

# The benefits to climate science of including Early Career Scientists as reviewers



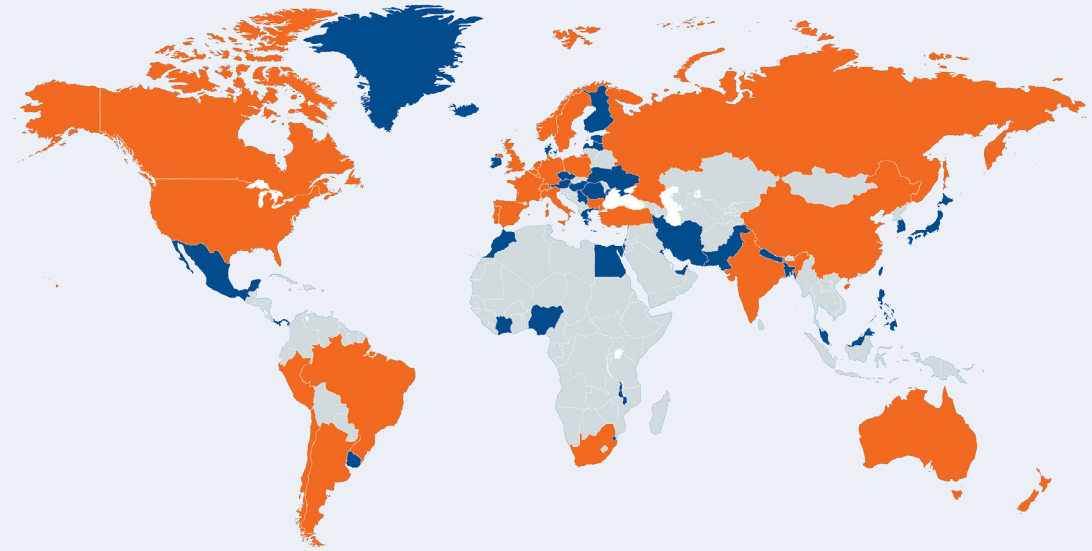
**Mathieu Casado, Gwenaëlle Gremion, Jilda Alicia Caccavo,  
APECS IPCC review working group**

# Who is APECS ?

**APECS is an international and inter-disciplinary organization for early career researchers working in the Polar and Alpine Regions and the wider Cryosphere.**

Membership includes:

- undergraduate and graduate students,
- postdoctoral researchers,
- early faculty members,
- young professionals,
- educators...



*Maps of APECS membership: orange are the countries who also have an APECS National Committee (NC), and blue are countries with members, but no NC.*

**Current membership: 2778 from 69 countries**

# APECS contributes to the IPCC !

The diversity of disciplines covered by the members of APECS (the Association of Polar Early Career Scientists) were a perfect match for the Special Report on Ocean and Cryosphere in a Changing Climate (SROCC).

List of relevant chapters:

