GMPV Division Meeting

Mike Burton, Marian Holness

Vienna | 10 April 2019

Meetings | Publications | Outreach | www.egu.eu

Agenda

- OSPP 2018 Awards
- EGU and Election Calendar
- EGU and GMPV status update
- EGU/AGU Joint sessions update
- Bunsen medal committee (vote)
- Science Officer team (vote)
- ECS Representative and team (vote)
- New format for the General Assembly (discussion)

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OSPP Awards

Alexandra Gutmann

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Caron Vossen

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Bromine Chemistry in volcanic plumes – Development of in-situ denuder sampling techniques for hydrogen bromine

Alexandra Gutmann[1]✉, Nicole Bobrowski[2,3], Marcello Liotta[4], Julian Rüdiger[5] and Thorsten Hoffmann[1]

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A Halogens in volcanic plumes

Quantities of emission, transformation and phase partitioning of the different bromine and other halogen species are still in details not known.[1]

BrO/SO_2 ratio was suggested as an indicator for changes in **volcanic activity** and can be measured by remote sensing techniques.[1][2]

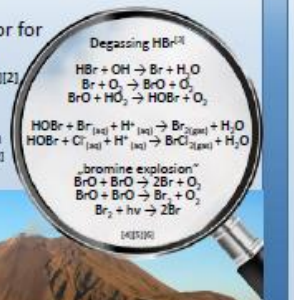
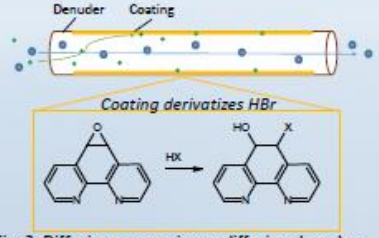


Fig. 1: **Model descriptions** suggest transformation of gaseous bromine species related to plume age[2]

Fig. 2: Bromine is thought to be emitted as HBr and partly transformed to BrO via multiphase reaction.

B Selective quantification of halogen species - Gas diffusion denuder

Gas molecules diffuse to coated denuder walls while particles pass denuder when pumping air through[7][8]



- *particle*
- *gas molecule*

L=30 cm
diameter 0,9 cm
Flow=250 mL/min

Fig. 3: Diffusion process in gas diffusion denuder, with **5,6-epoxy-5,6-dihydro-1,10-phenanthroline** (EP) as coating

Analytical procedure

1. sampling
2. elute coating with solvent
3. evaporate for concentration
5. Analysis with high pressure liquid chromatography coupled to ESI mass spectrometry and UV
6. Standard addition calibration

Bromine speciation with several coatings

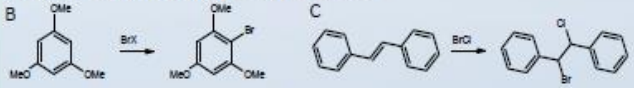


Fig. 4: coatings for determination of other bromine species
(A) Reactive halogens (BrX, oxidation number +1 or 0) with 1,3,5-Trimethoxybenzene[8]
(B) Interhalogens (BrCl) with *trans*-Stilben

Field Application

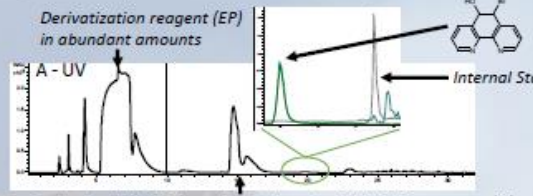
Simultaneous sampling of denuders with different coatings for various reactive halogens and alkaline traps (Raschig tube[9]) for total halogen amounts.

Fig. 5: Sampling setup (Vulcano Island 08/04/2016), denuder and Raschig tube.

Fig. 6: Sampling by UAV (Stromboli 06/04/2016), denuder and SO_2- and CO_2-Sensor.

C matrix influence and calibration

Large matrix (coating + derivatized products) causes precipitation and complicates analysis.



Derivatized HCl, HCl is emitted a hundredfold of HBr amounts.[11]

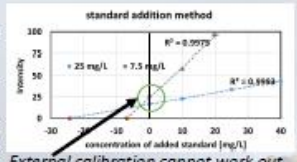
Fig. 7: (A) UV spectrum of processed denuder sample (July 2016, Masaya). (C) Extracted and zoom in of mass chromatogram (m/z 277, 279)

Calibration

Fig.8: **standard addition calibration method** demonstrated on lab samples.

Denuders from several batches with known concentrations.

Data points without standard addition represent external calibration results. It seems that **matrix influence** of different denuder batches differ vastly.



External calibration cannot work out correct results

Recovery 94.66 ± 5.08 %

D Field applications

Masaya 2016

Sample collection at different distances to emission source

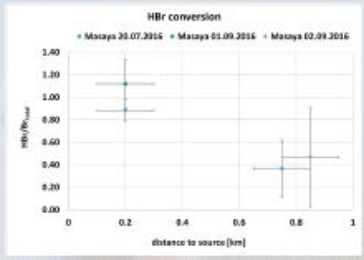


Fig.9: Development of HBr in the plume visible with HBr/Br_{total} ratios depending on distance to the source. HBr determined by denuders, Br_{total} by alkaline traps (analyzed by IC and ICP-MS).
Samples collected on the days (20.07.2016 blue, 01.09.2016 green, 02.09.2016 grey). Measurements of the HBr/Br_{total} ratio at Masaya volcano seem to show a decrease over increasing distance.

Sampling Site

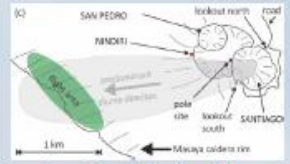


Fig. 10: Overview of Sampling Site at Masaya 2016
Data shown in Figure 9 were taken at ‚Pole Site', ‚Nindiri' and ‚San Pedro'.[10]

Collection efficiency

2 denuder in line ensure quantitative determination

Fig. 11: Collection efficiency dependent on coating amounts
April 2016 : 1 sample, 45 µmol EP/Denuder
July 2016: 4 samples, 90 µmol/Denuder

E Outlook

Denuder vs. Raschig tubes

- Comparison of lab samples collected by both methods simultaneously

Data sets help to gain knowledge on volcanic bromine chemistry

- Analyze collected samples
- More field applications to extent data sets

Other halogens

- Extent method for Chlorine and Iodine speciation?

Other coatings – more species

- Br radicals
- Also possible for H_2S and SO_2 distinction

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[2] v. Glasow, R., PNAS, 107, 15, 2010.
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OSPP Awards

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Can we predict seismogenic failure of single-phase magmatic liquids?

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Introduction

During ascent through the shallow crust, high viscosity magma fractures repeatedly, producing seismicity that can be used to both track magma movement and help forecast eruption times. Predictive tools have been developed in which the acceleration of the seismic signals toward failure is thought to follow a power law, such that the singularity defines the critical point at which the seismic signals run away and coincides with failure (e.g. Voight, 1988; Main, 1999). Here we use the Time-Reversed Omori Law (TROL) to describe such an increase (Bell et al., 2013; Vasseur et al., 2015):

$$\dot{\Omega}(t) = \frac{k}{(t_f - t)^p}$$

where $\dot{\Omega}$ is the event rate at time t, k is a multiplicative amplitude term and p is the power-law exponent. t_f is the predicted time of failure, which is in an ideal situation equal to the onset of an eruption or to the critical time, t_C, observed in lab experiments.

This research focuses on whether it is possible to forecast failure of single-phase viscoelastic magmatic liquids using acoustic emissions. Scaled laboratory deformation experiments are performed at volcanic temperatures and pressures in which acoustic emissions (AE) are tracked *in situ*. The TROL is used to predict the time of failure and is compared to other accelerating models to determine which model describes the acceleration of acoustic signals towards failure in single-phase magmatic liquids best.

