



Geodesy Division Business Meeting

Annette Eicker & The Geodesy Division Team

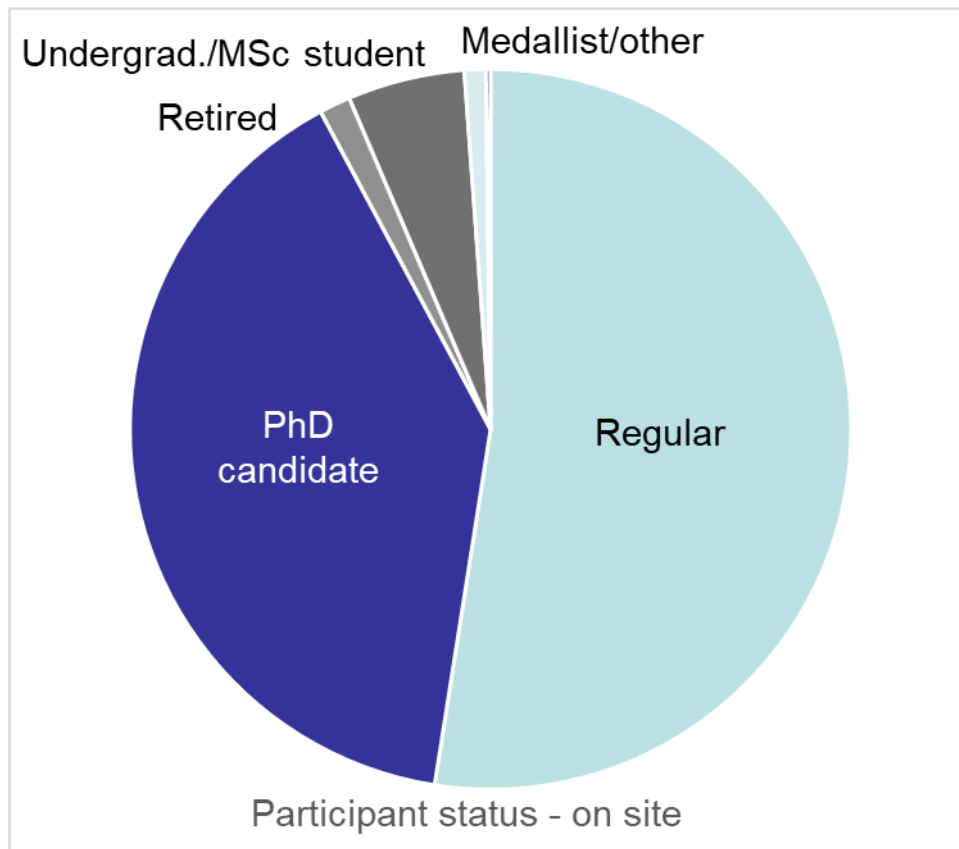
Everywhere, May 17th, 2022

- Statistics 2022
- 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

Statistics EGU22

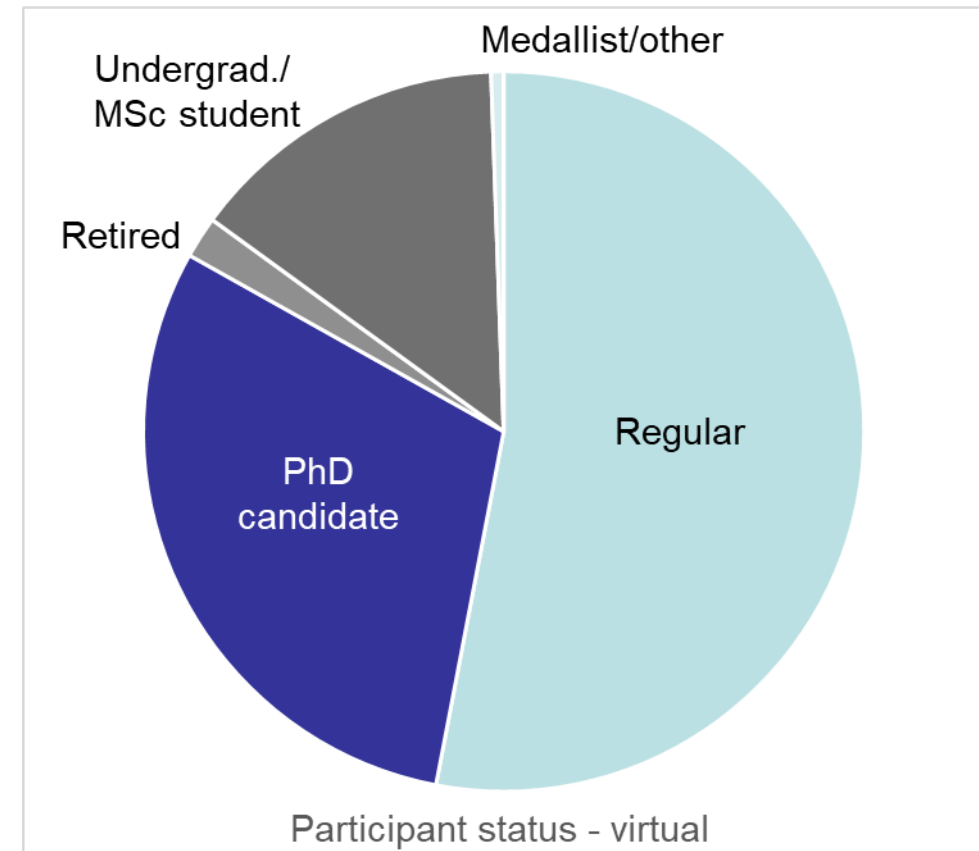
on-site

- 7280 on-site registrations
- On-site participants: 88 countries

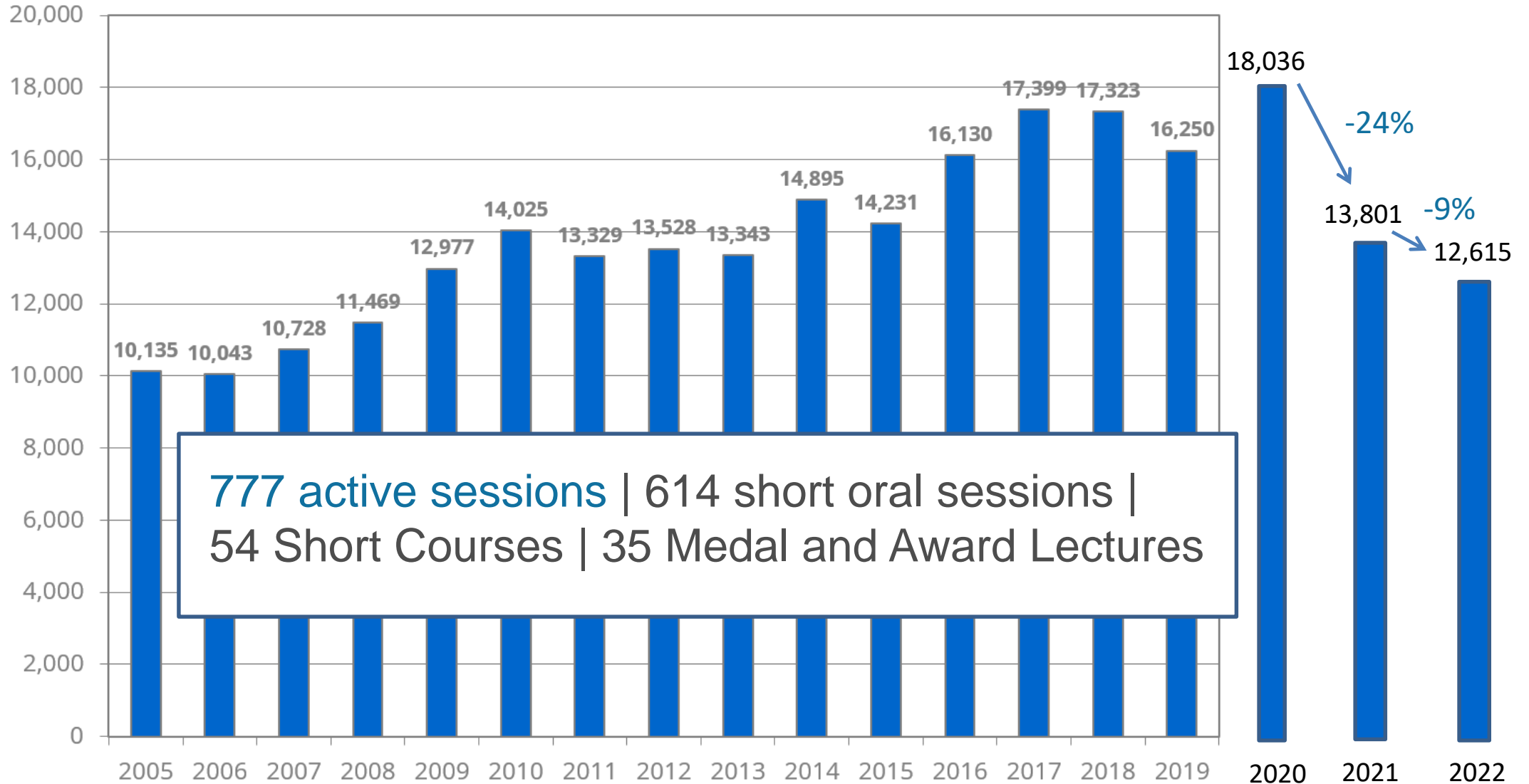


virtual

- 4384 virtual registrations (12/05 21:00)
- Virtual participants: 107 countries

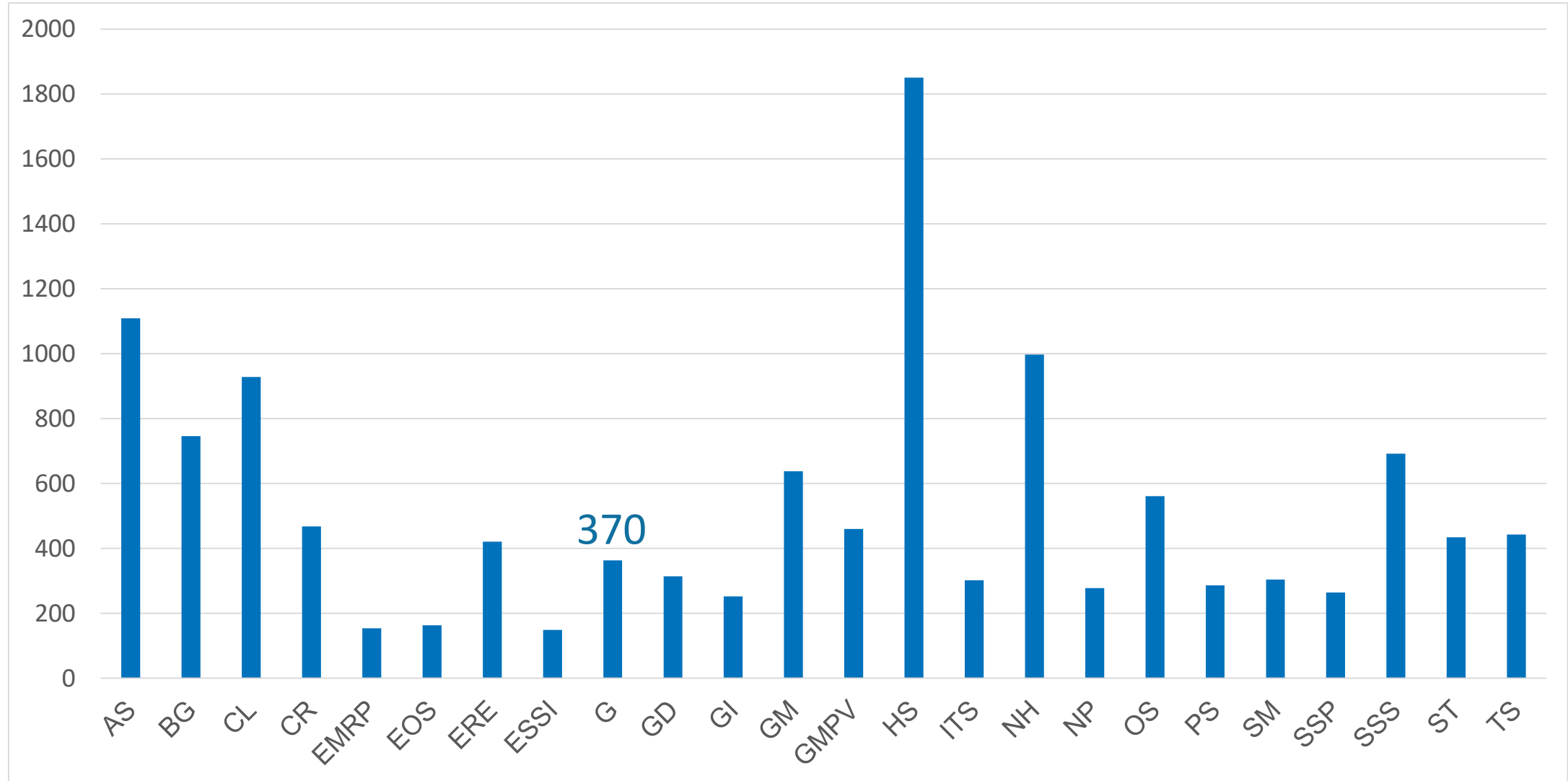


Papers in the programme 2005-2022



(Bars approximately drawn)

Abstracts 2022 per programme group



Statistics 2022 - Geodesy Sessions

Session	Title	coorg.	2022	time blocks	2021
G1.1	Mathematical methods...	x	11	1	13
G1.2	High-precision GNSS ...		28	2	28
G1.3	Data science and machine learning in geodesy		13	1	12
G1.5	Recent Developments in Geodetic Theory		14	1	16
G2.1	Precise Orbit Determination ...		20	1.5	30
G2.2	The International Terrestrial Reference ..		19	1.5	19
G2.3	The Global Geodetic Observing System ..		14	1	16
G3.1	Geodesy for Climate Research	x	24	2	16
G3.2	Satellite Altimetry ..	x	13	1	18
G3.3	Glacial Isostatic Adjustment...	x	28	2	18
G3.4	Active lithospheric deformation ...		35	3	-
