



CLUVEX
CLIMATE UNIVERSITY FOR VIRTUAL EXCHANGES

Climate University for Virtual EXchanges – C L U V E X –

CLUVEX: Virtual Exchange Weeks for Students

by CLUVEX Teams



Co-funded by the
Erasmus+ Programme
of the European Union



Outline:

- **CLUVEX project: Basic info & Partners/Teams & Staff & Aim**
- **Online Learning – Future of Education?**
- **CLUVEX stages in workflow for VEs & Dissemination, Upscaling, Networking**
- **Virtual Exchange (VE) Week for students – approach**
- **Outlined programme – Days 1-5 (Mon-Fri)**
- **Preparatory materials (VEG, CLG, CMC) – pre-task**
- **Lectures (1-8)**
- **Tools (1-3)**
- **Work in groups on “Climate Horizon” Exercise**
- **Learning outcomes**
- **Earned bonuses for students**
- **Welcome to Climate University Online Courses**
- **What you will earn/ have**

CLUVEX: Basic Info & Partners/ Teams



Action Type: Virtual Exchanges in Higher Education and Youth

Key Action: Learning Mobility of Individuals

Project #: 101111959

EU Grant: 474.359 €

Duration: 1 Jul 2023 – 30 Jun 2026

Coordinator: Dr. Hanna K. Lappalainen, hanna.k.lappalainen@helsinki.fi

University of Helsinki, UH-INAR

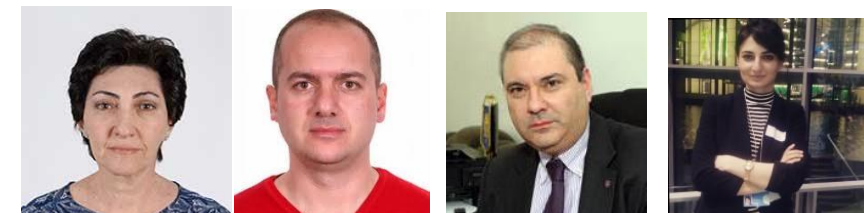
Website: <https://www.atm.helsinki.fi/cluvex>

Partners:

- **UH** – University of Helsinki, Finland
- **OSENU** – Odessa State Environmental University, Ukraine
- **TSNUK** – Taras Shevchenko National University of Kyiv, Ukraine
- **YSU** – Yerevan State University, Armenia
- **UCPH** – University of Copenhagen, Denmark
- **BioArt** – Bioart Society, Finland



CLUVEX: Project Staff Members



Full list of CLUVEX participants : https://www.atm.helsinki.fi/cluvex/?page_id=45



CLUVEX: General Aim

- to bridge students from European and Neighborhood East universities;
- to engage students with climate competences and green agenda together with interdisciplinary, green and soft skills;
- to educate 500 students in 1 Virtual Exchange (VE) Week (5 VE Weeks in total)
- to educate altogether 2500 students as Climate Messengers in 3 years



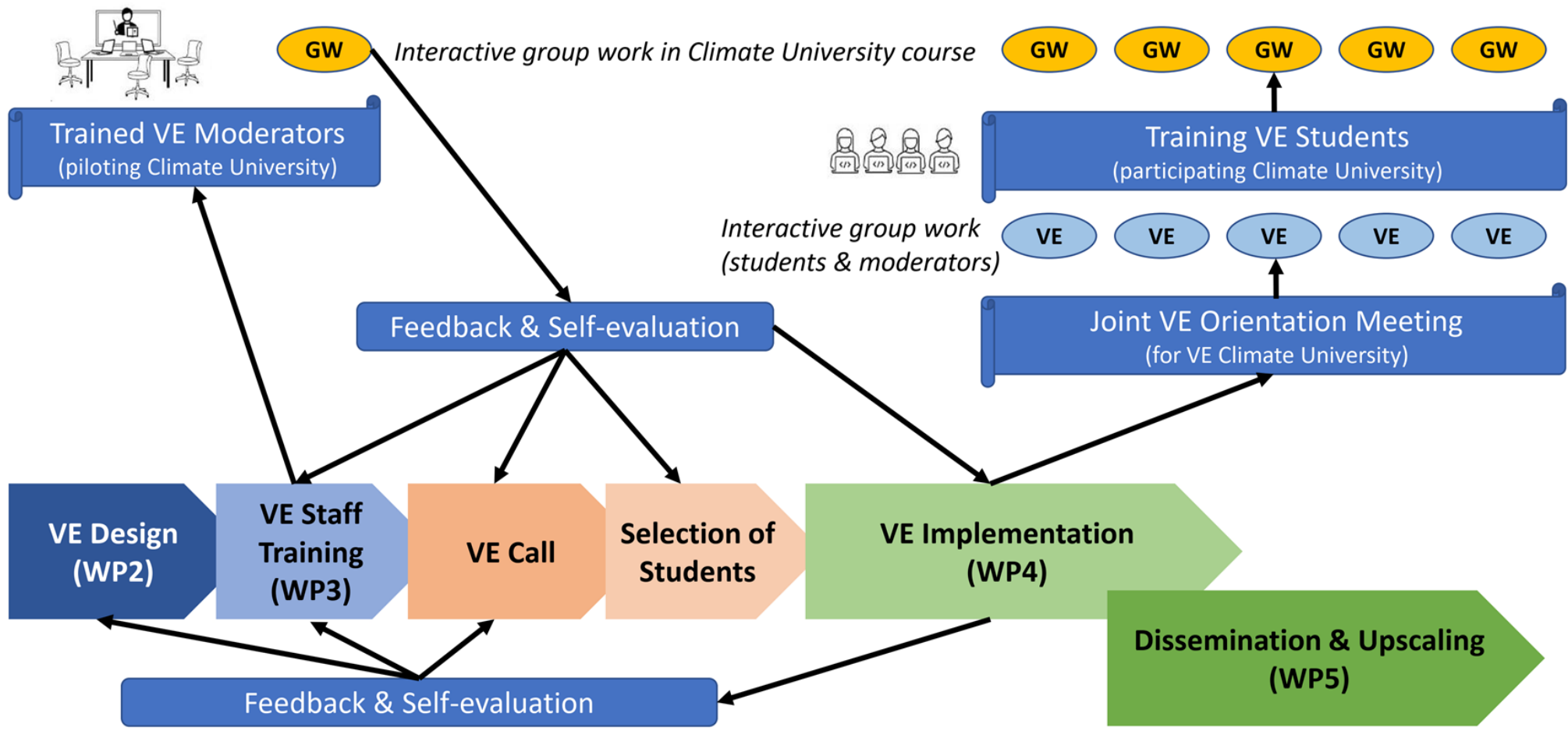
Online Learning - the Future of Education?

- Concept of traditional education is changing (COVID-19 !)
- Being physically present in classroom isn't the only learning option anymore - not with the rise of the internet and new technologies, at least.
- Online learning - access to a quality education whenever and wherever you want, as long as you can get online
- Challenges of distance learning can be little interaction!
- Virtual Exchange is a tool to increase interaction in distance education!



CLUVEX stages in workflow for VEs

Climate University Online Courses Running Lectures & Group Work



Dissemination and Upscaling

- International Assoc. of Meteorological Education & Sciences
- Air Pollution in the Arctic: Climate, Environment and Societies
- WMO Network of Regional Training Centers
- Pan-Eurasian Experiment
- Digital Belt and Road Program
- Copenhagen Science City



CLUVEX
VIRTUAL
EXCHANGE



International Network

- UNA Europa
 - UArctic Network of Universities
 - Nordic University Teachers Network
 - Climate University Network in Finland
 - Black Sea Universities Network
- INTENSE International Doctoral School Network

Welcome to act as a CLUVEX Moderator

The VEs organized by CLUVEX project (led by Univ Helsinki) are currently the largest EU VEs project in their field **offer a unique opportunity to learn about remote working and teaching in an international environment, and for e.g. doing training work at “Master of Teaching” or on “English language”.**



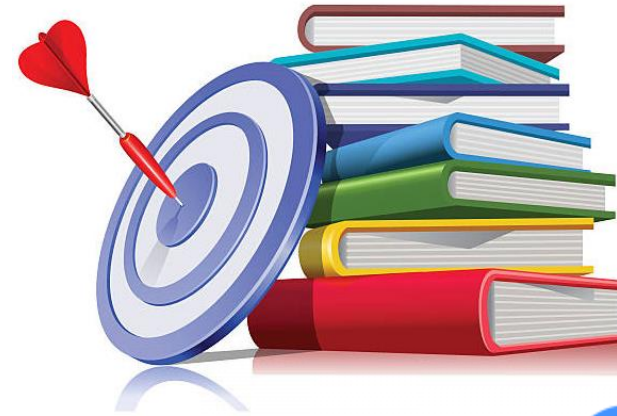
- During CLUVEX VE Weeks for students - joint sessions with up to 500 students from all CLUVEX Partners' universities and collaborating universities, where networking and interactions in small groups of up to 10 students, plus 1 moderator, will take place.
- Moderators' central role is ONLINE to support and motivate international and interdisciplinary interactions, discussions, and learning in small groups of students.