Methods

A high-load (<300 kN), high-temperature (<1050 °C) uniaxial press (Figure 1) was used to deform both synthetic soda-lime-silica glass and natural homogeneous obsidian, obtained from the Hrafntinnuhryggur ridge at Krafla volcano, Iceland, at constant strain rate. Acoustic emissions were recorded simultaneously using two acoustic emission transducers. The acoustic events were detected from continuous streams using a standard STA/LTA (Short-Term Average over Long-Term average) detector. An amplitude threshold of 68 dB was applied to the AE data to remove noise.

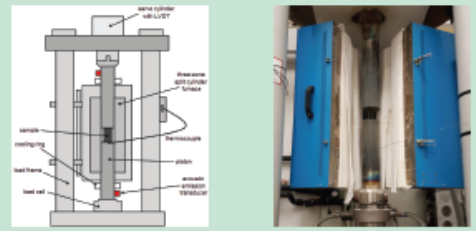

Figure 1: Left) Schematic diagram of the high-load, high-temperature uniaxial press, modified after Heap et al. (2014). Right) Picture of the high-load, high-temperature uniaxial press.

Three types of deformation behaviour

Three types of deformation behaviour could be distinguished, both visually when examining the samples that were recovered from the apparatus (Figure 2) and based on the mechanical and AE data (Figure 3). We refer to these three types as *viscous*, *transitional* and *brittle*.

Figure 2: The original form of synthetic soda-lime-silica glass on the left and three samples recovered from the apparatus on the right, depicting three types of deformation (viscous, transitional and brittle).

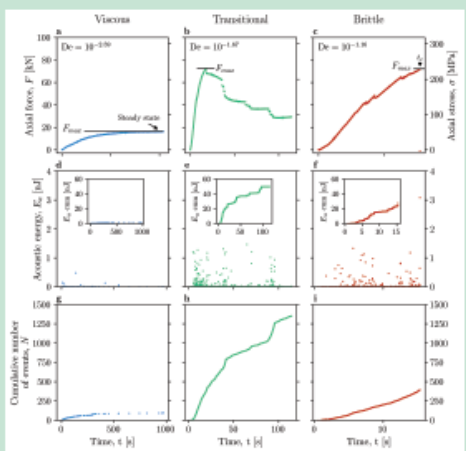

Figure 3: a,b,c) Axial force and stress as a function of time. d,e,f) Acoustic energy as a function of time. The insets show the cumulative acoustic energy with time. g,h,i) Cumulative number of acoustic events as a function of time. Examples are shown for each type of deformation behaviour (viscous, transitional and brittle). The Deborah number is given for each experiment.

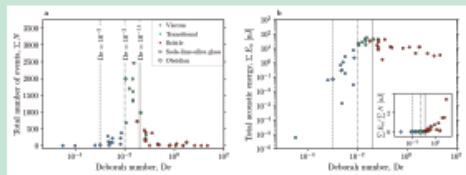

Figure 4: a) Total number of events and b) total acoustic energy for each individual experiment as a function of Deborah number, De. The inset shows the total acoustic energy divided by the total number of events for each individual experiment as a function of De. The dashed, dashed-dotted and solid grey lines correspond to De = 0.001, De = 0.01 and De = 0.04, respectively.

The dimensionless Deborah number (De) is used to locate the viscous-to-brittle transition. The three types of deformation behaviour seem to occur at discrete intervals of Deborah number (Figure 4), which is given by:

$$De = \frac{\lambda_r}{\lambda} = \frac{\mu \dot{\gamma}}{G_\infty}$$

where λ_r is the Maxwell relaxation time [s] and λ is the deformation time [s]. μ is the viscosity [Pa·s] and $\dot{\gamma}$ is the strain rate [s^{-1}]. According to Dingwell and Webb (1989) the infinite frequency shear modulus, G_∞, is $10^{10 \pm 0.5}$ Pa for all silicate compositions.

The waveforms and spectrograms of individual acoustic events for each of the deformation regimes show that the frequency content is always between 60 kHz and 1 MHz independent of De. However, the amplitude of the AE signal increases strongly with increasing De (Figure 5). This result proves that there are small amplitude events in the viscous regime, which are not associated with any visual observation that can be made after the sample is recovered from the apparatus. Our inference of these specific events is that they are related to the formation of micro-cracks that heal immediately during deformation.

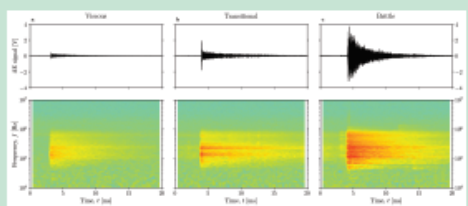

Figure 5: A waveform of a single event (top figures) and its spectrogram (bottom figures) for the three deformation regimes: a) Viscous; b) Transitional; c) Brittle.

Forecasting failure

The TROL was optimised for a large range of inital parameters to obtain the best fit and predict the time of failure. Figure 6 shows the normalised failure forecast, which is the ratio between the predicted time of failure, t_f, and the observed time of failure, t_C, as a function of Deborah number. At low De there is a cluster with a forecast error of approximately one order of magnitude. For high De, the forecast error is several orders of magnitude. Note that for those experiments the p-value is negative, which indicates a deceleration in the increase of acoustic events with time (Figure 7c). This would suggest that a power law is not the best model to predict failure of single-phase magmatic liquids.

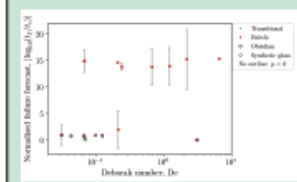

Figure 6: Normalised failure forecast as function of Deborah number, together with its standard deviation. A negative p-value (no outline) indicates a deceleration in the increase in acoustic events with time.

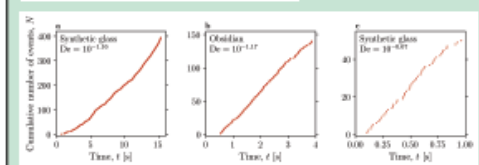

Figure 7: Typical examples of the cumulative number of acoustic events for both synthetic glass and obsidian: a) Acceleration; b) Linear increase; c) Deacceleration.

The TROL is compared to an exponential model and a linear model. The event rate for those models is given by:

Exponential model: $\dot{\Omega}(t) = k_e \exp(qt)$ Linear model: $\dot{\Omega}(t) = k_l t$

where k_e is the pre-exponential scaling parameter, q is the exponential constant (Bell et al., 2013) and k_l is the slope of the linear trend.

The different models can be compared by assessing the difference in the Bayesian Information Criterion (BIC). The BIC depends on the likelihood of the observations given the model, L, the number of datapoints, N, and the number of free parameters, P. The latter results in a preference for the model with the fewest parameters (Bell et al., 2013). The number of data points is equal to the number of events in this case. The BIC is given by:

$$BIC = -2\ln(L) + P\ln(N)$$

The linear model is preferred over both the exponential model and the TROL for almost all experiments (Figure 8). Note that the linear model does not include a time of failure, so other metrics must be used to predict the critical time, such as a threshold for the event rate or the total number of events.