Chap 2: High Mountain Areas

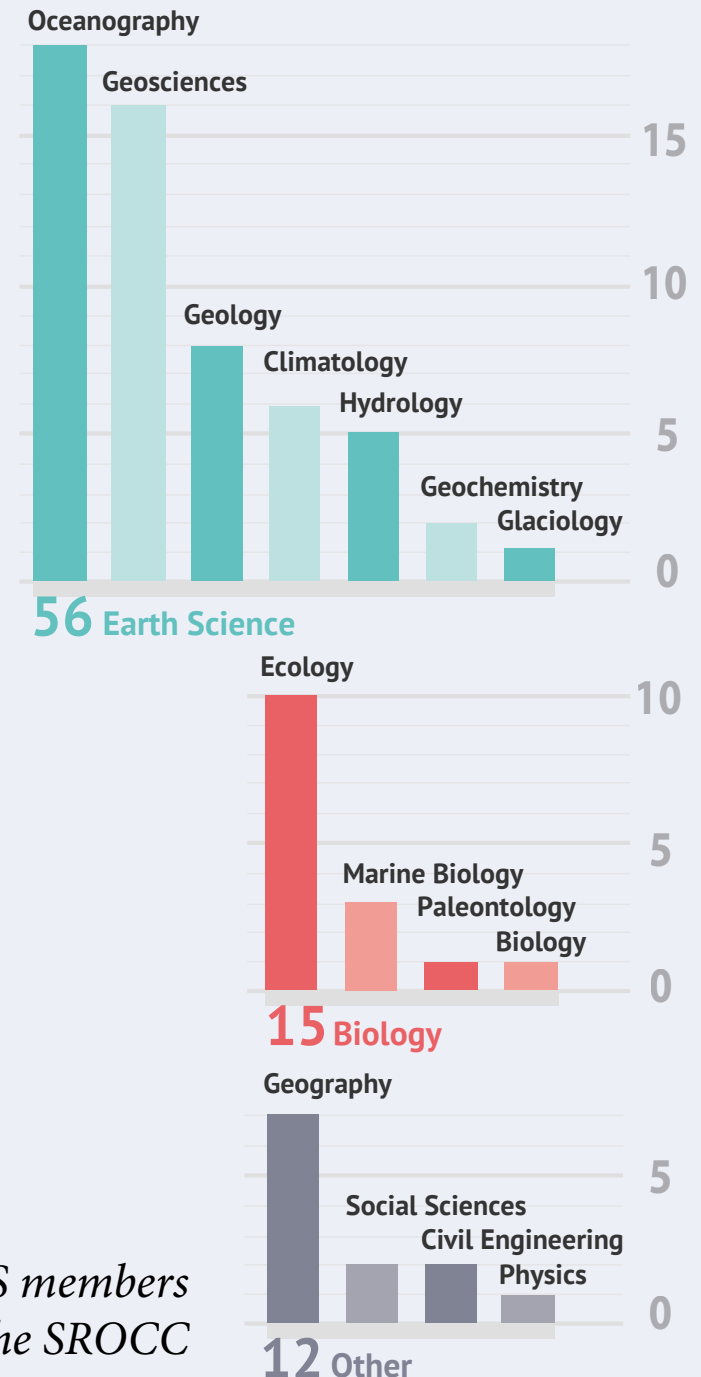
Chap 3: Polar Regions

Chap 4: Sea Level Rise and Implications for Low Lying Islands, Coasts and Communities

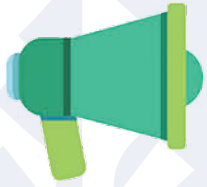
Chap 5: Changing Ocean, Marine Ecosystems, and Dependent Communities

Chap 6: Extremes, Abrupt Changes, and Managing Risks

*Various disciplines representend by the APECS members involved in reviewing the first order draft of the SROCC*



# Organising a group review



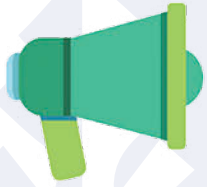
*scoping*

---

Oct 2017:

APECS approves the creation of a working group to review the First Order draft (FOD) of the SROCC

# Organising a group review



*scoping*



*outline*

---

Oct 2017

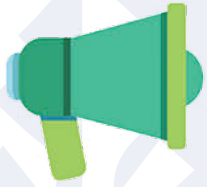
Dec 2017:

APECS council organises a project group to prepare the group review:

the outline of the report is used to plan the group structure

Call for applications through APECS networks

# Organising a group review



*scoping*



*outline*



*nomination of reviewers*

Oct 2017

Dec 2017

Mar 2018:

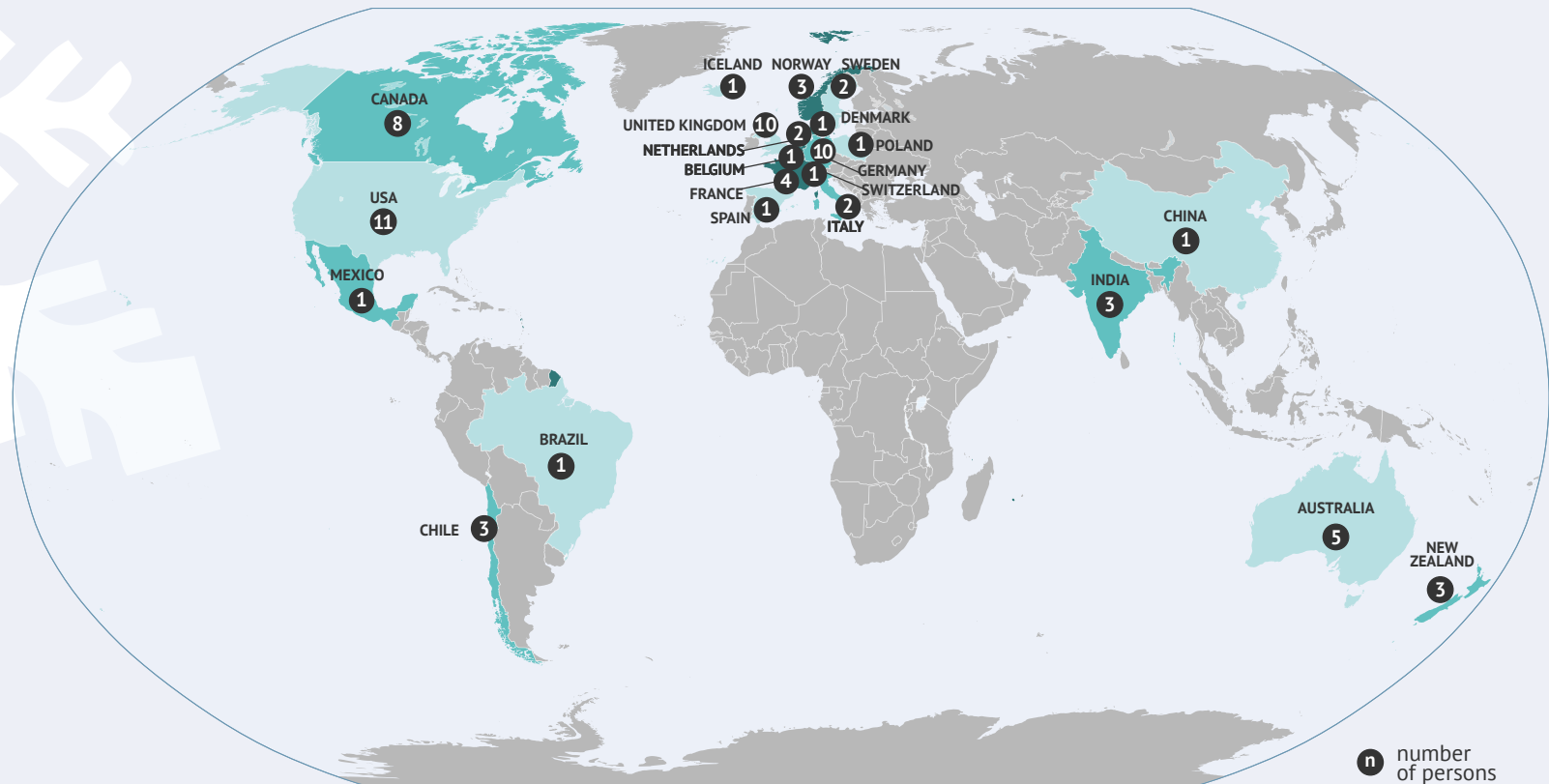
We received 158 applications.  
75 ECS were selected:

**PhD and below**

**33**

**Post doc and above**

**42**



n number of persons



# Organising a group review



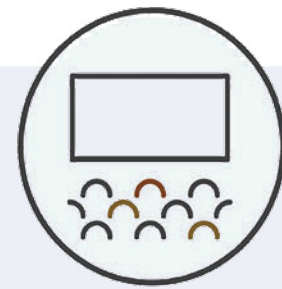
*scoping*



*outline*



*nomination of reviewers*



*Training*

Oct 2017

Dec 2017

Mar 2018

Mar to May 2018

Two training sessions were organised

Initiative supported by the IPCC WG I and WG II

Session 1:  
General introduction of IPCC procedures

Session 2:  
Q&A with authors and vice chairs

Speakers included:



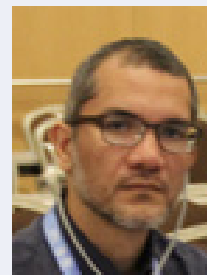
**Sarah Connors**  
Science Officer  
WGI



