

Hydrological Sciences Division Meeting

Elena Toth

EGU 2018 GA, Vienna| April 11, 2018



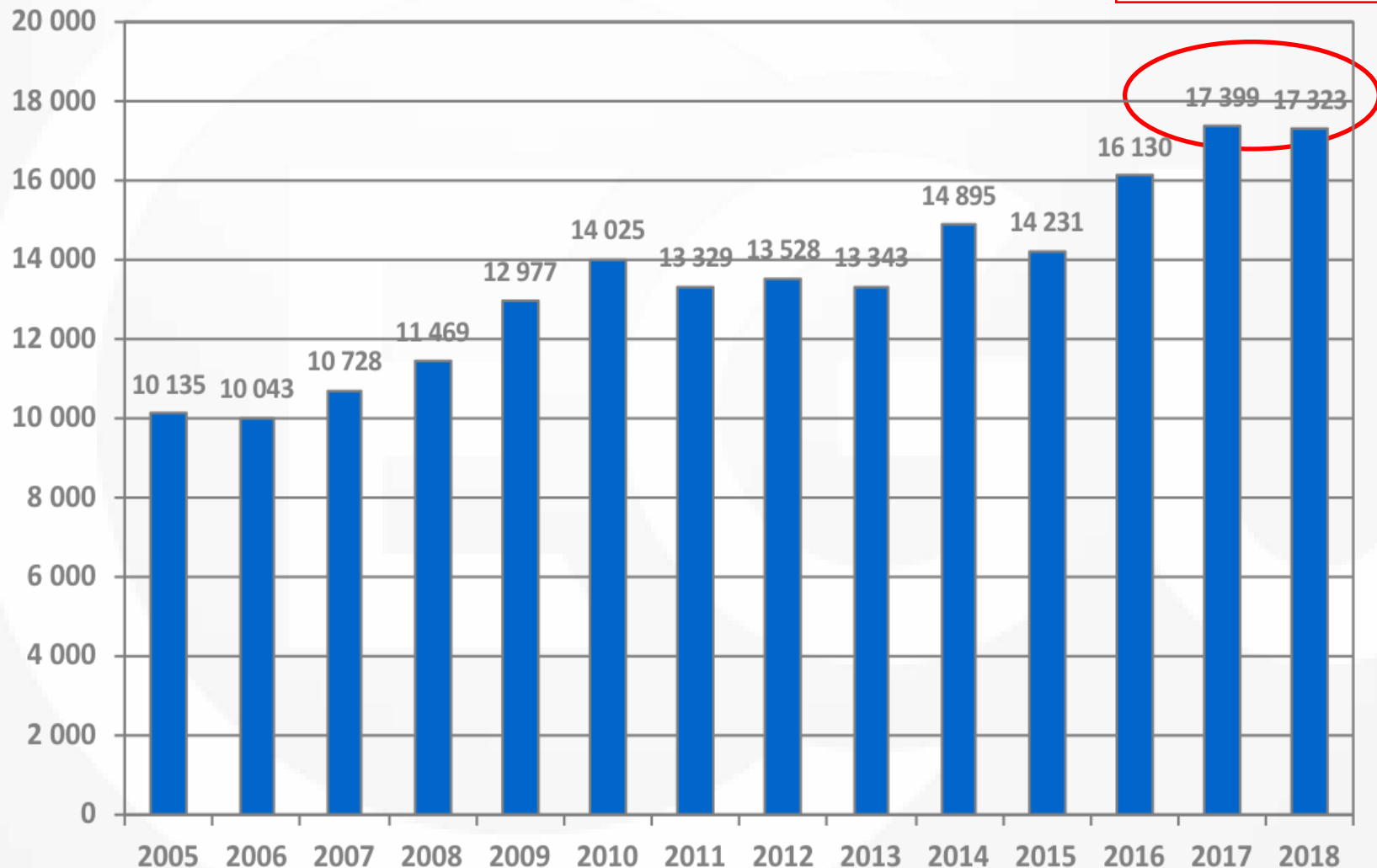
Meetings | Publications | Outreach | www.egu.eu

Agenda

- 1. General Assembly 2018**
- 2. HS Officers**
- 3. Young Hydrological Society Activities**
- 4. Outstanding Student Posters and PICOs: report + awards**
- 5. Division Medallists and Awardees**
- 6. Medal Committees 2019**
- 7. Novelties in GA 2019**
- 8. Leonardo Conference 2019 and other EGU events**
- 9. Communication and Outreach at Union Level + GA Survey 2018**
- 10. Hydrology and Earth System Sciences Journal: report + awards**
- 11. Any other business**