G3.5	Earth Rotation ..		20	1.5	13
G4.1	Modern Concepts for Gravimetric ...		21	1.5	20
G4.2	Satellite Gravimetry ..		28	2	26
G4.3	Geoid determination, gravity and magnetic...	x	29	2.5	21
G4.4	New Tools for Terrain Gravimetry		13	1	12
G5.1	Ionosphere, thermosphere,...		16	1.5	21
G5.2	Atmospheric and Environmental...+ extreme weather	x	26	2	27
			370	29	all: 385

Statistics 2022 - Geodesy Sessions

EDI Equality, Diversity, Inclusion

Session	Title	coorg.	2022	vPICO time blocks	2021
	Mathematical methods...	x	11	1	13
G1.2	High-precision GNSS ...				
G1.3	Data science and mach...				
G1.5	Recent Developments				
G2.1	Precise Orbit Determin...				
G2.2	The International Terre...				
G2.3	The Global Geodetic O...				
G3.1	Geodesy for Climate Re...				
G3.2	Satellite Altimetry ..				
G3.3	Glacial Isostatic Adjust...				
G3.4	Active lithospheric def...				
G3.5	Earth Rotation ..				
G4.1	Modern Concepts for C...				
G4.2	Satellite Gravimetry ..				
G4.3	Geoid determination, &				
G4.4	New Tools for Terrain Gravimetry		15	1	
G5.1	Ionosphere, thermosphere,...		16	1.5	
G5.2	Atmospheric and Environmental...+ extreme weather	x	26	2	27
			370	29	all: 385

Convener teams should be divers with respect to

