

IUGG BERLIN 2023



THE 28TH GENERAL ASSEMBLY
OF THE INTERNATIONAL UNION
OF GEODESY AND GEOPHYSICS

Together Again
for Geosciences

11-20 JULY 2023

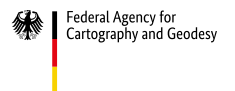
IUGG BERLIN 2023 PROGRAM

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**Planet Earth represents
the basis for all our lives,
its resources are limited.**

**This is why BGR is committed to protecting
the human habitat and promoting the sustainable
use of natural resources.**



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Welcome from the IUGG Leadership



Kathryn Whaler
IUGG President



Alexander Rudloff
IUGG Secretary General

A very warm welcome to Berlin for the 28th General Assembly (GA) of the International Union of Geodesy and Geophysics! We have a superb location, in both the city of Berlin, and the Messe City Cube, our Assembly venue.

Four years ago when we met for the centenary GA in Montréal, Canada, we had no inkling of the events to come that would impose sudden and drastic changes to our lives and livelihoods. We hope you are all looking forward to the opportunity to interact again in person, after long years of restrictions imposed by the pandemic – so the GA theme ‘Together Again in Geosciences’ is well chosen. But in this time we have also seen more extreme weather events, happening at a rate and intensity higher than many forecasts, which are at least contributed to by anthropogenic greenhouse gas emissions. So let’s make every minute of our GA count, to justify the emissions associated with it – from our travel and on site. We have a busy programme of disciplinary and interdisciplinary symposia, with oral and poster presentations, business meetings, opening and closing ceremonies, including award presentations, Union lectures, celebrating our early career scientists, and for the first time, a series of lunchtime ‘Big Themes’, plus many opportunities for the spontaneous and informal interactions we have all been missing. There are also plenty of other activities adding value to the GA, such as workshops, training and social events, fieldtrips, summer schools and meetings of related groups. We hope everyone finds the venue and its facilities conducive to presenting and learning about the latest advances in our science, establishing new collaborations, discussing the implications and impact of our results, and finding new opportunities. In addition, our GA offers the opportunity to contribute to deliberations and decisions about issues such as data principles and standards, observing protocols, model endorsement, definitions of parameters and indices, and making our science actionable, especially around climate change, 2030 UN Agenda for Sustainable Development, and building resilience to natural hazards with the Sendai Framework for Disaster Risk Reduction. The latest IPCC report catalogues that the world is at serious risk of failing to restrict temperature rises to 2°C, and the 2022 mid-term report shows that progress towards the Sustainable Development Goals is badly off track, with many targets further from being achieved than when the Agenda was adopted in 2015. Our science can contribute to delivering the results we all hope for to make our world a better place for all, as well as satisfying our natural curiosity to understand our environment and how our planet works.

The Local Organising Committee (LOC), Chaired by Harald Schuh, together with its professional conference organisers, C-IN, have worked under huge uncertainty owing to the pandemic to bring the Assembly to fruition. Our thanks also go to the GFZ, German Research Centre for Geosciences, for taking on the role of host organisation. We have had countless extremely nervous moments to get to this point! It is very pleasing that we have abstract submission and registrant levels comparable with recent GAs. Our splendid programme has been carefully crafted by the Scientific Programme Committee (SPC), under the leadership of Jürgen Müller, dependent on the knowledge, wisdom and cooperation of our Association Secretaries General.

We wish you all a scientifically stimulating and productive GA, lively discussions, and an enjoyable stay in Berlin.

Kathryn Whaler
IUGG President

Alexander Rudloff
IUGG Secretary General

The IUGG thanks the German Research Foundation (DFG) for its long-standing support.

Welcome from the LOC Chair



Harald Schuh
Chair, Local Organizing
Committee, IUGG2023

Dear IUGG2023 Delegates, colleagues and guests,

Welcome to Berlin! On behalf of the Local Organizing Committee, I am happy to welcome you to the 28th IUGG2023 General Assembly of the International Union of Geodesy and Geophysics at the CityCube in Berlin.

This General Assembly is a special opportunity for participants from around the world to come together and discuss the full range of geodetic and geophysical themes, and further enhance the important interdisciplinary collaboration for a better understanding of our Earth System. IUGG2023 will provide a platform for personal meetings, exchange of ideas and developing new concepts for international science collaboration, all of which have suffered a setback during the recent pandemic crisis. IUGG2023 will help to create a new spirit to address pressing large societal challenges such as global environmental change and natural hazards and to stimulate novel geoscience research. The Berlin-Brandenburg region has one of the largest geoscientific clusters in the world. Participants will have the opportunity to meet their scientific partners from many projects in person, here in Berlin, or to combine this with a visit to the research organizations GFZ, AWI, DLR and others. An exciting excursion program is offered, in particular an attractive program for young scientists to provide them with opportunities for exchange, presentation and discussion beyond the sessions.

After the fall of the Berlin Wall in 1989, the city of Berlin changed significantly, transforming into the dynamic, creative and highly innovative cosmopolitan capital of today's Germany. As a visitor you come to understand why Berlin is ranked as one of the most liveable cities, with its many sights, attractions and UNESCO World Heritage Sites, and experience its extensive, fast and secure public transportation system and its lush natural environment.

I would like to thank all the members of the Local Organizing Committee and the Scientific Program Committee for their hard work in preparing the IUGG2023 General Assembly, as well as our dedicated team of volunteers who will ensure that everything runs smoothly during the conference sessions. Thanks also to Alexander Rudloff, the IUGG Secretary-General, for his valuable input, and to Franz Kuglitsch, the IUGG Executive Secretary, for invaluable advice, information and participation in our promotional activities at EGU and AGU.

I also thank the German National Committee of Geodesy and Geophysics (NKGG), that won the bid for getting the General Assembly to Germany, the GFZ Helmholtz Center Potsdam as main host of the conference and the four co-organizers (Federal Institute for Geosciences and Natural Resources (BGR), Federal Agency for Cartography and Geodesy (BKG), Helmholtz Association, and Geo.X). Finally, my thanks go to the C-IN company (Czech Republic) our professional congress organiser (PCO) that handled abstract submission, travel-grant management, all aspects of the scientific program, registration and all logistical aspects of the conference.

On behalf of the Local Organizing Committee (LOC) of IUGG2023, I welcome you to Berlin.

Harald Schuh
Chair, Local Organizing Committee,
IUGG2023

Welcome from the SPC Chair



Jürgen Müller
Chair, Scientific Program
Committee, IUGG2023

Dear colleagues, guests and friends,

On behalf of the IUGG2023 Scientific Program Committee (SPC), it is a great pleasure to welcome you to the 28th General Assembly of the International Union of Geodesy and Geophysics in Berlin.

The Scientific Program Committee, basically the secretaries-general of the eight associations and the Union have worked hard for almost three years to prepare a unique program. It covers the full spectrum of geodesy and geophysics, including observation issues from space and on ground, data analysis and integration, modelling and interpretation towards a better understanding of the complex processes in the Earth's system. It tackles specialized research questions as "How can quantum technology benefit the geosciences" as well as urging themes like "Understanding the complex interaction of geosciences and climate change". We will also address topics like science education, international cooperation and the geosciences in developing countries.

We received excellent support by our professional congress organizer C-IN from the Czech Republic as well as by the LOC chaired by Harald Schuh from GFZ. Many thanks for this great team work.

More than 5,000 abstracts have been submitted for about a total of 200 Union, association and inter-association symposia including Union lectures. About 3,500 presentations will be given in oral sessions and about 1,500 as posters, which are presented in close vicinity of the exhibition. Special events are organized for early career researchers where more than 1,300 from 59 countries will attend this IUGG GA. Thus, platforms for scientific exchange and networking are offered at various levels.

We are happy to welcome you in the CityCube of Messe Berlin and looking forward to spend together inspiring days with fruitful discussions at the IUGG2023.

Jürgen Müller

Chair, Scientific Program Committee, IUGG2023

Welcome by the GFZ's Executive Board



Susanne Buitter
Scientific Executive
Director

Dear colleagues, guests and friends at IUGG,

What could be more beautiful and inspiring than a summer in Berlin and Potsdam? The answer is simple: A summer with the IUGG in Berlin and Potsdam! It is an honour and a pleasure for the GFZ German Research Centre for Geosciences to welcome you to the General Assembly, even more so as it only takes place every four years. We hope you will be impressed by the Berlin-Brandenburg region with its unique collection of geoscientific expertise and rich scientific history. We invite you to visit Telegrafenberg in Potsdam, not only a cradle of modern geodesy, but a place that unites so many geoscientific disciplines that the concept of "System Earth" becomes truly tangible here.

The IUGG General Assembly is only possible through the dedication of the Organizing Committee, to whom we would like to express our sincere thanks, and through the support of many partners, to whom great thanks are also due. We would specifically like to mention our sister centres AWI and GEOMAR within the Helmholtz family as well as the federal agencies BGR, BKG, the German Research Foundation DFG and the Federal Ministry of Education and Research. However, the IUGG can only become a real success through you, dear delegates and guests; you, who are involved in the geosciences, in lively discussions – and who hopefully are inspired by the science, culture and sights of our region.

Welcome to the IUGG's General Assembly!

Susanne Buitter

Scientific Executive
Director and Spokesperson
of the Executive Board

Stefan Schwartze

Administrative Executive
Director



Stefan Schwartze
Administrative Executive
Director

About the International Union of Geodesy and Geophysics (IUGG)

The International Union of Geodesy and Geophysics (IUGG) is an international, non-governmental, non-profit scientific organization, established in Brussels on 28 July 1919.

IUGG is one of about 40 scientific Unions and Associations presently grouped within the International Science Council (ISC). IUGG is dedicated to the international promotion and coordination of scientific studies of Earth (physical, chemical, and mathematical) and its environment in space. These studies include the shape of the Earth, its gravitational and magnetic fields, the dynamics of the Earth as a whole and of its component parts, the Earth's surface, internal structure, composition and tectonics, earthquakes and elastic wave propagation, the generation of magmas, volcanism and rock formation, the hydrological cycle including snow and ice, all aspects of the oceans, the atmosphere, and the cryosphere including climate dynamics, the ionosphere, magnetosphere and solar-terrestrial relations, and analogous problems associated with the Moon and other planets. IUGG encourages the application of this knowledge to societal needs, such as the development of mineral resources, mitigation of natural hazards and environmental preservation.

International Union of Geodesy and Geophysics



Union Géodésique et Géophysique Internationale

IUGG consists of 8 semi-autonomous International Associations

Each association is responsible for a specific range of topics or themes within the overall scope of Union activities.



INTERNATIONAL ASSOCIATION OF CRYOSPHERIC SCIENCES (IACS)



INTERNATIONAL ASSOCIATION OF GEODESY (IAG)



INTERNATIONAL ASSOCIATION OF GEOMAGNETISM AND AERONOMY (IAGA)



INTERNATIONAL ASSOCIATION OF HYDROLOGICAL SCIENCES (IAHS)



INTERNATIONAL ASSOCIATION OF METEOROLOGY AND ATMOSPHERIC SCIENCES (IAMAS)



INTERNATIONAL ASSOCIATION FOR THE PHYSICAL SCIENCES OF THE OCEANS (IAPSO)



INTERNATIONAL ASSOCIATION OF SEISMOLOGY AND PHYSICS OF THE EARTH'S INTERIOR (IASPEI)



INTERNATIONAL ASSOCIATION OF VOLCANOLOGY AND CHEMISTRY OF THE EARTH'S INTERIOR (IAVCEI)

General Assembly Information

Opening Hours

Registration (Entrance Foyer)

Tuesday 11. 7. 2023	07:30–18:00
Wednesday 12. 7. 2023	07:00–18:30
Thursday 13. 7. 2023	07:30–20:00
Friday 14. 7. 2023	07:30–18:30
Saturday 15. 7. 2023	07:30–18:30
Sunday 16. 7. 2023	07:30–18:30
Monday 17. 7. 2023	07:30–18:30
Tuesday 18. 7. 2023	07:30–18:30
Wednesday 19. 7. 2023	07:30–17:00

Speaker Ready Room (Cube Club)

Tuesday 11. 7. 2023	15:00–18:00
Wednesday 12. 7. 2023	07:00–18:30
Thursday 13. 7. 2023	07:30–18:30
Friday 14. 7. 2023	07:30–18:30
Saturday 15. 7. 2023	07:30–18:30
Sunday 16. 7. 2023	07:30–18:30
Monday 17. 7. 2023	07:30–18:30
Tuesday 18. 7. 2023	07:30–18:30
Wednesday 19. 7. 2023	07:30–19:00

Exhibition (Hall B)

Thursday 13. 7. 2023	10:00–20:30
Friday 14. 7. 2023	10:00–18:30
Saturday 15. 7. 2023	10:00–18:30
Sunday 16. 7. 2023	10:00–18:30
Monday 17. 7. 2023	10:00–18:30

Poster Sessions (Hall B)

Wednesday 12. 7. 2023	17:00–18:30	Hall B – Level 2
Friday 14. 7. 2023	17:00–18:30	Hall B – Level 2
Saturday 15. 7. 2023	17:00–18:30	Hall B – Level 2
Sunday 16. 7. 2023	17:00–18:30	Hall B – Level 2
Monday 17. 7. 2023	17:00–18:30	Hall B – Level 2
Tuesday 18. 7. 2023	17:00–18:30	Hall B – Level 2

IUGG Events

Ceremonies and Receptions

Thursday 13. 7. 2023	17:30–19:00	Hall A6–8 – Level 1	Opening and Award Ceremony
	19:00–20:30	Hall B – Level 2	Welcome Reception
Wednesday 19. 7. 2023	17:30–19:00	Hall A6 – Level 1	Closing Ceremony
	19:00–20:30	Hall B – Level 2	Farewell Reception

Union Lectures

Friday 14. 7. 2023 – Hall A8

10:30	IACS: Ricarda Winkelmann (Germany)
11:00	IAHS: Luz Adriana Cuartas (Brazil)
11:30	IAMAS: A.R. Ravishankara (USA)

Sunday 16. 7. 2023 – Hall A8

10:30	IUGG: TBA
11:00	IAHA: Max Moorkamp (Germany)
11:30	IAPSO: Martin Visbeck (Germany)

Tuesday 18. 7. 2023 – Hall A8

10:30	IAG: Geoffrey Blewitt (USA)
11:00	IASPEI: Philippe Lognonné (France)
11:30	IAVCEI: Robin Matoza (USA)

Wi-fi access

Network name: IUGG 2023
Password: iuggberlin

Gold Medal Lecture

Saturday, 15 July Hall A8

13:30–14:30 Valerie Masson-Delmotte (France)

Presentation of Early Career Scientists Awardees

Name	Date / time	Room	Session	Title
Mohd Farooq Azam (India)	12. 7. 2023 15:30–17:00	M8	C16a – IACS Early Career Awardees	Glaciohydrology of the Himalaya-Karakoram
Johan Gaume (Switzerland)	12. 7. 2023 15:30–17:00	M8	C16a – IACS Early Career Awardees	Has science solved one of history's greatest adventure mysteries?
Natalya Gomez (Canada)	12. 7. 2023 15:30–17:00	M8	C16a – IACS Early Career Awardees	The interactions between ice, sea level and the solid Earth in Antarctica and their global impacts
Patrick Hupe (Germany)	13. 7. 2023 10:30–12:00	New York 3	M01f – Middle Atmosphere Symposium	The capability of infrasound monitoring for studying atmospheric waves and probing the middle atmosphere dynamics
Jayashree Bulusu (India)	15. 7. 2023 10:30–12:00	M3	A10b – The Expanding Regimes of ULF Wave Research	Eigen modes of field line oscillations: Modelling and observations
Christina Karamperidou (USA)	15. 7. 2023 10:30–12:00	A8	M10a – El Niño – Southern Oscillation and its Regional and Global Impacts	Dynamics, predictability, and impacts of ENSO diversity in past, present, and future climates
Társilo Girona (USA)	16. 7. 2023 15:30–17:00	M5	JS04a – Monitoring, Imaging and Mapping of Volcanic Areas (IASPEI, IAG, IAVCEI, IAGA)	Geothermal anomalies preceding the 2021 Cumbre Vieja (La Palma, Spain) eruption
Nori Nakata (USA)	16. 7. 2023 8:30–10:00	M3	JS01a – Cryoseismology (IASPEI, IACS, IAG)	Unraveling shallow ice structure with active and passive seismic surveys at west Antarctica
Jana Börner (Germany)	17. 7. 2023 10:30–12:00	New York 2	JS03b – Probing the Earth's Lithosphere: Understanding Tectonic, Volcanic, Cryotonic and Geodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)	Electrical rock physics for underground CO2 storage

Special Session “Big Themes”

IUGG GA 2023 | Special Session “Big Themes”:

For its 28th General Assembly 2023 in Berlin, IUGG has launched a new session format called “Big Themes”. The relevant topics identified will be addressed in a condensed and novel format, with some quick introductions, a moderated panel discussion and an extended exchange with the plenary. Each session will be limited to 60 minutes, during the lunch break from 12:15 to 13:15 – daily from Thursday (13. 7. 2023) to Tuesday (18. 7. 2023) in hall A3.

BT#1 | Open Science, changing practices in science?

Thursday 13. 7. 2023, 12:15–13:15 – Hall A3

IUGG is committed to promoting digital science by supporting openly accessible and FAIR data, open software and thus open science. As a member organisation of the International Science Council (ISC), we are automatically signatories to the relevant declarations as well as supporters of the corresponding UN/UNESCO recommendation. The session will show the added value and perspectives for (Open) Science by means of selected examples.

BT#2 | Reflection of the International Year of Basic Sciences for Sustainable Development (IYBSSD)

Friday 14. 7. 2023, 12:15–13:15 – Hall A3

The International Year of Basic Sciences for Sustainable Development 2022 was a key moment of mobilisation to convince business and political leaders, as well as all citizens, of the importance of supporting, considering and mastering basic sciences to ensure a balanced, sustainable and inclusive development of the planet. IUGG is proud to support this global initiative proposed by the Republic of Honduras and proclaimed by the UN General Assembly.

BT#3 | Contribution to International Frameworks – Are we effective?

Saturday 15. 7. 2023 2023, 12:15–13:15 – Hall A3

IUGG, its Associations and Union Commissions have successfully and sustainably contributed to many frameworks in the course of its hundred-year history, either directly or through scientific contributions. The Big Theme Session aims to address the importance of solution-oriented science. This is a joint activity with the Global Geoscience Societies’ Task Team on “Advocate for the ESS in Global and Domestic Policies”.

BT#4 | Early Career Scientists – Needs, Wishes and Demands!

Sunday 16. 7. 2023, 12:15–13:15 – Hall A3

Early Career Scientists (ECS) are the promising minds in academic science and will occupy the established research and teaching positions in the future, regardless of the discipline and association they belong to within IUGG. Each Association takes different approaches to bringing young scientists into leadership positions and promoting their work. This Big Theme aims to bring together ECS (and people with influence on ECS) from across IUGG to discuss the feedback from the ECS social event on Saturday, and how it can best support them.

BT#5 | Where do we stand on EDI = Equality, Diversity, Inclusion?

Monday 17. 7. 2023, 12:15–13:15 – Hall A3

IUGG fully recognises the principles of EDI! However, as an international union based on country memberships, we face practical limits in implementation. Experiences and best practices will be shared and future strategies discussed. This is a joint activity with the Global Geoscience Societies Task Team on “Inclusion and Representation in Geoscience”.

BT#6 | Strengthening the North-South Dialogue! What are the Needs and Challenges?

Tuesday 18. 7. 2023 2023, 12:15–13:15 – Hall A3

IUGG and its associations are active worldwide, in line with the reach of geodetic and geophysical phenomena. Nevertheless, the participation of scientists, technicians and other stakeholders in the Global South is expandable. With the support of our partner institution, the ICTP, we want to focus more on this in the future and support new initiatives.



