



European Geosciences Union



Earth & Space  
Science Informatics

Division



# ESSI Division Meeting 2015

Joan Masó



# EGU General Assembly 2015 Facts

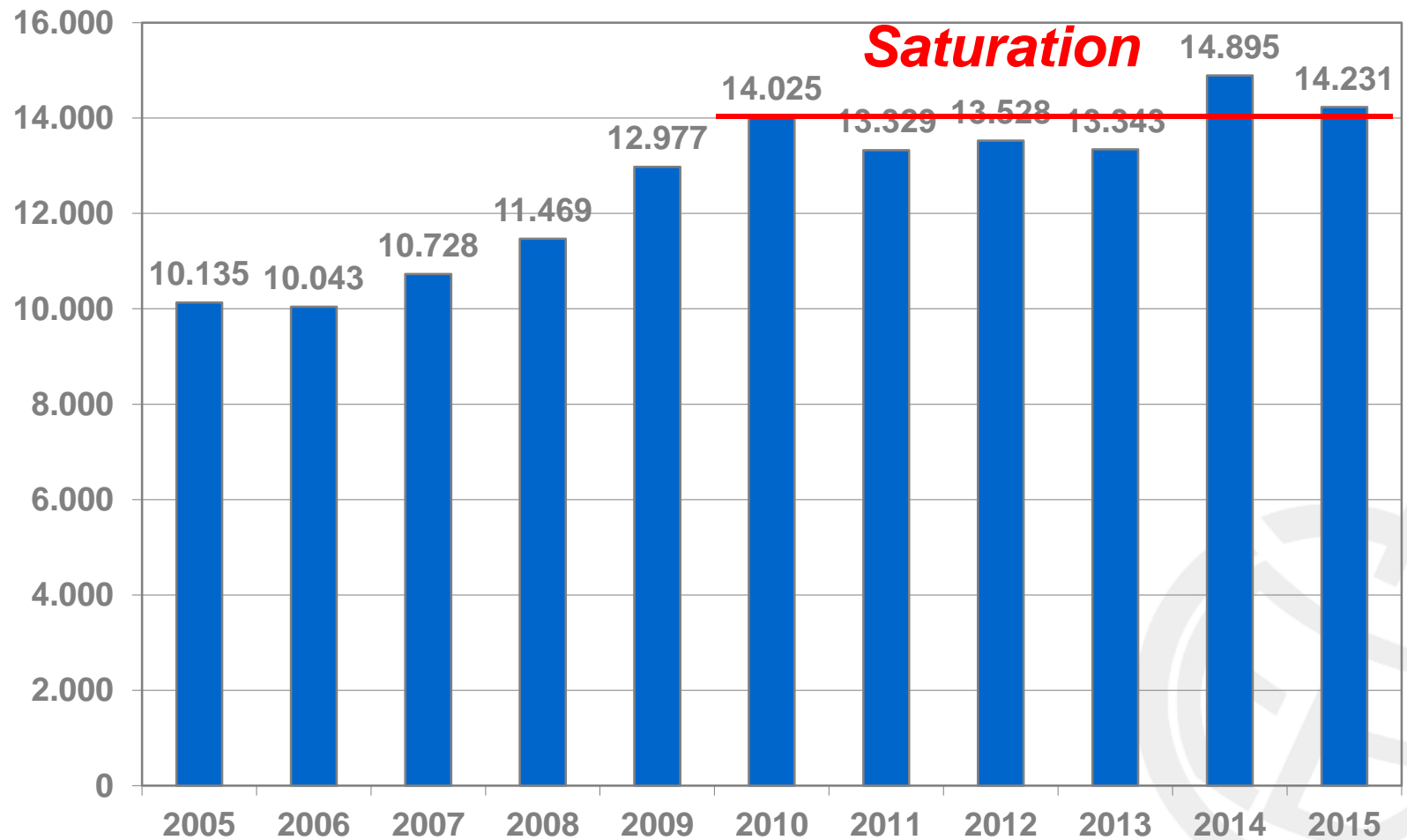
## As of 26 April, the Assembly 2014 provides:

- 14,895 Papers in Programme | +11.6% (2013)
- 4,829 Orals | 9,583 Posters | 483 PICOs
- Ratio 32 / 64 / 3
- 568 unique scientific Sessions | 126 PSD Sessions | 245 Side Events
- 10,261 Registrations in Advance (10,176 already paid) | +3.9% (2013)

