



**Sant'Anna**

Scuola Universitaria Superiore Pisa

**Seasonal  
Schools**

*Partecipa al seminario per  
conoscere meglio il programma e  
i docenti del corso*

**MERCOLEDÌ 27 GENNAIO**  
**ore 15,00**

*La diretta sulla pagina Facebook  
della Scuola Superiore Sant'Anna*



*Scuola Superiore Sant'Anna*

# THE ETHICS OF CLIMATE CHANGE

Un corso intensivo per analizzare il cambiamento climatico in  
modo innovativo e interdisciplinare





# THE ETHICS OF CLIMATE CHANGE. RESHAPING RESPONSIBILITIES FOR PRESENT AND FUTURE GENERATIONS



- **PERIOD:** February 22nd – 26th, 2021
- **DEADLINE FOR REGISTRATION:** February 3rd, 2021
- **LANGUAGE:** English
- **WHERE:** online
- **ECTS:** 3 credits
- **PARTICIPANTS:** undergraduate, postgraduate and PhD students, on track relative to the examinations required by their educational institutions, with a high average examination mark and with a self-certified knowledge of the teaching language at least B2 level



# THE ETHICS OF CLIMATE CHANGE. RESHAPING RESPONSIBILITIES FOR PRESENT AND FUTURE GENERATIONS



- **TUITION FEE:** determined according to the valid ISEE certification submitted
- **450€ PRIZE** (provided by Fondazione Talento all'Opera Onlus and Fondazione EY): to the 3 best performing participants
- **10% DISCOUNT:** for students enrolled in an affiliated university

**AFFILIATED INSTITUTIONS:** University of Catania, University of Tuscia, University of Trento, Fondazione Onaosi, University of Messina, University of Macerata, University of Camerino, University of Calabria, Conferenza dei Collegi Universitari di Merito

ADDITIONAL DETAILS and the online APPLICATION TOOL are available at:  
[www.santannapisa.it/en/ethics-climate-change-reshaping-responsibilities-present-and-future-generations](http://www.santannapisa.it/en/ethics-climate-change-reshaping-responsibilities-present-and-future-generations)

CONTACTS: [seasonalschools@santannapisa.it](mailto:seasonalschools@santannapisa.it)



# THE ETHICS OF CLIMATE CHANGE. RESHAPING RESPONSIBILITIES FOR PRESENT AND FUTURE GENERATIONS



- **COORDINATOR:**

Prof. Alberto Pirni (Sant'Anna School of Advanced Studies)

- **KEY TEACHING STAFF:**

Sant'Anna School of Advanced Studies → Prof. Roberto Buizza, Dr. Francesca Capone, Prof. Franco Flandoli, Prof. Barbara Henry, Prof. David Natali

