
IUGS E-BULLETIN (NO. 47, JANUARY 2010)

TRAGIC EARTHQUAKE HITS HAITI

As we were going to press with this latest IUGS e-Bulletin, a magnitude 7.0 earthquake struck Haiti, near the city of Port-au-Prince on 12 January 2010 causing immeasurable loss of life and damage to critical infrastructure. As we usher in the year 2010, we are humbly reminded that many tragedies around the world often relate to the dynamic nature of planet Earth. As Earth Scientists, we all well appreciate the need to better understand the causes of natural hazards. It is terrible and unfortunate that events such as earthquakes, tsunamis, landslides and volcanic eruptions continue to impact such significant numbers of people around the world. Our collective efforts through geoscience education, practical field research and innovative studies can help to minimize the risks of natural hazards, reduce human vulnerability and enhance the safety of the global society. On behalf of the many geoscientists represented by the IUGS, we send our heartfelt condolences and sympathies to the many people affected by this recent catastrophe.

The IUGS has maintained a resolution on natural disasters which is outlined as follows

**A RESOLUTION OF THE INTERNATIONAL UNION OF
GEOLOGICAL SCIENCES (IUGS)**

Whereas major natural disasters heighten awareness of the existence of geological hazards worldwide The International Union of Geological Sciences (IUGS) recognizes:

1. That earthquakes, on-land landslides, floods, and volcanic eruptions constitute significant potential for natural disasters;
2. That a substantial portion, if not most, of the global human population resides in areas characterized by significant risk of the occurrence of natural disasters;
3. That the tendency of the International Community to concentrate on reaction to natural hazards, rather than on preparation and their mitigation, operates to increase their cost to amounts much greater than that of preparation and mitigation;
4. That the lack of education in and awareness of Geological Sciences worldwide tends to decrease awareness of the possibility of natural disasters and preparation for them and thus exacerbate their human and economic toll when they inevitably occur;
5. That in the aftermath of a natural disaster, widespread knowledge of the geological sciences and of existing technology could assist rescue agencies and civil defense managers to obtain faster understanding of the extent of the damage from the event and how to cope with it;
6. That the reduction of the predictive uncertainty of a natural disaster is the most important issue in natural hazards reduction, but that reduction requires a thorough

understanding of the nature of the geological processes giving rise to the disaster.

7. That the reduction of damages by a natural disaster requires a series of actions previous to its occurrence, where the understanding of the geological scenario is essential to a sound and safe planning of human settlements.

THE IUGS RECOMMENDS:

1. That systems and procedures be established for early warning, developing public awareness including Geological Science education, regional evacuation routes, and shelters with locations based on appropriate geological information, including maps of existing geological hazards;
2. That comprehensive education in the Geological Sciences, including knowledge of local geological hazards and their risk, become an integral part of education systems at all levels and in all countries;
3. That regional disaster management systems be organized where they do not now exist, and that existing disaster management systems be made more effective, and that these systems take steps effectively to monitor known indicators of all natural disasters;
4. That multidisciplinary and multinational research programs and research networks on Geological hazards and risks be developed to improve the professional and public awareness of and understanding of the phenomena associated with such hazards, and that efforts be increased to develop forecasting capability of such hazards;
5. That international agencies and developed countries should provide economic and technical help to support the above mentioned programs and systems within developing countries with regions characterized by significant risk of the occurrence of natural disasters, in the understanding that any help provided before a disaster occurrence surely will save more lives than if the same help is provided afterwards.

THE IUGS RESOLVES:

1. To continue promoting the development and application of scientific expertise and experience in understanding the geological forces at work in the development of all types of natural hazards and the processes involved in their mitigation of natural hazards;
2. To continue sharing this information as freely as possible with other members of the scientific community, government officials, policy makers and planners, the insurance industry, and the public as a whole.

IUGS NEW WEBSITE

The IUGS has launched a new website which will be more informative and easier to use. The address remains the same at: <http://www.iugs.org/>.