CLUVEX: Calls for VE Weeks for students

Main Activity

- To announce 5 VE Calls & organize interactive online trainings called “VE Weeks-for-students” (1 ECTS credit point) in 2024-2026.
- To carry out the VE Weeks online in Zoom with plenary sessions (lectures and demo of tools for analysis of climate related data)+ work in small groups of students discussing specific topics of climate change and working on Individual and Collaborative “Climate Horizon” exercise.
- Small groups in Zoom break-out-rooms are guided by educated CLUVEX moderators
- **1st VE Week: 14-18 Oct 2024 - completed**
- **2nd VE Week: 12-16 May 2025 - completed**
- **3rd VE Week: 6-10 Oct 2025 – completed**
- **4th VE Week: 23-27 Feb 2026 - completed**
- **5th VE Week: 20-24 Apr 2026**



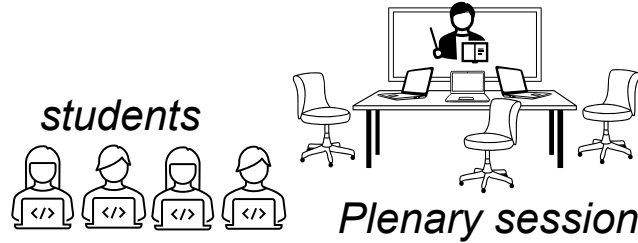
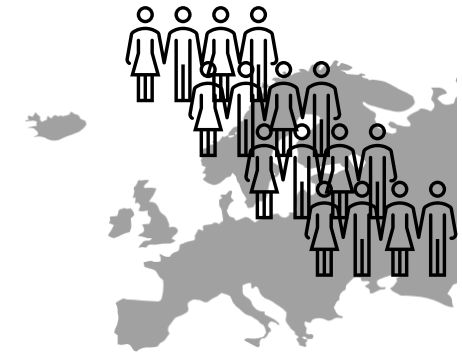
Virtual Exchange Call for students

Up to 450 students



Virtual Exchange Week

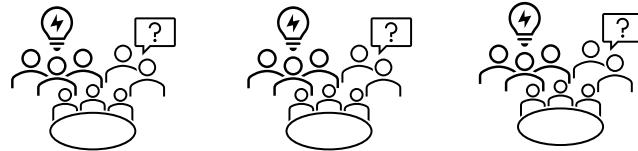
Up to 450 students + up to 50 moderators + tech. support staff



➔ **Monday** ⬅

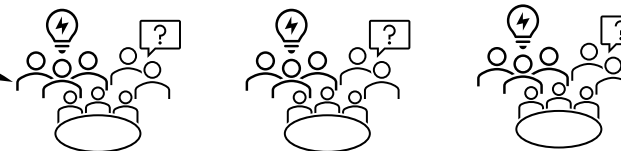


➔ **Tuesday** ⬅



work in groups
(1 moderator
& 10 students)
on e-platform
on groups' projects

➔ **Wednesday** ⬅



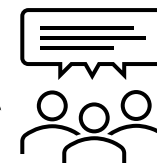
work in groups
(1 moderator
& 10 students)
on e-platform
on groups' projects

➔ **Thursday** ⬅



Group's projects/ presentations & discussions

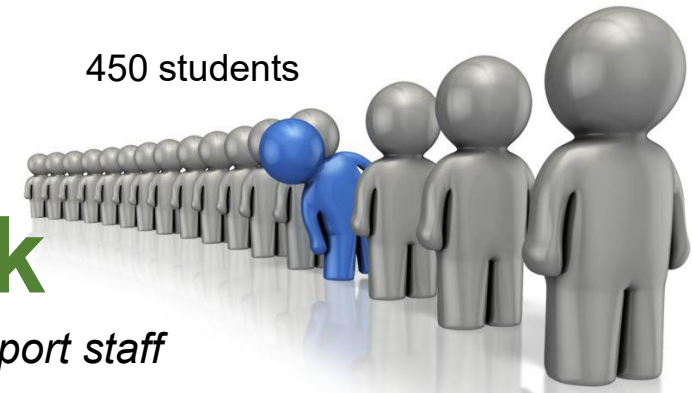
➔ **Friday** ⬅



Group's projects/ presentations & discussions

Virtual Exchange Call for students

450 students



Virtual Exchange Week

Up to 450 students + up to 50 moderators + tech. support staff

students



Plenary session

Monday

zoom



Plenary session

students



Tuesday

zoom



*work in groups
(1 moderator
& 10 students)
on e-platform
on groups' projects*

Wednesday

zoom



*work in groups
(1 moderator
& 10 students)
on e-platform
on groups' projects*

Thursday

zoom



Group's projects/ presentations & discussions

Friday

zoom



Group's projects/ presentations & discussions

VE Week for Students – Outlined Programme



Programme of the Virtual Exchange Week

All times are given in EET (i.e., in Finnish time)

❖ 1st Day: 20 April 2026 (14:00 – 17:00, 3h online)

14:00 – Welcoming words from the Hosts

Introduction into CLUVEX project & Virtual Exchange (*Hanna K. Lappalainen, UH*)

L8: Towards Sustainable Future Utopia (*Antti Rajala, UH*)

L5: Impacts of Climate Change and Future Outlook (*Hasmik Movsesyan, YSU*)

L2: Climate Change, Disasters, Carbon Neutrality and UN SDGs (*Alexander Baklanov, UCPH*)

L7: Artistic Res. & Critical Thinking at Intersection of Art, Science & Society (*Yvonne Billimore, BioArt*)

Introduction into Climate Horizon exercise (*Julia Karhumaa, Laura Riuttanen, UH*)

15:45 – Breaking students into groups & Introduction round in groups & pre-task sharing (**1+ hour**)

17:00 – End of the day

❖ 2nd Day: 21 April 2026 (14:00 – 17:00, 3h online)

14:00 – L1: Navigating Planetary Boundaries: Blueprint for Sustainable Future (*Inna Khomenko, ONU*)

L3: Climate Change Impact on Water Resources (*Sergiy Snizhko & Olga Shevchenko, TSNUK*)

L4: Nature Hazards – Floods (*Valeriya Ovcharuk, ONU*)

Tool for Environment and Data Visualization | Past & Present | (*Alexander Mahura, UH*)

Detailed Introduction into Climate Horizon exercise (*Julia Karhumaa, Laura Riuttanen, UH*)

15:30 – Breaking into same groups & working with tool and individual Climate Horizon (**1.5 hour**)

17:00 – End of the day

❖ 3rd Day: 22 April 2026 (14:00 – 17:00, 3h online)

14:00 – L6: Climate Change: Mitigation and Adaptation Strategies (*Hasmik Movsesyan, YSU*)

Tool for Socio-Economic Drivers of Climate Change | Past & Future | (*Stefan Fronzek, SYKE*)

Detailed Introduction into Climate Horizon exercise (*Julia Karhumaa, Laura Riuttanen, UH*)

14:30 – Breaking into same small groups & working with tool and individual Climate Horizon (**2.5 hour**)

17:00 – End of the day

❖ 4th Day: 23 April 2026 (14:00 – 17:00, 3h online)

14:00 – Tool for Climate Scenarios | Future | (*Risto Makkonen, FMI/UH*)

Detailed Introduction into Climate Horizon exercise (*Julia Karhumaa, Laura Riuttanen, UH*)

14:30 – Breaking into same groups & working with tool and individual Climate Horizon & discussing and drafting collaborative Climate Horizon (**2.5 hour**)

17:00 – End of the day

❖ 5th Day: 24 April 2026 (14:00 – 17:00, 3h online)

14:00 – Breaking into same small groups & working/ finalizing collaborative Climate Horizon (**2 hour**)

16:00 – Summary by Hosts, demonstration for all groups the collaborative Climate Horizon exercises

Questionnaire with feedback about VE Week

Reminders about Climate University online courses & reports in DigiCampus & ECTS credits

Wrap up & closing the VE Week

17:00 – End of the day | End of the Virtual Exchange Week for students



Preparatory Materials for VE Weeks



Virtual Exchange Guidebook (VEG)

Lessons learnt from the “Climate University for Virtual Exchanges” (CLUVEX) project in 2023-2026

Version 2.0

ERASMUS+ CLUVEX Project Number 101111959

Work Package 02
Deliverable 2.1

28 August 2024



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Climate Literacy Guidebook (CLG)

Reading materials for students participating in the CLUVEX Virtual Exchange Week

Version 3.0

ERASMUS+ CLUVEX Project Number 101111959

Work Package 02
Deliverable 2.2

28 February 2025



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Climate Messenger Code of Conduct (CMC)



Instructions for Virtual Exchange Week participants

Version 2.0

ERASMUS+ CLUVEX Project Number 101111959

Work Package 02
Deliverable 2.3

28th February 2025



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VE Week - Lectures

CLUVEX lectures provide a wider context of the climate change



Lecture #1: Navigating Planetary Boundaries: Our Blueprint for a Sustainable Future

Lecturer: Inna Khomenko, Mechnikov Odessa National University (ONU), Ukraine (UA)

Lecture #2: Climate Change, Disasters, Carbon-neutrality and UN Sustainable Development Goals

Lecturer: Alexander Baklanov, Niels Bohr Institute, University of Copenhagen (UCPH), Denmark

Lecture #3: Climate Change Impact on Water Resources

Lecturers: Sergiy Snizhko & Olga Shevchenko, T.Shevchenko National University of Kyiv (TSNUK), UA

Lecture #4: Nature Hazards - Floods

Lecturer: Valeriya Ovcharuk, Mechnikov Odessa National University (ONU), UA

Lecture #5: Impacts of Climate Change and Future Outlook

Lecturer: Hamsik Movseyan, Yerevan State University (YSU), Armenia

Lecture #6: Climate Change, Mitigation and Adaptation Strategies

Lecturer: Hasmik Movsesyan, Yerevan State University (YSU), Armenia

Lecture #7: Artistic Research and Critical Thinking at the Intersection of Art, Science and Society