**New no-
show rule**

Papers in programme 2005–2018



New No-shows rule

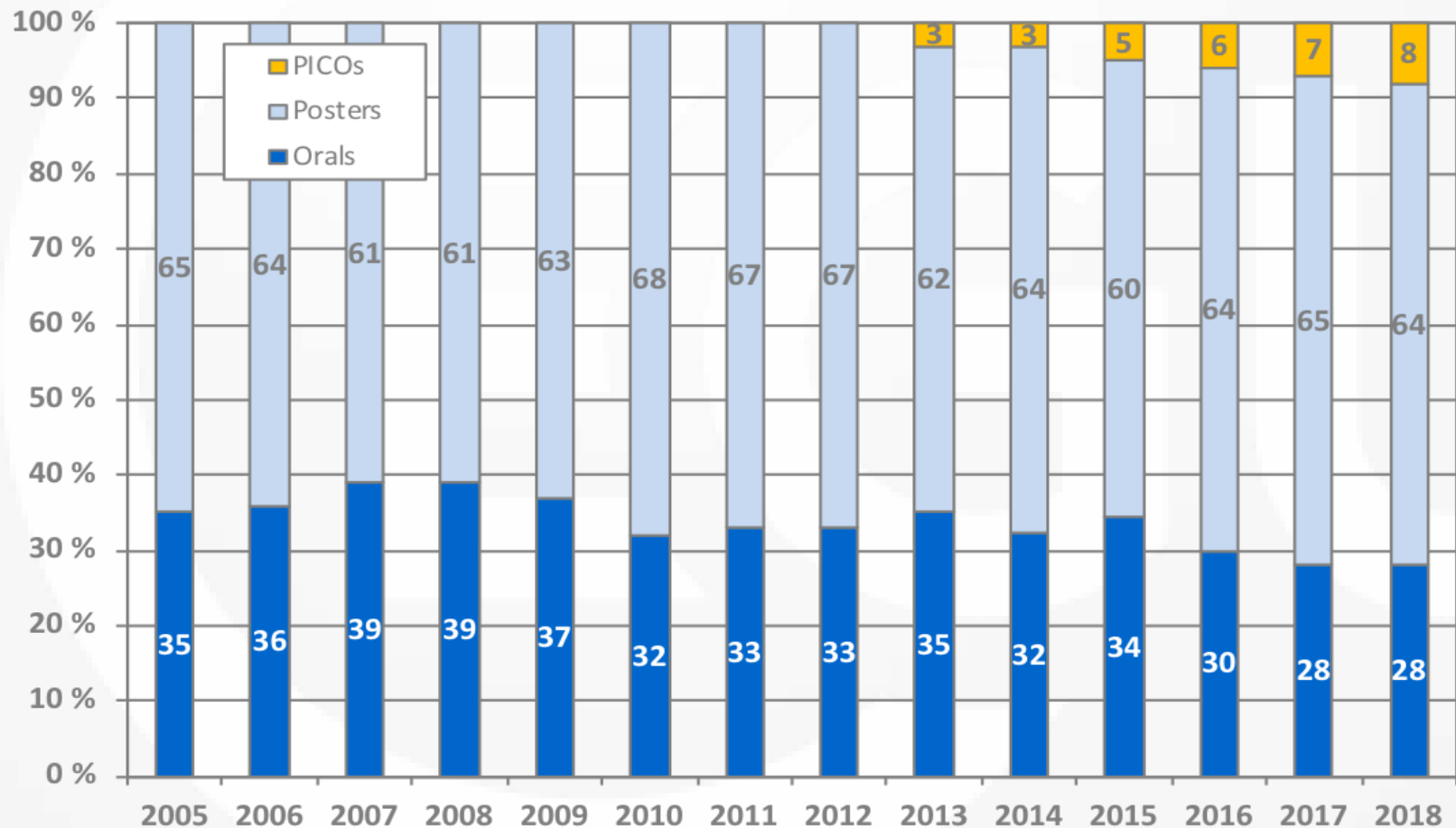
(https://egu2018.eu/guidelines/presenter_guidelines.html)

At the conference, missing presentations are categorized as no-shows if the abstract has not been withdrawn by the time of the presentation as given in the programme.

Such no-shows will be recorded and conveners will be informed after the conference.

No-show authors will be asked for reasons. Without appropriate reasons, these abstracts and their PDF files will be removed from the conference website.

Presentation ratio 2005–2018



GA 2018 – Hydrological Sciences Programme numbers

2350 abstracts (2355 in 2017) - *on Sunday before GA starts*

HS: ~13.5% of total EGU GA submissions (~ same as 2017)

Submitted to 91 HS-lead sessions

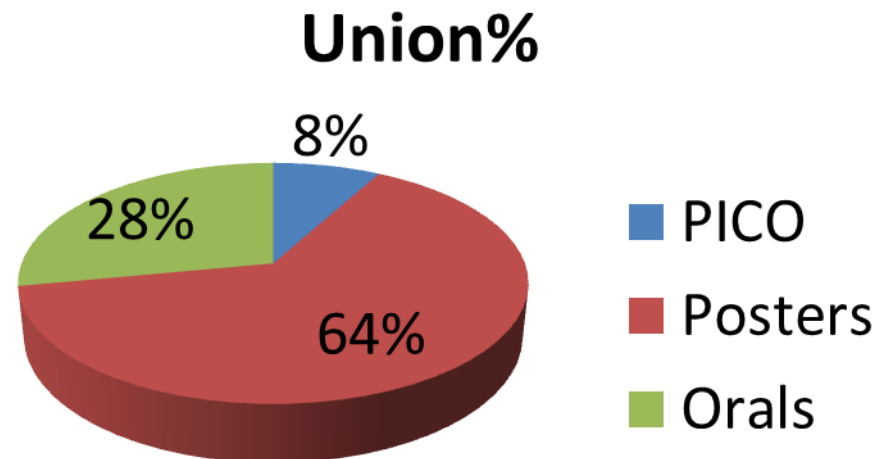
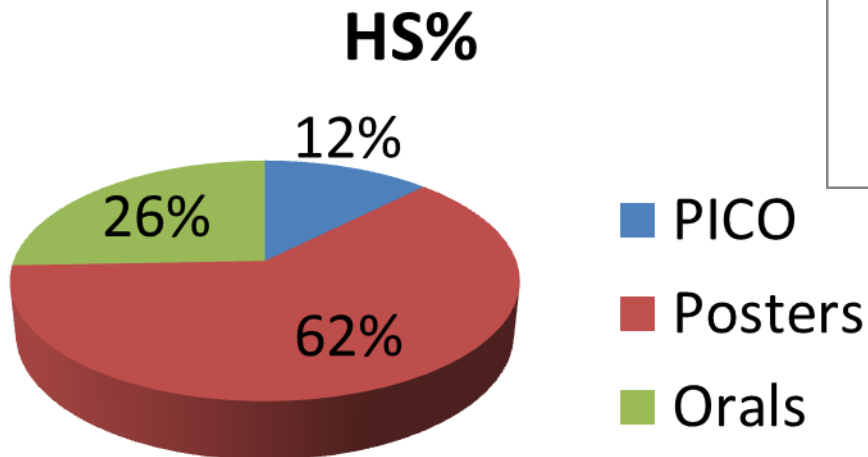
66 Oral+Poster sessions