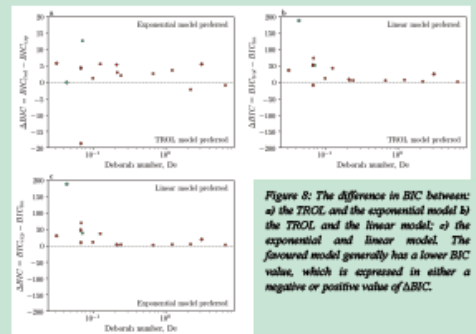

Figure 8: The difference in BIC between: a) the TROL and the exponential model b) the TROL and the linear model; c) the exponential and linear model. The favoured model generally has a lower BIC value, which is expressed in either a negative or positive value of ΔBIC.

Conclusions

- The deformation behaviour of single-phase viscoelastic magmatic liquids is viscous for De<0.01, transitional for 0.01<De<0.04 and brittle for De>0.04. For De<0.001, there are no AE due to a purely viscous response.
- The frequency content of the waveforms is always between 60 kHz and 1 MHz independent of De, but the amplitude increases with increasing De.
- At low De, the forecast error is approximately one order of magnitude. For high De, predicting failure can be several orders of magnitude off compared to the observed failure time.
- In case of single-phase magmatic liquids, a linear model is overall preferred over both the exponential model and the TROL. This may be a key reason for erroneous failure forecasts in materials including single-phase magmas and may help interpret poor predictions of eruptive behaviour at some active volcanoes. This also highlights a major shortcoming in the widely used TROL and points toward a need for novel forecasting tools.

References

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EGU and Election Calendar

Division Presidents have two main roles:

1. Members of the EGU programme committee, focussed on the GA

2. Members of EGU Council, focussed on strategy, policy

Joint PC/Council meetings in October and January and at GA

EGU is completely voluntary, no financial benefit to Division Presidents, or Executive Committee. Costs are covered for Oct/Jan meetings, but not GA, but the registration fee is waived.

EGU and Election Calendar

Presidents are elected for 2 years, renewable once through election for a further 2 years.

- April 2019 New President begins officially at Plenary meeting on Monday
- Division approves a vice-president
- October 2019 Election for the next two year Presidency, if a different President is elected then they will become vice president at the next EGU meeting, and President the next year. Usually the existing President is re-elected.
- October 2021 Election for next President, who becomes vice-president in April 2022 and President in April 2023
- One year overlap is needed for training

Date	Public	Conveners	Programme Committee/ Copernicus Meetings
01–21 Jun 2018			Call-for-skeleton-programme to PC
25 Jun – 15 Aug 2018	Public call-for-session-proposals for Union Symposia and Great Debates		
25 Jun – 06 Sep 2018	Public call-for-session-proposals (incl. short courses)		
25 Jun 2018 – 18 Jan 2019	Townhall meeting requests		
10 Sep – 10 Oct 2018			Session programme finalization and request for cooperation between programme groups, and iteration in acceptance of cooperation requests
10 Oct 2018			Fall PC meeting
22 Oct 2018	Start of **call-for-abstracts, support application, and splinter meeting** requests		
01 Dec 2018	Deadline for support applications		
02–05 Dec 2018		Support application assignment and rating	
06–14 Dec 2018			Support application ranking
15–19 Dec 2018			Support selection by committee
20 Dec 2018	Outcome of support selection	Outcome of support selection	

10 Jan 2019, 13:00 CET	Deadline for receipt of abstracts		
12–18 Jan 2019		**Session Organization I – Abstract Implementation** Acceptance, transfer, upload, and rejection	
12–20 Jan 2019		**Session Organization II – Session Tagging** Requests on room size, back-to-back, no overlap	
18 Jan 2019, 13:00 CET	**Deadline** for receipt of **late abstracts** and requests for **townhall meetings**		
21–22 Jan 2019			Room/time assignment to PGs
21–25 Jan 2019			**PCI – Abstract Implementation & Session Tagging** Session organization not finalized by conveners. Draft lay-out of programme
22 Jan 2019	Cancellation of support applicants who did not answer		
25 Jan 2019	Letter of acceptance		
25–30 Jan 2019			**PCII – Scheduling** Schedule of oral, poster, and PICO sessions
30 Jan – 01 Feb 2019			**PC/Council meeting**

11–17 Feb 2019, 13:00 CET			**PCIII – Presentation Selection** Finalizing session programmes & special lectures' programme
19 Feb 2019	Letter of schedule		Uploading meeting programme on web
19–25 Feb 2019			Generation of mobile apps and information & floor plans book
19–28 Feb 2019	OSPP participation & eligibility		
19 Feb – 03 Jun 2019	OSPP coordinator tool		
28 Feb 2019	**Deadline** for early registration, **letters of invitation, and childcare request**		
01 Mar – 12 Apr 2019	OSPP nominator tool		
22 Mar 2019	Deadline for splinter meeting requests		
25–26 Mar 2019			Generation of daily programme
27 Mar – 29 Apr 2019	OSPP judging forms		
07–12 Apr 2019	**European Geosciences Union – General Assembly**		
17 Apr – 14 Jun 2019	Presentation upload		
02–31 May 2019	OSPP award selection (coordinator tool)		

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GA 2019 statistics (as of 5 April 2019, 16:48)

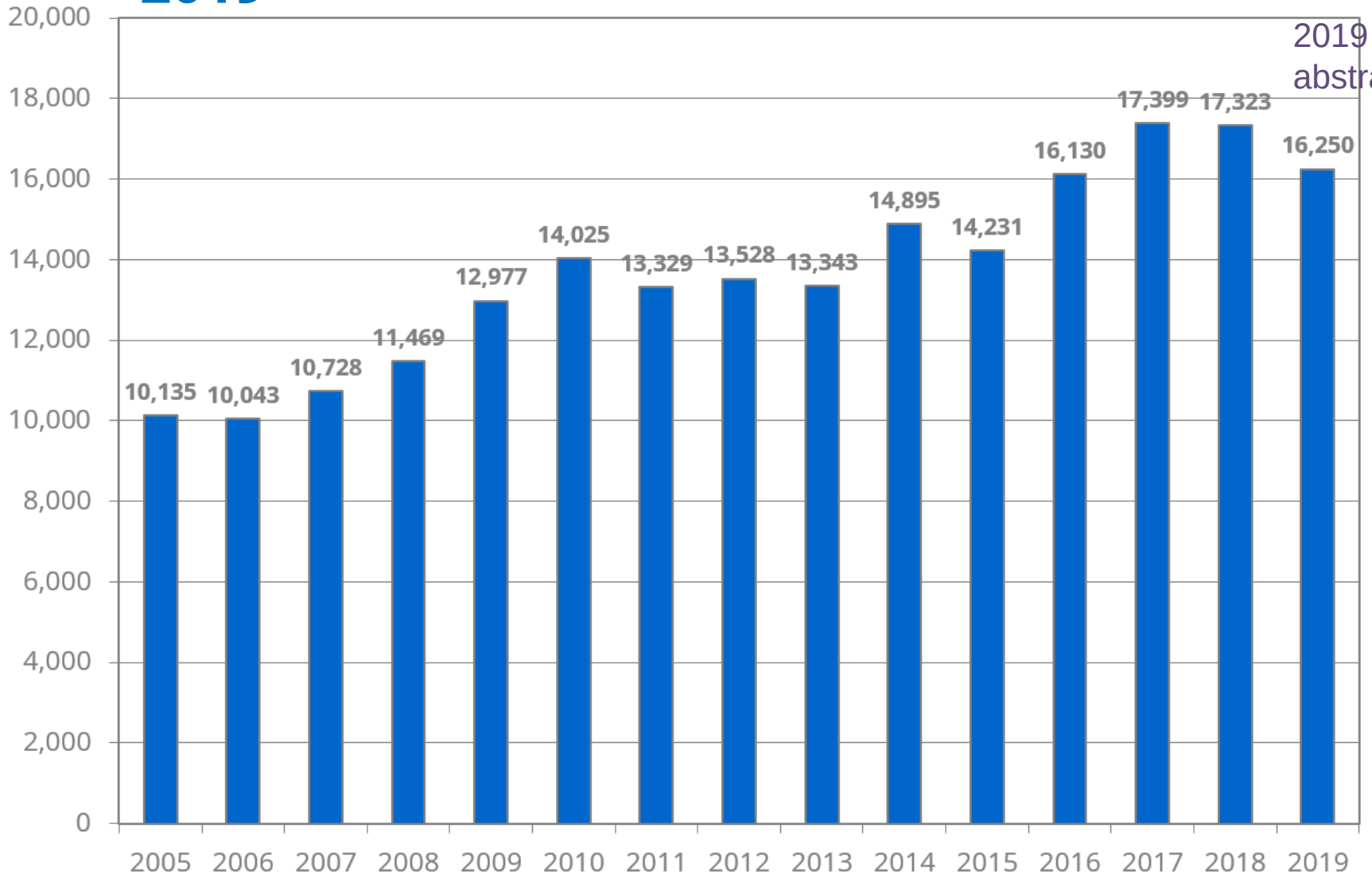
- 16,250 abstracts in programme | -6.2% relative to 2018
- (16,922 active abstracts 29 Jan 2019)
- 5,531 orals | 9,432 posters | 1,287 PICOs | ratio 34 / 58 / 8
- 14,283 registrations in advance | +12.17%
- 683 unique scientific sessions | 87 short courses | 338 side events* (total 1108)
- 508 out of 683 scientific sessions are co-organized (74.4%), thereof 24 ITS
- Original sessions 1471; 1108 still active, 363 withdrawn

