



## EGU announces 2014 awards and medals

The EGU has named the 43 recipients of next year's Union Medals and Awards, Division Medals, and Division Outstanding Young Scientists Awards. These individuals, honoured for their important contributions to the Earth, planetary and space sciences, will receive their prizes at the EGU 2014 General Assembly, which will take place in Vienna on 27 April – 2 May. The EGU has also announced the winners of the Outstanding Student Poster (OSP) Awards corresponding to the 2013 General Assembly.

The following individuals will receive 2014 Union medals and awards:

- **Pradeep Mujumdar** – Alexander von Humboldt Medal
- **Eric F. Wood** – Alfred Wegener Medal
- **Kevin C. A. Burke** – Arthur Holmes Medal
- **Stamatios Krimigis** – Jean Dominique Cassini Medal
- **Sebastian Watt, Peter Bijl, Noé Lugaz and Matthias Huss** – Arne Richter Award for Outstanding Young Scientists
- **Thomas Hofmann** – Union Service Award

The following individuals will receive 2014 division medals:

- **Shun-ichiro Karato** – Augustus Love Medal
- **Gregory Beroza** – Beno Gutenberg Medal
- **François Forget** – David Bates Medal
- **Stephen Matthew Griffies** – Fridtjof Nansen Medal
- **Karl Schindler** – Hannes Alfvén Medal
- **Sherilyn Fritz** – Hans Oeschger Medal
- **Upmanu Lall** – Henry Darcy Medal
- **Isabella Premoli Silva** – Jean Baptiste Lamarck Medal
- **Hoshin V. Gupta** – John Dalton Medal
- **Rumi Nakamura** – Julius Bartels Medal
- **Olivier Talagrand** – Lewis Fry Richardson Medal
- **Dorthe Dahl-Jensen** – Louis Agassiz Medal
- **Ian Main** – Louis Néel Medal
- **Maureen Raymo** – Milutin Milankovic Medal
- **Rob van der Voo** – Petrus Peregrinus Medal
- **Johan Six** – Philippe DuChaufour Medal
- **Hermann M. Fritz** – Plinius Medal
- **Peter van der Beek** – Ralph Alger Bagnold Medal

- **Chris Hawkesworth** – Robert Wilhelm Bunsen Medal
- **Costas Synolakis** – Sergey Soloviev Medal
- **Claudio Faccenna** – Stephan Mueller Medal
- **Reinhard Dietrich** – Vening Meinesz Medal
- **Urs Baltensperger** – Vilhelm Bjerknes Medal
- **Klaus Butterbach-Bahl** – Vladimir Ivanovich Vernadsky Medal

The following individuals will receive 2014 Division Outstanding Young Scientists Awards:

- **Nick J. Dunstone** – Climate: Past, Present & Future (CL) Division
- **Tabea Lissner** – Energy, Resources and the Environment (ERE) Division
- **Roelof Rietbroek** – Geodesy (G) Division
- **Rhodri Davies** – Geodynamics (GD) Division
- **Robert Hilton** – Geomorphology (GM) Division
- **Fubao Sun** – Hydrological Sciences (HS) Division
- **Nicolas Eckert** – Natural Hazards (NH) Division
- **Christina Plainaki** – Planetary and Solar System Sciences (PS) Division
- **Markus Steffens** – Soil System Sciences (SSS) Division
- **Stacia Gordon** – Tectonics and Structural Geology (TS) Division

The EGU Awards Committee received 123 applications for the 2014 awards, with 20% of them nominating female scientists (about 19% of this year's awardees are female). For more information about the awards above, including application and selection criteria and how to apply, check the [Awards & Medals](#) page on the EGU website.

