

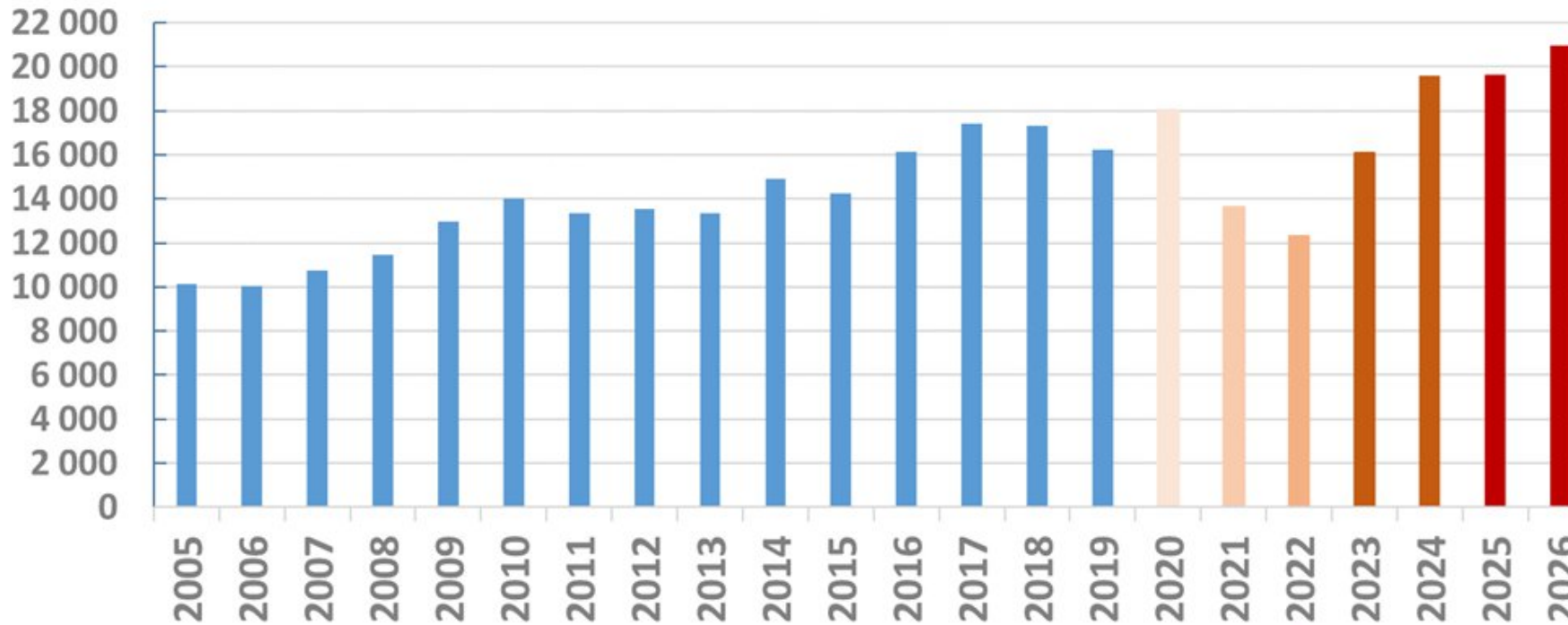


Geodesy Division Business Meeting

April 22nd, 2026, 13.30-14.30 CEST, online

- Statistics 2026
 - Medals and Awards
 - Vening Meinesz Medal
 - Outstanding Early Career Scientist Award
 - Structure of the Geodesy Division
 - Report by the Geodesy ECS Representative
 - Social media & networking
 - EGU EDI Committee
 - EGU's Policy network
 - Outlook 2027
-

Statistics EGU26



- 21,117 abstracts submitted at the deadline

20,534 active scheduled abstracts in 2026

(as of 21 April 2026)

