#SDG200 - Ocean-Climate-Society: Sustainability summer course

One Ocean Expedition

Setting Sail for the Future
August 2021 – April 2023

UNESCO
United Nations
Educational, Scientific and
Cultural Organization

Intergovernmental
Oceanographic
Commission

2021
2030
United Nations Decade
of Ocean Science
for Sustainable Development
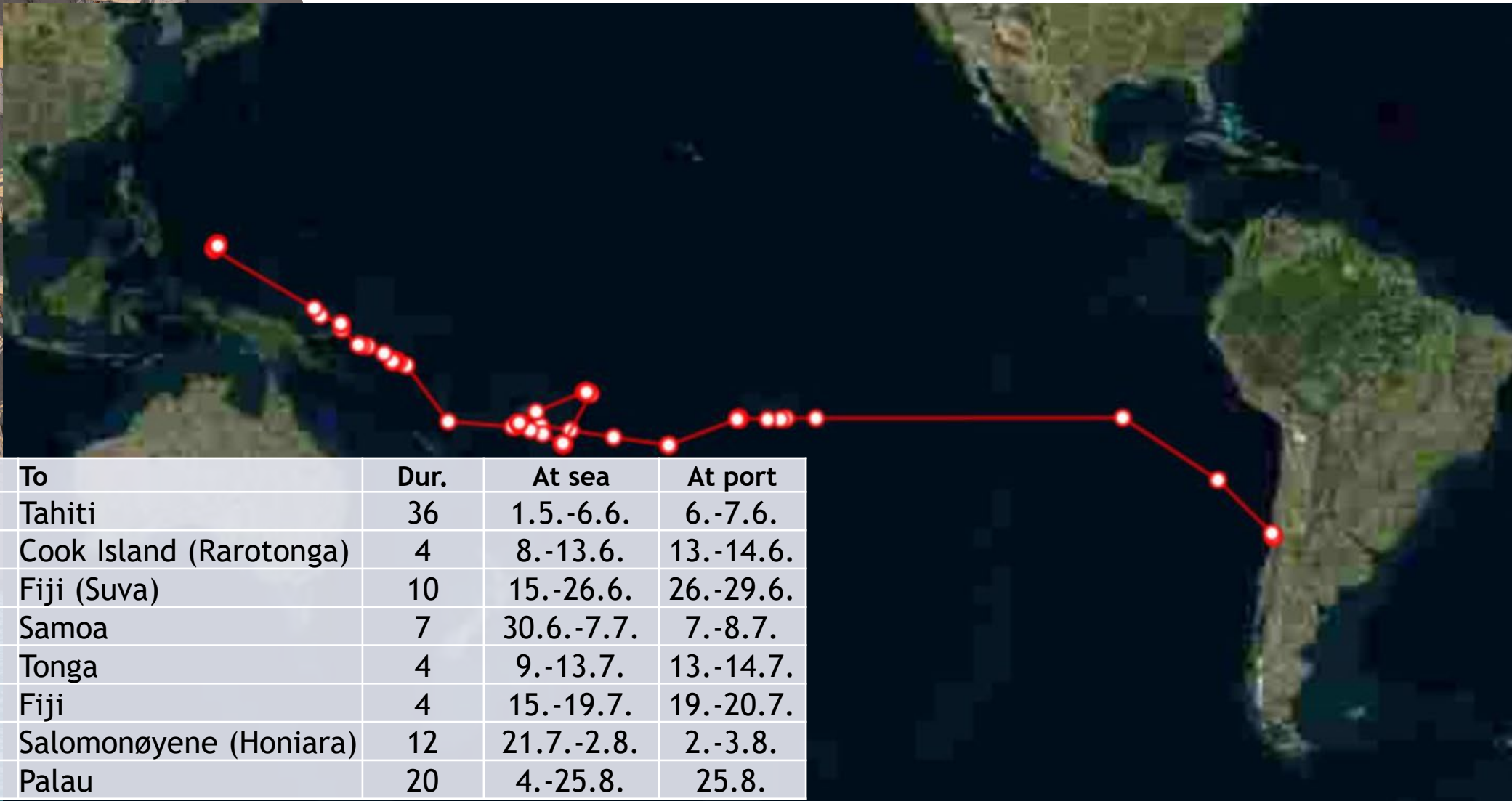
Utdanningsutvalget 1. september 2021