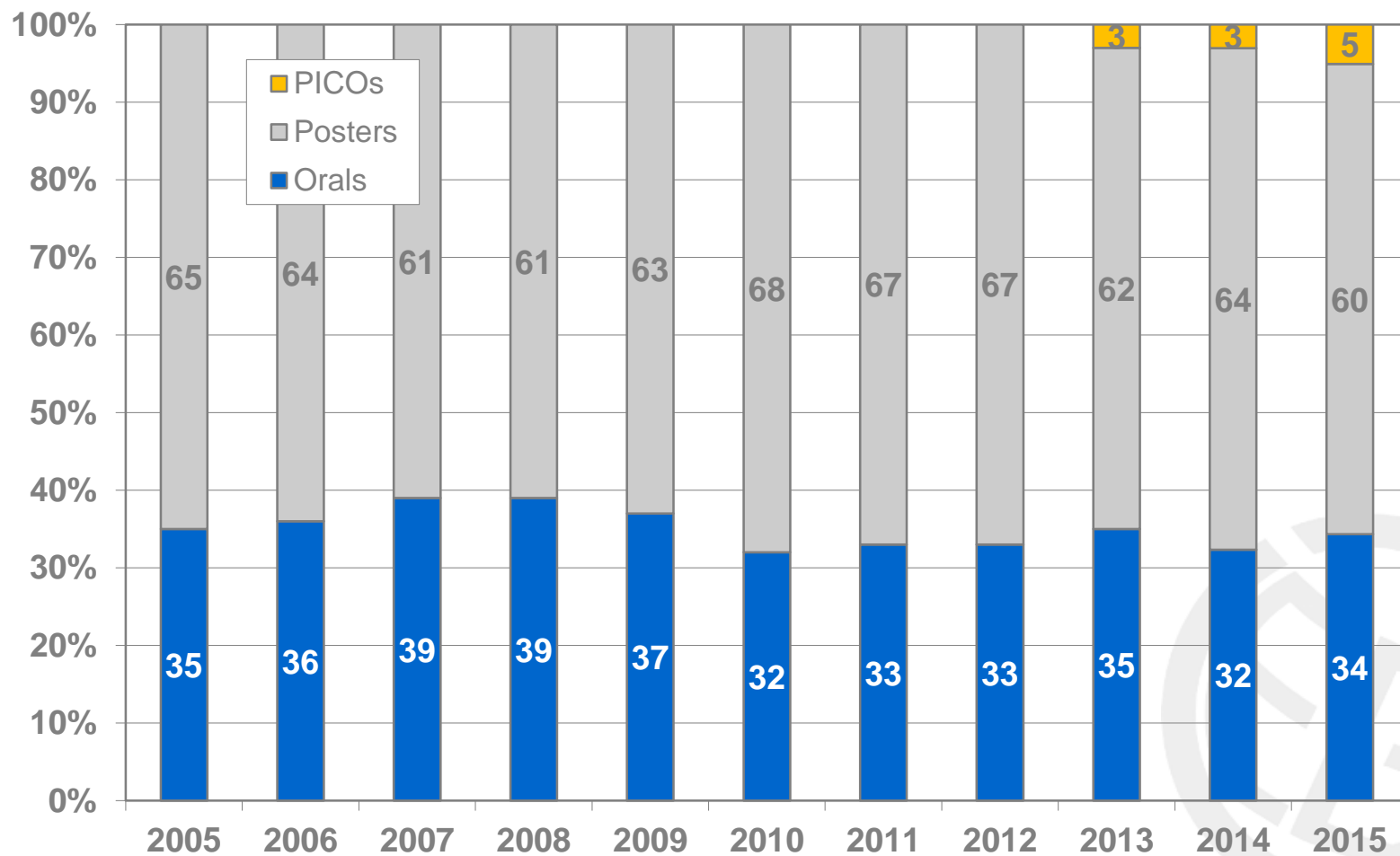
## As of 07 April, the Assembly 2015 provides:

- 14,231 papers in Programme | -4.46% (2014)
- 4,900 orals | 8,608 posters | 723 PICOs
- Ratio 34.5 / 60.5 / 5
- 379 unique scientific sessions | 285 side events
- PSD were cancelled
- 8,848 registrations in advance (8,800 already paid) | -13.77% (2014)