Lecturer: Yvonne Billimore, Bioart Society, Finland

Lecture #8: Towards Sustainable Future Utopia

Lecturer: Antti Rajala, University of Helsinki (UH), Finland

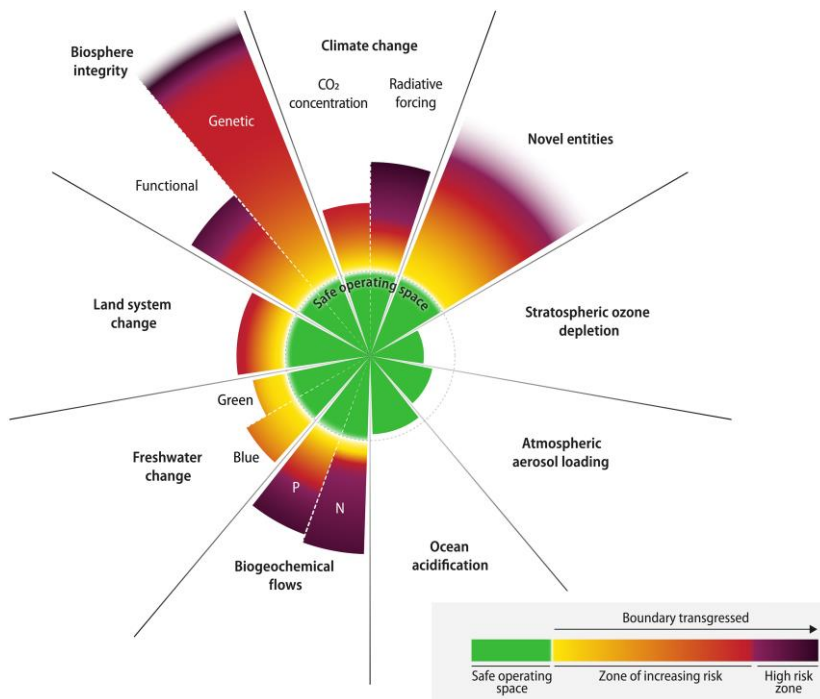


VE Week – Lectures 1 & 2

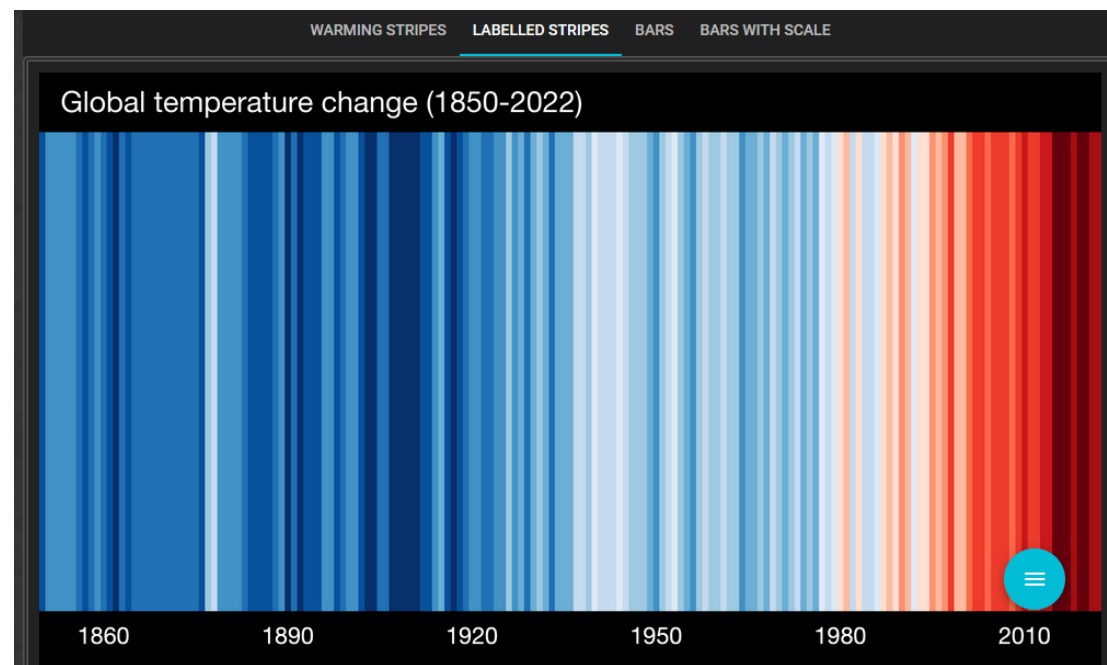


Lecture #1: Navigating Planetary Boundaries: Our Blueprint for a Sustainable Future

Inna Khomenko, Mechnikov Odessa National University, Ukraine



Current status of control variables for planetary boundaries (source/ credit - Richardson et al. 2023)



Ed Hawkins' Global Labelled Stripes source: <https://showyourstripes.info//globe>

Lecture #2: Climate Change, Disasters, Carbon-neutrality and UN Sustainable Development Goals

Alexander Baklanov, Niels Bohr Institute, University of Copenhagen, Denmark



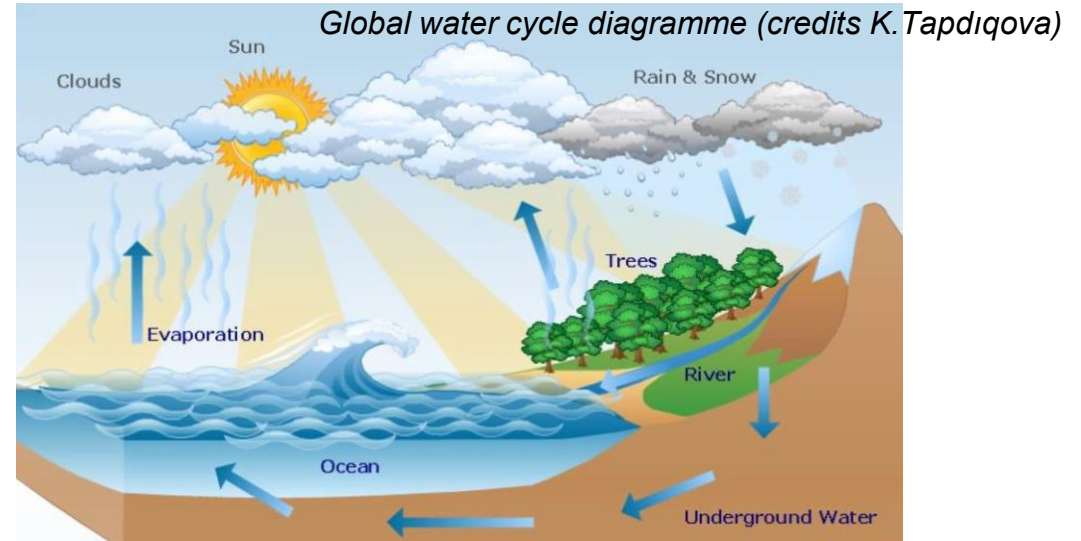
VE Week – Lectures 3 & 4

Lecture #3: Climate Change Impact on Water Resources

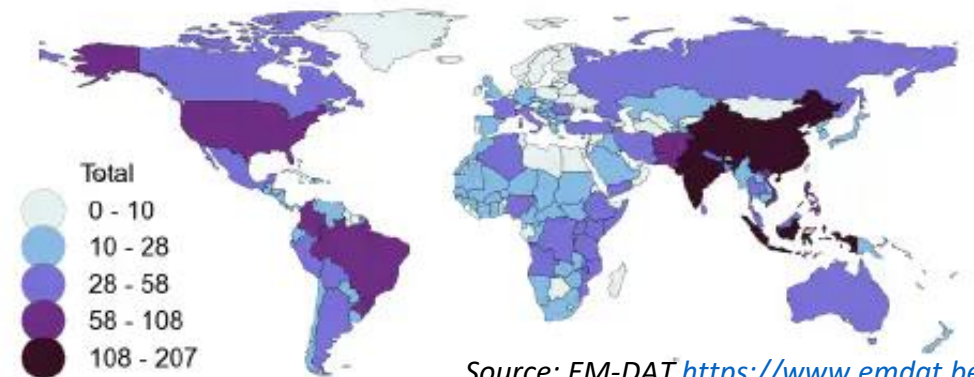
Sergiy Snizhko & Olga Shevchenko



*Taras Shevchenko National University of Kyiv
Ukraine*

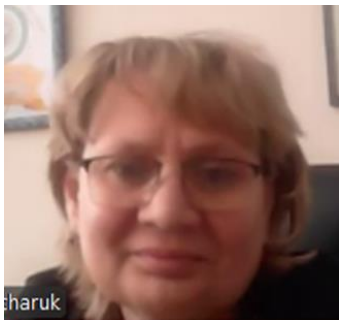


Flood occurrence per country (2000-2022)



