IAG Scientific Assembly 2025:
Geodesy for a changing environment

Scientific Organizing Committee (SOC):

Daniela Thaller (chair), Urs Hugentobler, Srinivas Bettadpur, Rebekka Steffen, Pawel Wielgosz, Laura Sanchez, Annette Eicker, Mattia Crespi, Valérie Ballu, Jürgen Müller, Szabolcs Rózsa

LOC representatives: Stefano Gandolfi, Susanna Zerbini

Symposia	Sessions within Symposia	Conveners
G01 Reference Frames		**Urs Hugentobler**
	G01-1: Space Techniques: Prerequisites for current and future terrestrial and lunar missions	**Krzysztof Sosnica**
	G01-2: International Terrestrial Reference Frame: Challenges, future developments and applications	**Mathis Bloßfeld**
	G01-3: Regional Reference Frames: Status, Challenges and Applications	**Fernand Bale**
	G01-4: The International Celestial Reference Frame for Geodetic Applications: Requirements, Challenges, and Future Prospects	**Maria Karbon**
G02 Gravity Field – Science Inference		**Srinivas Bettadpur**
	G02-1: Gravity Field and Reference Systems in Physical Geodesy	**Georges Vergos,** Tao Jiang, Ismael Foroughi, Hartmut Wziontek, Hussein Abd-Elmotaal, Daniela Carrion
	G02-2: Hydrological and Cryospheric Applications from Gravity and Satellite Altimetry	**Wei Feng,** Shin-Chan Han, Eva Boergens, Tyler Sutterley
	G02-3: Oceanography and Solid Earth Science from Gravity and Satellite Altimetry	**Cheinway Hwang,** Robert Tenzer, Mirko Reguzzoni, Daocheng Yu, Lan Zhang
G03 Gravity Field – Technology and Techniques		**Srinivas Bettadpur**
	G03-1: Next Generation Technologies	David Wiese, Luca Massotti, Jürgen Müller,

		Derek van Westrum
	G03-2: Terrestrial Gravimetry	Przemyslaw Dykowski, Ezequiel Antokoletz, Sylvain Bonvalot, Derek van Westrum, Vojtech Palinkas, Neda Darbeheshti
	G03-3: Spaceborne Gravimetry	João Encarnação, Adrian Jäggi, Aleš Bezdek, Nadège Pie
	G03-4: Analysis, algorithms, and Models	Athina Peidou, Khosro Ghobadi-Far, Rebecca McGirr, Sinem Ince
G04 Earth Rotation and Geodynamics		**Rebekka Steffen**
	G04-1: Geodetic Constraints and Modeling of Glacial Isostatic Adjustment and Cryospheric Deformation Across Time Scales	**Karen Simon,** Matthias Willen, Carsten Ludwigsen, Lambert Caron, Ingo Sasgen
	G04-2: Tidal and non-tidal mass signatures in space and surface geodetic observations	**Severine Rosat,** Carla Braitenberg, Xiaoming Cui, Henryk Dobslaw
	G04-3: Monitoring and Modelling of Earth Orientation Parameters Across Temporal Scales	**Henryk Dobslaw,** Sigrid Böhm, Sadegh Modiri, Jolanta Nastula, Chengli Huang
	G04-4: Open Session on Earth Rotation and Geodynamics	**Rebekka Steffen,** José Manuel Ferrandiz, Anna Riddell, Chikondi Chisenga, Benjamin F. Chao
G05 Advances in GNSS, Positioning Technologies, and Engineering Geodesy		**Pawel Wielgosz, Artur Fischer**
	G05-1: Emerging Positioning Technologies and GNSS Augmentations	**Heidi Kuusniemi,** Fabricio S. Prol, Dinesh Manandhar, Mahmoud Elsanhoury
	G05-2: Multi-frequency, Multi-constellation GNSS	**Jianghui Geng,** Pawel Wielgosz
	G05-3: GNSS for Troposphere	**Cuixian Lu,** Galina Dick, Ningbo Wang, Jonathan Jones
	G05-4: Engineering Geodesy	**Janis Kaminskis,** Janina Peplinska

