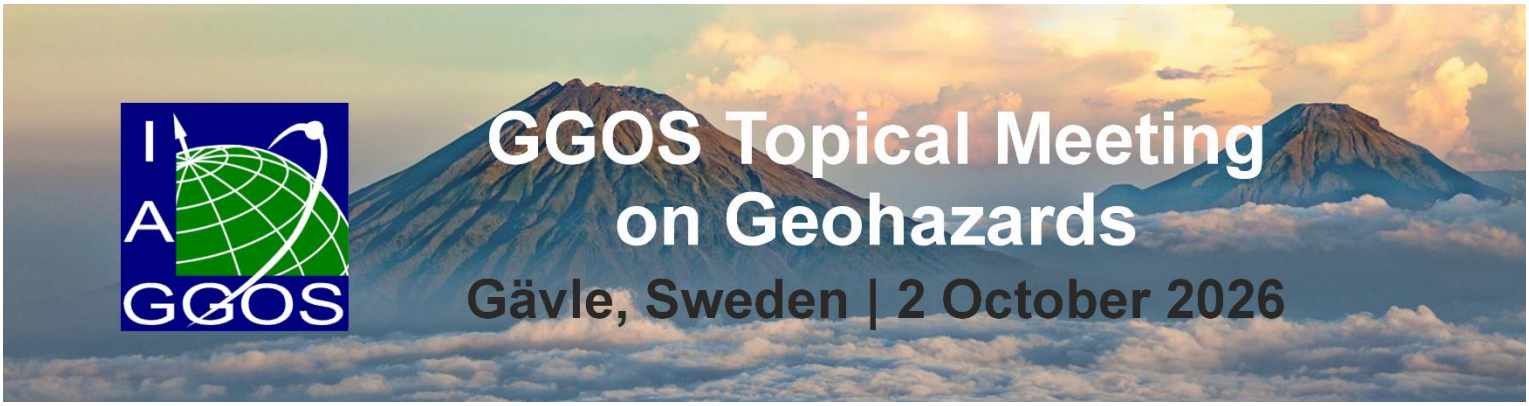

https://geodesy.science/events/ggos-topical-meeting-geohazards/

Assessing the feasibility of translating research into operational services for geohazard monitoring.

Supported by

IUGG – International Union of Geodesy and Geophysics
IAG – International Association of Geodesy
GGOS – Global Geodetic Observing System
Lantmäteriet – The Swedish Mapping, Cadastral and Land Registration Authority, Sweden
BEV – Federal Office of Metrology and Surveying, Austria
TUM – Technische Universität München, Germany
University of Gävle, Sweden

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Presentation

Through the **Global Geodetic Observing System (GGOS)**, the **International Association of Geodesy (IAG)** provides a common framework to encourage, coordinate and facilitate Earth-monitoring efforts based on geodesy. This framework aims to integrate observations and geodetic outputs from different national and international organisations, while also raising awareness of geodesy and its products. A key strategic objective of GGOS is to facilitate the incubation of new, integrated research topics supported by geodesy that address emerging scientific and societal challenges. To this end, GGOS promotes the establishment of **GGOS Focus Areas**. These address broader, cross-disciplinary issues, developing new methods, designing integrated data analysis, and identifying potential new geodetic products. Current GGOS Focus Areas include **Geohazards Monitoring**, **Geodetic Space Weather Research (GSWR)** and **Artificial Intelligence for Geodesy (AI4G)**.

The Focus Area on Geohazards Monitoring currently focuses on **GNSS-enhanced Tsunami Early Warning Systems (GeTEWS)**, particularly in Oceania, which is one of the most seismically active regions. Developments of this Focus Area have been instrumental in raising the profile of geodesy within important international bodies such as the Pacific Geospatial Surveying Council (PGSC), the GeoRisk Commission of the International Union of Geodesy and Geophysics (IUGG), the IUGG Joint Tsunami Commission, the UN Sendai Framework for Disaster Risk Reduction, and the UN International Committee on GNSS. The outcomes of this Focus Area have also contributed to the Global Assessment Reports on Disaster Risk Reduction (GAR), which are regularly published by the UN Office for Disaster Risk Reduction (UNDRR).

Given the success of the Geohazards Monitoring Focus Area with GeTEWS, GGOS is eager to extend its remit by exploring further ongoing and prospective applications of geodetic techniques and methods for monitoring natural hazards. The goal is to evaluate the feasibility of transforming ongoing and future scientific research outcomes into operational services. GGOS is particularly interested in approaching experts in **Synthetic Aperture Radar (SAR)** and **Interferometric Synthetic Aperture Radar (InSAR)** techniques, as well as **regional infrastructures** for geohazard monitoring based on geodetic methods. While most monitoring activities rely on satellites and space-based sensors, this Topical Meeting should emphasise **in-situ measurements** and **existing terrestrial monitoring sites and networks**.

Format of the meeting

The GGOS Topical Meeting on Geohazards will take place on 2 October 2026 in Gävle, Sweden. The meeting will consist of three 1.5-hour sessions, each beginning with key solicited presentations, followed by a discussion on the topics listed below. **Both on-site and remote participation will be possible**.

The GGOS Topical Meeting on Geohazards is scheduled to take place the day after the IAG **Commission 3 Symposium on "Tracking and Investigating Geodynamics and Earth Rotation"** (TIGER Symposium, https://geodesy.science/com3/meetings/tiger-symposium-2026/). As this Symposium includes sessions on Cryospheric Deformation, Volcanogeodesy and Seismogeodesy, experts from the International Association of Cryospheric Sciences (IACS), the International Association of Volcanology and Chemistry

of the Earth's Interior (IAVCEI), and the International Association of Seismology and Physics of the Earth's Interior (IASPEI) will have the opportunity to participate in the GGOS Topical Meeting.