On-site only up to 2019

Online only

Hybrid orals only

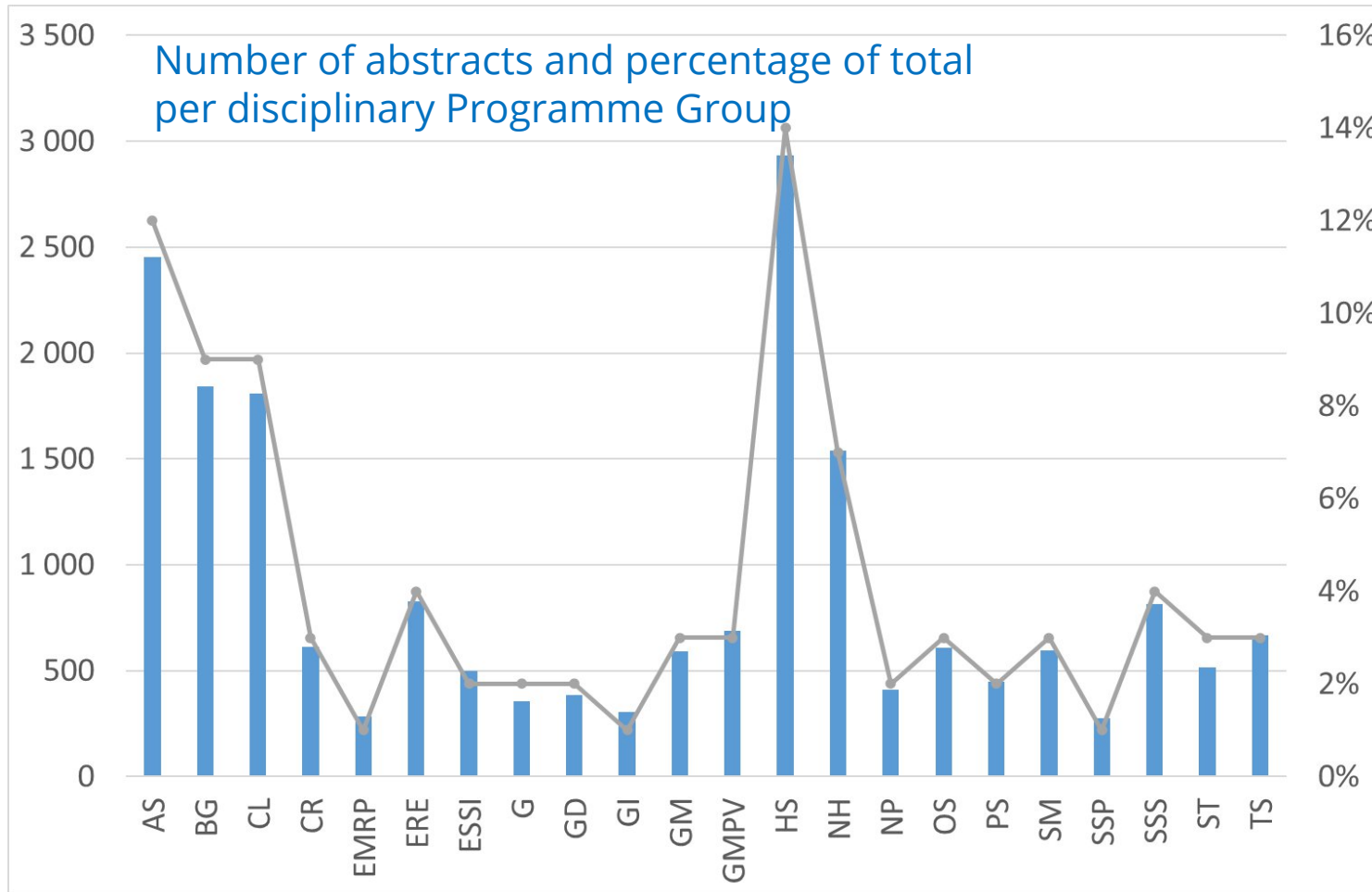
Fully hybrid since 2023

EGU26: numbers at a glance

- **1,000+ active sessions in total**
 - ~800 disciplinary PG sessions (60 ITS sessions)
 - 62 Short Courses + Artist-in-Residence workshops
 - 20 Education and Outreach Sessions (EOS), GIFT workshop
 - 38 Medal and Award Lectures
 - 9 Union Symposia and 7 Great Debates
 - 150+ Townhall & Splinter meetings scheduled
- **ECS Networking**
- **Science for Policy**
- **EDI Committee events**



More on: egu26.eu



- Overall, about 25 abstracts per session at EGU26
- Presentation types:
 - Orals: 43%
 - PICO: 7%
 - Posters on site: 47%
 - Posters virtual: 3%
- ECS authors: 58%

Statistics 2026 - Geodesy Sessions



Equality, Diversity, Inclusion

Session Title	coorg.	2026	oral blocks
G1.1 <u>Machine Learning for Geodesy</u>		19	1
G1.2 <u>Recent Developments in</u>			
G2.2 <u>New technologies for the</u>			
G2.3 <u>Terrestrial Reference Frames</u>			
G2.4 <u>High-precision GNSS [..]</u>			
G2.5 <u>Precise Orbit Determination</u>			
G3.1 <u>Geodesy for climate res</u>			
G3.2 <u>The omnipresent glacia</u>			
G3.3 <u>Space, Land and Marine</u>			
G3.4 <u>Hydrological and Cryos</u>			
G3.7 <u>Earth Rotation [...]</u>			
G4.1 <u>Modern Concepts for G</u>			
G4.2 <u>Satellite Gravimetry [...]</u>			
G5.2 <u>Atmospheric and Environmental Monitoring [...]</u>	x	37	2
		366	

convener teams should ideally reflect the entire G community with respect to

- gender
- affiliation
- career stage

15 out of 16 geodesy sessions received the EDI logo

94% (2025: 100%, 2024: 87%, 2023: 100%)

Please make sure your EGU profiles are up to date when organizing a session!

(submitted, without withdrawals)
2025: 393 => some decline

The Geodesy programme @EGU26

	Monday 4 May							Tuesday 5 May						Wednesday 6 May					
	8:30-10:15	10:15-10:45	10:45-12:30	12:45-13:45	14:00-15:45	16:15-18:00	Evening	8:30-10:15	10:15-10:45	10:45-12:30	14:00-15:45	16:15-18:00	Evening	8:30-10:15	10:15-10:45	10:45-12:30	14:00-15:45	16:15-18:00	19:00-20:00
G oral sessions	G3.7 (-2.20)		G2.5 (0.51)		G3.4 (0.15)	G2.2 (-2.21)		G5.2 (K1)		G5.2 (K1)	G3.1 (K1)	G2.1 (K1)		G1.1 (K2)			G2.4 (K1)	G2.4 (K1)	
G co-organised oral sessions	GD1.1 (K1)		GD1.1 (K1)											SM3.4 (D2)		SM3.4 (D2)	SM3.4 (D2)	SM3.4 (D2)	Gauss Lecture (F2)
Poster & Pico sessions			G3.7 (X2)		G2.2 (X2)	ITS2.2/G3.2 (X2)				G3.1 (X1)	G2.5 (X1)			G2.3 (X1)					G1.1 (X1)
					ITS2.2/G3.2 (X2)	PS7.2 (X4)				G3.4 (X1)	G5.2 (X1)	GD1.1 (X2)		G2.4 (X1)					G1.2 (X1)
																			TS3.6 (X2)
Pop-up events		Geodesy Fika (Terrace G)					G ECS Dinner (starts at 19:30)		Women in Geodesy (Terrace G)				IAG Reception (BEV) 19:00 - 21:45		Meet the G team (EGU booth)				
101 short courses				Geodesy (-2.62)	Geodesy & AI (-2.62)							Geology (-2.41/42)					Seismology (-2.41/42)	Exoplanets (-2.41/42)	