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katja.enberg@uib.no

SDG200
Ocean-Climate-Society: Sustainability summer course
- 4 months (1.5.-25.8.2022)

Leg	From	To	Dur.	At sea	At port
1	Valparaiso	Tahiti	36	1.5.-6.6.	6.-7.6.
2	Tahiti	Cook Island (Rarotonga)	4	8.-13.6.	13.-14.6.
3	Cook Island	Fiji (Suva)	10	15.-26.6.	26.-29.6.
4	Fiji (Suva)	Samoa	7	30.6.-7.7.	7.-8.7.
5	Samoa	Tonga	4	9.-13.7.	13.-14.7.
6	Tonga	Fiji	4	15.-19.7.	19.-20.7.
7	Fiji	Salomonøyene (Honiara)	12	21.7.-2.8.	2.-3.8.
8	Salomonøyene	Palau	20	4.-25.8.	25.8.

SDG200

Ocean-Climate-Society: Sustainability summer course

- 4 months (1.5.-25.8.2022)

- 30 ECTS

- 90 students

- Open to students from all UiB faculties

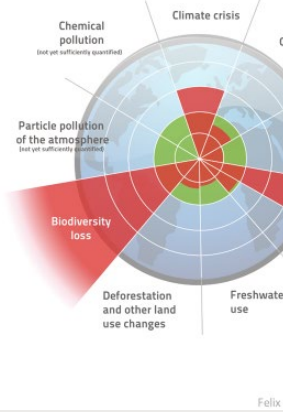 + selected partner universities

Students need

- 60 ECTS from a university

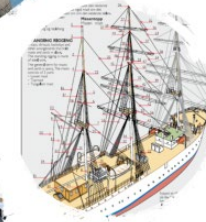- approved seamen's health certificate

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Planetary boundaries

- Explain how **planetary boundaries** define the safe operating space for humanity.

- Apply concepts of sustainability and planetary boundaries to develop a **sustainability solution**.

Chemical pollution (not yet sufficiently quantified)

Climate crisis

Particle pollution of the atmosphere (not yet sufficiently quantified)

Biodiversity loss

Deforestation and other land use changes

Freshwater use

Felix

Humans: individuals, groups and societies

- Engage with the **sustainability challenges** in Agenda 2030, while acknowledging the role of **individual and collective actions**.

- Recognise and explain **connections** between **social, cultural, economic and environmental challenges** in achieving **socially just** and **sustainable societies**.
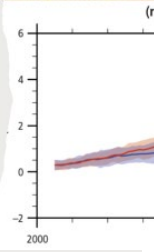
ECONOMICS
Production & Resourcing
Exchange & Transfer
Accounting & Regulation
Consumption & Use
Labour & Welfare
Technology & Infrastructure
Wealth & Distribution

Organization & Governance
Law & Justice
Communication & Movement
Representation & Negotiation
Security & Accord
Dialogue & Reconciliation
Ethics & Accountability
POLITICS

greenleft

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Sailing

- Explain basic **nauti** **expressions** includ ropes.
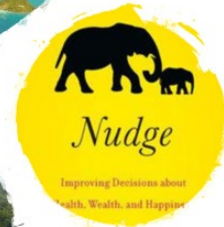
- **Participate** in sail s **basic navigation** an

Methods

- **Design a study** using **qualitative** and **quantitative** research methods, and explain how these are needed for finding **solutions** for sustainable development.

- Apply simple **models** of **climate** and **population dynamics**.

- Apply **natural, behavioural** and **social science methods** and **data** to evaluate **sustainability solutions** and their impacts.

- **Collect, interpret** and **communicate data** in the field.