Remember to frequently visit the site to see news updates and current information. If you are unable to activate any part of the site or detect any problems please advise the IUGS Secretary General email: Peter.Bobrowsky@NRCan.gc.ca and the IUGS Secretariat email: iugs@usgs.gov

TRANSFER OF THE IUGS SECRETARIAT

As reported in E-bulletin No. 45 the office of the IUGS Secretariat is now officially operating from the US Geological Survey in Reston Virginia. Please note the new contact details of the Secretariat: Postal address: IUGS Secretariat, MS-917, US Geological Survey; 12201 Sunrise Valley Drive; Reston VA 20192, USA. Email address: IUGS@usgs.gov

ATTENDING THE 34TH 2012 INTERNATIONAL GEOLOGICAL CONGRESS (IGC) IN AUSTRALIA?

It is now less than 20 months until the 34th International Geological Congress in Brisbane, Australia from 2-10 August 2012 (website [<http://www.34igc.org/>](http://www.34igc.org/)). E-Bulletin #35 contained an invitation to participate in the 34th IGC, and to promote the event to others. To assist the IGC Planning Committee - and to get your name on the list for future announcements - if you are planning to attend, or thinking about attending, or planning to give a paper, or wish to suggest a session etc, or wish to exhibit/sponsor at the Congress you are invited to register your interest now on the IGC website at [<http://www.34igc.org/expression-of-interest.html>](http://www.34igc.org/expression-of-interest.html), through the "Register your interest" tab. If you subsequently register your details you will be amongst the first to be advised when IGC registration opens in 2011. Registrations received within the first 100 days of Early Bird registration opening will be in the running to win a free airfare (economy class) to Australia. Also visit the website to check out some of the wide range of scientific tours/field-trips currently being planned in Australia, New Zealand, and Malaysia etc. Go to the "Technical Tours" tab at the bottom of the IGC website front page at [<http://www.34igc.org/>](http://www.34igc.org/).

GEOINDICATORS - TOOLS FOR ACCESSING RAPID GEOLOGICAL CHANGES

Though formal IUGS participation in their Geoindicator Initiative ended in 2005, an extensive Geoindicators website of information relating to monitoring rapid abiotic landscape change is being maintained by the Lithuanian Geological Survey at [<www.lgt.lt/geoin/>](http://www.lgt.lt/geoin/). The latest addition is a new translation of the annotated geoindicators checklist into Spanish "Introducción a los GEOINDICADORES", carried out by N.J. and A.M. Bejerman (Cordoba, Argentina), under the umbrella of the Asociación Argentina de Geología Aplicada a la Ingeniería. The Spanish checklist (pdf) can be downloaded at [<http://www.lgt.lt/geoin/files/spanish_flyer.pdf>](http://www.lgt.lt/geoin/files/spanish_flyer.pdf). As concern over climate and environmental change grows worldwide, the importance of tracking of changes in landscapes and ecosystems is being more widely recognized. On a global scale this is an implicit theme in the recent magisterial overview by J. Rockström and others of "A Safe Operating Space for Humanity" (Nature, 461 472-475, 2009). The need for careful tracking of environmental change is also emphasized in two new books.

"Landscapes on the Edge: New Horizons for Research on Earth's Surface" (National Academies Press, Washington DC) and "Geological Monitoring" edited by R. Young and L. Norby (Geological Society of America).

PLEASE ASSIST WITH THIS IMPORTANT IUGS-GEM SURVEY

The Working Group on "Communicating Environmental Geoscience" (CEG) <<http://sites.google.com/a/iugs-gem.org/iugs-gem-communicating-environmental-science/Home>> of the IUGS Commission "Geoscience for Environmental Management" (IUGS-GEM) <<http://www.iugs-gem.org/>> is surveying environmental geoscientists on their attitude to, and experience of, communicating their results to the public, policy makers, and others. The objective of the survey is to determine attitudes of environmental geoscientists towards communication and public engagement, as a compliment to similar surveys of scientists in general. Previous surveys have been country-specific, so the aim is to make this survey as international in scope as possible. We hope to publish the results of the survey in a refereed paper. We believe the results will be of interest to many working in environmental geoscience.

There are 39 questions, most of which require only short answers, but there is also the opportunity to provide more extended answers if you choose. The survey should take 20-30 minutes to complete.

You can take the survey online in either English or Spanish versions
English -
<http://www.surveymonkey.com/s.aspx?sm=MlcLa8yth99Gfqj_2fChKnsg_3d_3d>

Spanish -
<http://www.surveymonkey.com/s.aspx?sm=yvNigB6HK8fwZ4umjODNzQ_3d_3d>

Please distribute this information to any environmental geoscientists you may know, as GEM needs a good response rate to make meaningful conclusions.

