

# living planet symposium

BONN  
23–27 May  
2022

TAKING THE PULSE  
OF OUR PLANET FROM SPACE



## Women and girls in STEM education: insights from Women in Copernicus survey

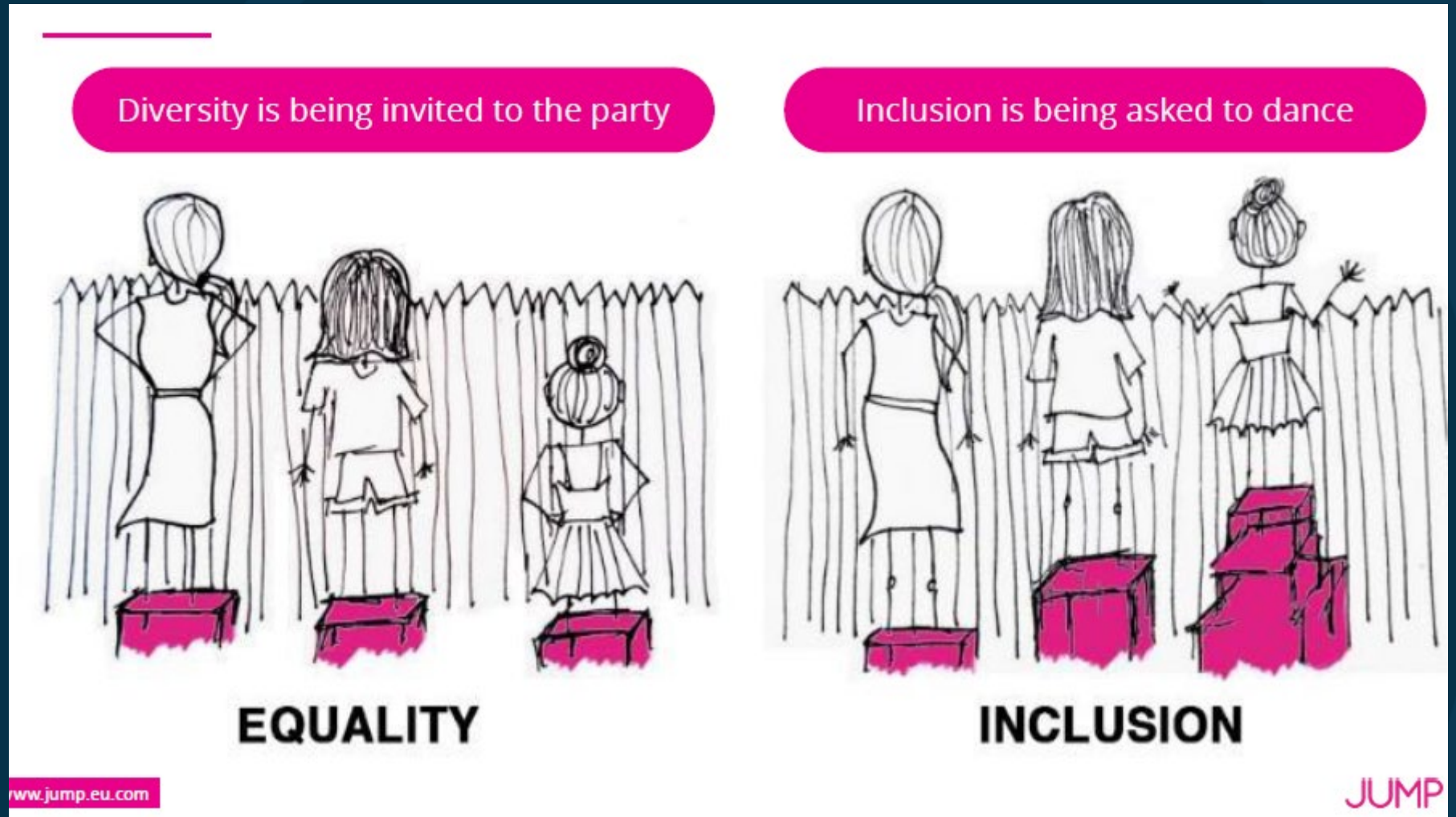
Nathalie Stéphenne, Barbara Riedler, Marie Jagaille, Aida Monfort-Muriach,  
Grazia Fiore, Natassa Antoniou, Flávia de Souza Mendes, Kathrin Lenvain