Climate change

13 CLIMATE ACTION

- Explain the **greenhouse effect** and the relative importance of **natural and man-made emissions** for climate change in the past and the future.

- Recognise the human impacts on the **climate system** and assess the **risks** to local ecosystems and societies.

- Explain the **international frameworks**, including **legal**, for climate **assessment, adaption and mitigation**.

- **Assess** which **human activities** contribute most to climate change (on an individual, local, national and global level).

Humans: individuals, groups and societies

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Nudge
Improving Decisions about
ealth, Wealth, and Happin

- Apply **behavioural science** to understa attitudes and behaviours towards sustainable development

- Analyse **case studies** from the **Pacific r** including **regionalism, political agenda international treaties**, and **sustainabili** efforts.

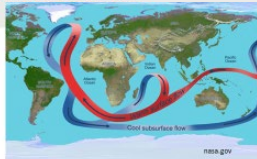- Analyse and contextualise **social pheno** that arise from **unsustainable practices**

Understanding research and policy

Meld. St. 22

Cetaceans and Tuna Fisheries in

ICES SGBIODIV REPORT 2009

Study Group on Bio

AMAP Assessment 2018: Arctic Ocean Acidification

- Explore **connections** and **contrasts** between **scientific literature** and the literature of **reports, conventions** and **popular science literature**.

- Analyse current **scientific knowledge** and identify **research needs** related to SDGs.
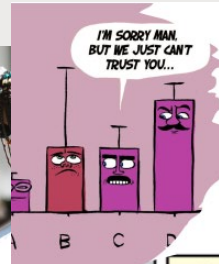
Ocean and its resources

nasa.gov

14 LIFE BELOW WATER

- Reflect upon the role of **oceans** in **global climate, ecological, oceanographic,** and **food systems**.

- Explain basic **ecological, oceanographic** and **meteorological** concepts, relating the latter two to global **wind systems** and **ocean currents**.

- Compare different **fisheries management** systems and approaches.

Humans: individuals, groups and societies

- Accommodate **individual differences** of **opinions** and **actions, cultural and social backgrounds** and **negotiate across these differences**.

- Contribute to **interdisciplinary teams** and value the **different roles** within such teams.

- Evaluate **current political processes** and ways to influence these at an individual, community and regional level.

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POLITIC

Understanding research and policy

I'M SORRY MAN, BUT WE JUST CAN'T TRUST YOU...

A B C D

THE ACADEMIC REVIEW PROCESS

IS IT GOOD???

- Identify differences between **scientific knowledge, values and opinions**, and critically evaluate different types of arguments in **societally relevant debates**.

- Provide **constructive feedback** and conduct **peer-reviews** verbally and in written form.

- Compose and use **scientifically valid arguments** in societally relevant debates.

- Analyze **uncertainty** and its role in **science** and **decision-making**.

How should the students learn?

- Active learning
- Several assignments, all obligatory
  - Essays (individual and group)
  - Presentations
  - Reflection diary
  - Communication/outreach as a learning activity
  - Popular science books
- Assignments (and whole teaching framework) needs to be flexible
- All assessment done when the students leave the ship

What do the prospective students say?

Student selection criteria

- CV and motivation letter

- Academic diversity and interdisciplinary approach

- International representation

- Gender diversity

Shortlisted candidates may be invited to an interview

We want to have an interdisciplinary and diverse student group!

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International students

Canada (OFI): 2

IOC OTGA, Pacific: 5

South Africa (INTPART): 5-6

South Africa (IAU): 1

Uganda (Global Challenges): 5

Argus: currently 2

≥ 20

Timeline

September 1st: Søknadsweb opens

October 1st: application deadline

December 1st: applicants informed of the decision

December 15th: deadline to accept the offer

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Jeg håper dere kan støtte med