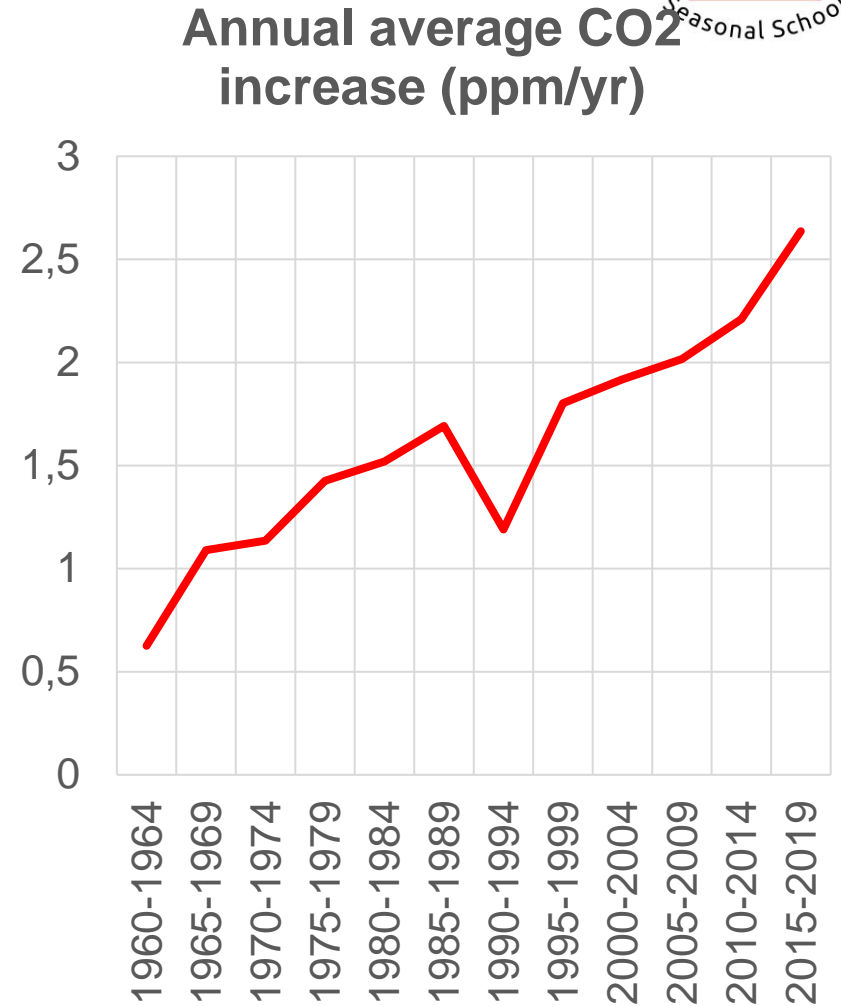
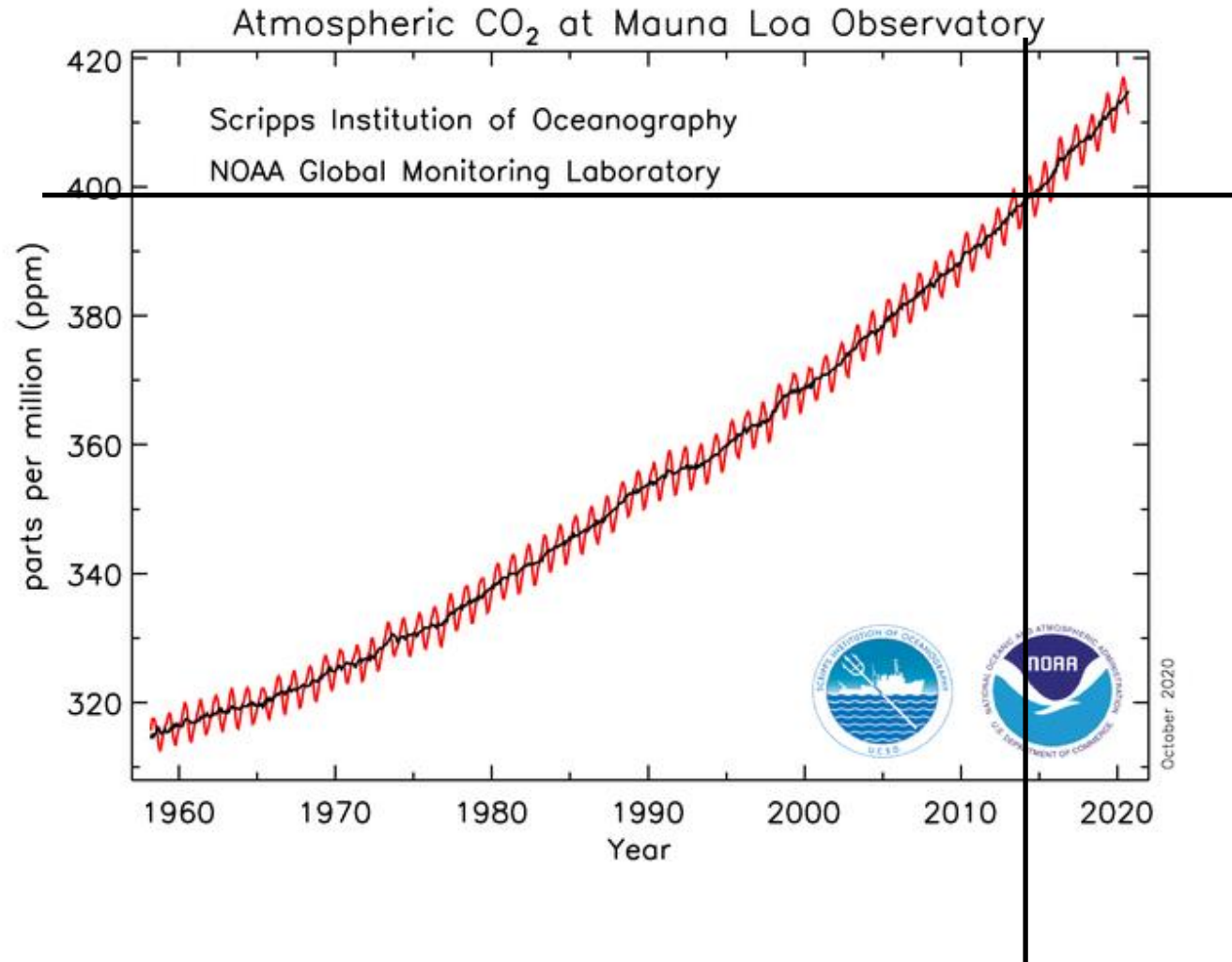
University of Turin → Prof. Tiziana Andina, Dr. Fausto Corvino, Prof. Maurizio Ferraris