## Papers in Programme 2005–2015

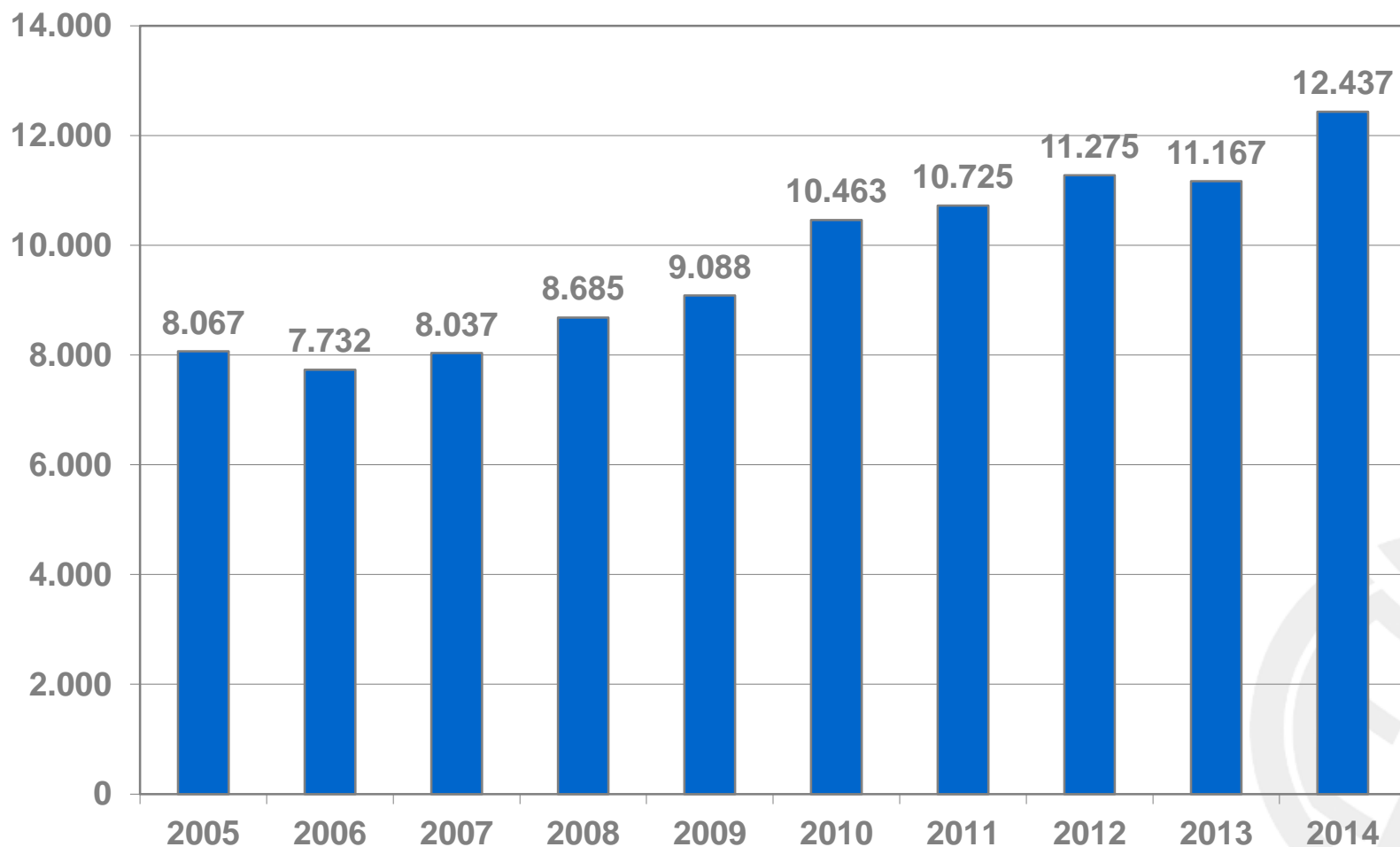


## Presentation Ratio 2005–2015



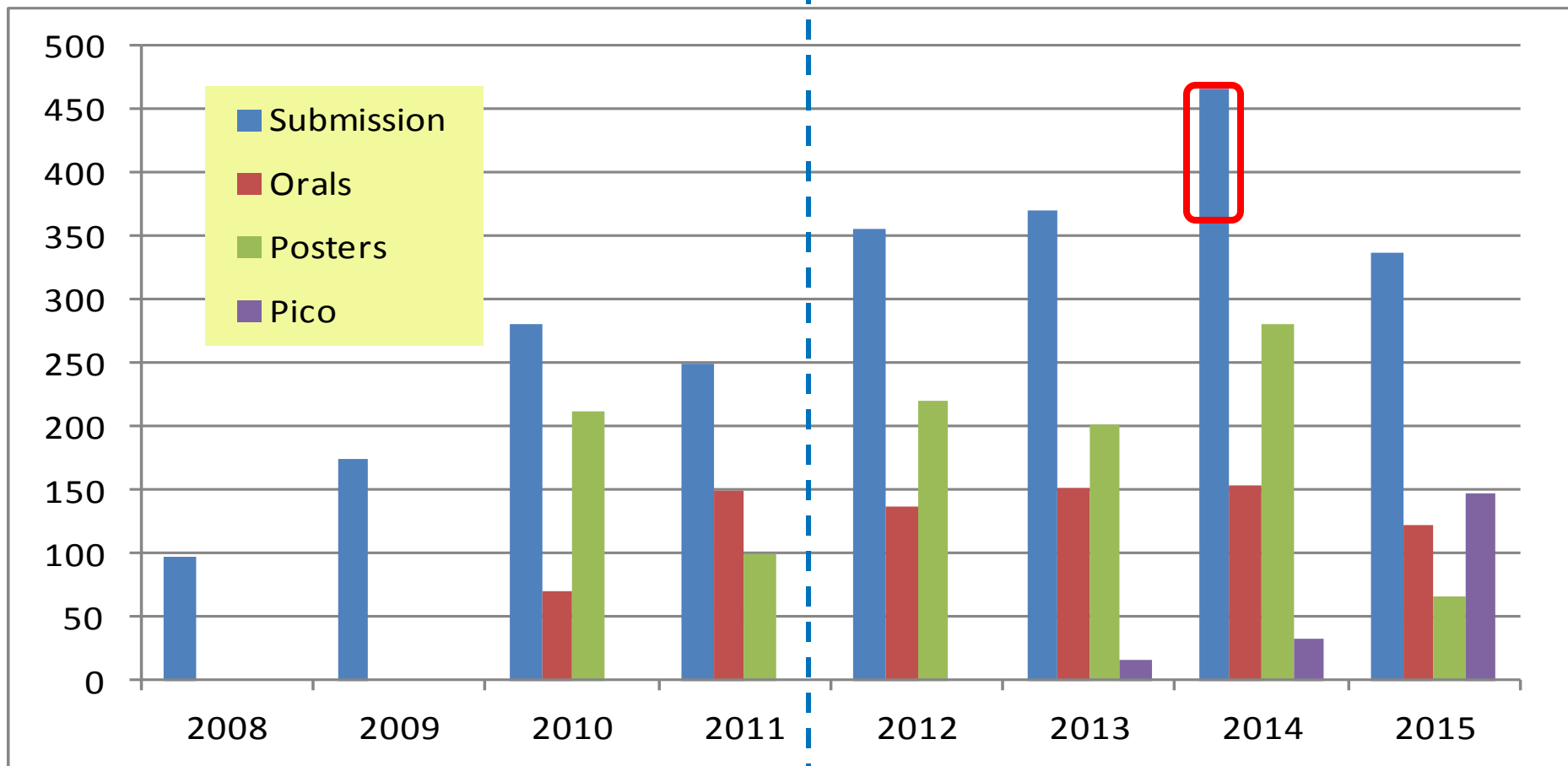


## Participants at EGU Assemblies 2005–2014



2015?

# Participation in ESSI



Introduction of the  
abstract fee

# ESSI Subprogram in numbers

- **#1: Community-driven challenges and solutions dealing with Informatics**
  - Sessions: 5/4
  - Oral: 44, PICO: 0, Poster: 39
- **#2: Multi-disciplinary challenges and solutions across the Earth and Space Sciences**
  - Sessions: 13/10
  - Oral: 59, PICO: 46, Poster: 82
- **#3: Visualization for scientific discovery and communication**
  - Sessions: 4/3
  - Oral: 20, PICO: 19, Poster: 27



## 94 Conveners

Akiyo Yatagai, Alaitz Zabala, Alexander Beer, Alice Milne, Andreas Kaiser, Andrew Woolf, Anette Eltner, Balázs Székely, Barbara Brown, Ben Domenico, BERIT ARHEIMER, Bernd Ritschel, Bernhard Höfle, Carlos Castillo, Christian Brieser, Damià Vericat, Dawn Wright, Dick M. A. Schaap, Dominik E. Reusser, Ebru Bozdogan, Ewa Szyndrak, Fabian Neugirg, Francesco Zucca, Georg Gartner, Giulia