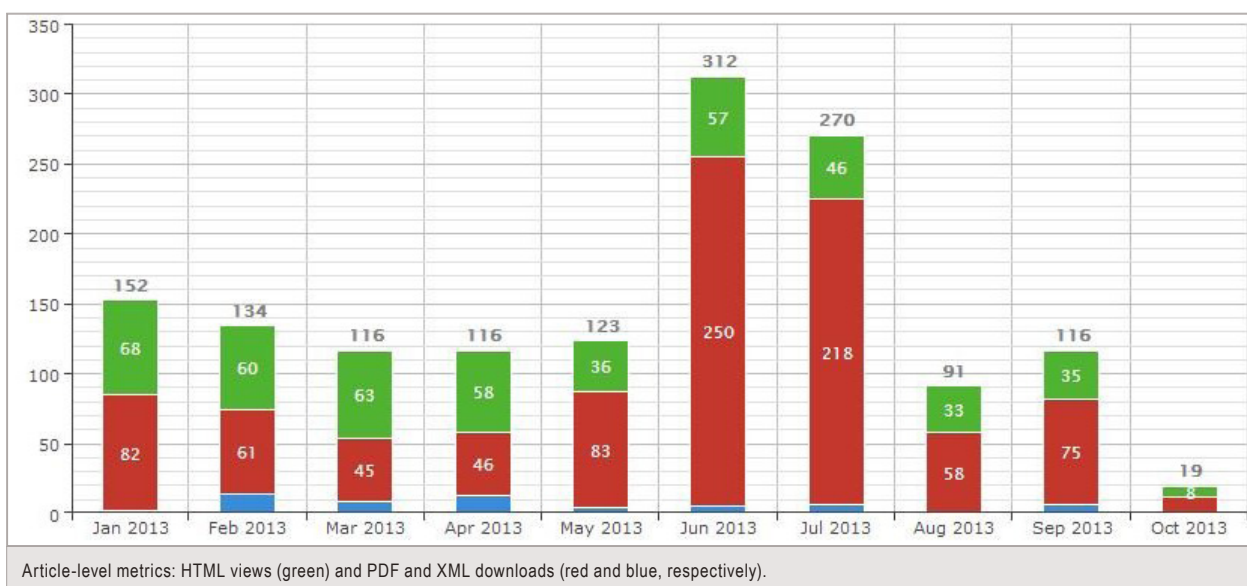
In addition to the Union and division awards and medals, the EGU also gives away a number of poster awards to students taking part in its annual General Assembly. These OSP Awards aim to further improve the overall quality of poster presentations and foster students' excitement to present posters at a large scientific conference. The list of recipients of the 2013 OSP Awards is now available [online](#). For more information about the OSP awards, including application criteria and how to apply in 2014, check the [OSP page](#).

An earlier version of this article was [published on the EGU website](#)



EGU 2013 Award Ceremony: Arne Richter awardees and their nominators.

## Article-level metrics now available in EGU journals



Copernicus Publications, the publisher of the EGU open access journals, has launched article-level metrics (ALMs) for all its journals.

While traditional ways of measuring impact operate at journal level, [ALMs](#) allow us to assess the overall influence and reach of each individual research paper. They do this by quantifying the usage (downloads and views), impact (citations), saves (bookmarks) and discussion (social media and blog coverage) at the article level.

In EGU open access publications, ALM information is visible under a [Metrics](#) tab available for final revised papers published in EGU journals (such as Atmospheric Chemistry and Physics), as well as articles under open review in EGU discussion forums (such as Atmospheric Chemistry and Physics Discussions).

Ulrich Pöschl, Chair of the EGU Publications Committee, said in an email statement: "For EGU publications, the introduction of article-level metrics is another important step in the endeavour of improving scientific communication and quality assurance. ALMs are important complementary elements in the successful interactive open access publishing approach of EGU, which features public review and interactive discussion on the internet (multi-stage open peer review)."

Copernicus Publications now track citations from CrossRef and Google Scholar (and will soon include Scopus and Web of Science citations), downloads and views since January 2013 and bookmarks in both CiteULike and Mendeley. In addition, mentions on sites such as Research Blogging, Facebook, ScienceSeeker, Nature Blogs, Wikipedia, Wordpress(.com), Reddit and Google Blogs are also tracked, and Copernicus plans to incorporate Twitter in the near future.

ALMs allow authors to stay up-to-date with the influence and reach of their published articles and share this information with peers, funding institutions and others. For publishers, and for the EGU, they provide critical insight into what articles generate the most activity, which can then be advertised via the journals' websites or on the EGU's social media channels.

The Public Library of Science (PLOS) launched ALMs in 2009 and made their app available to other publishers. Copernicus is implementing ALMs in all its journals using the PLOS open source app. Martin Rasmussen, the Managing Director of Copernicus, [said in an interview with PLOS blogs](#): "We hope that more publishers will join this initiative and consider implementing it to enable direct comparison across journals."

An earlier version of this article was [published on the EGU website](#)

## EGU 2014 call for abstracts is open!

Up until 16 January 2014, you can submit your abstract for the upcoming EGU General Assembly, taking place in Vienna, Austria, from 27 April to 2 May 2014. In addition to established scientists, PhD students and other early career researchers are welcome to submit abstracts to present their research at the conference.

Further, the EGU encourages undergraduate and master students to submit abstracts on their dissertations or final-year projects. The EGU recognises that there are many outstanding students who would benefit from attending and presenting at the General Assembly and, therefore, provides a [discounted registration rate](#) to this group. Interested undergraduates can apply to present a poster (or

talk) on research undertaken in a laboratory setting, on a mapping or field project they've been involved in during their degrees, or any other research project of relevance.

You can browse through the EGU 2014 sessions [on the General Assembly website](#). Clicking on 'please select' will allow you to search for sessions by Programme Group and submit your abstract to the relevant session either as plain text, LaTeX, or a MS Word document. Further guidelines on [how to submit an abstract](#) are available on the EGU 2014 website.