COSPAR 2024
45th Scientific Assembly
July 13-21 2024, BEXCO, Busan, Korea

www.cospar2024.org

Save The Date

COSPAR 2024

45th Scientific Assembly

July 13-21 2024, BEXCO, Busan, Korea



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Korean National Committee for COSPAR

Organizer



Korea Astronomy and Space Science Institute



The Korean Space Science Society

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ORGANIZATION



BUSAN
TOURISM ORGANIZATION

Scientific Program

UNION SYMPOSIA

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	U01	A3	U01a - Geoscience and Mathematics for Sustainable Development
		10:30	12:00	U01	A3	U01b - Geoscience and Mathematics for Sustainable Development
		13:30	15:00	U01	A3	U01c - Geoscience and Mathematics for Sustainable Development
		15:30	17:00	U01	A3	U01d - Geoscience and Mathematics for Sustainable Development
THU	13.07.2023	8:30	10:00	U02	A3	U02a - Artificial Intelligence for Managing Natural Hazards and Disasters
		10:30	12:00	U02	A3	U02b - Artificial Intelligence for Managing Natural Hazards and Disasters
SUN	16.07.2023	13:30	15:00	U03	A3	U03a - New Discoveries in Deep Interior of the Earth and Planets
		15:30	17:00	U03	A3	U03b - New Discoveries in Deep Interior of the Earth and Planets
MON	17.07.2023	8:30	10:00	U04	A3	U04a - New Advances in Planetary Science and Comparative Planetology
		10:30	12:00	U04	A3	U04b - New Advances in Planetary Science and Comparative Planetology

IACS (Cryospheric Sciences)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	C06	M8	C06a - New Frontiers in Paleoclimate Reconstructions and Proxy Interpretations From Ice Cores
		10:30	12:00	C06	M8	C06b - New Frontiers in Paleoclimate Reconstructions and Proxy Interpretations From Ice Cores
		13:30	15:00	C08	M8	C08a - Challenges in Modeling, Monitoring and Predicting Alpine Mass Movements
		15:30	17:00	C16	M8	C16a - IACS Early Career Awardees
THU	13.07.2023	8:30	10:00	C01	M2	C01a - Advances in Modelling Glaciers and Ice Caps – Past Reconstructions, Future Projections, and Process-Based Studies
		10:30	12:00	C01	M2	C01b - Advances in Modelling Glaciers and Ice Caps – Past Reconstructions, Future Projections, and Process-Based Studies
		13:30	15:00	C02	M2	C02a - Glacier Changes in High Mountain Asia and the Karakoram Anomaly: Latest Insights From the Atmosphere and Cryosphere
FRI	14.07.2023	8:30	10:00	C10	A8	C10a - Satellite-Derived Snow Cover Products and Their Applications in Hydrology
		8:30	10:00	C05	Paris 1	C05a - Tropical Glaciers: Mass Changes, Climate Forcing and Impacts on Indigenous Communities
		8:30	10:00	C13	Paris 2	C13a - Data Driven Cryospheric Sciences: Machine Learning, Data Assimilation and Inverse Methods for the Cryosphere
		13:30	15:00	C13	Paris 2	C13b - Data Driven Cryospheric Sciences: Machine Learning, Data Assimilation and Inverse Methods for the Cryosphere
		15:30	17:00	C13	Paris 2	C13c - Data Driven Cryospheric Sciences: Machine Learning, Data Assimilation and Inverse Methods for the Cryosphere
SAT	15.07.2023	15:30	17:00	C09	M6	C09a - Mountain Snow Cover Under Climate Change: From Past to Future
SUN	16.07.2023	8:30	10:00	C03	Paris 1	C03a - Debris Covered Glaciers
		13:30	15:00	C07	London 1	C07a - Mass Changes of The Cryosphere – The Need for and Lessons Learned From Intercomparison Exercises
		13:30	15:00	C04	Paris 1	C04a - Fast Glacier Flow: Processes, Observations and Modelling of Ice Streams, Tidewater Glaciers and Surging Glaciers
		15:30	17:00	C07	London 1	C07b - Mass Changes of The Cryosphere – The Need for and Lessons Learned From Intercomparison Exercises
		15:30	17:00	C14	Paris 1	C14a - Cryospheric Processes and Related Socioeconomic Impacts

IAG (Geodesy)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	G05	London 3	G05a - Multi-signal positioning, Remote Sensing and Applications
		10:30	12:00	G05	London 3	G05b - Multi-signal positioning, Remote Sensing and Applications
		13:30	15:00	G05	London 3	G05c - Multi-signal positioning, Remote Sensing and Applications
		15:30	17:00	G05	London 3	G05d - Multi-signal positioning, Remote Sensing and Applications

THU	13.07.2023	8:30	10:00	G05	London 3	G05e - Multi-signal positioning, Remote Sensing and Applications
		10:30	12:00	G05	London 3	G05f - Multi-signal positioning, Remote Sensing and Applications
		13:30	15:00	G05	London 3	G05g - Multi-signal positioning, Remote Sensing and Applications
		15:30	17:00	G05	London 3	G05h - Multi-signal positioning, Remote Sensing and Applications
FRI	14.07.2023	8:30	10:00	G05	London 3	G05i - Multi-signal positioning, Remote Sensing and Applications
		13:30	15:00	G05	London 3	G05j - Multi-signal positioning, Remote Sensing and Applications
		15:30	17:00	G05	London 3	G05k - Multi-signal positioning, Remote Sensing and Applications
SAT	15.07.2023	13:30	15:00	G02	Paris 2	G02a - Static Gravity Field and Height Systems
		15:30	17:00	G02	Paris 2	G02b - Static Gravity Field and Height Systems
SUN	16.07.2023	8:30	10:00	G02	Paris 2	G02c - Static Gravity Field and Height Systems
		13:30	15:00	G06	Paris 2	G06a - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		15:30	17:00	G06	Paris 2	G06b - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
MON	17.07.2023	8:30	10:00	G03	A4	G03a - Time-variable Gravity Field
		8:30	10:00	G02	London 2	G02d - Static Gravity Field and Height Systems
		8:30	10:00	G06	Paris 2	G06c - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		10:30	12:00	G03	A4	G03b - Time-variable Gravity Field
		10:30	12:00	G02	London 2	G02e - Static Gravity Field and Height Systems
		10:30	12:00	G06	Paris 2	G06d - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		13:30	15:00	G01	A3	G01a - Reference Systems and Frames
		13:30	15:00	G03	A4	G03c - Time-variable Gravity Field
		13:30	15:00	G02	London 2	G02f - Static Gravity Field and Height Systems
		13:30	15:00	G06	Paris 2	G06e - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		15:30	17:00	G01	A3	G01b - Reference Systems and Frames
		15:30	17:00	G03	A4	G03d - Time-variable Gravity Field
		15:30	17:00	G02	London 2	G02g - Static Gravity Field and Height Systems
		15:30	17:00	G06	Paris 2	G06f - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
TUE	18.07.2023	8:30	10:00	G06	A1	G06g - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		8:30	10:00	G01	A3	G01c - Reference Systems and Frames
		8:30	10:00	G03	A4	G03e - Time-variable Gravity Field
		13:30	15:00	G06	A1	G06h - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		13:30	15:00	G01	A3	G01d - Reference Systems and Frames
		13:30	15:00	G03	A4	G03f - Time-variable Gravity Field
		13:30	15:00	G04	M2	G04a - Earth Rotation and Geodynamics
		15:30	17:00	G06	A1	G06i - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		15:30	17:00	G01	A3	G01e - Reference Systems and Frames
		15:30	17:00	G04	M2	G04b - Earth Rotation and Geodynamics
WED	19.07.2023	8:30	10:00	G06	A1	G06j - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		8:30	10:00	G01	A3	G01f - Reference Systems and Frames
		8:30	10:00	G03	A4	G03g - Time-variable Gravity Field
		10:30	12:00	G06	A1	G06k - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		10:30	12:00	G01	A3	G01g - Reference Systems and Frames
		10:30	12:00	G03	A4	G03h - Time-variable Gravity Field
		10:30	12:00	G04	M2	G04c - Earth Rotation and Geodynamics
		13:30	15:00	G06	A1	G06l - Monitoring and Understanding the Dynamic Earth with Geodetic Observations
		13:30	15:00	G01	A3	G01h - Reference Systems and Frames
		13:30	15:00	G04	M2	G04d - Earth Rotation and Geodynamics

IGA (Geomagnetics and Aeronomy)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
THU	13.07.2023	8:30	10:00	A12	London 1	A12a - Magnetospheric Processes
		8:30	10:00	A15	Budapest1	A15a - Advances and Upcoming Developments in Solar and Heliospheric Physics

		10:30	12:00	A12	London 1	A12b - Magnetospheric Processes
		10:30	12:00	A23	London 2	A23a-CurrentDevelopmentsofGroundGeomagneticObservationsandIntegrationWithSpace Based Data
		10:30	12:00	A15	Budapest1	A15b - Advances and Upcoming Developments in Solar and Heliospheric Physics
		13:30	15:00	A22	A3	A22a - Planetary Magnetic Fields and Secular Variation at All Temporal Scales
		13:30	15:00	A13	London 1	A13a - Magnetospheric Boundary Layers
		13:30	15:00	A23	London 2	A23b-CurrentDevelopmentsofGroundGeomagneticObservationsandIntegrationWithSpace Based Data
		13:30	15:00	A15	Budapest1	A15c - Advances and Upcoming Developments in Solar and Heliospheric Physics
		15:30	17:00	A22	A3	A22b - Planetary Magnetic Fields and Secular Variation at All Temporal Scales
		15:30	17:00	A13	London 1	A13b - Magnetospheric Boundary Layers
		15:30	17:00	A23	London 2	A23c-CurrentDevelopmentsofGroundGeomagneticObservationsandIntegrationWithSpace Based Data
		15:30	17:00	A15	Budapest1	A15d - Advances and Upcoming Developments in Solar and Heliospheric Physics
FRI	14.07.2023	8:30	10:00	A22	A3	A22c - Planetary Magnetic Fields and Secular Variation at All Temporal Scales
		8:30	10:00	A04	New York 2	A04a - Advances in Mid-Latitude, Low-Latitude and Equatorial Aeronomy
		8:30	10:00	A16	London 1	A16a - Waves and Turbulence in the Solar Corona and Wind
		8:30	10:00	A15	Budapest1	A15e - Advances and Upcoming Developments in Solar and Heliospheric Physics
		8:30	10:00	A24	M3	A24a-GeomagneticObservations,IndicesandProductsforSpaceScience,SpaceWeatherandSpace Climate Applications
		13:30	15:00	A22	A3	A22d - Planetary Magnetic Fields and Secular Variation at All Temporal Scales
		13:30	15:00	A04	New York 2	A04b - Advances in Mid-Latitude, Low-Latitude and Equatorial Aeronomy
		13:30	15:00	A16	London 1	A16b - Waves and Turbulence in the Solar Corona and Wind
		13:30	15:00	A15	Budapest1	A15f - Advances and Upcoming Developments in Solar and Heliospheric Physics
		13:30	15:00	A24	M3	A24b-GeomagneticObservations,IndicesandProductsforSpaceScience,SpaceWeatherandSpace Climate Applications
		15:30	17:00	A22	A3	A22e - Planetary Magnetic Fields and Secular Variation at All Temporal Scales
		15:30	17:00	A04	New York 2	A04c - Advances in Mid-Latitude, Low-Latitude and Equatorial Aeronomy
		15:30	17:00	A16	London 1	A16c - Waves and Turbulence in the Solar Corona and Wind
		15:30	17:00	A15	Budapest1	A15g - Advances and Upcoming Developments in Solar and Heliospheric Physics
		15:30	17:00	A24	M3	A24c-GeomagneticObservations,IndicesandProductsforSpaceScience,SpaceWeatherandSpace Climate Applications
SAT	15.07.2023	8:30	10:00	A21	A1	A21a - Satellite-Based Geomagnetic Field Measurements and Modeling
		8:30	10:00	A15	A7	A15h - Advances and Upcoming Developments in Solar and Heliospheric Physics
		8:30	10:00	A04	New York 2	A04d - Advances in Mid-Latitude, Low-Latitude and Equatorial Aeronomy
		8:30	10:00	A19	London 1	A19a - Solar Eruptions (CMEs, Flares, Filaments), Their Source Region Evolution, and Forecast
		8:30	10:00	A10	M3	A10a - The Expanding Regimes of ULF Wave Research
		8:30	10:00	A07	M6	A07a-RadiationBeltandRingCurrent:EmergenceandLossinGeospace,andtheRoleoftheCold Plasma Background
		10:30	12:00	A21	A1	A21b - Satellite-Based Geomagnetic Field Measurements and Modeling
		10:30	12:00	A15	A7	A15i - Advances and Upcoming Developments in Solar and Heliospheric Physics
		10:30	12:00	A04	New York 2	A04e - Advances in Mid-Latitude, Low-Latitude and Equatorial Aeronomy
		10:30	12:00	A19	London 1	A19b - Solar Eruptions (CMEs, Flares, Filaments), Their Source Region Evolution, and Forecast
		10:30	12:00	A10	M3	A10b - The Expanding Regimes of ULF Wave Research
		10:30	12:00	A07	M6	A07b-RadiationBeltandRingCurrent:EmergenceandLossinGeospace,andtheRoleoftheCold Plasma Background
		13:30	15:00	A21	A1	A21c - Satellite-Based Geomagnetic Field Measurements and Modeling
		13:30	15:00	A15	A7	A15j - Advances and Upcoming Developments in Solar and Heliospheric Physics
		13:30	15:00	A04	New York 2	A04f - Advances in Mid-Latitude, Low-Latitude and Equatorial Aeronomy
		13:30	15:00	A19	London 1	A19c - Solar Eruptions (CMEs, Flares, Filaments), Their Source Region Evolution, and Forecast
		13:30	15:00	A10	M3	A10c - The Expanding Regimes of ULF Wave Research
		13:30	15:00	A07	M6	A07c-RadiationBeltandRingCurrent:EmergenceandLossinGeospace,andtheRoleoftheCold Plasma Background

SUN	16.07.2023	8:30	10:00	A15	A7	A15k - Advances and Upcoming Developments in Solar and Heliospheric Physics
		8:30	10:00	A17	New York 1	A17a-InterplanetaryShocks,ParticleAcceleration,andTransportinSolarandHeliosphericPhysics
		8:30	10:00	A19	London 1	A19d - Solar Eruptions (CMEs, Flares, Filaments), Their Source Region Evolution, and Forecast
		8:30	10:00	A14	M2	A14a - Dayside Magnetosphere Interactions
		8:30	10:00	A03	M4	A03a - Coupling Processes in the Atmosphere-Ionosphere System
		13:30	15:00	A15	A7	A15l - Advances and Upcoming Developments in Solar and Heliospheric Physics
		13:30	15:00	A17	New York 1	A17b-InterplanetaryShocks,ParticleAcceleration,andTransportinSolarandHeliosphericPhysics
		13:30	15:00	A14	M2	A14b - Dayside Magnetosphere Interactions
		13:30	15:00	A03	M4	A03b - Coupling Processes in the Atmosphere-Ionosphere System
		15:30	17:00	A15	A7	A15m - Advances and Upcoming Developments in Solar and Heliospheric Physics
		15:30	17:00	A17	New York 1	A17c-InterplanetaryShocks,ParticleAcceleration,andTransportinSolarandHeliosphericPhysics
		15:30	17:00	A14	M2	A14c - Dayside Magnetosphere Interactions
		15:30	17:00	A03	M4	A03c - Coupling Processes in the Atmosphere-Ionosphere System
		MON	17.07.2023	8:30	10:00	A06
8:30	10:00			A18	A7	A18a - Space Weather and Space Climate: Data and Models
8:30	10:00			A03	M4	A03d - Coupling Processes in the Atmosphere-Ionosphere System
8:30	10:00			A25	M7	A25a - Geoelectric Field Measurements and Modeling for Space Weather Applications
10:30	12:00			A06	A2	A06b - Energetic Particle Precipitation Impacts on the Ionosphere, Upper Atmosphere, and Climate System
10:30	12:00			A18	A7	A18b - Space Weather and Space Climate: Data and Models
10:30	12:00			A11	M4	A11a - Magnetotail Dynamic Processes
10:30	12:00			A25	M7	A25b - Geoelectric Field Measurements and Modeling for Space Weather Applications
13:30	15:00			A06	A2	A06c - Energetic Particle Precipitation Impacts on the Ionosphere, Upper Atmosphere, and Climate System
13:30	15:00			A18	A7	A18c - Space Weather and Space Climate: Data and Models
13:30	15:00			A11	M4	A11b - Magnetotail Dynamic Processes
13:30	15:00			A01	M7	A01a - New Frontiers in Rock and Environmental Magnetism
15:30	17:00			A09	A2	A09a-Magnetosphere-Ionosphere-ThermosphereCouplingduringEnhancedGeomagneticActivity
15:30	17:00			A18	A7	A18d - Space Weather and Space Climate: Data and Models
15:30	17:00			A11	M4	A11c - Magnetotail Dynamic Processes
15:30	17:00			A01	M7	A01b - New Frontiers in Rock and Environmental Magnetism
TUE	18.07.2023	8:30	10:00	A09	A2	A09b-Magnetosphere-Ionosphere-ThermosphereCouplingduringEnhancedGeomagneticActivity
		8:30	10:00	A20	New York 3	A20a - The Rising Phase of Solar Cycle 25 and Comparisons to Previous Cycles
		8:30	10:00	A08	M6	A08a - DIV III Reporter Review
		8:30	10:00	A05	M1	A05a-SpaceWeatherandElectrodynamicsofthelonsphereandAtmosphereintothePolarRegions
		13:30	15:00	A09	A2	A09c-Magnetosphere-Ionosphere-ThermosphereCouplingduringEnhancedGeomagneticActivity
		13:30	15:00	A20	New York 3	A20b - The Rising Phase of Solar Cycle 25 and Comparisons to Previous Cycles
		13:30	15:00	A08	M6	A08b - DIV III Reporter Review
		13:30	15:00	A05	M1	A05b-SpaceWeatherandElectrodynamicsofthelonsphereandAtmosphereintothePolarRegions
		15:30	17:00	A20	New York 3	A20c - The Rising Phase of Solar Cycle 25 and Comparisons to Previous Cycles
		15:30	17:00	A08	M6	A08c - DIV III Reporter Review
		15:30	17:00	A05	M1	A05c-SpaceWeatherandElectrodynamicsofthelonsphereandAtmosphereintothePolarRegions

IAHS (Hydrology)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	H11	London 1	H11a-StochasticHydrologyWithContributionsonMethodologiesandApplications,forModeling, Forecasting, Change Assessment, and Uncertainty Quantification
		8:30	10:00	H01	London 2	H01a - Panta Rhei Synthesis: Change in Hydrology and Society
		10:30	12:00	H11	London 1	H11b-StochasticHydrologyWithContributionsonMethodologiesandApplications,forModeling, Forecasting, Change Assessment, and Uncertainty Quantification
		10:30	12:00	H01	London 2	H01b - Panta Rhei Synthesis: Change in Hydrology and Society

		10:30	12:00	H12	M1	H12a - Extremes in Hydroclimatic Systems
		13:30	15:00	H11	London 1	H11c-StochasticHydrologyWithContributionsonMethodologiesandApplications,forModeling, Forecasting, Change Assessment, and Uncertainty Quantification
		13:30	15:00	H01	London 2	H01c - Panta Rhei Synthesis: Change in Hydrology and Society
		13:30	15:00	H12	M1	H12b - Extremes in Hydroclimatic Systems
		15:30	17:00	H11	London 1	H11d-StochasticHydrologyWithContributionsonMethodologiesandApplications,forModeling, Forecasting, Change Assessment, and Uncertainty Quantification
		15:30	17:00	H01	London 2	H01d - Panta Rhei Synthesis: Change in Hydrology and Society
		15:30	17:00	H04	Helsinki 2	H04a - Diminishing Lakes and Wetlands: Causes Behind the Process and Actions for Recovery
		15:30	17:00	H12	M1	H12c - Extremes in Hydroclimatic Systems
THU	13.07.2023	8:30	10:00	H01	London 2	H01e - Panta Rhei Synthesis: Change in Hydrology and Society
		8:30	10:00	H03	Budapest2	H03a - Floods: Processes, Forecasts, Probabilities, Impact Assessments and Management
		8:30	10:00	H02	M1	H02a-DetectingtheImpactsofWaterManagementontheSpatialandTemporalPatternofNatural Water Resources Via Observations, Models and Remote Sensing
		10:30	12:00	H03	Budapest2	H03b - Floods: Processes, Forecasts, Probabilities, Impact Assessments and Management
		10:30	12:00	H02	M1	H02b-DetectingtheImpactsofWaterManagementontheSpatialandTemporalPatternofNatural Water Resources Via Observations, Models and Remote Sensing
		13:30	15:00	H03	Budapest2	H03c - Floods: Processes, Forecasts, Probabilities, Impact Assessments and Management
		13:30	15:00	H08	Paris 1	H08a - A Familiar Paradigm – Climate Change and the Soil-Sediment Continuum – Resilience, Thresholds, and Adjustments
		13:30	15:00	H02	M1	H02c-DetectingtheImpactsofWaterManagementontheSpatialandTemporalPatternofNatural Water Resources Via Observations, Models and Remote Sensing
		15:30	17:00	H08	Paris 1	H08b - A Familiar Paradigm – Climate Change and the Soil-Sediment Continuum – Resilience, Thresholds, and Adjustments
		15:30	17:00	H03	Budapest2	H03d - Floods: Processes, Forecasts, Probabilities, Impact Assessments and Management
		15:30	17:00	H02	M1	H02d-DetectingtheImpactsofWaterManagementontheSpatialandTemporalPatternofNatural Water Resources Via Observations, Models and Remote Sensing
FRI	14.07.2023	8:30	10:00	H02	London 2	H02e-DetectingtheImpactsofWaterManagementontheSpatialandTemporalPatternofNatural Water Resources Via Observations, Models and Remote Sensing
		8:30	10:00	H03	Budapest2	H03e - Floods: Processes, Forecasts, Probabilities, Impact Assessments and Management
		8:30	10:00	H05	M2	H05a - Climate Change and The Water Quality
		8:30	10:00	H15	M4	H15a - The History of Hydrology
		13:30	15:00	H02	London 2	H02f-DetectingtheImpactsofWaterManagementontheSpatialandTemporalPatternofNatural Water Resources Via Observations, Models and Remote Sensing
		13:30	15:00	H09	Budapest2	H09a-AnalysisandPredictionofHydrologicalInducedDisastersinHighMountainEnvironment
		13:30	15:00	H05	M2	H05b - Climate Change and The Water Quality
		13:30	15:00	H15	M4	H15b - The History of Hydrology
		15:30	17:00	H02	London 2	H02g-DetectingtheImpactsofWaterManagementontheSpatialandTemporalPatternofNatural Water Resources Via Observations, Models and Remote Sensing
		15:30	17:00	H09	Budapest2	H09b-AnalysisandPredictionofHydrologicalInducedDisastersinHighMountainEnvironment
		15:30	17:00	H05	M2	H05c - Climate Change and The Water Quality
		15:30	17:00	H15	M4	H15c - The History of Hydrology
SAT	15.07.2023	8:30	10:00	H14	M2	H14a - Improving Understanding of Hydrological Processes Through Water Quality
		8:30	10:00	H10	M8	H10a-TransdisciplinaryCitizen-CentredParticipatoryWFEFNexusApproachestoAchieveWater,Food, Energy and Environment Security
		10:30	12:00	H13	M2	H13a - Vegetation and Hydrology Interactions: A Remote Sensing Perspective
		10:30	12:00	H06	M8	H06a - The Future of Water Resources Management
		13:30	15:00	H13	M2	H13b - Vegetation and Hydrology Interactions: A Remote Sensing Perspective
		13:30	15:00	H06	M8	H06b - The Future of Water Resources Management
SUN	16.07.2023	8:30	10:00	H07	London 2	H07a - Stable Isotopes of Water in the Hydrological Cycle
		8:30	10:00	H06	M8	H06c - The Future of Water Resources Management
		13:30	15:00	H07	London 2	H07b - Stable Isotopes of Water in the Hydrological Cycle
		13:30	15:00	H06	M8	H06d - The Future of Water Resources Management
		15:30	17:00	H07	London 2	H07c - Stable Isotopes of Water in the Hydrological Cycle
		15:30	17:00	H06	M8	H06e - The Future of Water Resources Management