In the week after the GGOS Topical Meeting, the **GGOS Days 2026 will take place at the same venue**, see https://geodesy.science/events/ggos-days-2026/. Those attending the GGOS Tipcoal meeting are also welcome to participate in GGOS Days 2026.

Topics

The use of geodetic techniques to monitor natural hazards is well documented in scientific research and public literature. Further improvements are discussed at regular science-driven conferences. The GGOS Topical Meeting focuses on effectively **applying research results to early warning programmes**. These include the challenges of long-term deployment and operation of observation networks and sensors, data archiving and analysis capabilities, implementation of real-time services and usability of geodetic outputs in emergency response programmes. Key invited speakers will summarise the current challenges in their field of expertise, and discussions in a round-table format will identify areas in which GGOS could contribute towards overcoming these challenges.

Participation and pre-registration

All colleagues working on the topics of the meeting or related themes are invited to participate on-site or online. **Attendance is free of charge** (no registration fee), but pre-registration is required to ensure room capacity and to coordinate the online communication. The pre-registration form is available at

https://geodesy.science/events/ggos-topical-meeting-geohazards/#registration

By pre-registering, the participants agree that their data will be stored internally in the GGOS records. The data will only be used for meeting-related organisational issues. On-site participation will be confirmed before 15 August. If any pre-registered participant is not able to attend the meeting, they are asked to withdraw their pre-registration as soon as possible (by contacting ggos@geodesy.science). Please note that the free participation is only valid for the GGOS Topical Meeting on Geohazards (2 October 2026). To attend the entire TIGER Symposium, a registration fee is required (see https://geodesy.science/com3/meetings/tiger-symposium-2026/#registration). GGOS Topical Meeting attendees interested to join the Volcano- and/or Seismogeodesy Sessions of the TIGER Symposium (on 1 October 2026) can register free of charge via the GGOS Topical Meeting website.

Important Dates

- Pre-registration deadline **31 July 2026**
- On-site participation confirmation **15 August 2026**
- Schedule and conference program **31 August 2026**
- List of participants **15 September 2026**
- GGOS Topical Meeting **2 October 2026**

Coordination team

- **Laura Sánchez**, President of GGOS, Technische Universität München, Deutsches Geodätisches Forschungsinstitut (DGFI-TUM), Germany
- **Rebekka Steffen**, President IAG Commission 3 "Earth Rotation and Geodynamics", Lantmäteriet, Sweden
- **Constanza Santori**, Early Career Scientist Representative, Universidad de Chile, Chile
- **Holger Steffen**, EPOS TCS GNSS Executive Board Chair, Lantmäteriet, Sweden
- **Faramarz Nilfouroushan**, Senior lecturer, University of Gävle, Sweden
- **Martin Sehnal**, Director of the GGOS Coordinating Office, BEV – Federal Office of Metrology and Surveying, Austria

Venue and travel information

The GGOS Topical Meeting on Geohazards will be hosted by Lantmäteriet, the Swedish Mapping, Cadastral and Land Registration Authority (https://www.lantmateriet.se/en/), located in:

Lantmäterigatan 2C, 802 64 Gävle, Sweden

Gävle (Sweden) is located about 150 km to the north of Stockholm. More information about the city can be found at https://www.visitgavle.se/en.

Arrival by air

The closest airport is Stockholm Arlanda Airport (airport code ARN), which has daily connections to many European and worldwide destinations through scheduled services of a large number of international airlines. It is the largest airport in Sweden. The airport has frequent train connections to Gävle via the station Arlanda C, which is located between the terminals 5 and 4.

Arrival by train

Gävle's railway station is located very close to the city centre. Timetables and tickets are supplied by SJ, https://www.sj.se/en.

Arrival by car

Those wishing to drive to Gävle need to enter the Scandinavian peninsula taking either a ferry to Gothenburg, Stockholm or Trelleborg, or using the Øresund Bridge, the connection between Denmark (Copenhagen) and Sweden (Malmö).

Accommodation

Information about hotel reservation will be provided to on-site participants later.

Visa

Sweden is a member of the European Union; therefore, no visa is needed for E.U. citizens. Non - E.U. participants should contact their nearest Swedish Embassy or Consulate for further information. For a complete list of countries who do need to apply for a visa, check https://www.government.se/government-policy/migration-and-asylum/list-of-foreign-

citizens-who-require-visa-for-entry-into-sweden/. If you do need a visa, please visit https://www.government.se/government-policy/migration-and-asylum/information-on-visas/ to find more details. Those who require a formal invitation for the purpose of obtaining a visa, or raising travel funds in their country, may contact the organisation team ggos@geodesy.science. Only those participants who have confirmed their contribution to the GGOS Days topics will receive a formal invitation letter. Travel and medical insurance, if required, are the sole responsibility of the participant.

Code of conduct

GGOS follows the Code of Conduct of the International Union of Geodesy and Geophysics (IUGG) and their anti-harassment guidelines. These code and guidelines apply for all GGOS meetings. GGOS opposes any discrimination or harassment based on such factors as age, citizenship, disability, ethnic origin, gender identity, language, political or other opinion, religion, or sexual orientation. We will follow IUGG's Anti-Harassment Guidelines to prevent any form of harassment or discrimination, and to ensure an inclusive atmosphere that encourages the free expression and exchange of scientific ideas and results. Further details about the code of conduct are available at https://geodesy.science/events/ggos-topical-meeting-geohazards/#code-of-conduct.

Contact

https://geodesy.science/events/ggos-topical-meeting-geohazards/

GGOS Coordinating Office, ggos@geodesy.science