- rekruttering
- tilrettelegging

Links and Video

https://oneoceanexpedition.com/

https://www.uib.no/oneocean/

https://www.uib.no/en/course/SDG200

https://youtu.be/4d-w5Y1NFD0

https://youtu.be/KxJmWfptydc

https://youtu.be/meast8OyZ1g

https://fb.watch/7B07fu14MY/

SUPPLEMENTARY INFO: Learning outcomes

Knowledge
Skills
General competences

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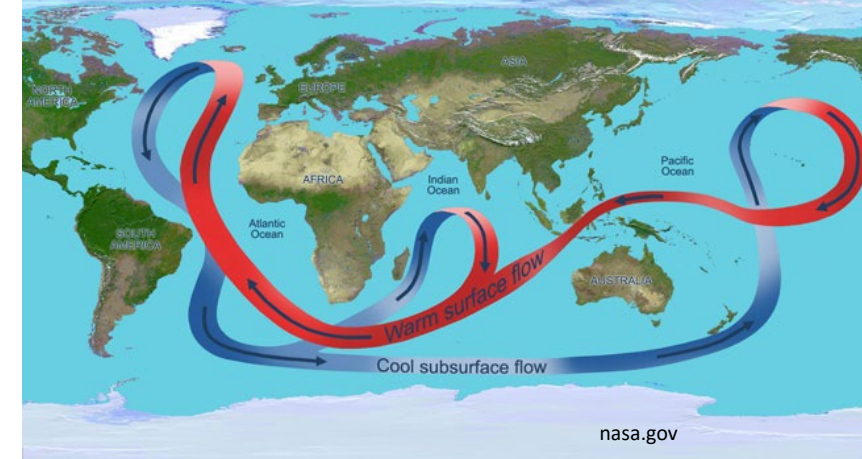

Felix Müller after Rockström et al. 2009
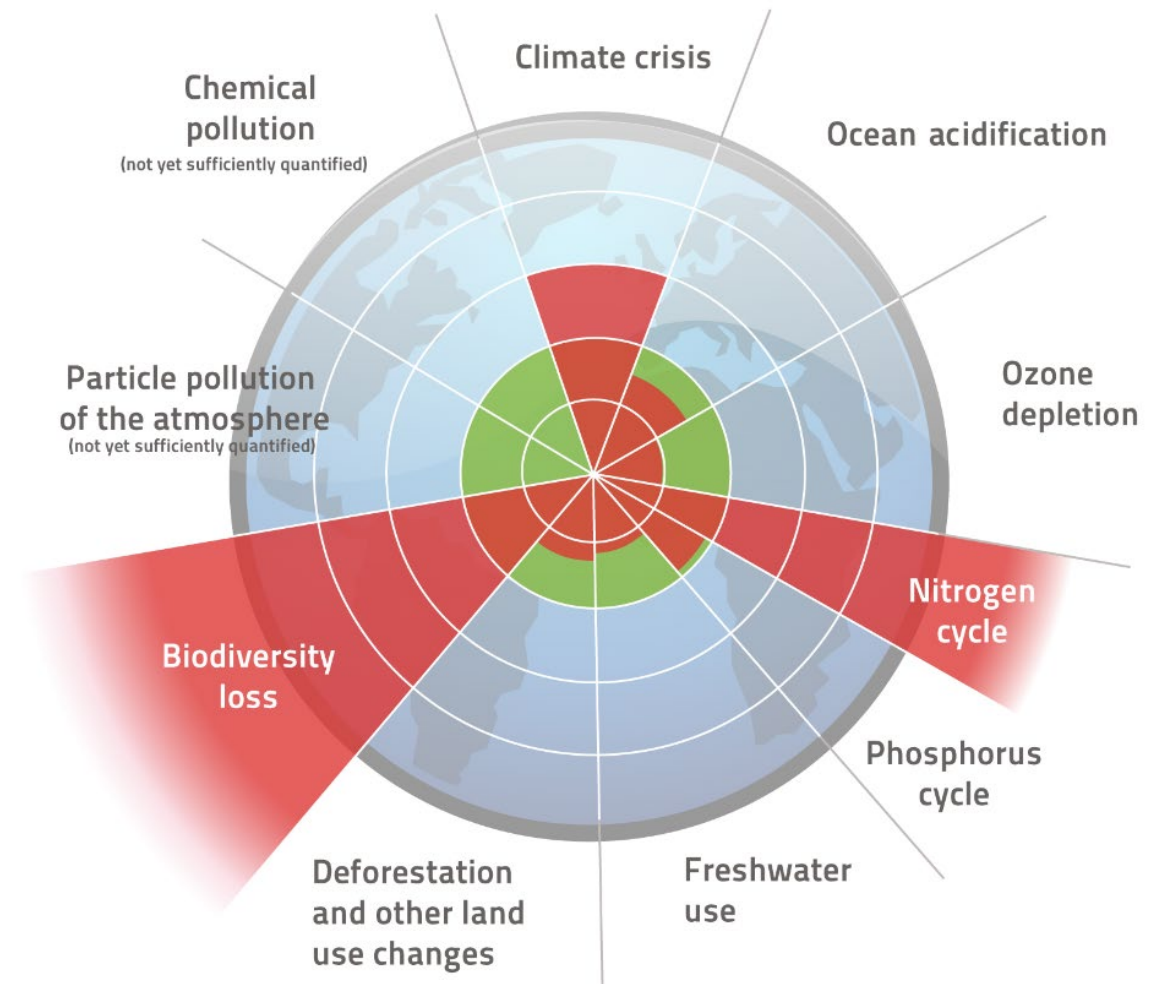
Climate change