	Thursday 7 May						Friday 8 May				
	8:30-10:15	10:15-10:45	10:45-12:30	14:00-15:45	16:15-18:00	19:00-20:00	8:30-10:15	10:15-10:45	10:45-12:30	14:00-15:45	16:15-18:00
G oral sessions	G2.3 (0.96/97)		G3.3 (0.96/97)		G4.2 (K1)	MAL32-G (G1)	G4.2 (K2)		G4.1 (K2)	G4.1 (K2)	
G co-organised oral sessions	HS6.4 (2.44)		HS6.4 (2.44)		PS7.2 (0.16)		TS3.6 (G2)				
Poster sessions	G4.1 (X2)		G4.2 (X2)		G3.3 (X2)		HS6.4 (A)				
	SM3.4 (X1)				G (v3)						



G oral sessions
G co-organised oral sessions
Poster sessions

Special Session: G2.1

- G2.1: Geodesy: Streamlining geodetic research for policy - how can we utilize the Essential Geodetic Variables (EGVs) for easier engagement and communication
- Discussion/panel format

Virtual posters:

- All geodesy virtual posters in TB4 on Thursday
- Individual poster booths in Zoom
- On-site presentation, in TB3 on Thursday

(ICS) Calendar link



20th C.F. Gauss Lecture by Rebekka Steffen, solicited, on Wednesday, 19:00, room F2

Please show support to our virtual presenters!

How is the geodesy programme created?

1. Session proposal, acceptance, and abstract submission
 2. Rough estimate of minimum **# of abstracts for each oral slot** by EGU and session merging based on this number
 3. Assignment of **specific # of oral blocks** for Geodesy (this year: 16+1)
 4. Assignment of **rooms to a cluster of four small divisions** (G, GD, GMPV, SM) => 92 time slots in 5 different rooms
 5. **Negotiation** within the cluster to get rooms and time slots for Geodesy
 6. **Distribution** of geodesy session into „our“ oral blocks based on
 - size of sessions/rooms
 - number of time slots per session
 - requests for no overlap/back-to-back/days avoidance
 - time conflicts of conveners/speakers which have obligations in more than one session
 - scheduling of the corresponding poster session,...
-

Medals and awards

Geodesy Division 2025 OSPP Award:

ETH zürich



Marcel Iten
(ETH Zurich)

Ionospheric data fusion with GNSS, GNSS-RO and satellite altimetry based on machine learning

Marcel Iten¹, Shuyin Mao¹, Benedikt Soja¹
¹Institute of Geodesy and Photogrammetry, ETH Zurich

1 Introduction

Global ionospheric maps (GIMs) are widely used ionospheric products, especially in Global Navigation Satellite System (GNSS) applications, as they allow for instance to correct for the ionospheric delays in single-frequency applications. The global distribution of GNSS data used to describe the ionospheric state is heavily limited to continental regions, leaving oceanic areas with major data gaps. Combining ionospheric estimates from different space geodetic techniques such as **GNSS**, **GNSS radio occultation (GNSS-RO)** and **satellite altimetry** we can improve the GIM quality in regions without GNSS observations.

2 Data

- Global GNSS data from the International GNSS Service (IGS) network.¹
- GNSS-RO data from the University Corporation for Atmospheric Research (UCAR) of the Constellation Observing System for Meteorology Ionosphere and Climate (COSMIC-2) mission.²
- Satellite altimetry data from National Oceanic and Atmospheric Administration (NOAA) of the Jason-3 mission.³

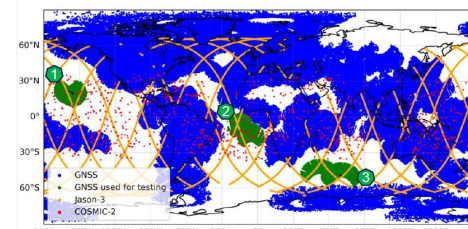


Figure 1: Distribution of ionospheric observations from different observation techniques for 2024-08-09. Marked in green are the three test regions Hawaii (1), Atlantic (2) and Antarctic (3).

3 Method

- Neural network (NN) based GIM consisting of 10 ensemble members.⁴
- Loss function according to Laplacian deep ensembles which enables to output the predicted value with an estimated uncertainty.⁵

$$L_j = \sum_{i=1}^N \left(\log(\eta_i(X_j)) + \frac{|Y_j - \mu_j(X_j)|}{\eta_j(X_j)} \right)$$

Pipeline to fill data gaps with additional data:

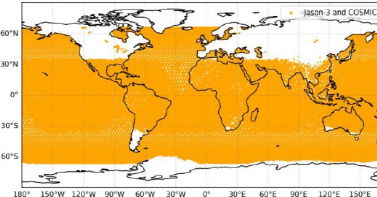
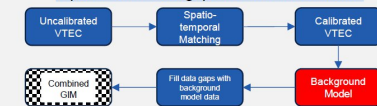


Figure 2: Distribution of ionospheric observations from Jason-3 and COSMIC-2 for 80 days used to construct a background model for a specific region.

4 Results

Table 1: VTEC MAE [TECU] for the three test regions by modeling, excluding local GNSS data, and excluding GNSS samples.

Region	Local GNSS included	No local GNSS, no Background	No local GNSS, with Background
Hawaii	1.64	4.89	3.52
Atlantic	2.29	4.26	3.09
Antarctic	0.92	2.45	2.25

Table 2: Single point positioning 3D MAE [m] compared to a dual frequency solution. Evaluated for stations of the test regions for a case with included local GNSS data, no local GNSS data and a case where missing local data is compensated with data from the background model.