Last year we introduced an innovative presentation format – Presenting Interactive Content, better known as [PICO](#). PICO sessions bring together the advantages of both oral and poster sessions, allowing authors to present the essence of their work and follow it

up with interactive discussion. Please note that some sessions are 'PICO only', meaning you cannot select oral/poster preference.

The deadline for the receipt of abstracts is **16 January 2014, 13:00 CET**. If you would like to apply for [financial support](#), please submit an application no later than **29 November 2013**.

For more information on the General Assembly, see the [EGU 2014 website](#) and follow us on [Twitter](#) ([#EGU2014](#) is the conference hashtag) and [Facebook](#).

*An earlier version of this article was [published on the EGU blog](#)*

## New Educational Fellow at the EGU Office

Jane Robb, the new [EGU Fellow](#), started working at the EGU Executive Office as Educational Officer in September 2013. Her role is to help develop and implement the EGU's educational strategy and initiatives for formal and informal education as well as working on new education-related collaborations for the EGU.

Jane earned her BSc (Hons) Geology from the University of Edinburgh then went on to gain an MRes in Heritage Science from University College London. In her MRes research, she used social science techniques to understand the perceived value (i.e., educational, historical, uniqueness) of geological collections in museums. These insights were used to improve collections care in museums and enhanced her understanding of how people relate to science – knowledge useful when engaging audiences in science education.

In the past five years Jane has also worked as a science communication and outreach officer for [Our Dynamic Earth](#) science centre, the [Scottish Earth Science Education Forum](#) and [Exscitec](#) as

well as volunteering for Rockwatch (a club for young geologists) and holding the communications officer post on the national committee for Geology for Global Development. Before she moved to the EGU she worked at University College London as a research assistant in pedagogy and student experience, a role that she says was incredibly useful in developing her knowledge of teaching and learning research and engagement.

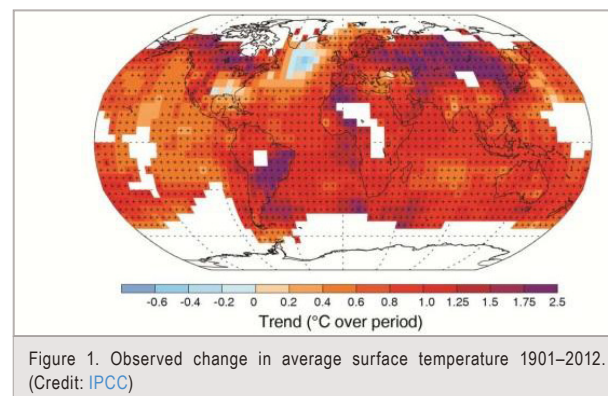
Jane says: "I believe there is lots of scope for exciting new education initiatives across the EGU and look forward to getting stuck in. If you would like to know more about what we have to offer regarding our education strategy, or maybe have an interesting education-related collaboration in mind, get in touch with me at [robb@egu.eu](mailto:robb@egu.eu)."

*An earlier version of this article was [published on the EGU blog](#)*

## Key findings from the new IPCC report

"Human influence on the climate system is clear" was the key message from the report on the physical science of climate change from the Intergovernmental Panel on Climate Change (IPCC).

"We have come a long way since the first IPCC report was published in 1990," a statement reiterated throughout the press conference for the release of the report. The IPCC were keen to register the significance of the work and progress made in this report – an "assessment of a string of assessments from 1990," according to Thomas Stocker, Co-Chair for Working Group I, reporting on the [physical science basis of climate change](#). The [fourth IPCC assessment](#), published in 2007, was the first report to state that "warming



of the climate system is unequivocal” and that “most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations.”

In the [fifth report](#), this message is heightened. Since the 1950s many of the changes observed and analysed in this report have been unprecedented including warming of the atmosphere and ocean, diminishing amounts of snow and ice, rising sea levels, and increases in the concentrations of greenhouse gases. With 259 lead authors citing 9200 papers in the report, two thirds of which have been published since 2007, the fifth assessment presents a strong message to policymakers across the world. Incredibly, this feat of scientific work has been approved and agreed upon by 110 governments across the world, with 1089 reviewers consisting of scientists, the public and governments from 55 of those countries offering a staggering 54,677 comments on the physical science basis report. Almost every word was commented on, disputed and discussed to come up with 18 headline messages – a first for the IPCC reports – that stated in simple language the report’s key outcomes.

“If you look at temperature, it is red” stated Stocker in a press conference, describing one of several key images from the IPCC [policy-makers’ summary](#) (see Fig. 1).

