

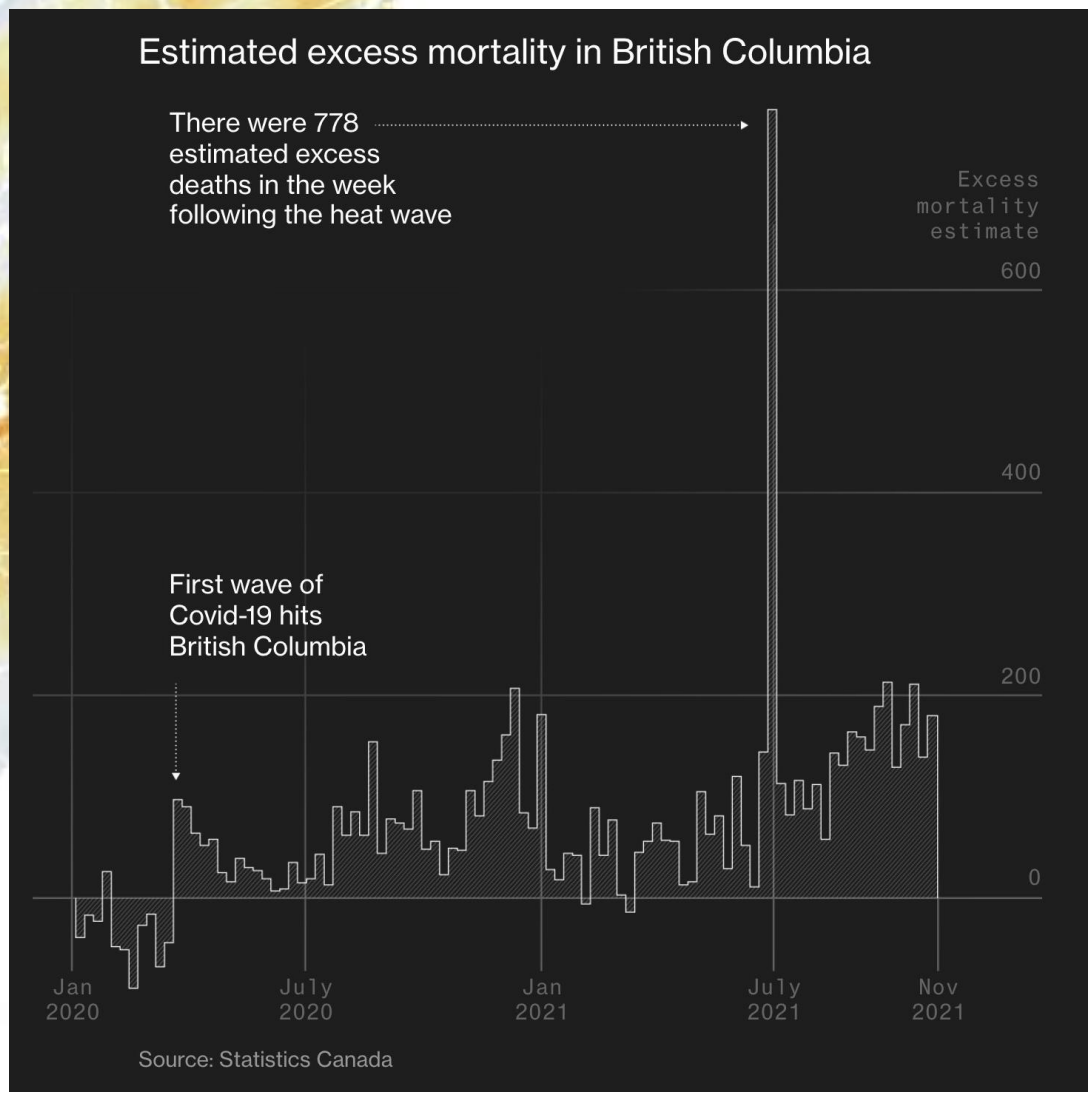
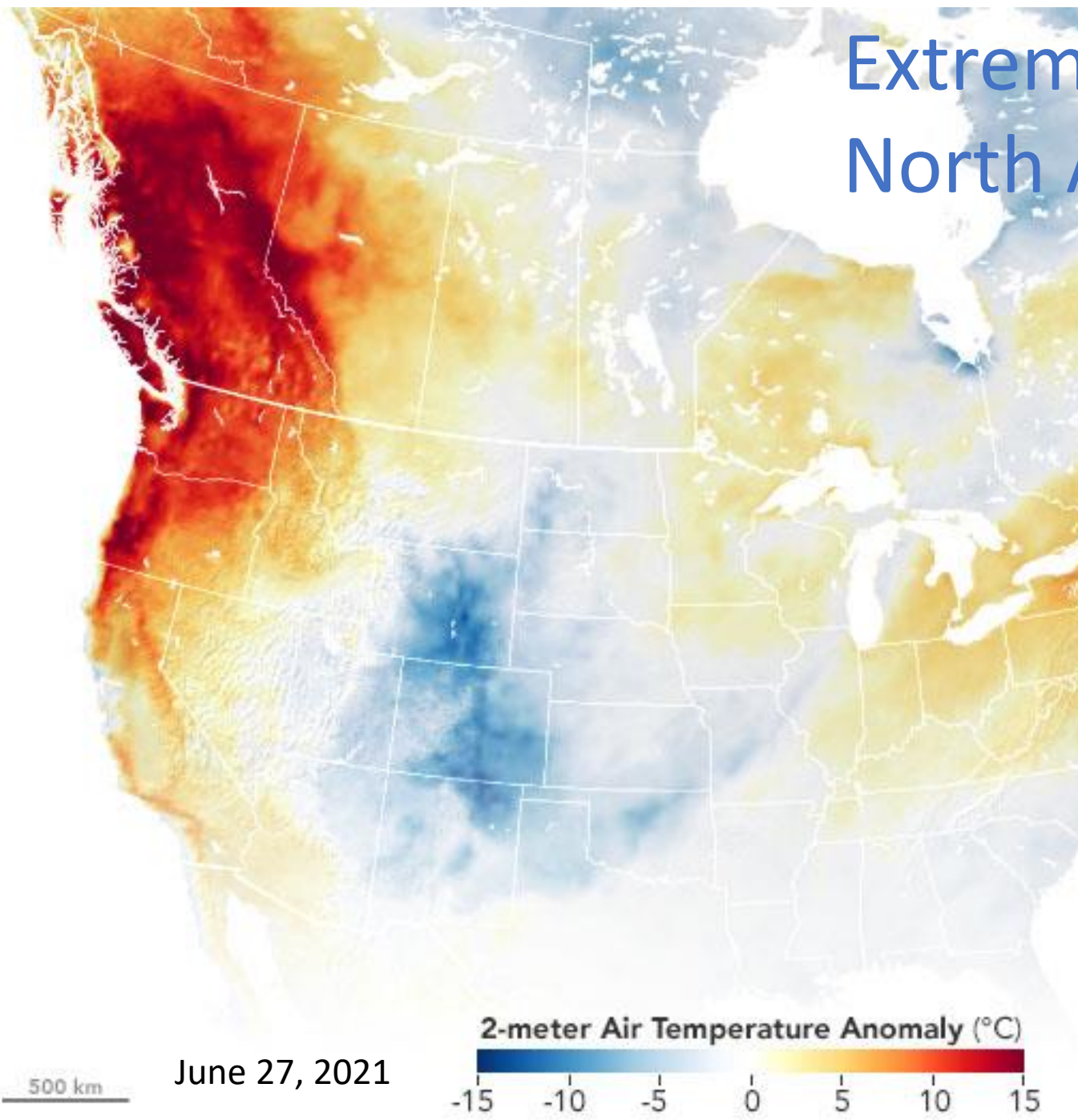
Being a (climate) scientist in the unfolding climate crisis