Station(Region)	Local GNSS included	No local GNSS, no Background	No local GNSS, with Background
MIKEA (Hawaii)	2.67	4.89	3.52
KOKF (Hawaii)	2.12	4.26	3.09
STHL(ATlantic)	2.09	2.45	2.25
ASCG(ATlantic)	3.44	4.36	3.88
CZTG(Antarctic)	1.47	2.26	2.06
KRGG(Antarctic)	2.01	2.59	2.36
KERG(Antarctic)	1.56	2.20	1.96

5 Conclusion and Outlook

- Missing GNSS data significantly reduces the performance of VTEC modelling.
- Using samples from the background model can help mitigate this error to some extent.
- Adapting the loss function can lead to more realistic uncertainty predictions in oceanic areas.
- Background modelling will continue to be optimized and evaluated.

Conveners, please make sure the students in your sessions get enough votes!

For a poster presentation:

Ionospheric data fusion with GNSS, GNSS-RO and satellite altimetry based on machine learning

Iten M., Mao S., Soja B.

Medals and Awards

- The **2026 Vening Meinesz Medal** is awarded to **Frank Flechtner** for innovative work in gravity field determination and exceptional contributions to the realisation of pivotal satellite gravity missions.
- The **2026 Division Outstanding Early Career Scientists Award** is awarded to **Eva Boergens** for outstanding work on addressing contemporary hydrological challenges using satellite geodesy.



Frank Flechtner



Eva Boergens

Thank you to all
nominators!

- Geodesy Division Medal & Award Ceremony 2026
- Thursday, May 7th, 19:00 – 20:00 CEST, room G1 & online
 - 19:00 – 19:05 Introduction (Roelof Rietbroek)
 - 19:05 – 19:20 **ECS Award Presentation: Eva Boergens**
 - *From Observations of the Earth's Gravity Field to Insights into Hydrology*
 - 19:20 – 19:25 Citation for Frank Flechtner (Adrian Jäggi)
 - 19:25 – 19:55 **Vening Meinesz Medal Lecture: Frank Flechtner**
 - *Satellite Gravimetry: Realization and Further Prospects*
 - 19:55 – 20:00 Closure



Frank Flechtner



Eva Boergens

Medals and Awards

How to nominate?

Where: <https://www.egu.eu/awards-medals/nominations/>

When: from now to June 15

What is required:

ECS = up to **7 years** since highest degree (Jan. 1st of year the award is presented). Can be extended (child care, illness, etc.).

	Division and Union Medals e.g. Vening Meinesz Medal	Outstanding Early Career Scientists Awards
Nomination letter	1 page	½ page
Curriculum Vitae	2 pages	1 page
Selected bibliography	2 pages	½ page
Supporting letters	3-5 (max 1 page each)	-

Please contribute by nominating your colleagues!!

(New) Structure of the Geodesy Division

The faces behind the Geodesy division 2026/27

- **President**
 - Roelof Rietbroek (Uni Twente, Netherlands)
- **Deputy President**
 - Anna Klos (Military Univ. of Tech., Poland)
- **Science Officers**
 - Transdisciplinary: Rebekka Steffen (Lantmäteriet, Sweden)
 - Space: Liliane Biskupek (DLR, Germany)
 - Terrestrial: TBD (currently overseen by Anna Klos)
- **Early Career Scientists Representatives**
 - Marius Schlaak (Rep, Uni de Toulouse, France)
 - Michela Ravanelli (incoming Co-Rep, Uni de la Côte d'Azur, France)
- **Social Media Officer**
 - Barbara Jenny (DTU Space, Denmark)
- **Policy Officer**
 - TBD (currently overseen by Roelof Rietbroek)
- **EDI Division Officer**
 - TBD (currently overseen by Rebekka Steffen)
- **OSPP coordinator**
 - Anna Klos



Meet the Geodesy Division Team:

Wed, 6 May, 10:15-10:45,
EGU Booth in poster area

- **Vening Meinesz Medal Committee**
 - Voting: Four past medalists and past president (A. Eicker) & past ECS awardee (2025)
 - Non-voting (ex officio): Division President and EGU Award Committee Chair

 - **Committee 2027:**
 - Frank Flechtner
 - René Forsberg
 - Jeffrey Freymueller
 - Jürgen Müller
 - Matthias Schartner
 - Annette Eicker (Chair)
 - Ex officio (not voting): Roelof Rietbroek, Marian Holness
-

- **Programme Committee**
 - Division President (Chair) + Deputy-President + Science Officers
 - **Outstanding Early Career Scientist Award**
 - Division President (Chair) + Deputy-President + Science Officers + Past Awardee
-

ECS Report

Report by the Geodesy ECS Representatives

- The current ECS Representatives of the Geodesy Division are:

ECS Representative
(main)



Marius Schlaak
(Uni de Toulouse, France)

Apr 2025 -2027 (main)
Apr 2027 - 2028 (outgoing)

ECS Representative
(Outgoing co)



Öykü Koç
(Politecnico di Milano, Italy)

Apr 2023-2025 (main)
Apr 2025-2026 (outgoing)

ECS Representative
(incoming co main)



Michela Ravanelli
(Université de la Côte d'Azur,
France)

Apr 2026-2027 (co-)
Apr 2027- ... (main)

What is the Role of an ECS Representative?

At the level of the 22 EGU Divisions, ECS representatives and their teams are the voice of Early Career Scientists within EGU, advocating for their needs and ensuring representation at the General Assembly and year-round. Union-level ECS representative consolidates feedback and expresses it at the EGU's Programme Committee and Council.

During the year

- Task Groups (*Life-Career Wellness, Outreach & Communication, Activities & Impact, Equality Diversity & Inclusion*)
- Communication and outreach, including writing blog posts
- Running webinars, as well as virtual peer-to-peer seminars, panels, training and networking events.
- Science-policy activities, such as attending science-policy events and workshops and contributing to policy briefs and position papers

At the General Assembly

- Scientific Sessions
- Great Debates and Union Symposia
- Short Courses on a wide range of topics, such as science communication, grant writing, and career development
- Networking events, such as the ECS Networking & Careers Reception
- Mentoring programs
- Awards and recognitions
- Communication and outreach activities

Strengthening ties between ECS members across scientific divisions and improving communication with ECS members within the EGU to form an inclusive geosciences community. Encouraging ECS to uphold open science, contributing actively to the EGU scientific programme to ensure a diversity of geoscientific views and ideas.