This simple statement with clever wordplay not only elicits a global increase in surface temperature but also danger. Our planet is warming, and humans are the culprit. He goes on to say “...each of the last three decades has been successively warmer at the Earth’s surface than any preceding decade since 1850...Global surface temperature change for the end of the 21<sup>st</sup> century is likely to exceed 1.5°C relative to 1850 to 1900 for all RCP scenarios.” RCP stands for representative concentration pathways, four greenhouse gas concentration trajectory models used by the IPCC in its fifth report.

“In the Northern Hemisphere, 1983–2012 was likely the warmest 30-year period of the last 1400 years.” For the fifth assessment the IPCC have gone to great lengths not only to ensure consistency and reliability in scientific data and consensus, but also to outline the key points from their summary for policymakers: the use of simple language to describe the data that does not include hype or headlines but instead simple scientific language.

The report also highlights the increase in global mean sea level rise (see Fig. 2), with a key headline stating “...the rate of sea level rise since the mid-19th century has been larger than the mean rate during the previous two millennia (high confidence). Over the period 1901–2010, global mean sea level rose by 0.19 [0.17 to 0.21] m”.

The summary for policymakers states: “...cumulative emissions of CO<sub>2</sub> largely determine global mean surface warming by the late 21<sup>st</sup> century and beyond” (see Fig. 3). “Most aspects of climate change will persist for many centuries even if emissions of CO<sub>2</sub> are stopped. This represents a substantial multi-century climate change commitment created by past, present and future emissions of CO<sub>2</sub>.”

Dominique Raynaud, review editor of chapter five (on palaeoclimatology) of the report and officer on the [EGU Climate: Past, Present and Future Division](#) in an interview with the EGU Educational Fellow commented on the most important aspect of this report: “For the first

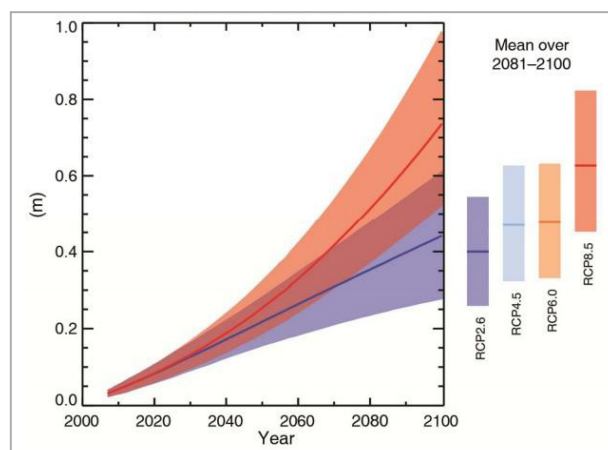


Figure 2. Global mean sea level rise. (Credit: [IPCC](#))

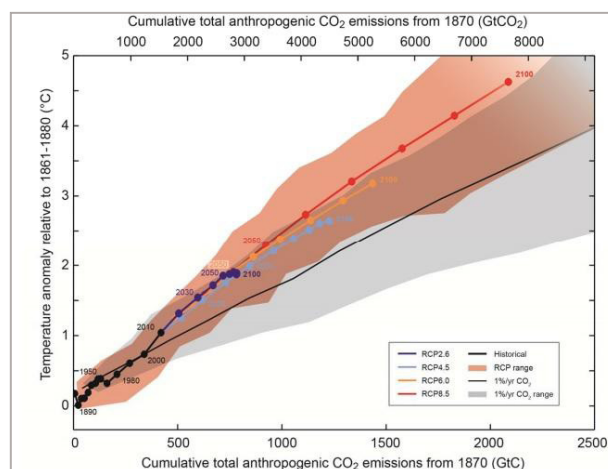


Figure 3. Variation of temperature with cumulative total anthropogenic CO<sub>2</sub> emissions from 1870. (Credit: [IPCC](#))

time the scientific community has defined a set of four [RCP] scenarios which represent a range of 21<sup>st</sup> century climate policies. Only one scenario suggests that the global mean temperature change for the end of the 21<sup>st</sup> century will not exceed 2°C.”

Raynaud went on to say “With this scenario, we still have a hope to keep [to the] reasonable expected warming for this century...policy-makers should obviously consider such a possibly.”

In some ways, the outcomes of this report are a repetition of what the public have already been hearing: humans are influencing climate change. But what is crucial to note about this fifth assessment report is the huge consensus among scientists, public and governments about this statement.

“This is not about ideology, this is not about self-interest” was a quote from Achim Steiner, the head of the UN’s environment programme, UNEP – a comment that will resonate with many through the ‘unequivocal’ status of the report’s conclusions. And a statement that Stocker echoed later “it threatens our planet, our only home,” clearly urging policymakers across the globe to take combined action on climate change.

*An earlier version of this article by Jane Robb, the EGU Educational Fellow, was [published on the EGU blog](#)*