Source: EM-DAT <https://www.emdat.be>
international disaster database

Lecture #4: Nature Hazards – Floods

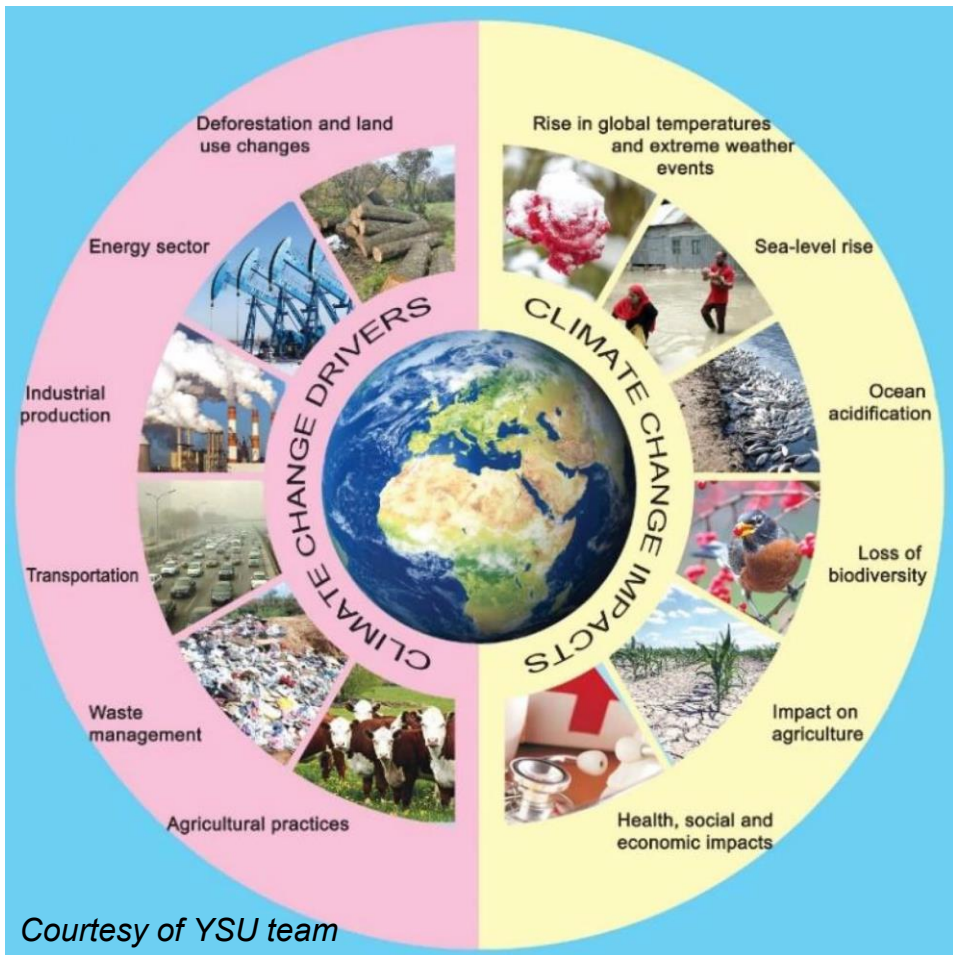


Valeriya Ovcharuk
*Mechnikov Odessa National University
Ukraine*

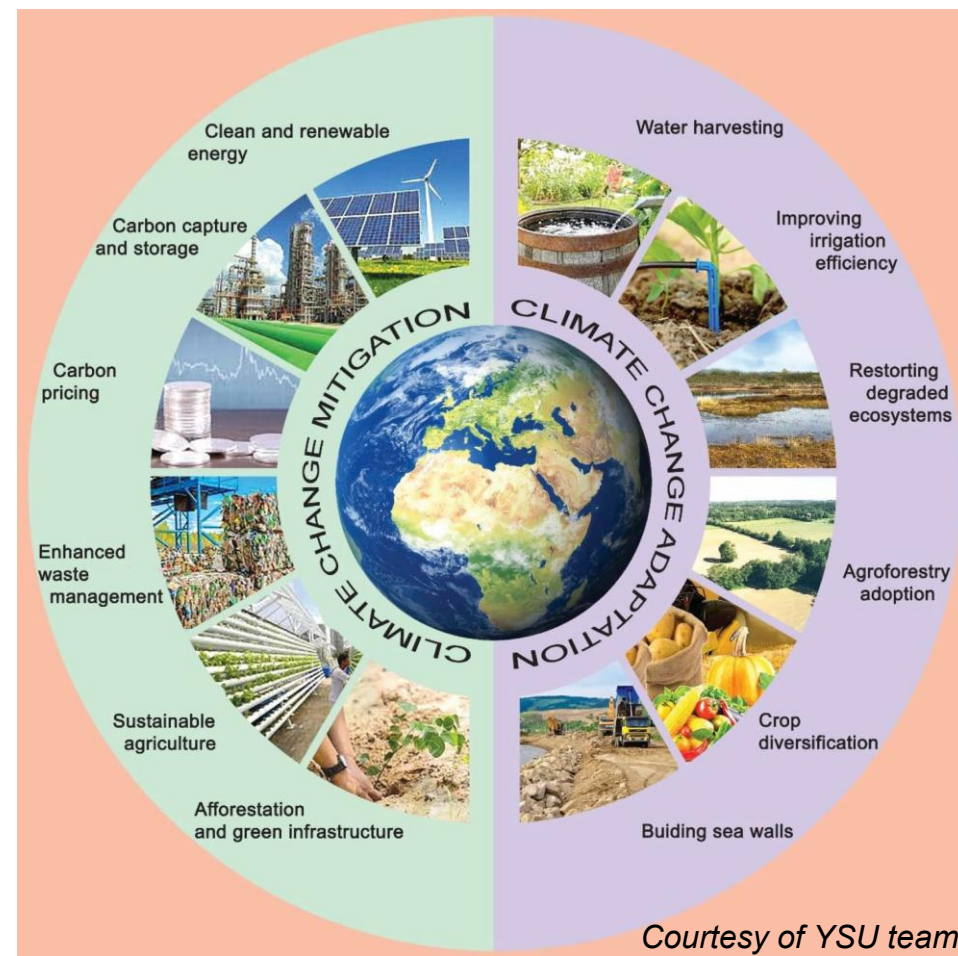


VE Week – Lectures 5 & 6

Lecture #5: Impacts of Climate Change and Future Outlook



Hasmik Movsesyan
Yerevan State University
Armenia



Lecture #6: Climate Change, Mitigation and Adaptation Strategies



VE Week – Lectures 7 & 8



Lecture #7: Artistic Research and Critical Thinking at the Intersection of Art, Science and Society

The Heavens (photo by Till Bovermann)



The North Escaping (photo by Teemu Lehmasruusu)



Yvonne Billimore
Bioart Society
Finland

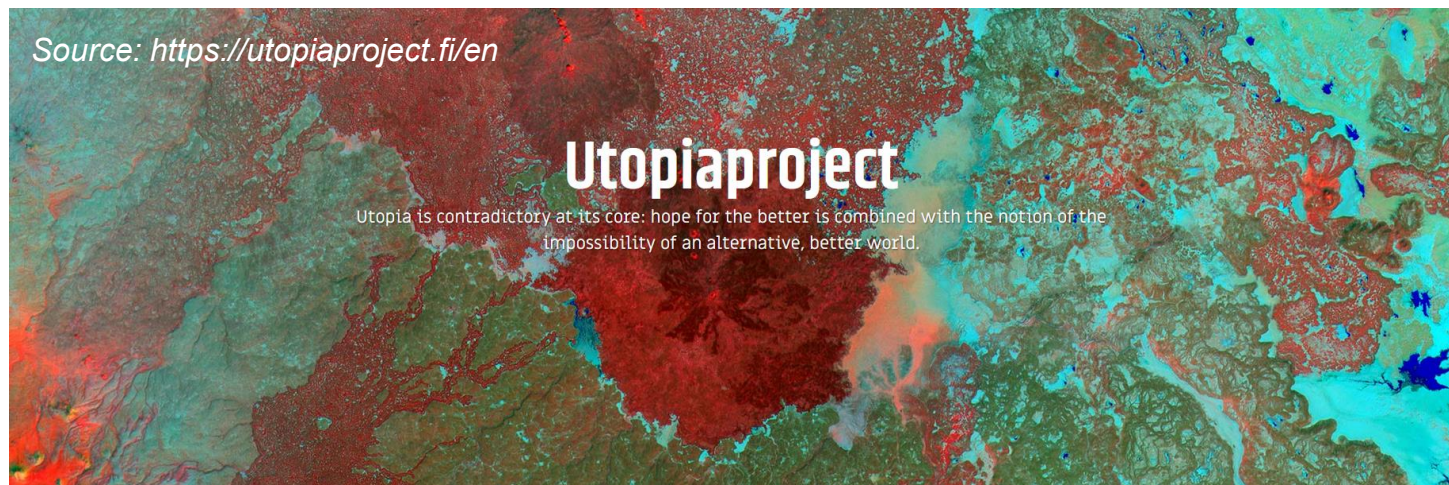


Antti Rajala
University of Helsinki
Finland



Lecture #8:
Towards
Sustainable
Future
Utopia

Source: <https://utopiaproject.fi/en>





VE Week - Tools

User-friendly tools to examine regions from local to global scales

Tool #1 | Past & Present | Environment and Data Visualization

Lecturer: Alexander Mahura, University of Helsinki, Finland

ERA-5 Past Climate Explorer (PCE) tool: <https://era5.lobelia.earth>

- *Questions for environment/ climate conditions/ society/ pollution ...*



Tool #2 | Past & Future | Socio-Economic Drivers of Climate Change

Lecturer: Stefan Fronzek, Finnish Environment Institute, Finland

Shared Socioeconomic Pathways (SSP) Database: <https://tntcat.iiasa.ac.at/SspDb>

Historic Time-Series of Socio-Economic Indicators: <https://data.worldbank.org/indicator>

- *Questions for historical/ political/ social/ natural causes that lead into current situation ...*



Tool #3 | Future | Climate Scenarios

Lecturer: Risto Makkonen, Finnish Meteorological Institute, Finland

IPCC Interactive Atlas: <https://interactive-atlas.ipcc.ch>

- *Questions for historical/ political/ social/ natural causes that lead into current situation ...*



lobelia. english

Choose a climate parameter to show on the map: average air temperature - as well as an aggregation period: year (average) -

Riga

Click/tap on the map or manually edit the location's coordinates: lon: 24.027 lat: 57.044

Air temperature

Monthly average temperatures range from -2.9 °C (February) to 18 °C (July). Yearly average temperature is 7.1 °C.

Tool #1 | Past & Present | ERA5 PCE



english

Past Climate Explorer

Source: ERA5 dataset, 1981-2010

Choose a climate parameter to show on the map: average air temperature as well as an aggregation period: January

Riga

Click/tap on the map or manually edit the location's coordinates: lon: 24.027 lat: 57.044

Air temperature

Monthly average temperatures range from -2.9 °C (February) to 18 °C (July). Yearly average temperature is 7.1 °C.

english

Past Climate Explorer

Source: ERA5 dataset, 1981-2010

Choose a climate parameter to show on the map: average air temperature as well as an aggregation

- Average air temperature
- Maximum air temperature
- Minimum air temperature
- Frost days
- Warm nights
- Precipitation
- Rainy days (≥ 0.5 mm)
- Heavy rainy days (≥ 10 mm)
- Very heavy rainy days (≥ 20 mm)
- Relative humidity
- Average wind speed
- Wind gusts
- Cloud cover

the location's lon: 24.027 lat: 57.044

from 8.2 °C

age temperature is

english

Past Climate Explorer

Source: ERA5 dataset, 1981-2010

Choose a climate parameter to show on the map: average air temperature as well as an aggregation period: January

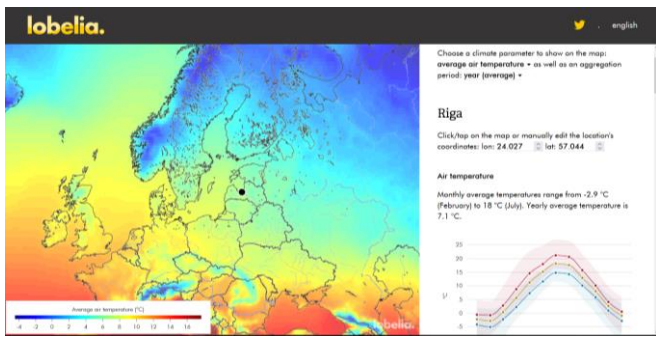
Riga

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Air temperature

Monthly average temperatures range from -2.9 °C (February) to 18 °C (July). Yearly average temperature is 7.1 °C.