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- **Assess** which **human activities** contribute most to climate
change (on an individual, local, national and global level).

- Evaluate climate **adaptation measures**.

Ocean and its resources

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nasa.gov

14 LIFE BELOW WATER

# Humans: individuals, groups and societies

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ECONOMICS
Production & Resourcing
Exchange & Transfer
Accounting & Regulation
Consumption & Use
Labour & Welfare
Technology & Infrastructure
Wealth & Distribution

ECOLOGY
Materials & Energy
Water & Air
Flora & Fauna
Habitat & Food
Place & Space
Constructions & Settlements
Emission & Waste
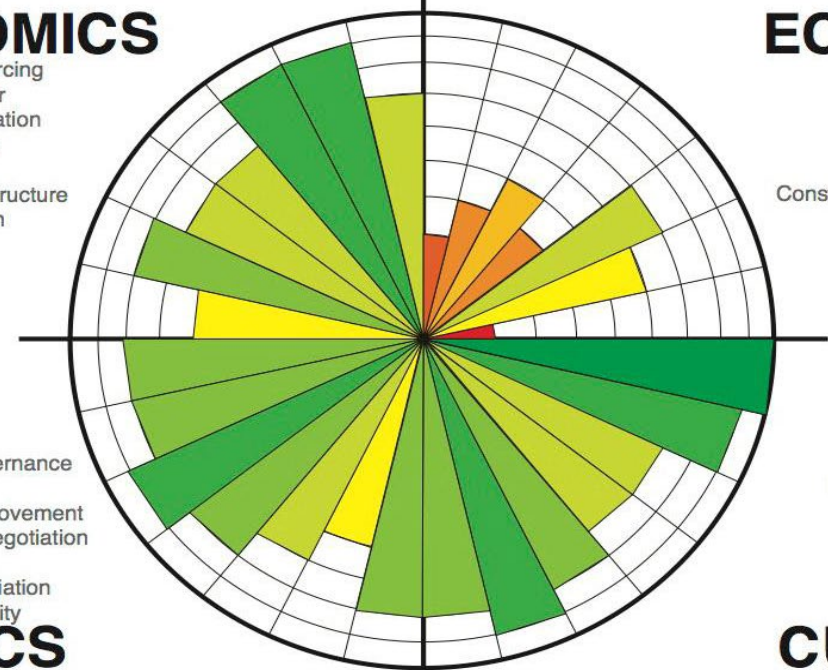
Organization & Governance
Law & Justice
Communication & Movement
Representation & Negotiation
Security & Accord
Dialogue & Reconciliation
Ethics & Accountability
POLITICS

Engagement & Identity
Recreation & Creativity
Memory & Projection
Belief & Meaning
Gender & Generations
Enquiry & Learning
Health & Wellbeing
CULTURE

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©Camilla Borrevik

Nudge
Improving Decisions about
Health, Wealth, and Happiness

©Camilla Borrevik

Humans: individuals, groups and societies

- Apply **behavioural science** to understand **attitudes** and **behaviours** towards sustainable development

- Analyse **case studies** from the **Pacific region**, including **regionalism**, **political agendas, international treaties**, and **sustainability efforts**.