San Raffaele University – IUSS → Dr. Francesca Pongiglione

University of Graz → Prof. Lukas Meyer



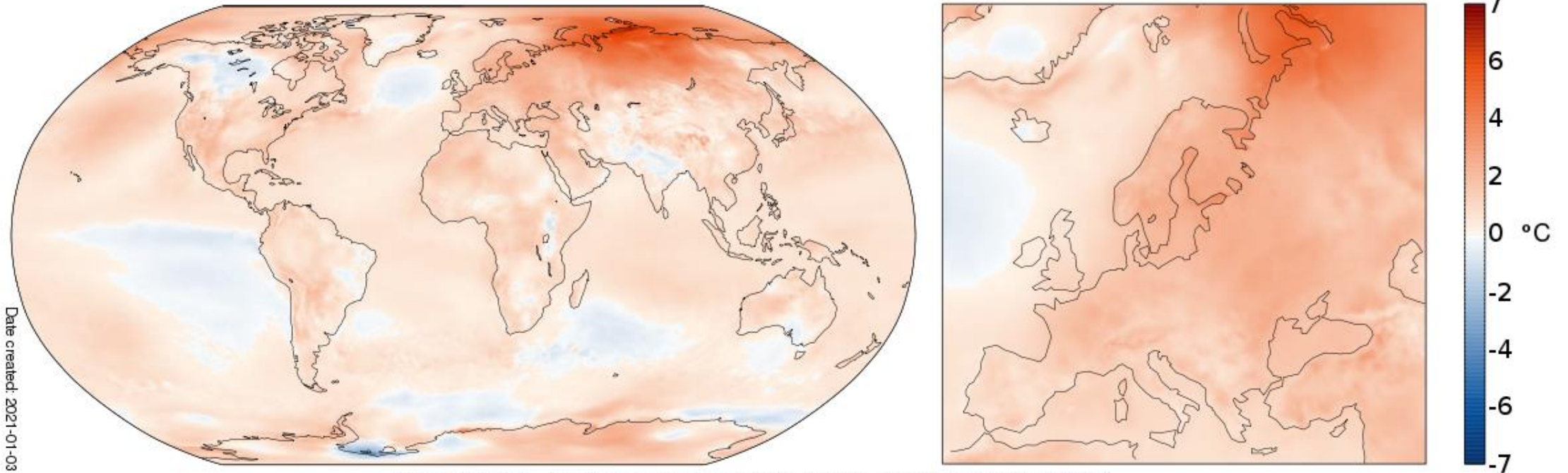
# CO<sub>2</sub>: the concentration increases faster