27/05/2022

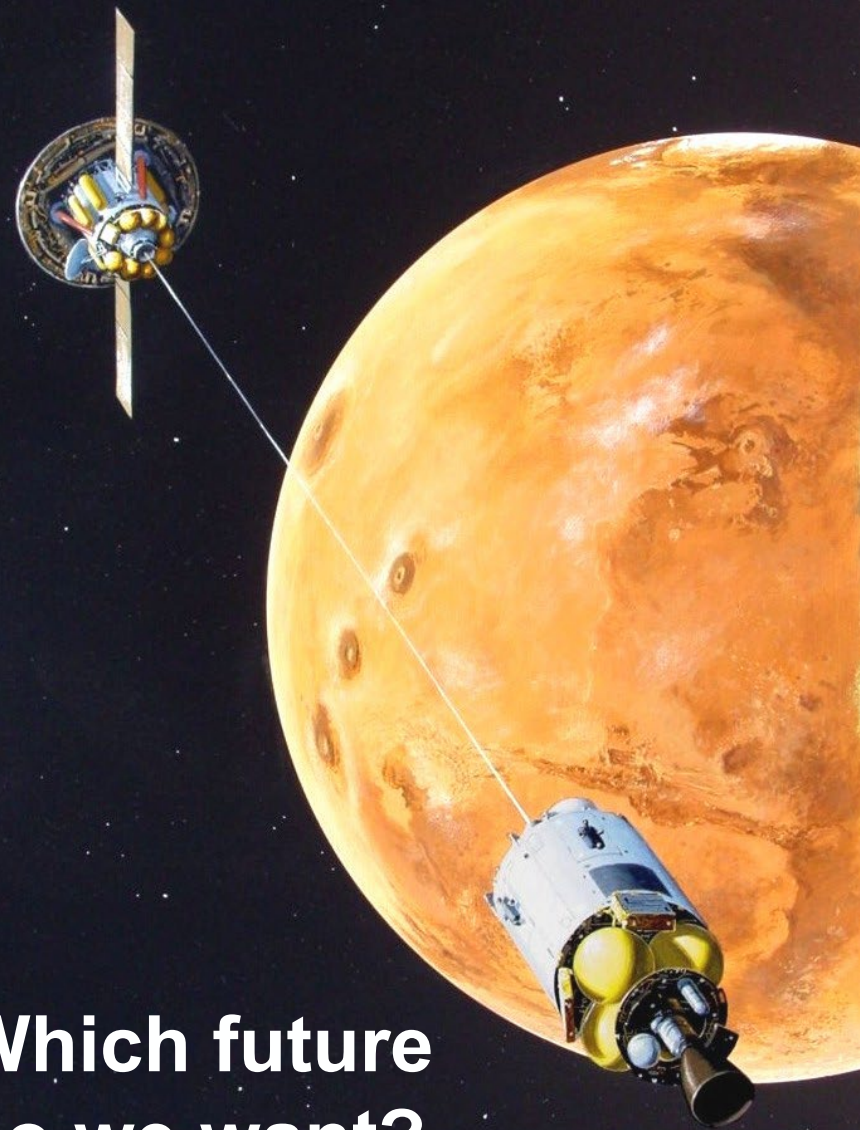
# We are all different

« It is easier to break an atom than a prejudice »

A. Einstein



# Planet Mars or Planet Earth? What do we offer to our childs?



Which future  
do we want?



# Why you and me? A challenge for us!

## Inequality exists



Women in the EU earn on average **16%** less than men per hour



Only **67%** of women in the EU are employed, compared to **78%** of men



On average, women's pensions are **30.1%** lower than men's pensions



**75%** of unpaid care and domestic work is done by women

90% of future jobs will require STEM-related skills

A diversity of skills leads to greater innovation success  
> in EO, in EU !

WE can act for ensuring better access to STEM education and careers for:

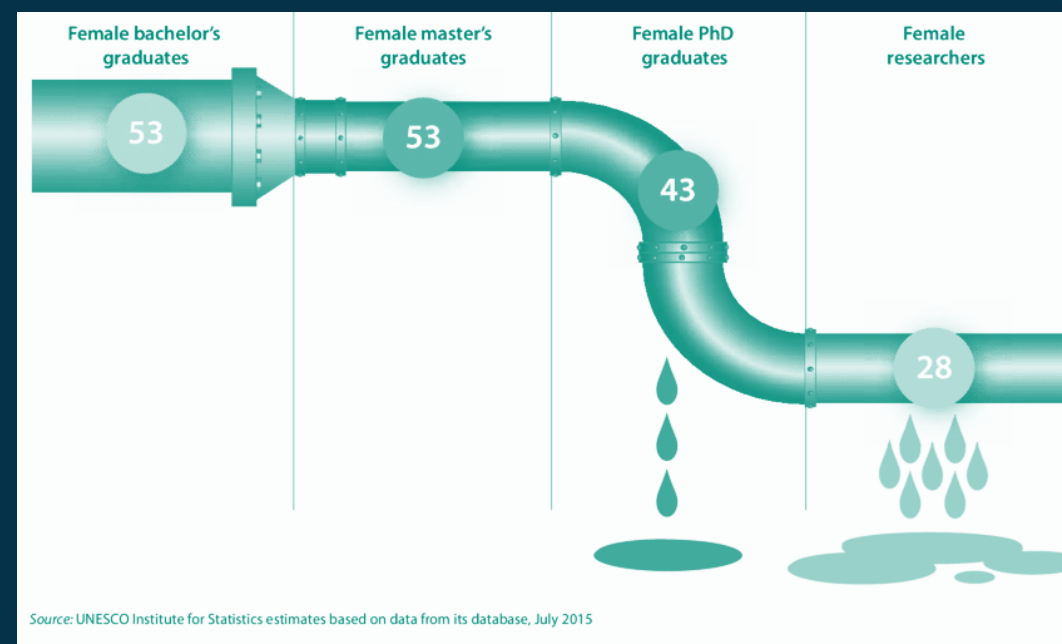
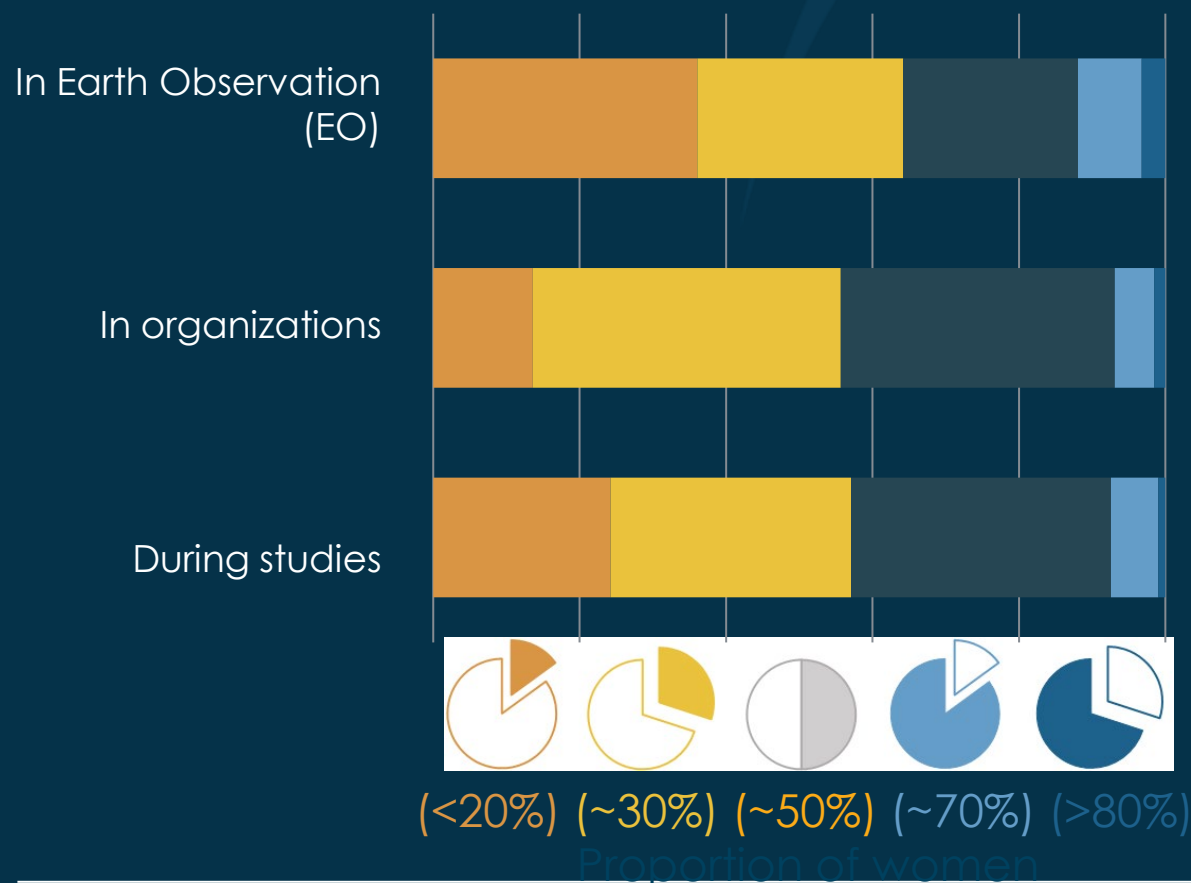
- Human rights (SDG)
- Scientific Innovation
- Development perspectives



*“Gender equality is a core principle of the European Union, but it is not yet a reality. In business, politics and society as a whole, we can only reach our full potential if we use all of our talent and diversity. Using only half of the population, half of the ideas or half of the energy is not good enough.”*

President Ursula von der Leyen

# It is difficult to be a women in EO or to imagine working in EO for a young girl



“ Boys clubs  
Male oriented events  
The only women at the board ”

# WOMEN IN COPERNICUS



[www.womenincopernicus.eu](http://www.womenincopernicus.eu)

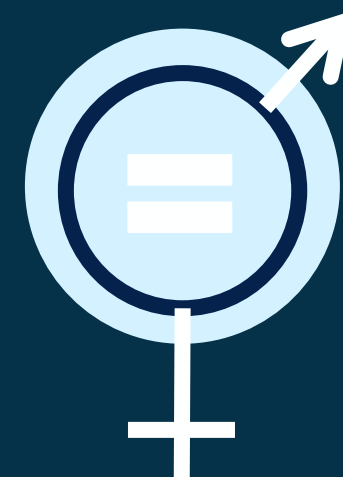
Nathalie Stéphenne, Public Service of Wallonia