Veronika Huber

ISIMIP/PROCLIAS Cross-Sectoral Meeting Potsdam

18 May 2022

Extreme heat wave in Western North America, June 2021



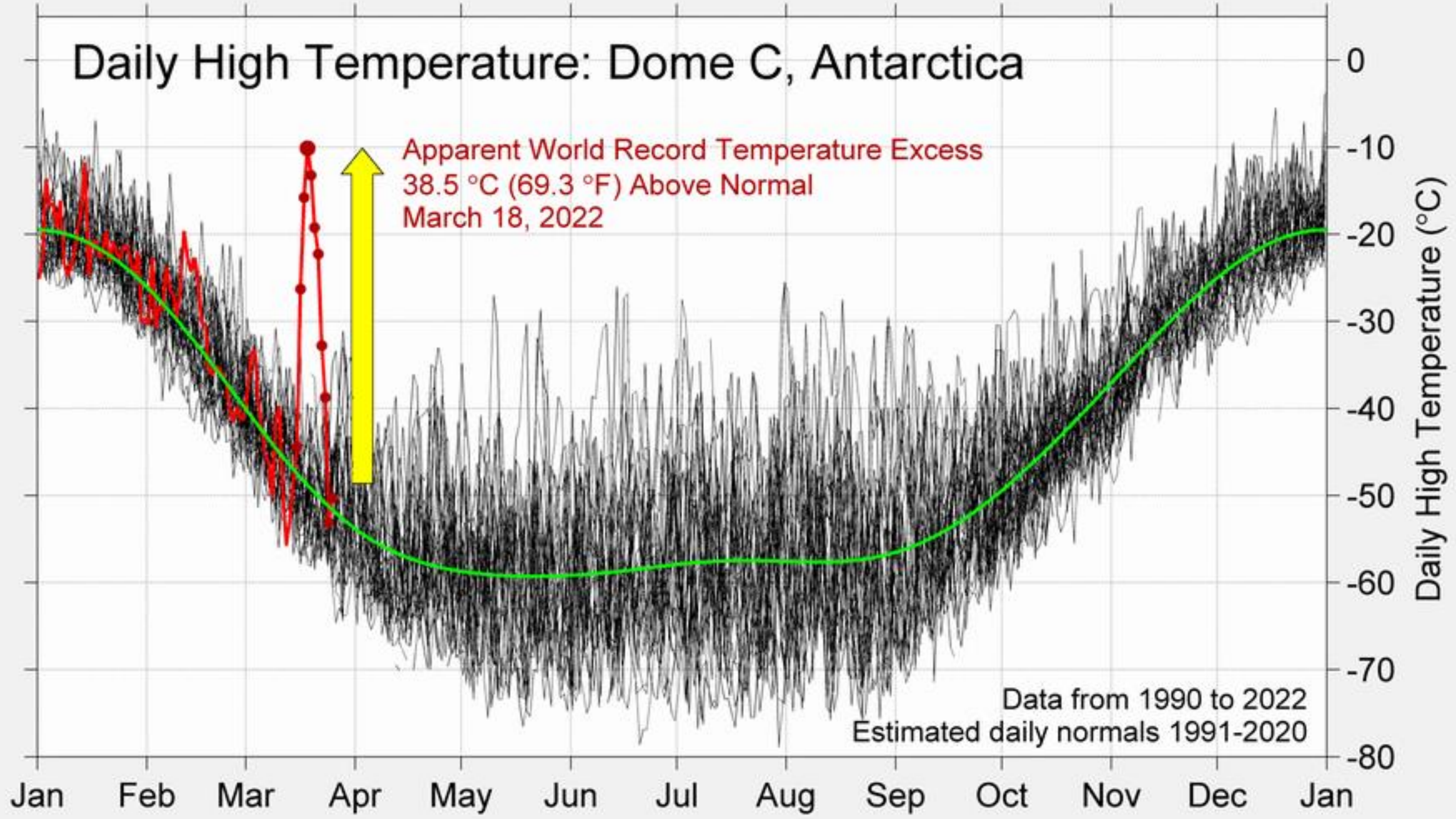