(from Scripps/NOAA Mauna Loa Obs) 5

# 2020 warmest year (as 2016) since 1979

Surface air temperature anomaly for January 2020 to December 2020

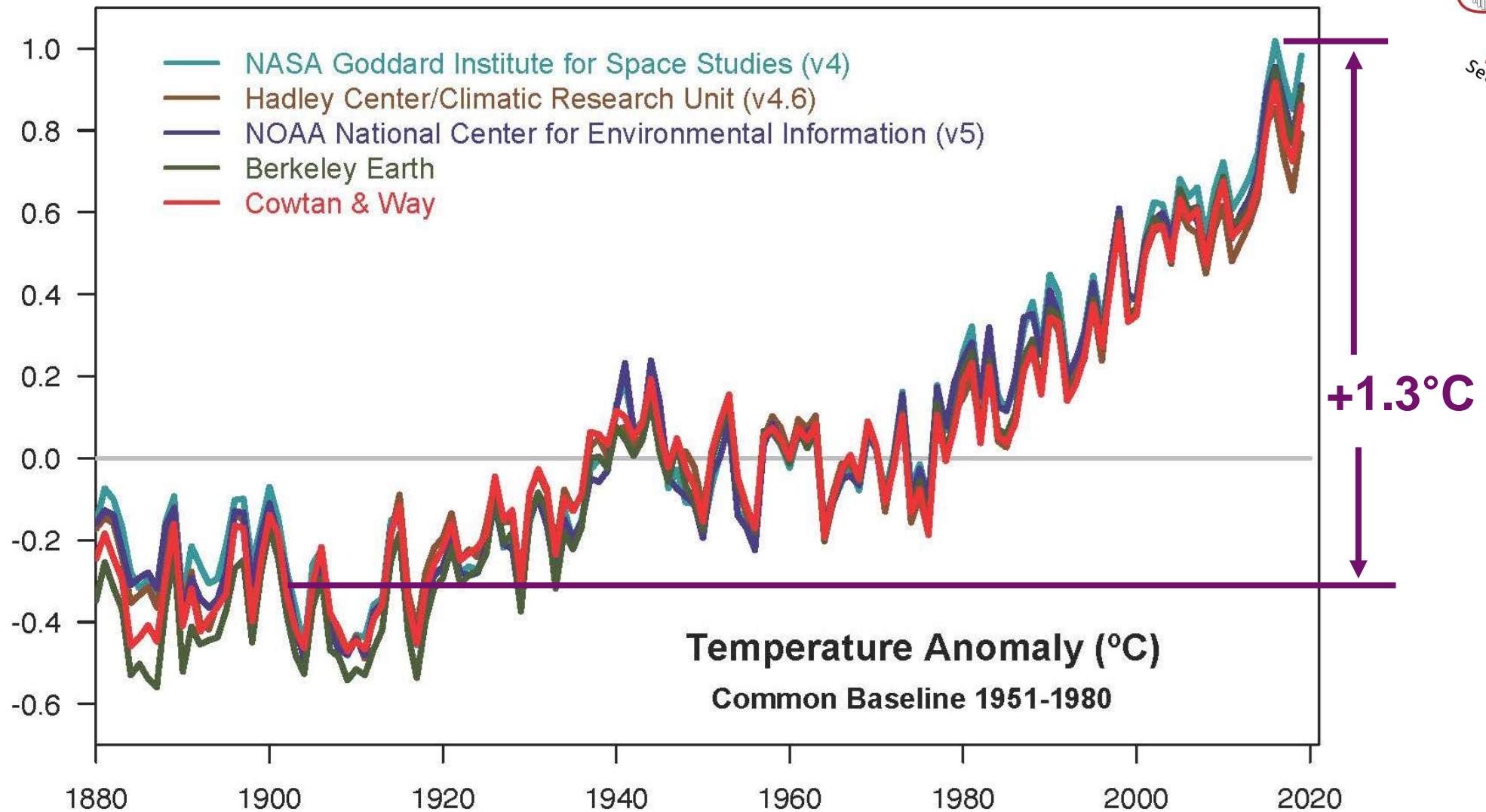


Date created: 2021-01-03

(Data: ERA5. Reference period: 1981-2010. Credit: C3S/ECMWF)

(Source: Copernicus Climate Change Service)