- gender
- affiliation
- career stage

17 out of 18 geodesy sessions received the EDI logo!!

Thank you!!

94%
(2021: 70%)

Can we make it to 100% next year?

Medals and awards

- The **2022 Vening Meinesz Medal** is awarded to **Peter J.G. Teunissen** for pioneering and influential work ranging from fundamental geodetic theory to breakthrough innovations in Global Navigation Satellite System modelling and precise positioning.
- Division Medal Ceremony and Medal Lecture
 - Thursday, May 26th
 - 7 p.m. (CEST): **2022 medal lecture (Peter Teunissen)**
 - *Geodetic inference: a selection of some challenging topics*



Peter J.G. Teunissen

- The **2022 Division Outstanding Early Career Scientists Award** is awarded to **Kristel Chanard** for outstanding contributions to the determination and understanding of Earth's surface deformations.
- ECS Award Presentations
 - **2022 ECS Award Presentation: Kristel Chanard**
 - Fri, 27 May, 10:20–10:30 (CEST), Session G3.1
 - *Geodesy: A sensor for hydrology*



Kristel Chanard

Geodesy Division 2021 vOSPP Award: Sebastian Strasser (TU Graz)

Comparison and generalization of GNSS satellite attitude models
(Strasser, S.; Banville, S.; Kvas, A.; Loyer, S.; Mayer-Gürr, T.)