IAMAS (Meteorology and Atmospheric Sciences)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	M04	A4	M04a - Past Climate Changes and Their Relevance for the Future
		8:30	10:00	M22	New York 1	M22a - Cloud and Precipitation Studies
		8:30	10:00	M31	New York 2	M31a - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		8:30	10:00	M01	New York 3	M01a - Middle Atmosphere Symposium
		8:30	10:00	M35	M3	M35a-ExplorationoftheDiversityofPlanetaryAtmospheres:FromtheSolarSystemtoExo-Planets
		8:30	10:00	M08	M4	M08a - Variability and Near-Term Predictability of the Antarctic Climate System
		8:30	10:00	M25	M5	M25a - Cloud Nucleation Studies
		8:30	10:00	M26	M6	M26a-WeatherModificationandSmallScaleGeoengineering:Theory,PracticeandTechnology
		8:30	10:00	M06	M7	M06a-MonsoonSystemsInRapidandIntensifyingClimateChangeandTheirRoleinExtremeEvents
		10:30	12:00	M04	A4	M04b - Past Climate Changes and Their Relevance for the Future
		10:30	12:00	M22	New York 1	M22b - Cloud and Precipitation Studies
		10:30	12:00	M31	New York 2	M31b - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		10:30	12:00	M01	New York 3	M01b - Middle Atmosphere Symposium
		10:30	12:00	M35	M3	M35b-ExplorationoftheDiversityofPlanetaryAtmospheres:FromtheSolarSystemtoExo-Planets
		10:30	12:00	M08	M4	M08b - Variability and Near-Term Predictability of the Antarctic Climate System
		10:30	12:00	M25	M5	M25b - Cloud Nucleation Studies
		10:30	12:00	M26	M6	M26b-WeatherModificationandSmallScaleGeoengineering:Theory,PracticeandTechnology
		10:30	12:00	M06	M7	M06b-MonsoonSystemsInRapidandIntensifyingClimateChangeandTheirRoleinExtremeEvents
		13:30	15:00	M22	New York 1	M22c - Cloud and Precipitation Studies
		13:30	15:00	M31	New York 2	M31c - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		13:30	15:00	M01	New York 3	M01c - Middle Atmosphere Symposium
		13:30	15:00	M04	M3	M04c - Past Climate Changes and Their Relevance for the Future
		13:30	15:00	M25	M5	M25c - Cloud Nucleation Studies
		13:30	15:00	M26	M6	M26c-WeatherModificationandSmallScaleGeoengineering:Theory,PracticeandTechnology
		13:30	15:00	M06	M7	M06c-MonsoonSystemsInRapidandIntensifyingClimateChangeandTheirRoleinExtremeEvents
		15:30	17:00	M22	New York 1	M22d - Cloud and Precipitation Studies
		15:30	17:00	M31	New York 2	M31d - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		15:30	17:00	M01	New York 3	M01d - Middle Atmosphere Symposium
		15:30	17:00	M04	M3	M04d - Past Climate Changes and Their Relevance for the Future
		15:30	17:00	M25	M5	M25d - Cloud Nucleation Studies
15:30	17:00	M26	M6	M26d-WeatherModificationandSmallScaleGeoengineering:Theory,PracticeandTechnology		
15:30	17:00	M06	M7	M06d-MonsoonSystemsInRapidandIntensifyingClimateChangeandTheirRoleinExtremeEvents		
THU	13.07.2023	8:30	10:00	M22	New York 1	M22e - Cloud and Precipitation Studies
		8:30	10:00	M31	New York 2	M31e - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		8:30	10:00	M01	New York 3	M01e - Middle Atmosphere Symposium
		8:30	10:00	M04	M4	M04e - Past Climate Changes and Their Relevance for the Future
		8:30	10:00	M03	M5	M03a-ClimateExtremesintheAtmosphere-Land-OceanSystem:PhysicalProcesses,Predictability, Impacts and Adaptation
		8:30	10:00	M26	M6	M26e-WeatherModificationandSmallScaleGeoengineering:Theory,PracticeandTechnology
		8:30	10:00	M06	M7	M06e-MonsoonSystemsInRapidandIntensifyingClimateChangeandTheirRoleinExtremeEvents
		8:30	10:00	M24	M8	M24a - Dynamics and Microphysics of Moist Convection
		10:30	12:00	M22	New York 1	M22f - Cloud and Precipitation Studies
		10:30	12:00	M31	New York 2	M31f - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		10:30	12:00	M01	New York 3	M01f - Middle Atmosphere Symposium
		10:30	12:00	M03	M5	M03b-ClimateExtremesintheAtmosphere-Land-OceanSystem:PhysicalProcesses,Predictability, Impacts and Adaptation
		10:30	12:00	M14/ M13	M6	M14/M13a - Climate Change in the Polar Regions

		10:30	12:00	M06	M7	M06f-MonsoonSystemsinRapidandIntensifyingClimateChangeandTheirRoleinExtremeEvents
		10:30	12:00	M24	M8	M24b - Dynamics and Microphysics of Moist Convection
		13:30	15:00	M22	New York 1	M22g - Cloud and Precipitation Studies
		13:30	15:00	M31	New York 2	M31g - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		13:30	15:00	M01	New York 3	M01g - Middle Atmosphere Symposium
		13:30	15:00	M03	M5	M03c-ClimateExtremesintheAtmosphere-Land-OceanSystem:PhysicalProcesses,Predictability, Impacts and Adaptation
		13:30	15:00	M14	M6	M14/M13b - Climate Change in the Polar Regions
		13:30	15:00	M06	M7	M06g-MonsoonSystemsinRapidandIntensifyingClimateChangeandTheirRoleinExtremeEvents
		13:30	15:00	M24	M8	M24c - Dynamics and Microphysics of Moist Convection
		15:30	17:00	M22	New York 1	M22h - Cloud and Precipitation Studies
		15:30	17:00	M31	New York 2	M31h - Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability
		15:30	17:00	M01	New York 3	M01h - Middle Atmosphere Symposium
		15:30	17:00	M03	M5	M03d-ClimateExtremesintheAtmosphere-Land-OceanSystem:PhysicalProcesses,Predictability, Impacts and Adaptation
		15:30	17:00	M14	M6	M14/M13c - Climate Change in the Polar Regions
		15:30	17:00	M24	M8	M24d - Dynamics and Microphysics of Moist Convection
FRI	14.07.2023	8:30	10:00	M22	New York 1	M22i - Cloud and Precipitation Studies
		8:30	10:00	M01	New York 3	M01i - Middle Atmosphere Symposium
		8:30	10:00	M29	M1	M29a - Dynamics of Mountain Weather and Climate: Observations, Modeling and Prediction at All Scales
		8:30	10:00	M03	M5	M03e-ClimateExtremesintheAtmosphere-Land-OceanSystem:PhysicalProcesses,Predictability, Impacts and Adaptation
		8:30	10:00	M14	M6	M14/M13d - Climate Change in the Polar Regions
		8:30	10:00	M07	M8	M07a-EarthSystemResponsetoSolarRadiationModification:Modeling,ImpactsandUncertainties
		13:30	15:00	M11	A8	M11a - Earth's Energy Budget
		13:30	15:00	M01	New York 3	M01j - Middle Atmosphere Symposium
		13:30	15:00	M29	M1	M29b - Dynamics of Mountain Weather and Climate: Observations, Modeling and Prediction at All Scales
		13:30	15:00	M27	M5	M27a - Atmospheric Chemistry in the Anthropocene: From the Urban to Global Scales
		13:30	15:00	M15	M6	M15a - Polar Modelling
		13:30	15:00	M05	M7	M05a-Atmosphere-Ocean-IceInteractions:Physical,BiogeochemicalandBiologicalProcesses in the Ross Sea
		13:30	15:00	M07	M8	M07b-EarthSystemResponsetoSolarRadiationModification:Modeling,ImpactsandUncertainties
		15:30	17:00	M11	A8	M11b - Earth's Energy Budget
		15:30	17:00	M01	New York 3	M01k - Middle Atmosphere Symposium
		15:30	17:00	M27	M5	M27b - Atmospheric Chemistry in the Anthropocene: From the Urban to Global Scales
		15:30	17:00	M15	M6	M15b - Polar Modelling
		15:30	17:00	M05	M7	M05a-Atmosphere-Ocean-IceInteractions:Physical,BiogeochemicalandBiologicalProcesses in the Ross Sea
		15:30	17:00	M07	M8	M07c-EarthSystemResponsetoSolarRadiationModification:Modeling,ImpactsandUncertainties
SAT	15.07.2023	8:30	10:00	M11	A8	M11c - Earth's Energy Budget
		8:30	10:00	M01	New York 3	M01l - Middle Atmosphere Symposium
		8:30	10:00	M30	London 2	M30a - Tropical Meteorology
		8:30	10:00	M34	M5	M34a - Data Assimilation and Machine Learning in Earth Systems Modeling
		8:30	10:00	M28	M7	M28a - Advances in Dynamic Meteorology
		10:30	12:00	M10	A8	M10a - El Niño - Southern Oscillation and its Regional and Global Impacts
		10:30	12:00	M01	New York 3	M01m - Middle Atmosphere Symposium
		10:30	12:00	M30	London 2	M30b - Tropical Meteorology
		10:30	12:00	M34	M5	M34b - Data Assimilation and Machine Learning in Earth Systems Modeling
		10:30	12:00	M28	M7	M28b - Advances in Dynamic Meteorology
		13:30	15:00	M32	A5	M32a - Sub-Seasonal to Decadal Prediction (S2S-S2D)
		13:30	15:00	M23	New York 3	M23a - Cloud-Radiative Interactions

		13:30	15:00	M30	London 2	M30c - Tropical Meteorology
		13:30	15:00	M34	M5	M34c - Data Assimilation and Machine Learning in Earth Systems Modeling
		13:30	15:00	M28	M7	M28c - Advances in Dynamic Meteorology
		15:30	17:00	M19	A1	M19a - Lightning Observations for Research and Applications in Meteorology and Climate
		15:30	17:00	M11	A3	M11d - Earth's Energy Budget
		15:30	17:00	M32	A5	M32b - Sub-Seasonal to Decadal Prediction (S2S-S2D)
		15:30	17:00	M10	A8	M10b - El Niño – Southern Oscillation and its Regional and Global Impacts
		15:30	17:00	M23	New York 3	M23b - Cloud-Radiative Interactions
		15:30	17:00	M30	London 2	M30d - Tropical Meteorology
		15:30	17:00	M12	Helsinki 2	M12a - Advances in Atmospheric Radiation
		15:30	17:00	M27	M3	M27c - Atmospheric Chemistry in the Anthropocene: From the Urban to Global Scales
		15:30	17:00	M34	M5	M34d - Data Assimilation and Machine Learning in Earth Systems Modeling
		15:30	17:00	M28	M7	M28d - Advances in Dynamic Meteorology
SUN	16.07.2023	8:30	10:00	M21	A2	M21a - Thunderstorms and the Global Electrical Circuit
		8:30	10:00	M19	A3	M19b - Lightning Observations for Research and Applications in Meteorology and Climate
		8:30	10:00	M32	A5	M32c - Sub-Seasonal to Decadal Prediction (S2S-S2D)
		8:30	10:00	M10	A6	M10c - El Niño - Southern Oscillation and its Regional and Global Impacts
		8:30	10:00	M23	New York 3	M23c - Cloud-Radiative Interactions
		8:30	10:00	M12	Helsinki 2	M12b - Advances in Atmospheric Radiation
		8:30	10:00	M28	M6	M28e - Advances in Dynamic Meteorology
		8:30	10:00	M33	M7	M33a - Diagnosing and Reducing Errors and Biases in Weather and Climate Models
		13:30	15:00	M20	A2	M20a - Lightning Physics and Effects
		13:30	15:00	M32	A5	M32d - Sub-Seasonal to Decadal Prediction (S2S-S2D)
		13:30	15:00	M10	A6	M10d - El Niño – Southern Oscillation and its Regional and Global Impacts
		13:30	15:00	M23	New York 3	M23d - Cloud-Radiative Interactions
		13:30	15:00	M12	Helsinki 2	M12c - Advances in Atmospheric Radiation
		13:30	15:00	M28	M6	M28f - Advances in Dynamic Meteorology
		13:30	15:00	M33	M7	M33b - Diagnosing and Reducing Errors and Biases in Weather and Climate Models
		15:30	17:00	M32	A5	M32e - Sub-Seasonal to Decadal Prediction (S2S-S2D)
		15:30	17:00	M10	A6	M10e - El Niño – Southern Oscillation and its Regional and Global Impacts
		15:30	17:00	M23	New York 3	M23e - Cloud-Radiative Interactions
		15:30	17:00	M12	Helsinki 2	M12d - Advances in Atmospheric Radiation
		15:30	17:00	M28	M6	M28g - Advances in Dynamic Meteorology
		15:30	17:00	M33	M7	M33c - Diagnosing and Reducing Errors and Biases in Weather and Climate Models

IAPSO (Physical Oceanography)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	P05	A1	P05a - The Meridional Overturning Circulation
		8:30	10:00	P02	Helsinki 2	P02a - Physics and Biogeochemistry of Semi-Enclosed, Shelf Seas, and Coastal Zones
		8:30	10:00	P03	Budapest1	P03a - Ocean Mixing Frontiers
		10:30	12:00	P05	A1	P05b - The Meridional Overturning Circulation
		10:30	12:00	P02	Helsinki 2	P02b - Physics and Biogeochemistry of Semi-Enclosed, Shelf Seas, and Coastal Zones
		10:30	12:00	P03	Budapest1	P03b - Ocean Mixing Frontiers
		13:30	15:00	P05	A1	P05c - The Meridional Overturning Circulation
		13:30	15:00	P02	Helsinki 2	P02c - Physics and Biogeochemistry of Semi-Enclosed, Shelf Seas, and Coastal Zones
		13:30	15:00	P03	Budapest1	P03c - Ocean Mixing Frontiers
		15:30	17:00	P05	A1	P05d - The Meridional Overturning Circulation
		15:30	17:00	P03	Budapest1	P03d - Ocean Mixing Frontiers
THU	13.07.2023	8:30	10:00	P05	A1	P05e - The Meridional Overturning Circulation
		8:30	10:00	P02	Helsinki 2	P02d - Physics and Biogeochemistry of Semi-Enclosed, Shelf Seas, and Coastal Zones
		8:30	10:00	P06	M3	P06a - IIOE-2: A Huge Step Forward for the Indian Ocean Sciences

		10:30	12:00	P05	A1	P05f - The Meridional Overturning Circulation
		10:30	12:00	P03	Helsinki 1	P03e - Ocean Mixing Frontiers
		10:30	12:00	P02	Helsinki 2	P02e - Physics and Biogeochemistry of Semi-Enclosed, Shelf Seas, and Coastal Zones
		10:30	12:00	P06	M3	P06b - IIOE-2: A Huge Step Forward for the Indian Ocean Sciences
		13:30	15:00	P05	A1	P05g - The Meridional Overturning Circulation
		13:30	15:00	P03	Helsinki 1	P03f - Ocean Mixing Frontiers
		15:30	17:00	P05	A1	P05h - The Meridional Overturning Circulation
		15:30	17:00	P03	Helsinki 1	P03g - Ocean Mixing Frontiers
SUN	16.07.2023	8:30	10:00	P01	A1	P01a - General Topics in Oceanography (physics and biogeochemistry)
		13:30	15:00	P01	A1	P01b - General Topics in Oceanography (physics and biogeochemistry)
		15:30	17:00	P04	A1	P04a - Storm Surges, Waves, and Coastal Hazards
MON	17.07.2023	8:30	10:00	P04	A1	P04b - Storm Surges, Waves, and Coastal Hazards
		8:30	10:00	P01	A5	P01c - General Topics in Oceanography (physics and biogeochemistry)
		8:30	10:00	P08	M8	P08a - Bringing Scientific and Technological Ocean Information Together for Advancement of Sustainable Development in the Framework of the UN Ocean Decade
		10:30	12:00	P04	A1	P04c - Storm Surges, Waves, and Coastal Hazards
		10:30	12:00	P01	A5	P01d - General Topics in Oceanography (physics and biogeochemistry)
		10:30	12:00	P08	M8	P08b - Bringing Scientific and Technological Ocean Information Together for Advancement of Sustainable Development in the Framework of the UN Ocean Decade
		13:30	15:00	P04	A1	P04d - Storm Surges, Waves, and Coastal Hazards
		13:30	15:00	P01	A5	P01e - General Topics in Oceanography (physics and biogeochemistry)
		13:30	15:00	P08	M8	P08c - Bringing Scientific and Technological Ocean Information Together for Advancement of Sustainable Development in the Framework of the UN Ocean Decade
		15:30	17:00	P04	A1	P04e - Storm Surges, Waves, and Coastal Hazards
		15:30	17:00	P01	A5	P01f - General Topics in Oceanography (physics and biogeochemistry)

IASPEI (Seismology, Geophysics)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
FRI	14.07.2023	13:30	15:00	S18	A1	S18a-IntegratingSeismicTomographyWithMineralPhysicsandPotentialFieldstoDescribetheCrust and Upper Mantle Physical State
		13:30	15:00	S08	A6	S08a - Anthropogenic Seismicity
		13:30	15:00	S11	New York 1	S11a - Site Response in Urban Areas
		15:30	17:00	S18	A1	S18b-IntegratingSeismicTomographyWithMineralPhysicsandPotentialFieldstoDescribetheCrust and Upper Mantle Physical State
		15:30	17:00	S14	A4	S14a-NewAdvancesinUnderstandingTheEarth'aCrustDynamicsintheLightofSolvingtheProblem of Earthquake Forecasting
		15:30	17:00	S08	A6	S08b - Anthropogenic Seismicity
		15:30	17:00	S11	New York 1	S11b - Site Response in Urban Areas
SAT	15.07.2023	8:30	10:00	S08	A6	S08c - Anthropogenic Seismicity
		10:30	12:00	S08	A6	S08d - Anthropogenic Seismicity
		13:30	15:00	S08	A6	S08e - Anthropogenic Seismicity
		13:30	15:00	S17	M1	S17a - Structure and evolution of the lithosphere in the circum-Mediterranean
		15:30	17:00	S20	M8	S20a - Education & Outreach to Ensure Success of Earthquake Early Warning Programmes
SUN	16.07.2023	15:30	17:00	S02	M1	S02a-International,National,RegionalandLocalNetworksandEarthquakeDataCenters:Highlights and Challenges
MON	17.07.2023	8:30	10:00	S09	A6	S09a - Earthquake Ground Motion and Seismic Hazard
		8:30	10:00	S02	M1	S02b-International,National,RegionalandLocalNetworksandEarthquakeDataCenters:Highlights and Challenges
		10:30	12:00	S09	A6	S09b - Earthquake Ground Motion and Seismic Hazard
		10:30	12:00	S02	M1	S02c-International,National,RegionalandLocalNetworksandEarthquakeDataCenters:Highlights and Challenges
		13:30	15:00	S09	A6	S09c - Earthquake Ground Motion and Seismic Hazard
		13:30	15:00	S02	M1	S02d-International,National,RegionalandLocalNetworksandEarthquakeDataCenters:Highlights and Challenges