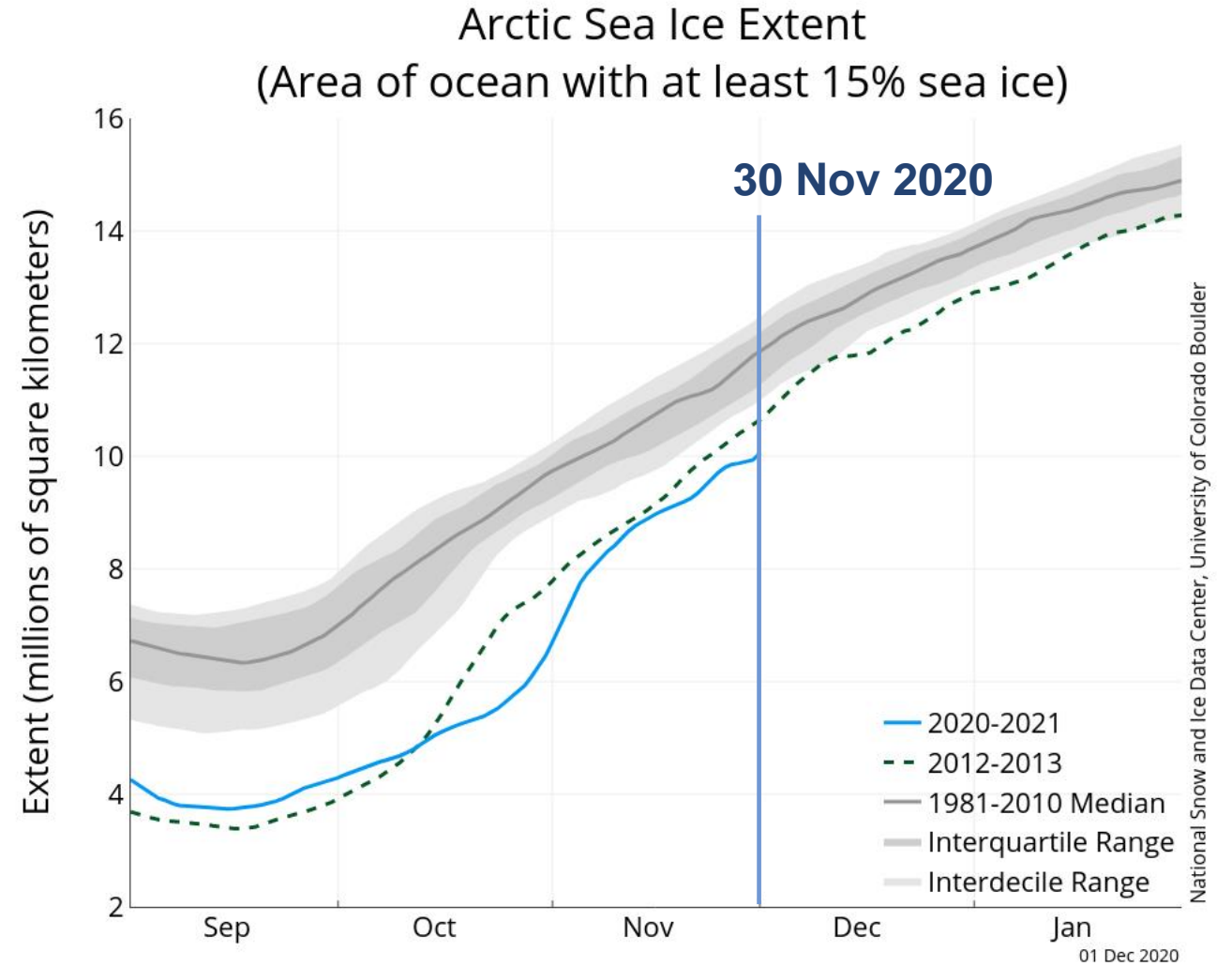
# ~ +1.3°C: the climate continues to warm



(Source: NASA)