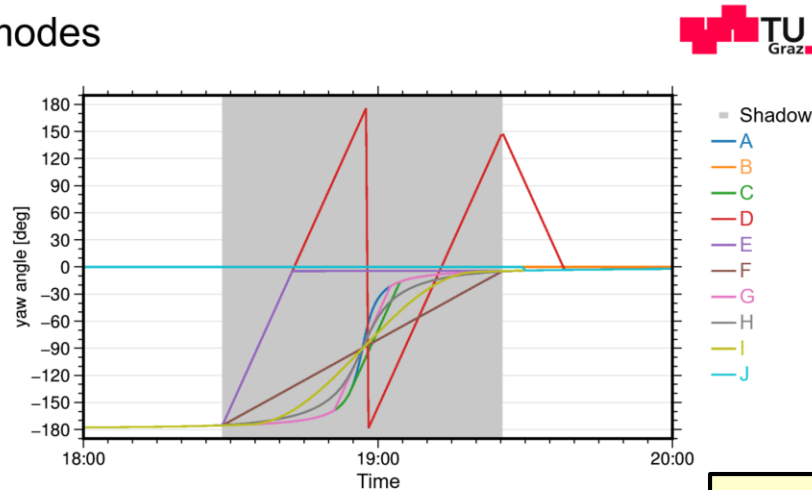


Sebastian Strasser

Overview of known attitude modes

Satellite type	Default	Midnight	Noon	Ref.
GPS-II/IIA	A	D	C	[1]
GPS-IIR/IIR-M	A	C	C	[1]
GPS-IIF	A	F	C	[2]
GLO-M	A	E	G	[3]
GAL-1	A	H	H	[4]
GAL-2	A	I	I	[4]
BDS-2G/3G	B	B	B	[5, 6]
BDS-2I/2M*	A	J	J	[5]
BDS-3I/3M	A	I	I	[6]
QZS-1	A	J	J	[7]
QZS-2G	B	B	B	[7]
QZS-2I	A	G	G	[7]

*Most BDS-2I/2M satellites have transitioned to BDS-3I/3M modes



Mode denotation (somewhat descriptive):

- A Nominal yaw-steering
- B Orbit normal
- C Catch-up yaw-steering
- D Shadow max yaw-steering and recovery
- E Shadow max yaw-steering and stop
- F Shadow constant yaw
- G Centered max yaw-steering
- H Smoothed yaw-steering
- I Smoothed yaw-steering
- J Beta-dependent orbit



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

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!!

Medals and Awards

How to nominate?

← → ↻ 🏠 🔒 https://www.egu.eu/awards-medals/nominations/ 📄 ⋮ 🛡️ ☆ ⬇️ 📄 📄 📄

Submit a new nomination

Awards & medals nominations for the year 2023 are **currently open**. The deadline for submissions is 15 June 2022. Please read the guidelines above carefully before submitting a nomination.

EGU members can nominate candidates for all EGU awards and medals. If you are an EGU member, please use the [members' awards & medals nomination form](#) to propose a candidate for the year 2023.

Non-EGU members can only nominate candidates to the EGU Angela Croome Award. If you are not an EGU member, please use the [public nomination form](#) to propose a candidate for the Angela Croome Award for the year 2023.

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

Nomination letter,
CV, bibliography

Nomination details

Award ▪

Select the award for which you are nominating a candidate. Please note that several awards, including Julius Bartels Medal, Petrus Peregrinus Medal and Runcorn-Florensky Medal, are only offered in alternating years and will not appear in the menu during an off year.

Division Outstanding Early Career Scientist Awards

Division

Geodesy (G)

Name (nominee) ▪

Email (nominee) ▪

Postal address (nominee) ▪

Date highest degree qualification obtained

YYYY-MM-DD

Nomination package ▪

Either upload a single PDF file or a ZIP/TAR/TGZ archive containing multiple PDF documents (max. file size 50 MB)

Browse... No file selected.

Structure of the Geodesy Division

Structure of Geodesy Division

- **President:**
 - Annette Eicker
(HCU Hamburg, Germany, 2021 - 25)
- **Deputy-President**
 - Roelof Rietbroek
(Uni Twente, Netherlands, 2021 - 25)
- **Science Officers**
 - Xavier Collilieux (ENSG/IPGP, France, 2021 - 25)
 - Anna Klos (Military Univ. of Tech., Poland, 2021 – 25)
- **Early Career Scientists Representatives**
 - Rebekka Steffen (Lantmäteriet, Sweden, 2021-22)
 - Andreas Kvas (TU Graz, Austria, 2022-23)



- **Vening Meinesz Medal Committee**
 - Voting: Four past medalists and past president (J. Böhm)
 - Non-voting (ex officio): Division President and EGU Award Committee Chair

- **Committee 2022:**
 - Peter Teunissen
 - Chris Jekeli
 - Willi Freeden
 - Tonie van Dam
 - Johannes Böhm (Chair)
 - Ex officio (not voting): Annette Eicker, Thomas Blunier

