

ASTRONOMERS FOR **PLANET EARTH**

# Synergies between A4E and Sustainable HEP



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@astro4earth



<http://astronomersforplanet.earth>



## What is the idea behind A4E?

Be the sustainability  
movement in astronomy

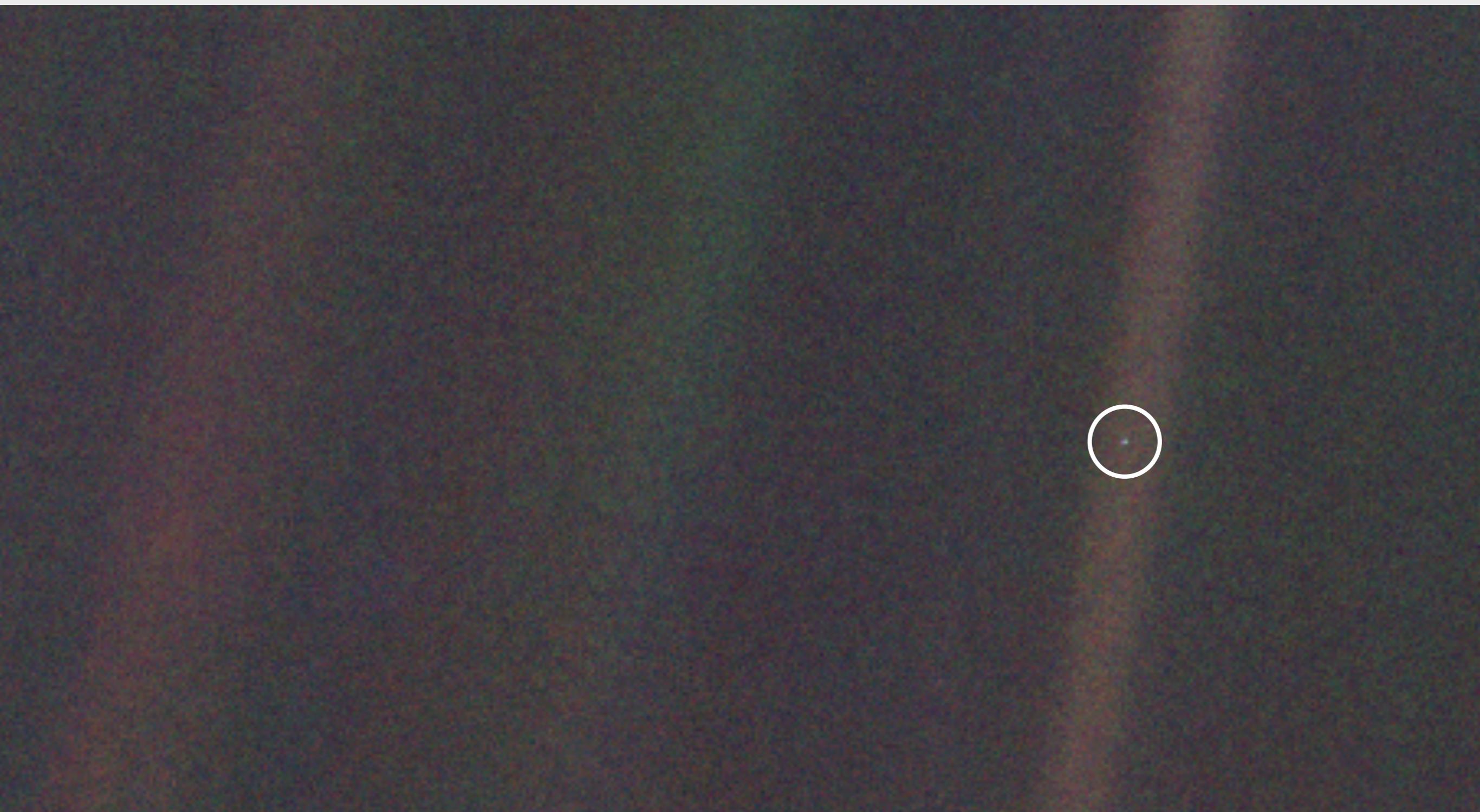
Provide the astronomical  
perspective in the  
sustainability movement