# The Arctic sea ice continues to melt

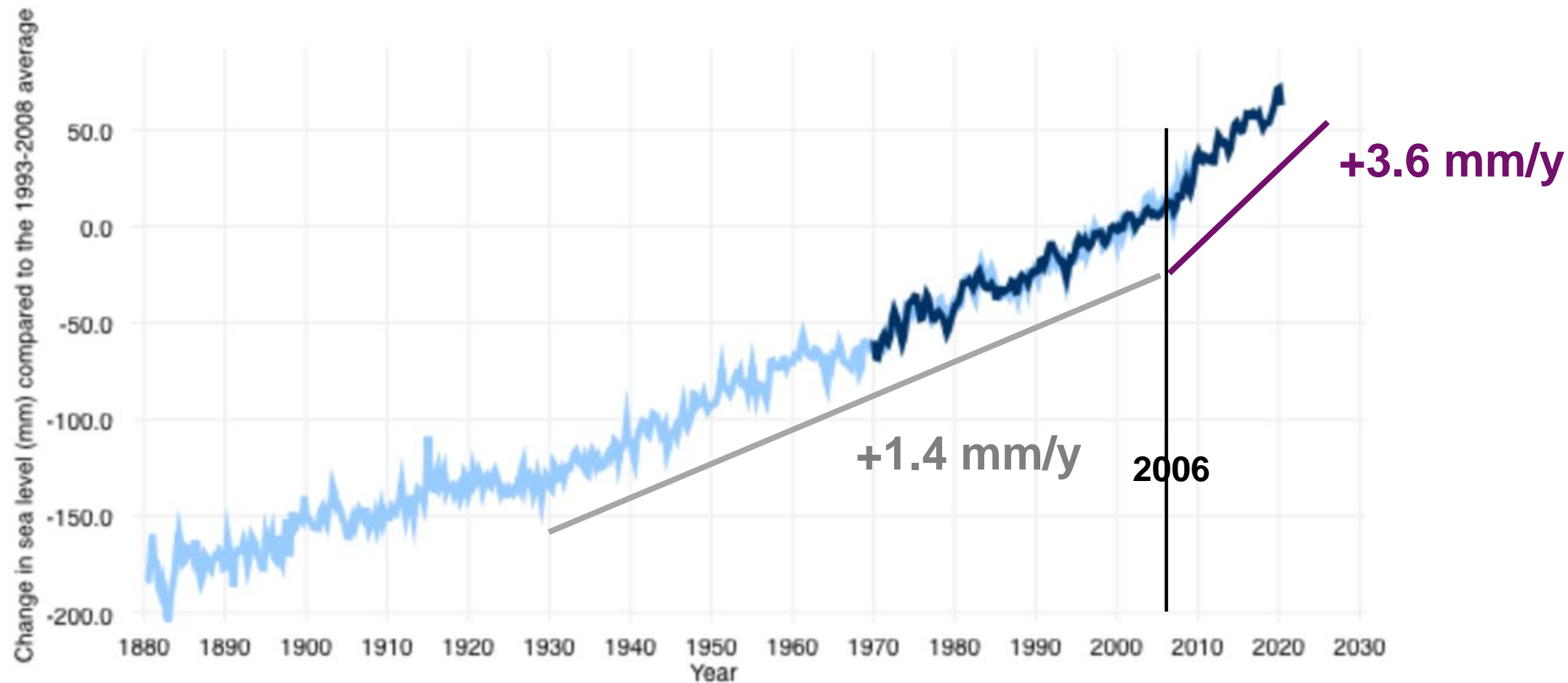


(Source: NSIDC)



# Sea-level rise is accelerating

## Sea level since 1880



(Source: [www.climate.org](http://www.climate.org))

# Key questions

- The future climate: how will it be?
- De-carbonization and economic growth: can we conciliate the two?
- Societal change: can we introduce it before it is too late?
- Responsibilities: who could/should move first?
- Inter-generational justice: is this generation 'fit' to take the right decisions?
- ...

# Framing the Ethical approach to Climate Change: Two Fundamental Challenges



# The Ethical implications of Climate Change

- **The scientific objective:** if humanity wants to have a reasonable chance of not dramatically and irreversibly changing the climate, it must keep its cumulative CO<sub>2</sub> emissions within a precise limit: a remaining budget of about 420 GtCO<sub>2</sub> for a 66% chance of limiting global warming to 1.5°C above pre-industrial levels (IPCC, 2019)

## ***Three things to do***

- 1) *Mitigation:* reducing GHGs emissions and/or enlarging carbon sinks (e.g. forests), until we reach net-zero carbon neutrality
- 2) *Adaptation:* given that some climate change is already inevitable, we should find ways to protect the most vulnerable (e.g., adapting buildings to extreme weather events, installing seawalls, creating crops that can withstand the rains, and so on...)
- 3) *Compensation:* when it is too late for mitigation, and adaptation is unavailable (or too expensive), someone should compensate those who suffer the undeserved effects of climate change

- **The main ethical question:** who should shoulder the burden of climate action?