6 Poster only sessions

19 PICO sessions (14 in 2017), for 23 time blocks (16 in 2017)

HS PICOs ~ 19% of the total PICO spots

GA 2018 – Hydrological Sciences Programme numbers



EGU GA 2018 - Hydrological Sciences programme

| SubDivision Programmes | HS1 | HS2.1 | HS2.2 | HS2.3 | HS2.4 | HS3 | HS4 | HS5 | HS6 | HS7 | HS8.1 | HS8.2 | HS8.3 | HS9 | HS10 |
|------------------------|-----|-------|-------|-------|-------|-----|-----|-----|-----|-----|-------|-------|-------|-----|------|
|------------------------|-----|-------|-------|-------|-------|-----|-----|-----|-----|-----|-------|-------|-------|-----|------|

Oral and PICO sessions

| Room | MO1 | MO2 | MO3 | MO4 | TU1 | TU2 | TU3 | TU4 | WE1 | WE2 | WE lunch | WE3 | WE4 | TH1 | TH2 | TH3 | TH4 | FR1 | FR2 | FR3 | FR4 |
|-----------------|-----------------------------------|-------|-------|-------|-------|--------------------|-------------------|-------------------|-------|-------|---------------------|-------|------------|-------|-------|-------|---------------------|-------|-------|--------------------|--------------------|
| 2.15 | | 2.1.3 | 4.6 | 4.3 | 6.4 | 6.4 | 6.2 | 6.2 | 2.3.6 | 2.1.2 | | 6.6 | 6.6 | 10.10 | 10.7 | 10.9 | 10.2 | 10.5 | 10.3 | 10.3 | 10.3 |
| 2.31 | | | | | | | | | | | | | 1.10 | 2.3.4 | 2.3.4 | 2.3.9 | 2.3.1 | 8.1.7 | 8.1.5 | 10.1 | |
| 2.44 | 1.4 | 1.4 | 1.4 | 5.5 | 3.1 | 3.1 | 3.2 | 3.3 | 4.4 | 4.4 | | 2.2.4 | 8.2.2 | 8.1.6 | 8.1.6 | 8.1.4 | 8.1.4 | 9.7 | 9.1 | 9.1 | 9.1 |
| 2.95 | | 6.3 | 6.3 | 6.3 | 2.3.5 | 2.3.5 | 2.1.4 | 5.4 | 5.8 | 5.7 | | 5.14 | 5.14 | 5.3 | 9.3 | 9.4 | 9.8 | 8.3.1 | 2.2.1 | 2.2.1 | 2.2.1 |
| B | 8.2.1 | 8.2.1 | 8.2.1 | 8.2.3 | 4.1 | 7.5 | 7.5 | 7.5 | 2.1.6 | 2.1.6 | HS Div. Meeting* | 7.1 | 7.1 | 7.2 | 7.2 | 7.2 | 2.4.2 | 7.4 | 7.4 | | |
| C | 5.6 | 5.6 | 5.6 | 1.3 | 5.2 | | | | 8.2.4 | 8.2.4 | | 8.2.4 | 1.17 | 2.4.1 | 2.4.1 | 1.8 | 1.8 | 2.1.1 | 2.1.1 | 2.1.1 | 2.1.1 |
| 2.20/1.2/1.61 | | | | | | 8.1.1 Room 2.20 | 2.3.3 Room 1.2 | 2.3.3 Room 1.2 | | | | | | | | | | | | 8.3.4 Room 1.61 | 8.3.4 Room 1.61 |
| PICO Spot A | 2.2.2 | 2.2.2 | | | 1.6 | 5.1 | 4.5 | 4.5 | | | | 2.4.3 | 2.3.2 | | | 1.12 | 5.11 | | | 1.16 | |
| PICO Spot 5b | Hall X5, close to Registration | | 1.2 | 1.2 | 2.2.3 | | 5.9 | | 7.3 | 7.3 | | | 8.1.2 | | 1.18 | 6.5 | 7.7 | 7.9 | 8.3.2 | | |
| Poster-only | MO5: 1.1 + 3.4 + 8.2.6 | | | | | | | | | | | | TH5: 2.1.7 | | | | FR1: 8.2.10 + 8.3.6 | | | | |

Meetings of the SubDivision Committees (public)

| | | |
|--|---|------|
| Catchment hydrology | Friday 12.15-13.15 | 0.15 |
| Hydroinformatics | Tuesday 12.15-13.15 | 2.44 |
| Hydrological forecasting | Tuesday 10.30-12.00 | 2.83 |
| Water policy, management and control | Monday 12.15-13.15 | C |
| Remote sensing & data assimilation | Tuesday 17.00-17.30 | 2.15 |
| Precipitation & climate | Wednesday (following HS Div meeting, 13.15) | |
| Groundwater and Unsaturated zone | Tuesday 17.30-18.15 | 2.83 |
| Erosion, sedimentation & river processes | Thursday 8.30-10.00 | 2.83 |
| Ecohydrology, wetlands and estuaries | Thursday 12.15-13.15 | 2.61 |

Elected HS President = new Deputy Division President

EGU Election Autumn 2017



Maria-Helena Ramos

IRSTEA (National Research Institute of Science
and Technology for Environment and Agriculture)
Antony, France