Sofia, Giuseppe M.R. Manzella, Horst Schwichtenberg, Isidora Jankov, James Brasington, Jay Pearlman, Jens Klump, Jim Chandler, Joan Masó, John K. Hillier, John Ludden, John Quinton, Jon Blower, José Miguel Rubio Iglesias, Kwo-Sen Kuo, Lluís Pesquer, Lorenzo Bigagli, M. James, Mark Smith, Markus Neteler, Martin Rutzinger, Massimo Cocco, Matthew Harrison, Michael Böttger, Mikael Pedersen, Mike Ashworth, Mike Sips, Miquel Ninzerola, Mohan Ramamurthy, Monique Petitdidier, Morris Riedel, Niklas Röber, Norbert Pfeifer, Norman Kerle, Oliver Fuhrer, Paolo Diviacco, Paolo Paron, Paul Kucera, Peter Baumann, Peter Düben, Peter Löwe, Pierre-Philippe MATHIEU, Pietro Teatini, R M Lark, R. S. Nanjundiah, Rahul Ramachandran, Rémy Bossu, Riccardo Lanari, Rob van der Krogt, Robert Tomas, Rocco Malservisi, Saskia Keesstra, Sébastien Denvil, Simon Cox, Stefano Nativi, Steve Hughes, Steve Mathers, Susan Conway, Thomas R. Walter, Tobias Heckmann, Torsten Möller, Valentine Anantharaj, Walter Schmidt, Wim Hugo, Wim Som de Cerff, Wolfgang Schwanghart, Xavier Lapillonne, Xavier Pons, Yann Chemin, Yukinobu Koyama