Flooding Western Germany, July 2021



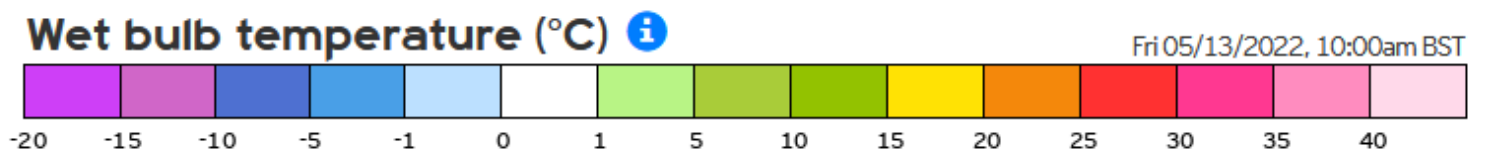
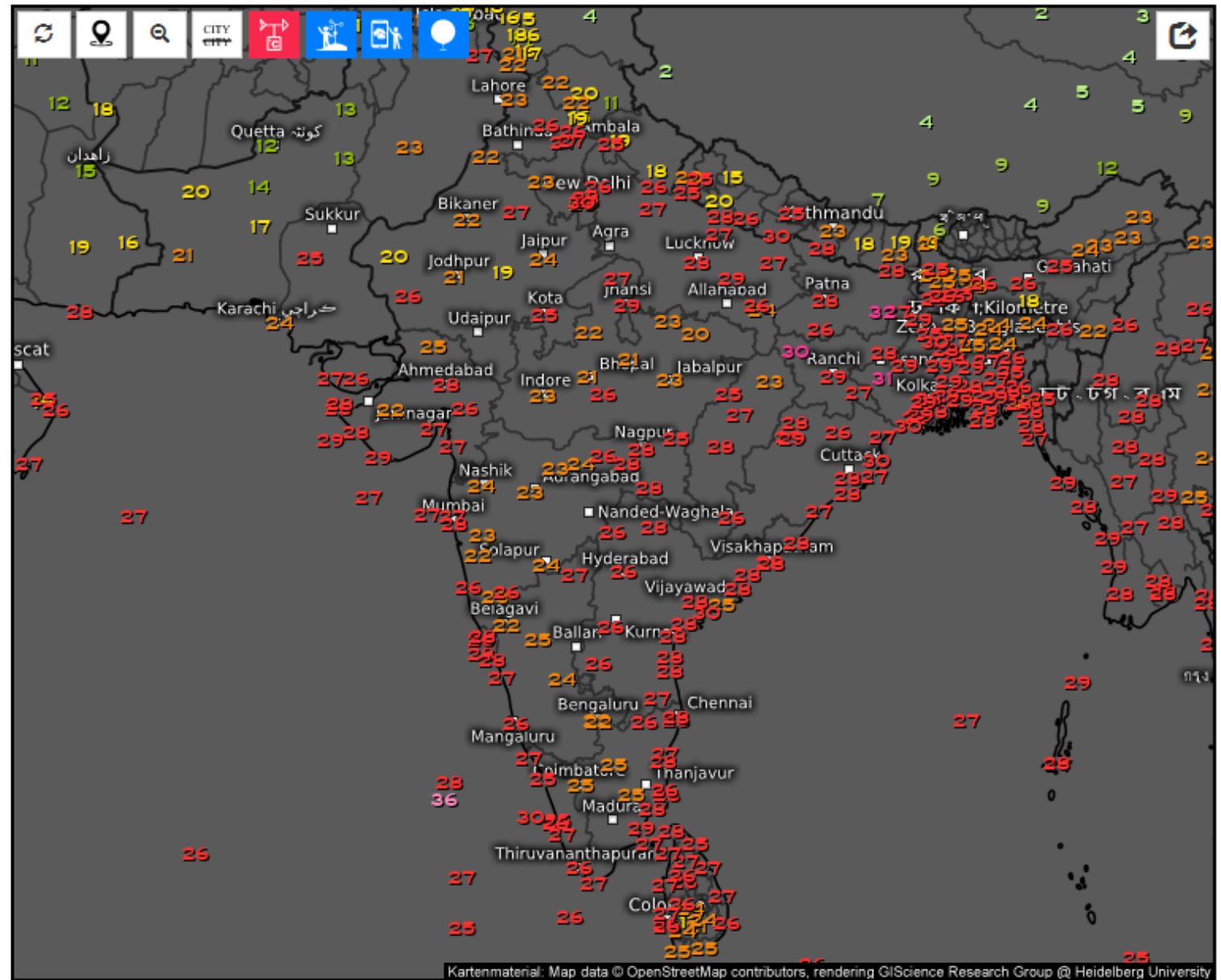
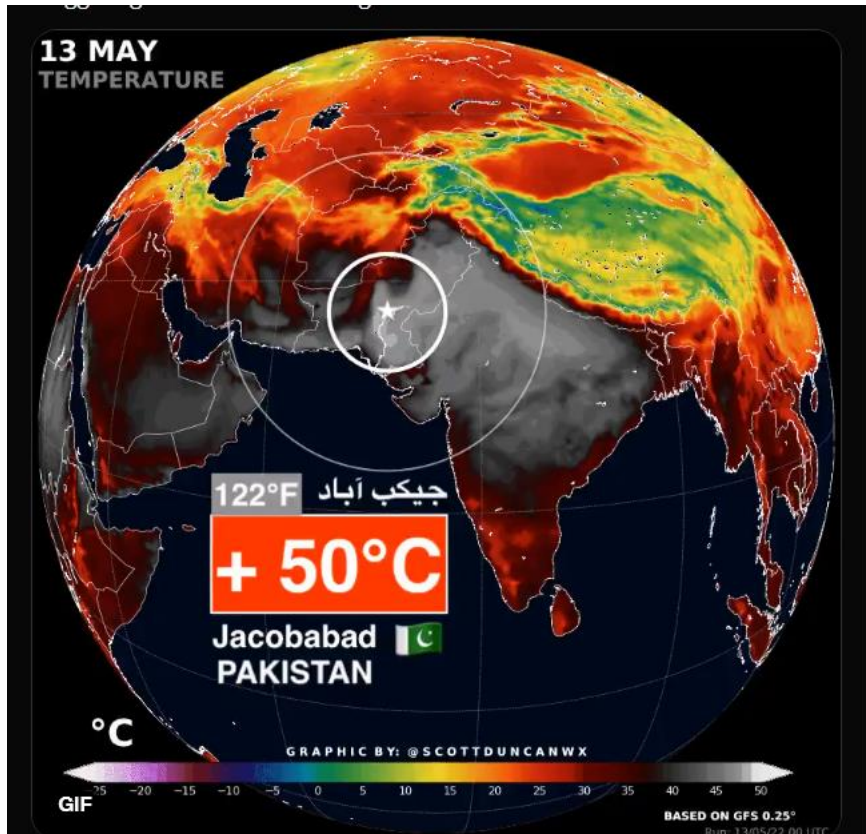
Flooding South Africa, April 2022