Hydrological forecasting SD

Outgoing: **Maria-Helena Ramos**



Incoming: **Femke Davids**



Remote sensing & data assimilation SD

Outgoing: **Annett Bartsch**



Incoming: **Chiara Corbari**



HS Officers: New SubDivision Chairs

Precipitation & climate SD

Outgoing: **Chris Onof**



Incoming: **Andreas Langousis**



Vadose zone SD

Outgoing: **Martine van der Ploeg**



Incoming: **Stefano Ferraris**



HS Officers: New SubDivision Chairs

Erosion, sedimentation & river processes SD

Outgoing: **Hugh Smith**



Incoming: **Stefan Haun**



HS Officers: SubDivision Chairs

Catchment hydrology: **Bettina Schaefli**



HydroInformatics: **Maurizio Mazzoleni**



Water policy, management and control:
Andrea Castelletti



HS Officers: SubDivision Chairs

Groundwater: **Monica Riva**



Estuaries, wetlands & eco-hydrology:
Josie Geris



HS Officers

New Outreach and Communication Division Committee

Laurent Pfister



Wouter Berghuijs



Maria-Helena Ramos



Miriam Coenders



OSPP Coordinators:

Julian Klaus and Luisa Hopp



EGU Early Career Scientist Representative for the Hydrological Sciences

Nilay Dogulu



Young Hydrological Society: An initiative developed by a group of young colleagues who created a platform for young/early-career hydrologists.



| | |
|-------------------------|----------------|
| Interactive discussion | PICO session |
| Short course / Workshop | EGU Networking |
| Education | Social |

Join us!

| | Mon 9/4 | Tue 10/4 | Wed 11/4 | Thu 12/4 | Fri 13/4 |
|---------------|---|---|--|--|---|
| 08:30 - 10:00 | | | Innovation in Geoscience, Hydrology and Engineering Education (Orals) Room -2.85 EOS16/HS1.14 | | How to write a paper in Hydrology Room -2.16 SC3.6/HS12.2 Giuliano Di Baldassarre, Hannah Cloke, Ciaran Harman, Margaret Shanfield |
| 10:30 - 12:00 | | Rhyme your research Room -2.16 SC2.4 Science poetry workshop by Sam Illingworth | Using R in Hydrology Room -2.16 SC1.19/HS12.4 With guest lecturers! | | |
| 12:15 - 13:15 | | Meet the expert in Hydrology: hydrological science and practice Room -2.91 SC3.15/HS12.1 Jutta Thielen-del Pozo (EC JRC), Johannes Cullmann (WMO) | | EGU Early Career Scientists' Forum Room N2 PCN7 | |
| 13:30 - 15:00 | Hydroinformatics for Hydrology: extreme value modelling Room -2.85 SC1.20/HS12.3 Hugo Winter (EDF Energy) | | Innovation in Geoscience, Hydrology and Engineering Education (Posters) Hall X1 EOS16/HS1.14 | | Future of (hydrological) publishing PICO Spot A HS1.16 Doerthe Tetzlaff (solicited contribution) |
| 15:30 - 17:00 | | | | | |
| 17:30 - 19:00 | | | | | |
| 19:00 - ... | | | HYDRODRINKS Legendary annual drinks with fellow young hydrologists. We will be at Gasthaus Hansy this year. Follow @YoungHydrology for details! | | EGU SCIENCE POETRY SLAM Recite your science poem during the conveners' party. Entrance included! Register with @samillingworth before Tue, 4 PM. |

Interested in what we do?

Get in touch!

youngHS.com

@YoungHydrology



younghydrologicsociety@gmail.com

groups/YoungHydrologicSociety

Outstanding Student Poster and PICO: report + awards

Rewards the best posters and PICOs of young scientists (graduate students and recently completed PhDs)

- Coordinators: Luisa Hopp, Julian Klaus, Lena Noack (EGU)
- 328 poster and PICOs (57) in the competition (2017: 276/28; 2016: 271/21; 2015: 143, 2014: 377; 2013: 85; 2012: 184)
- 86 sessions (2017: 81; 2016: 73; 2015: 59)

Outstanding Student Poster and PICO: report + awards

Procedure for participating

- (PhD-) students need to actively register (only 1 Poster/PICO per year)
- at least 3 judges per poster
- Criteria: scientific quality, presentation, and discussion
- Top 1-5 of the ranked posters win the OSP Award (depending on number of posters in competition)

Outstanding Student Poster and PICO: report + awards

Benefits of participating:

- 3 judges per poster come to talk to you
- Feedback on poster

If you win:

- short presentation on the EGU website
- conference fee waived for the next GA
- when the work is subsequently published in HESS, the page charges will be waived

Outstanding Student Poster and PICO : report + awards

Procedure for poster assessment

New online system:

- Conveners ask and assign judges
- Judges automatically receive email and link to the assessment form
- Judges can deny the nomination directly online
- Judges fill the assessment form via the EGU webpage or the phone app

Reminder for good scientific practice: when nominating judges please avoid any conflict of interest

Outstanding Student Poster and PICO Awards 2016

Five winners in 2017, 1 for ~60 submissions, 5 Poster



Bart Schilperoort, TU Delft
*Using Distributed Temperature
Sensing for evaporation
measurements*



**Camille Kerboas, University
of Lausanne**
*Bacterial trajectories tracked
with time-lapse video-
microscopy reveal the impact
of manganese
biomineralization on bacterial
sedimentation*

Outstanding Student Poster and PICO Awards 2016



Claire Merker, University of
Hamburg
*Rain radar measurement
error estimation using data
assimilation in an advection-
based nowcasting system*



Rachel Bazile, Université
du Québec à Chicoutimi
*Should we use seasonal
meteorological ensemble
forecasts for hydrological
forecasting? A case study
for nordic watersheds in
Canada*



Hannes Müller,
University of Hannover
*Rainfall disaggregation
for hydrological
modeling: Is there a
need for spatial
consistence?*

Aim of EGU medals

- To recognise eminent scientists for their research contributions to one field of geosciences;
- To identify the awardees as role models for a young generation of scientists to foster geosciences research;
- For the awardees to act as ambassadors for the European Geosciences Union at the global scale.