# THANKS !



## 6 PICO sessions

- “The poster of the future”
- I’m interested in your opinion about PICO to continue in this direction



**Session ESS13.2**  
State of the Art in Earth Science Data Visualization  
2-Minutes-Madness: 08:30–08:56  
PICO Viewing Time: 08:56–10:00  
Please visit the touch screens and meet the authors



# ESSI Subprogram

- **#1: Community-driven challenges and solutions dealing with Informatics**
  - Kerstin Lenhert
  - Giuseppe Manzella
- **#2: Multi-disciplinary challenges and solutions across the Earth and Space Sciences**
  - Horst Schwichtenberg
  - Wim Som de Cerff
  - Paolo Mazzetti
- **#3: Visualization for scientific discovery and communication**
  - Jon Blower
  - Mohan Ramamurthy
- **THANKS!**



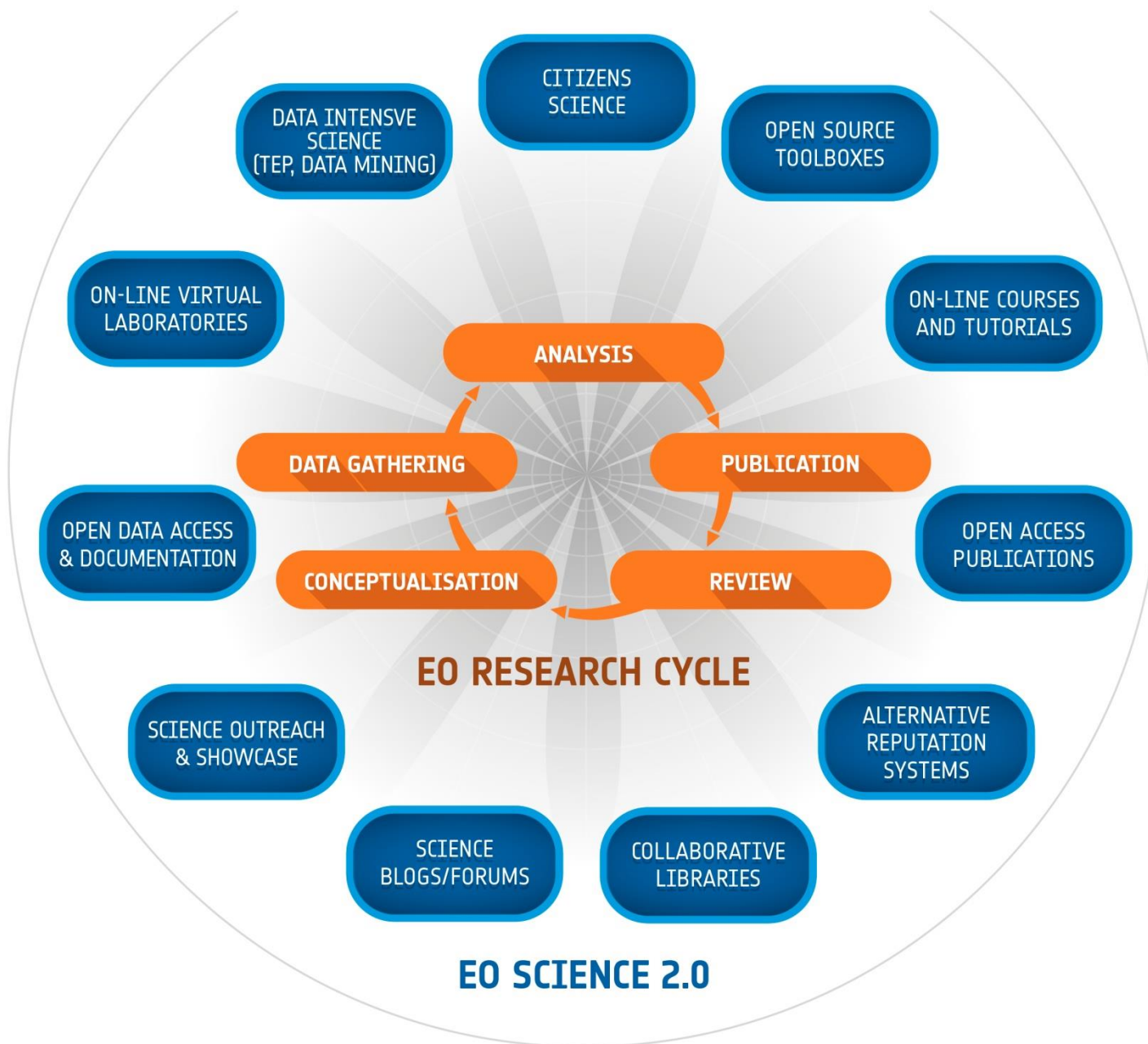


## ESSI New subprogram

- Yves-louis Desnos, Pierre Philippe Mathieu (ESA)
- EO Science 2.0 idea.
- Put together the emerging approaches for Sciences
  - Citizens Science, Big data, Open Source, Open Data...
- Leave out the current “Infrastructure, networks... in the current ESSI 2