THE BRITISH GEOLOGICAL SURVEY'S NEW OPENGEOSCIENCE WEBSITE

On 7 December the British Geological Survey launched a new web site - OpenGeoscience - the world's first open-access supply of street-level geological mapping for a whole country with on-the-fly viewing of bedrock and superficial geology overlaid on street maps and aerial photography at a resolution better than 50m. The OpenGeoscience material is free-of-charge for non-commercial private study, research, and educational activities. Users can explore the six OpenGeoscience sections - Data, Education, Maps, Pictures, Reports and Software on an easy-to-use web interface. On the day the OpenGeoscience web was launched it had over 70,000 visitors resulting in more than 10 million image hits. To view the free access site go to:
<<http://www.bgs.ac.uk/opengeoscience/>>

PUBLICATIONS, JOURNALS AND NEWSLETTERS

EPISODES - NEW WEBSITE

Now that the IUGS magazine Episodes is published in India it has a new website address at <<http://www.episodes.co.in>>. The website also

contains information on the editorial contact address, subscriptions, and the email address for sending manuscripts etc. Bookmark this new address in your computer.

--The International Council for Science (ICSU) - the non-governmental organization representing a global membership that includes both national scientific bodies (117 members) and international scientific unions (30 members) including the IUGS - produces their newsletter "Insight" that is available at:
<http://www.icsu.org/2_resourcecentre/RESOURCE_list_base.php4?rub=12>

--The International Association of Hydrologists (IAH) newsletter "IAH Groundwater eNews" is available at:
<http://www.iah.org/news_eneews.asp>.

--The International Erosion Control Association (IECA) journal "Erosion Control" is available at: <<http://www.ieca.org>>.

--The International Geographical Union (IGU) - Union Géographique Internationale (UGI) Quarterly E-Newsletter is available at:
<<http://www.homeofgeography.org/>>

--The International Union for Quaternary Research (INQUA) newsletter "Quaternary Perspectives" is available at:
<http://www.inqua.tcd.ie/publications_quaternary_perspectives.html>

--The International Union of Geodesy and Geophysics (IUGG) electronic Journal is available at: <<http://www.iugg.org/publications/ejournals>>.

--The International Union of Soil Sciences (IUSS) Bulletin is available at: <<http://www.iuss.org/index.htm>>.

--UNESCO Global Geoparks Network - keep up to date with current activities at <<http://www.globalgeopark.org/publish/portall1/tab59/>>

-- The inaugural issue of the International Geosphere-Biosphere Programme (IGBP) "Global Change" magazine (which takes over from IGBP's newsletter) is now available for download. Articles span a wide range of topics, including: recent carbon-cycle research, planetary boundaries, the global carbon budget, and China's urban emissions.
<<http://www.igbp.net/page.php?pid=231>>

--Springer's Environmental Journals - Free Access to latest issues. The Springer Environmental Sciences Reading Room is a free service that provides unlimited access to Environmental journals, 6 times a year. Go to: <<http://sci.scientific-direct.net/c.asp?814564&a0979e101192e124&3>>

--The Earth Portal website includes a free weekly newsletter that you can view at: <<http://www.earthportal.org/news/>>.

--The "Earth Science India e-Journal" is now available on the web at: <<http://www.earthscienceindia.info/>>. This open access quarterly e-journal is a not-for-profit website under the umbrella of The Society of Earth Scientists and is devoted to the development of Earth/Environmental Sciences of India.

--Earthscan, has a new journal "Environmental Hazards" addressing the full range of extreme geological, hydrological, atmospheric and biological hazard events. For more information see: <http://www.earthscan.co.uk/?tabid=37213>. For Enquiries email to: journals@earthscan.co.uk.

--ProGEO The European Association for the Conservation of the Geological Heritage publishes a quarterly newsletter ProGEO NEWS available online at <http://www.progeo.se/index.html>.

--Visit the website of the International Medical Geology Association (IMGA) at <http://www.medicalgeology.org/>. The "NEWS" button on the Home Page provides the latest information on activities, conferences, etc.

--The latest International Geosphere-Biosphere Programme NEWSLETTER can be downloaded at: <http://www.igbp.net/page.php?pid=231>.