# Why WIC?

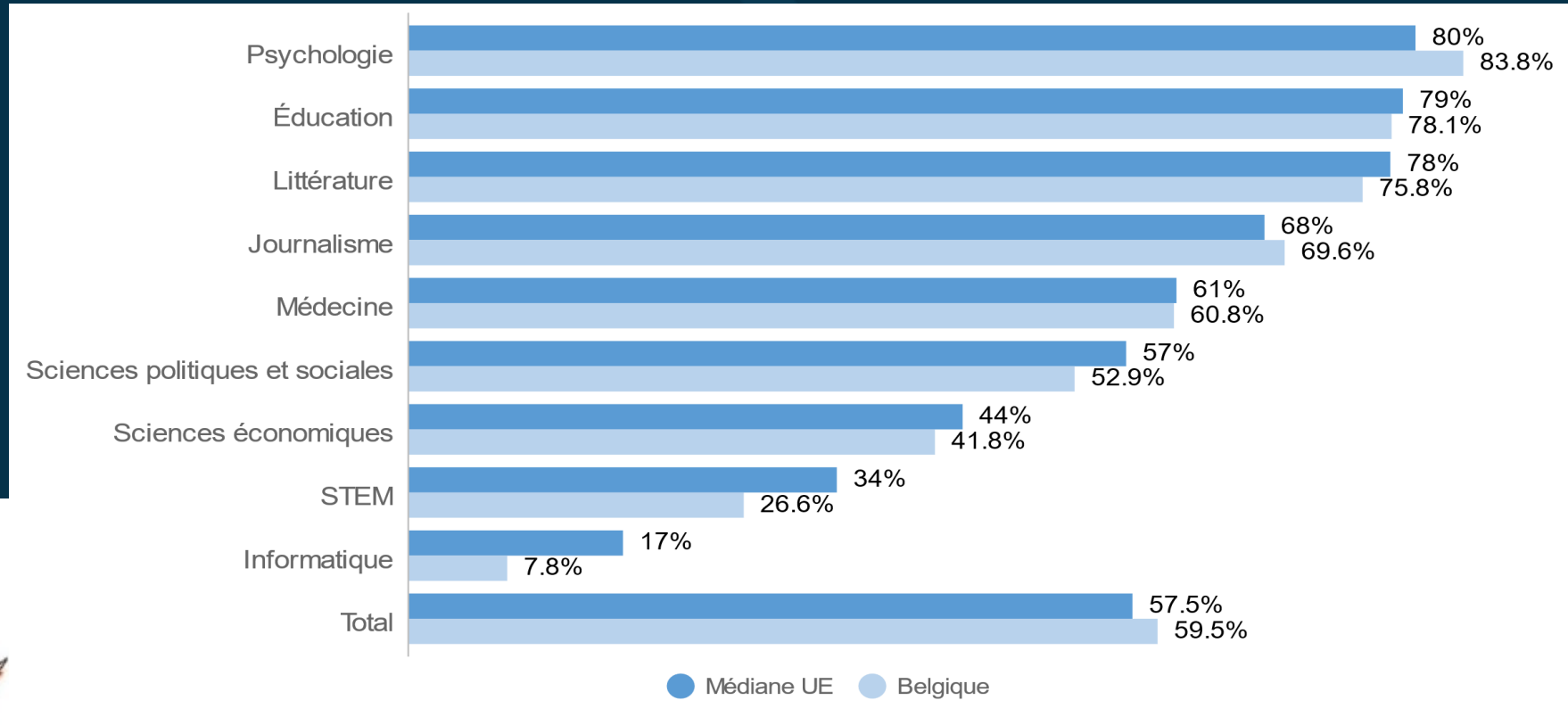
Survey and research

Actions for the future



# Most and less chosen studies

53% of young girls are convinced that they will never perform as well as boys (Microsoft, and KRC Research)

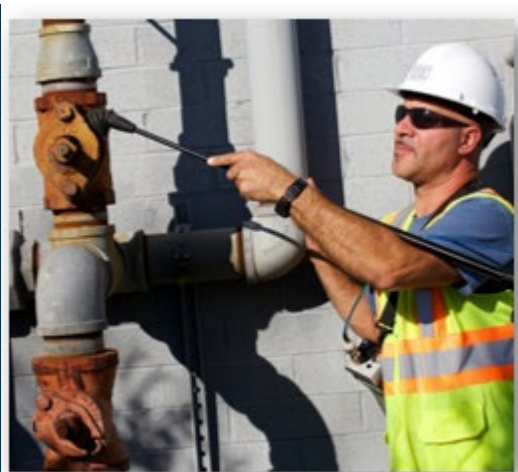




# Imbalance in the working force



- 86.6% of women are employed in the service sector
- Health and social actions branches bring together 42.5% of working women
- 88% of the nursing staff is female



- 93% of the secretaries are women
- 98% of the technicians are male

# Adding women on the picture?



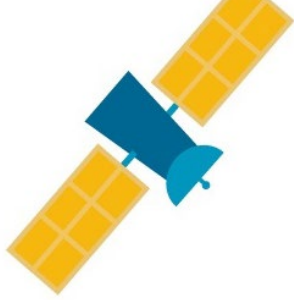
Women are part of the Copernicus experience  
But they are not always visible ... or not enough!

Give women in Copernicus a **voice and face**

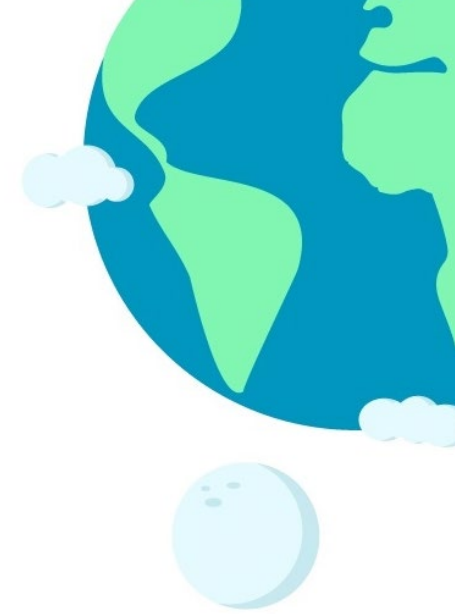
Find possible **solutions for gender-balance** in Copernicus

**Inspire girls and young women** by bringing women to the forefront of Copernicus





# What about Women in Copernicus/EO\*GI sector ?



This underrepresentation of women is visible in the field of Earth Observation - Geoinformation Sector (EO\*GI)