*Side events include the programme groups MAL, PCN, FAM, TSM, SEV, PC, PPAA

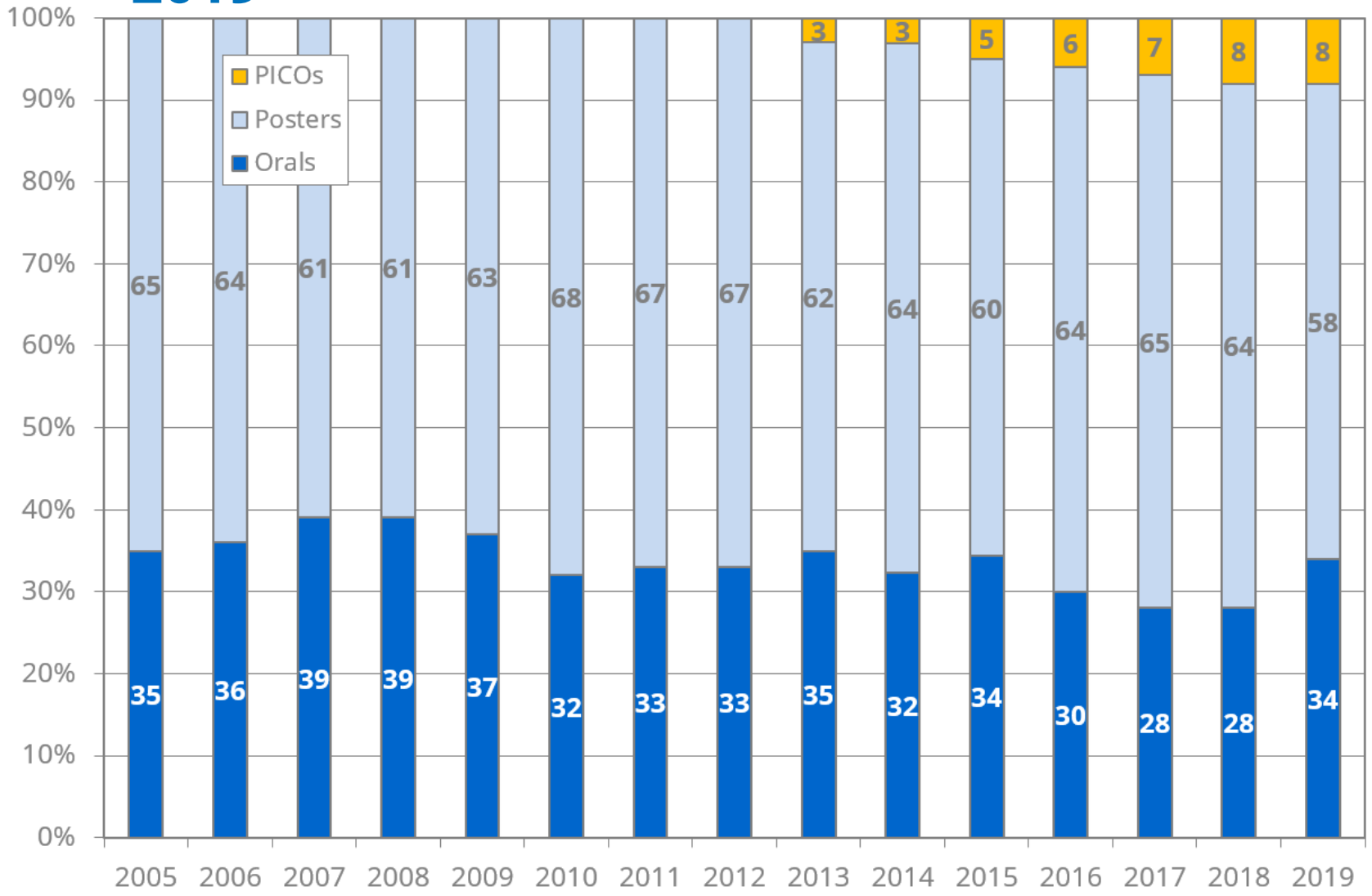
Abstracts in programme 2005 – 2019

2018 withdrawal of no-show abstracts

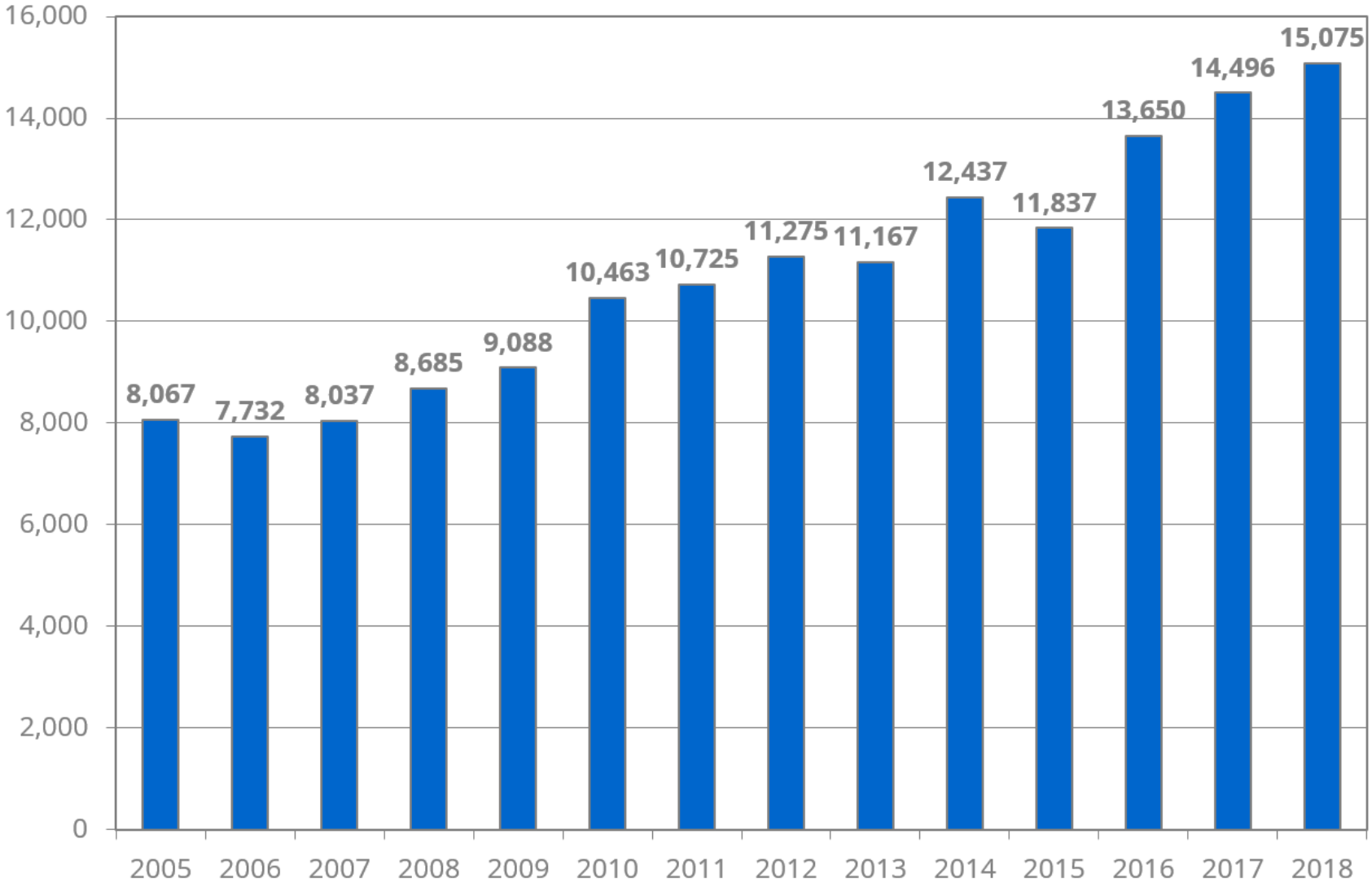
2019 one first-author abstract rule



Presentation ratio 2005 – 2019



Participation 2005 – 2018



GA2019 daily schedule

Block	Time	Activity
TB1	08:30 – 10:15	Posters, orals, PICOs
Break	10:15 – 10:45	
TB2	10:45 – 12:30	Posters, orals, PICOs
Lunch break	12:30 – 14:00	
TB3	14:00 – 15:45	Posters, orals, PICOs
Break	15:45 – 16:15	
TB4	16:15 – 18:00	Posters, orals, PICOs
TB5 - Break	18:00 – 19:00	Networking, extra poster viewing, exhibition, activities in the foyers
TB6	19:00 – 20:00	Townhalls, some short courses, some medal lectures

GA2019 Networking Time 18:00 – 19:00

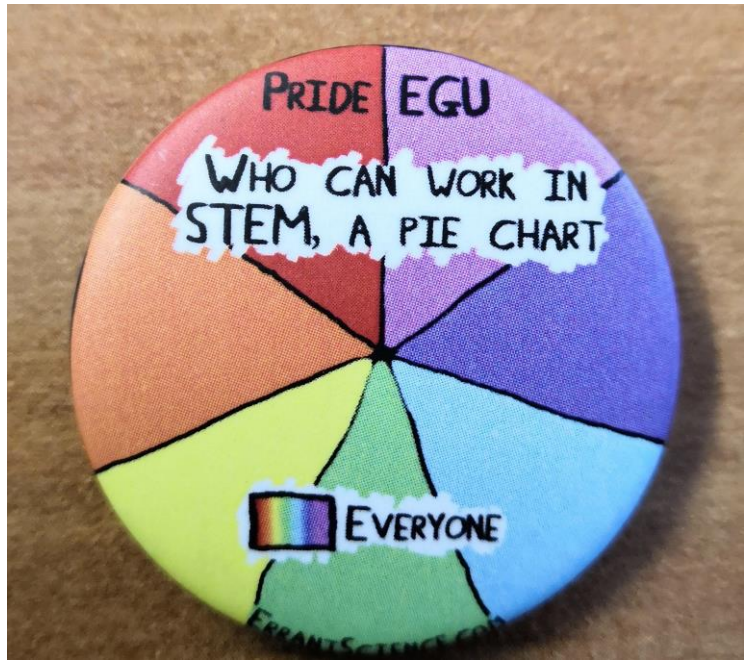
- Meet colleagues!
- Extra poster viewing
- Visit exhibition
- Gather community pre-evening medal lectures/short courses/townhalls
- Artists-in-residence Foyer D
- Drink spots throughout the building (beer, non-alc beer, soft drinks)
- ‘Meet the Talents’ TU and TH, Green gallery
- Geoscience Games Night, WE, Foyer D
- Receptions at EGU booth, TU, WE and TH (diversity, journals)

GA2019 Photo Policy

- It is prohibited to take photos or videos of scientific material shown in any oral, PICO, or poster presentations unless the presenter authorizes it. Presenters are encouraged to inform the audience if they welcome photos or sharing on social media (images at https://egu2019.eu/about_and_support/rules_of_conduct.html)