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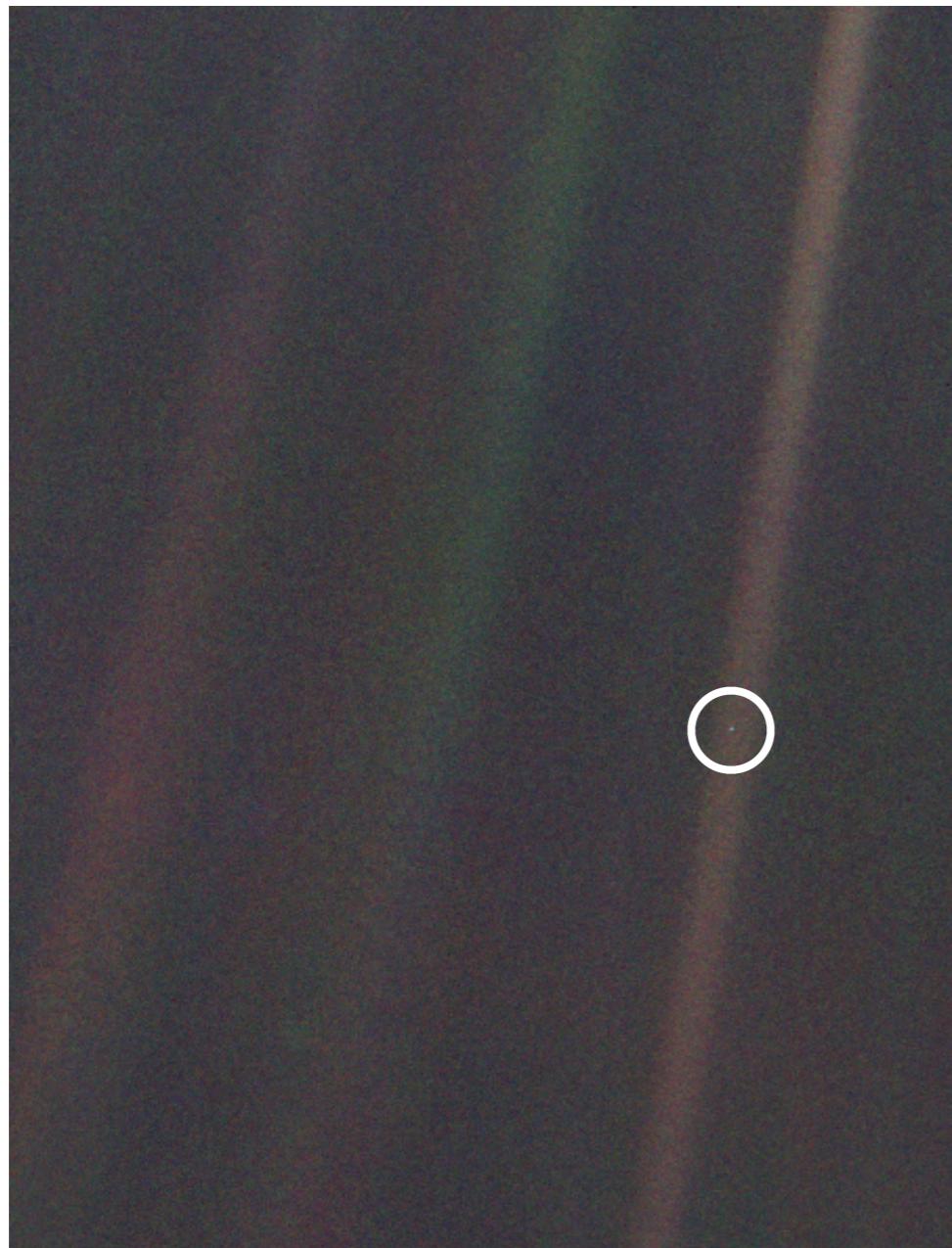
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The Pale Blue Dot" is a photograph of Earth taken Feb. 14, 1990, by NASA's Voyager 1 at a distance of 3.7 billion miles (6 billion kilometers) from the Sun. (Credit: NASA/JPL-Caltech.)