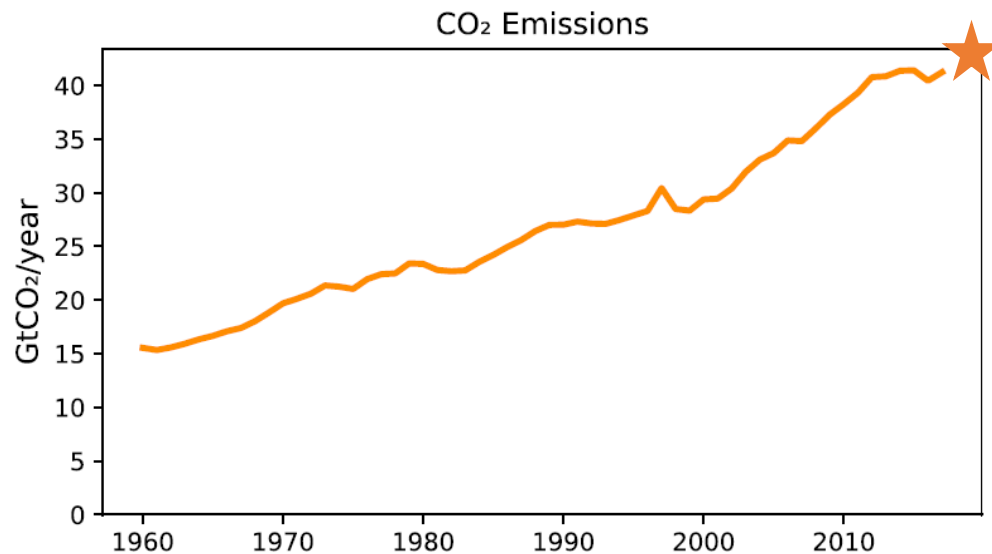
Daily High Temperature: Dome C, Antarctica