G06 Global Geodetic Observing System		**Laura Sanchez, José Rodriguez, Detlef Angermann**
	G06-1: Contribution of geodesy to Earth observations	**Laura Sanchez,** Richard Gross, Hansjörg Kutterer
	G06-2: Global geodetic infrastructure for Earth System Monitoring	**José Rodriguez,** Martin Lidberg, Lucia McCallum, Cornelia Eschelbach
	G06-3: Standardization, integration and optimization of geodetic products	**Detlef Angermann,** Robert Heinkelmann, Nicholas Stamatakos, George Vergos
	G06-4: Enhancement of GGOS collaboration at regional level	**Claudia Tocho,** Esther Azcue, Aletha de Witt
G07 ICCT – Advances in Geodetic Theory		**Mattia Crespi Amir Khodabandeh Pavel Novák**
	1: Gravitational field modelling and analysis for the Earth and for oblate and prolate planetary bodies and irregularly shaped celestial bodies	Michal Šprlák, **Zhi Yin,** Dimitrios Tsoulis
	2: Geoid/quasigeoid modelling approaches in view of cm-precision/cm-accuracy	**Ropesh Goyal** Sten Claessens
	3: Height datum: definition, new concepts, and standardization	**Xiaopeng Li** Marcelo Santos
	4: High-precision GNSS theory and algorithms	**Dimitrios Psychas**
	5: Geodetic quality/integrity modelling, monitoring and design	**Safoora Zaminpardaz**
G08 Geodesy for Climate Research		**Annette Eicker,** Carmen Blackwood, Balaji Devaraju, Frank Ghomsi, Maria Fernanda Camisay
G09 Seafloor Geodesy, Marine Positioning and Undersea Navigation		**Valérie Ballu,** Heidrun Koop
G10 Modern Concepts and Quantum Technology for Geodesy		**Jürgen Müller,** Jakob Flury, Marcelo Santos, Marvin Reich, Öykü Koç
G11 Geodesy for Society: Data Management, Policy Networking and Public Engagement		**Martin Sehnal,** Szabolcs Rózsa

	G11-1: Data Management, Dissemination of Results, and Stakeholder Networking	**Anna Riddell,** Roger Fraser, Markus Bradke, Taylor Yates
	G11-2: Geodesy at the Intersection of Science and Policy	**Allison Craddock,** Basara Miyahara
	G11-3: Communication, Education and Outreach in Geodesy	**Martin Sehnal,** Szabolcs Rozsa, Öykü Koc, Sujata Dhar
Joint Symposia		
J01: Geodetic Space Weather Research		**Michael Schmidt,** Ehsan Forootan, Fabricio Dos Santos Prol, Ningbo Wang, Andrès Calabia Aibar
J02: Artificial Intelligence and Machine Learning in Geodesy		**Benedikt Soja, Maria Kaselimi**
	J021: Geodetic machine learning: Theoretical challenges and opportunities for geodesy	**Lotfi Massarweh,** Mostafa Kiani Shahvandi, Alireza Amiri-Simkooei
	2: AI for Deformation Analysis and GNSS Remote Sensing: Earth, Atmosphere and Natural Hazards	**Milad Asgarimehr,** Ashutosh Tiwari, Monique Kuglitsch
	3: Decoding Earth's Dynamics: Machine Learning Frontiers in EOP and Gravity Field Assessment	**Sadegh Modiri,** Santiago Belda, Fupeng Li, Justyna Śliwińska-Bronowicz, Zhangli Sun
J03: Geohazards Monitoring through Geodesy		**Tim Melbourne,** Susanna Ebmeier, Jean-Mathieu Nocquet, Masayuki Kano, Michela Ravanelli
Highlight Sessions		
H01 Future Geodetic Satellite Missions and new Technologies		**Susanne Glaser,** Johannes Böhm, Carmen Blackwood
H02 Northeast Italy with focus on the Po Plain – Impacts of changing climate on the region		**Stefano Gandolfi, Susanna Zerbini**

H03 Geodetic Monitoring for Geohazards		**Tim Melbourne,** Laura Sanchez, Jean-Mathieu Nocquet
	No Call-for-Abstracts; Presentations will be by invitations only	
H04 Geodesy for Climate and Water		**Carmen Blackwood, Annette Eicker, Jay Famiglietti**
	No Call-for-Abstracts; Presentations will be by invitations only	