## The astronomical perspective



- ◆ There is no Planet B
- ◆ Planet Earth is a unique ecosystem
- ◆ we must preserve and protect it
- ◆ astronomy ignites emotions
- ◆ uniquely situated for science and climate communication



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## Examples for sharing astronomical perspective

Astronomers for Planet Earth

they/them

Astronomers have a unique perspective on the Earth. Our work reveals the immense distances to ... [Read more](#)

[✉️](mailto:astronomersforplanetearth@g...) [astronomersforplanetearth@g...](#)

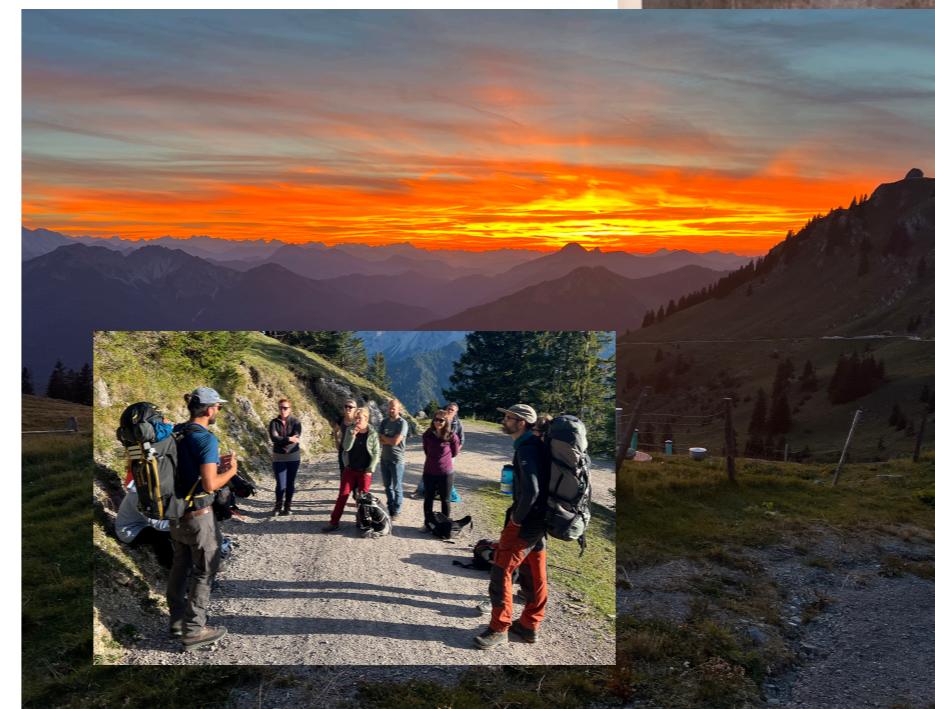
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outreach  
videos (e.g.  
solar eclipse)