# OPENING UP THE EO RESEARCH PROCESS







- **Infrastructures**
  - Digital infrastructures to enhance international geoscience information access, provision and use
  - Integrated Research Infrastructures and Services to users: supporting excellence in a science for society (co-organized)
  - Service and Brokering Architecture challenges for multi-disciplinary interoperability and Future Internet
  - CyberGIS as an Engine of Data Stewardship
  - Metadata, Data Models, and Semantics (co-organized)PICO Session
  - International cross-project collaboration and interoperability of data management systemsPICO Session
  - Platforms, Sensors and Applications with Unmanned Aerial Systems in the geosciences (co-organized)PICO Session
  - High Resolution Topography in the Geosciences: methods and applications (co-organized)
- **Open Science 2.0**
  - Innovative Evaluation and Prediction for Large Earth Science Datasets
  - Big Data for Earth Science - Challenges, Practices, and Opportunities (co-organized)
  - Earth science on Cloud, HPC and Grid
  - Open Access to Research Data and Public Sector Information: perspective, drivers, and barriers (co-organized)
  - Free and Open Source Software (FOSS) for Geoinformatics and Geosciences (co-organized)
- **Neither against nor abstention votes**



# Decrease of subprogram ESSI1

- Leak on thematic programs
- Need for reinforce it.



# Too few applicants to grants

## Programme Group Statistics

Scheduled	Total: 466
Status	Active: 452 (97%) Withdrawn: 14 (3%)
Support Applications	None: 452 (97%)
Presentations	Posters: 280 (60%) Orals: 154 (33%) PICOs: 32 (7%)

■ [Show Statistics for all Programme Groups](#)

## Meeting Statistics

Scheduled	Total: 15,634
Status	Active: 14,851 (95%) Withdrawn: 783 (5%)
Granted Supports	None: 14,582 (98%) YSTA: 253 (2%) ESTA: 16 (0%)
Presentations	Orals: 4,815 (31%) PICOs: 960 (6%) Posters: 9,556 (61%)

## Programme Group Statistics

Scheduled	Total: 336
Status	Active: 328 (98%) Withdrawn: 8 (2%)
Granted Supports	None: 385 (115%) YSTA: 3 (1%)
Presentations	Orals: 123 (37%) Posters: 148 (44%) PICO: 65 (19%)

■ [Show Statistics for all Programme Groups](#)

## Meeting Statistics

Scheduled	Total: 14,749
Status	Active: 14,106 (96%) Withdrawn: 643 (4%)
Granted Supports	None: 13,854 (98%) YSTA: 226 (2%) ESTA: 26 (0%)
Presentations	Orals: 4,877 (33%) PICO: 714 (5%) Posters: 8,515 (58%)



# ESTA and YSTA

- **Young Scientist's Travel Award (YSTA):**
  - a free registration together with a refund of the Abstract Processing Charge (APC).
  - additional financial support for the travel expenditures with a maximum of €300.
  - be age 35\* or younger.
  - be an undergraduate or postgraduate (Masters/PhD) student or have received her/his highest degree qualification (e.g., BSc, MSc, PhD) within the last seven\* years.
- **Established Scientist's Travel Award (ESTA):**
  - a free registration together with a refund of the Abstract Processing Charge (APC)
  - additional financial support for the travel expenditures with a maximum of €300.
  - lower middle income countries



# Ian McHarg Medal

- This medal has been established by the Division on Earth and Space Sciences Informatics. It is reserved for distinguished research in Information Technology applied to Earth and Space Sciences.
- In recognition of the scientific achievements of Ian McHarg.
  - Glasgow 1920 – USA 2001
  - was pioneer of the concept of ecological planning
  - he set the basic concepts of the Geographic Information Systems.





