



**INTEGRATED DROUGHT
MANAGEMENT PROGRAMME**



WORLD
METEOROLOGICAL
ORGANIZATION



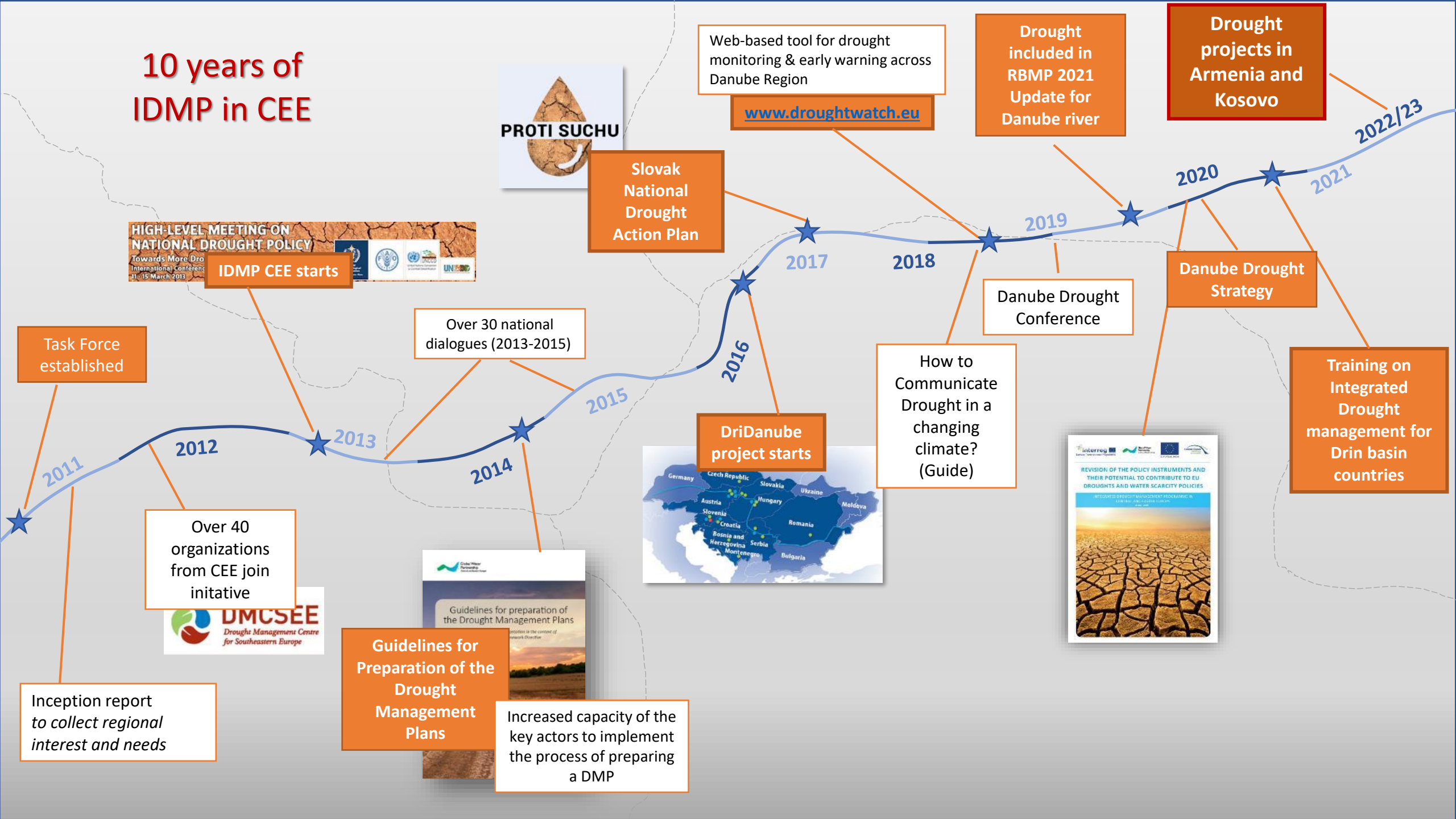
Global Water
Partnership

**IDMP Central and Eastern Europe
&
Drought Management Centre for
Southeast Europe**

Update on regional activities

**Sabina Bokal, Anna Smetanova GWP CEE
Andreja Sušnik, DMCSEE**

10 years of IDMP in CEE



Integrated Drought Management System and Measures to Mitigate the Impact of the Climate Change in Kosovo



October 2022 – June 2024

Main activities:

- Draft Action Plan for the Drin River Pilot Basin
- A set of drought mitigation measures
- Drought Management Community of Practice
- National consultative dialogue
- Training for water management experts and farmers

Building on NOAA funded activities in 2022 on IDMP in Drin basin countries.