◆ hiking and  
stargazing



SCIENCE | MEDICINE | TECHNOLOGY | HEALTH

**ScienceTimes**  
The New York Times

TUESDAY, MAY 14, 2024 DI

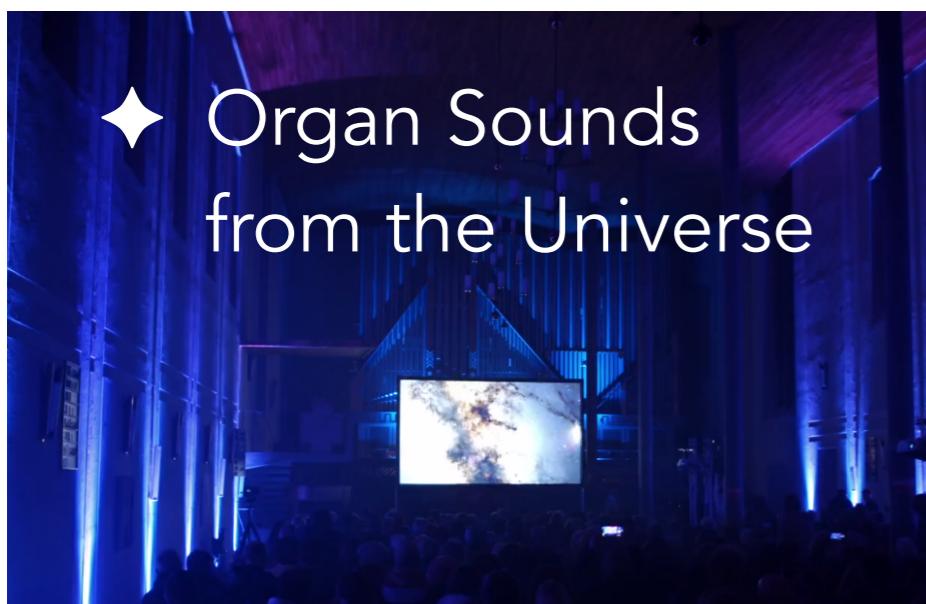
◆ New York Times Feature

That afternoon, from her home some miles away, Dr. Sacken watched burning embers fall from a smoky sky and worried. Later, she learned that her colleagues had escaped just in time. As the fire raced up the mountain, it threatened the other side carrying discs full of research data.

All but one of Mount Stromlo's eight telescopes were destroyed that day, along with millions of dollars' worth of equipment that engineers had been building for observatories around the world. The fires also destroyed 500 homes across greater Canberra, and killed four people.

The incident was an early warning for astronomy. Wildfires, exacerbated by climate change, were becoming a problem for their facilities. In Australia, several observatories have been damaged or threatened by fires and other extreme weather, and changing atmospheric conditions have made ground-based astronomical research more challenging.

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◆ Organ Sounds  
from the Universe



## Sustainability Movement in Astronomy

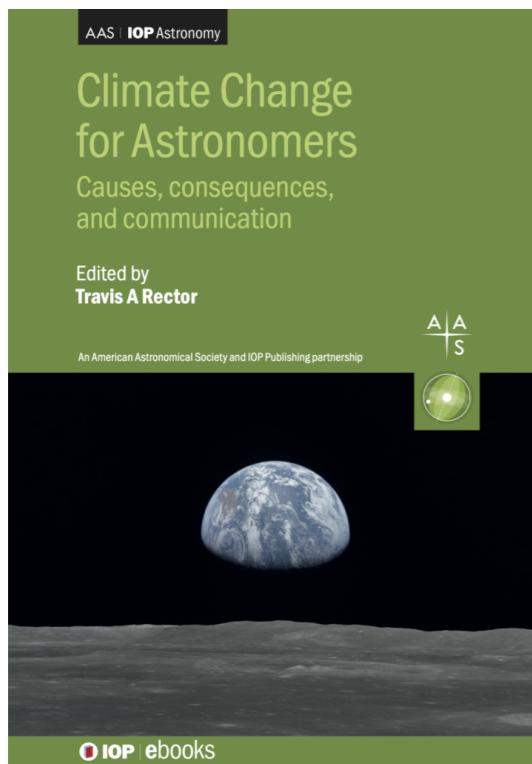
- ◆ scientists must act according to research
- ◆ astronomers have significantly larger CO<sub>2</sub> footprint than average citizen of Planet Earth
- ◆ we want to ensure that we can keep doing astronomy
  - ◆ funding
  - ◆ observatories
- ◆ find best practices within the community, ignite constructive conversation