Connect with us!



But we are not alone and we are growing! ECS team members are helping with social media, blog and general activities.



Marius Schlaak
(he/him)
ECS Rep



Michela Ravanelli
(she/her)
ECS Co-Rep



Barbara Jenny
(she/her)
Social Media Officer



Fikri Bamahry
(he/him)
Campfires



Kiana Karimi
(she/her)
Social Media



Mario Moreno
(he/him)
Social Media



Chethan
(he/him)
Blog Author



Rebekka Steffen
(she/her)
Blog Editor-in-Chief



Leire Retegui-Schiettekatte
(she/they)
Blog Editor



Radosław Zajdel
(he/him)
Blog Editor



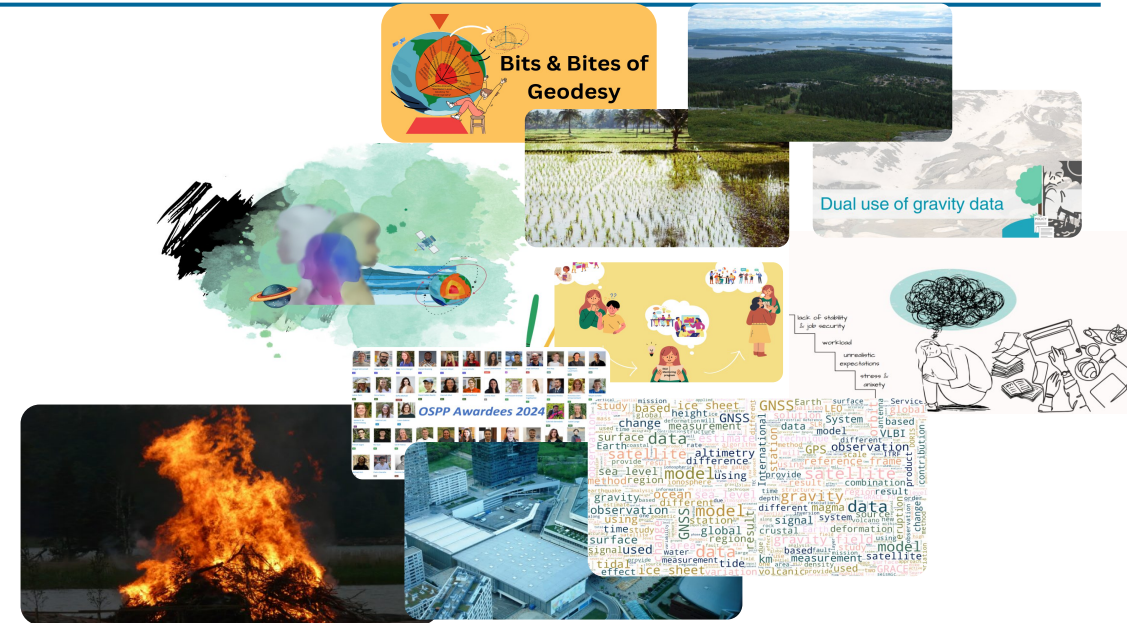
Çağatay Çakan
(he/him)
Blog Author

Connect with us!

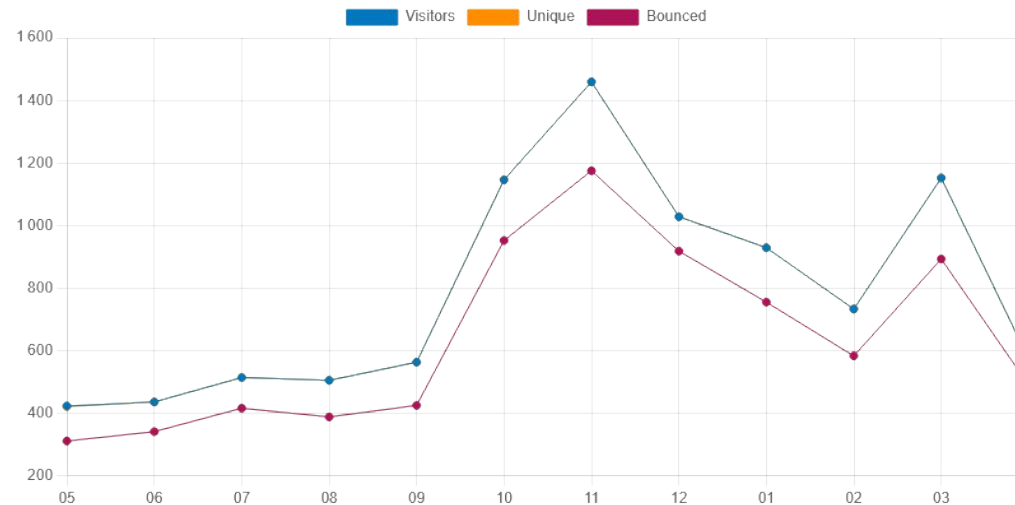


ECS Activities 2025-2026: Blog

- We publish posts **every last Friday** of the month
- Blog covers Topics of Geodesy, ECS , and more :
 - Geodesist of Tour
 - Postdoc Diaries
 - What Does a Geodesist look like
 - Bits & Bites of Geodesy
 - Networking events
 - Division News
 - Based on Papers



