

Division Meeting, 29.04.2024

Giorgia Stasi, Viktor J. Bruckman & the ERE team



Energy, Resources & the Environment (EGU)



### **WELCOME from the ERE team!**



Rotman Criollo ECS Representative



Viktor J. Bruckman Vice President Integrated studies



Giorgia Stasi President



Johannes Miocic Outreach Geo-storage



Sonja Martens Renewable Energy



Michael Kühn Publications



Thanushika Gunatilake ECS co-Representative



Firefly Image 4



Sarah Weihmann OSPP Coordinator



Ana Teresa M. Lima Policy

Raw materials, monitoring

#### **ERE in a nutshell**

- **ERE** builds on the **interdisciplinary geoscientists community** at EGU, representing various disciplines of the earth, planetary and space sciences.
- ERE addresses challenges of the present and future:
- Provide adequate and reliable supplies of affordable energy and geo-resources,
- obtained in environmentally sustainable ways,
- to promote economic prosperity, environmental quality and political stability around the world.



## How do we serve the community?

- Organization Plan/run the ERE sessions for the General Assembly, Campfires
- Publications Organize our annual ERE special issue
- Information Run the ERE mailing lists, website, blog, newsletter, BlueSky
- Awards Organizing ECS and OSPP Awards
- Networking Bring together ERE early career scientists, building bridges across disciplines, generations and regions

#### Our goal:

to provide a forum where scientists, especially early career researchers, can present their work and discuss their ideas with experts in **all fields of geoscience**, by offering a **hybrid**, **inclusive** and **environmentally friendly General Assembly** that responds to the main **scientific challenges** of geosciences worldwide

### **EGU25:** numbers at a glance

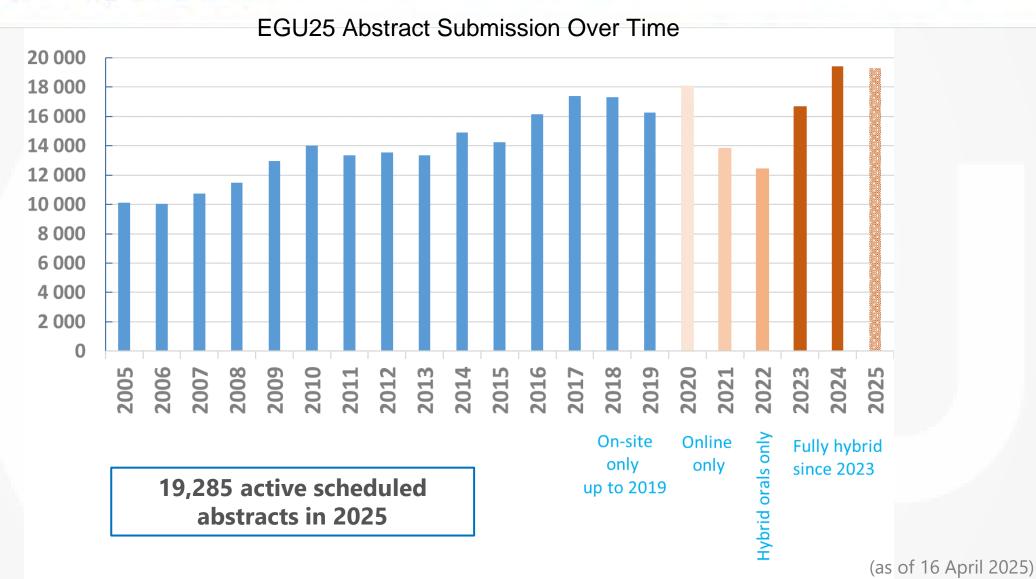
- **1,099 active sessions** in total (+7% EGU24):
  - 730 disciplinary PG sessions, of which 48 are ITS sessions
  - 20 Education and Outreach Sessions (EOS), incl. GIFT workshop
  - 62 Short Courses + 2 Artist in Residence workshops
  - 39 Medal and Award Lectures
  - 9 Union Symposia and 9 Great Debates
  - 146 Townhall & Splinter meetings scheduled
- ECS Networking, Science for Policy, and EDI Committee events