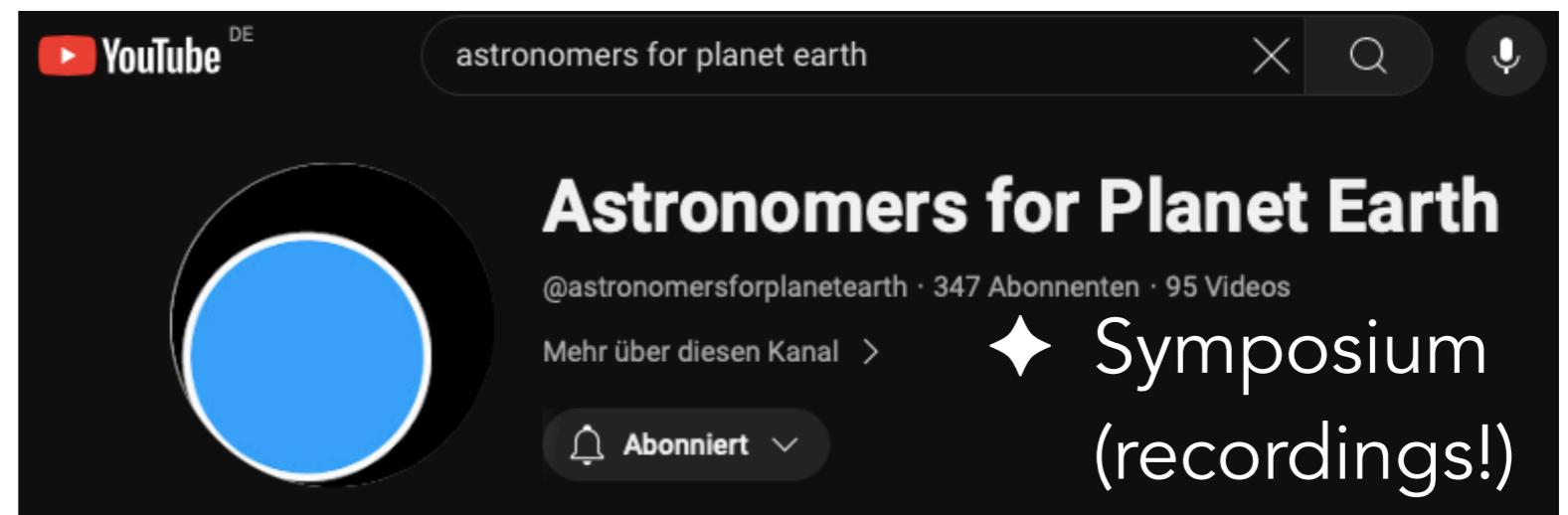
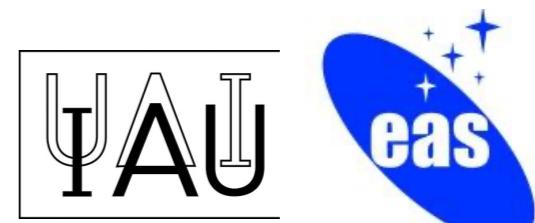
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## Examples for transforming our field