- **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 Representative

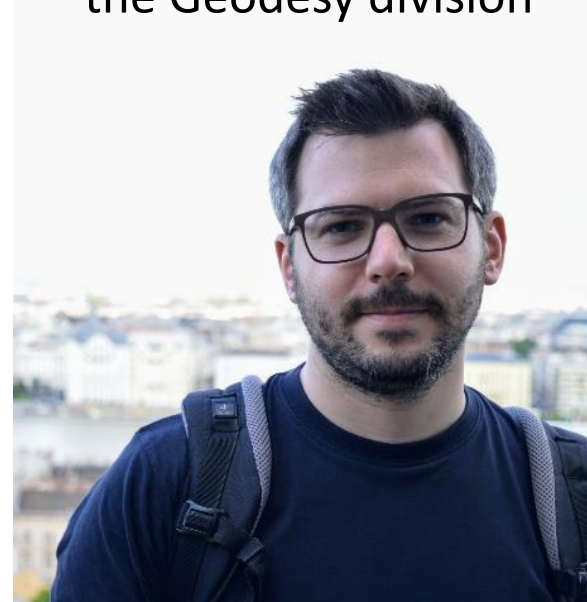
- New ECS Representatives started their work shortly before the last EGU General Assembly (vEGU21)

- 2021/2022: ECS Representative of the Geodesy division



Rebekka Steffen
(Lantmäteriet, Sweden)

- ECS Co-Representative of the Geodesy division



Andreas Kvas
(TU Graz, Austria)

- 2022/2023: ECS Co-Representative of the Geodesy division

- ECS Representative of the Geodesy division

Report by the Geodesy ECS Representative

- We are not alone 😊:



Öykü Koç
(Politecnico di Milano, Italy)



Laura Jensen
(HCU Hamburg, Germany)



Bart Root
(TU Delft, The Netherlands)

- Communication via EGU-G-ECS Slack Workspace

What is the role of an ECS Representative?

- being the voice of ECSs, making the community more inclusive, taking work-life balance and mental well-being into account and, finally, motivating and encouraging fellow scientists
- Interact with the Division Team
 - Help with organization of events
 - Contribute to the development of the EGU schedule, if necessary
- Interact with the Early Career Scientists
 - Organize networking events
 - Update the ECS community about important decisions
- Interact with ECS Representatives from other divisions and the Union Representative
 - Meet bi-monthly to update and coordinate activities (nowadays are meetings via Zoom and chat via own Slack Workspace)
 - Work in thematic working groups to improve organization
 - Help to improve and advance EGU by new ideas and bringing them to attention
 - Improve visibility of ECSs within EGU

Report by the Geodesy ECS Representative

- ECS Representative group
 - 5 active working groups at the ECS level:
 - Connectivity
 - Jobs and Careers
 - Work life balance
 - Awards and medals
 - Pride
 - Organization of short courses, great debates and exhibitions
 - Meet regularly
 - Proposing proposals for the EGU council
- Working groups are not exclusive for ECS Representatives → everybody can join
- Meetings via Zoom every 6 to 8 weeks
- Preparing and attending a pre-GA meeting (on Saturday before the EGU GA)
- Meeting with all Division Presidents and ECS Representatives to enhance communication
- Put forward action proposals for EGU council
- Contribute to webinars and Campfires
- Organize networking events and short courses at the EGU GA

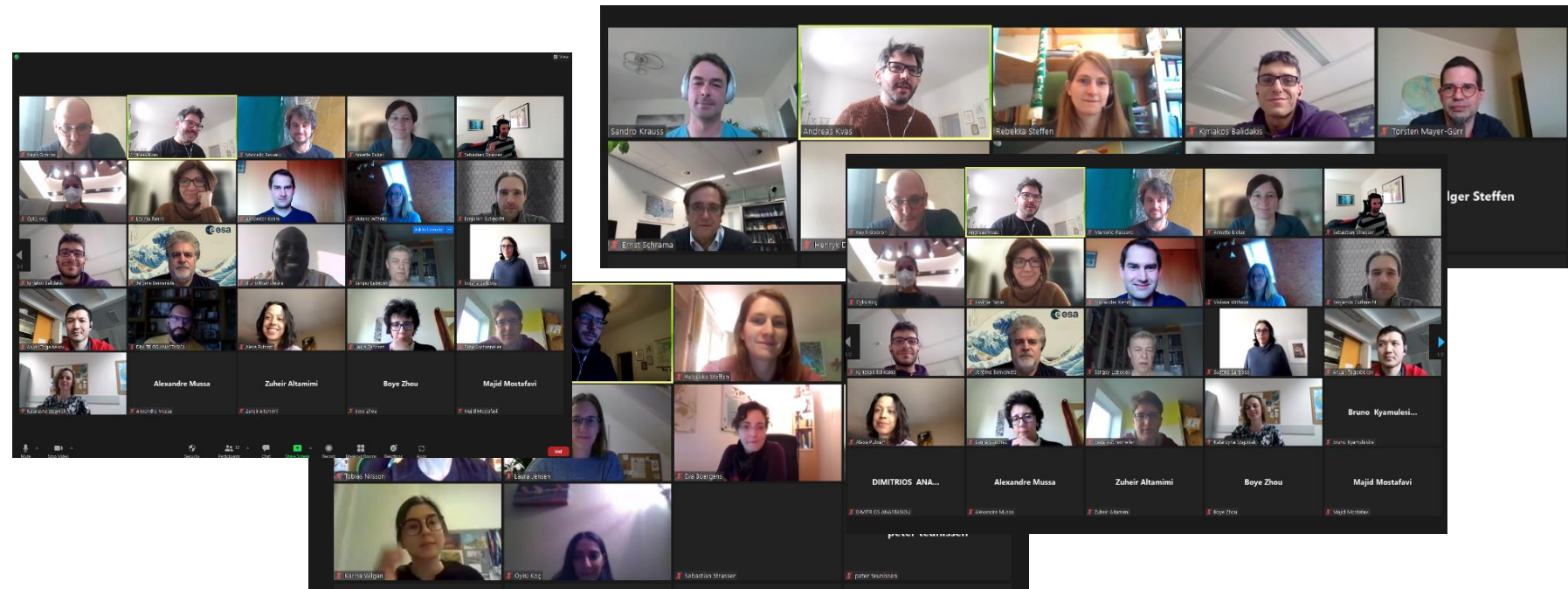
Report by the Geodesy ECS Representative