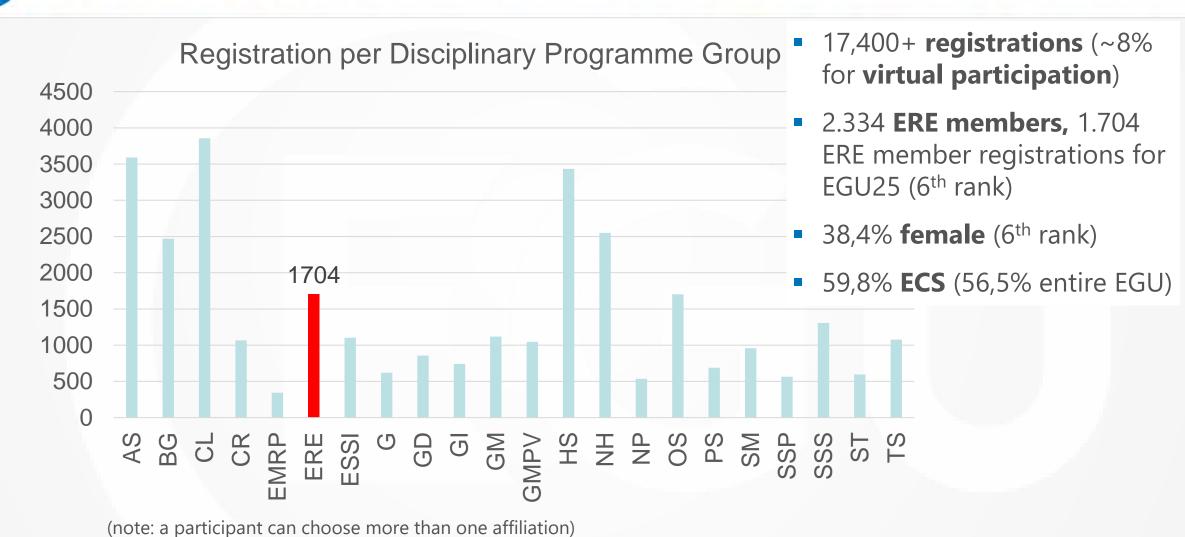


**EGU23 oral presentation** Photo credit: Pfluegl 2023

More on: <a href="https://www.egu25.eu/">https://www.egu25.eu/</a>

## EGU General Assembly 2025 Vienna, Austria & Online | 27 April-2 May 2025





### **ERE Scientific Program 2025 (2024)**

- ERE 1 Integrated Studies (8/3)(8/6)
- ERE 2 Renewable Energy (**5/2**)(8/3)
- ERE 3 Geo-storage (6/0)(5/0)
- ERE 4 Raw materials and resources (5/1)(7/1)
- ERE 5 Process coupling and monitoring (3/4)(6/3)
- ERE 6 Inter- and Transdisciplinary sessions related to ERE (6/0)(5/0)

#### **Summary**

33 sessions lead (2024: 39), 10 sessions (co-organized)

https://meetingorganizer.copernicus.org/EGU25/sessionprogramme/ERE





## **Division Outstanding Early Career Scientist Award**

The 2025 Division Outstanding Early Career Scientist Award is awarded to

#### Iman Rahimzadeh Kivi

for outstanding contributions to the characterisation and modelling of coupled thermo-hydro-mechanical-chemical (THMC) processes in geo-energy applications and his enthusiastic community service.

AWARD LECTURE: Wed, 30 April, 14:05–14:35, Room -2.31 (PURPLE LEVEL)



## EGU General 2025 Vienna, Austria & Online | 27 April-2 May 2025



## **Outstanding Student and PhD candidate Presentation (OSPP) Award**

The 2024 ERE OSPP Award goes to

**Gabriele Benedetti** 

A python toolbox for survival analysis in fractured rock systems



## EGU General 2025 Vienna, Austria & Online | 27 April-2 May 2025



## **Outstanding Student and PhD candidate Presentation (OSPP) Award**

The 2023 ERE OSPP Award goes to

**Isabel Lange** 

Dissolution experiments on a polyphase basalt surface under conditions relevant to offshore CO<sub>2</sub> storage



## **NEW ERE President (2025-2027)!**



## Giorgia Stasi

enrolled in a PhD program in Applied Geophysics at the University of Liège, Belgium Geologist at the Geological Survey of Belgium (specialized in Ore Geology and Geochemistry)

- ERE Division President (since April 28, 2025)
- First ECS Division President of the Union