Knowledge transfer on drought issues due to climate change for Armenia



September 2022 – October 2023

Study Visit – Bratislava (SHMI, GWP CEE, Czech Globe) and in Ljubljana (DMCSEE in-kind contribution)

Armenian Drought Management Community – opened in April 2023

- 50+ members
- to support transfer of knowledge and lessons learned;
- to build a sustainable community for Armenian drought experts and relevant institutions
- to engage other stakeholders (e.g. students)
- to establish repository with all relevant drought info



COMMUNITY OF PRACTICE

Երաշտի կառավարման հայկական համայնք
Armenian Drought Management Community

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Climate

Armenia

Planned activities

Support the Implementation of IDM and Catalyze Change

„Kosovo project“: Action plan for preparation of the DMP; CoP for Kosovo, set of measures, training & national dialogue

Generate and Manage Knowledge

- „Kosovo project“: capacity building on drought
- **HuT Project** - Researching the transfer and scalability of multi-hazard DRR solutions among different case studies (2 in CEE related to flood and droughts)

Communication and Strengthen Partnerships

- Support development of **Community of Practice on Drought** in Armenia and Kosovo (Visegrad Project)
- Active collaboration among multiple CEE countries, DMSCEE, Armenia and Kosovo partners in projects
- Support drought aspects and drought-flood aspects related to NBS in Community of practice of water related NBS
- Strengthening existing partnerships in the region and connect with other institutions and initiatives to gain extra knowledge and good practices.

Fundraising

- **Submitted project(s):**

LAREDAR: Lakes and Reservoirs in the Danube River Basin – submitted in Nov 22; Promoting climate change adaptation capacities in the Danube Region and disaster management on transnational level in relation to environmental risks taking into account ecosystem based approaches

- **Calls to consider for application:**

HORIZON-CL6-2024-BIODIV-02-1-two-stage: Demonstrating Nature-based Solutions for the sustainable management of water resources in a changing climate, with special attention to reducing the impacts of extreme drought. Open in Oct 2023, 22 Feb 2024 (First Stage), 17 Sep 2024 (Second Stage)

Danube Region programme (Interreg): DriDanube vol.2?



**INTEGRATED DROUGHT
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DMCSEE
Drought Management Centre
for Southeastern Europe



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ARSO METEO
Slovenian Environment Agency



**Global Water
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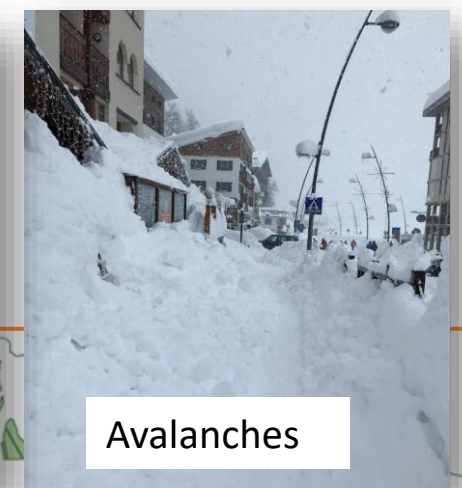
Drought Management Centre for Southeastern Europe
Update on ARSO drought-related projects

*How to adapt to changing weather **X**-tremes and associated compound and cascading **RISKS** in the context of **C**limate **C**hange*

Start/End: 1 November 2022 – 31 October 2025 (36 months)

Project value: 2.982.072.92 EUR

Programme: Interreg Alpine Space 2021-2027



Partnership

- The project **team**:
- 11 partners (from practice, policy-advisers, science), 6 countries
- **Lead partner EURAC Research** (Bolzano, Italia),
- **Slovenian Environment Agency / ARSO** (Slovenia),
- Development Agency Sora (Slovenia),
- Civil Protection Agency, Autonomous Province of Bolzano (Italia),
- Autonomous Province of Trento (Italia),
- Auvergne Rhône-Alpes Energy Environment Agency (France),
- GeoSphere Austria (Austria),
- Forest-technical service for torrent and avalanche control, Section Tyrol (Austria),
- Environment Agency Austria (Austria),
- Technical University of Munich (Germany),
- Swiss Federal Institute for Forest, Snow and Landscape Research WSL (Switzerland)