- Extra stickers in poster halls

An inclusive General Assembly

- Please use gender-neutral language
- Informal Pride@EGU event TU, 15:00 – 16:00 ECS & Networking Zone



errantscience.com

An accessible General Assembly

- Free child care, kids fun area
- Breastfeeding room (yellow level)
- Four quiet rooms (brown level)
- Multi-faith prayer rooms (yellow level)
- The ACV is fully accessible by wheelchair
- Poster halls have chairs available for people to sit down if needed
- Steps to help presenters hang up their posters
- Each PICO spot has a lower screen for increased accessibility
- In lecture hall, please use the screen's cursor where possible
- Please repeat questions as not everyone will have heard the question
- What can we do better? Please e-mail programme.committee@egu.eu

https://blogs.egu.eu/geolog/2019/03/22/accessibility-at-the-general-assembly-2

GA2019 Person of trust

- All participants at EGU's General Assembly are expected to follow the rules of conduct, https://egu2019.eu/about_and_support/rules_of_conduct.html
- Should you observe violations against these rules please contact the designated trusted person at the EGU Information (during the General Assembly) and/or send an email to conduct@egu.eu.
- Violations to the rules of conduct will be taken seriously and appropriate actions will be taken where necessary.

A greener General Assembly?

The EGU and Copernicus are working towards minimising the GA's carbon footprint. We need everyone's help!