EGU awards the following awards and medals each year:

- Outstanding Early Career Scientists Award, at the division level (Division Outstanding Early Career Scientists Award) and Union level (Arne Richter Award for Outstanding Early Career Scientists).
- Division Medals to recognize outstanding achievements by active researchers.
- Union Medals to recognize lifetime achievements, or exceptional contributions to science.

HS Division Medals

John Dalton Medal

This medal has been established by the Division on Hydrological Sciences in recognition of the scientific achievements of [John Dalton](#).

It will be awarded by the European Geosciences Union for distinguished research in Hydrology ~~re~~viewed as an Earth science.

Division Medallists and Awardees

The 2018 **John Dalton Medal** has been awarded yesterday to

Gabriel G. Katul

for his fundamental contributions to the theory and measurement of evapotranspiration, canopy turbulence and ecosystem fluxes.



Henry Darcy Medal

This medal has been established by the Division on Hydrological Sciences in recognition of the scientific achievements of [Henry Darcy](#).

It is reserved for individuals in recognition of their outstanding scientific contributions

in water resources research and water resources engineering and management.

The 2018 **Henry Darcy Medal** will be awarded tomorrow to

Alberto Montanari

for his physically based stochastic modelling and the major impact this had on water-resources engineering and management



Medal Lecture Thu 12th April

Arne Richter (Union) Award for Outstanding Early Career Scientists

Awarded to Yoshihide Wada for his pioneering research on estimating global water use and water availability, and for capturing the effects of the human footprint on the global hydrological cycle.



Medal Lecture Wed 11th April, 15.00-15.30 Room C

2019 Medal Committees

The committees that select the Dalton and Darcy Medallists need a formal approval at this meeting.

Dalton Medal Committee:

- Diane McKnight (Chair)
- Gerrit de Rooij (Chair)
- Harry Vereecken
- Dani Or
- Gabriel Katul

(Ex-officio [not voting]: HS Division President, Elena Toth, and Chair of the Union Awards Committee, Özgür Karatekin)

2019 Medal Committees

The committees that select the Dalton and Darcy Medallists need a formal approval at this meeting.

Darcy Medal Committee:

- Gerrit de Rooij (Chair)
- Yoram Rubin
- Nick van de Giesen
- *Past EGS/EGU Darcy Medallist*

(Ex-officio [not voting]: HS Division President, Elena Toth, and Chair of the Union Awards Committee, Özgür Karatekin)

2019 Medal Committees

Committee for nominating the Division Early Career Outstanding Scientist

- Elena Toth
- Laurent Pfister
- Steffen Birk
- Maria-Helena Ramos

Proposal of candidates for the awards/medals (**deadline 15th June 2018**)

For the Division Outstanding Early Career Scientists Award

(“a scientist who has received his or her highest degree [BSc, MSc, or PhD] within the past seven years + parental leaves”)

Nomination letter (1/2 page)

Curriculum Vitae. A summary of the candidate's CV (**1 page**)

Selected bibliography. A list of selected publications by the candidate that best support the nomination (**1/2 page**). It should also state briefly the candidate's total number and types of publications and citations.

The whole nomination package for the Outstanding Early Career Scientists must not exceed 2 pages.

If you need help in the nomination process, ask for the advice of our SubDivision Chairs

Proposal of candidates for the awards/medals (**deadline 15th June 2018**)

For the Division and Union medals:

A -Nomination letter (1 page, main nominator must be EGU member). This must clearly detail why the candidate deserves this recognition, in particular focus on the candidate's scientific contributions to the field, their importance, their impact on the discipline and their implications for the future. The new views and new insights that have been stimulated by the candidate's work are particularly relevant.