		15:30	17:00	S09	A6	S09d - Earthquake Ground Motion and Seismic Hazard
		15:30	17:00	S02	M1	S02e-International,National,RegionalandLocalNetworksandEarthquakeDataCenters:Highlights and Challenges
		15:30	17:00	S15	M2	S15a - Boundary Layers in Earth's Mantle: Origin, Structure, and Influence on Convection
		15:30	17:00	S04	M3	S04a - Advancements in Acquisition, Processing and Interpretation of Seismological Data
		15:30	17:00	S06	M8	S06a - Pre-Instrumental Earthquake Data
TUE	18.07.2023	8:30	10:00	S09	A6	S09e - Earthquake Ground Motion and Seismic Hazard
		8:30	10:00	S16	A7	S16a - Earthquake Source Mechanics
		8:30	10:00	S10	New York 1	S10a - Multi-Hazard Risk Assessment
		8:30	10:00	S15	M2	S15b - Boundary Layers in Earth's Mantle: Origin, Structure, and Influence on Convection
		8:30	10:00	S04	M3	S04b - Advancements in Acquisition, Processing and Interpretation of Seismological Data
		8:30	10:00	S13	M4	S13a - Development, Testing and Application of Earthquake Forecasting Models
		8:30	10:00	S06	M8	S06b - Pre-Instrumental Earthquake Data
		13:30	15:00	S12	A6	S12a - Recent Devastating Earthquakes Including the Feb. 6, 2023 Turkey Sequence
		13:30	15:00	S16	A7	S16b - Earthquake Source Mechanics
		13:30	15:00	S10	New York 1	S10b - Multi-Hazard Risk Assessment
		13:30	15:00	S04	M3	S04c - Advancements in Acquisition, Processing and Interpretation of Seismological Data
		13:30	15:00	S13	M4	S13b - Development, Testing and Application of Earthquake Forecasting Models
		13:30	15:00	S03	M8	S03a - Seismic Scattering and Absorption, Ambient Noise, and Monitoring Earth's Structure
		15:30	17:00	S01	A2	S01a - Observational Seismology – Open Session
		15:30	17:00	S12	A6	S12b - Recent Devastating Earthquakes Including the Feb. 6, 2023 Turkey Sequence
		15:30	17:00	S16	A7	S16c - Earthquake Source Mechanics
		15:30	17:00	S10	New York 1	S10c - Multi-Hazard Risk Assessment
		15:30	17:00	S04	M3	S04d - Advancements in Acquisition, Processing and Interpretation of Seismological Data
		15:30	17:00	S13	M4	S13c - Development, Testing and Application of Earthquake Forecasting Models
		15:30	17:00	S03	M8	S03b - Seismic Scattering and Absorption, Ambient Noise, and Monitoring Earth's Structure
WED	19.07.2023	8:30	10:00	S01	A2	S01b - Observational Seismology – Open Session
		8:30	10:00	S12	A6	S12c - Recent Devastating Earthquakes Including the Feb. 6, 2023 Turkey Sequence
		8:30	10:00	S16	A7	S16d - Earthquake Source Mechanics
		8:30	10:00	S13	M4	S13d - Development, Testing and Application of Earthquake Forecasting Models
		8:30	10:00	S07	M3	S07a - Scientific Drilling and Downhole Monitoring – A Key to Understand Geohazards
		8:30	10:00	S05	M6	S05a - Advances in Earthquake and Explosion Monitoring Using Distributed Acoustic Sensing
		8:30	10:00	S03	M8	S03c - Seismic Scattering and Absorption, Ambient Noise, and Monitoring Earth's Structure
		10:30	12:00	S01	A2	S01c - Observational Seismology - Open Session
		10:30	12:00	S12	A6	S12d - Recent Devastating Earthquakes Including the Feb. 6, 2023 Turkey Sequence
		10:30	12:00	S16	A7	S16e - Earthquake Source Mechanics
		10:30	12:00	S19	M1	S19a - Fabrics and Dynamics of the Lithosphere-Asthenosphere System Imaged by Seismic Anisotropy and Integrated Studies
		10:30	12:00	S13	M4	S13e - Development, Testing and Application of Earthquake Forecasting Models
		10:30	12:00	S07	M3	S07b - Scientific Drilling and Downhole Monitoring – A Key to Understand Geohazards
		10:30	12:00	S05	M6	S05b - Advances in Earthquake and Explosion Monitoring Using Distributed Acoustic Sensing
		10:30	12:00	S03	M8	S03d - Seismic Scattering and Absorption, Ambient Noise, and Monitoring Earth's Structure
		13:30	15:00	S01	A2	S01d - Observational Seismology – Open Session
		13:30	15:00	S12	A6	S12e - Recent Devastating Earthquakes Including the Feb. 6, 2023 Turkey Sequence
		13:30	15:00	S16	A7	S16f - Earthquake Source Mechanics
		13:30	15:00	S19	M1	S19b - Fabrics and Dynamics of the Lithosphere-Asthenosphere System Imaged by Seismic Anisotropy and Integrated Studies
		13:30	15:00	S05	M6	S05c - Advances in Earthquake and Explosion Monitoring Using Distributed Acoustic Sensing
		13:30	15:00	S03	M8	S03e - Seismic Scattering and Absorption, Ambient Noise, and Monitoring Earth's Structure

IAVCEI (Volcanology, Geochemistry)

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
SAT	15.07.2023	8:30	10:00	V08	Budapest2	V08a-VolcanoGeologyandMapping,EruptiveBehaviourandHazardAssessmentFromFieldStudies
		10:30	12:00	V05	Budapest2	V05a - Interactions Between Volcanic Eruptions and Climate
		13:30	15:00	V05	Budapest2	V05b - Interactions Between Volcanic Eruptions and Climate
		15:30	17:00	V03	Budapest2	V03a - Uncertainty Treatment in Volcanic Hazard Analyses
MON	17.07.2023	8:30	10:00	V15	M2	V15a - Interdisciplinary Approaches to Volcanic Hazards Modelling
		10:30	12:00	V01/ V12	New York 1	V01/V12a-StudyingandMonitoringVolcanicProcessessthroughVolcanoGeodesyTechniques, Approaches and Realistic Modeling
		10:30	12:00	V04	M2	V04a - Integrated Approaches to Investigate Pyroclastic Density Currents
		10:30	12:00	V10	M5	V10a - History of Volcanology and Historical Volcanology
		13:30	15:00	V01/ V12	New York 1	V01/V12b-StudyingandMonitoringVolcanicProcessessthroughVolcanoGeodesyTechniques, Approaches and Realistic Modeling
		13:30	15:00	V04	M2	V04b - Integrated Approaches to Investigate Pyroclastic Density Currents
		13:30	15:00	V10	M5	V10b - History of Volcanology and Historical Volcanology
		15:30	17:00	V01/ V12	New York 1	V01/V12c-StudyingandMonitoringVolcanicProcessessthroughVolcanoGeodesyTechniques, Approaches and Realistic Modeling
		15:30	17:00	V14	M5	V14a - Open-vent Systems – Definitions, Longevity, and Implications
		TUE	18.07.2023	8:30	10:00	V02
8:30	10:00			V13	M5	V13a - Recent Advances in Volcanology
13:30	15:00			V13	M5	V13b - Recent Advances in Volcanology
WED	19.07.2023	8:30	10:00	V06	A5	V06a-GeochemicalandGeophysicalResponsesofMagmaFeedingSystemsandEruptionDynamics at Active and Quiescent Volcanoes
		10:30	12:00	V06	A5	V06b-GeochemicalandGeophysicalResponsesofMagmaFeedingSystemsandEruptionDynamics at Active and Quiescent Volcanoes
		13:30	15:00	V07	A5	V07a - Putting Time And Rate Constraints On Magmatic Processes – How Fast How Long
		13:30	15:00	V09	M4	V09a - Advanced Remote Sensing Techniques to Study Volcanic Hazards

Joint Symposia [IACS, IAG, IAHS, IAMAS, IAPSO, IASPEI, IAVCEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	JC01	Paris 2	JC01a - Remote Sensing of the Cryosphere (IACS, IAHS)
		10:30	12:00	JC01	Paris 2	JC01b - Remote Sensing of the Cryosphere (IACS, IAHS)
		13:30	15:00	JC01	Paris 2	JC01c - Remote Sensing of the Cryosphere (IACS, IAHS)
THU	13.07.2023	8:30	10:00	JC01	Paris 2	JC01d - Remote Sensing of the Cryosphere (IACS, IAHS)
		10:30	12:00	JC01	Paris 2	JC01e - Remote Sensing of the Cryosphere (IACS, IAHS)
		13:30	15:00	JC02	Paris 2	JC02a-Declining Glacier, Snow Cover and Permafrost and Their Impacts on Downstream Hydrology (IACS, IAHS, IAG)
		15:30	17:00	JC02	Paris 2	JC02b-Declining Glacier, Snow Cover and Permafrost and Their Impacts on Downstream Hydrology (IACS, IAHS, IAG)
FRI	14.07.2023	13:30	15:00	JC05/ M16	Paris 1	JC05/M16a-Atmosphere-Ocean-Sea Ice Interactions: Physical and Chemical Processes (IACS, IAMAS, IAPSO) / Atmosphere-Ocean-Sea Ice Interactions: Local Processes and Global Implications
		15:30	17:00	JC05/ M16	Paris 1	JC05/M16b-Atmosphere-Ocean-Sea Ice Interactions: Physical and Chemical Processes (IACS, IAMAS, IAPSO) / Atmosphere-Ocean-Sea Ice Interactions: Local Processes and Global Implications
SAT	15.07.2023	8:30	10:00	JC05/ M16	Paris 1	JC05/M16c-Atmosphere-Ocean-Sea Ice Interactions: Physical and Chemical Processes (IACS, IAMAS, IAPSO) / Atmosphere-Ocean-Sea Ice Interactions: Local Processes and Global Implications
		8:30	10:00	JC06	Paris 2	JC06a - Mountain Cryosphere Hazards (IACS, IAVCEI, IASPEI)
		10:30	12:00	JC05/ M16	Paris 1	JC05/M16d-Atmosphere-Ocean-Sea Ice Interactions: Physical and Chemical Processes (IACS, IAMAS, IAPSO) / Atmosphere-Ocean-Sea Ice Interactions: Local Processes and Global Implications
		10:30	12:00	JC06	Paris 2	JC06b - Mountain Cryosphere Hazards (IACS, IAVCEI, IASPEI)
		13:30	15:00	JC05/ M16	Paris 1	JC05/M16e-Atmosphere-Ocean-Sea Ice Interactions: Physical and Chemical Processes (IACS, IAMAS, IAPSO) / Atmosphere-Ocean-Sea Ice Interactions: Local Processes and Global Implications
		15:30	17:00	JC04/ C15	Paris 1	JC04/C15a-Atmospheric Circulations and Surface Mass Balance of Ice Sheets (IACS, IAMAS)/Progress in Quantifying Ice-Sheet Surface Mass Balance: Past, Present and Future
		15:30	17:00	JC03	Helsinki1	JC03a-Coupling Processes Between the Atmospheric Boundary-Layer and Snow-Ice Surfaces: Modelling at Convection and Snowdrift-Permitting Scales (IACS, IAHS, IAMAS)

Joint Symposia [IAG, IACS, IAGA, IAHS, IAMAS, IAPSO, IASPEI, IAVCEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	JG05	Paris 1	JG05a - Geodesy for Climate Research (IAG, IAMAS, IACS, IAPSO, IAHS)
		10:30	12:00	JG05	Paris 1	JG05b - Geodesy for Climate Research (IAG, IAMAS, IACS, IAPSO, IAHS)
		13:30	15:00	JG06	A4	JG06a - Monitoring Sea Level Changes by Satellite and In-Situ Measurements (IAG, IAPSO)
		13:30	15:00	JG05	Paris 1	JG05c - Geodesy for Climate Research (IAG, IAMAS, IACS, IAPSO, IAHS)
		15:30	17:00	JG06	A4	JG06b - Monitoring Sea Level Changes by Satellite and In-Situ Measurements (IAG, IAPSO)
		15:30	17:00	JG05	Paris 1	JG05d - Geodesy for Climate Research (IAG, IAMAS, IACS, IAPSO, IAHS)
THU	13.07.2023	8:30	10:00	JG06	A4	JG06c - Monitoring Sea Level Changes by Satellite and In-Situ Measurements (IAG, IAPSO)
		8:30	10:00	JG05	Paris 1	JG05e - Geodesy for Climate Research (IAG, IAMAS, IACS, IAPSO, IAHS)
		10:30	12:00	JG06	A4	JG06d - Monitoring Sea Level Changes by Satellite and In-Situ Measurements (IAG, IAPSO)
		10:30	12:00	JG05	Paris 1	JG05f - Geodesy for Climate Research (IAG, IAMAS, IACS, IAPSO, IAHS)
		13:30	15:00	JG06	A4	JG06e - Monitoring Sea Level Changes by Satellite and In-Situ Measurements (IAG, IAPSO)
FRI	14.07.2023	13:30	15:00	JG04	A4	JG04b - Satellite Gravimetry for Groundwater Monitoring (IAG, IAHS)
		8:30	10:00	JG04	A4	JG04a - Satellite Gravimetry for Groundwater Monitoring (IAG, IAHS)
		8:30	10:00	JG01	A7	JG01a - Interactions of the Solid Earth With Ice Sheets and Sea Level (IAG, IACS, IASPEI)
		13:30	15:00	JG01	A7	JG01b - Interactions of the Solid Earth With Ice Sheets and Sea Level (IAG, IACS, IASPEI)
		15:30	17:00	JG01	A7	JG01c - Interactions of the Solid Earth With Ice Sheets and Sea Level (IAG, IACS, IASPEI)
SAT	15.07.2023	8:30	10:00	JG03	London3	JG03a - Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)
		10:30	12:00	JG03	London3	JG03b - Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)
		13:30	15:00	JG03	London3	JG03c - Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)
		15:30	17:00	JG03	London3	JG03d - Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)
SUN	16.07.2023	8:30	10:00	JG03	London3	JG03e - Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)
		13:30	15:00	JG03	London3	JG03f - Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)

		15:30	17:00	JG07	A8	JG07a - Modern Gravimetric Techniques for Geosciences (IAG, IAVCEI, IAPSO, IASPEI)
		15:30	17:00	JG03	London3	JG03g - Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)
MON	17.07.2023	8:30	10:00	JG07	A8	JG07b - Modern Gravimetric Techniques for Geosciences (IAG, IAVCEI, IAPSO, IASPEI)
		8:30	10:00	JG02	London1	JG02a - Theory and Methods of Potential Fields (IAG, IAGA)
		10:30	12:00	JG07	A8	JG07c - Modern Gravimetric Techniques for Geosciences (IAG, IAVCEI, IAPSO, IASPEI)
		10:30	12:00	JG02	London1	JG02b - Theory and Methods of Potential Fields (IAG, IAGA)
		13:30	15:00	JG07	A8	JG07d - Modern Gravimetric Techniques for Geosciences (IAG, IAVCEI, IAPSO, IASPEI)
		13:30	15:00	JG02	London1	JG02c - Theory and Methods of Potential Fields (IAG, IAGA)
		15:30	17:00	JG07	A8	JG07e - Modern Gravimetric Techniques for Geosciences (IAG, IAVCEI, IAPSO, IASPEI)
		15:30	17:00	JG02	London1	JG02d - Theory and Methods of Potential Fields (IAG, IAGA)

Joint Symposia [IAGA, IACS, IAG, IAHS, IAMAS, IAPSO, IASPEI, IAVCEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
THU	13.07.2023	8:30	10:00	JA05	A5	JA05a - Solar Influence on the Atmosphere and Climate (IAGA, IAMAS)
		10:30	12:00	JA05	A5	JA05b - Solar Influence on the Atmosphere and Climate (IAGA, IAMAS)
		13:30	15:00	JA05	A5	JA05c - Solar Influence on the Atmosphere and Climate (IAGA, IAMAS)
		15:30	17:00	JA05	A5	JA05d - Solar Influence on the Atmosphere and Climate (IAGA, IAMAS)
		15:30	17:00	JA06	Helsinki2	JA06a-Long-TermChangesintheStratosphere,Mesosphere,Thermosphere,andlonosphere(IAGA, IAMAS - ICMA)
FRI	14.07.2023	8:30	10:00	JA02	A5	JA02a-DataAssimilationandStatisticalLearninginEarthandSpaceSciences(IAGA,IACS,IAHS, IAMAS, IASPEI)
		8:30	10:00	JA06	Helsinki2	JA06b-Long-TermChangesintheStratosphere,Mesosphere,Thermosphere,andlonosphere(IAGA, IAMAS - ICMA)
		13:30	15:00	JA02	A5	JA02b-DataAssimilationandStatisticalLearninginEarthandSpaceSciences(IAGA,IACS,IAHS, IAMAS, IASPEI)
		13:30	15:00	JA06	Helsinki2	JA06c-Long-TermChangesintheStratosphere,Mesosphere,Thermosphere,andlonosphere(IAGA, IAMAS - ICMA)
		15:30	17:00	JA02	A5	JA02c-DataAssimilationandStatisticalLearninginEarthandSpaceSciences(IAGA,IACS,IAHS, IAMAS, IASPEI)
SAT	15.07.2023	8:30	10:00	JA03	A4	JA03a- AnalogueDatafortheFuture:PreservationandPresent-DayUtilizationofHistoricalData in the Geosciences (IAGA, IACS, IASPEI, IAHS, IAG, IAPSO)
		8:30	10:00	JA01	Budapest1	JA01a- MachineLearninginGeo-,OceanandSpaceSciences(IAGA,IAVCEI,IAHS,IASPEI,IAMAS, IAPSO)
		10:30	12:00	JA03	A4	JA03b- AnalogueDatafortheFuture:PreservationandPresent-DayUtilizationofHistoricalData in the Geosciences (IAGA, IACS, IASPEI, IAHS, IAG, IAPSO)
		10:30	12:00	JA01	Budapest1	JA01b- MachineLearninginGeo-,OceanandSpaceSciences(IAGA,IAVCEI,IAHS,IASPEI,IAMAS, IAPSO)
		13:30	15:00	JA03	A4	JA03c- AnalogueDatafortheFuture:PreservationandPresent-DayUtilizationofHistoricalData in the Geosciences (IAGA, IACS, IASPEI, IAHS, IAG, IAPSO)
		13:30	15:00	JA01	Budapest1	JA01c- MachineLearninginGeo-,OceanandSpaceSciences(IAGA,IAVCEI,IAHS,IASPEI,IAMAS, IAPSO)
SUN	16.07.2023	8:30	10:00	JA08	New York 2	JA08a - Ground and Satellite Electromagnetic Observations Related to Earthquakes, Tsunami's and Volcanic Activity (IAGA, IASPEI (EMSEV), IAVCEI)
		13:30	15:00	JA08	New York 2	JA08b - Ground and Satellite Electromagnetic Observations Related to Earthquakes, Tsunami's and Volcanic Activity (IAGA, IASPEI (EMSEV), IAVCEI)
		13:30	15:00	JA01	Budapest1	JA01d- MachineLearninginGeo-,OceanandSpaceSciences(IAGA,IAVCEI,IAHS,IASPEI,IAMAS, IAPSO)
		15:30	17:00	JA08	New York 2	JA08c - Ground and Satellite Electromagnetic Observations Related to Earthquakes, Tsunami's and Volcanic Activity (IAGA, IASPEI (EMSEV), IAVCEI)
		15:30	17:00	JA01	Budapest1	JA01e- MachineLearninginGeo-,OceanandSpaceSciences(IAGA,IAVCEI,IAHS,IASPEI,IAMAS, IAPSO)
MON	17.07.2023	8:30	10:00	JA07	New York 3	JA07a-InterdisciplinaryObservationsofPre-EarthquakeProcesses.TheConceptofLithosphere- Atmosphere- lonosphere Coupling (IAGA, IASPEI (EMSEV))
		10:30	12:00	JA07	New York 3	JA07b-InterdisciplinaryObservationsofPre-EarthquakeProcesses.TheConceptofLithosphere- Atmosphere- lonosphere Coupling (IAGA, IASPEI (EMSEV))
		13:30	15:00	JA07	New York 3	JA07c-InterdisciplinaryObservationsofPre-EarthquakeProcesses.TheConceptofLithosphere- Atmosphere- lonosphere Coupling (IAGA, IASPEI (EMSEV))

		15:30	17:00	JA07	New York 3	JA07d-InterdisciplinaryObservationsofPre-EarthquakeProcesses.TheConceptofLithosphere-Atmosphere-Ionosphere Coupling (IAGA, IASPEI (EMSEV))
TUE	18.07.2023	8:30	10:00	JA04	A8	JA04a - Marine Geodesy and Geophysics – Opportunities & Hazards (IAGA, IAG, IASPEI, IAVCEI)
		13:30	15:00	JA04	A8	JA04b - Marine Geodesy and Geophysics – Opportunities & Hazards (IAGA, IAG, IASPEI, IAVCEI)
		15:30	17:00	JA04	A8	JA04c - Marine Geodesy and Geophysics – Opportunities & Hazards (IAGA, IAG, IASPEI, IAVCEI)

Joint Symposia [IAHS, IACS, IAG, IAGA, IAMAS, IAPSO, IASPEI, IAVCEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	JH02	Budapest 2	JH02a - Advances in Snow Hydrology (IAHS, IACS)
		10:30	12:00	JH02	Budapest 2	JH02b - Advances in Snow Hydrology (IAHS, IACS)
		13:30	15:00	JH02	Budapest 2	JH02c - Advances in Snow Hydrology (IAHS, IACS)
		15:30	17:00	JH03	Budapest 2	JH03a - Snow in the Critical Zone (IAHS, IACS)
SAT	15.07.2023	8:30	10:00	JH06	A3	JH06a-Education&OutreachinGeosciences(IAHS,IASPEI,IAGA,IAG,IAVCEI,IACS,IAMAS,IAPSO)
		8:30	10:00	JH05	M4	JH05a-CitizenScience,CrowdsourcingandInnovativeMonitoringforAdvancingGeo-Sciences(IAHS,IASPEI,IAGA,IACS,IAMAS)
		10:30	12:00	JH06	A3	JH06b-Education&OutreachinGeosciences(IAHS,IASPEI,IAGA,IAG,IAVCEI,IACS,IAMAS,IAPSO)
		13:30	15:00	JH06	A3	JH06c-Education&OutreachinGeosciences(IAHS,IASPEI,IAGA,IAG,IAVCEI,IACS,IAMAS,IAPSO)
SUN	16.07.2023	8:30	10:00	JH01	Budapest 2	JH01a-New,Large,andOpenDatafortheEarthandEnvironmentalScienceCommunity(IAHS,IAPSO,IACS,IAG,IAMAS,IAPSO,IASPEI,IAVCEI)
		13:30	15:00	JH01	Budapest 2	JH01b-New,Large,andOpenDatafortheEarthandEnvironmentalScienceCommunity(IAHS,IAPSO,IACS,IAG,IAMAS,IAPSO,IASPEI,IAVCEI)