## EGU General Assembly 2025 Vienna, Austria & Online | 27 April-2 May 2025

- President / PG Chair: Giorgia Stasi (elected)
- Outgoing Deputy President: Viktor J. Bruckman (elected)
- Division Officers
  - Rotman Criollo (ECS Representative)
  - Astrid Fajtak (policy)
  - Thanushika Gunatilake (ECS co-Representative)
  - **Michael Kühn** (publications & ERE 4/Raw materials and resources & ERE 5 /process coupling and monitoring SPG chair)
  - **Sonja Martens** (ERE 2/Renewable Energy SPG chair)
  - Johannes Miocic (outreach, ERE 3/Geo-storage SPG chair)
  - Daniel Ospina (policy)
  - **Sarah Weihmann** (OSPP coordinator)





G. Stasi

V.J. Bruckman





R. Criollo



A. Fajtak



T. Gunatilake



M. Kühn



S. Martens



J. Miocic



D. Ospina



S. Weihmann



## **ERE GA25 Activities & Highlights**











## **ERE GA25 Activities & Highlights**





#### **EGU25 Children's Art Exposition**



#### #EGUart

Clean energy can come from the sun, wind, water and even the heat from deep inside the Earth (geothermal). These types of energy sources are called renewable, as they come from natural things that do not run out. Scientists who study the Earth (geologists) play an important role in identifying suitable locations and sourcing resources needed to build renewable energy infrastructure.

Join us in exploring the Power of the Planet through the growing exhibition of art created by (very) Early Career Scientists at the EGU25 childcare and family room facilities!



Energy, Resources and the Environment

Subscribe to the newsletter!



### **ERE Going Forward**

Interdisciplinarity of ERE reflects current needs:

- Energy transition
- Bridge between geoscience and policy
- Climate resilience and environmental risk
- Circular Economy

#### What can we do for you?



https://www.menti.com/

Code: 2599 6301



- Sustainable growth
- Increase opportunities of networking and connections
- Foster interdisciplinary collaboration



#### Who we are

**Early career scientists** (ECS) are students and scientists in the Earth, planetary and space sciences who received their highest degree within the past seven years.

#### What we do

- Working Groups
- Communication and outreach
- Webinars and training
- Networking events
- Science-policy activities



#### ECS Team:



Rotman Criollo Outgoing ECS Representative



Thanushika Gunatilake Incoming ECS Representative



Annelotte Weert ECS team



Nikita Bondarenko ECS team



Ronja Borgmastars ECS team - policy



YOU ARE THE NEXT!

Are you interested in being more involved in EGU activities?

Join our team!

For more info: ecs-ere@equ.eu

Early Career Scientists | ecs-ere@egu.eu



#### Our activities:

- Campfires (informal seminars)
- Short Courses during the GA
- Fieldwork-related activities (webinars)
- Participation to the Working Groups
- Networking events



Meet with other early careers scientist (ECS) may support your collaborations

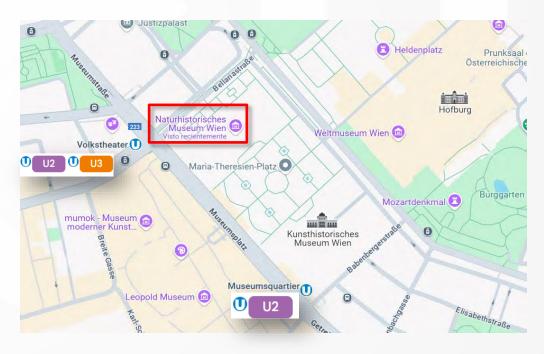


POP-UP EVENT EGU Scavanger Hunt @ NHM Vienna

Sun, 27 Apr, 14:00-15:30 Mon, 28 Apr, 8:45-10:00

Location:

**Natural History Museum Vienna** 





#### Our activities:

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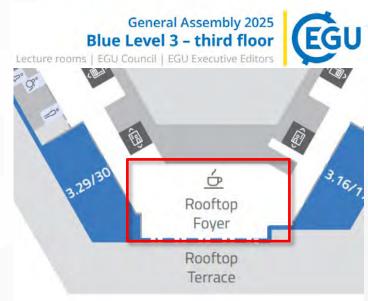


Meet with other early careers scientist (ECS) may support your day by day science

## NET6 ECS NETWORKING RECEPTION

Tue, 29 Apr, 18:00–19:30 Location: Rooftop Foyer (Blue Level - floor 3)







#### Our activities:

- Campfires (informal seminars)
- Short Courses during the GA
- Fieldwork-related activities (webinars)
- Participation to the Working Groups
- Networking events



Meet with other early careers scientist (ECS) may support your day by day science (tips, methods, grants, collaborations, ....)