--The National Ground Water Association (NGWA) of the USA hosts an ongoing series of events and educational courses. For information visit their website at <http://www.ngwa.org/DEVELOPMENT/index.aspx>.

--The book "PaleoParks - The protection and conservation of fossil sites worldwide" by Jere H. LIPPS & Bruno R.C. GRANIER (Special Editors) is available free. See: http://paleopolis.rediris.es/cg/uk-bookmarks.html#CG2009_BOOK_03.

--The Geological Societies Africa (GSAf) website has the Newsletters/Bulletins of Eastern Africa GSAf, Northern Africa GSAf, Southern Africa GSAf, and Western Africa GSAf. Go to: <http://www.geologicalsocietyofafrica.org/news/newsletter/>. To receive the GSAf newsletters via email contact Dr. Abdelkader Saadallah at: kader@saadgeo.com. GSAf website: <http://www.geologicalsocietyofafrica.org>.

FORTHCOMING MEETINGS

For a listing of forthcoming geoscience meetings, conferences, and workshops of interest check the Calendar section of the IUGS website: <http://www.iugs.org/Calendar.html>.

February 4-7, 2010. 6th International Dyke Conference. held at Department of Geology, Banaras Hindu University, Varanasi, India. Theme: "Dyke swarms: Keys for Geodynamic Interpretation". Web: <http://idc6.igpetbhu.com>. Contact person: Dr. Rajesh K. Srivastava, Professor of Geology, Banaras Hindu University, Varanasi 221 005, India. Email: 6idc2010@gmail.com, or rajeshgeolbhu@gmail.com.

April 6-9, 2010. 13th Quadrennial IAGOD (International Association on the Genesis of Ore Deposits) Symposium "Giant ore deposits down-under". Adelaide Convention Centre, Adelaide, South Australia. Includes pre- and post conference fieldtrips. Details at: <http://www.alloccassionsgroup.com/IAGOD2010>.

April 11-15, 2010. National Ground Water Association (NGWA) Ground Water Summit and 2010 Ground Water Protection Council Spring Meeting.

The Westin Tabor Center, 672 Lawrence Street, Denver, Colorado, USA. This year's annual vent with the theme "Groundwater for a Thirsty World," will focus on groundwater's role as a global resource. <http://www.ngwa.org/summit2010/index.aspx>.

April 11-17, 2010. The 5th Conference of the African Association of Women Geoscientists. Grand-Bassam, Côte d'Ivoire. Theme "Women & Geosciences for Peace". First circular http://www.aawg.org/AAWG/IMG/pdf/CAAWG5_first_circular-2.pdf. Contact: Juliette Tea, President AAWG-CI & Chairwoman of the conference, email: jtea@petroci.ci. Consult the website at www.aawg.org

April 26-28, 2010. 1st International Applied Geological Congress. Department of Geology (IAGC), Faculty of Sciences Islamic Azad University - Mashhad Branch (IAUM) Mashhad-Iran. Theme "New Directions of Investigations in Earth Sciences and Related Subjects". Email: info@iagc.ir; Web: <http://www.iagc.ir/>.

April 26-30, 2010. INTERPRAEVENT 2010 International Symposium in PacificRim. Taipei, China. The main topic of the symposium "Natural Disasters Mitigation Including Floods, Storms, Debris flows, Mass movements and Earthquakes etc." Abstracts submitted on the web at: <http://interpraevent2010.nchu.edu.tw/>.

May 10-14, 2010. Advanced Conference on Seismic Risk Mitigation & Sustainable Development, Trieste, Italy. First announcement and Online application available at: http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a09145 Local Organizer Prof. G.F. Panza email: stnr2142@ictp.it

May 21-23, 2010. Society for Sedimentary Geology (SEPM) Field Conference on "Microbial Mats in Siliciclastic Sediments from the Archean to Present", Denver, Colorado, and Dinosaur Ridge, Denver, USA. Visit the website at: http://www.sepm.org/activities/researchconferences/microbial/microbial_home.htm Convenors: Nora Noffke nnoffke@odu.edu and Henry Chafetz hchafetz@uh.edu.