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Sailing

- Explain basic **nautical terms** and **expressions** including rigging, sails and ropes.

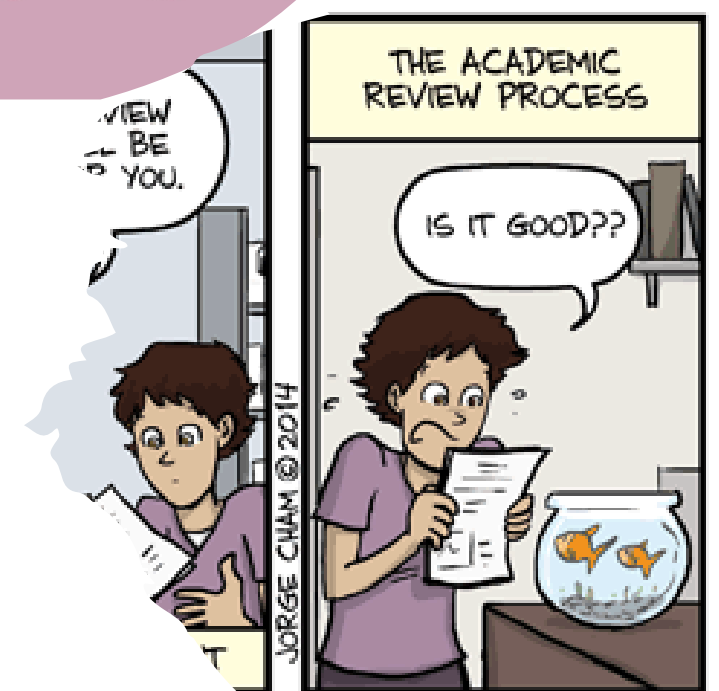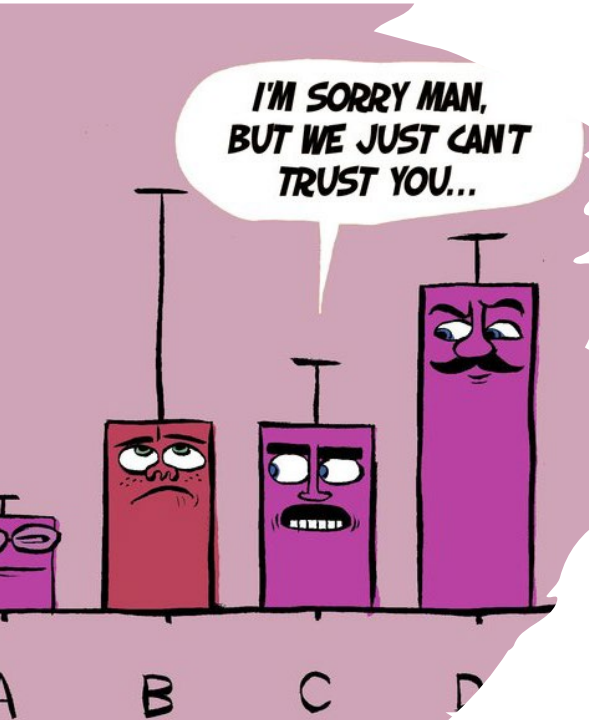- **Participate** in sail **setting** and **trimming**, **basic navigation** and **watch procedures**.