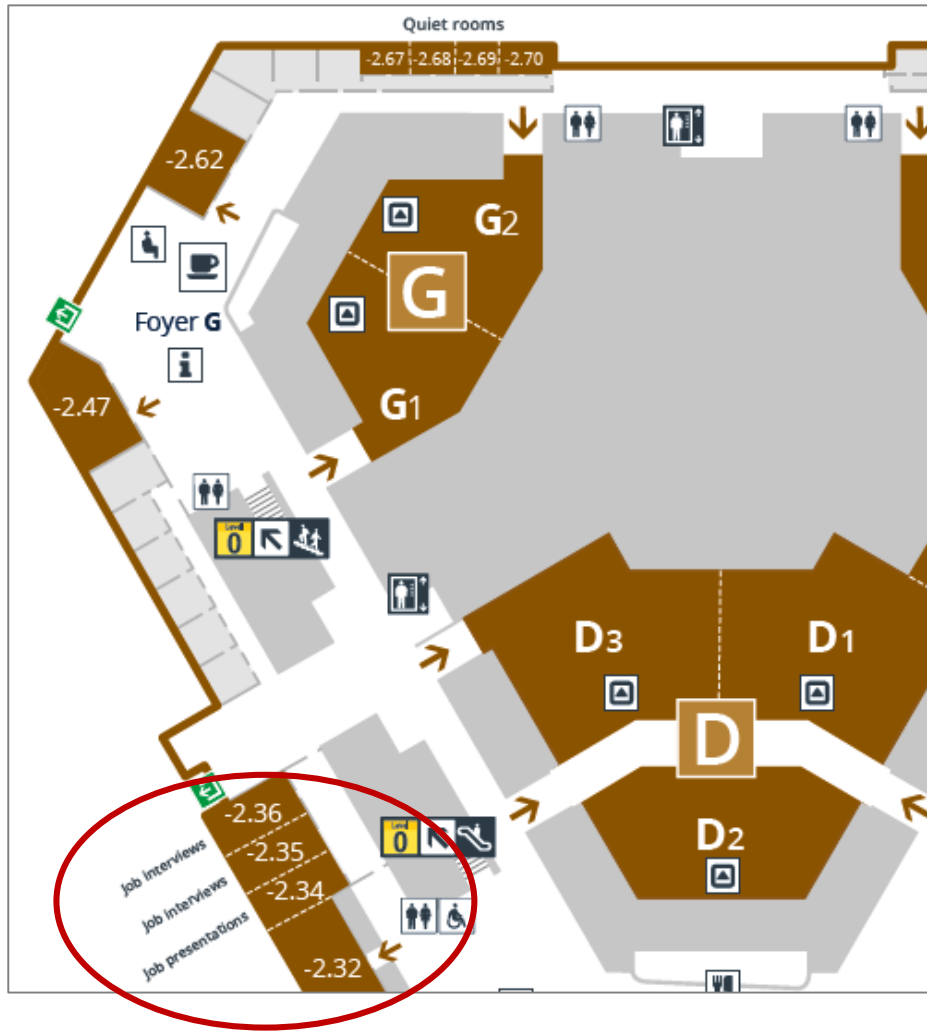
- Come by train when possible. SBB offers a discount for GA participants
- Offset CO2 emissions from your travel. On-site terminal in entrance hall
- EGU Today online only
- No programme book
- Carpeting in poster halls X only (required for noise reduction)
- Water fountains (no single use bottles) – bring your own water bottle
- Bring your own coffee cup

Townhall meeting 'The carbon footprint of EGU's General Assembly', Thursday, 19:00 – 20:00, room -2.47

https://blogs.egu.eu/geolog/2019/03/05/make-your-egu-2019-experience-more-environmentally-

GA2019 Job Centre

- Job presentations
- Interview rooms
- Open science clinique
- Job advert and cv posting pillar



https://meetingorganizer.copernicus.org/EGU2019/sessionprogramme/SEV#JC

GA2019 Artists-in-residence

- Visit our artists-in-residence in Foyer D:
  - Morgane Merlin, illustrator and environmental science PhD student.
  - Giorgo Skretis, sculptor
- There will be art for sale
- Short courses by artists-in-residence:
  - SC2.13 ‘Get creative! Sketching and drawing (your) science
  - SC2.14 ‘Sculpt your research’




GA2019 – some further selected items

- Coffee spots in poster halls as well as all four floors of the ACV
- Beer spots in poster halls and in the exhibitions (beer, non-alc beer, soft drinks)
- Science-and-Society events:
  - SCS1 Science, Politics and European (dis)integration: A conversation of Geoscientists with Ilaria Capua and Mario Monti
  - SCS2 Plastics in the Hydrosphere: An urgent problem requiring global action
- Public lecture by Insa Thiele-Eich, Meteorologist and astronaut in training, TH 19:00, Natural History Museum
- Networking & ECS Zone (red level)
- Remember to register for the convener reception!

GA2019 rules and guidelines

- No solicited presentations by conveners: “Authors (first and co-authors) cannot have a solicited presentation in a session they (co-)convene. (Co)-conveners cannot be presenting author, and are discouraged from being co-author, on oral presentations in a session they convene.”
- 1 abstract rule: “Authors are allowed as first author to submit either one regular abstract plus one abstract solicited by a convener, or two solicited abstracts. A second regular abstract can be submitted to the EOS programme group. ”
- Number of conveners on a session: At session submission minimum 2 and maximum 5 conveners
- Number of convenerships as a guideline: A maximum of three (co-)convenerships total, with one as lead convener. Short Courses are exempted from the guideline on number of convenerships.
- Diversity: We strongly encourage convener teams to reflect (i) multiple countries and institutes and (ii) different career stages, and especially to include early career scientists, and (iii) gender diversity.

Memorial for Lily Pereg

- Tuesday at the start of the SSS division meeting, 12:45, room G1
- Contributions by Alberto Montanari (incoming EGU president), John Quinton (Soil executive editor), Evgenia Blagodatskaya and colleagues (SSS division), Fuensanta Garcia Orenes (friend and colleague)
- Claudio Zaccone is acting PG chair for SSS and leads the division meeting

GA 2020 timeline (working version)

1 – 20 Jun 2019	Call-for-skeleton. Sub-programme structure only
24 Jun – 15 Aug 2019	Public call for GDB and US
24 Jun – 5 Sep 2019	Public call-for-sessions, incl SC
9 Sep – 9 Oct 2019	Session programme finalization
9 Oct 2019	PC Meeting Ismaning
1 Dec 2019	Support application deadline
15 Jan 2020	Abstract submission deadline

GMPV Rooms clustered with GD, G, SM

Room	PAX	MO1	MO2	MO3	MO4	TU1	TU2	TU3	TU4	WE1	WE2	WE3	WE4	TH1	TH2	TH3	TH4	FR1	FR2	FR3	FR4
		Red Level – second floor																			
2.15	95	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
2.25	130	BG	BG	BG	BG	BG	BG	BG	BG	BG	BG	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
2.31	95	BG	BG	BG	BG	HS	HS	HS	HS	BG	BG	BG	BG	BG	BG	HS	HS	BG	BG	BG	BG
2.44	122	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	BG	BG	BG	BG	BG	BG	BG	BG	BG	BG
B	670	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
C	670	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	BG	BG	HS	HS	HS	HS
2.95	122	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
		Green Level – first floor																			
L1	100	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	NH	NH
L2	150	BG	BG	BG	BG	BG	BG	BG	BG	BG	BG	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP
L3	280	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ITS	ITS	ITS	ITS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS
L4/5	140	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS
L6	261	CR/OS	CR/OS	CR/OS	CR/OS	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH
L7	115	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS
L8	100	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS
M1	104	NH	NH	NH	NH	NH	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP
M2	121	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH
1.61	159	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH
1.85	159	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS
N1	175	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS
N2	158	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS
		Yellow Level – ground floor																			
0.11	120	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
0.14	120	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL
0.31	120	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	AS	AS	AS	AS	AS	AS
E1	494	Unexpected	GDB2	US1	US1	US2	US2	Unexpected	GDB5	Unexpected	GDB4	Award	Award	Unexpected	GDB1	US4	US4	US5	US5	US3	US3
0.49	118	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
0.60	117	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
E2	494	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL
F1	494	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	UMI
0.94	110	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	UMI
0.96	105	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP
F2	494	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	UMI
		Brown Level – basement																			
D1	370	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
D2	293	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
D3	370	SSP/GM	SSP/GM	SSP/GM	SSP/GM	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
-2.32	111	SSS	SSS	SSS	SSS	SSS	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM
G1	220	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS
-2.47	86	AS	AS	AS	AS	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSS	SSS	SSS	CL	CL	CL	SSS	SSS	SSS	TS/EMRP	TS/EMRP	TS/EMRP
G2	220	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM
K1	220	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	UMI
-2.91	117	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	UMI
K2	220	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	UMI
-2.20	150	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS
-2.21	150	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
Sum	9239																				