## 2020 and 2022 : Global surveys about

- + background, career, barriers, facilitators and educational choices for by women working in Copernicus
- + 450 answers in 2020
- + 200 new participants > 80 men

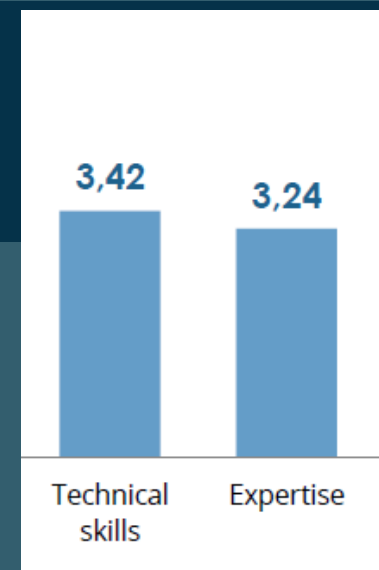
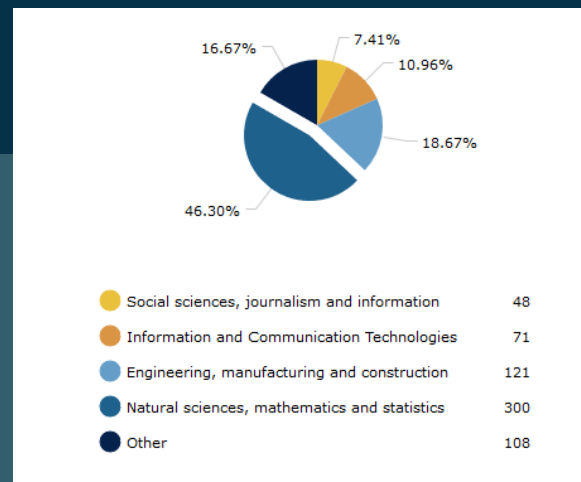
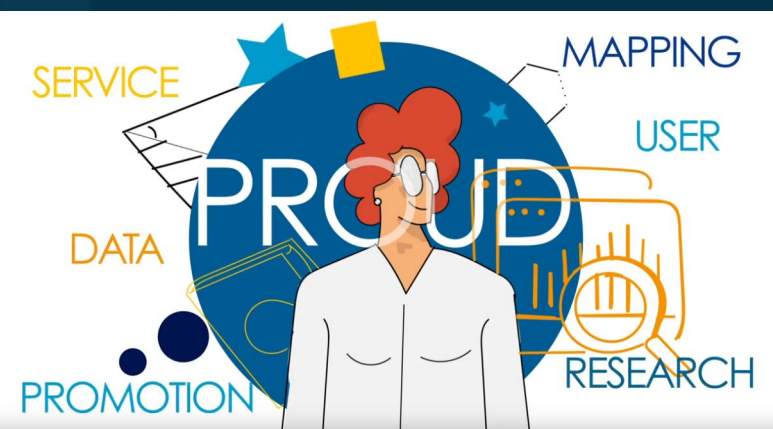