**Andreas Fischlin**  
vice-chair  
WGII



**Greg Flato**  
vice-chair  
WGI



**Carlos Mendez**  
vice-chair  
WGII



**Katja Mintenbeck**  
Director of Science  
WGII



**Elvira Poloczanska**  
Science advisor  
WGII

# Organising a group review



*scoping*

Oct 2017



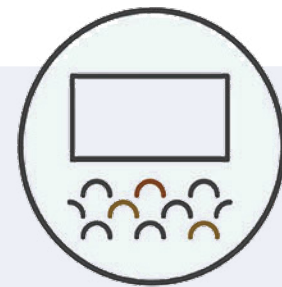
*outline*

Dec 2017



*nomination of reviewers*

Mar 2018



*Training*

Mar to May 2018

Our team produced up to 2155 comments,

These were checked and sorted, and 2012 were sent to the authors of the SROCC,

Co-signed by all 75 ECS involved.



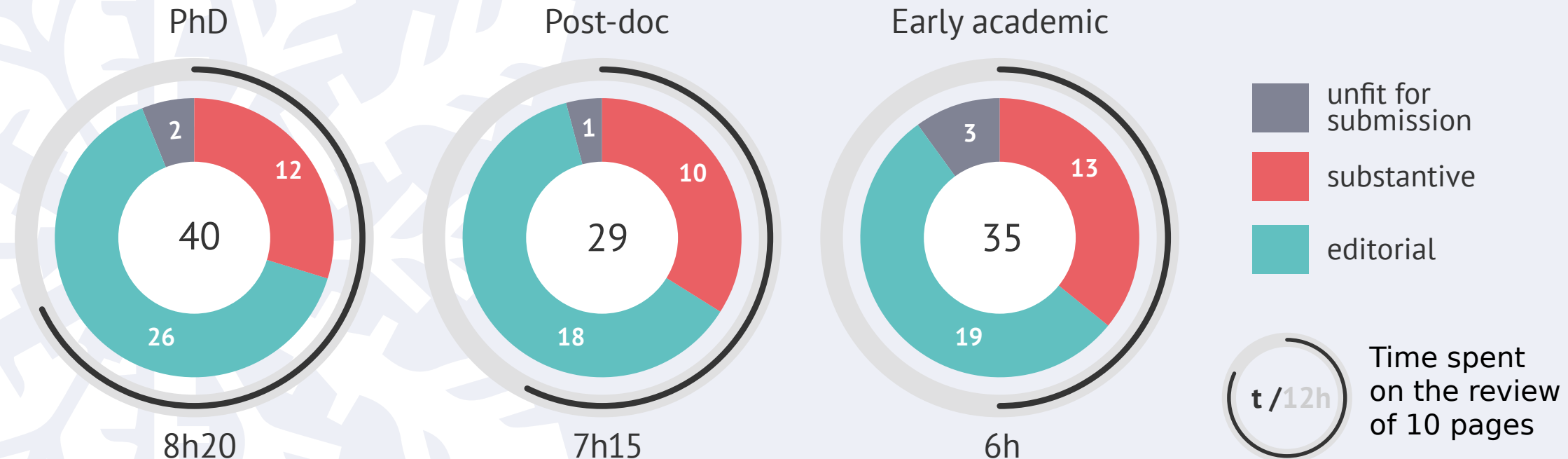
*Review FOD*

May - June 2018



# Everyone has something to offer

The number of comments per person is not linked with career level.