# Global, individual and intergenerational responsibility for climate action

***The atmosphere's natural capacity to absorb greenhouse gases is a global and intergenerational common good □ is there a fair and sustainable way to regulate its use?***

*The first empirical premise:* Some countries have a higher historical emissions record than others, some countries now have a greater capacity to invest in green technologies than others, some countries have benefited more from their emissions than others (e.g. consumption-based vs. production-based accounting):

*The first ethical challenge:* how to achieve a fair and sustainable distribution of emissions that will allow net-zero carbon neutrality to be reached in a short time.

**Some (examples of the) ethical questions that will be addressed in the seasonal school**

- do historical emissions play a role in deciding emission reductions today? (do those who have emitted more in the past have a greater responsibility to reduce their environmental impact today)?
- Is it reasonable to say that all persons now alive have an equal right to emit?
- what are the climate action responsibilities of those countries that have a high emission record but have internal situations of poverty (both poverty in the broad sense and energy poverty)

# Global, individual and intergenerational responsibility for climate action

***The atmosphere's natural capacity to absorb greenhouse gases is a global and intergenerational common good □ is there a fair and sustainable way to regulate its use?***

- The second empirical premise: No country, or coalition of countries, let alone a coalition of individuals, can unilaterally stop climate change or prevent others from increasing the concentration of greenhouse gases in the atmosphere:

“The group causing climate change is the largest possible collective and also lacks the structure or decision-making capability of a collective, such as a team, a corporation, or even a nation” (M. Banks, 2013)

The second ethical challenge: how do we obtain individual/collective cooperation on climate action and prevent freeriding?

**Some (examples of the) ethical questions that will be addressed in the seasonal school**

- What are the individual responsibilities of climate action with respect to a problem that can only be solved collectively?
- How do individual duties of climate responsibility, both intra- and intergenerational, reconcile with other duties towards the closer social groups to which one belongs?



## **The Seasonal School**

**«The Ethics of Climate Change: Reshaping  
Responsibilities for Present and Future  
Generations»**

**A comprehensive outlook to the program**

THE ETHICS OF CLIMATE CHANGE. Reshaping Responsibilities for Present and Future Generations					
Monday 22/02	Tuesday 23/02	Wednesday 24/02	Thursday 25/02	Friday 26/02	
<b>Legenda:</b> Opening and closing sessions Co-speaker class Workshop Role-playing Sharing-activities	<b>III.a – Social objects and transgenerationality</b> (09:00-10:30)	<b>IV.a – Ethics of climate change I: Individual and global duties</b> (09:00-10:30)	<b>V.a – Climate Global Challenges: Politics &amp; Welfare</b> (09:00-10:30)	<b>VI.a – Ethics of climate change II: Intergenerational justice</b> (09:00-10:30)	
<b>Welcome</b> (11:00 – 12:00)	<b>III.b – Individual reading</b> (10:30-11-30)	<b>IV.b – Individual reading</b> (10:30-11-30)	<b>V.b. – Individual reading</b> (10:30-11-30)	<b>VI.b – Individual reading</b> (10:30-11-30)	
<b>Ice breaking</b> (12:00 – 13:00)	<b>III.c – Debate</b> (11:30-12:30)	<b>IV.c – Debate</b> (11:30-12:30)	<b>V.c. – Debate</b> (11:30-12:30)	<b>VI.c. – Debate</b> (11:30-12:30)	
<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	
<b>I – Scientific evidence of Climate Change</b> (14:00 – 16:00)	<b>Workshop 1: Climate Change and social sciences</b> (14:00–17:30)	<b>Roundtable 2: Communicating the Ethics of Climate Change</b> (14:00–18:00)	<b>Workshop 2: EU Green Deal: Transport and Energy, from Brussels to the Cities</b> (14:00–17:30)	<b>Role Playing 2: Ethical Social Actors: A climate change negotiation: beyond gridlock</b> (14:00 – 18:00)	
<b>II – Climate Change, Diplomacy and Regulation</b> (17:00–19:00)				<b>Final exam Closing</b> (18:00 – 19:30)	
<b>Roundtable 1: Sharing Experiences in CC Research</b> (21:00–23:00)		<b>Role Playing 1: CC and Ethical Dilemmas: An Oxford-style debate</b> (21:00 – 23:00)			