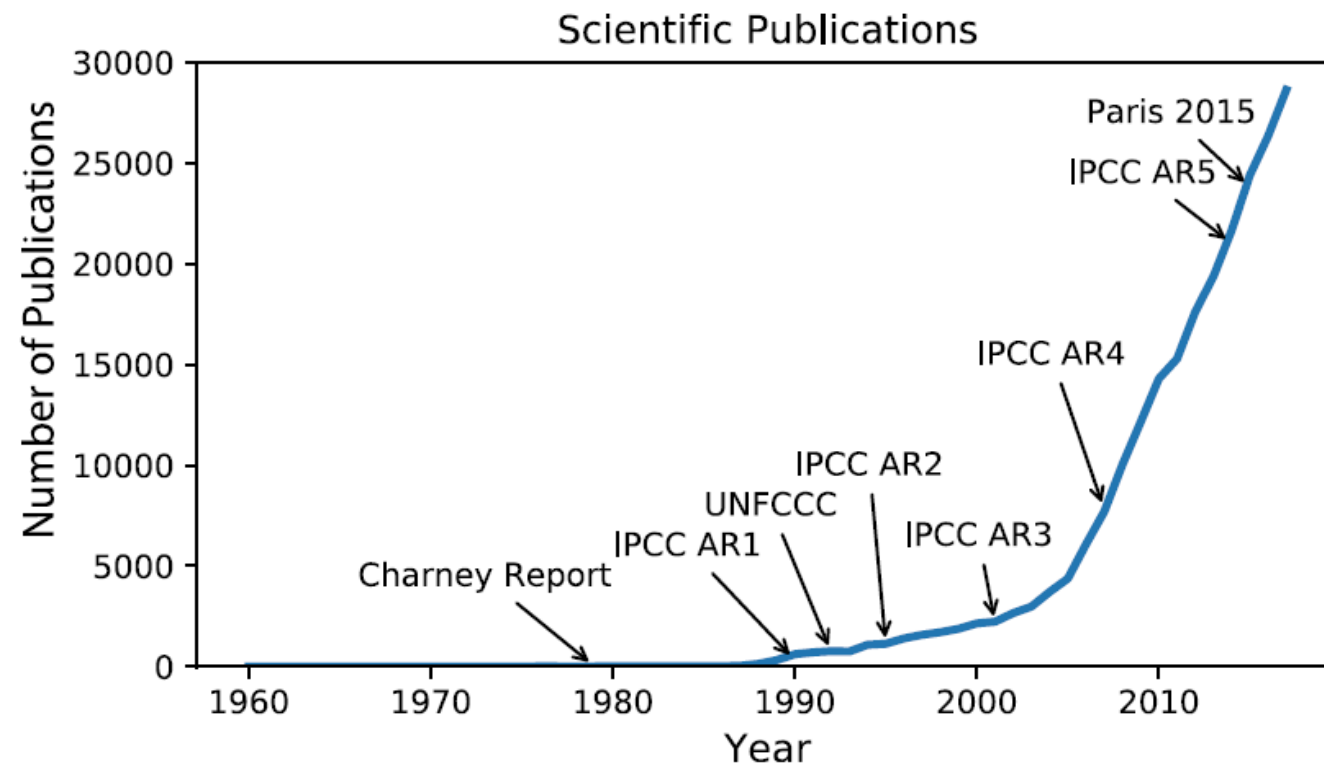
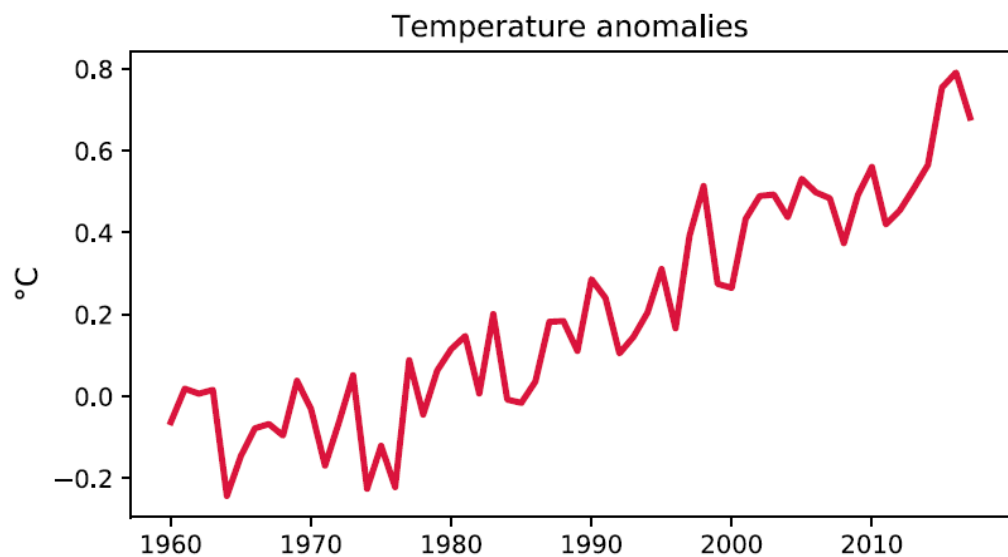
Heat wave in India and Pakistan, April-May 2022



The increasing gap between knowledge and action



2021: highest global fossil CO₂ emissions ever (IEA 2021)



Knutti et al. 2019 One Earth Commentary

What now?



How can science contribute to closing the knowledge-action gap in climate change?