- What are these proposals?
 - Change in ECS definition
 - Previously: An Early Career Scientist (ECS) in an undergraduate or postgraduate (Masters/PhD) student or a scientist who has received their highest degree (BSc, MSc, or PhD) within the past seven years*.
*Provided parental leave fell into that period, up to one year of parental leave time may be added per child, where appropriate.
 - Now: An Early Career Scientist (ECS) is a student, a PhD candidate, or a practising scientist who received their highest certificate (e.g. BSc, MSc or PhD) within the past seven years. The seven-year period can be extended to allow for periods when the scientist was not working in science because of, but not limited to, caring and/or parental responsibilities, disability, personal illness, community obligations or national service.
 - ECS Zoom account
 - Secretary position within the ECS Representative Group (person)
 - Proposal to extend the deadline at EGU journal (leave time)
 - Proposal for student status extension
 - Proposal to improve ECS visibility on EGU (division) websites

Not all proposals/ideas go through the EGU council

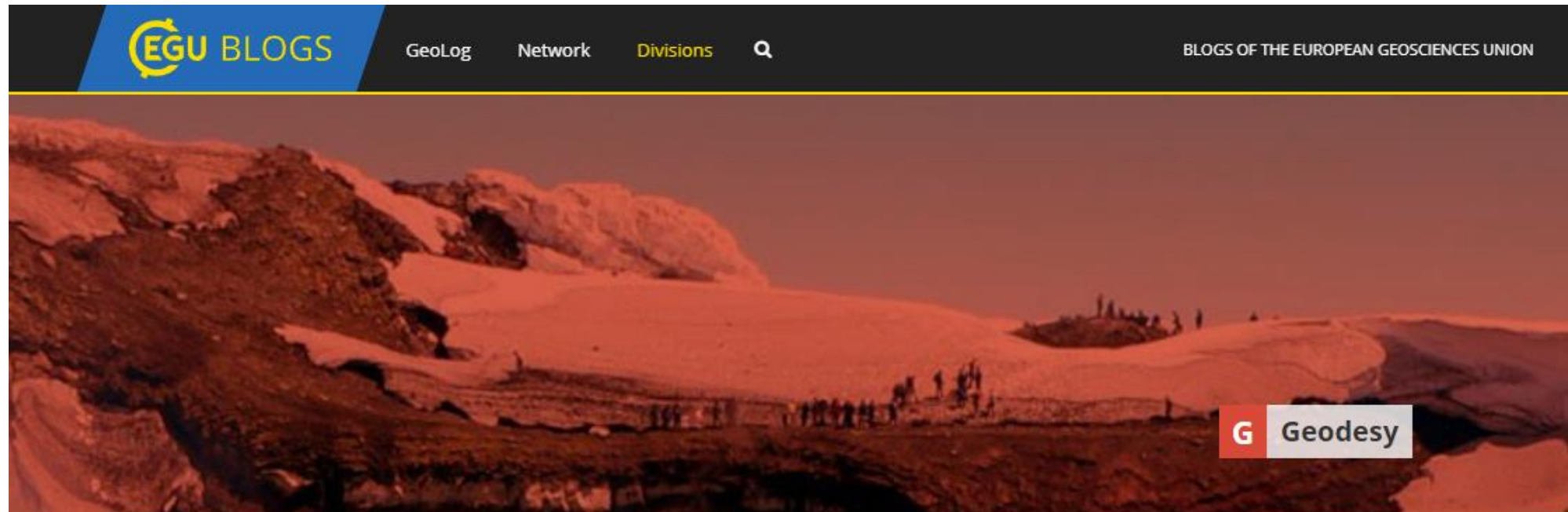
Report by the Geodesy ECS Representative

- What has been done in the Geodesy division since April 2021?
 - Campfires: "Share your Research"
 - Five events so far
 - 30 – 70 attendees at each event



Report by the Geodesy ECS Representative

- What has been done in the Geodesy division since April 2021?
 - EGU Geodesy Blog
 - 23 Posts since the last General Assembly
 - 60 unique visitors per week



Report by the Geodesy ECS Representative

- What has been done in the Geodesy division since April 2021?
 - EGU Geodesy Blog

Geodesists on Tour series

Geodesists on Tour: GNSS measurements in East Africa

D. Sarah Stamps and edited by Rebekka Steffen
- March 23, 2022



Installation of site UGN6 at the Queen's Pavilion (Uganda). Photo Credit: D. Sarah Stamps.

Africa hosts the world's most extensive sub-aerial rift system on Earth known as the East African Rift System (EARS). It stretches over 5000 km from the Red Sea and Gulf of Aden intersection in the north to the Southwest Indian Spreading Ridge south of South Africa. East-West, the EARS spans the eastern border of the Democratic Republic of Congo across to eastern Madagascar over 3000 km. The ... [\[Read More\]](#)

Geodesists on Tour: Gravity measurements on Antarctica

Jyri Näränen and edited by Rebekka Steffen
- August 10, 2021

Geodesists on Tour: On the left side of the road for getting the g

Przemysław Dykowski and edited by Rebekka Steffen
- January 24, 2022



A10-020 absolute gravimeter a gravity station near Newport (Ireland).