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December



Tool #1 | Application | Riga

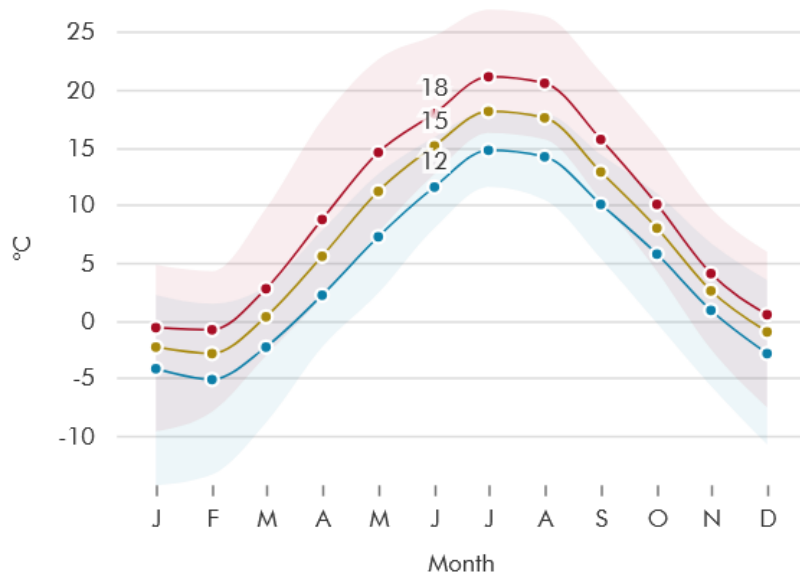
Air temperature & Warming stripes



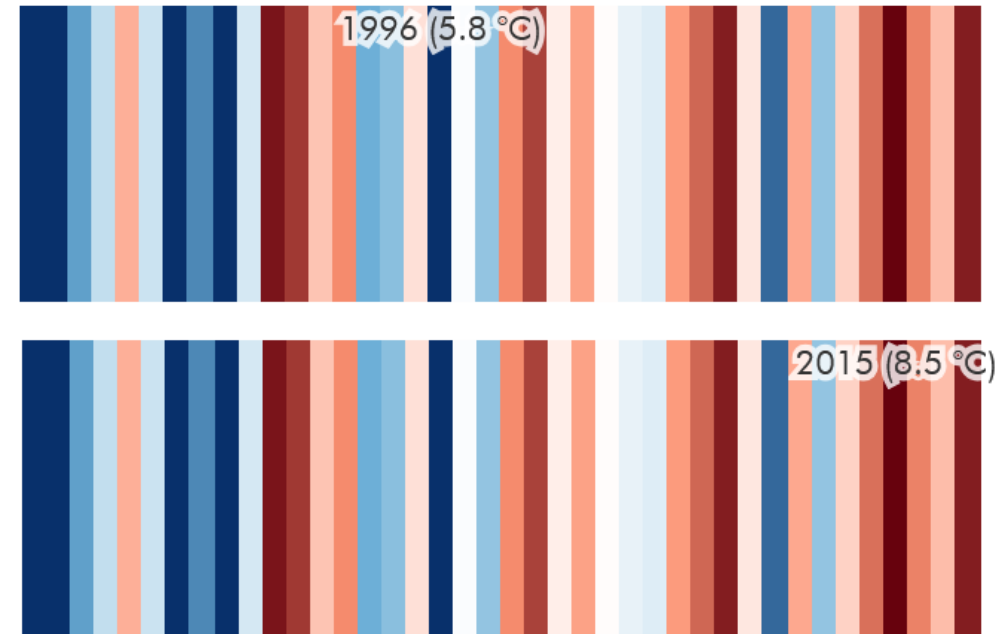
Monthly average temperatures range from -2.9 °C (February) to 18 °C (July). Yearly average temperature is 7.1 °C.

Warming stripes (sometimes referred to as **climate stripes**, **climate timelines**) are data visualization graphics that use a series of coloured stripes chronologically ordered to visually portray long-term temperature trends

Warming stripes for the extended period 1979-2018 (what's this?):



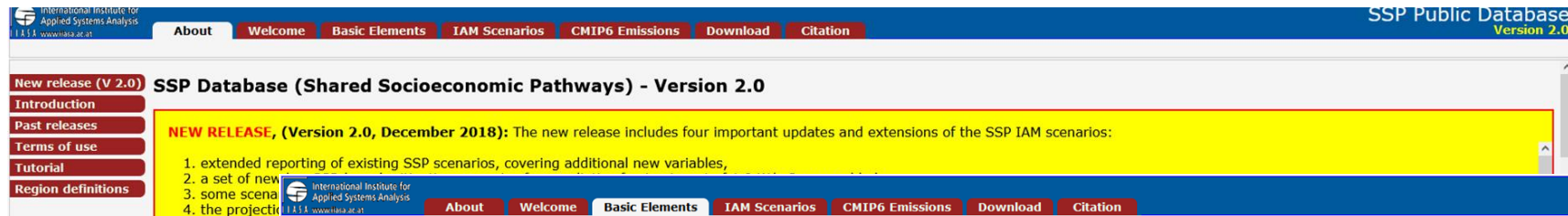
- Monthly average of daily maximum
- Monthly min/max of daily maximum
- Monthly average of daily average
- Monthly average of daily minimum



progression from blue (cooler) to red (warmer) stripes portrays annual increases of global average temperature intuitively convey global warming trends to non-scientists.



Tool #2 | Past & Future | Socio-Economic Drivers of Climate Change



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SSP Public Database
Version 2.0

About Welcome Basic Elements IAM Scenarios CMIP6 Emissions Download Citation

New release (V 2.0) SSP Database (Shared Socioeconomic Pathways) - Version 2.0

NEW RELEASE, (Version 2.0, December 2018): The new release includes four important updates and extensions of the SSP IAM scenarios:

1. extended reporting of existing SSP scenarios, covering additional new variables,
2. a set of new scenarios,
3. some scenario projections,
4. the project's projections

For a citation of the SSP database, see the **Introduction** page.

Changes since Release 1.1.14

IAM Model
AIM
IMAGE

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About Welcome Basic Elements IAM Scenarios CMIP6 Emissions Download Citation

Select region(s), scenario(s), and variable to define your query

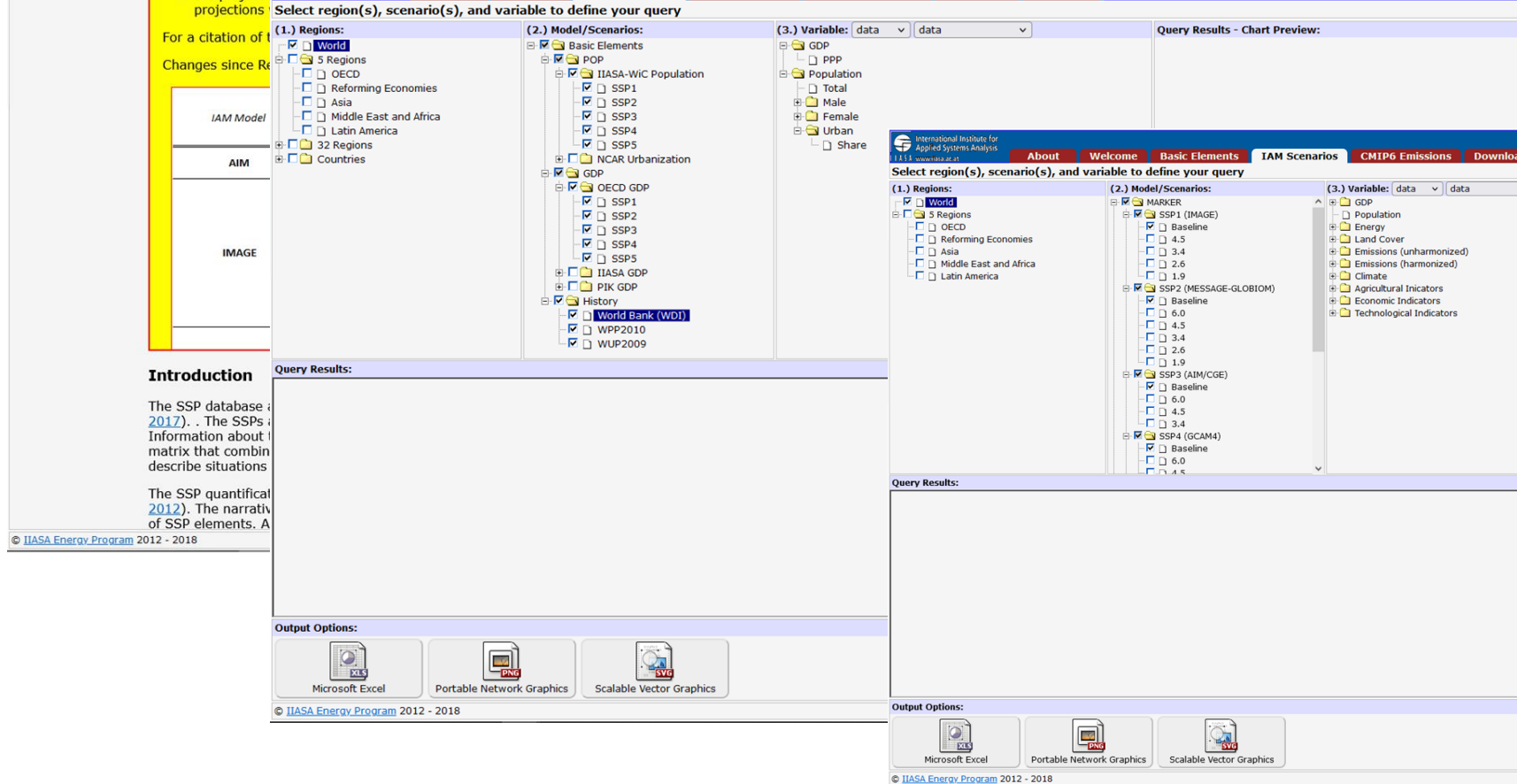
(1.) Regions: World, 5 Regions, OECD, Reforming Economies, Asia, Middle East and Africa, Latin America, 32 Regions, Countries