#### **ERE ECS NETWORKING LUNCH**

Wed, 30 Apr, 12:45-13:45

Location:

**Terrace G (Purple level – floor -2)** 





#### Our activities:

- Campfires (informal seminars)
- Short Courses during the GA
- Fieldwork-related activities (webinars)
- Participation to the Working Groups
- Networking events



Having a connected community of ERE ECS

POP-UP EVENT ERE Women and Allies Lunch

Thu, 01 May, 12:30-14:00

Location:

Networking zone Terrace G (Purple level – floor -2)







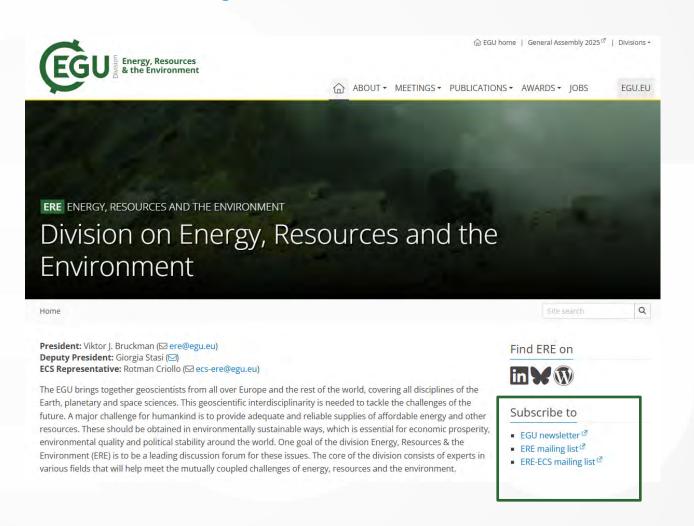
## https://www.egu.eu/ere/



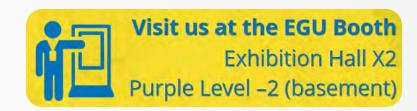
Join our team!

For more info: ecs-ere@equ.eu

### **ERE Early Career Scientists ECS**







## Working Groups | What are they and what do they do?



Outreach & Communication



Activities & Impact



**Life-Career Wellness** 



**Equality, Diversity** and Inclusion



WHERE

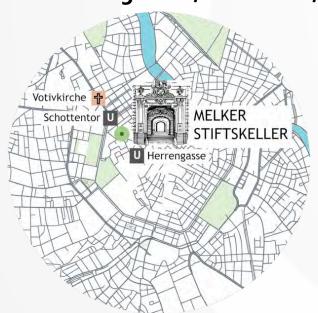
"Melker Stiftskeller" restaurant

WHEN

Thursday 01/05 at 19:20

LOCATION

Schottengasse 3, 1010 Wien, Austria





#### **MENU**

Different options Including vegan,

BY YOUR OWN



## Registration



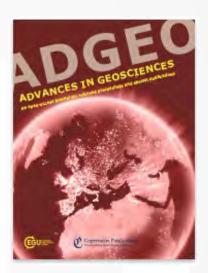
Limited places! First come, first served basis!

Early Career Scientists | ecs-ere@egu.eu



#### **ERE: Publish in Advances in Geosciences**

- Join the ERE special issue 2025 in Advances in Geosciences (ADGEO)
- If you submitted an abstract to an ERE session or a co-organized one for the GA 2025, you are welcome to contribute with a publication.
- Your manuscript needs to be directly linked to your EGU abstract (please add your abstract number when submitting).
- Guidelines for preparations and templates are available on the ADGEO website: <a href="https://www.advances-in-geosciences.net/submission.html">https://www.advances-in-geosciences.net/submission.html</a>
- Manuscripts need to be 4 pages long and should target around 10 pages.
- Publication fees are 900 € per paper (changed since 1<sup>st</sup> January 2025).
- Submissions are possible from 1 April until 15 June 2025.
- Reviews are done by ERE officers, conveners and authors of the GA 2025.
- If you submit a manuscript we expect you to take part in the reviewing process. So we might ask you to do up to two reviews.
- Questions? Please contact: Michael Kühn (adgeo.ere.egu@gfz-potsdam.de)