May 26-29, 2010. 15th Congress of the Geologists of Serbia with international participation. Belgrade, Serbia. Organised by the Serbian Geological Society, the Faculty of Mining and Geology, and the Association of Geological Engineers and Technicians. The Congress events will include plenary sessions, oral and poster sessions, panel discussions, special sessions and field trips. See: <http://www.nsgd.org/> and <http://www.nsgd.org/15Congress2010/English.htm>

June 3-6, 2010. International Geobiology Conference 2010 (ICG2010). China University of Geosciences, Wuhan, China. Sponsors include: ICS, IPA, IGCP507, IGCP555, IGCP572, NSFC etc. Web: <http://www.geobiology.net.cn/2010meeting>.

June 13-17, 2010. Third European Conference on Permafrost (EUCOP111). Svalbard, Norway. See the website at: <http://www.eucop2010.no>. Organizers contacted email: post@EUCOP2010.no.

June 13-18, 2010. Goldschmidt 2010 -"Earth, Energy, and the Environment". Knoxville, Tennessee, USA. The Goldschmidt Conference is the premier international meeting for geochemistry; Full details at: <http://www.goldschmidt2010.org/index>.

June 15-17, 2010. International Groundwater Conference "Toward Sustainable Groundwater in Agriculture: An International Conference Linking Science and Policy". Hyatt Regency, San Francisco Airport, Burlingame, California, USA. Organized by the Water Education Foundation and the University of California, Davis. Cosponsors include the Groundwater Resources Association of California, the International Association of Hydrogeologists, and the USGS. Note the abstract submission deadline has been extended until January 18, 2010. Full details at www.ag-groundwater.org

June 20-25, 2010. The 10th International Multidisciplinary Scientific GeoConference & Expo (SGEM 2010) will be held at the Flamingo Grand Congress Centre, Albena Resort Complex, Bulgaria. Theme "Modern management of mine producing, geology and environmental protection". Information and online registration at www.sgem.org. Secretariat Bureau Tel: +359 2 975 3982, E-mail: sgem@sgem.org or sgem@stef92.com

July 1-14, 2010. INHIGEO Symposium 35 - Madrid-Almadén, SPAIN. The International Commission on the History of Geological Sciences Annual Conference. Theme: "History of Research in Mineral Resources". Scientific Sessions 5-10 July, 2010. The conference language will be English. Website: <http://www.inhigeo.org>. First Circular available at www.sedpgym.org/inhigeo2010 or www.colegiominas.com/download/fichero_portada/sgpym.doc. Abstract deadline 30 April 2010. Conference Secretary: José Eugenio Ortiz Menéndez, email: joseeugenio.ortiz@upm.es.

July 10-18, 2010. The 8th International Conference of INZA on the Occurrence, Properties and Utilization of the Natural Zeolite "Zeolite2010", Sofia, Bulgaria (including field-trip). See: <http://www.zeolite2010.org>.

August 1-6, 2010. The 19th World Congress of Soil Science, Brisbane, Australia. Theme "Soil Solutions for a Changing World". See: <http://www.19wcscs.org.au/>.

August 8-13, 2010. AGU Joint Assembly, Iguassu Falls, Brazil. All topics of the Earth Sciences will be covered: Earth, Oceans, Atmosphere, Space & Planets. This "Meeting of the Americas" is co-sponsored by the Brazilian Geophysical Society, IASPEI, and many other Latin-American organizations. Abstracts will be accepted in February-March 2010. More information at: <http://www.agu.org/meetings/ja10>.

August 29-September 4, 2010. SEISMIX 2010. The 14th International Symposium on Deep Seismic Profiling of the Continents and their Margins. Cairns, Australia. Major sponsors - Geological Society of Australia, Geoscience Australia, and IGCP 559, Research School of Earth Sciences, Australian National University. Contact Seismix10@ga.gov.au. For further information see: <http://www.earthscrust.org/earthscrust/seismix2010.htm>.

August 30–September 2, 2010. STRATI 2010 The 4th French Congress of Stratigraphy. Paris 6 (UPMC), France. (The main official language will be English). This international event is hosted by the University Pierre and Marie Curie. Website (construction) at <http://paleopolis.rediris.es/STRATI2010/>. Additional information available at <http://strati-info.blogspot.com/2009/02/strati-2010-4-eme-congres-francais-de.html> and <http://www.univ-brest.fr/geosciences/CFS/>.