(2.) Model/Scenarios: Basic Elements, POP, IASIA-WIC Population, SSP1, SSP2, SSP3, SSP4, SSP5, NCAR Urbanization, GDP, OECD GDP, SSP1, SSP2, SSP3, SSP4, SSP5, IASIA GDP, PIK GDP, History, World Bank (WDI), WPP2010, WUP2009

(3.) Variable: data, data

Query Results - Chart Preview:

<https://tntcat.iiasa.ac.at/SspDb>



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SSP Public Database
Version 2.0

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Select region(s), scenario(s), and variable to define your query

(1.) Regions: World, 5 Regions, OECD, Reforming Economies, Asia, Middle East and Africa, Latin America, 32 Regions, Countries

(2.) Model/Scenarios: Basic Elements, MARKER, SSP1 (IMAGE), Baseline, 4.5, 3.4, 2.6, 1.9, SSP2 (MESSAGE-GLOBIOM), Baseline, 6.0, 4.5, 3.4, 2.6, 1.9, SSP3 (AIM/CGE), Baseline, 6.0, 4.5, 3.4, SSP4 (GCAM4), Baseline, 6.0, 4.5, 3.4

(3.) Variable: data, data

Query Results - Chart Preview:

Introduction

The SSP database (2017). The SSPs information about a matrix that combines describe situations

The SSP quantification (2012). The narrative of SSP elements. A

© IIASA Energy Program 2012 - 2018

Output Options: Microsoft Excel, Portable Network Graphics, Scalable Vector Graphics

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SSP Public Database
Version 2.0

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(3.) Variable: data, data

Query Results - Chart Preview:

CMIP6 Emissions: BC, CF6, CF4, CH4, CO2, CO, N2O, HFC, N2, NH3, N2O, SF6, Sulfur, VOC

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Tool #2 | Shared Socioeconomic Pathways

Basic Elements

International Institute for Applied Systems Analysis
www.iiasa.ac.at

Basic Elements | IAM Scenarios | CMIP6 Emissions | Download | Citation

Select region(s), scenario(s), and variable to define your query

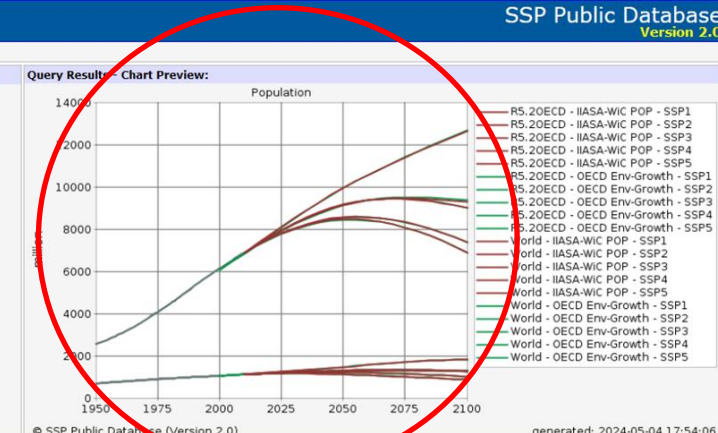
(1.) Regions: World, 5 Regions, Reforming Economies, Asia, Middle East and Africa, Latin America, 32 Regions, Countries

(2.) Model/Scenarios: Basic Elements, IIASA-WIC Population (SSP1, SSP2, SSP3, SSP4, SSP5), NCAR Urbanization, OECD GDP (SSP1, SSP2, SSP3, SSP4, SSP5)

(3.) Variable: data, data, GDP, PPP, Population (Total, Male, Female, Urban, Share)

SSP Public Database Version 2.0

Query Results - Chart Preview: Population



generated: 2024-05-04 17:54:06

IAM Scenarios

International Institute for Applied Systems Analysis
www.iiasa.ac.at

IAM Scenarios | CMIP6 Emissions | Download | Citation

Select region(s), scenario(s), and variable to define your query

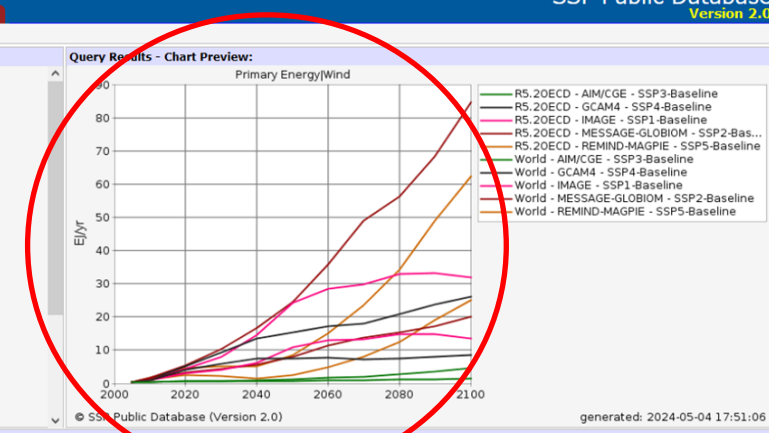
(1.) Regions: World, 5 Regions, Reforming Economies, Asia, Middle East and Africa, Latin America

(2.) Model/Scenarios: MARKER, SSP1 (IMAGE) (Baseline, 4.5, 3.4, 2.6, 1.9), SSP2 (MESSAGE-GLOBIOM) (Baseline, 6.0, 4.5, 3.4, 2.6, 1.9), SSP3 (AIM/CGE) (Baseline, 6.0, 4.5, 3.4), SSP4 (GCAM4) (Baseline, 6.0, 4.5, 3.4)

(3.) Variable: data, data, GDP, Population, Energy (Primary Energy, Total, Biomass, Coal, Oil, Gas, Fossil, Nuclear, Non-Biomass Renewables, Hydro, Geothermal, Other, Solar, Wind, Secondary Energy Trade, Secondary Energy, Final Energy, Energy Service, Land Cover, Emissions (unharmonized))

SSP Public Database Version 2.0

Query Results - Chart Preview: Primary Energy/Wind



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Region	Model - Scenario	Variable	Unit	2005	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100
R5.20ECD	AIM/CGE - SSP3-Baseline	Primary Energy/Wind	EJ/yr	0.334	0.414	0.528	0.623	0.781	0.897	1.025	1.134	1.226	1.327	
R5.20ECD	GCAM4 - SSP4-Baseline	Primary Energy/Wind	EJ/yr	0.337	0.965	3.961	5.968	7.545	7.556	7.731	7.267	7.494	7.947	8.507
R5.20ECD	IMAGE - SSP1-Baseline	Primary Energy/Wind	EJ/yr	0.337	0.964	2.899	3.982	6.141	10.845	12.980	13.313	14.713	14.798	13.474
R5.20ECD	MESSAGE-GLOBIOM - SSP2-Baseline	Primary Energy/Wind	EJ/yr	0.338	1.433	3.367	4.453	5.605	8.027	11.418	13.658	15.329	17.262	20.181
R5.20ECD	REMIND-MAGPIE - SSP5-Baseline	Primary Energy/Wind	EJ/yr	0.357	1.284	2.477	2.259	1.455	2.593	4.781	7.963	12.591	19.018	25.175
World	AIM/CGE - SSP3-Baseline	Primary Energy/Wind	EJ/yr	0.368	0.452	0.595	0.783	0.998	1.190	1.599	2.084	2.804	3.637	4.691
World	GCAM4 - SSP4-Baseline	Primary Energy/Wind	EJ/yr	0.374	1.230	5.194	9.391	13.480	15.429	17.076	17.853	20.972	23.693	25.993
World	IMAGE - SSP1-Baseline	Primary Energy/Wind	EJ/yr	0.374	1.229	4.360	7.932	14.680	24.367	28.400	29.866	32.821	33.089	31.801
World	MESSAGE-GLOBIOM - SSP2-Baseline	Primary Energy/Wind	EJ/yr	0.387	1.661	5.504	10.258	16.669	24.615	35.936	48.886	56.267	68.249	84.510
World	REMIND-MAGPIE - SSP5-Baseline	Primary Energy/Wind	EJ/yr	0.385	1.742	4.514	5.213	5.035	8.523	15.090	23.490	34.150	48.870	62.230

© SSP Public Database (Version 2.0)
generated: 2024-05-04 17:51:06

Output Options: Microsoft Excel, Portable Network Graphics, Scalable Vector Graphics

Notes:

current user: guest | logout

Tool #3 | Future | IPCC Interactive Atlas



<https://interactive-atlas.ipcc.ch>

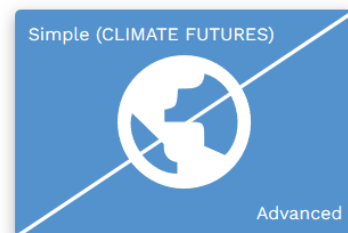
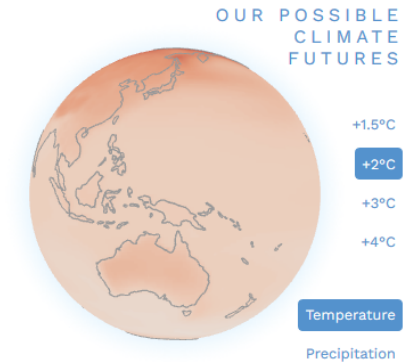
IPCC Working Group I (WGI): Sixth Assessment Report

IPCC WGI Interactive Atlas

A novel tool for flexible spatial and temporal analyses of much of the observed and projected climate change information underpinning the Working Group I contribution to the Sixth Assessment Report, including regional synthesis for Climatic Impact-Drivers (CIDs).