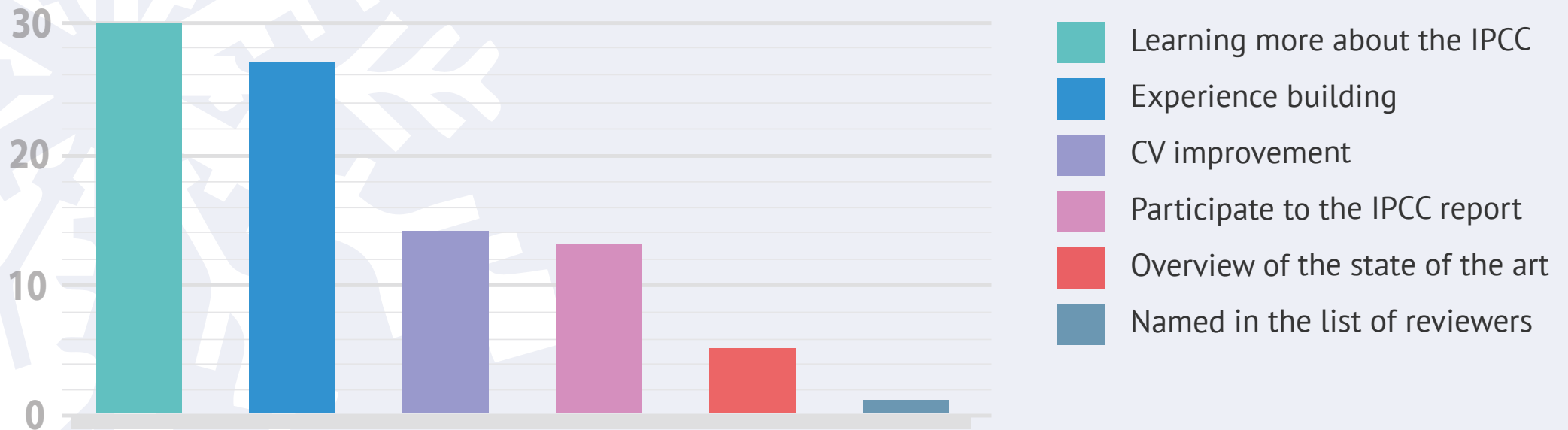
*Comparing the average number of comments per person for different career levels*

*Casado et al, Geosciences Communication, 2020*

# Personal feelings of ECS

Being able to contribute to IPCC reports

Learn and get review experience



*Motivations of the participants to take part in our group review*

*Casado et al, Geosciences Communication, 2020*

# Conclusions and perspective

Get involved in the IPCC reports by participating in the review of the report.

IPCC is committed to including motivated Early Career Scientists in their process.

APECS supports Early Career Scientists who want to participate by:

- In fall 2020: organising a group review of the SOD of the WGI

Our experience shows that ECS are capable, and engaged reviewers.

Material produced:

- a guide,
- videos of our webinars,
- our communications in journals.

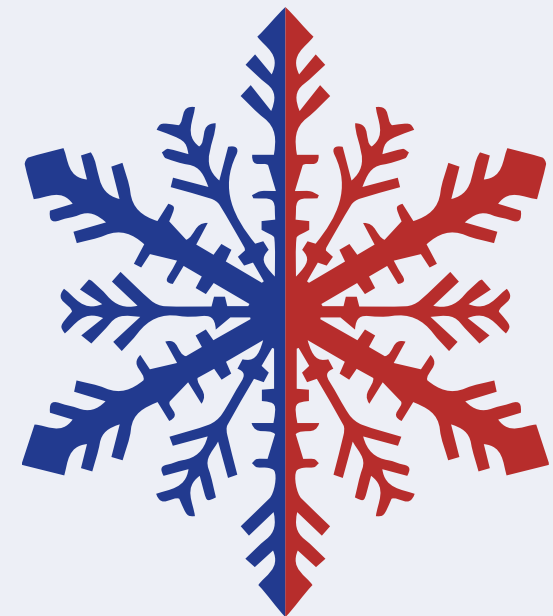
Ask us to access any of it !

Contact us at [ipcc-review@apecs.is](mailto:ipcc-review@apecs.is) !!!

See also:

M. Casado, *Engage more early-career scientists as peer reviewers*, *Nature*, 2018, doi: [10.1038/d41586-018-05956-7](https://doi.org/10.1038/d41586-018-05956-7)

M. Casado, G. Gremion, P. Rosenbaum, J. A. Caccavo, K. Aho, N. Champollion, S. Connors, A. Dahood, A. Fernandez, M. Lizotte, K. Mintenbeck, E. Poloczanska, G. Fugmann, *The benefits to climate science of including early-career scientists as reviewers*, *Geoscience Communication*, 2020, doi: [10.5194/gc-3-89-2020](https://doi.org/10.5194/gc-3-89-2020)





Thank you !

*We thank the members of the APECS IPCC review working group, Kelsey Aho, Nicolas Champollion, Sarah Connors, Adrian Dahood, Alfonso Fernandez, Gerlis Fugmann, Martine Lizotte, Katja Mintenbeck, Elvira Poloczanska, Paul Rosenbaum for their contribution to this presentation.*