## Our medallists



2013

- Alessandro Annoni
  - information technology applications, data management, openness



2012

- Peter Fox
  - informatics as a genuine discipline in Earth Sciences



2011

- Monique Petitdidier
  - support of African scientists, outreach and 'science citizens'



## Future medals

- In 2013-2014 we did not have nominations and the opportunity was missed
- In 2014-2015 we fail to provide a valid candidate.
  - 2 candidates were submitted. One was discarded because a fail in one of the requirements and the other was not considered relevant for ESSI section.
- **Let's not miss this opportunity again.**
- **You MUST submit candidates. The president cannot.**
  - <http://www.egu.eu/awards-medals/proposal-and-selection-of-candidates.html>
- **More than one candidate is required.**
- Please start thinking about candidates for 2016
  - Ideas?





# Former Ian McHarg Medal committee

- Alessandro Annoni (2 years)
- Monique Petitdidier (4 years)
- Peter Fox (3 years)
- Peter Baumann (1 year)
- David Arctur (1 year)
- Jose Miguel Rubio (1 year)
- **THANKS!!**



# New medal committee for **approval**

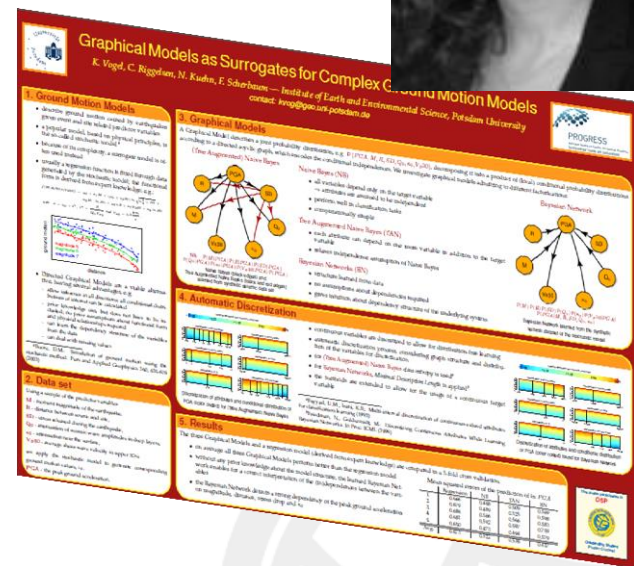
- Alessandro Annoni (chair)
- Lluís Pesquer
- Peter Fox
- Peter Baumann
- David Arctur
- Jose Miguel Rubio
- Neither against nor abstention votes



# Outstanding Student Poster (OSP)

• 2012 Kristin Vogel

- OSP division *coordinator*  
– Ivette Serral
- (and she is ESSI *webmaster* also)







# Young Scientist Representative



- Each division can have a representative for the young scientist
- **Martin Hammitzsch**
- Young scientist representatives are a crucial link between the EGU and the young scientist community

<http://geolog.egu.eu/2013/12/06/seeking-young-scientists-a-great-opportunity-to-get-involved-in-the-egu/>



## Young Scientist Representative

- The responsibilities can include (but aren't limited to):
  - organising events for young scientists at our annual General Assembly,
  - outreach to young scientists and the wider public through social media or a division blog,
  - or establishing a mentoring programme for other young scientists
- Candidate: **Martin Hammitzsch**
- Neither against nor abstention votes
- See “ESSI Young Scientists Update” later in this presentation for the report of activities.





## @EGU\_ESSI on twitter



EGU\_ESSI ha retwitteado



**Joan Masó Pau** @joanma747 · 2 h

People engaged in long discussions with authors in ESSI2.11 metadata data models and semantics. #EGU15



2



[Ver más fotos y videos](#)



EGU\_ESSI ha retwitteado



**ConnectinGEO** @ConnectinGEO · 13 de abr.

Impressed about the map of infrastructures that COOPEUS is doing. Very relevant for the objectives of [@ConnectinGEO](#)  
[meetingorganizer.copernicus.org/EGU2015/EGU201...](http://meetingorganizer.copernicus.org/EGU2015/EGU201...)



2



Find the EGU on



<http://www.egu.eu/outreach/social-media/>

# Open Access Journals in EGU

- **Geoscientific Instrumentation, Methods and Data Systems (GI).** Topics:
  - Retrieval techniques of scientific products from measurements;
  - Calibration and data quality assessment;
  - Uncertainty in measurements;
  - Newly developed and planned research platforms and community instrumentation capabilities;
  - Major national and international field campaigns and observational research programs;
  - New observational strategies to address societal needs in areas such as monitoring climate change and preventing natural disasters;





# Vice-president (Deputy President)

- Vice-president: Paolo Mazzetti
- Has served for 1 years





# Science Officers

- Reinhard Budich
  - Meteorology and Climatology
- Pier Giorgio Marchetti
  - Space
- Kerstin Lehnert
  - Geochemistry
- Giuseppe R. Manzella
  - Oceanography
- Peter Fox
  - for the Liaison with AGU-ESSI
- Science Officers should promote sub-programmes and ask their colleagues to organize sessions.
- They have served for many years. **THANKS!**
- Is there new volunteers? Present sub-programmes chairs are good candidates to Science Officers.