5 suggestions from Reto Knutti:

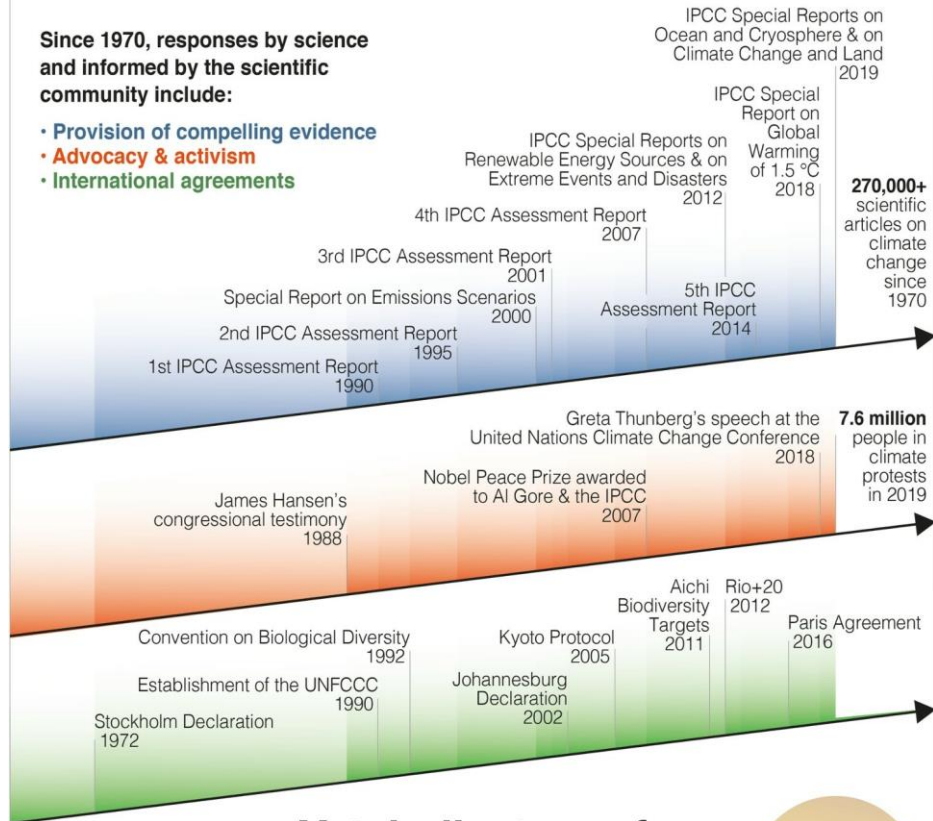
- 1) **Climate services**: more local, more near term information relevant for adaptation of infrastructure and agriculture, and societal risk management
- 2) **Interdisciplinary approaches** in the context of sustainable development
- 3) Research on **solutions with co-benefits**
- 4) Quantify **uncertainties** in all aspects of science for robust decision making
- 5) Engaging with **humanities and social sciences**, accounting for the „human factor“ (irrational decision making, belief systems, etc)

Global change is occurring

The scientific community has responded

Since 1970, responses by science and informed by the scientific community include:

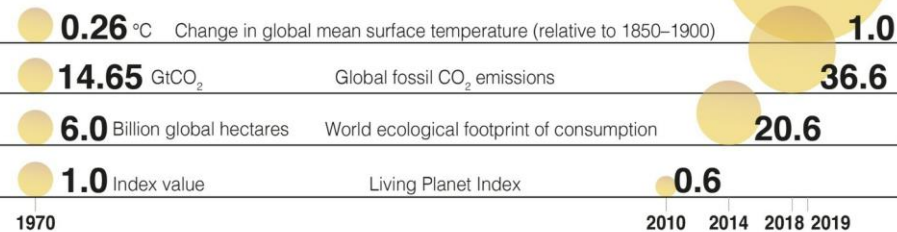
- Provision of compelling evidence
- Advocacy & activism
- International agreements



270,000+ scientific articles on climate change since 1970

7.6 million people in climate protests in 2019

Yet, indicators of adverse change continue*



* Sources: IPCC 2018; WWF 2018; Friedlingstein *et al.* 2019

Call for a moratorium on climate change research

“We [...] call for a halt to further IPCC assessments. We call for a moratorium on climate change research until governments are willing to fulfil their responsibilities in good faith and urgently mobilize coordinated action from the local to global levels.”

Glavovic et al. 2021 Climate and Development



My personal
reflections on 3
options for getting
active beyond the
science

Option 1: Communication – Expand your audience

- Organize a talk within your local community, e.g., for the parents of your kids' school, at the sports club, at the church, at your favourite bar,...
- Use social media (?)
- Make use of opportunities arising in conversations with friends, neighbours, family members, ...



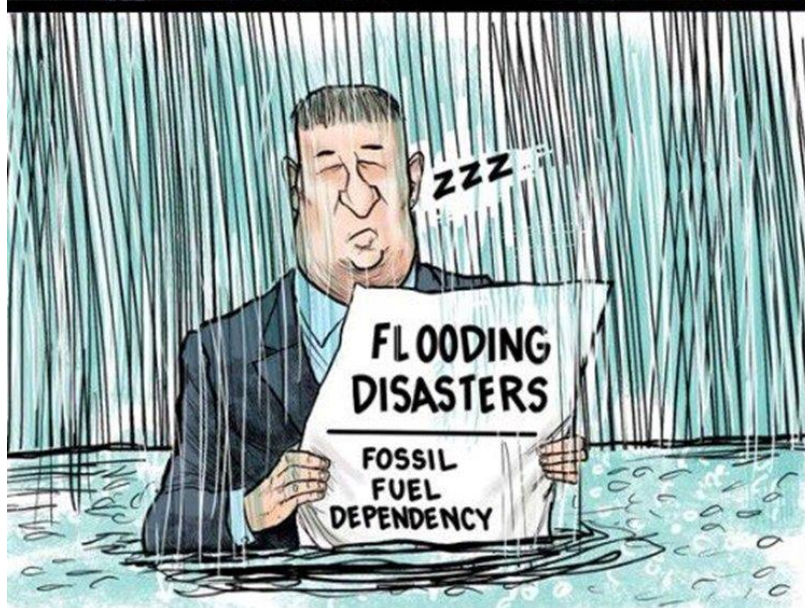
Con 30 años a 50°C

¿Cómo proteger a nuestr@s hij@s de la crisis climática?