# Women are an important part of the Copernicus ecosystem

Mainly **STEM background**

High **educational level**, **expertise** and level of **technical skills**

**Proud** and **satisfied** with jobs within the Copernicus ecosystem



# In COPERNICUS

- freely available EO and in-situ data
- focus on user-uptake

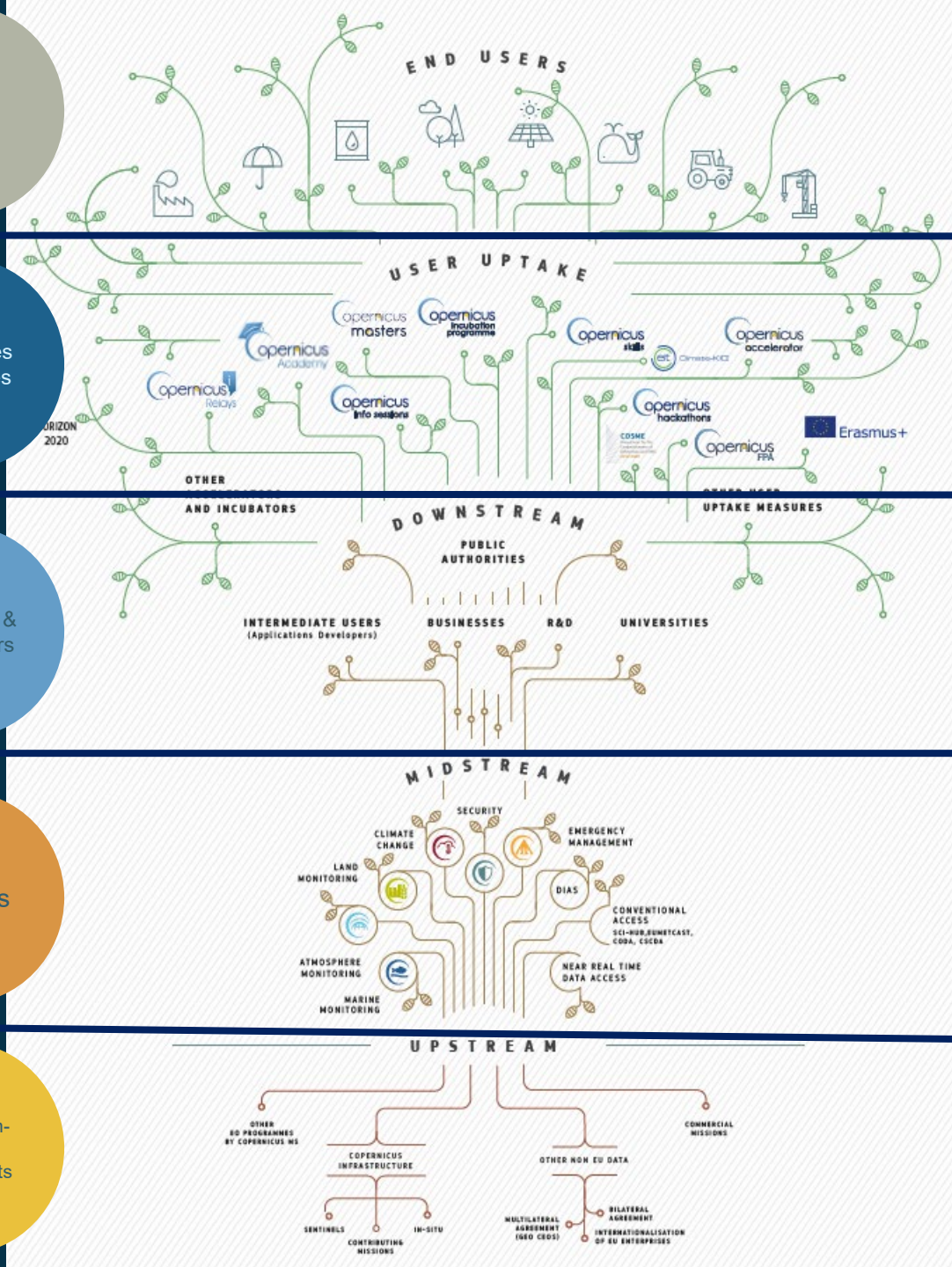
End users

Programes & activities

Mid users & Developers

Services

Space & in-situ components



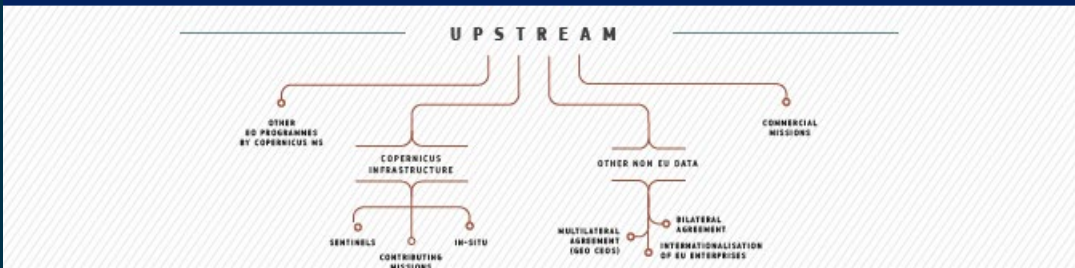
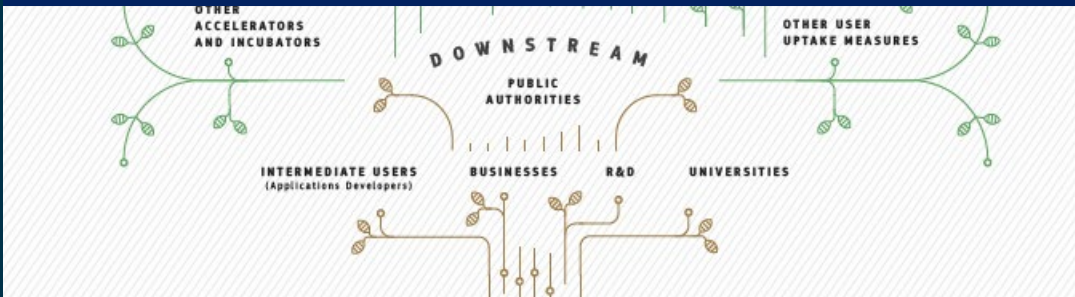
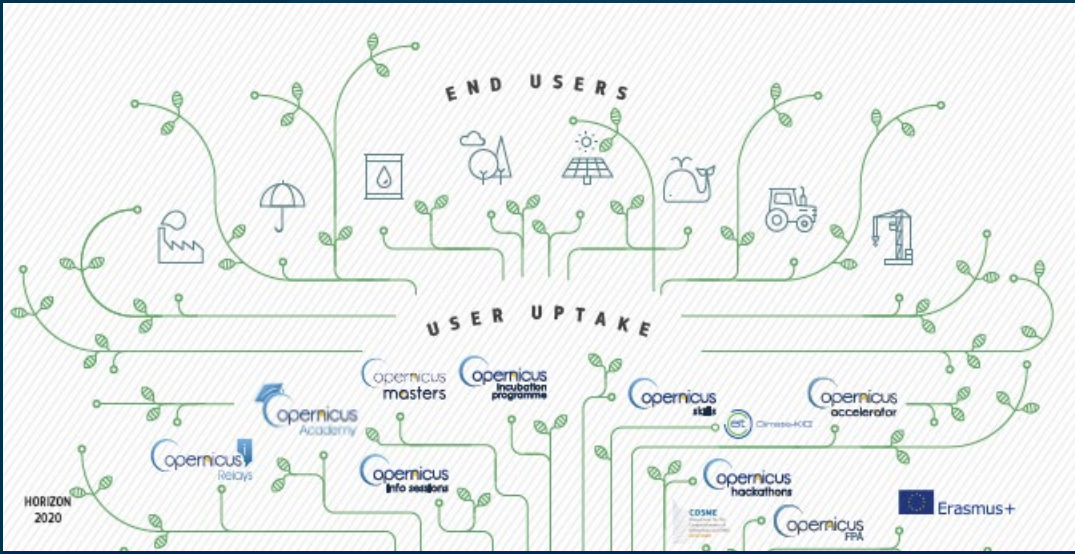
# Where in the Copernicus ecosystem are women working?