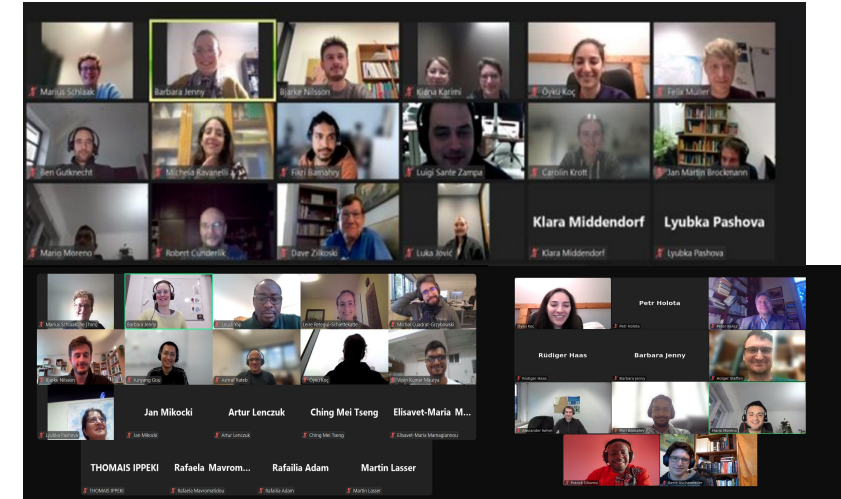
Subscribe to the Blog here:



ECS Activities 2025-2026: Campfires

We host Campfires **every third Thursday** of the month

- A platform where scientists can share their research in an informal setting
- A place where ECS can get feedback on their presentation style
- An opportunity to network and connect with friends and colleagues



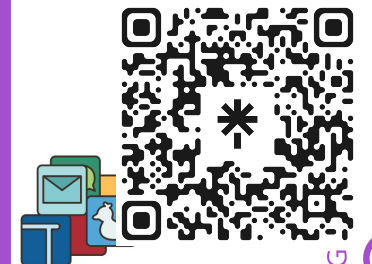
Interested in giving a talk?

Sign up here:



ecs-g@egu.eu

Connect with us!



ECS Activities at GA26

Do not forget to add them to your programme!

Early Career Scientists Pre-GA Icebreaker

Where: CopaBeach (just a few minutes away from the ACV)

When: Sun, 03 May, 16:30 - 18:15 (CEST)

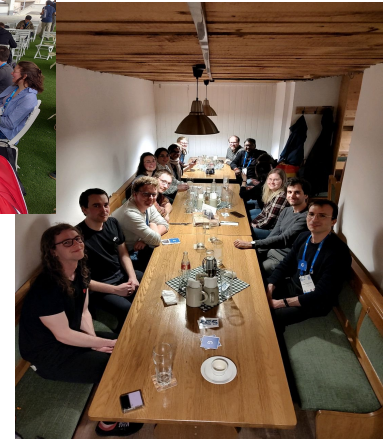
Afterwards to EGU Opening Reception at ACV from 18:30-21:00.



Geodesy Fika: Social gathering for Geodesy Early Career Scientists

Where: EGU networking zone - terrace G (purple level)

When: Mon, 04 May, 10:15–10:45 (CEST) (First coffee break on Monday)



Geodesy Early Career Scientists Dinner

Where: Location will be provided to registered participants.

When: Mon, 04 May, starts at 19:30 (CEST)

If you'd like to participate, please register (limit: 30 persons):

<https://cloud.egu.eu/apps/forms/s/3XNziXBCpymgsprCNAcWifg6>

Sign up here for the ECS Dinner!



There are more Geodesy division events!

Geodesy 101: A crash course for non-geodesists

When: Mon, 04 May, 12:45–13:45 (CEST)

Where: Room -2.62

"Women in Geodesy" coffee break

When: Location: EGU networking zone – terrace G (Purple Level)

Where: Tue, 05 May, 10:15-10:45 CEST

Puzzle with (meet) the Geodesy division team

When: Wed, 06 May, 10:15–11:15 CEST

Where: EGU booth – Hall X2

Vening Meinesz Medal Lecture and G Division Outstanding ECS Award Lecture

When: Thu, 07 May, 19:00–19:55 (CEST)

Where: Room G1

And some union-wide events we want to highlight:

Opening Reception

When: Sun, 03 May, 18:30–21:00

Where: Foyer F

First-time Attendee Networking

When: Mon, 04 May, 18:00–19:30

Where: EGU networking zone – next to EGU booth (Hall X2)

ECS Networking Reception

When: Tue, 05 May, 18:00–19:30

Where: Room Rooftop Foyer + Foyer C

EDI Reception

When: Mon, 04 May, 18:00–19:00

Where: Rooftop Foyer

ECS Forum: Have your say!

When: Thu, 07 May, 12:45–13:45

Where: Room 3.16/17

GeoVision Night

When: Fri, 08 May, 18:10–20:00

Where: Room E1



How to Get in Contact and Stay Up-to-Date:

E-Mail lists:



ecs-g@egu.eu



g@egu.eu

Social Media:



@g.egu.eu



EGU Geodesy division



egu_g_division

Our link tree for our socials and subscription to the mailing lists



Please reach out to us to:

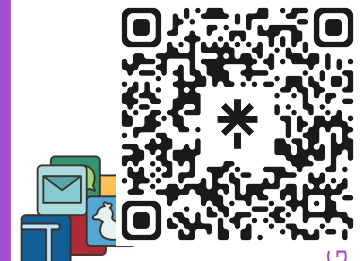
- suggest improvements
- share ideas
- join the Team
- get to know us

Posting about #EGU26?

→ **#EGU26_G**

→ **Tag us: @g.egu.eu
on BlueSky**

Connect with us!



