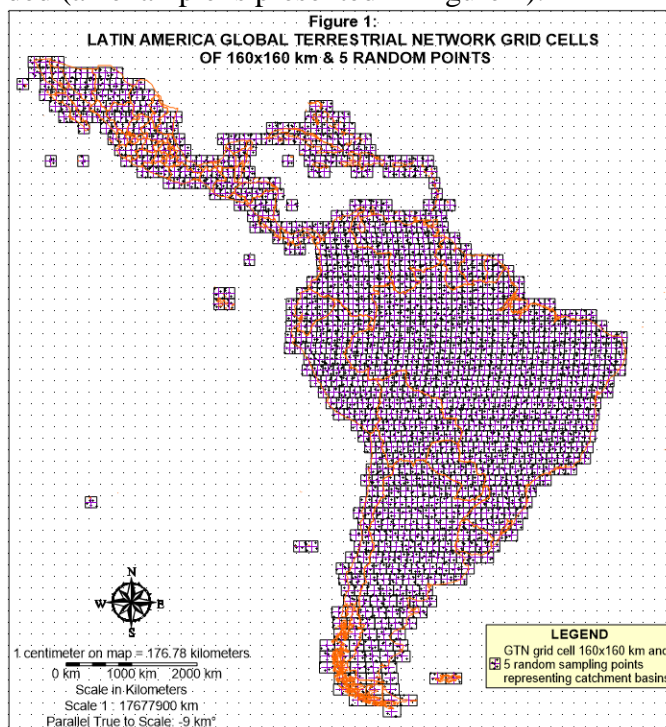


Figure 8. Latin American Global Terrestrial Network grid cells of 160x160 km & 5 random points



For the IUGS website: A one-page concise text (up to about 500 words), if possible providing a web-link (e.g. to an IUGS activity website). **Each contribution to the IUGS e-Bulletin, website and/or social media should be marked as to which target medium or media it should be published in. Each contribution should be sent, at the same time, to the following addresses:**

gurmeet28374@gmail.com (Editor, e-Bulletin)
giuseppe.dicapua@ingv.it (Webmaster)
yamirka.rojas@ifg.uni-kiel.de (Editor, Social Media)
mdaniela.munozg@gmail.com (Social Media)

Time Frame for submissions to the e-Bulletin:

1. IUGS sends a reminder to leaders of activities in the last week of each month;
2. Contributions should be provided by the 16th day of every month.
3. IUGS will evaluate all submitted items in terms of urgency and will allocate these to the next monthly issue or a later issue and will also check that these comply with IUGS policy for publications and ethics;
4. The IUGS Publications Committee Team will aim to compile monthly e-Bulletin by the 25th day of the month and send it to the IUGS Secretariat;
5. The IUGS Secretariat will dispatch the e-Bulletin to the IUGS Community on, or before, the last day of each month;

This time frame may vary due to public holidays that affect the e-Bulletin Team and IUGS Secretariat such as Christmas and Chinese New Year.

NOTES

- Please check the IUGS [Calendar of Events](#) for upcoming scientific meetings. If you require information on international conferences, meetings, etc. to be considered for inclusion in this Calendar please mail to: giuseppe.dicapua@ingv.it
- To be added to or removed from the IUGS e-Bulletin distribution list, please mail to: iugs.beijing@gmail.com or secretariat@iugs.org
- Follow the IUGS on Social Media! We are on [Facebook](#), [Twitter](#), and [LinkedIn](#).
- Check the IUGS website: <http://www.iugs.org/>

Edited by: Dr. Gurmeet Kaur, Panjab University, Chandigarh, India

www.iugs.org