## New of Renew division president

- Current president is starting its 3<sup>rd</sup>
- Previous years 2013→2014, 2014→2015
- Thanks for re-electing me
- Next years 2015→2016, 2016→2017
- In 2016 will be an opportunity to appoint a new division president.



# ESSI Young Scientists Update

**Martin Hammitzsch – YS Representative**

EGU General Assembly, 2015

DM7: Division Meeting for Earth & Space Science Informatics (ESSI)

April 14, 2015, Vienna





# YS division representative for ESSi

- Martin Hammitzsch

Helmholtz Centre Potsdam  
GFZ German Research Centre for  
Geosciences  
Potsdam, Germany

[martin.hammitzsch@gfz-potsdam.de](mailto:martin.hammitzsch@gfz-potsdam.de)





# Activities in 2014 and early 2015

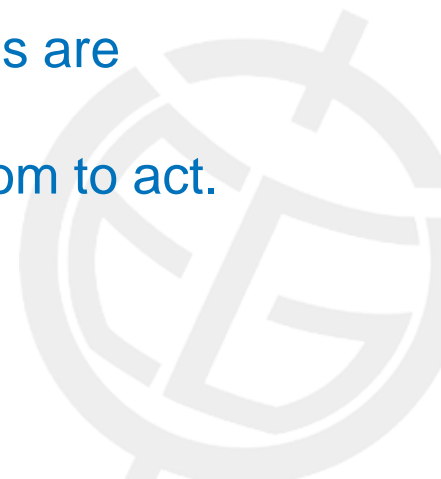
- 1. Commencing ESSI YS representative activities
- 2. Defining key objective
- 3. Organizing short courses for the EGU GA 2015
- 4. Proposing funded workshops for EGU YS
- 5. Linking up with YS representatives of other divisions
- 6. Linking up with YS of the ESSI division





# 1. Commencing ESSI YS representative activities

- In 2014, election of the YS representative has not taken place for the ESSI division during the EGU GA Division Meeting for Earth and Space Science Informatics due to a collision with the EGU Young Scientists Forum
- Following a meeting with the ESSI division president at the end of DM the Union Council confirmed that activities can be run as the acting (in opposite to elected) YS representative for 2014 and until the next division meeting.
- In practice there is no difference in the way functions are carried out.
- No obligations exist and YS-reps have lots of freedom to act.





## 2. Defining key objective

- Passing on software engineering skills to YS across EGU / divisions
  - Writing, publishing, and citing software code
  - Common practice in the scientific performance
  - Cornerstone in practising Open Science in the geosciences
- Based on meetings and discussions with
  - the ESSI division president,
  - the YS PC representative, and
  - YS representatives of other divisions



### 3. Organizing short courses for the EGU GA 2015

- Given the key objective an initially planned short course on scientific software in the geosciences has been extended to a short course series
  - Embedded in the context of Open Science
  - Primarily serve the YS during the EGU GA 2015
- The topics and line up of speakers organised from summer 2014
- In December the series has been





## 4. Proposing funded workshops for EGU YS

- Implementation of workshops and a software summer school for YS on teaching software skills have been discussed with and accompanied by the YS PC representative, EGU communications officers, the media and communications manager, and the executive secretary
- Available opportunities have been taken



## 4. Proposing funded workshops for EGU YS cont'd

- Executive secretary has been of great help in sorting out regulations and provided excellent support in shaping the workshop proposal following given regulations while representing EGU's interests
- Workshops have been designed for the EGU YS as the primary target group of workshop participants



## 5. Linking up with YS representatives of other divisions

- After the EGU GA 2014 the YS representatives of EGU divisions met virtually with Skype chats on a regular base in 2014 (Jul 1, Jul 8, Sep 22, Nov 24) and 2015 (Jan 26, April 1)
- The topics discussed have been manifold and primarily covered
  - The role and definition of YS
  - The role, structure, and communication of YS representatives
    - in general within the EGU and





## 6. Linking up with YS of the ESSI division

- Mailing lists and lists of ESSI members that can be considered as YS
  - Requested and discussed in several meetings
  - Progress on official channels to directly approach young scientists has been slow in 2014
  - Requested mailing lists will become effective by end of the EGU GA 2015
- Few YS representatives started to use twitter and Facebook
  - Fair progress in getting directly connected to YS of their divisions and thus started to create first attempts of a vital forum
  - These channels aren't official and thus lack momentum to be seriously taken into account for adoption in the ESSI division



## Activities in 2015

- Run short courses for the EGU GA 2015
- Run funded software workshops for EGU YS
- Link up with YS of the ESSI division
- Organise ESSI and cross disciplinary events for YS at EGU GA 2016
- Look for candidates to take over role of YS Representative for ESSI