Joint Symposia [IAMAS, IACS, IAHS, IAPSO, IASPEI, IAVCEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	JM04	A2	JM04a-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
		10:30	12:00	JM04	A2	JM04b-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
		13:30	15:00	JM04	A2	JM04c-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
		15:30	17:00	JM04	A2	JM04d-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
THU	13.07.2023	8:30	10:00	JM04	A2	JM04e-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
		10:30	12:00	JM04	A2	JM04f-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
		13:30	15:00	JM04	A2	JM04g-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
		15:30	17:00	JM04	A2	JM04h-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
FRI	14.07.2023	8:30	10:00	JM04	A2	JM04i-WeatherandClimateExtremes:Understanding,Modeling,Prediction,andImpacts(IAMAS, IAHS)
		13:30	15:00	JM01	A2	JM01a - Recent Advances in Regional Climate Modelling (IAMAS, IACS)
		15:30	17:00	JM01	A2	JM01b - Recent Advances in Regional Climate Modelling (IAMAS, IACS)
SAT	15.07.2023	8:30	10:00	JM02	A2	JM02a-Tropical-PolarInteractions,ArcticAmplificationandItsInfluenceonMidlatitudeWeather (IAMAS, IACS, IAPSO)
		10:30	12:00	JM02	A2	JM02b-Tropical-PolarInteractions,ArcticAmplificationandItsInfluenceonMidlatitudeWeather (IAMAS, IACS, IAPSO)
		13:30	15:00	JM02	A2	JM02c-Tropical-PolarInteractions,ArcticAmplificationandItsInfluenceonMidlatitudeWeather (IAMAS, IACS, IAPSO)
		15:30	17:00	JM03	A2	JM03a - Polar Regions Instrumentation (IAMAS, IACS, IASPEI)
		15:30	17:00	JM05	Budapest1	JM05a-EarthSystemModels:AssessingtheEarthSystem'sStateandFateFromRegionaltoPlanetary Scales (IAMAS, IAHS, IACS, IAPSO, IAVCEI)

SUN	16.07.2023	8:30	10:00	JM05	Budapest1	JM05b-EarthSystemModels:AssessingtheEarthSystem'sStateandFateFromRegionaltoPlanetary Scales (IAMAS, IAHS, IACS, IAPSO, IAVCEI)
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Joint Symposia [IAPSO, IACS, IAG, IAGA, IAHS, IAMAS, IAPSO, IASPEI, IAVCEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
WED	12.07.2023	8:30	10:00	JP03	Helsinki1	JP03a-PhysicalandBiogeochemicalOceanandIceProcessesintheSouthernOcean:Observations, State Estimation and Modeling (IAPSO, IACS)
		10:30	12:00	JP03	Helsinki1	JP03b-PhysicalandBiogeochemicalOceanandIceProcessesintheSouthernOcean:Observations, State Estimation and Modeling (IAPSO, IACS)
		13:30	15:00	JP03	Helsinki1	JP03c-PhysicalandBiogeochemicalOceanandIceProcessesintheSouthernOcean:Observations, State Estimation and Modeling (IAPSO, IACS)
		15:30	17:00	JP03	Helsinki1	JP03d-PhysicalandBiogeochemicalOceanandIceProcessesintheSouthernOcean:Observations, State Estimation and Modeling (IAPSO, IACS)
THU	13.07.2023	8:30	10:00	JP03	Helsinki1	JP03e-PhysicalandBiogeochemicalOceanandIceProcessesintheSouthernOcean:Observations, State Estimation and Modeling (IAPSO, IACS)
		13:30	15:00	JP06	M3	JP06a - Electromagnetic Studies of the Ice and Ocean System (IAPSO, IACS, IAGA)
FRI	14.07.2023	8:30	10:00	JP05	Helsinki1	JP05a - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		13:30	15:00	JP05	Helsinki1	JP05b - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		15:30	17:00	JP05	Helsinki1	JP05c - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		15:30	17:00	JP04	Helsinki2	JP04a - Ice Sheet-Ocean Interactions: Challenges and Insights From Theory, Observations and Modelling (IAPSO, IACS, IASPEI)
SAT	15.07.2023	8:30	10:00	JP05	Helsinki1	JP05d - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		8:30	10:00	JP04	Helsinki2	JP04b - Ice Sheet-Ocean Interactions: Challenges and Insights From Theory, Observations and Modelling (IAPSO, IACS, IASPEI)
		10:30	12:00	JP05	Helsinki1	JP05e - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		10:30	12:00	JP04	Helsinki2	JP04c - Ice Sheet-Ocean Interactions: Challenges and Insights From Theory, Observations and Modelling (IAPSO, IACS, IASPEI)
		13:30	15:00	JP05	Helsinki1	JP05f - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		13:30	15:00	JP04	Helsinki2	JP04d - Ice Sheet-Ocean Interactions: Challenges and Insights From Theory, Observations and Modelling (IAPSO, IACS, IASPEI)
SUN	16.07.2023	8:30	10:00	JP02	A4	JP02a - Arctic Ocean Physics and Biochemistry in a Changing Climate (IAPSO, IACS)
		8:30	10:00	JP05	Helsinki1	JP05g - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		8:30	10:00	JP01	M5	JP01a - Tides (IAPSO, IAHS, IAGA, IASPEI, IAG)
		13:30	15:00	JP02	A4	JP02b - Arctic Ocean Physics and Biochemistry in a Changing Climate (IAPSO, IACS)
		13:30	15:00	JP05	Helsinki1	JP05h - Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)
		13:30	15:00	JP01	M5	JP01b - Tides (IAPSO, IAHS, IAGA, IASPEI, IAG)
		15:30	17:00	JP02	A4	JP02c - Arctic Ocean Physics and Biochemistry in a Changing Climate (IAPSO, IACS)

Joint Symposia [IASPEI, IACS, IAG, IAGA, IAHS, IAPSO, IASPEI, IAVCEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
SAT	15.07.2023	8:30	10:00	JS09	New York 1	JS09a - Early Warning Systems for Geohazards (IASPEI, IAVCEI, IAHS, IAG)
		8:30	10:00	JS06	M1	JS06a - Joint Inversion of Different Geophysical Data Sets (IASPEI, IAGA, IAG, IAVCEI)
		10:30	12:00	JS05	M4	JS05a-Real-TimeGNSSDataandProductsUsage:InteroperabilityandManagementChallenges (IASPEI, IAG, IAVCEI, IAPSO)
		10:30	12:00	JS09	New York 1	JS09b - Early Warning Systems for Geohazards (IASPEI, IAVCEI, IAHS, IAG)
		10:30	12:00	JS06	M1	JS06b - Joint Inversion of Different Geophysical Data Sets (IASPEI, IAGA, IAG, IAVCEI)
		13:45	15:00	JS05	M4	JS05b-Real-TimeGNSSDataandProductsUsage:InteroperabilityandManagementChallenges (IASPEI, IAG, IAVCEI, IAPSO)
		13:30	15:00	JS09	New York 1	JS09c - Early Warning Systems for Geohazards (IASPEI, IAVCEI, IAHS, IAG)
		15:30	17:00	JS05	M4	JS05c-Real-TimeGNSSDataandProductsUsage:InteroperabilityandManagementChallenges (IASPEI, IAG, IAVCEI, IAPSO)
		15:30	17:00	JS09	New York 1	JS09d - Early Warning Systems for Geohazards (IASPEI, IAVCEI, IAHS, IAG)

		15:30	17:00	JS02	M1	JS02a - Seismo – Geodesy (IASPEI, IAG)
SUN	16.07.2023	8:30	10:00	JS02	M1	JS02b - Seismo – Geodesy (IASPEI, IAG)
		8:30	10:00	JS01	M3	JS01a - Cryoseismology (IASPEI, IACS, IAG)
		13:30	15:00	JS02	M1	JS02c - Seismo – Geodesy (IASPEI, IAG)
		13:30	15:00	JS01	M3	JS01b - Cryoseismology (IASPEI, IACS, IAG)
		15:30	17:00	JS04	M5	JS04a - Monitoring, Imaging and Mapping of Volcanic Areas (IASPEI, IAG, IAVCEI, IAGA)
MON	17.07.2023	8:30	10:00	JS03	New York 2	JS03a-ProbingtheEarth'sLithosphere:UnderstandingTectonic,Volcanic,CryotonicandGeodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)
		8:30	10:00	JS07	M3	JS07a-GeophysicalConstraints ontheEarth'sDeepInteriorCombiningModellingandObservations (IASPEI, IAGA, IAG, SEDI)
		8:30	10:00	JS04	M5	JS04b - Monitoring, Imaging and Mapping of Volcanic Areas (IASPEI, IAG, IAVCEI, IAGA)
		8:30	10:00	JS08	M6	JS08a-AdvancesinHeatFlowStudies:FromFundamentalGeodynamicUnderstandingtoGeothermal Energy Applications (IASPEI, IAVCEI (IHFC))
		10:30	12:00	JS03	New York 2	JS03b - Probing the Earth's Lithosphere: Understanding Tectonic, Volcanic, Cryotonic and Geodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)
		10:30	12:00	JS07	M3	JS07b-GeophysicalConstraints ontheEarth'sDeepInteriorCombiningModellingandObservations (IASPEI, IAGA, IAG, SEDI)
		10:30	12:00	JS08	M6	JS08b-AdvancesinHeatFlowStudies:FromFundamentalGeodynamicUnderstandingtoGeothermal Energy Applications (IASPEI, IAVCEI (IHFC))
		13:30	15:00	JS03	New York 2	JS03c-ProbingtheEarth'sLithosphere:UnderstandingTectonic,Volcanic,CryotonicandGeodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)
		13:30	15:00	JS07	M3	JS07c-GeophysicalConstraints ontheEarth'sDeepInteriorCombiningModellingandObservations (IASPEI, IAGA, IAG, SEDI)
		13:30	15:00	JS08	M6	JS08c-AdvancesinHeatFlowStudies:FromFundamentalGeodynamicUnderstandingtoGeothermal Energy Applications (IASPEI, IAVCEI (IHFC))
		15:30	17:00	JS03	New York 2	JS03d - Probing the Earth's Lithosphere: Understanding Tectonic, Volcanic, Cryotonic and Geodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)
		15:30	17:00	JS08	M6	JS08d-AdvancesinHeatFlowStudies:FromFundamentalGeodynamicUnderstandingtoGeothermal Energy Applications (IASPEI, IAVCEI (IHFC))
TUE	18.07.2023	8:30	10:00	JS03	New York 2	JS03e-ProbingtheEarth'sLithosphere:UnderstandingTectonic,Volcanic,CryotonicandGeodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)
		13:30	15:00	JS03	New York 2	JS03f-ProbingtheEarth'sLithosphere:UnderstandingTectonic,Volcanic,CryotonicandGeodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)
		15:30	17:00	JS03	New York 2	JS03g - Probing the Earth's Lithosphere: Understanding Tectonic, Volcanic, Cryotonic and Geodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)

Joint Symposia [IAVCEI, IAG, IAGA, IAMAS, IAPSO, IASPEI]

	DATE	FROM	TO	ID #	ROOM	SESSION TITLE
SAT	15.07.2023	15:30	17:00	JV07	M2	JV07a - The Architecture of the Lithosphere in Volcanic Regions (IAVCEI, IASPEI, IAGA, ILP)
SUN	16.07.2023	8:30	10:00	JV06	A8	JV06a - Geophysics of Solar System Planets (IAVCEI, IASPEI, IAG, IAGA)
		13:30	15:00	JV06	A8	JV06b - Geophysics of Solar System Planets (IAVCEI, IASPEI, IAG, IAGA)
		15:30	17:00	JV03	Helsinki1	JV03a - Hunga Tonga (IAVCEI, IAMAS, IAPSO, IASPEI, IAGA, IAG)
MON	17.07.2023	8:30	10:00	JV04	New York 1	JV04a - Volcano Seismology (IAVCEI, IASPEI)

POSTER SESSIONS | 17:00–18:30 | Poster/Exhibition Hall B

	DATE	ID #	TITLE	DISPLAYED	
				FROM	TO
WED	12.07.2023	C01	Advances in Modelling Glaciers and Ice Caps – Past Reconstructions, Future Projections, and Process-Based Studies	12.07.	13.07.
		C02	Glacier Changes in High Mountain Asia and the Karakoram Anomaly: Latest Insights From the Atmosphere and Cryosphere	12.07.	13.07.
		C06	New Frontiers in Paleoclimate Reconstructions and Proxy Interpretations From Ice Cores	12.07.	13.07.
		C08	Challenges in Modeling, Monitoring and Predicting Alpine Mass Movements	12.07.	13.07.
		C10	Satellite-Derived Snow Cover Products and Their Applications in Hydrology	12.07.	13.07.
		C11	Light Absorbing Particles on Snow and Ice	12.07.	13.07.
		G05	Multi-signal positioning, Remote Sensing and Applications	12.07.	13.07.
		H01	Panta Rhei Synthesis: Change in Hydrology and Society	12.07.	13.07.
		H04	Diminishing Lakes and Wetlands: Causes Behind the Process and Actions for Recovery	12.07.	13.07.
		H11	Stochastic Hydrology With Contributions on Methodologies and Applications, for Modeling, Forecasting, Change Assessment, and Uncertainty Quantification	12.07.	13.07.
		H12	Extremes in Hydroclimatic Systems	12.07.	13.07.
		JC01	Remote Sensing of the Cryosphere (IACS, IAHS)	12.07.	13.07.
		JG05	Geodesy for Climate Research (IAG, IAMAS, IACS, IAPSO, IAHS)	12.07.	13.07.
		JG06	Monitoring Sea Level Changes by Satellite and In-Situ Measurements (IAG, IAPSO)	12.07.	13.07.
		JH02	Advances in Snow Hydrology (IAHS, IACS)	12.07.	13.07.
		JM04	Weather and Climate Extremes: Understanding, Modeling, Prediction, and Impacts (IAMAS, IAHS)	12.07.	13.07.
		JP03	Physical and Biogeochemical Ocean and Ice Processes in the Southern Ocean: Observations, State Estimation and Modeling (IAPSO, IACS)	12.07.	13.07.
		M01	Middle Atmosphere Symposium	12.07.	13.07.
		M04	Past Climate Changes and Their Relevance for the Future	12.07.	13.07.
		M06	Monsoon Systems in Rapid and Intensifying Climate Change and Their Role in Extreme Events	12.07.	13.07.
		M08	Variability and Near-Term Predictability of the Antarctic Climate System	12.07.	13.07.
		M22	Cloud and Precipitation Studies	12.07.	13.07.
		M25	Cloud Nucleation Studies	12.07.	13.07.
		M26	Weather Modification and Small Scale Geoengineering: Theory, Practice and Technology	12.07.	13.07.
		M31	Ocean-Atmosphere Mechanisms of Climate Variability, Change and Predictability	12.07.	13.07.
		M35	Exploration of the Diversity of Planetary Atmospheres: From the Solar System to Exo-Planets	12.07.	13.07.
		P02	Physics and Biogeochemistry of Semi-Enclosed, Shelf Seas, and Coastal Zones	12.07.	13.07.
		P03	Ocean Mixing Frontiers	12.07.	13.07.
P05	The Meridional Overturning Circulation	12.07.	13.07.		
U01	Geoscience and Mathematics for Sustainable Development	12.07.	13.07.		
FRI	14.07.2023	A04	Advances in Mid-Latitude, Low-Latitude and Equatorial Aeronomy	14.07.	15.07.
		A12	Magnetospheric Processes	13.07.	14.07.
		A13	Magnetospheric Boundary Layers	13.07.	14.07.
		A15	Advances and Upcoming Developments in Solar and Heliospheric Physics	14.07.	15.07.
		A16	Waves and Turbulence in the Solar Corona and Wind	14.07.	15.07.
		A22	Planetary Magnetic Fields and Secular Variation at All Temporal Scales	13.07.	14.07.
		A23	Current Developments of Ground Geomagnetic Observations and Integration With Space Based Data	13.07.	14.07.
		A24	Geomagnetic Observations, Indices and Products for Space Science, Space Weather and Space Climate Applications	14.07.	15.07.
		C13	Data Driven Cryospheric Sciences: Machine Learning, Data Assimilation and Inverse Methods for the Cryosphere	14.07.	15.07.
		H02	Detecting the Impacts of Water Management on the Spatial and Temporal Pattern of Natural Water Resources Via Observations, Models and Remote Sensing	13.07.	14.07.
		H03	Floods: Processes, Forecasts, Probabilities, Impact Assessments and Management	13.07.	14.07.
		H05	Climate Change and The Water Quality	14.07.	15.07.

POSTER SESSIONS | 17:00–18:30 | Poster/Exhibition Hall B

	DATE	ID #	TITLE	DISPLAYED	
				FROM	TO
		H08	A Familiar Paradigm – Climate Change and the Soil-Sediment Continuum – Resilience, Thresholds, and Adjustments	13.07.	14.07.
		H09	Analysis and Prediction of Hydrological Induced Disasters in High Mountain Environment	14.07.	15.07.
		H10	Transdisciplinary Citizen-Centred Participatory WEF Nexus Approaches to Achieve Water, Food, Energy and Environment Security	14.07.	15.07.
		H13	Vegetation and Hydrology Interactions: A Remote Sensing Perspective	14.07.	15.07.
		H14	Improving Understanding of Hydrological Processes Through Water Quality	14.07.	15.07.
		JA02	Data Assimilation and Statistical Learning in Earth and Space Sciences (IAGA, IACS, IAHS, IAMAS, IASPEI)	14.07.	15.07.
		JA06	Long-Term Changes in the Stratosphere, Mesosphere, Thermosphere, and Ionosphere (IAGA, IAMAS-ICMA)	13.07.	14.07.
		JC02	Declining Glacier, Snow Cover and Permafrost and Their Impacts on Downstream Hydrology (IACS, IAHS, IAG)	13.07.	14.07.
		JC05/ M16	Atmosphere-Ocean-Sea Ice Interactions: Physical and Chemical Processes (IACS, IAMAS, IAPSO)/Atmosphere-Ocean-Sea Ice Interactions: Local Processes and Global Implications	14.07.	15.07.
		JG01	Interactions of the Solid Earth With Ice Sheets and Sea Level (IAG, IACS, IASPEI)	14.07.	15.07.
		JG04	Satellite Gravimetry for Groundwater Monitoring (IAG, IAHS)	14.07.	15.07.
		JP04	Ice Sheet-Ocean Interactions: Challenges and Insights From Theory, Observations and Modelling (IAPSO, IACS, IASPEI)	14.07.	15.07.
		JP05	Tsunamis (IAPSO, IASPEI, IAVCEI, IAMAS, IAG)	14.07.	15.07.
		JP06	Electromagnetic Studies of the Ice and Ocean System (IAPSO, IACS, IAGA)	13.07.	14.07.
		M03	Climate Extremes in the Atmosphere-Land-Ocean System: Physical Processes, Predictability, Impacts and Adaptation	13.07.	14.07.
		M05	Atmosphere-Ocean-Ice Interactions: Physical, Biogeochemical and Biological Processes in the Ross Sea	14.07.	15.07.
		M11	Earth's Energy Budget	14.07.	15.07.
		M14/ M13	Climate Change in the Polar Regions	13.07.	14.07.
		M15	Polar Modelling	14.07.	15.07.
		M24	Dynamics and Microphysics of Moist Convection	13.07.	14.07.
		M27	Atmospheric Chemistry in the Anthropocene: From the Urban to Global Scales	14.07.	15.07.
		M29	Dynamics of Mountain Weather and Climate: Observations, Modeling and Prediction at All Scales	14.07.	15.07.
		P06	IIOE-2: A Huge Step Forward for the Indian Ocean Sciences	13.07.	14.07.
		S08	Anthropogenic Seismicity	14.07.	15.07.
		S11	Site Response in Urban Areas	14.07.	15.07.
		S14	New Advances in Understanding The Earth's Crust Dynamics in the Light of Solving the Problem of Earthquake Forecasting	14.07.	15.07.
		S18	Integrating Seismic Tomography With Mineral Physics and Potential Fields to Describe the Crust and Upper Mantle Physical State	14.07.	15.07.
SAT	15.07.2023	A07	Radiation Belt and Ring Current: Emergence and Loss in Geospace, and the Role of the Cold Plasma Background	15.07.	16.07.
		A10	The Expanding Regimes of ULF Wave Research	15.07.	16.07.
		A19	Solar Eruptions (CMEs, Flares, Filaments), Their Source Region Evolution, and Forecast	15.07.	16.07.
		A21	Satellite-Based Geomagnetic Field Measurements and Modeling	15.07.	16.07.
		C05	Tropical Glaciers: Mass Changes, Climate Forcing and Impacts on Indigenous Communities	15.07.	16.07.
		C09	Mountain Snow Cover Under Climate Change: From Past to Future	15.07.	16.07.
		JA01	Machine Learning in Geo-, Ocean and Space Sciences (IAGA, IAVCEI, IAHS, IASPEI, IAMAS, IAPSO)	15.07.	16.07.
		JA03	Analogue Data for the Future: Preservation and Present-Day Utilization of Historical Data in the Geosciences (IAGA, IACS, IASPEI, IAHS, IAG, IAPSO)	15.07.	16.07.
		JC03	Coupling Processes Between the Atmospheric Boundary-Layer and Snow-Ice Surfaces: Modelling at Convection and Snowdrift-Permitting Scales (IACS, IAHS, IAMAS)	15.07.	16.07.
		JC04/ C15	Atmospheric Circulations and Surface Mass Balance of Ice Sheets (IACS, IAMAS)/Progress in Quantifying Ice-Sheet Surface Mass Balance: Past, Present and Future	15.07.	16.07.
		JC06	Mountain Cryosphere Hazards (IACS, IAVCEI, IASPEI)	15.07.	16.07.
		JG03	Remote Sensing and Modelling of the Atmosphere (IAG, IAGA, IAMAS, IAVCEI)	15.07.	16.07.