GMPV Update

Room	PAX	MO1	MO2	MO3	MO4	TU1	TU2	TU3	TU4	WE1	WE2	WE3	WE4	TH1	TH2	TH3	TH4	FR1	FR2	FR3	FR4
		Red Level – second floor																			
2.15	95	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
2.25	130	BG	BG	BG	BG	BG	BG	BG	BG	BG	BG	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
2.31	95	BG	BG	BG	BG	HS	HS	HS	HS	BG	BG	BG	BG	BG	BG	HS	HS	BG	BG	BG	BG
2.44	122	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	BG	BG	BG	BG	BG	BG	BG	BG	BG	BG
B	670	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
C	670	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	BG	BG	HS	HS	HS	HS
2.95	122	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
		Green Level – first floor																			
L1	100	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	NH	NH
L2	150	BG	BG	BG	BG	BG	BG	BG	BG	BG	BG	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP
L3	280	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ITS	ITS	ITS	ITS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS
L4/5	140	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	GIFT	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS
L6	261	CR/OS	CR/OS	CR/OS	CR/OS	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH
L7	115	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS	EOS
L8	100	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS
M1	104	NH	NH	NH	NH	NH	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP
M2	121	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH
1.61	159	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	ST/PS	NH	NH	NH	NH	NH	NH	NH	NH	NH	NH
1.85	159	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS
N1	175	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS	ITS
N2	158	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS	CR/OS
		Yellow Level – ground floor																			
0.11	120	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
0.14	120	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL
0.31	120	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	AS	AS	AS	AS	AS	AS
E1	494	Unexpected	GDB2	US1	US1	US2	US2	Unexpected	GDB5	Unexpected	GDB4	Award	Award	Unexpected	GDB1	US4	US4	US5	US5	US3	US3
0.49	118	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
0.60	117	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
E2	494	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL
F1	494	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	UMI
0.94	110	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	UMI
0.96	105	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP	ERE/ESSI/GI/NP
F2	494	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	CL	UMI
		Brown Level – basement																			
D1	370	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
D2	293	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
D3	370	SSP/GM	SSP/GM	SSP/GM	SSP/GM	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
-2.32	111	SSS	SSS	SSS	SSS	SSS	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM
G1	220	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS
-2.47	86	AS	AS	AS	AS	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSS	SSS	SSS	CL	CL	CL	SSS	SSS	SSS	TS/EMRP	TS/EMRP	TS/EMRP
G2	220	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM	SSP/GM
K1	220	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	UMI
-2.91	117	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	UMI
K2	220	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	TS/EMRP	UMI
-2.20	150	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS
-2.21	150	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM	GMPV/G/GD/SM
Sum	9239																				

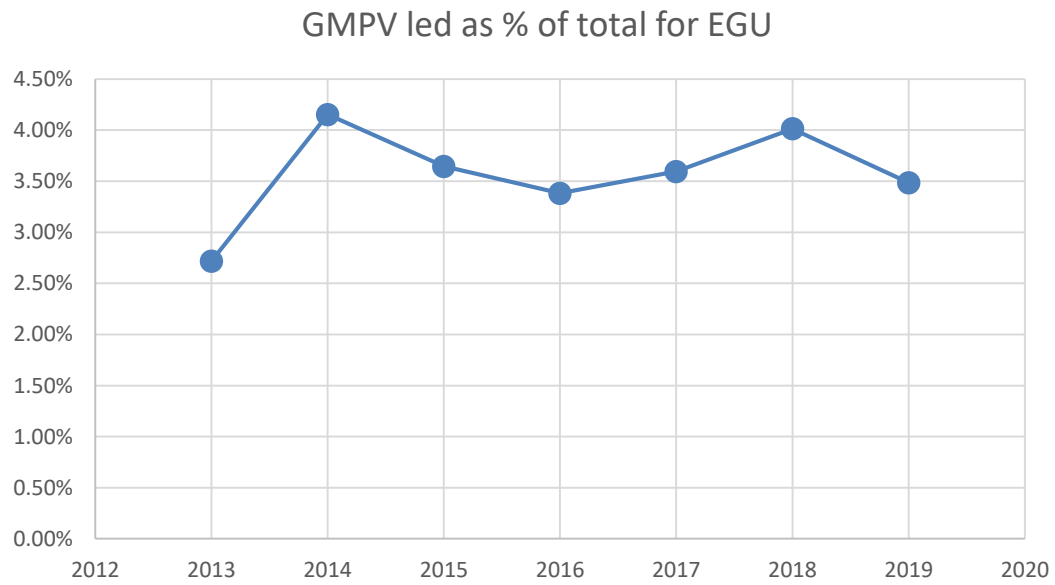
GMPV Update

Schedule	G: 20																	
	GD: 19																	
	GMPV: 28																	
	SM: 25																	
	-> GD and G could have one oral block per time block with no overlapping sessions. I certainly would appreciate the ability to be able to schedule this.																	
	Room availability: 4 for ~the whole week, plus 2 for a few blocks											D1,2,3	-2.21	-2.32, -2.91				
												Big (>290)	Medium (1	Small (<120)				
	D1 (370) 20 blocks							Division	N sessions	%		44	20	28	total			
	D2 (293) 20 blocks							GMPV	28	30.4%		13	6	9	28			
	-2.21 (150) 20 blocks							SM	25	27.2%		12	5	8	25			
	-2.91 (117) 19 blocks							G	20	21.7%		10	4	6	20			
	D3 (370) 4 blocks (FR1-4)							GD	19	20.7%		9	4	6	19			
	-2.32 (111) 9 blocks(TU2-TH2)																	
								total	92	100.00%		44	20	28	92			

Room	MO1	MO2	MO3	MO4	TU1	TU2	TU3	TU4	WE1	WE2	WE3	WE4	TH1	TH2	TH3	TH4	FR1	FR2
D1 (370) 20 blocks					2.4	GMPV1.1	2.4	2.4		5.1	5.1	5.1					4.2	4
D2 (293) 20 blocks	5.7	5.7	5.6												3.1	3.1		
D3 (370) 4 blocks (FR1-4)																		
-2.21 (150) 20 blocks									**2.1**	2.1			5.2	5.2				
-2.91 (117) 19 blocks				5.15			5.9	4.3			**3.2**	1.2	4.1	1.4			3.4	SM
-2.32 (111) 9 blocks(TU2-TH2)																		
PICO	3.3				5.5				5.3								2.2	
Poster geochem		1.1	1.5, 5.15					5.12	2.4	1.2, 3.2	2.1		1.4					
Poster Fluids															4.1			1.3,
Poster Volc				5.6,5.7,5.9	4.3							5.11			5.2	5.1		
28	5				6				6				5				6	
	ORALS											PICO					POSTERs	

GMPV Update

Year	GMPV led abstracts	Co-org Abstracts	GMPV total abstracts	EGU abstracts	GMPV led as % of total for EGU	N sessions
2013	359	505	864	13215	2.72%	
2014	615	751	1366	14810	4.15%	
2015	512	589	1101	14047	3.64%	
2016	541	717	1258	15999	3.38%	
2017	620	440	1060	17251	3.59%	
2018	725	1212	1937	18068	4.01%	28
2019	570	848	1418	16353	3.49%	31