JUEVES 12 DE MAYO a las 17:00

Dónde: **CEIP HUERTA SANTA MARINA (Biblioteca)**
C. Bordador Rodríguez Ojeda, 10

Por Veronika Hubber - bióloga, investigadora y madre & María Victoria Román - economista, investigadora y madre



Let's seek advice
on communication
from psychologists



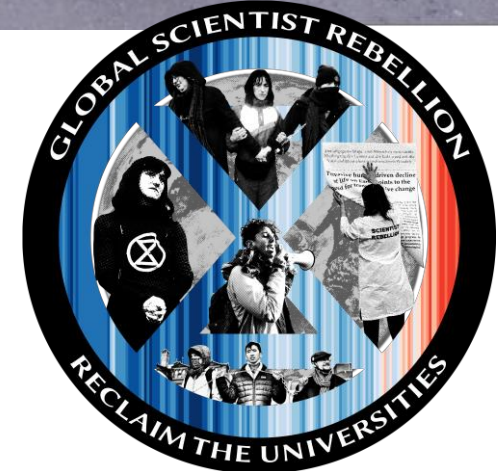
Option 2: Engage in climate activism



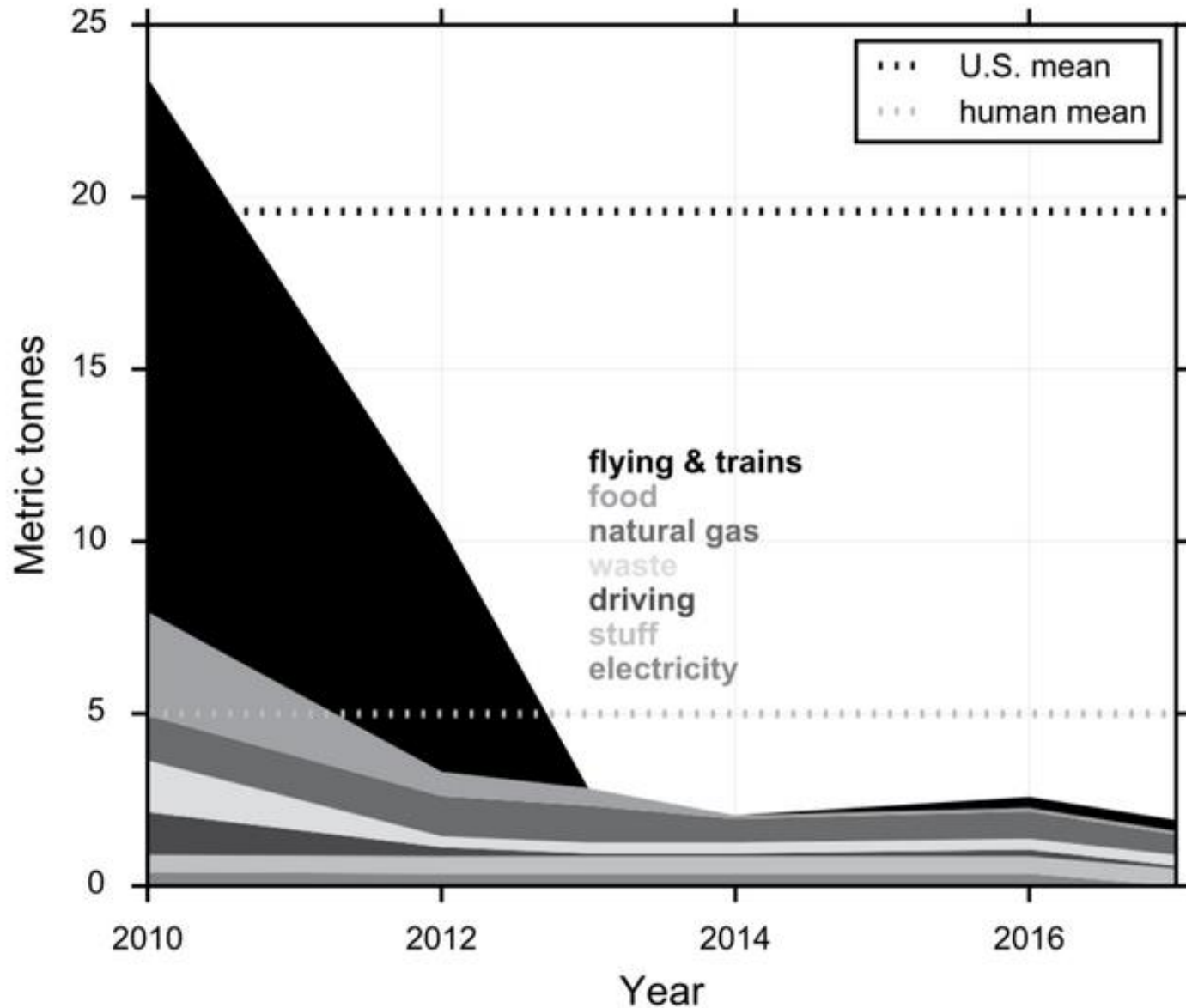
RESCOOP.EU



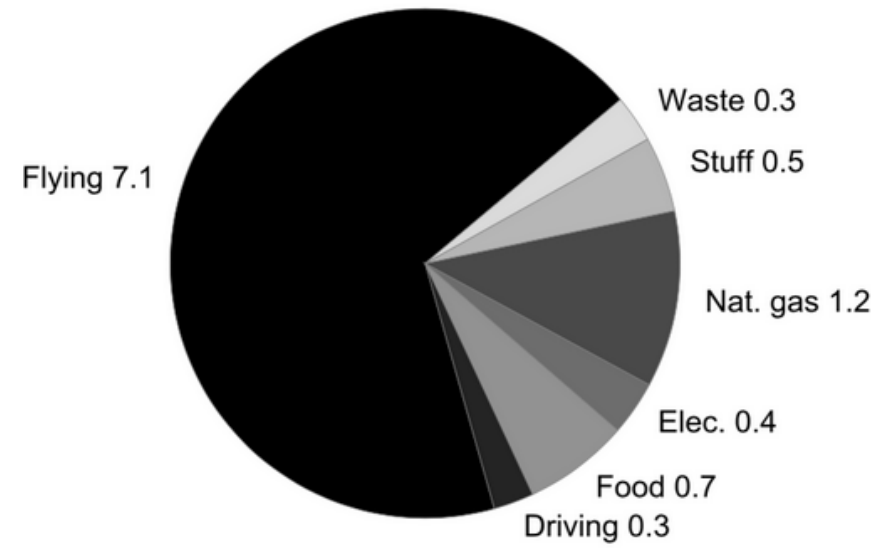
Citizen energy cooperatives



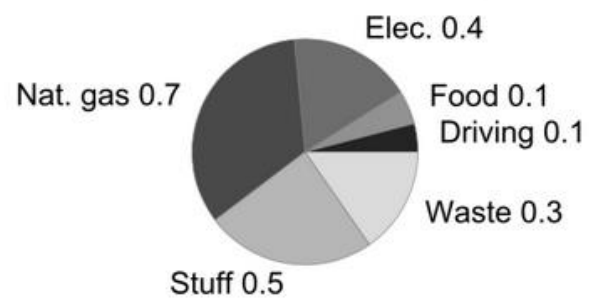
Option 3: Be honest about your carbon footprint



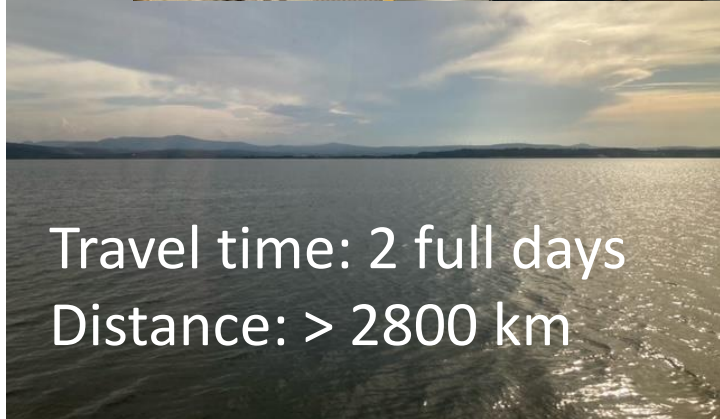
My 2012 emissions:
10 tonnes CO₂e



My 2014 emissions:
2.1 tonnes CO₂e



My train ride from Sevilla to Potsdam



Orange F 4G 12:12 74 %

Reiseplan



Travel time: 2 full days
Distance: > 2800 km

Seen from the train, close to Lyon, France, 15 May 2022



One idea: Documenting our train travel on the PROCLIAS website

72,
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Ricardo Morte Ferrer
Steve Melia
Angelica Lim
Women Sord...

PROCESS-BASED MODELS FOR CLIMATE IMPACT ATTRIBUTION ACROSS SECTORS

Many complex process-based models are available to project future climate impacts. Yet, the current climate impact research community is fragmented, modeling mostly individual systems. This lack of

bertragen der Daten von www.sfu.ca...

[Ricardo Morte Ferrer](#) [Steve Melia](#) [Angelica Lim](#)

Referree
report
deadline

Paper
revision
deadline

Evaluation
report
deadline



Proposal
deadline

Exam
marking
deadline

And all the
other stuff in
my life....
deadlines



Discussion points

Given the knowledge-action gap, and the increasing manifestation of climate impacts all around us, should we

- Just keep on as before?
- Change the science we are doing (e.g., more near term and local)?
- Invest (even) more time in communication and communication training?
- Engage in climate activism or even civil disobedience?
- Reduce our own carbon footprints by e.g. flying less?
- Do anything else that has not been mentioned?

Thank you!

If you want to get involved please contact:

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Ann van Griensven: Ann.Van.Griensven@vub.be