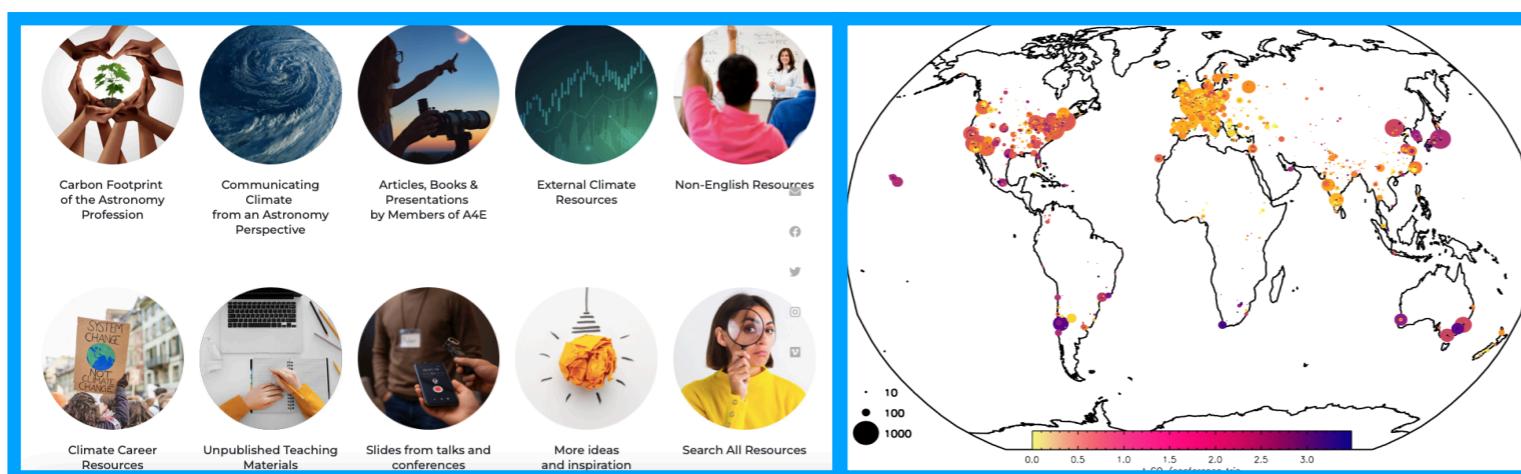
- ◆ teaching book



- ◆ communication with astronomical societies



- ◆ Symposium (recordings!)



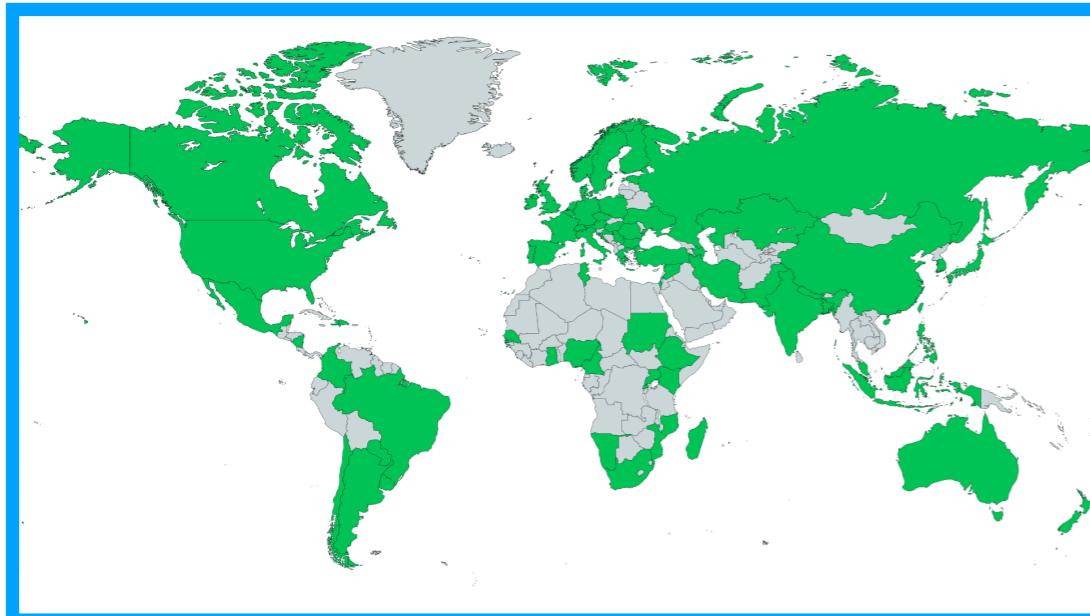
- ◆ resources on website such as publications, jobs and presentation materials



## How A4E works

### grass roots

>1700 members from 74 countries involved in many different activities and projects



### charity

legal entity capable of taking donations, small group of people





## Synergies with HEP and outlook

Strengthen exchange  
between organizations

A4E Five Year  
Anniversary in  
November

Webinars

Super  
computing

GRAND  
project

Astroparticle  
physics



# ASTRONOMERS FOR PLANET EARTH

Facing the climate crisis can make us feel as powerless as a paramecium in the ocean. But look again at that Pale Blue Dot. Our whole world occupies only 0.12 of the 640,000 pixels in that frame and yet it holds creatures who are able to capture its image from a vast distance. Let your support and activism be the fraction of a pixel that turns the picture of our shared future into an inspiring work of art for you and the people around you.

Thank you!

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Questions?

Ideas?

Problems?

Feedback?

Thank you!