POSTER SESSIONS | 17:00–18:30 | Poster/Exhibition Hall B

	DATE	ID #	TITLE	DISPLAYED	
				FROM	TO
		JM02	Tropical-Polar Interactions, Arctic Amplification and Its Influence on Midlatitude Weather (IAMAS, IACS, IAPSO)	15.07.	16.07.
		JM03	Polar Regions Instrumentation (IAMAS, IACS, IASPEI)	15.07.	16.07.
		JM05	Earth System Models: Assessing the Earth System's State and Fate From Regional to Planetary Scales (IAMAS, IAHS, IACS, IAPSO, IAVCEI?)	15.07.	16.07.
		JS02	Seismo – Geodesy (IASPEI, IAG)	15.07.	16.07.
		JS05	Real-Time GNSS Data and Products Usage: Interoperability and Management Challenges (IASPEI, IAG, IAVCEI, IAPSO)	15.07.	16.07.
		JS06	Joint Inversion of Different Geophysical Data Sets (IASPEI, IAGA, IAG, IAVCEI)	15.07.	16.07.
		JS09	Early Warning Systems for Geohazards (IASPEI, IAVCEI, IAHS, IAG)	15.07.	16.07.
		JV07	The Architecture of the Lithosphere in Volcanic Regions (IAVCEI, IASPEI, IAGA, ILP)	15.07.	16.07.
		M10	El Niño – Southern Oscillation and its Regional and Global Impacts	15.07.	16.07.
		M12	Advances in Atmospheric Radiation	15.07.	16.07.
		M19	Lightning Observations for Research and Applications in Meteorology and Climate	15.07.	16.07.
		M23	Cloud-Radiative Interactions	15.07.	16.07.
		M28	Advances in Dynamic Meteorology	15.07.	16.07.
		M30	Tropical Meteorology	15.07.	16.07.
		M32	Sub-Seasonal to Decadal Prediction (S2S-S2D)	15.07.	16.07.
		S17	Structure and evolution of the lithosphere in the circum-Mediterranean	15.07.	16.07.
		S20	Education & Outreach to Ensure Success of Earthquake Early Warning Programmes	15.07.	16.07.
		V03	Uncertainty Treatment in Volcanic Hazard Analyses	15.07.	16.07.
		V05	Interactions Between Volcanic Eruptions and Climate	15.07.	16.07.
		V08	Volcano Geology and Mapping, Eruptive Behaviour and Hazard Assessment From Field Studies	15.07.	16.07.
SUN	16.07.2023	A03	Coupling Processes in the Atmosphere-Ionosphere System	16.07.	17.07.
		A14	Dayside Magnetosphere Interactions	16.07.	17.07.
		A17	Interplanetary Shocks, Particle Acceleration, and Transport in Solar and Heliospheric Physics	16.07.	17.07.
		C03	Debris Covered Glaciers	15.07.	16.07.
		C04	Fast Glacier Flow: Processes, Observations and Modelling of Ice Streams, Tidewater Glaciers and Surging Glaciers	15.07.	16.07.
		C14	Cryospheric Processes and Related Socioeconomic Impacts	15.07.	16.07.
		G02	Static Gravity Field and Height Systems	16.07.	17.07.
		H06	The Future of Water Resources Management	15.07.	16.07.
		H07	Stable Isotopes of Water in the Hydrological Cycle	15.07.	16.07.
		JA08	Ground and Satellite Electromagnetic Observations Related to Earthquakes, Tsunami's and Volcanic Activity (IAGA, IASPEI (EMSEV), IAVCEI)	16.07.	17.07.
		JG07	Modern Gravimetric Techniques for Geosciences (IAG, IAVCEI, IAPSO, IASPEI)	16.07.	17.07.
		JH01	New, Large, and Open Data for the Earth and Environmental Science Community (IAHS, IAPSO, all associations)	15.07.	16.07.
		JH06	Education & Outreach in Geosciences (IAHS, IASPEI, IAGA, IAG, IAVCEI, IACS, IAMAS, IAPSO)	15.07.	16.07.
		JP01	Tides (IAPSO, IAHS, IAGA, IASPEI, IAG)	16.07.	17.07.
		JP02	Arctic Ocean Physics and Biochemistry in a Changing Climate (IAPSO, IACS)	15.07.	16.07.
		JS01	Cryoseismology (IASPEI, IACS, IAG)	16.07.	17.07.
		JS04	Monitoring, Imaging and Mapping of Volcanic Areas (IASPEI, IAG, IAVCEI, IAGA)	16.07.	17.07.
		JV03	Hunga Tonga (IAVCEI, IAMAS, IAPSO, IASPEI, IAGA, IAG)	16.07.	17.07.
		JV06	Geophysics of Solar System Planets (IAVCEI, IASPEI, IAG, IAGA)	16.07.	17.07.
		M20	Lightning Physics and Effects	15.07.	16.07.
		M33	Diagnosing and Reducing Errors and Biases in Weather and Climate Models	16.07.	17.07.
		P01	General Topics in Oceanography (physics and biogeochemistry)	16.07.	17.07.
		P04	Storm Surges, Waves, and Coastal Hazards	16.07.	17.07.
		S02	International, National, Regional and Local Networks and Earthquake Data Centers: Highlights and Challenges	16.07.	17.07.

POSTER SESSIONS | 17:00–18:30 | Poster/Exhibition Hall B

	DATE	ID #	TITLE	DISPLAYED	
				FROM	TO
		U03	New Discoveries in Deep Interior of the Earth and Planets	16.07.	17.07.
MON	17.07.2023	A01	New Frontiers in Rock and Environmental Magnetism	17.07.	18.07.
		A06	Energetic Particle Precipitation Impacts on the Ionosphere, Upper Atmosphere, and Climate System	17.07.	18.07.
		A09	Magnetosphere-Ionosphere-Thermosphere Coupling during Enhanced Geomagnetic Activity	17.07.	18.07.
		A11	Magnetotail Dynamic Processes	17.07.	18.07.
		A18	Space Weather and Space Climate: Data and Models	17.07.	18.07.
		A25	Geoelectric Field Measurements and Modeling for Space Weather Applications	17.07.	18.07.
		G01	Reference Systems and Frames	17.07.	18.07.
		G03	Time-variable Gravity Field	17.07.	18.07.
		JA07	Interdisciplinary Observations of Pre-Earthquake Processes. The Concept of Lithosphere-Atmosphere-Ionosphere Coupling (IAGA, IASPEI (EMSEV))	17.07.	18.07.
		JG02	Theory and Methods of Potential Fields (IAG, IAGA)	17.07.	18.07.
		JS03	Probing the Earth's Lithosphere: Understanding Tectonic, Volcanic, Cryotonic and Geodynamic Processes Using Geophysical Methods (IASPEI, IAG, IAGA)	17.07.	18.07.
		JS07	Geophysical Constraints on the Earth's Deep Interior Combining Modelling and Observations (IASPEI, IAGA, IAG, SEDI)	17.07.	18.07.
		JS08	Advances in Heat Flow Studies: From Fundamental Geodynamic Understanding to Geothermal Energy Applications (IASPEI, IAVCEI (IHFC))	17.07.	18.07.
		JV01	Volcano-Ice Interactions (IAVCEI, IACS)	17.07.	18.07.
		JV04	Volcano Seismology (IAVCEI, IASPEI)	17.07.	18.07.
		P08	Bringing Scientific and Technological Ocean Information Together for Advancement of Sustainable Development in the Framework of the UN Ocean Decade	17.07.	18.07.
		S06	Pre-Instrumental Earthquake Data	17.07.	18.07.
		S09	Earthquake Ground Motion and Seismic Hazard	17.07.	18.07.
		S15	Boundary Layers in Earth's Mantle: Origin, Structure, and Influence on Convection	17.07.	18.07.
		V01/ V12	Studying and Monitoring Volcanic Processes through Volcano Geodesy Techniques, Approaches and Realistic Modeling	17.07.	18.07.
TUE	18.07.2023	A05	Space Weather and Electrodynamics of the Ionosphere and Atmosphere into the Polar Regions	17.07.	18.07.
		A20	The Rising Phase of Solar Cycle 25 and Comparisons to Previous Cycles	17.07.	18.07.
		G04	Earth Rotation and Geodynamics	18.07.	19.07.
		G06	Monitoring and Understanding the Dynamic Earth with Geodetic Observations	18.07.	19.07.
		JA04	Marine Geodesy and Geophysics – Opportunities & Hazards (IAGA, IAG, IASPEI, IAVCEI)	17.07.	18.07.
		S01	Observational Seismology – Open Session	18.07.	19.07.
		S03	Seismic Scattering and Absorption, Ambient Noise, and Monitoring Earth's Structure	18.07.	19.07.
		S04	Advancements in Acquisition, Processing and Interpretation of Seismological Data	17.07.	18.07.
		S05	Advances in Earthquake and Explosion Monitoring Using Distributed Acoustic Sensing	18.07.	19.07.
		S10	Multi-Hazard Risk Assessment	18.07.	19.07.
		S12	Recent Devastating Earthquakes Including the Feb. 6, 2023 Turkey Sequence	18.07.	19.07.
		S13	Development, Testing and Application of Earthquake Forecasting Models	18.07.	19.07.
		S16	Earthquake Source Mechanics	18.07.	19.07.
		S19	Fabrics and Dynamics of the Lithosphere-Asthenosphere System Imaged by Seismic Anisotropy and Integrated Studies	18.07.	19.07.
		V02	Modelling and Monitoring of Volcanic Ash Clouds	18.07.	19.07.
		V06	Geochemical and Geophysical Responses of Magma Feeding Systems and Eruption Dynamics at Active and Quiescent Volcanoes	18.07.	19.07.
		V07	Putting Time And Rate Constraints On Magmatic Processes – How Fast How Long	18.07.	19.07.
		V09	Advanced Remote Sensing Techniques to Study Volcanic Hazards	18.07.	19.07.
		V13	Recent Advances in Volcanology	18.07.	19.07.

Meetings

DATE	TIME	VENUE	ROOM	MEETING
IUGG				
11.07.2023	09:00–12:00	City Cube, Level 3	R4	1 st IUGG Bureau Meeting*
11.07.2023	14:00–18:00	City Cube, Level 3	R3	1 st IUGG Executive Committee Meeting*
12.07.2023	10:00–12:00	City Cube, Level 3	R6	1 st IUGG Finance Committee Meeting*
12.07.2023	14:00–18:00	City Cube, Level 1	A5	1 st IUGG Council Meeting*
13.07.2023	09:00–12:00	City Cube, Level 3	R4	2 nd IUGG Bureau Meeting*
14.07.2023	10:00–12:00	City Cube, Level 3	R6	2 nd IUGG Finance Committee Meeting*
14.07.2023	16:00–18:00	City Cube, Level 3	R3	2 nd IUGG Executive Committee Meeting*
15.07.2023	09:00–13:00	City Cube, Level 1	A5	2 nd IUGG Council Meeting*
17.07.2023	09:00–12:00	City Cube, Level 3	R4	3 rd IUGG Bureau Meeting*
18.07.2023	15:00–18:00	City Cube, Level 1	A5	3 rd IUGG Council Meeting*
20.07.2023	10:00–11:30	City Cube, Level 3	R4	Meeting of the new IUGG Bureau*
20.07.2023	13:30–15:30	City Cube, Level 3	R3	Meeting of the new IUGG Executive Committee*
20.07.2023	16:00–17:30	City Cube, Level 3	R6	Meeting New Finance Committee*
IACS				
11.07.2023	09:00–13:00	City Cube, Level 3	R5	IACS Bureau Meeting 21
11.07.2023	14:00–18:00	City Cube, Level 3	R4	Glacier MIP3 Science Meeting
12.07.2023	12:30–13:30	City Cube, Level 3	R2	GlacierMIP Annual Meeting
13.07.2023	12:30–13:30	City Cube, Level 3	R2	IACS Working Groups (RGI & Glacier – Ice Sheet Delineation)
14.07.2023	12:30–13:30	City Cube, Level 3	R12	Network for Glaciers: GTN-G
15.07.2023	12:30–13:30	City Cube, Level 3	R12	Joint Body on Status of Mountain Snow Cover (SMSC)
15.07.2023	17:00–18:30	Hall 7, Level 1	New York 2	IACS Plenary
16.07.2023	12:30–13:30	City Cube, Level 3	R12	IACS Working Groups 5
17.07.2023	09:00–12:00	City Cube, Level 3	R12	IACS Bureau Meeting 22
IAG				
11.07.2023	08:30–12:00	City Cube, Level 3	S4	IAG Executive Committee
12.07.2023	08:30–10:30	City Cube, Level 3	M1	IAG Council
12.07.2023	12:00–13:00	City Cube, Level 3	M3	IAG Journal of Geodesy Editorial Board Meeting
12.07.2023	18:00–21:30	City Cube, Level 1	A4	IAG Opening Ceremonies and Reception
13.07.2023	08:30–12:00	City Cube, Level 3	R12	IAG Executive Committee
13.07.2023	14:00–15:00	City Cube, Level 3	R12	Business Meeting of IAG Commission 3
14.07.2023	15:30–18:30	City Cube, Level 3	M1	GGOS Bureau and Working Group meeting
17.07.2023	14:00–17:00	City Cube, Level 3	R12	Seafloor geodesy data standardization task force (IAG's ICCM)
18.07.2023	12:30–13:30	City Cube, Level 3	R2	IAG Working Group 1.3.1 "Time-dependent transformations between reference frames in deforming regions"
19.07.2023	08:30–10:30	City Cube, Level 3	M1	IAG Council
19.07.2023	15:00–16:30	City Cube, Level 1	A4	IAG Closing Ceremonies
20.07.2023	08:30–12:00	City Cube, Level 3	R3	IAG Executive Committee
IAGA				
13.07.2023	12:00–13:30	City Cube, Level 3	M1	IAGA WG III ULF Waves
13.07.2023	12:00–13:30	City Cube, Level 3	M5	IAGA Division VI
13.07.2023	12:00–13:30	City Cube, Level 3	M6	IAGA WG V-OBS
13.07.2023	12:00–13:30	City Cube, Level 3	M7	IAGA WG II-C
13.07.2023	12:00–13:30	City Cube, Level 3	M8	IAGA WG II-A
13.07.2023	12:00–13:30	Hall 7, Level 1	London 2	IAGA Conference of Delegates 1
14.07.2023	12:00–13:30	City Cube, Level 3	M4	IAGA WG II-F
14.07.2023	12:00–13:30	City Cube, Level 3	M5	IAGA WG I-1
14.07.2023	12:00–13:30	City Cube, Level 3	M6	IAGA WG V-DAT
14.07.2023	12:00–13:30	City Cube, Level 3	M7	IAGA WG II-G

DATE	TIME	VENUE	ROOM	MEETING
14.07.2023	12:00–13:30	City Cube, Level 3	M8	IAGA Division III
14.07.2023	18:00–19:30	City Cube, Level 3	M3	IAGA GeoDaWG
14.07.2023	18:00–19:30	City Cube, Level 3	M4	IAGA Division I
14.07.2023	18:00–19:30	City Cube, Level 3	M5	IAGA Interdivisional Commission on Education and Outreach with Social Media WG
14.07.2023	18:00–19:30	City Cube, Level 3	M6	IAGA WG II-E
14.07.2023	18:00–19:30	City Cube, Level 3	M7	IAGA WG II-D
14.07.2023	18:00–19:30	City Cube, Level 3	M8	IAGA Division IV
15.07.2023	15:30–17:00	City Cube, Level 1	A7	IAGA Ceremony
15.07.2023	12:00–13:30	City Cube, Level 3	M4	IAGA VERSIM
15.07.2023	12:00–13:30	City Cube, Level 3	M5	IAGA WG V-MOD
15.07.2023	12:00–13:30	City Cube, Level 3	M6	IAGA Interdivisional Commission on History
15.07.2023	12:00–13:30	City Cube, Level 3	M7	IAGA Interdivisional Commission on Developing Countries
15.07.2023	12:00–13:30	City Cube, Level 3	M8	IAGA Interdivisional Commission on Space Weather
15.07.2023	18:00–19:30	City Cube, Level 3	M4	IAGA Division V
15.07.2023	18:00–19:30	City Cube, Level 3	M3	IAGA Division II
17.07.2023	17:30–19:00	City Cube, Level 3	M8	IAGA Conference of Delegates 2

IAHS

12.07.2023	12:00–13:30	City Cube, Level 3	M1	IAHS SYSTA reception
12.07.2023	17:00–20:30	City Cube, Level 1	A2	IAHS Administrative Plenary, Elections
13.07.2023	12:00–13:30	City Cube, Level 3	M2	IAHS ECS Workshop 1
13.07.2023	16:00–18:30	City Cube, Level 3	M2	IAHS HSJ Editorial retreat part 1
14.07.2023	10:30–12:00	City Cube, Level 3	M1	IAHS ECS Workshop 2
14.07.2023	16:00–18:30	City Cube, Level 3	R2	IAHS HSJ Editorial retreat part 2
14.07.2023	17:00–18:30	City Cube, Level 3	M2	IAHS ECS Workshop 3
15.07.2023	12:00–13:30	City Cube, Level 3	M1	IAHS ECS Workshop 4
15.07.2023	15:00–17:00	City Cube, Level 1	A6	IAHS Forum of commissions and working groups
15.07.2023	17:00–19:30	City Cube, Level 1	A6	IAHS Plenary and Prize ceremony
16.07.2023	12:00–13:30	City Cube, Level 3	M1	IAHS-ICWRS meeting
17.07.2023	08:30–13:30	City Cube, Level 3	R2	IAHS Bureau

IAMAS

12.07.2023	12:00–13:30	City Cube, Level 3	R12	ICCL business meeting
12.07.2023	13:00–17:00	City Cube, Level 3	M4	IAMAS General Assembly
13.07.2023	12:00–13:30	City Cube, Level 3	R5	ICDM business meeting
13.07.2023	12:00–13:30	City Cube, Level 3	R3	International Radiation Commission Business Meeting
13.07.2023	12:00–13:30	City Cube, Level 3	R12	ICMA Business meeting
13.07.2023	12:00–13:30	City Cube, Level 3	M3	International Commission on Polar Meteorology
14.07.2023	12:00–13:30	City Cube, Level 3	M2	IAMAS Business Meeting
15.07.2023	12:00–13:30	City Cube, Level 3	R3	ICCP Executive Committee

IAPSO

11.07.2023	08:30–12:00	City Cube, Level 3	R3	IAPSO 1 st Executive Committee Meeting
13.07.2023	15:30–17:00	City Cube, Level 3	R3	Meeting of the Tidal Analysis IAPSO Best Practice Study Group
14.07.2023	18:30–20:00	City Cube, Level 3	M1	IAPSO General Business Meeting*
15.07.2023	15:30–17:00	City Cube, Level 1	A4	IAPSO medal ceremony
17.07.2023	18:30–20:00	City Cube, Level 3	R3	IAPSO 2 nd Executive Committee Meeting*

IASPEI

12.07.2023	08:30–18:00	City Cube, Level 3	S4	ISC Executive Committee
13.07.2023	08:30–11:00	City Cube, Level 3	S3	IASPEI ExeCom (closed meeting)
13.07.2023	11:30–15:00	City Cube, Level 3	M4	ISC Governing Council
13.07.2023	15:15–18:15	City Cube, Level 3	M4	FDSN 1 st Plenary
14.07.2023	08:30–10:00	City Cube, Level 1	A1	IASPEI Opening Plenary
14.07.2023	12:00–13:00	City Cube, Level 3	M3	Asian Seismological Commission (ASC) 1 st Meeting
14.07.2023	12:00–13:00	City Cube, Level 3	R2	FDSN WG 1
14.07.2023	18:00–21:00	Hall 7, Level 1		London 2 Commission on Earthquake Generation Process – Physics, Modelling, and Monitoring for Forecast