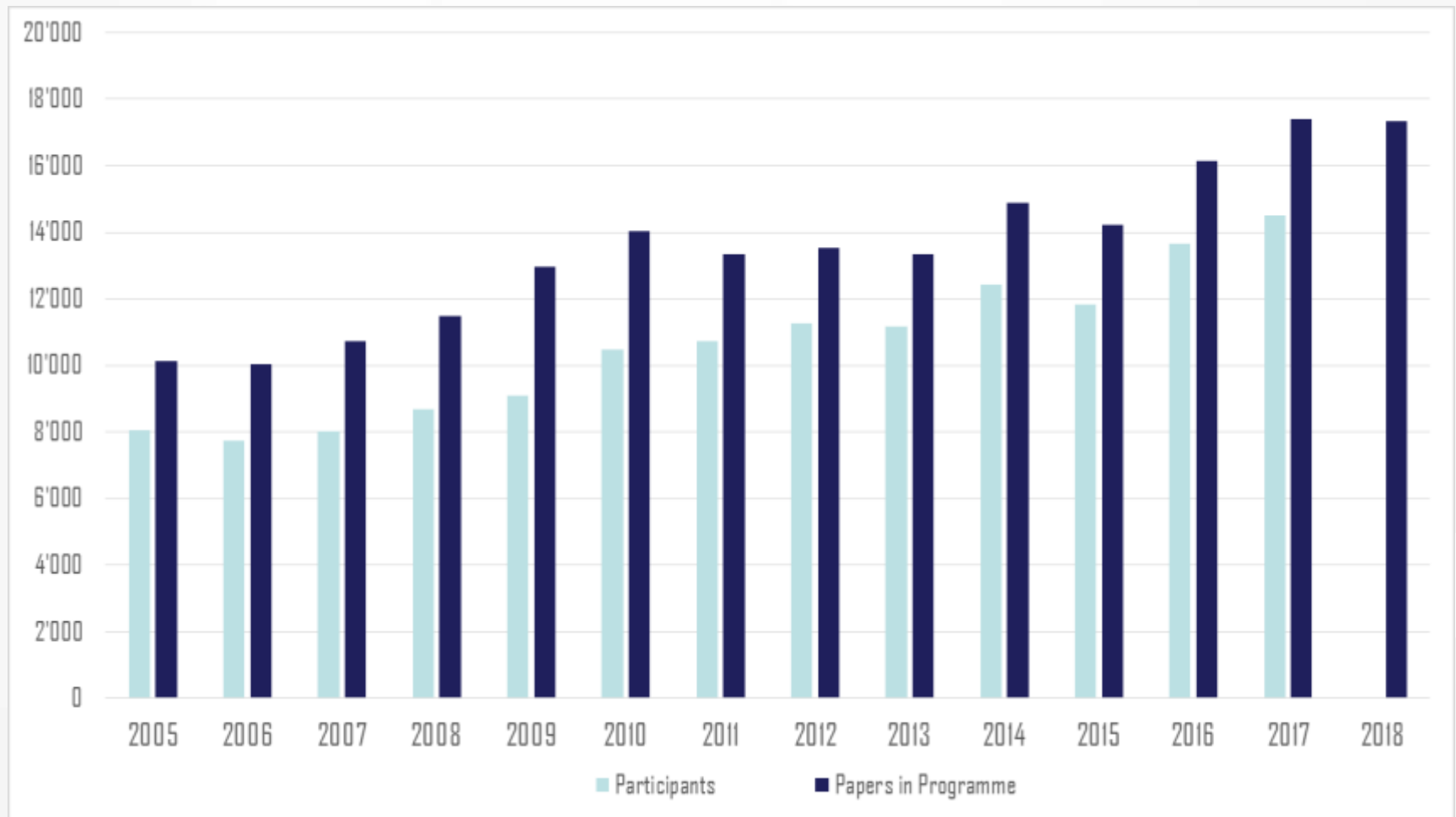
B -Curriculum Vitae (2 pages). A summary of the candidate's CV, including the candidate's name, address, history of employment, degrees, research experience, honours, and service to the community.

C- Selected bibliography (2 pages). A list of selected publications by the candidate that best support the nomination. It should also state briefly the candidate's total number and types of publications and citations.

D - Supporting letters. Between 3 and 5 letters of support (maximum 1 page each) should be submitted.

Future format General Assemblies?

Papers in programme 2005–2018 and participants 2005–2017



Future format General Assemblies?

- We may reach maximum poster capacity in ~2 years
- Oral sessions can reach 80% median room fill in ~2 years, meaning 50% of the rooms will be full to overfull
- There is no possibility for new rooms or extra space in the ACV
- EGU has signed a contract with the ACV until 2024
- 60% - 65% (2013-2018) of abstracts are posters, which are presented in 1.5 hours only

Parallel oral and poster sessions

- **First-author rule: not only for orals:** “Authors will be allowed as first author to submit either one regular abstract plus one abstract solicited by a convener, or two solicited abstracts.”

NOVELTIES FOR CONVENERS

- **No solicited presentations by conveners:** “Authors (first and co-authors) should not have a solicited presentation in a session they (co-)convene. (Co-)conveners should not be presenting author, and are discouraged from being co-author, on oral presentations in a session they convene.”
- **Number of conveners on a session:**
Minimum 2 – Maximum 5
- **Number of convenerships** as a recommendation:
1 as main convener, maximum 3 (co-)convenerships in total

| | |
|-----------------------|---|
| 01 Jun – 21 Jun 18 | Call-for-skeleton: only sub-programme structure (headers), no sessions |
| 25 Jun – 13 Sep 18 | Public call-for-sessions <i>Includes GDB and US</i> |
| 17 Sep – 12 Oct 18 | Session programme finalization |
| 11 Oct 18 | PC Meeting |
| 15 Oct 18 – 10 Jan 19 | Abstract submission |

Leonardo Conference 2019?

Leonardo Conference on the Hydrological Cycle

Topical conference series run by HS

Small: 80-120 participants

In the fall, every year

Financial support provided by EGU

Expression of interest for 2018 to Elena Toth
(hs@egu.eu)

BY MAY 15, 2018

EGU Today

- Daily newsletter highlighting scientific sessions, short courses and other activities at the Assembly
- Paper copies will be distributed daily and can be downloaded at: **egu2018.eu/egu_today.html**

Blogs

- GeoLog, the EGU Blog Network & EGU Division Blogs will be sharing great sessions, research, interviews and more throughout the Assembly
- Follow them at **geolog.egu.eu** and **blogs.egu.eu**

Social Media

- Sessions will be advertised on Twitter (**[@EuroGeosciences](https://twitter.com/EuroGeosciences)**) and Facebook (**European Geosciences Union**)
- For behind the scenes access to the conference follow us on Instagram (**[@EuroGeosciences](https://www.instagram.com/EuroGeosciences)**)
- Participants can ask questions & keep updated by following **#EGU18**