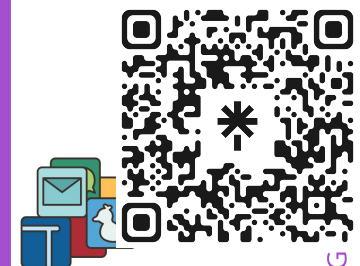
Geodesy ECS activities in the upcoming year

- **Collaboration between Geodetic communities:**
 - Joint Webinars with AGU and IAG
- **Continued outreach for the EGU Geodesy community**
 - Campfires (third Thursday of the month)
 - Blog posts (last Friday of the month)
 - Social media channels are growing
- **Community building online and during the General Assembly**
 - Online Networking sessions
 - Pop-up Networking events in Vienna
 - Increasing the visibility of Geodesy in social media
 - Program updates on social media

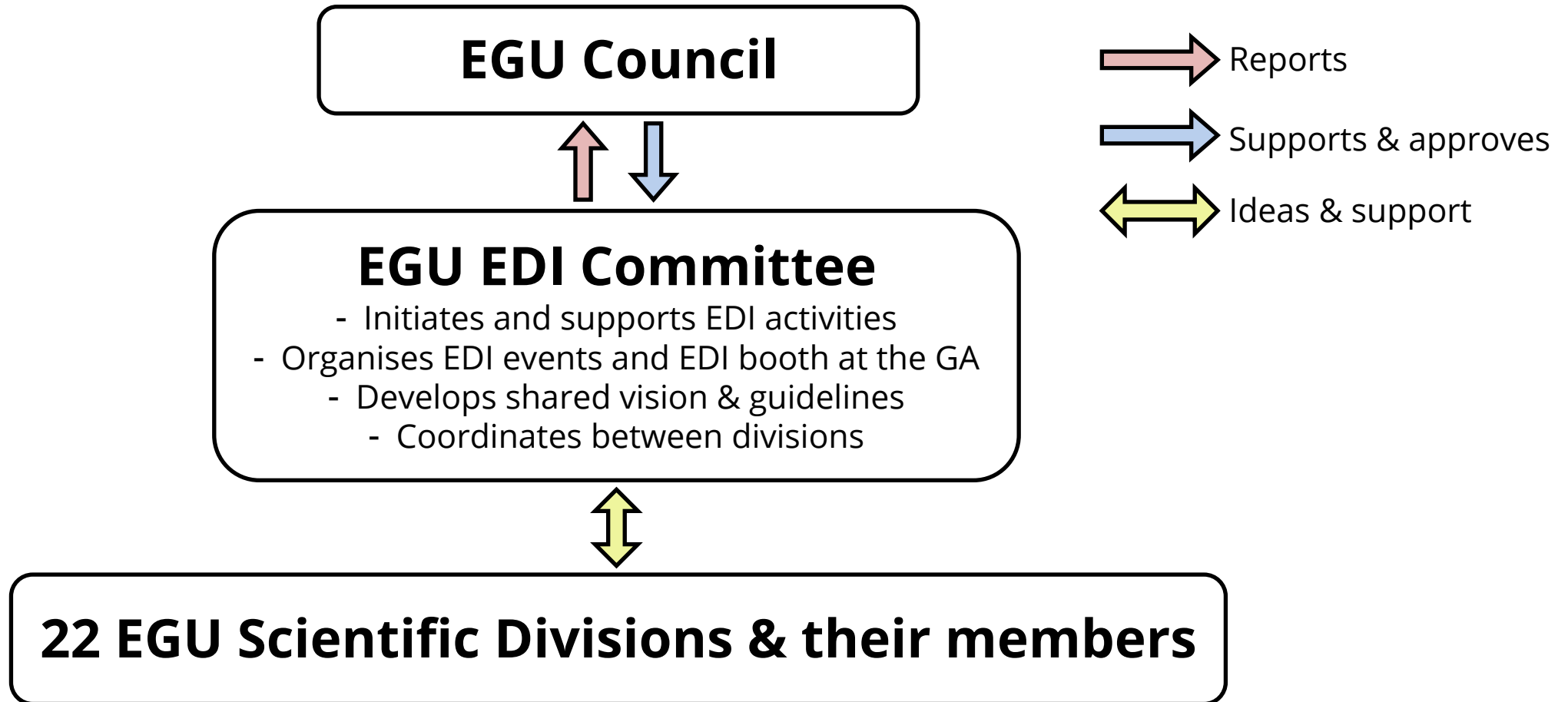
We are growing, taking more responsibilities, and are hosting community events more regularly!