DATE	TIME	VENUE	ROOM	MEETING
14.07.2023	18:00–21:00	Hall 7, Level 1	London 1	Commission on Seismological Observation and Interpretation (CoSOI)
15.07.2023	12:00–13:30	City Cube, Level 3	R2	FDSN WG 2
15.07.2023	18:00–21:00	City Cube, Level 3	M5	African Seismological Commission (AfSC)
15.07.2023	18:00–21:00	City Cube, Level 3	M8	Commission on Earth Structure and Geodynamics
15.07.2023	18:00–21:00	City Cube, Level 3	M7	Latin American and Caribbean Seismological Commission (LACSC)
16.07.2023	12:00–13:30	City Cube, Level 3	M4	Commission on Education and Outreach
16.07.2023	12:00–13:30	City Cube, Level 3	R2	FDSN WG 3
16.07.2023	18:00–21:00	City Cube, Level 3	M4	Commission on Earthquake Hazard, Risk and Strong Ground Motion
16.07.2023	18:00–21:00	City Cube, Level 3	M6	Commission on Earthquake Source Mechanics
17.07.2023	12:00–13:30	City Cube, Level 3	M6	FDSN WG 4
17.07.2023	17:00–18:30	City Cube, Level 3	R12	CoSOI – Working Group on Reference Events for Improved Locations
17.07.2023	18:00–21:00	City Cube, Level 3	M4	Asian Seismological Commission (ASC) 2 nd Meeting
17.07.2023	18:00–21:00	City Cube, Level 3	M6	Commission on Tectonophysics and Crustal Structure
18.07.2023	12:00–13:30	City Cube, Level 3	M6	FDSN WG 5
18.07.2023	12:00–13:30	City Cube, Level 3	M4	Program Discussion next Assembly
19.07.2023	12:00–13:30	City Cube, Level 3	M8	FDSN 2 nd Plenary
19.07.2023	15:30–17:00	City Cube, Level 1	A1	IASPEI Closing Plenary

IAVCEI

18.07.2023	16:00–18:30	City Cube, Level 1	A4	IAVCEI General Assembly
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JOINT MEETINGS

15.07.2023	12:00–13:30	Hall 7, Level 1	New York 2	WG on Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)
16.07.2023	12:00–13:30	City Cube, Level 3	M8	WG on Seismo-Geodesy
16.07.2023	18:30–20:00	Hall 7, Level 1	New York 2	Joint Tsunami Commission Business Meeting
17.07.2023	12:00–13:30	City Cube, Level 3	M3	IAGA-IASPEI 2025 Planning
17.07.2023	18:00–21:00	City Cube, Level 3	M2	International Heat Flow Commission (IHFC) – IAPSO / IASPEI / IAVCEI

UNION COMMISSIONS

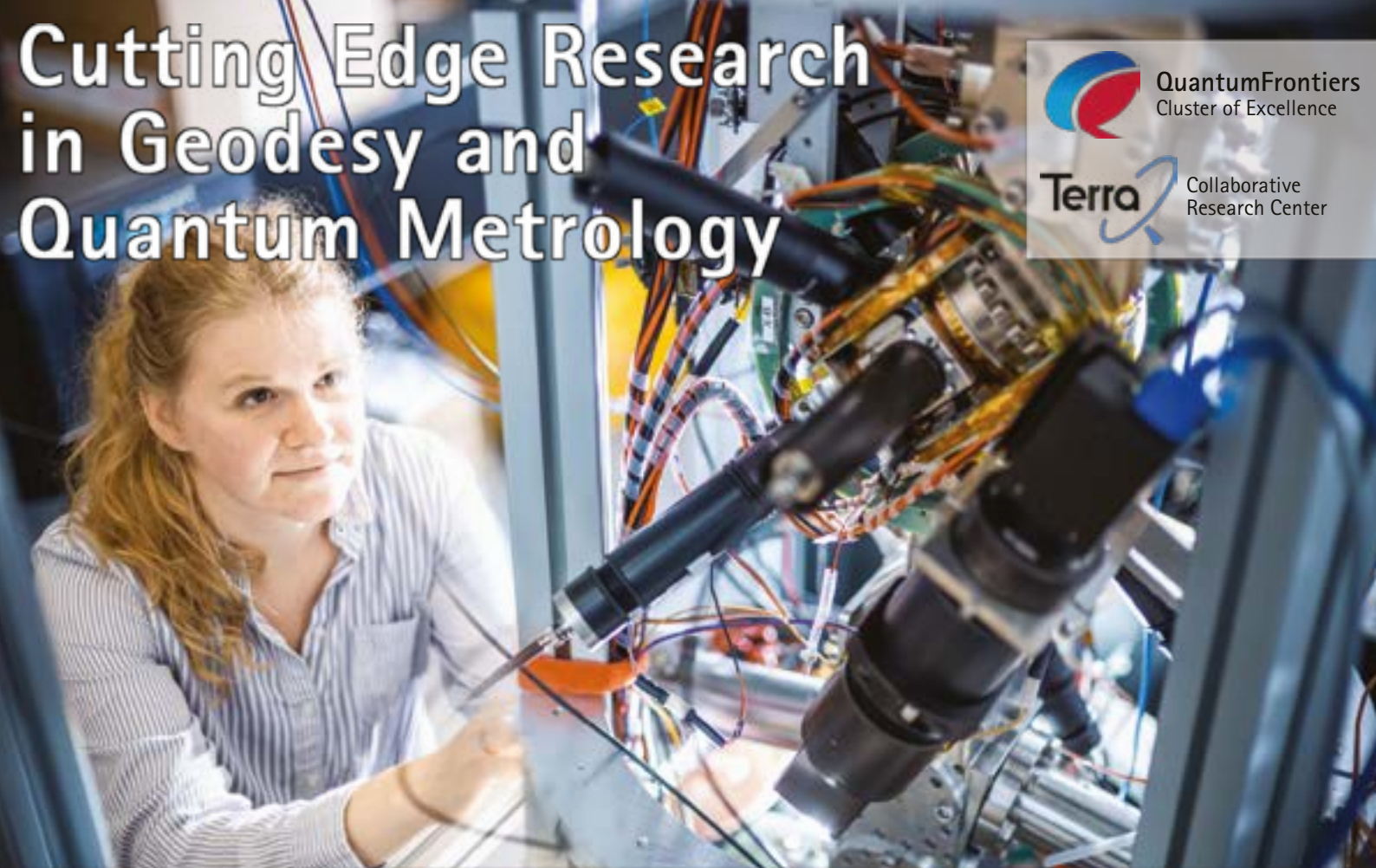
11.07.2023	12:00–13:00	City Cube, Level 3	R3	Union Commission on Geophysical Risk and Sustainability (GeoRisk Commission) Business Meeting
13.07.2023	12:00–13:30	City Cube, Level 3	R4	CCEC business meeting
13.07.2023	12:00–13:30	City Cube, Level 3	S4	IUGG Commission on Mathematical Geophysics (CMG) Executive Committee Meeting
16.07.2023	17:45–18:45	City Cube, Level 3	R13	SEDI Business meeting

OTHER MEETINGS

11.07.2023	09:00–17:00	City Cube, Level 3	R2	Third CliC/CLIVAR Northern Oceans Region Panel Meeting
11.07.2023	09:00–17:00	City Cube, Level 3	R13	SORP-15 meeting
11.07.2023	09:00–17:00	City Cube, Level 3	R12	Meeting of WMO/WWRP Expert Team on Weather Modification
11.07.2023	14:00–17:00	City Cube, Level 3	R5	Bureau Meeting of the Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)
12.07.2023	09:00–17:00	City Cube, Level 3	M2	ISMIP6
12.07.2023	12:00–13:30	City Cube, Level 3	M6	AGATA – Antarctic Geospace And aTmosphere research
12.07.2023	15:00–17:00	City Cube, Level 3	R2	AMELIE meeting
12.07.2023	17:00–18:00	City Cube, Level 3	R2	VLF/SIC collaboration meeting
13.07.2023	09:00–17:00	City Cube, Level 3	R1	Airbus
13.07.2023	16:00–20:00	City Cube, Level 3	M3	Upcoming Southern Ocean Initiatives
14.07.2023	08:30–10:00	City Cube, Level 3	R2	OCEAN:ICE interactions – Ice sheet impacts on ocean circulation and climate feedbacks
14.07.2023	17:30–19:00	City Cube, Level 3	R13	General Council Meeting of the Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)
14.07.2023	18:00–20:00	City Cube, Level 3	R12	ORFEUS Board of Directors*
17.07.2023	09:00–16:00	City Cube, Level 3	R3	Polar ECRA workshop
17.07.2023	11:45–13:15	City Cube, Level 3	R13	UCPS Business Meeting at IUGG 2023
17.07.2023	14:00–16:00	City Cube, Level 3	R2	Introduction to the COST action: The LTO Research Network
17.07.2023	17:30–18:30	City Cube, Level 3	R3	Perspectives and Practices to Communicate Global Aftershock Forecasts
18.07.2023	09:00–12:30	City Cube, Level 3	R13	Toward an Antarctic Regional Radiation Network (ARRN)
18.07.2023	18:00–19:00	City Cube, Level 3	R2	IDS birthday

*by invitation only

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www.QuantumFrontiers.de



www.TerraQ.uni-hannover.de

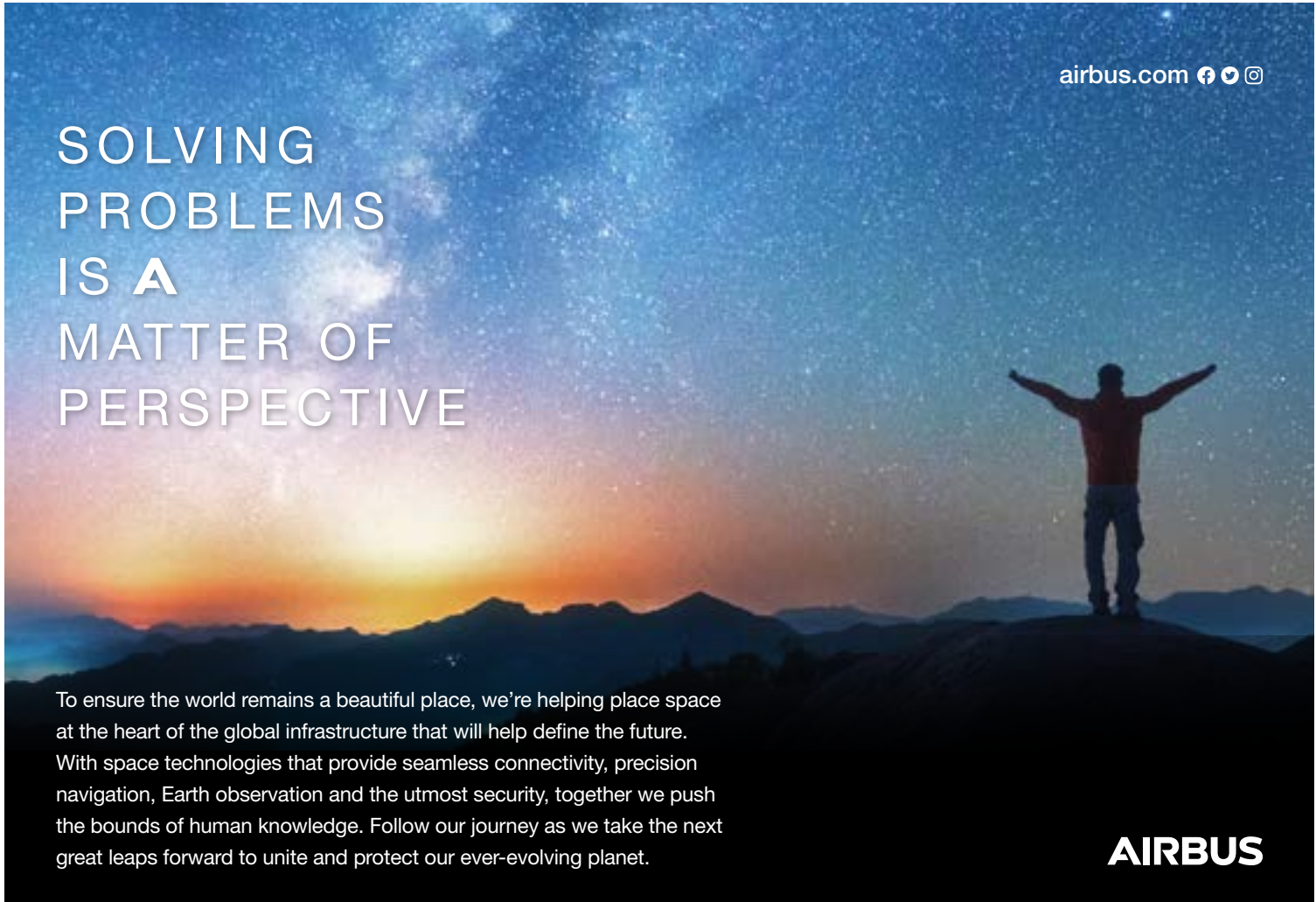
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Acknowledgments

The organizers of the 28th IUGG General Assembly in Berlin gratefully express their gratitude to the following organizations who, through their generosity, have helped to make this Assembly possible.

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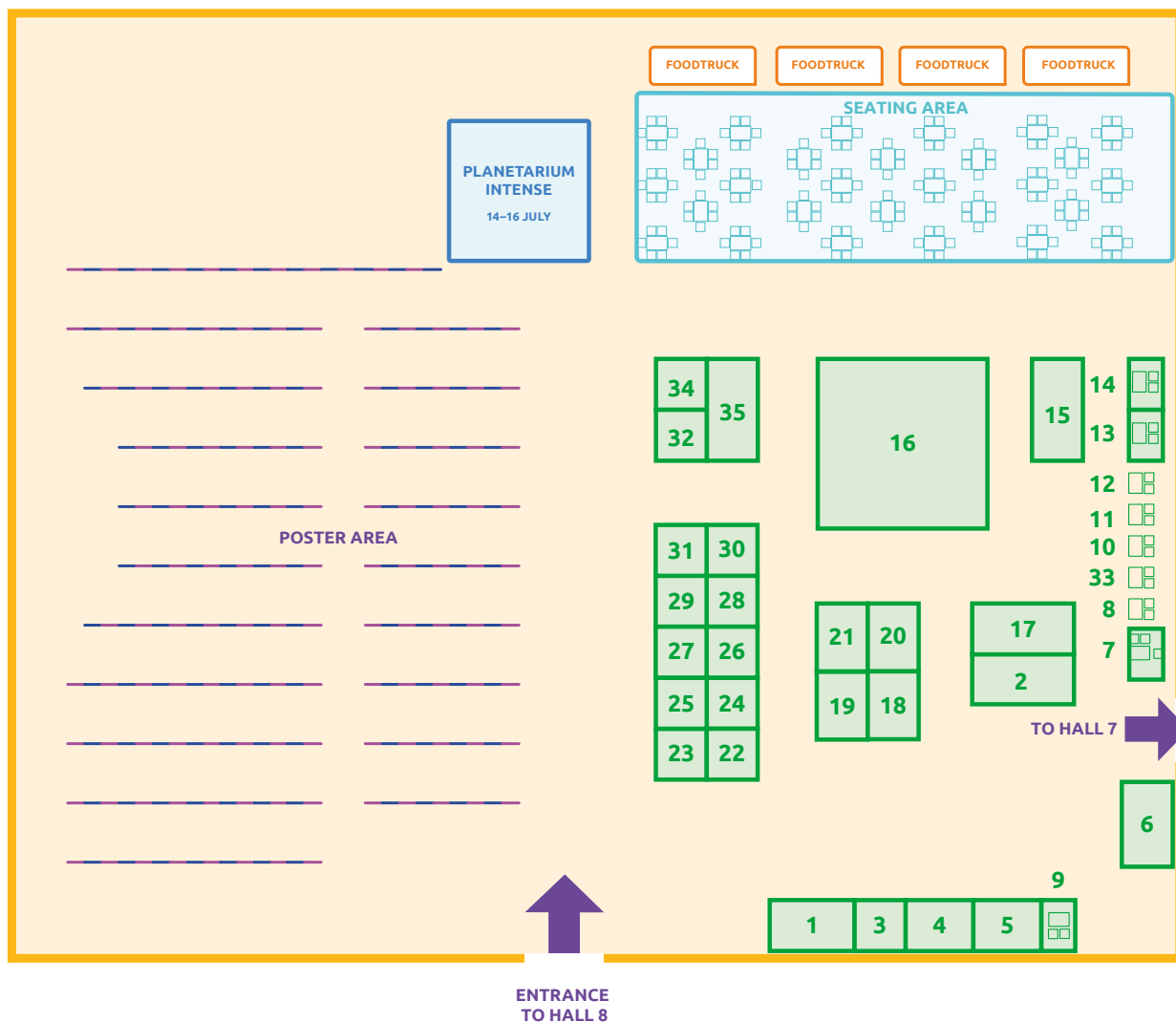


DFG Deutsche
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Exhibitors



Exhibition Floorplan



List of Exhibitors

Booth number	Company
1	TERRAQ + QUANTUM FRONTIERS
2	AGU
3	IMPC - Deutsches Zentrum für Luft- und Raumfahrt
4	GEO8STAR
5	EPOS-ERIC
6	Airbus
7	Rockland + Nortek
8	DIGOS
9	Royal Astronomical Society
10	Cambridge University Press
11	Leibniz-Sozietät der Wissenschaften
12	Seismological Society of America

Booth number	Company
13	Eastern Atlas
14	IAVCEI
15	BGR
16	NASA
17	GfZ
18	HEXAGON
19	IUGS
20	National Center of Meteorology
21	Nanometrics
22	Kinematics
23	IAG
24	ELKH

Booth number	Company
25	IUGG National Committee of the Republic of Korea
26	HI Weather
27	BACO-25
28	Springer Nature
29	PIESAT
30	EGU
31	Gempa gmbh + Raspberry Shake
32	AAS
33	Alberding
34	IMAR
35	IUGG (Display and seating area)

Company Profiles

(in alphabetical order)

Booth n. 32

AAS

Advances in Atmospheric Sciences (AAS), launched in 1984, aims to rapidly publish the latest achievements and developments on the dynamics, physics and chemistry of the Earth's atmosphere and ocean. It also aims to rapidly publish potentially high influential papers on the atmospheres of other planets and on earth system dynamics in which the atmosphere and/or ocean are involved. It's indexed by the SCI database and its current Impact Factor is 3.9. AAS is the associated journal of the International Association of Meteorology and Atmospheric Sciences (IAMAS).

Website: www.iapjournals.ac.cn/aas



Booth n. 2

AGU

AGU is a global community supporting more than half a million advocates and professionals in the Earth and space sciences. We pioneer new approaches to growing the exchange of scientific knowledge through publishing and meetings. We encourage and facilitate new and transdisciplinary fields of study, transforming our programs and operations as we anticipate the changing needs of our worldwide community. We promote excellence in scientific research by setting and promoting standards and best practices, strengthening the integrity of published and presented research and leveraging our science to help society worldwide.

Website: www.agu.org



Booth n. 6

Airbus

Airbus pioneers sustainable aerospace for a safe and united world. The Company constantly innovates to provide efficient and technologically-advanced solutions in aerospace, defence, and connected services. Airbus is a European leader in defence and security and one of the world's leading space businesses.

Website: www.airbus.com

AIRBUS

Booth n. 33

Alberding GmbH

Alberding GmbH, a German-based SME, develops software and system solutions for precise satellite-based applications (GNSS) for more than 25 years. We offer complete solutions for the target markets geo-monitoring, GIS, surveying, precise positioning and precise IoT.

The Alberding telemetry and positioning sensors can be used in combination with smartphones and tablet PC or standalone as precise IoT sensors. Our software inside the sensors is managing the data flow and can capture, log and transmit data from external weather or geotechnical sensors.

In combination with our web-based software we offer complete solutions for precise positioning and geo-monitoring applications.

Website: www.alberding.eu



Booth n. 27

BACO-25

Busan IAMAS-IACS-IAPSO Joint Assembly 2025 will be held from July 20 to 25, 2025 in Busan, South Korea. This 6-day event will attract distinguished colleagues from government, academia, and industries from around the globe, who will participate in scientific presentations and discussions, exchanges of information, and international cooperation in the area of earth sciences. Busan is the second largest city in Korea known as an ocean tourism city with 7 beautiful beaches. It is also a city of festivals, which provides unique experiences for international tourists.

Website: <http://baco-25.org>



Booth n. 15

BGR

Geosciences are an integral part of daily life – much more than we are probably aware of. Clean drinking water, sand and clay for building houses, energy and heat are just as much a part of geoscientific research as protecting human lives from georisks. The Federal Institute for Geosciences and Natural Resources is committed to sustainable use of natural resources and protection of the human habitat. As a neutral institution feeling responsible for the future we advise ministries and the European Community and act as partners in industry and science. The leading motive of our daily work is the improvement of living conditions by sustainable use of Geo-Potentials.

Website: www.bgr.bund.de



Booth n. 10

CAMBRIDGE UNIVERSITY PRESS

Cambridge University Press is a not-for-profit publisher that dates from 1534 and is part of the University of Cambridge. Our mission is to unlock people's potential with the best learning and research solutions by combining state-of-the-art content with the highest standards of scholarship, writing and production. Visit our stand to discuss publishing with us, browse our latest publications and pick up some free journal samples. All the books we have on display are available for purchase at a 60% discount.

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Booth n. 8

DIGOS

DiGOS offers comprehensive expertise in system engineering and implementing field-proven geodetic & geophysical observation systems. DiGOS provides seismic measurement equipment for research, infrastructural monitoring and civil engineering activities worldwide.