Getting the small g (the absolute gravity value) outdoors has always been some sort of a challenge. But, in the early 2000s the possibility to measure gravity has changed by the arrival of the first A10 absolute gravimeters. They to a large extent revolutionized the approach of performing gravity measurements in the open field and with that improved the approach to design and measure national grav ... [\[Read More\]](#)

Geodesists on Tour: GPS measurements on Antarctica

Stephanie Konfal and edited by Rebekka Steffen
- October 10, 2021



ANET GPS site at Lepley Nunatak. Photo credit: Jeremy Miner

Meet the Division Team

Insights from the past ECS Representative of the Geodesy division

edited by Rebekka Steffen and Andreas Kvas
- July 2, 2021



For our last interview we haven't talked to a member of the current Geodesy division team. Instead we asked the past ECS (Early Career Scientist) representative of the Geodesy division, Katrin Bentel, a few questions. Fortunately, she gave us some insights about the role of an ECS Representative. Find out below. What did you like most about your time as the Geodesy ECS Representative? ... [\[Read More\]](#)

Meet the new Geodesy Science Officer – Part 2

edited by Rebekka Steffen and Andreas Kvas
- June 24, 2021



In the past weeks you have met the president, deputy president and one science officer of the Geodesy division. Last but not least, we introduce you today to the second science officer: Xavier Collillieux. He also answered a few questions for us (including where his favourite place in Vienna is). Curious to find out? Then read below. What is your position within the EGU and/or the Geodesy Division? ... [\[Read More\]](#)

Meet the new Geodesy Science Officer – Part 1

edited by Rebekka Steffen and Andreas Kvas
- June 15, 2021



Report by the Geodesy ECS Representative

- What has been done in the Geodesy division since April 2021?
 - Geodesy 101 Short Course

SC4.4

[Geodesy 101](#) ▶

Co-organized by CR8/G7/GD10/HS11/TS14

Convener: Rebekka Steffen^{ECS} 🔍 | Co-conveners: Andreas Kvas^{ECS} 🔍, Benedikt Soja^{ECS} 🔍

★ Wed, 25 May, 10:20–11:50 (CEST) ■ Room -2.85/86

What is Geodesy for you?

Go to menti.com ⇨ code: 7584 8887




Report by the Geodesy ECS Representative

- What has been done in the Geodesy division since April 2021?
 - Contributing to other short courses organized by the ECS Working Groups

SC3.6

[Scared of giving presentations?](#)

Co-organized by EOS2





Convener: Andrea Regina Biedermann^{ECS}  | Co-conveners: Anita Di Chiara , Janina J. (Bösken) Nett^{ECS} , Saioa A. Campuzano^{ECS} 


★ Mon, 23 May, 13:20–14:50 (CEST)  Room -2.85/86

SC2.6

[How to build and grow your scientific network](#)




Co-organized by AS6/PS 12


Convener: Meriel J. Bittner^{ECS}  | Co-conveners: Jenny Turton , Andreas Kvas^{ECS} , Gregor Luetzenburg^{ECS} 

★ Mon, 23 May, 15:10–16:40 (CEST)  Room -2.61/62

SC1.3

[Mind your Head: mental health and the academic working environment](#)

Convener: Anita Di Chiara  | Co-conveners: Andrea Regina Biedermann^{ECS} , Rebekka Steffen^{ECS} , Selina Kiefer^{ECS} 

★ Tue, 24 May, 08:30–10:00 (CEST)  Room -2.85/86


Report by the Geodesy ECS Representative

- What has been done in the Geodesy division since April 2021?
 - Campfires
 - EGU Geodesy Blog
 - Geodesy 101 Short Course
 - Creating a history of the Geodesy division
 - Contributing to other short courses organized by the ECS Working Groups
 - Contributed to division activities

[Geodesy Dinner](#)

Organized by Rebekka Steffen | Co-organized by: Annette Eicker, Andreas Kvas

Location: Details soon

Wed, 25 May, 19:00–22:00 CEST 

Tags: Division event, Early Career Scientist (ECS), Networking

[Meet the Geodesy Division Team](#)

Organized by Rebekka Steffen | Co-organized by: Annette Eicker

Location: EGU Networking zone at terrace G

Thu, 26 May, 16:30–17:10 CEST 

Tags: Social, Division event, Early Career Scientist (ECS), Networking

Report by the Geodesy ECS Representative

- What has been done in the Geodesy division since April 2021?
 - Campfires
 - EGU Geodesy Blog
 - Geodesy 101 Short Course
 - Creating a history of the Geodesy division
 - Contributing to other short courses organized by the ECS Working Groups
 - Contributed to division activities
 - Established a networking coffee break for Geodesy ECS: every months (via Zoom and in-person at EGU22) ⇨ Geodesy Fika