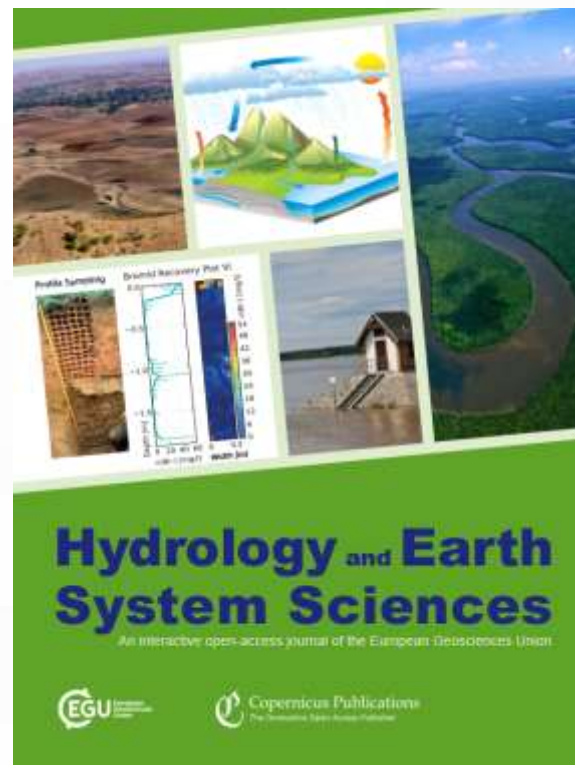
The Horizon 2020 Geoscience Survey

Experience with EU funding programmes?

Help us tell policymakers about what EU funded research areas geoscientists feel should be focused on, improved or continued.

Online: www.egu.eu/H2020survey
Or at the EGU Booth (Brown Level, -2)

A promotional poster for the EGU booth at the Horizon 2020 Geoscience Survey. The poster has a blue header with the text 'EXPERIENCE WITH EU FUNDING PROGRAMMES? WE NEED YOUR FEEDBACK!'. Below this is a photograph of a large, circular meeting room with many people seated around a large table, with the European Union flag in the background. The text on the poster reads: 'Help us tell policymakers about what EU funded research areas geoscientists feel should be focused on, improved or continued. HEAD TO THE EGU BOOTH (BROWN LEVEL, -2) TO COMPLETE THE SURVEY NOW! www.egu.eu/H2020survey'. At the bottom, there are two logos: the EGU logo on the left and the European Geosciences Union logo on the right, with the website 'www.egu.eu | info@egu.eu' below them.

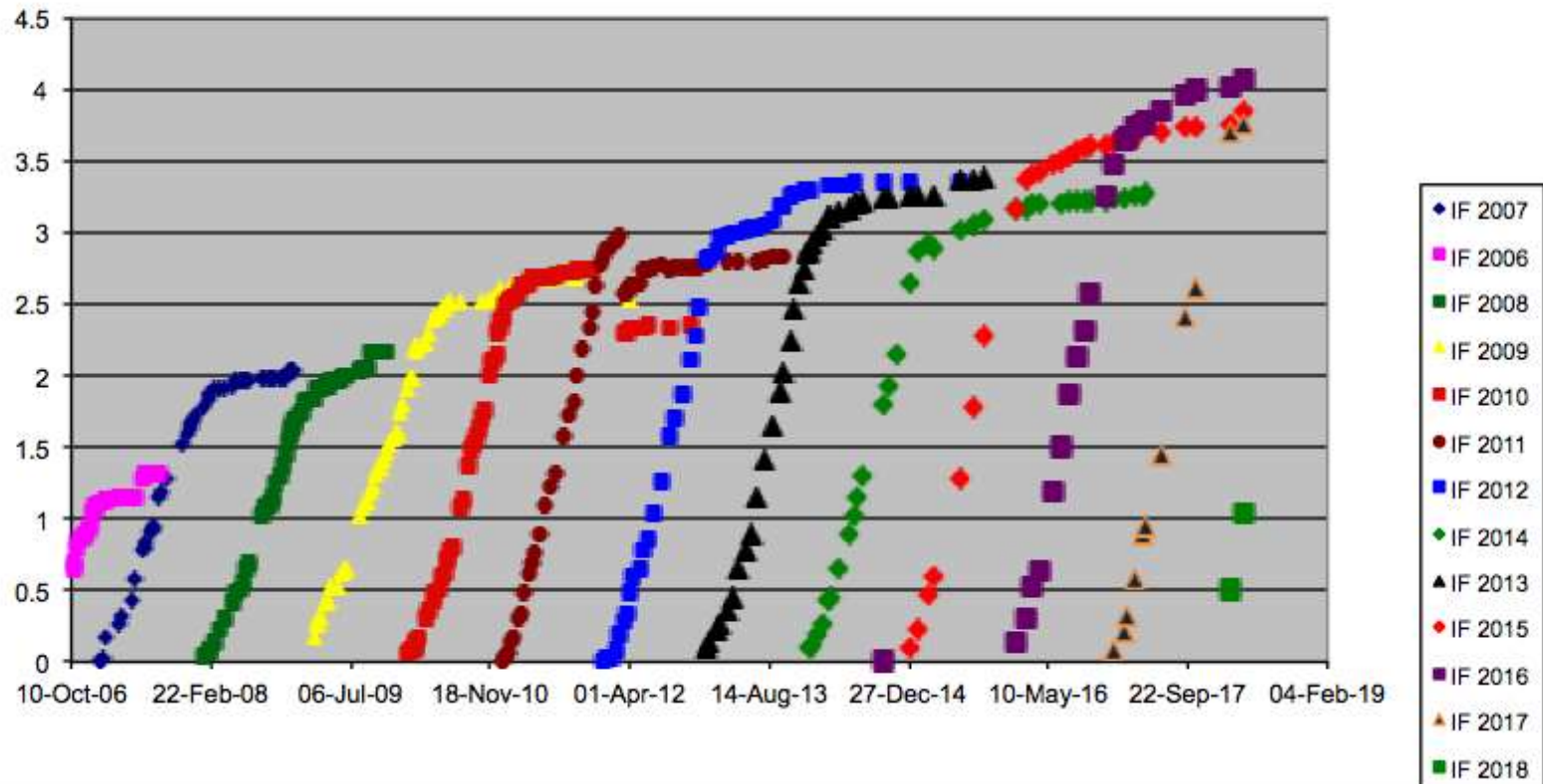


EGU Hydrological Sciences Division Journal

Executive Editors:

Erwin Zehe, Alberto Guadagnini,

Theresa Blume, Hannah Cloke



- Impact factor 2016: 4.437
- Impact factor 2017: > 4

2017 HESS OUTSTANDING EDITOR AWARD



Dr. Thom Bogaard



Dr. Brian Berkowitz

In recognition of their excellent service
as Editor of
Hydrology and Earth System Sciences
in the period 2017 - 2018

Hydrology and Earth System Sciences (HESS)

JIM DOOGE AWARD

for the two most outstanding papers of HESS in 2017/18

High significance and highly original

- Nominations by all HESS editors
- Executive Editors chose



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The European Geosciences Union

presents the

"Jim Dooge Award"

to

Roth, T. R. and Nolin, A. W.

for their outstanding paper in

'Hydrology and Earth System Sciences' in 2017:

**Forest impacts on snow accumulation and ablation across an elevation gradient
in a temperate montane environment,
HESS, 21, 5427 - 5442, 2017.**

Signed April 2017

Erwin Zehe
Chief Executive Editor
of "Hydrology and Earth System Sciences"



Signed April 2017

Elena Toth
President
of the Hydrological Sciences Division of the EGU



Forest impacts on snow accumulation and ablation across an elevation gradient in a temperate montane environment

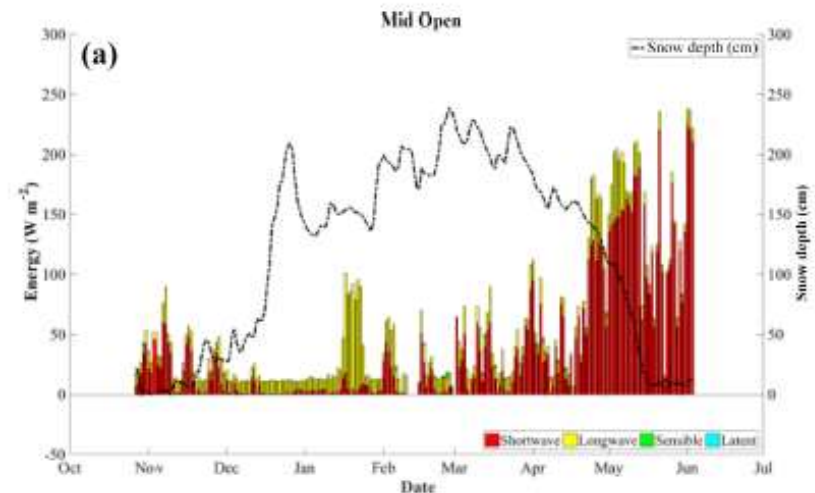
Travis R. Roth and Anne W. Nolin

Water Resource Sciences, Oregon State University, Corvallis, OR 97331, USA

Correspondence to: Travis R. Roth (rothtra@science.oregonstate.edu)

Received: 5 October 2016 – Discussion started: 1 November 2016

Revised: 5 September 2017 – Accepted: 9 September 2017 – Published: 6 November 2017



The study revealed in a paired experimental approach that warm low and mid latitude forest impeded snow interception in the canopy and thereby enhance long wave energy input into sub canopy snow pack. This implies that snow pack in open areas reside longer. The opposite pattern was found in high altitude and cold forests. This highlights the need for improved forest cover model representation to accurately predict water resources in maritime forests.

The European Geosciences Union

presents the

"Jim Dooge Award"

to

Oerter, E., Malone, M., Putman, A., Drits-Esser, D., Stark, L. and Bowen, G.

for their outstanding paper in

'Hydrology and Earth System Sciences' in 2017:

**Every apple has a voice: using stable isotopes to teach about
food sourcing and the water cycle,
HESS, 21, 3799 - 3810, 2017.**

Signed April 2017

Erwin Zehe
Chief Executive Editor
of "Hydrology and Earth System Sciences"



Signed April 2017

Elena Toth
President
of the Hydrological Sciences Division of the EGU



Every apple has a voice: using stable isotopes to teach about food sourcing and the water cycle

Erik Oerter^{1,2,4}, Molly Malone³, Annie Putman^{1,2}, Dina Drits-Esser³, Louisa Stark³, and Gabriel Bowen^{1,2}

¹Department of Geology and Geophysics, University of Utah, 115 South 1460 East, Salt Lake City, UT 84112, USA

²Global Change and Sustainability Center, University of Utah, 257 South 1400 East, Salt Lake City, UT 84112, USA

³Genetic Science Learning Center, University of Utah, 515 100 South, Salt Lake City, UT 84112, USA

⁴Current address: Lawrence Livermore National Laboratory, 7000 East Avenue, Livermore, CA 94550, USA

Correspondence to: Erik Oerter (erikjoerter@gmail.com)



The study shows that irrigation and meteoric water in leaves a characteristic isotopic fingerprint in fruits, which allows to trace their geographical origin. This connection between common fruits and the water cycle use used as an access point to teach varies groups about isotope hydrology and the water cycle within an impressive 1 day reach out activity, which includes hands on experiments. We regard this is an extremely smart and appealing way to communicate our science to the public .

Any other business

Short Course

Principles of catchment-scale hydrological modelling

April 16-20, 2018,

<http://sccshm.ihcantabria.com>

EGU General Assembly 2019

Vienna, Austria

07–12 April 2019