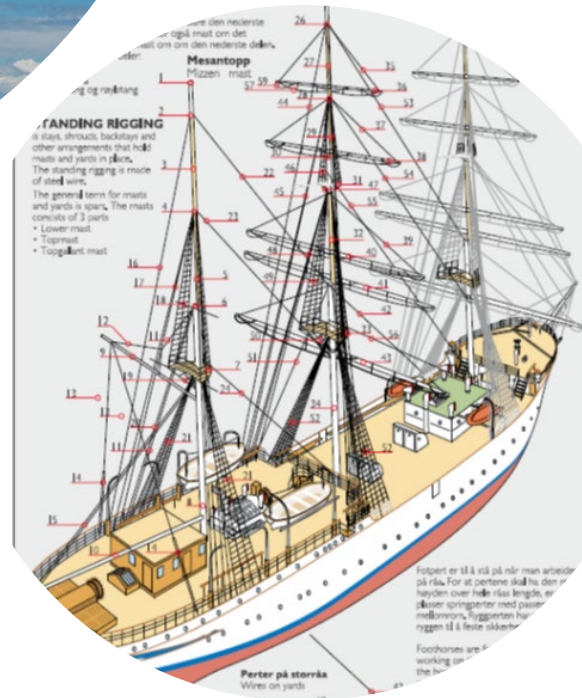
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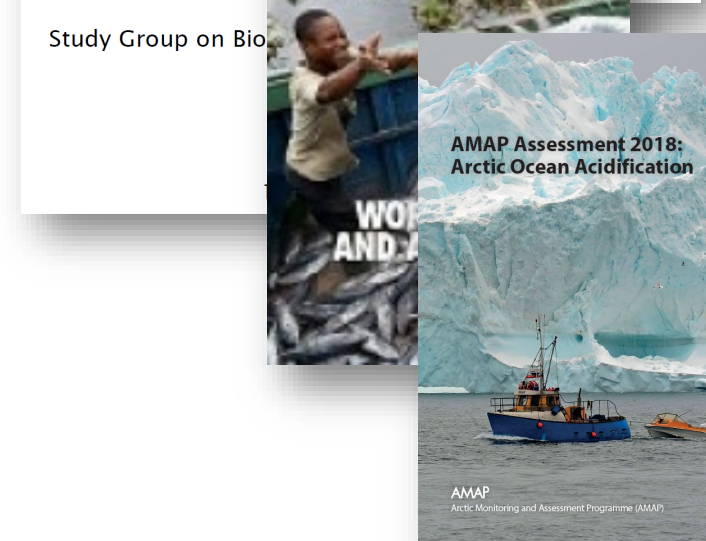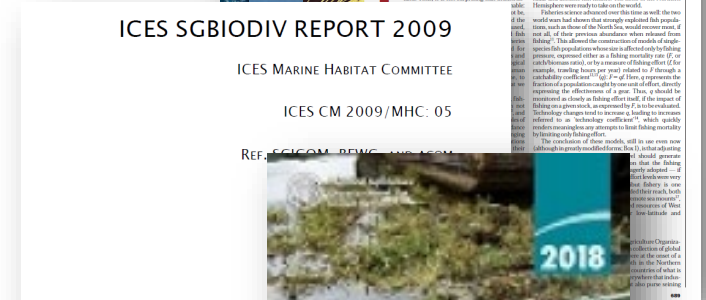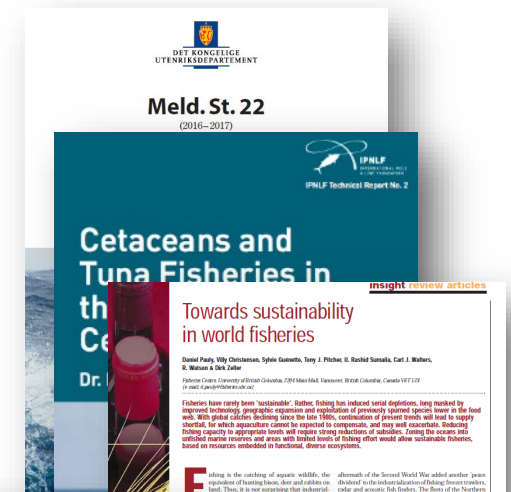
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(relative to 1986–2005)

Mean over 2081–2100

IPCC