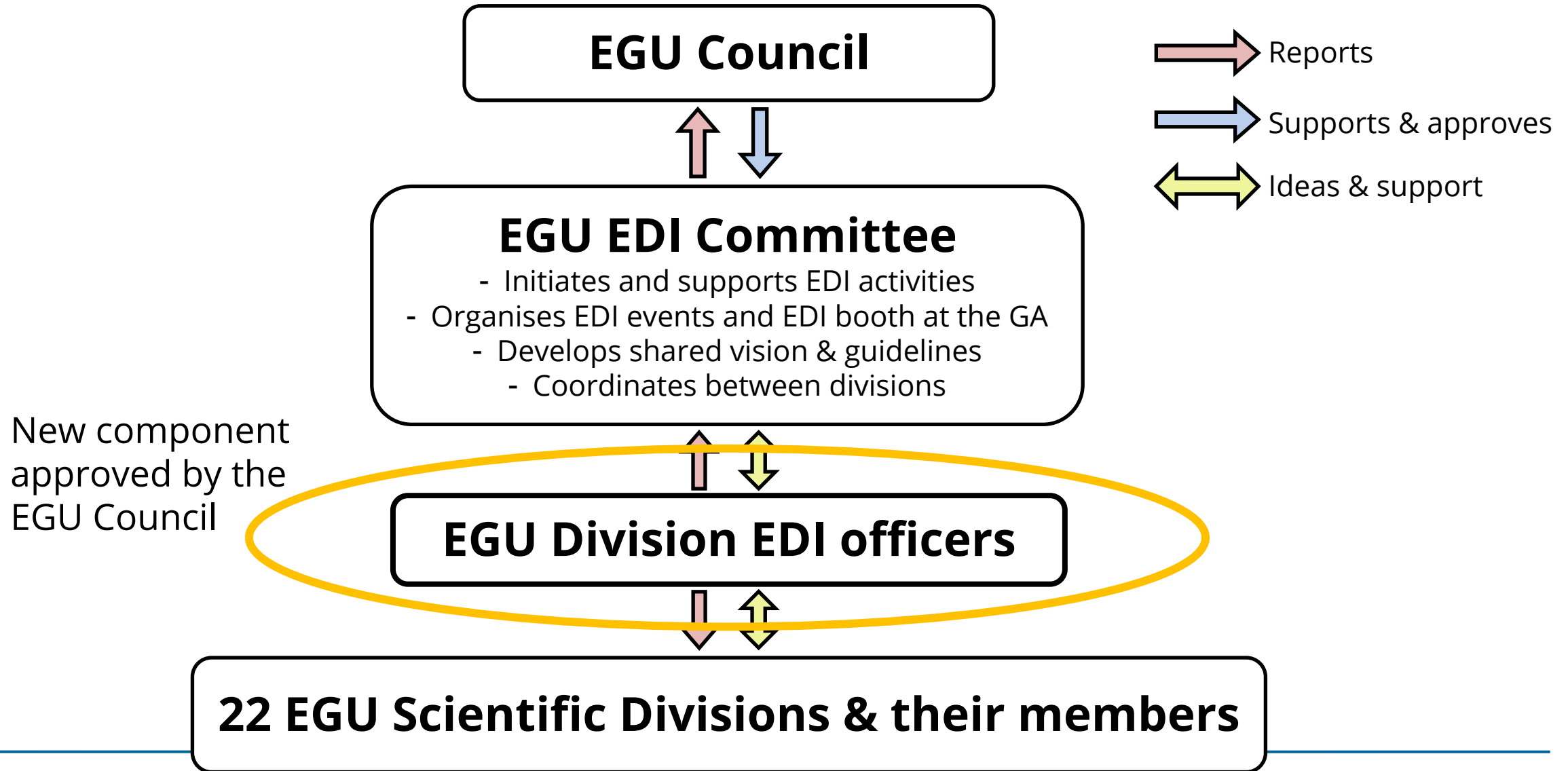
We need your help! Join the **G division ECS team**, contact us...
... and spread the word!

Connect with us!



EGU EDI Committee





Responsibilities of a Division EDI Officer:

- Advise the Division President and programme group chair (if different) about EDI-related issues and initiatives raised by the members, other Division EDI officers and the EDI Committee
- Collect timely feedback on EDI-related matters from members
- Support the Division President and EDI Committee implementing division relevant EDI actions
- Provide feedback to the EGU EDI Committee
- Participate in 3 to 4 dedicated EDI Committee meetings planned throughout the year
- Prepare information about the EDI (EGU-wide and division specific) events, initiatives and issues that could be reported at the division meeting
- Support the EDI Committee at the General Assembly (e.g., at the EGU EDI booth, attending EDI networking events)

Are you interested in this position?

- the call for a G Division EDI Officer will be sent around shortly via the EGU G mailing list

Questions? Come to the EGU EDI booth during the week!

EDI Events during EGU26:

- “Women in Geodesy” coffee break, Tuesday, May 5, 10:15-10:45 (CEST), Terrace G
 - EDI reception, Monday, May 4, 18:00-19:00 (CEST), Rooftop Foyer
 - EDI Award Lecture, Monday, May 4, 19:00-20:00 (CEST), Room G1
 - Pride and allies reception, Wednesday, May 6, 18:00-19:30 (CEST), Rooftop Foyer
 - Celebrating Neurodiversity in Geosciences, Wednesday, May 6, 18:00-19:30 (CEST), Room Rooftop Foyer
 - EDI Rising Geoscientist reception, Thursday, May 7, 18:00-19:00 (CEST), Rooftop Foyer
 - EOS3.2 - Promoting and supporting inclusive excellence in the geosciences | Poster Session, Friday, May 8, 8:30-10:15 (CEST), Hall X4
 - EOS3.2 - Promoting and supporting inclusive excellence in the geosciences | Oral Session, Friday, May 8, 14:00-18:00 (CEST), Room -2.92
 - GDB1 - What's next for EDI in these turbulent times?, Friday, May 8, 10:45-12:30 (CEST), Room E1
-

EGU's Policy Network

EGU Division Policy Officers

- Share relevant policy opportunities and resources to their Division engage
- Coordinate division members to provide information to policymakers
- Support #Science4Policy sessions and initiatives at EGU General Assemblies
- Collective action and feedback from an EGU standpoint which involves community input *e.g. EU Have your say - Public Consultations and Feedback*



Chloe Hill
EGU Policy
Manager



Outgoing Öykü Koç
EGU G Division
Policy Officer



Join a science for policy session at EGU26

- Learn about opportunities to engage in policymaking
- Develop skills to help you communicate with policymakers
- Come to the EGU Science for Policy Help Desk – everyday (12:00 -13:00) at the EGU Booth
- Join the Geodesy Division Science for Policy session:
[Streamlining geodetic research for policy - how can we utilize the Essential Geodetic Variables \(EGVs\) for easier engagement and communication](#)



And next year?

 **EGU** General
Assembly 2027

April 4-9, 2027

Vienna

Consider signing up for EGU's Peer support programme 2027

- Bring newcomers/ECS and more established scientists together
 - Exchange ideas and provide advice: e.g. how to navigate the GA
 - After registration, a system will match first attendees with Experienced attendees
 - Flexible low-effort format :
 - ~3 catch ups over the week
- <https://www.egu.eu/outreach/mentoring>

Experience report on our geodesy division blog:
<https://blogs.egu.eu/divisions/g/2023/03/03/egus-mentoring-programme/>



IAG Geodesy Reception @ EGU26



See you there!

IAG Geodesy Reception @ EGU26

Tuesday, May 5th, 19:00 CEST

BEV, Schiffamtsgasse 1-3, 1020 Vienna – 8th floor

Registration re-opens now.

Make sure to get your spot!

<https://geodesy.science/event/iag-geodesy-reception-2026/>



Thank you to IAG & many more!!