[Participate in the user testing survey](#)

[Errata and problem reporting](#)



REGIONAL INFORMATION

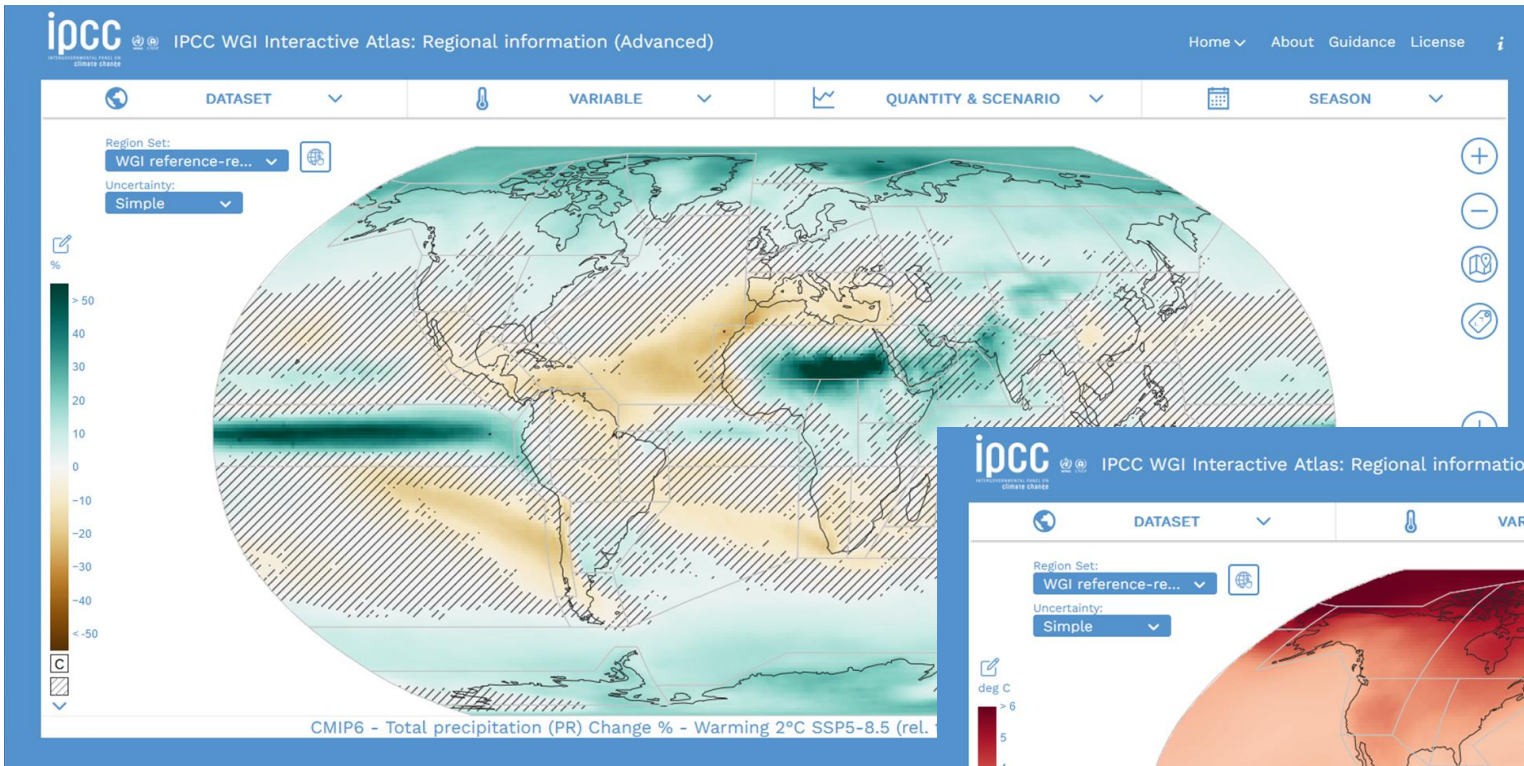


REGIONAL SYNTHESIS

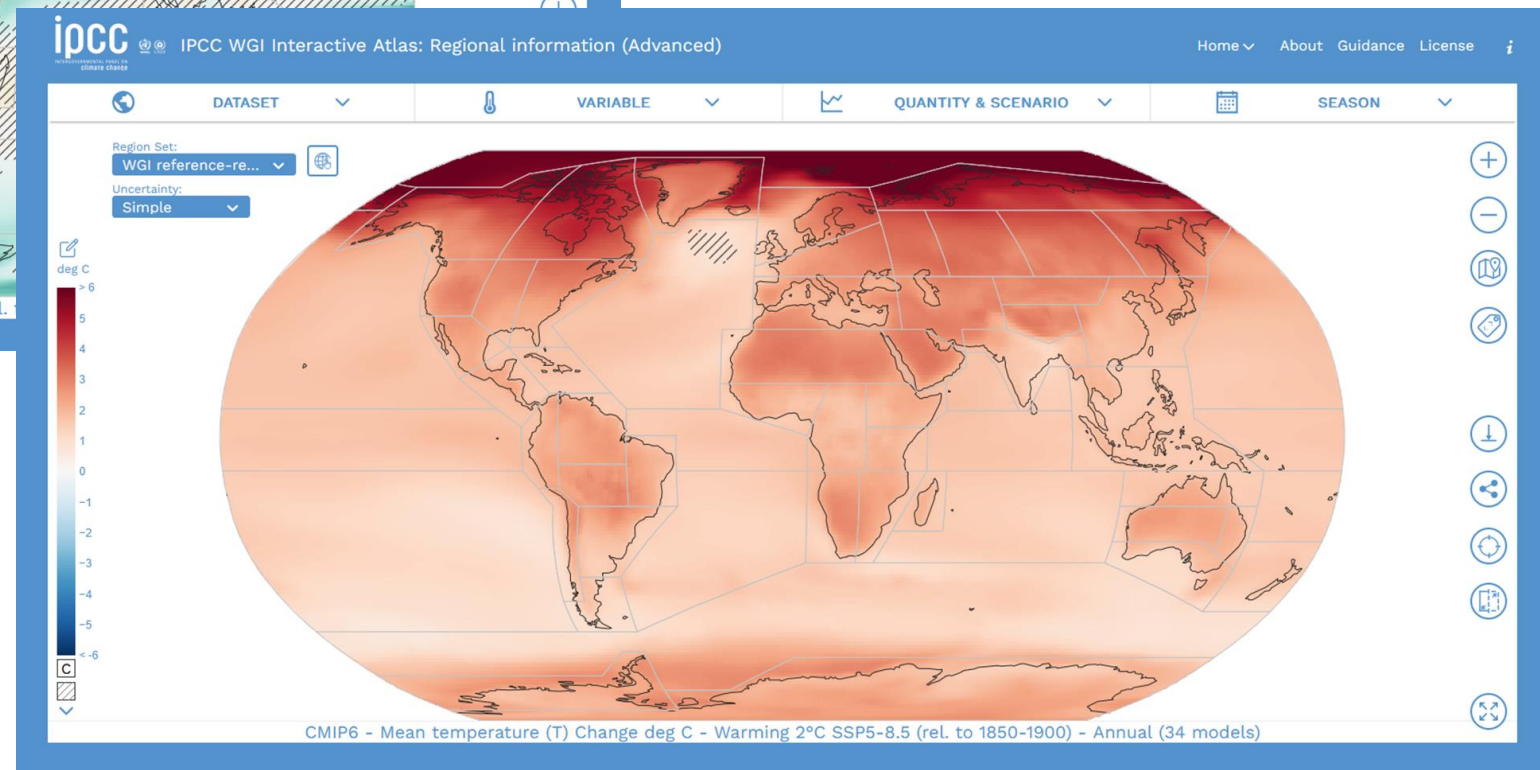


DOCUMENTATION

Tool #3 | Future | IPCC Interactive Atlas



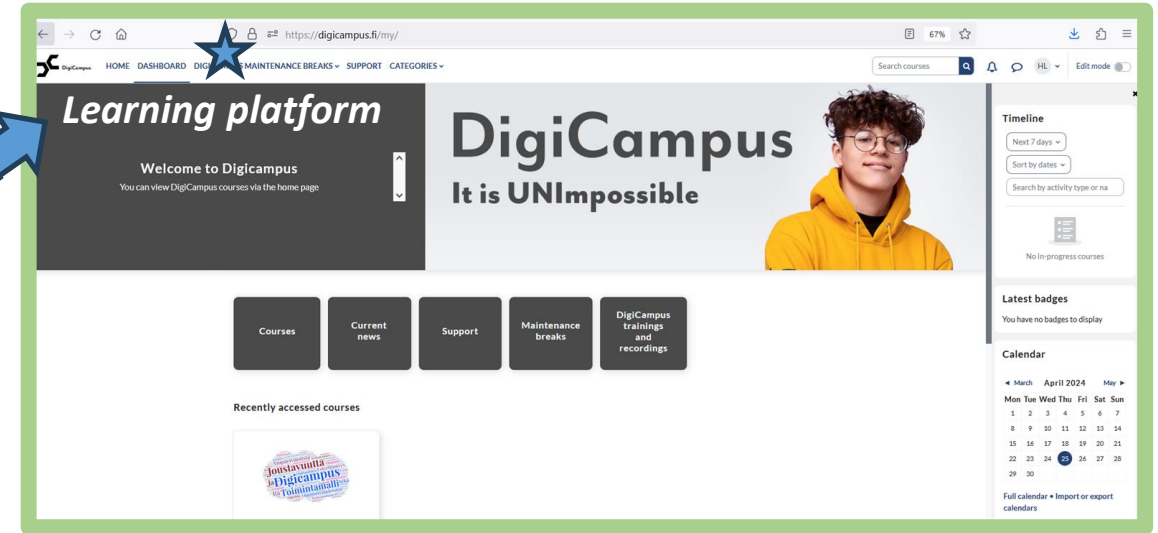
Total Precipitation



Mean Temperature

VE Week – Work in Groups on Climate Horizon

Learning + Communication + Collaboration Platforms (★)