Agenda

- OSPP 2018 Awards
- EGU and Election Calendar
- EGU and GMPV status update
- EGU/AGU Joint sessions update
- Bunsen medal committee (vote)
- Science Officer team (vote)
- ECS Representative and team (vote)
- New format for the General Assembly (discussion)

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Proposed GMPV Bunsen Medal Committee 2020

Mike Burton, Chair (GMPV President, 2015-2019)

Tetsuo Irifune (Bunsen, 2016)

Graham Pearson (Bunsen, 2017)

Andrew Putnis (Bunsen 2018)

Daniela Rubatto (Bunsen 2019)

Evgenia Elyinskaya (Science Officer)

Marian Holness (ex-officio)

Özgür Karatekin (ex-officio)

15 June 2019 Deadline for Nominations for ECS, Division and Union Medal

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Proposed GMPV Science Officer Team

14 Science Officers

Volcanology

Andrea di Muro - field-based monitoring, new eruptions

Evgenia Ilyinskaya- development of inter-disciplinary sessions on impacts/hazards, involving volcano observatories where possible

Anya Schmidt - hazard mitigation

Brendan McCormick-Kilbride - remote sensing and gas emission

Luca de Siena – Volcano Geophysics

Proposed GMPV Science Officer Team

14 Science Officers

Petrology

Marco Viccaro – Igneous, Mushes, layered intrusions, granites

Andrea di Muro – Igneous, Mushes, layered intrusions, granites

Silvio Ferrero – High temperature metamorphic petrology, crustal evolution

Owen Weller – High temperature metamorphic petrology, crustal evolution

Urs Schaltegger – High temperature metamorphic petrology, geochronology

Encarni Agudo – Low temperature metamorphic petrology

Proposed GMPV Science Officer Team

14 Science Officers

Geochemistry

Ellie Jennings – Earth geochemistry

Joerg Hermann - mantle-surface, volatile cycles, subduction

Chiara Petrone – planetary geochemistry

Mineralogy

Joerg Hermann – Experimental mineralogy

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Proposed GMPV Science Officer Team

6 Early Career Scientist Committee Members proposed

Emily Mason coordinator

Daniela Reis Facebook and twitter

Elina Bakradze Facebook, social events

Francesco Giuntoli Social events - future career

Gabriela Bunga Naen, social media

Michael Jollands Blog Posts

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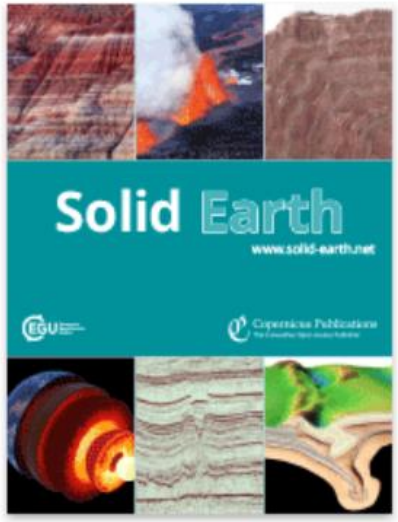

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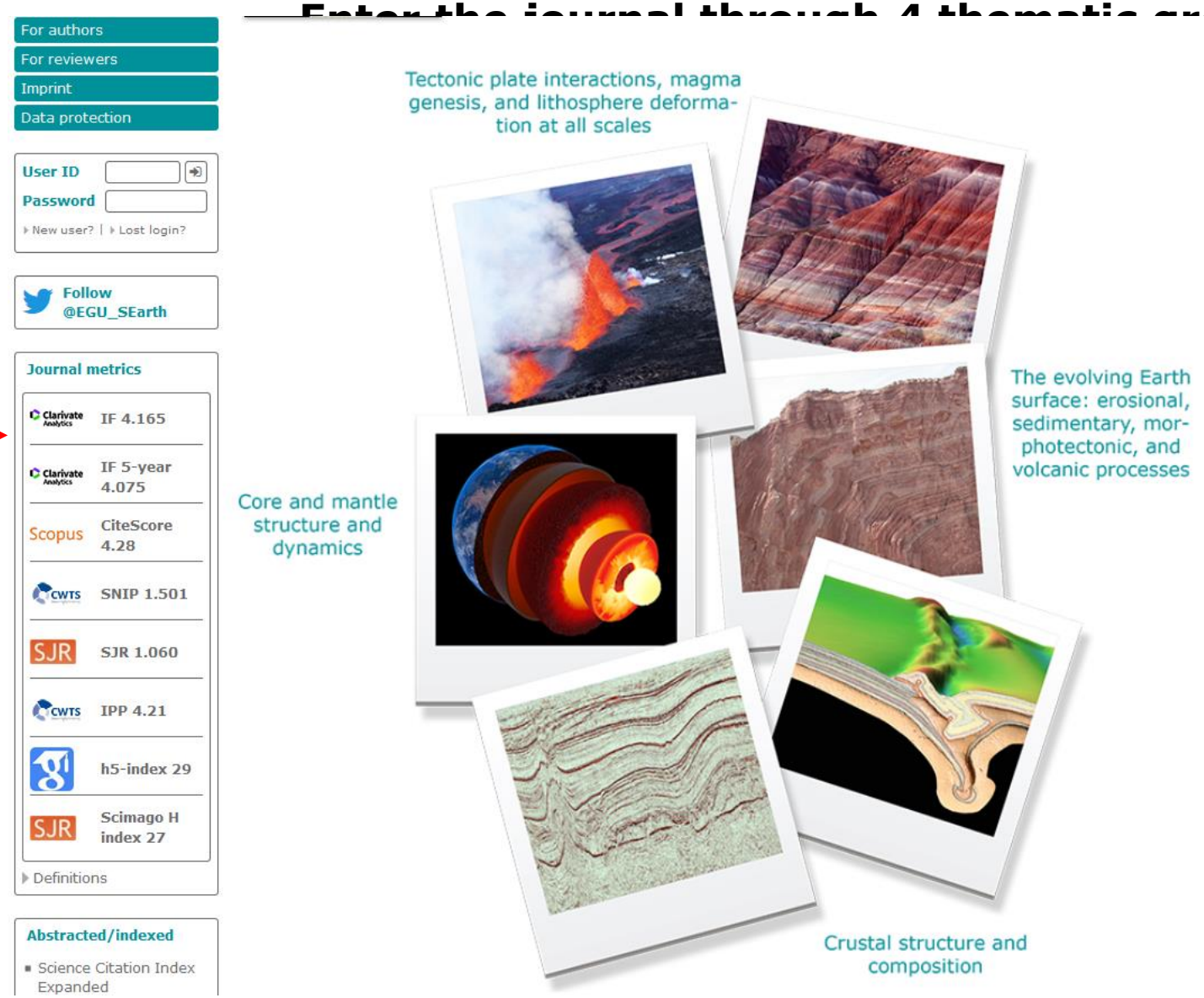

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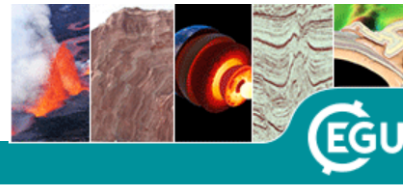

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27 Mar 2019

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Fabian Antonio Stamm, Miguel de la Varga, and Florian Wellmann

Solid Earth Discuss., https://doi.org/10.5194/se-2019-57, 2019

Manuscript under review for SE (discussion: open, 0 comments)

27 Mar 2019

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Matthew S. Tarling, Steven A. F. Smith, James M. Scott, Jeremy S. Rooney, Cecilia Viti, and Keith C. Gordon

Solid Earth Discuss., https://doi.org/10.5194/se-2019-62, 2019

Manuscript under review for SE (discussion: open, 0 comments)

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