### **ERE: Publish in Advances in Geosciences**

## European Geosciences Union General Assembly 2024, EGU Division Energy, Resources & Environment (ERE)

EGU General Assembly 2024, Vienna, Austria, 14-19 April 2024

Editor(s): Michael Kühn (Helmholtz Centre Potsdam - GFZ German Research Centre for Ge Natural Sciences, Belgium), Viktor J. Bruckman (Austrian Academy of Sciences, Austria), Soi Centre for Geosciences, Germany), and Johannes Miocic (University of Groningen, Netherlands)

A major challenge for humankind is to provide adequate and reliable supplies of affordation environmentally sustainable ways, which is essential for economic prosperity, enviror this Special Issue, that reflects the scientific program of the General Assembly 2024 of the European Geosciences Union (EGU), we would like to provide a holistic view on active management of energy-related programs. In addition, we provide a forum for the present developments in the understanding of resources systems. This can also cover aspects of

**Review process**: all papers of this special volume underwent the regular peer-review pr ADGEO managing editor.

27 Sep 2024

New data for a model update of the Waiwera geothermal reservoir in New Zealand Michael Kühn, Vaughan Stagpoole, Graham Paul D. Viskovic, and Thomas Kempka Adv. Geosci., 65, 1–7, https://doi.org/10.5194/adgeo-65-1-2024, 2024

> Short summary

27 Sep 2024

Quantification of scalings in dynamic environments using a combination of Quartz Crys Lilly Zacherl and Thomas Baumann

Adv. Coossi 65 0 17 https://doi.org/10.5104/odgss.65.0.2024.2024

08 Nov 2024

Geological screening of onshore saline aquifers for CO2 storage: Paraná and Espírito Santo basins, Brazil

Francyne Bochi do Amarante, Juliano Kuchle, Claiton Marlon dos Santos Scherer, Shahin E. Dashtgard, and Maurício Barcelos Haag Adv. Geosci., 65, 19–35, https://doi.org/10.5194/adgeo-65-19-2024, 2024

▶ Short summary

11 Nov 2024

Characterization of artesian flow and heat transition in an ATES research wellbore using DTS monitoring and numerical modelling

Liang Pei, Lioba Virchow, Guido Blöcher, Stefan Kranz, and Ali Saadat

Adv. Geosci., 65, 37-44, https://doi.org/10.5194/adgeo-65-37-2024, 2024

▶ Short summary

12 Nov 2024

DecTree: a physics-based geochemical surrogate for surface complexation of uranium on clay

Marco De Lucia

Adv. Geosci., 65, 45-54, https://doi.org/10.5194/adgeo-65-45-2024, 2024

▶ Short summary

25 Nov 2024

Lessons from national approaches: a long uphill struggle in search of sites for repositories for nuclear waste locations

Thomas Flüeler

Adv. Geosci., 65, 55-70, https://doi.org/10.5194/adgeo-65-55-2024, 2024

Short summary

04 Dec 2024

Assessing future ice-sheet variability for long-term safety of deep geological repositories

Johan Liakka, Natalie S. Lord, Alan Kennedy-Asser, Daniel J. Lunt, Charles J. R. Williams, and Jens-Ove Näslund Adv. Geosci., 65, 71–81, https://doi.org/10.5194/adgeo-65-71-2024, 2024