August 30–September 3 2010. 6th Quadrennial Conference of the International Geoscience Educators Organisation (IGEO) Johannesburg, South Africa.
See: <http://web.wits.ac.za/NewsRoom/Conferences/GeoSciEd>.

September 5–9, 2010. International Mine Water Association IMWA 2010 Symposium. Cape Breton University, Sydney, Nova Scotia, Canada. Theme "Mine Water & Innovative Thinking" Website <http://www.IMWA2010.info>. Announcement and call for Abstracts see: http://www.imwa2010.info/docs/IMWA2010_1stcall.pdf Abstract deadline January 15, 2010. Conference Secretary Amy Kokoska: amy@IMWA2010.info.

September 12–16, 2010. The 6th Canadian Conference on Permafrost (CanCOP6) in conjunction with the 63rd Canadian Geotechnical Conference. Calgary, Alberta, Canada. Web: <http://ninja.pro.net/disk2/geocalgary10/papers.php?lang=en>. Contact: Jim Henderson, email: permafrost@geo2010.ca

September 15–18, 2010. International Conference on Geoevents, Geological Heritage, and the Role of the IGCP. Caravaca de la Cruz, Spain. Jointly organized by the Spanish Committee for the IGCP, and the European Association for the Conservation of Geological Heritage. Sponsored by the Caravaca de la Cruz Municipal Council. Web: <http://www.ugr.es/~mlamolda/congresos/geoevents/>.

September 23–26, 2010. 19th Congress of the Carpathian-Balkan Geological Association (CBGA 2010). Thessaloniki, Greece. Web with Second Circular at: <http://www.cbga2010.org/>. Send your questions to: info@cbga2010.org.

September 26–October 1, 2010. 45° Congresso Brasileiro de Geologia. Bethlehem, Para, Brazil. – The 45th Brazilian Congress of Geology with the theme "Development and Global Change: The Importance of Geosciences". Information at: <http://www.45cbg.com.br>.

September 30–October 9, 2010. Society of Economic Geologists 2010 Conference (SEG2010). Keystone Resort, Colorado, USA. "The Challenge of Finding New Mineral Resources: Global Metallogeny, Innovative Exploration, and New Discoveries." Pre-and post field trips and short courses planned. Contacts */abstract dates etc.* <http://www.seg2010.org/>.

November 15–17, 2010. 6th Nepal Geological Congress. Kathmandu, Nepal. More than 450 participants from 56 countries are expected to participate in this congress on the occasion of the 30th Anniversary of the Nepal Geological Society. For more information, including the First Circular with Pre-registration Form and Abstract details, see <http://www.ngs.org.np/>.

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January 8-14, 2011. 23rd Colloquium of African Geology (CAG23) theme "Together in Africa for a leading role in Geosciences". University of Johannesburg, South Africa. The CAG is being held for the first time in South Africa. Scientific contributions in all aspects of geosciences are very welcome with particular emphasis on new methodologies and applications to the benefit of the society. Expressions of interest by 31/12/2009. Deadline for early registration & abstracts submission 30/06/2010. Deadline for late registration & abstracts submission 30/09/2010. For details see: <http://www.cag23.co.za/>.

April 8-11, 2011. IV Cuban Earth Science Convention. Convention Palace, Havana, Cuba. Full details at: <http://www.cubacienciasdelatierra.com>.

July 20-27, 2011. International Union for Quaternary Research (INQUA) XXVIII Congress. Bern, Switzerland.

Web: <http://www.inqua.tcd.ie/congress.html>

August 1-5, 2011. 10th International Congress for Applied Mineralogy (ICAM2011). Trondheim, Norway. Regularly check for updates and register your address on the ICAM mailing list at www.icam2011.org or contact: secretary.icam2011@ngu.no.

August 22-26, 2011. 25th International Applied Geochemistry Symposium (IAGS2011). Rovaniemi, Finland. Jointly organized by the Geology section of the Finnish Association of Mining and Metallurgical Engineering, the Geological Survey of Finland, the Institute of Geosciences-University of Oulu, the Association of Applied Geochemists (AAG), and with support from professionals in the mineral exploration industry. Deadline for abstracts 31 March 2011. Full details at: <http://www.iags2011.fi/>.

With best regards,
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