EUROPEAN CLIMATE RISK ASSESSMENT

Building resilience of European societies to climate change risks

ISIMIP Interactive Viewer for the European Climate Risk Assessment - beta version

© Igor Popovic, Climate Change PIX /EEA





European Environment Agency European Topic Centre Climate change adaptation and LULUCF



EU policy drive on climate change adaptation

2021 EU Strategy on Adaptation to Climate Change

Smarter, swifter and more systematic adaptation



Improve knowledge of climate impacts and adaptation solutions



Step-up adaptation planning and climate risk assessments



Accelerate adaptation action



Help to strengthen climate resilience on a

global scale

EUCRA objective:

set priorities for adaptation in Europe

Main features and added policy value

An assessment of key current and future climate risks in Europe



Fast-track, to be published in **April 2024**



Expert-driven and evidence-based



Involving the European Commission and other key stakeholders



Identifying key risks per system sector and across systems and sectors



Identifying priorities for action

Use of interactive tools

Planned products EUCRA report **Executive summary** (input to planned Commission Communication) Interactive data viewers Sectoral policy briefs

Different lines of evidences

Quantitative



Climate data and climate scenarios

e.g. European Climate Data Explorer, C3S, IPCC Interactive Atlas

- Socio-economic data & event databases
 e.g. DKMKC Risk Data Hub, Eurostat database
- Climate change impacts projections e.g. PESETA IV, COACCH, ISIMIP

Socio-oconomic sconarios





- Literature reviews e.g. IPCC AR6
- Climate change impacts studies e.g. EU-funded research projects
- Expert elicitation e.g. Expert Advisory Group
- Stakeholder engagement e.g. Commission Working Group

EUCRA Interactive viewer – beta version (internal)

Purpose: visualize and

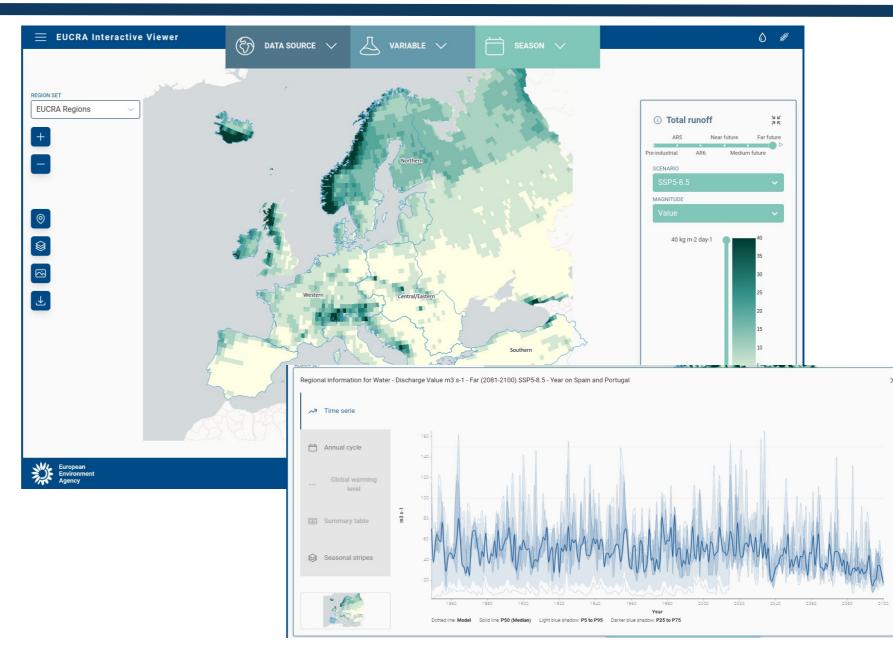
download information that support the climate risk analysis within EUCRA

Domain: Europe

1st set: User-driven selection of ISIMIP variables

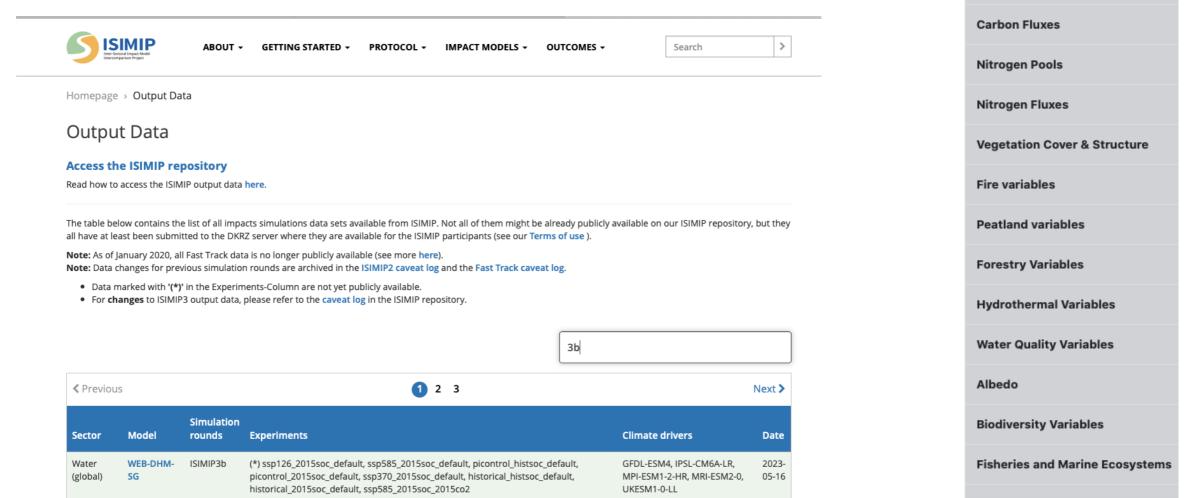
Next: additional ISIMIP variables, possibly include climate impact drivers, non-climatic drivers, exposure, vulnerability eea-eucra.predictia.es Username: predictia