Geodesy Fika ▶

Organized by Rebekka Steffen | Co-organized by: Andreas Kvas

Location: EGU Networking zone at terrace G

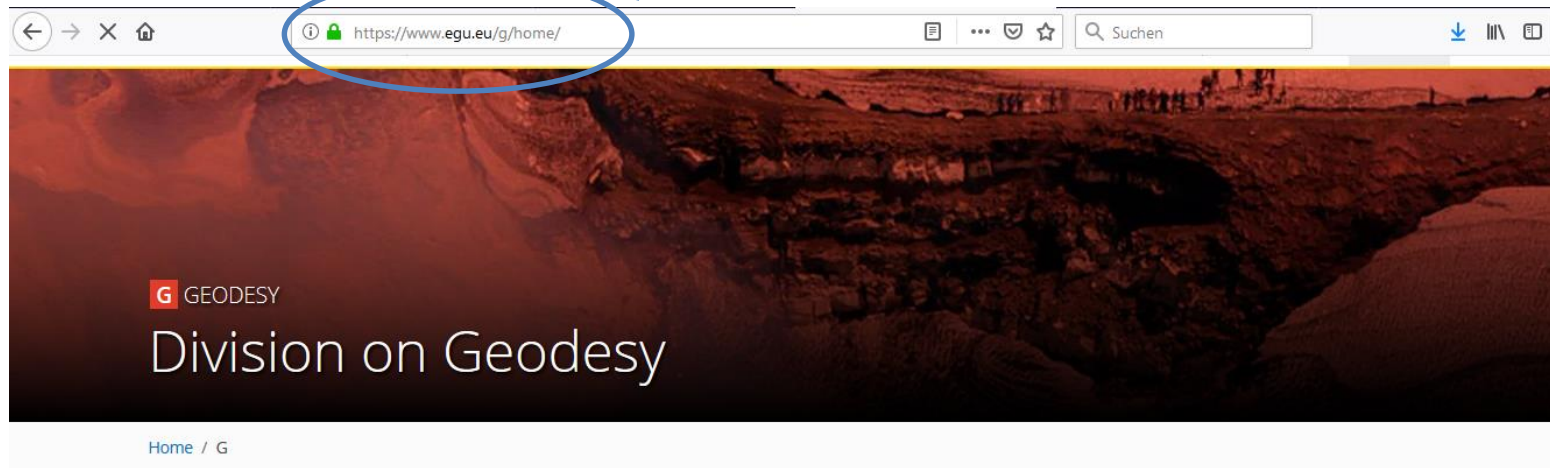
Mon, 23 May, 09:50–10:30 CEST 

Tags: Social, Division event, Early Career Scientist (ECS), Networking

Early Career Scientists

- How to get connected?

www.egu.eu/g



President: Johannes Böhm (g@egu.eu)
Deputy President: Annette Eicker (annette.eicker@hcu-hamburg.de)

Traditionally geodesy is the science of the measurement and the mapping of the Earth's surface. Since the surface is mainly shaped by the Earth's gravity field the classical definition includes the Earth's gravitational potential. Observing the Earth figure, the orientation and rotation as well as the gravity field, geodesy today provides spatial and temporal patterns of geophysical processes within the Earth system such as sea level rise, tides, melting of continental ice masses, changes in global water circulation and in the atmosphere or deformations of the solid Earth. Consequently, the geodesy division covers activities on the whole spectrum of modern geodetic Earth system modeling from the measurement systems to the investigation of geophysical processes.

Find G on



Subscribe to

- EGU newsletter
- G mailing list
- G-ECS mailing list

Sign up for
geodesy mailing
lists!

Geodesy ECS activities in the upcoming year (2022-2023)

- Continuing with the **blog articles**:
 - “Geodesists on Tour” series
 - Start “Geodesy 101” blog series
 - Let us know, if you want to contribute as an author or editor!
- **Geodesy 101 short course** at the EGU 2023 GA again
- Continuing with the **Networking Events** throughout the year for ECSs
- Expanding the ECS Geodesy Team
- Join the Geodesy Fika

We need your help!!! Interested in joining the **G division ECS team**, contact us...

Social Media

- Several ways to follow the activities
 - Social Media (@EGU_Geodesy), Webpage, Blog (g.egu.eu)



Geodesy

Tweeting about #EGU22?

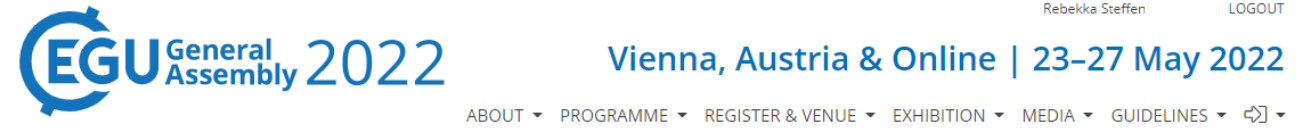
⇒ #EGU22_G

⇒ Tag us: @EGU_Geodesy

EGU Profile

Have you already set up your EGU profile?

www.egu22.eu



My profile



Rebekka Steffen
Lantmäteriet
Sweden

[Edit my profile](#) [My network](#)

Get connected!

My stickers

Stickers are only shown to users of your network.



[Edit stickers](#)

Contact me

Contact information, if shared, is only shown to users of your network and, if applicable, on editorial board websites as well as in the convener information of conference programmes.

- rebekka.steffen@lm.se
- <https://sites.google.com/site/rebkekasteffengeo/>
- Street/postbox: Lantmäterigatan 2C
ZIP: 80182 City: Gävle

Follow me

Profiles from #vEGU21 can be used again.

And next year?

The main title of the slide is 'EGU General Assembly 2023'. The 'EGU' part is in a large, blue, sans-serif font, with a blue circular arrow icon to its left. To the right of 'EGU', the words 'General Assembly' are written in a smaller, blue, sans-serif font, stacked vertically. To the right of 'General Assembly', the year '2023' is written in a large, blue, sans-serif font.

Date to be announced

Sign up as a mentor for EGU's Mentoring programme 2023

- 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 mentees with mentors
- Flexible low-effort format :
 - ~3 quick meetings over the week
 - Mentors are encouraged to introduce mentee to their peers



Geodesy Dinner



See you there!

Geodesy Dinner

Wednesday, May 25th, 19:00 CEST

Bierheuriger zum Gangl

Please register!