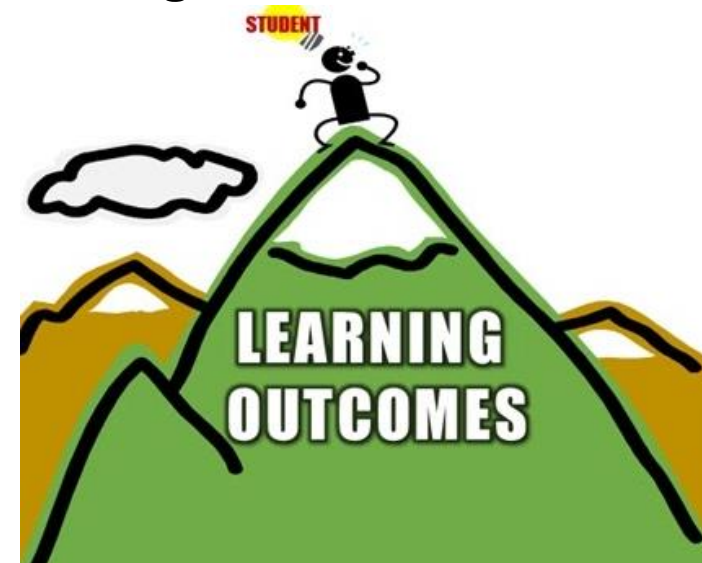
DigiCampus for sharing materials for students & moderators:

- VEG – Virtual Exchange Guidebook
- CLG – Climate Literacy Guidebook
- CMC – Climate Messenger Code of Conduct
- Videos+slides of 8 lectures & 3 tools for data analysis
- Group Exercise "Climate Horizon" & linking to SDGs
- Questionnaires



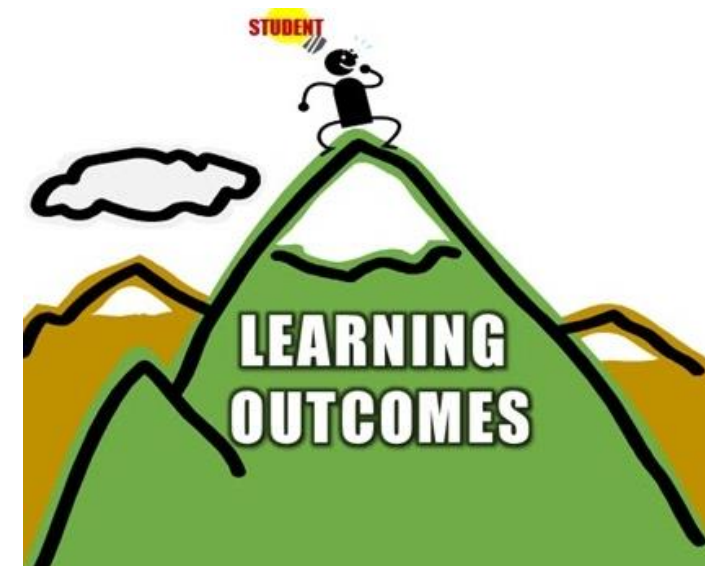
VE Week – Learning Outcomes /in Certificate/

- Basics of the atmosphere, biosphere, hydrosphere and anthroposphere interaction and feedbacks.
- Basics of climate change based on latest science: Planetary boundaries concept, Last methodological tools used in observing the Earth System.
- Understanding of the human role from different perspectives like ethical, social, different cultural backgrounds in climate change, adaptation, and mitigation advances.
- Critically reflect owns views on climate change, sustainability, and create new visions.
- Reflect different international and intercultural perspectives on climate change and sustainability.



VE Week – Learning Outcomes /in Certificate/

- Reflect about global versus local challenges in finding adaptation and mitigation solutions.
- Work together in different online working environments.
- Work and be part of an international teams and manage small joint projects.
- Communicate and present their work in English.
- Learning basic study skills such as use of open data, literature search, critical reading and thinking.

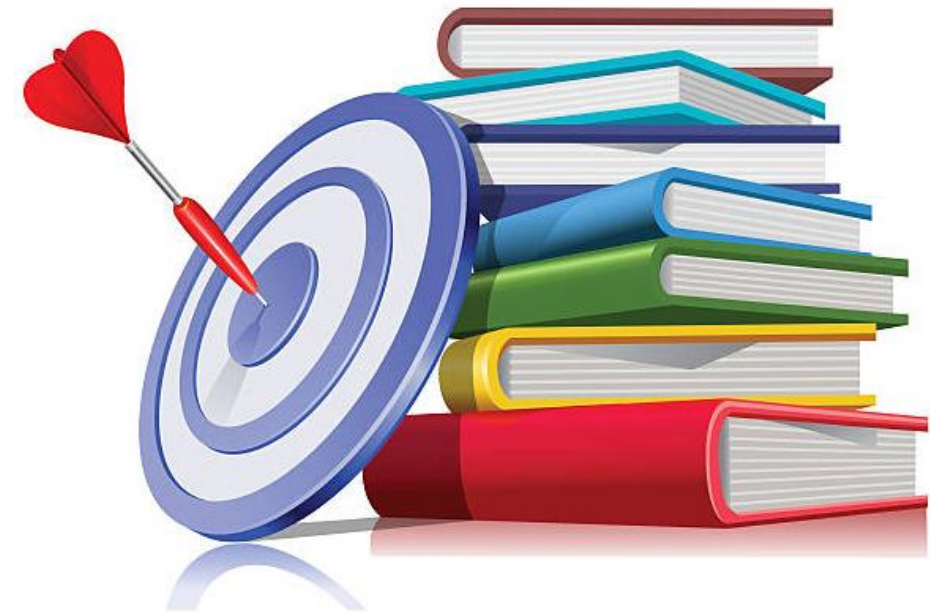


VE Week – Earned Bonuses for Students



Students awarded the following:

- **1 ECTS credit by University of Helsinki**
- **CLUVEX Certificate**
- **Status of Climate Messenger**
- **Welcome to Climate University Online Courses**



Welcome to Climate University Online Courses



Students (BSc, MSc, PhD, PostDocs)
who participated in CLUVEX VE Weeks
and became the **Climate Messengers**



are also encouraged to take the Climate University online courses

<https://climateuniversity.fi>

Climate University


- brave forerunner in educating active sustainability makers for the society and business -









Courses

2-5 ECTS each
50+ ECTS in total
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www.climateuniversity.fi



 SUSTAINABLE.NOW	 CLIMCOMMS.NOW	 SYSTEMSCHANGE.NOW
 CIRCULAR.NOW	 CLIMATE.NOW	 LUKIOLAISEN ILMASTO.NOW
 STATISTICAL TOOLS	 SOLUTIONS.NOW	 LEADERSHIP FOR SUSTAINABLE CHANGE
 BIODIVERSITY.NOW	 FORESTS AND CLIMATE	 LIVING WITH CHANGING CLIMATE

After moderators' training & self-education, you will:

- get the necessary credits from the University of Helsinki (3 ECTS),
- get an internship certificate related to your studies,
- try pedagogy and language skills in a national small group,
- learn technical remote working and interaction skills that you will need when you move into working life,
- increase your network with the organizing universities,
- have a unique experience that broadens your world view.

Next is tutorial by Aleksi Vauhkonen (UH)

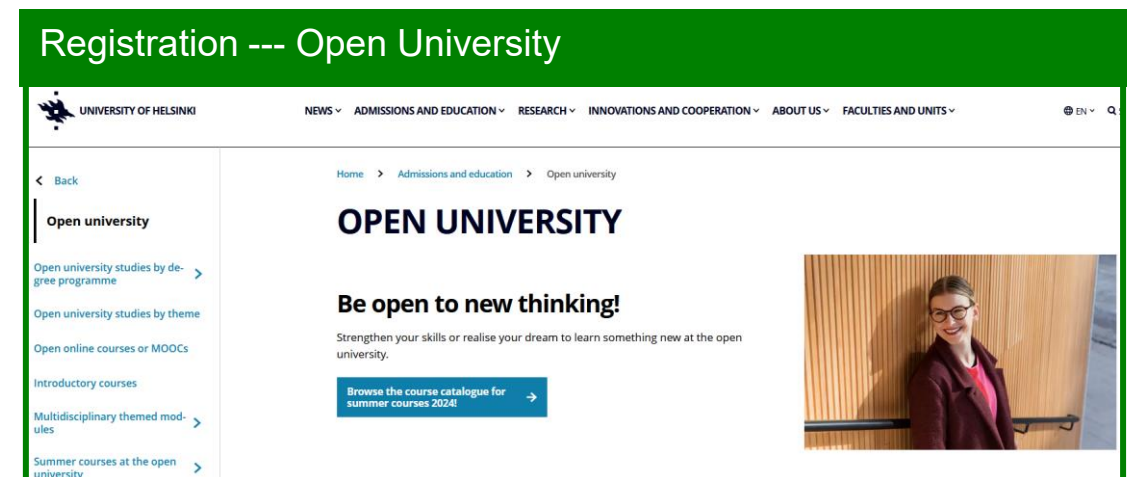


Materials --- DigiCampus

Welcome to
the shared learning environment
for universities!

DigiCampus
It is UNImpossible

<http://www.digicampus.fi>



Registration --- Open University

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