42 %

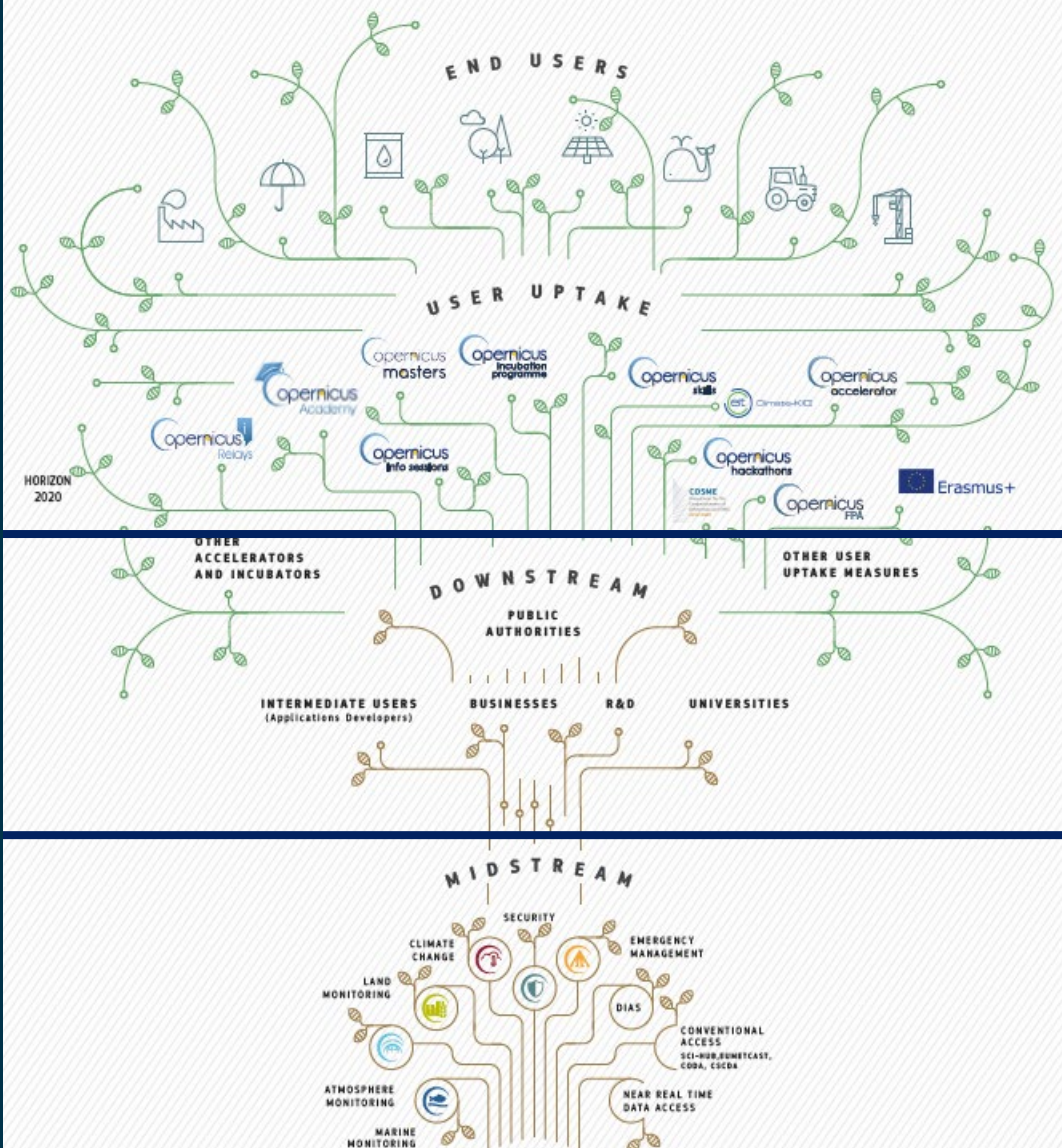
24 %

27 %

6 %



# Where in the Copernicus ecosystem are women working?



66% of us are close to the users\*

Copernicus downstream services development

Use of Copernicus data and services for different thematic applications



This is a strength!

With a high interest in support and application  
With aim of being **useful**, solve societal challenges



Being a minority is still the main barrier identified by the women taking this survey



# Main barriers

What I have seen in the Middle East and in Europe is that there are women studying in STEM, but they somehow disappear in minor roles afterwards



Gender imbalance

3,58

Gender bias

3,47

Lack of self-confidence

3,34

Motherhood

3,19

We, women in Science, have to work harder to get the same recognition as our male colleagues



Maternity leave and motherhood introduces a gap in a career (will I have the same position or projects when returning?). Working part-time affects credibility, appreciation and position in the company




In the past, when I was working in the private sector, the maternity was perceived as a showstopper, and the


...the hierarchical level is still not very high.