We are the experts when it comes to Satellite Laser Ranging including Space Debris surveillance and optical ground stations.

The company is based in Potsdam, Germany, with our roots at the historic German Research Centre for Geosciences (GFZ) research campus.

Website: <http://digos.eu>



Booth n. 13

EASTERN ATLAS

Since 1998 eastern atlas offers scientific and technical services in archeogeophysical prospection. We also apply continuously enhanced high-resolving geophysical methods in engineering and environmental projects.

Website: <http://eastern-atlas.de/>



Booth n. 30

EGU

The European Geosciences Union (EGU) is the leading organisation for Earth, planetary and space science research in Europe and fosters fundamental geoscience research, and applied research that addresses key societal and environmental challenges.

It is a non-profit international union of scientists with about 18,000 members from all over the world. EGU publishes a number of diverse scientific open access journals, which use an innovative public peer-review and interactive public discussions format, supports topical meetings, and organises education and outreach activities. It also honours scientists with a number of awards and medals. Its annual General Assembly is the largest European geosciences event.

Website: www.egu.eu



Booth n. 24

ELKH

The Eötvös Loránd Research Network (ELKH, established in 2019) was named after the preeminent Hungarian scientist, Baron Roland Eötvös (Buda, July 27, 1848 – Budapest, April 8, 1919). Eötvös through his diverse scientific work and leadership exemplifies the interconnectedness of the humanities and natural sciences, of research and innovation. On the occasion of the 175th anniversary of his birth, at the booth of the Institute of Earth Physics and Space Science (EPSS, Sopron; a member of the ELKH network) stereoscopic photographs on his research and mountaineering activities will be displayed, as well as an original Eötvös torsion balance.

Website: <http://elkh.org/en>



Booth n. 5

EPOS

EPOS, the **European Plate Observing System**, has been designed and built as the sole Research Infrastructure for Solid Earth Science in Europe. EPOS harmonizes and integrates multidisciplinary solid Earth data acquired through diverse scientific systems and optimizes their open access to ensure sustainable and universal use and re-use of data and products. This is a prerequisite to make a step change in developing new concepts and tools for innovative research and, in turn, is mandatory to answer scientific and socio-economic questions concerning the system Earth.

Website: www.epos-eu.org



Booth n. 4

GEO*8

The GEO*8 is a consortium of eight leading institutions with state-of-the-art infrastructure and competencies for Earth science research and innovation. GEO*8 stands for integrated solid Earth science linking observations and Earth system modelling through a multi-scale approach to unravel the interaction between the deep Earth and processes operating at the Earth's surface. Research by GEO*8 is vital for better assessing Earth hazards and innovative technology for extracting Earth resources in the energy transition. The prime objective of the GEO*8 alliance includes the use of joint infrastructures, the bundling of interests, particularly within the European research framework, and the promotion of Earth sciences.

Website: <https://geo8.eu/>



Booth n. 17

GFZ

The GFZ is Germany's national research center for the solid Earth sciences. Our mission is to deepen the knowledge of the dynamics of the solid Earth, and to develop solutions for grand challenges facing society. This includes anticipating hazards arising from Earth's dynamic systems and mitigating the associated risks to society; securing our habitat under the pressure of global change; and supplying energy and resources for a growing population in a sustainable manner.

These challenges are inextricably linked with the dynamics of planet Earth, not just the solid Earth and its surface, but also the hydrosphere, atmosphere, and biosphere, and the chemical, physical, and biological processes connecting them.

Website: www.gfz-potsdam.de/en



Booth n. 18

HEXAGON

Hexagon's Geosystems division provides a comprehensive portfolio of digital solutions that capture, measure, and visualise the physical world and enable data-driven transformation across industry ecosystems. Our reality-capture technologies create digital worlds from different views, whether a single dimension between two walls in a house, cadastral boundaries of properties or 3D shapes of cities, infrastructures, utilities, entire countries or even crime scenes. These digital worlds provide actionable information vital for understanding, planning and execution. During execution, Geosystems' positioning, guiding and visualisation solutions empower users to work with the highest efficiency and quality.

Website: <https://hexagon.com>



Booth n. 26

HIWeather

High Impact Weather Project (HIWeather) is a 10-year research project established in 2016 by WMO World Weather Research Program (WWRP).

HIWeather aims to promote cooperative International research to achieve a dramatic increase in resilience to high impact weather, worldwide, through improving forecasts for timescales of minutes to two weeks and enhancing their communication and utility in social, economic and environmental applications.

Website: www.hiweather.net



Booth n. 23

IAG

The International Association of Geodesy (IAG) is an association of the International Union of Geodesy and Geophysics (IUGG). Geodesy is the science of measurement and mapping the Earth and its gravity field. IAG creates and maintains global geodetic reference systems and frames, and IAG Services coordinate observing networks, and generate various products. These cover a wide range of applications vital for modern society, including basis for global satellite positioning. IAG provides data for understanding global processes such as sea-level rise, melting of ice sheets or deformations of the solid Earth. The Global Geodetic Observing System (GGOS) of the IAG serves as an access point for geodetic data and products.

Website: www.iag-aig.org



Booth n. 14

IAVCEI

IAVCEI stands for the **International Association of Volcanology and Chemistry of the Earth's Interior**. The Association represents the primary international focus for: (1) research in volcanology, (2) efforts to mitigate volcanic disasters, and (3) research into closely related disciplines, such as igneous geochemistry and petrology, geochronology, volcanogenic mineral deposits, and the physics of the generation and ascent of magmas in the upper mantle and crust.

Website: www.iavceivolcano.org



Booth n. 34

iMAR Navigation GmbH

iMAR Navigation GmbH, a medium size enterprise located in St. Ingbert / Germany, is a leading worldwide specialist in developing and manufacturing most accurate INS/GNSS based inertial navigation and measurement solutions for many applications. For geophysics applications, with the advanced measurement system iCORUS and the post-processing software iPosCAL-GRAV, *iMAR provides an unmatched solution for strapdown airborne gravimetry surveying.*

iMAR's INS/GNSS products are in use worldwide since more than 30 years now, e.g. for aircraft testing, navigation and guidance, unmanned vehicle control, antenna and camera stabilization, HDD drillhead surveying and control, pipeline surveying, target tracking, defense applications and many others.

Website: www.imar-navigation.de



Booth n. 3

IMPC – Deutsches Zentrum für Luft- und Raumfahrt

The performance of radio systems used in space-based communication, navigation and remote sensing is affected by the ionospheric variability. Moreover, ionospheric disturbances may degrade the accuracy, reliability and availability of Global Navigation Satellite Systems (GNSS), such as GPS and the future civilian European system Galileo. The Ionosphere Monitoring and Prediction Center (IMPC) of DLR provides a near real-time information and data service on the current state of the ionosphere, related forecasts and warnings. Well established ground and space based GNSS measurements are used to permanently monitor the electron density and the structure of the ionosphere-plasmasphere system. Threats due to the ionosphere can be mitigated with the help of IMPC services such as forecasts and warnings of ionospheric disturbances. The IMPC service is involved in the ESA space safety programme and is part of a global ICAO Space Weather Center operated by the PECASUS consortium. IMPC products and services are disseminated via the website

Website: <https://impc.dlr.de/>

Contact: Martin.Kriegel@dlr.de; Jens.Berdermann@dlr.de

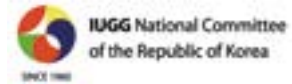


Booth n. 25

IUGG National Committee for the Republic of Korea

The Republic of Korea officially joined the IUGG in 1960 at the 12th IUGG General Assembly in Helsinki, and we, the IUGG National Committee of the Republic of Korea (K-IUGG), were established in 1969. We became a legal entity in 2022 and are thus posed to lead the nation in hosting the 29th IUGG General Assembly in 2027 in collaboration with government ministries, the Incheon City, Korea Tourism Organization, and Incheon Tourism Organization. K-IUGG comprises eight international associations, each promoting scientific research and development in their respective areas. In 2021, amid the global pandemic and travel restrictions, we successfully hosted Conference on Mathematical Geophysics (CMG) online. K-IUGG is working with various geosciences-related societies and institutions in Korea to promote geosciences research, foster the education of young students, and win the bid to host the IUGG General Assembly in 2027.

Website: www.iugg.or.kr



Booth n. 19

IUGS

The International Union of Geological Sciences (IUGS) is a non-political, non-governmental, non-profit organization. Founded in 1961, it is one of the largest member organizations of the International Science Council (ISC) and one of the world's largest scientific organizations. It has a global membership of about a million earth scientists through approximately 120 member countries, which are represented through Adhering Organizations – commonly academies, geological surveys, or geological societies.

Website: www.iugs.org



Booth n. 22

KINEMATRICS

Kinematics is the world leader in innovative design, quality manufacturing and timely supply of earthquake instruments, systems and solutions, where reliability, flexibility and cost effectiveness are important. KMI has over 50 years' experience providing seismologists and structural engineers with the highest standard implementations. Kinematics offer the least expensive Total Cost of Ownership (TCO), which includes not only the initial cost of purchase, but also the accumulated cost of non-fault operation, maintenance, troubleshooting, repair and related field sites visits and no loss of data due to equipment failure.

Visit <https://kinematics.com>



Booth n. 11

Leibniz-Sozietät der Wissenschaften

The LEIBNIZ SOCIETY OF SCIENCES TO BERLIN E.V. is an association of eminent scholars in the natural, social and engineering sciences, and the arts and humanities. Its traditions and its membership go back to the Kurfürstlich-Brandenburgische Societät der Wissenschaften (the later Brandenburg Society of Sciences), founded in 1700 and to its intellectual "father" and first president, Gottfried Wilhelm Leibniz (1646–1716). It is thus one of the oldest academic institutions in Germany. Historically, since the foundation of the Brandenburg Society of Sciences, the Leibniz Society has existed continuously over three centuries with secret-ballot election of new members and is based on their scientific activities and achievements.

Website: <http://leibnizsozietat.de>



Booth n. 21

NANOMETRICS

From mission-critical seismic arrays and tsunami warning systems in over 90 countries across the globe, to induced seismicity monitoring and frac monitoring for the energy production market, Nanometrics specializes in full-service, integrated solutions for studying manmade and natural seismicity, including turnkey seismic networks, industry-leading precision instrumentation, complete data processing and analysis services, and software applications.

Website: <http://nanometrics.ca>



Booth n. 16

NASA

NASA's Science Mission Directorate conducts scientific exploration that is enabled by access to space. We project humankind's vantage point into space with observatories in Earth orbit and deep space, spacecraft visiting the Moon and other planetary bodies, and robotic landers, rovers, and sample return missions. From space, in space, and about space, NASA's science vision encompasses questions as practical as hurricane formation, as enticing as the prospect of lunar resources, as surprising as behavior in weightlessness, and as profound as the origin of the Universe.

Website: www.nasa.gov



Booth n. 20

National Center of Meteorology

The UAE Research Program for Rain Enhancement Science is an international research initiative launched in 2015 in line with the UAE's innovation strategy. Managed by the National Centre of Meteorology (NCM), UAEREP aims to promote scientific advancement, capacity building and development of new technology in rain enhancement. Every two years, the program offers a financial grant of up to US\$1.5 Million to two innovative research projects. Since its inception, the program has provided grants worth US\$16.5 million to 11 innovative research projects and has registered 5 patents internationally. Preparations are currently underway to announce the winners of the fifth cycle.

Website: www.uaerep.ae



Booth n. 7

Nortek

Nortek designs, develops and manufactures acoustic underwater ADCPs, DVLs, Current Meter and Velocimeter that are used to measure currents and motion in the marine environment. Nortek's ocean technology is used in many applications, from understanding the impact of climate change to providing underwater navigational assistance. Engineers use the sensors to conduct offshore operations including construction, maintenance and surveying. Scientists learn more about our marine environment and discover the unexplored depths of our oceans and underwater robotics developers can provide new solutions that aim to increase the safety and efficiency of their vehicles. Whatever the nature of the marine science or engineering project, Nortek supports every step of the way.

Website: www.nortekgroup.com



Booth n. 29

PIESAT

With headquarter in Hong Kong, 50+ subsidiaries, 4 R&D centers, one research institute in China and over 80 doctors and masters, PIESAT is a leading satellite operation and application service provider. With "Serve the Earth & Space Community" as its mission, PIESAT has been focusing on development of core technology in the satellite application, and devoted to customization of satellite application software, initialization of professional application, commercialization of applicational services. PIESAT has also developed PIE (Pixel Information Expert) software series with complete independent intellectual property rights, and provide comprehensive solutions of spatial information applications such as software products, system design and development, data analysis application services for government sectors, enterprises, colleges and universities, research institutions. The only remote sensing application enterprise among the first batch of listed enterprises of sci-tech innovation board, went public in July 2019.

Website: www.piesat.cn



Booth n. 1

QUANTUMFRONTIERS

In the Cluster of Excellence QuantumFrontiers, we use light and matter to extend the fundamentals and applications of metrology beyond the quantum limit. We develop quantum devices to monitor our water resources from space, detect gravitational waves and explore which clock achieves the best accuracy. We exploit hand-in-hand nano-engineering and quantum physics to increase the sensitivity of measurements to improve our fundamental understanding of nature. We invite you to learn more about the research to advance the foundation of metrology by exploring light and matter and the applications in metrology at the quantum frontier of the smallest and largest scales.

Mailing Address

Leibniz Universität Hannover
Cluster of Excellence QuantumFrontiers
QUEST Leibniz Forschungsschule
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Raspberry Shake and GEMPA

Raspberry Shake and **GEMPA** bring seismic monitoring solutions to a new level. GEMPA, the leading developer of the SeisComP ecosystem, offers solutions for local and induced seismicity monitoring, moment tensor inversion, earthquake early warning, seismic and infrasound array processing, structural health monitoring and earthquake engineering analysis. The professional-grade, low-cost Earth monitoring sensors developed by Raspberry Shake such as seismographs, accelerometer and infrasound models, allow a cost-effective densification of existing networks with rapid deployments and full integration in SeisComP applications. The combined forces developed by GEMPA and Raspberry Shake are used from professional scientists, institutions, industry, to hobbyists and educators.

Website: <http://raspberryshake.org>

Website: www.gempa.de



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Rockland Scientific

Rockland Scientific is dedicated to the measurement of turbulent flow in the marine environment and provides measurement services, assist with technical questions and consult on the design of measurement campaigns, experimental instrumentation, and data collection & processing. At Rockland, an eclectic team works in an inclusive environment to deliver sensor and software solutions to Oceanographers in 30 countries. A thriving ocean technology company headquartered in Victoria, with satellite sales offices in the USA and France, Rockland helps scientists understand climate change. Rockland takes pride in their customer-first culture, which is reflected by raving referrals and a growing number of scientific publications.

Website: <http://rocklandscientific.com>



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Royal Astronomical Society

The Royal Astronomical Society (RAS), founded in 1820, encourages and promotes the study of astronomy, solar-system science, geophysics and closely related branches of science. The RAS organises scientific meetings, publishes international journals, recognises outstanding achievements with the awarding of medals and prizes, maintains an extensive library, supports education through grants and outreach activities, and represents UK astronomy nationally and internationally.

Website: <https://ras.ac.uk/>



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Seismological Society of America (SSA)

Seismological Society of America (SSA) – One Community. One Mission:
Advance Earthquake Science Worldwide.

SSA is mission-driven to publish high-impact papers that advance earthquake science worldwide. We accomplish this by publishing three of the leading journals in Seismology – *The Bulletin of the Seismological Society of America (BSSA)*, *Seismological Research Letters (SRL)* and *The Seismic Record (TSR)*.

We support seismologists, building their networks through our travel grant programs and furthering their professional development with mentoring, workshops and conferences. Please [contact info@seismosoc.org](mailto:info@seismosoc.org) to learn more.

Website: www.seismosoc.org



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SPRINGER NATURE

Springer Nature is one of the world's leading global research, educational and professional publishers, home to an array of respected and trusted brands providing quality content through a range of innovative products and services. Springer Nature is the world's largest academic book publisher, publisher of the world's most influential journals and a pioneer in the field of open research. The company numbers almost 13,000 staff in over 50 countries and has a turnover of approximately EUR 1.5 billion. Springer Nature was formed in 2015 through the merger of Nature Publishing Group, Palgrave Macmillan, Macmillan Education and Springer Science+Business Media.

Website: www.springernature.com



Booth n. 1

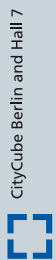
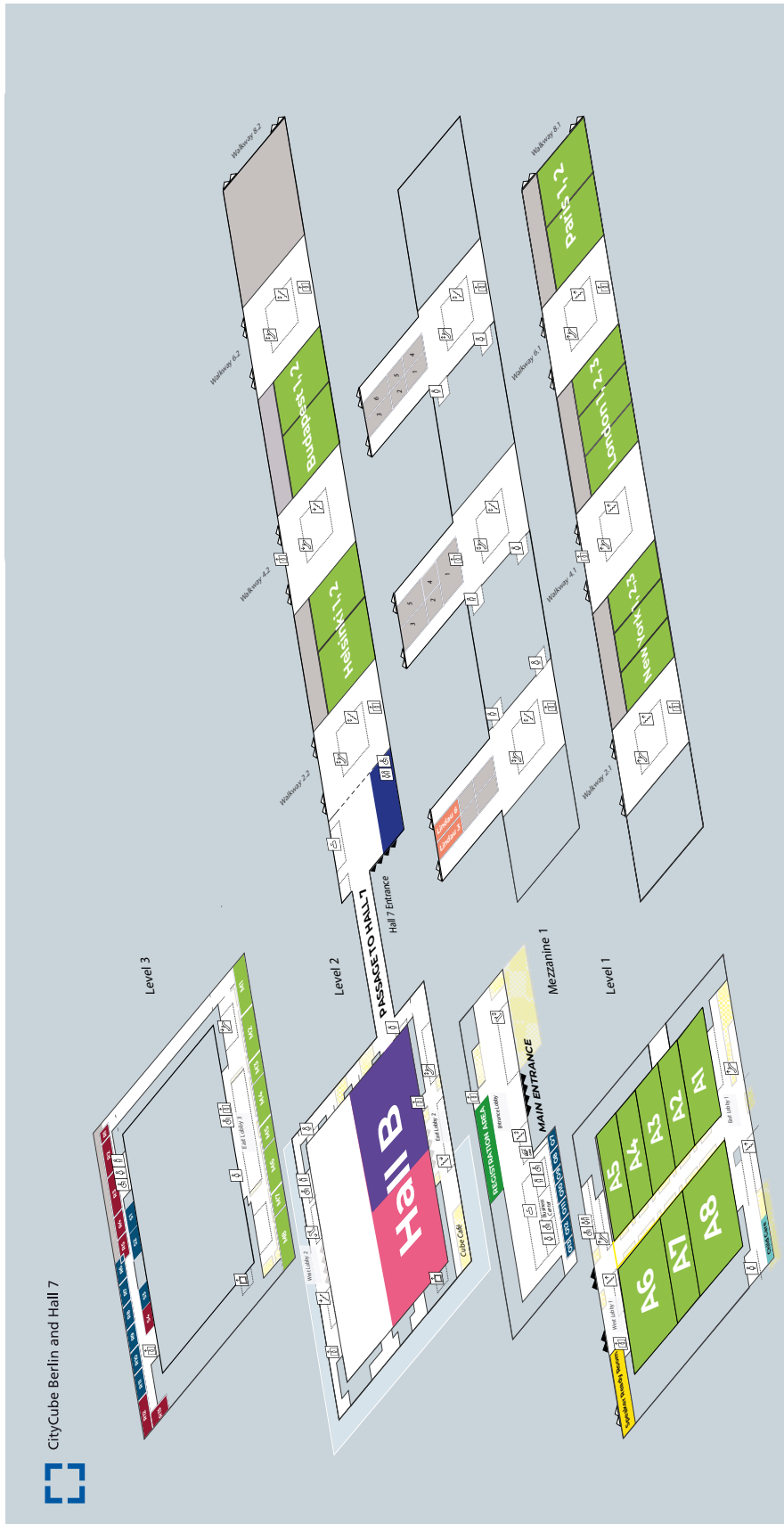
TERRA Q

Collaborative Research Center 1464 TerraQ – Relativistic and Quantum-based Geodesy. In TerraQ, we develop and apply novel quantum technology and measurement concepts for gravimetric Earth observations on ground and in space. To enable the monitoring of spatial and temporal mass variations at the next accuracy level, we integrate expertise from engineering and fundamental research. This way, we create a new geodesy that advances satellite geodesy, terrestrial gravimetry and reference systems. TerraQ will provide crucial input for climate change research with enormous impact on the whole field of geosciences. And, TerraQ will educate the needed early-career scientists for this demanding task.

Website: www.terraq.uni-hannover.de/en



General Floorplan



CityCube Berlin and Hall 7

- Hall B**
 - Poster Area
 - Exhibition & Food Zone
- Other**
 - Registration Area
 - Travel Grants Counter
 - Speaker Ready Room
 - Child Care
 - Messe Berlin Guest Events
- Scientific Sessions**
 - A1-A8
 - New York 1-3
 - London 1-3
 - Paris 1-2
 - Helsinki 1-2
 - Budapest 1-2
 - M1-M8
- Meetings**
 - R1-R5
 - R12, R13
 - S4
- Offices**
 - R6-R11
 - S1-S3
 - O7-O11
 - O12, O13
- Volunteers**
 - Lindau 3
 - Lindau 6



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