▶ Short summary











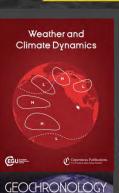
## Open Access Publications



Measurement

- Open Access Journals
- Interactive Public Peer Review

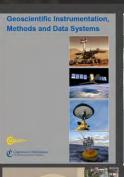






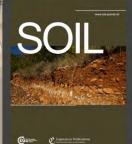
GEOSCIENCE

COMMUNICATION

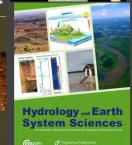




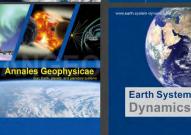






























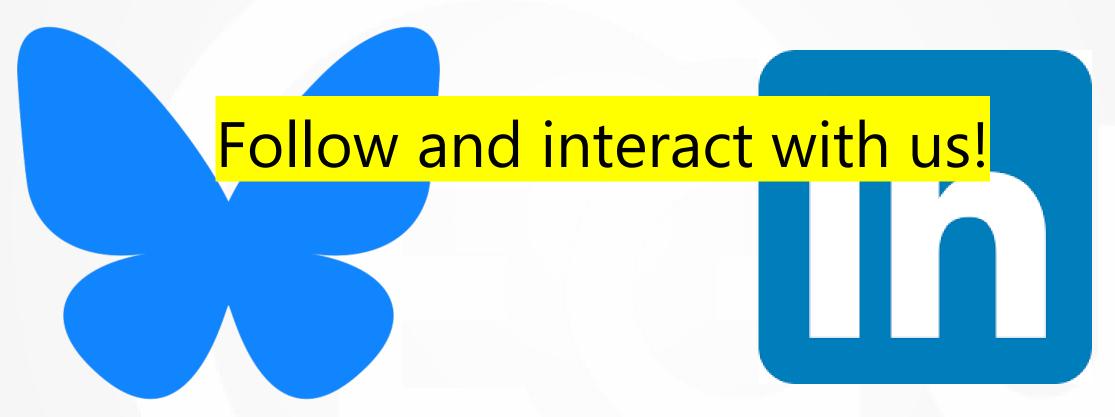




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EGU Blogs » Divisions » Energy, Resources and the Environment

## https://blogs.egu.eu/divisions/ere/

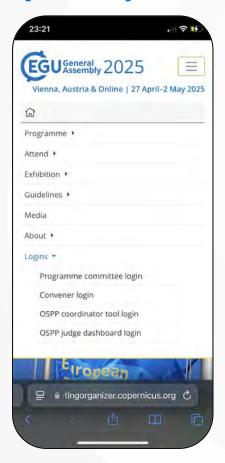
Energy, Resources and the Environment

Interview with ERE Outstanding ECS Awardee Iman Rahimzadeh Kivi

**ABOUT** 



## Outstanding Student and PhD candidate Presentation (OSPP) Awards







OSPP voting to	loc			
EGU25-2742   ECS   Numerical investigat convection in fracture domes: the fracture Jonas Sullmann and Tue, 29 Apr   16:15- OSPP Judge: Sarah W	tion of the red-poro d salt chi Thomas ( 18:00   X5	us media mney pro Graf 5.256 (Hall	near salt blem	
Author not eligible				
Scientific content		oo:   5 aver- 0 outstandi		
Correctness of methods and information	5-	Y	10	5
Significance of the work	-			5
Originality and creativity of the approach	7	Y		5
Conclusions supported by data and analysis	7	4		5
Author's knowledge of the subject matter and	=	Y		5

## EGU Special Activity Fund 2026 – call for proposals

**Goal:** Promote high-profile, innovative, 'out-of-the-box', not-profit activities contributing to EGU's vision and strategy: <a href="https://www.egu.eu/about/strategy/">https://www.egu.eu/about/strategy/</a>

Key points: ~20-30k EUR per project, activity has to start and must be completed in 2026

- **Application process**: Concept note due by Fri 13 June 2025
  - Full proposals (upon invitation by mid-July) due by Fri 19 Sept 2025
  - Decision by October 2025

For details and to **submit a concept note** (DL13.06.2025):

https://www.egu.eu/meetings/special-activity-fund/





## Join a Science for Policy Session at EGU25!

Find out how you can more effectively engage with policymakers and how your research can have policy impact

**EGU's Science for Policy Help Desk** 

Every day, 12:00-13:00 at the EGU booth

See the full EGU25 Science for Policy Programme







## Subscribe to the EGU's Science for Policy Newsletter!

### Monthly updates on:

- EGU's #Sci4Pol activities
- Opportunities to engage with policymakers
- Science-policy events and workshops
- Geoscience-relevant policy news





The Daily Newsletter at the General Assembly

## EGU TODAY IS NOW DIGITAL!





All issues of the newsletter will be made available at

www.egu.eu/egutoday/

through the conference app and on screens inside the ACV.

# the call for Training School applications: 16 May, 2025



Photo credit: V. De Micco, 2024

The EGU provides financial support to training school organisers in order to facilitate participation of early career scientists and/or to support the quality of the school through field trips or by inviting exceptional lecturers.





## Did you know the EGU has a monthly newsletter?





The email newsletter informs EGU members about

- EGU NEWS AND BLOGS
- GENERAL ASSEMBLY UPDATES
- HIGHLIGHTS FROM EGU JOURNALS
  - JOBS AND MEETINGS

and much more!