It's still difficult to occupy a leading position as a women in the Copernicus field!



Attract **next generations**  
and **talents** including **girls**  
changing the image  
of STEM and Copernicus profession



**WHICH ARE THE CHALLENGES TO OVERCOME**

Implementation of **policies** to achieve gender balance in Copernicus-related workplaces

**Empathy** in the management & **team working**

**Mentoring** and **coaching** with female & men actors



**Visibility** of role models and existing women

**Networks** of Women dedicated to exchange personal experiences and expertise

## WHO DO WE NEED ?

to attain this vision

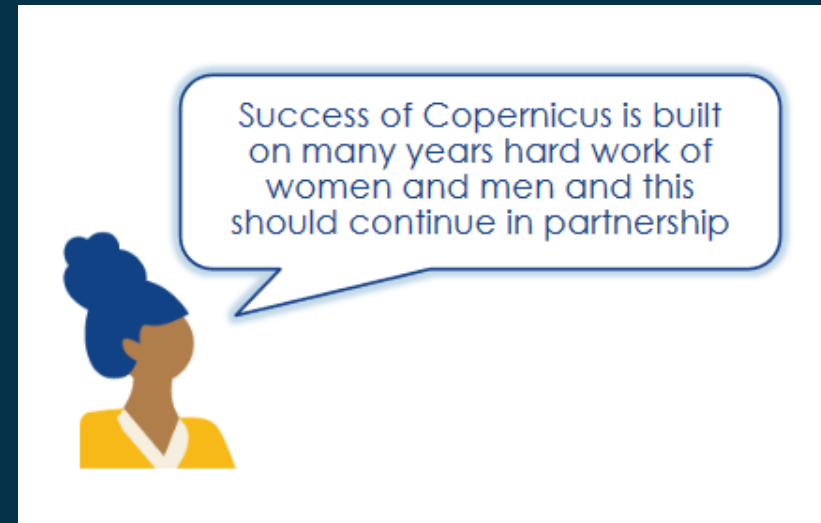
Everyone's involvement offering a safe work environment and attracting or keeping talents





Taking care of women's motivations and their working conditions is an **investment in the future of Copernicus!**

involvement of **highly skilled women**  
foster **user-uptake** of Copernicus data and services



# Involving men as allies : low answer rate



2020



Survey 1.0

2021



Dissemination of results

2022



Survey 2.0



# Videos



www.youtube.com/channel/UChBf6KFe0tIXIyoXMY\_mGnA



Website



Women in Copernicus

24 Abonnenten

ABONNIERT



ÜBERSICHT

VIDEOS

PLAYLISTS

KANÄLE

DISKUSSION

KANALINFO



Uploads

▶ ALLE WIEDERGEHEN



Build a common future for Copernicus



WTAC#4 - Women talk about Copernicus - "Copernicus is...



WTAC#3 - Women talk about Copernicus - "Gender bias"



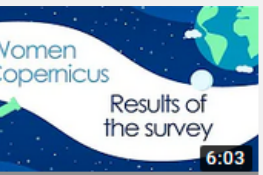
WTAC#2 - Women talk about Copernicus - "Copernicus is...



WTAC#1 - Women talk about Copernicus - "Copernicus in...



WTAC#5 - Women talk about Copernicus - "Copernicus is...



Women in Copernicus - Women are part of...



# Events

- **Scientific events** with round table with men : EUROGI, Copernicus Cob Hub, IGARSS
- **Gender events** : GEHE, Comité files et femmes de Sciences
- Webinars for **students**
- Bridges between **women initiatives** : stronger together and among us
- **Girls days** for science in universities
- **Podcast** in Brittany
- Social media : twitter/linkedin / Instagram
- Copernicus Observer : two editions



25/02/2021

WiC at the "Women in GI" IRLOGI / EUROGI webinar  
Check the [webinar flyer](#) for more info.



9/12/2020

WiC at the [European Space Week](#) - session "Space for Equality, Diversity & Inclusion"  
Check the [presentation](#) of the session.



25/11/2020

WiC at the [Copernicus Academy and Relays General Assembly](#)  
Have a look at the [agenda](#) and check the [presentation](#).



5/11/2020

WiC at the CoRdiNet - [CopHub.Ac Joint Final Event "A hitchhiker's guide to digitalisation in Europe - the detour through Space"](#)  
[Watch recording](#)



6/10/2020

Space Girls Space Women (Nereus) - WiC pitch during SGSW Nereus websession  
[Watch recording](#)



24/09/2020

WiC at EOcafe (EARSC) - Presentation of preliminary results and debate on Women in Copernicus  
[Watch recording](#)

Welcome

# Women in Copernicus



Nathalie Stéphenne  
(Public Service of Wallonia)



Marie Jagaille  
(Brittany Remote Sensing Group)



Estefania Aguilar Moreno  
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Grazia Fiore  
(EURISY)



Natassa Antoniou  
(EARSC)



Aida Monfort Muriach  
(University Jaume I)



Kathrin Lenvain  
(AZO Space of Innovation)



Thanks to  
all WIC  
participants



# We are not alone. We are a lot! And you?



[www.womenincopernicus.eu](http://www.womenincopernicus.eu)



subscribe per mail at website



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channel: Women in Copernicus