Password: demo



FUCRA Interactive viewer – beta version

https://protocol.isimip.org/#42-output-variables



Temperature-related Mortality

Hydrological Variables

Agricultural Variables

Carbon Pools

Water management Variables

Data sources

Fisheries

- Total Consumer Biomass Density (**tcb**)
- Total Catch (commercial groups / size classes) (**tc**)

Biomes

- Carbon Mass in Vegetation (cveg-total)
- Carbon Mass in Above Ground Vegetation Biomass (cvegag-total)
- Carbon Mass Flux out of Atm. due to Net Primary Production on Land (npp-total)
- Carbon Mass Flux out of Atm. due to Net Biospheric Production on Land (nbp-total)
- Leaf Area Index (lai-total)
- Burnt Area Fraction (**burntarea-total**)

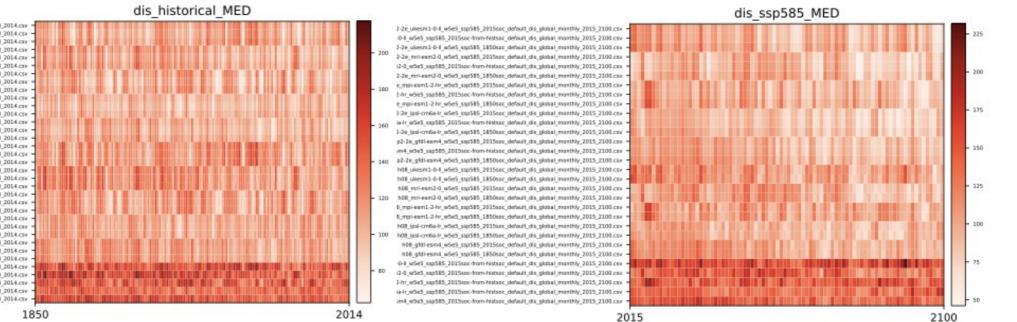
*Instead of using the total it may also make sense to show the results per plant functional type (pft)

Agriculture: Crop production (not ready)

Water: discharge (dis), runoff (qtot)

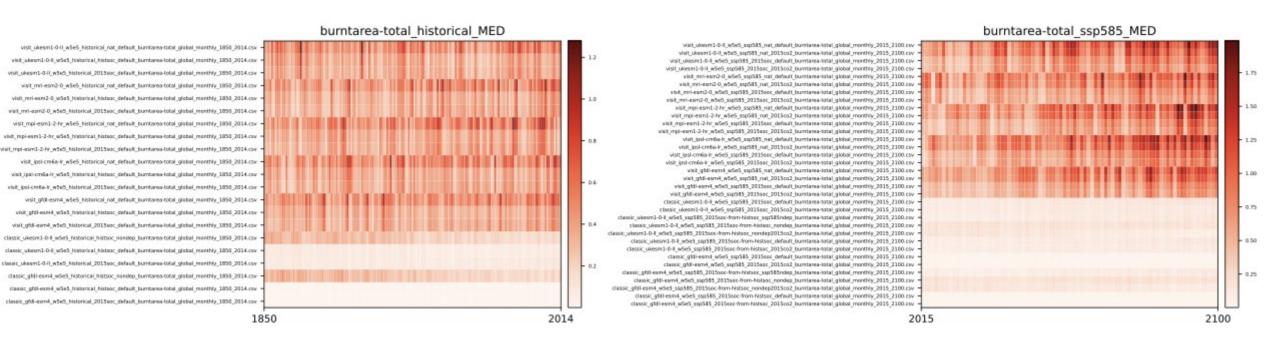
Which **additional variables** from these sectors could provide robust information for EUCRA?

Data sources



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Data sources



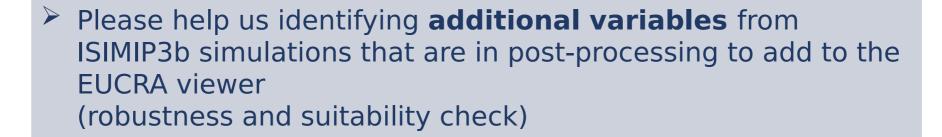
Potential: ISIMIP viewer (not EEA funded)

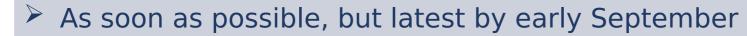
Spin-off of EUCRA version (open source)

Global coverage

Inclusion of further ISIMIP variables (without EEA involvement)

Call to action





Please let us know if simulations for additional sectors are already in an advance stage

For more information on EUCRA:

Visit the <u>EUCRA webpage</u> on Climate-ADAPT

Contact us: EUCRA@eea.europa.eu