Alpine Space

- Alpine space area



Pilot areas



Pilots

- **Garmish (D)**

- Intense summer rainstorms > rockfalls, debris flow

- **Wipptal-Tirol (ITA, AUT)**

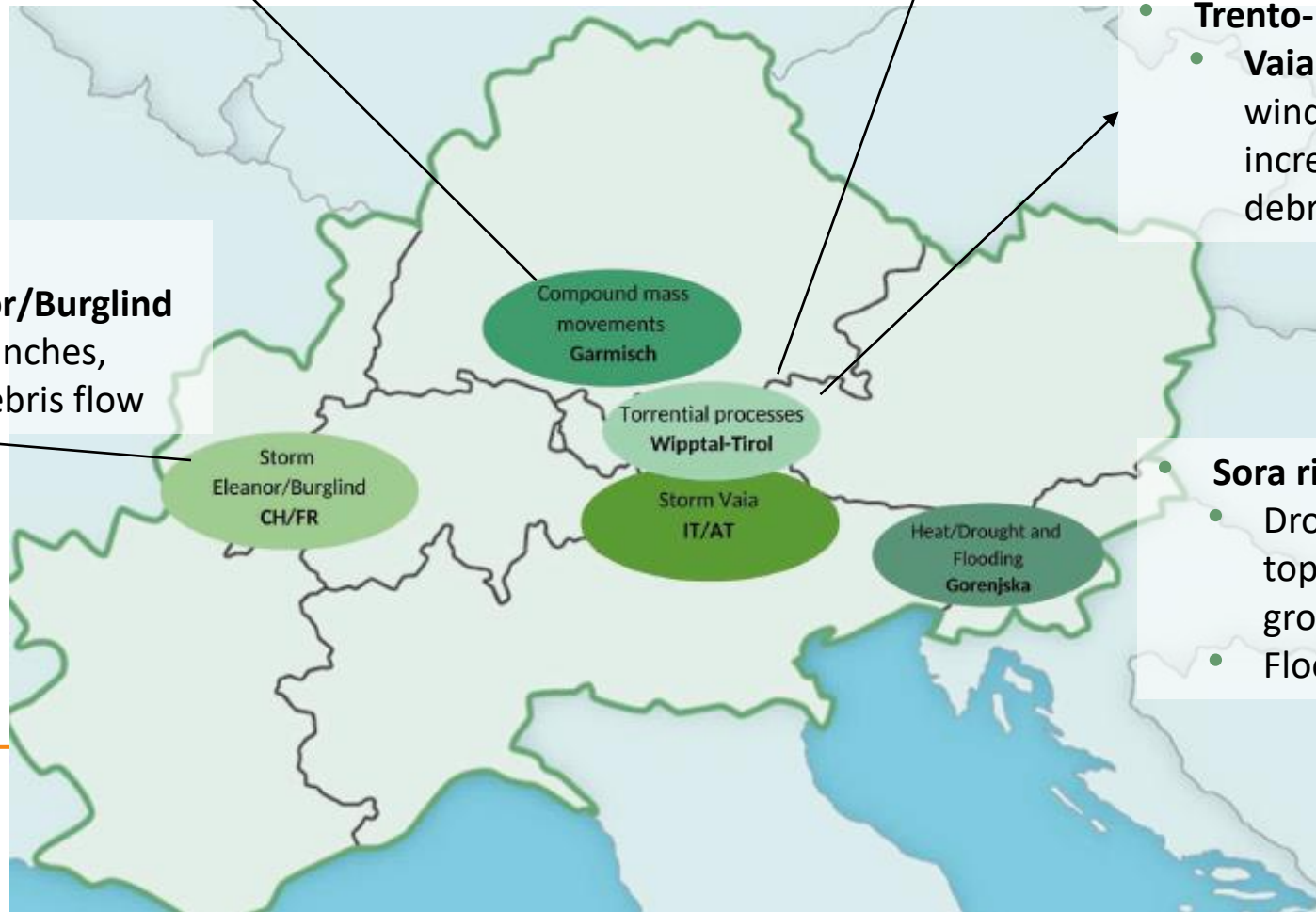
- Increased rain intensity > debris flow, driftwood, floods;
- Higher temperatures > Permafrost and glacier melt

- **Trento-Bolzano (ITA)**

- **Vaia storm** (Heavy precipitation and strong wind) > crashing of entire forests, increased avalanche danger, floods and debris flow

- **France, Switzerland**

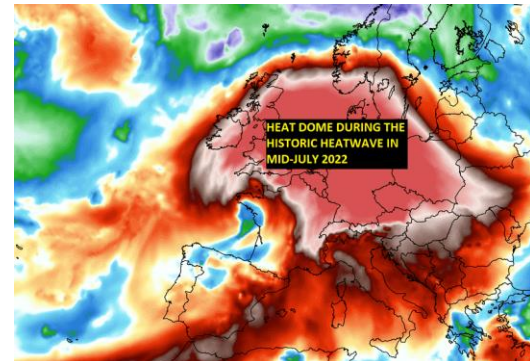
- Winter storm **Eleanor/Burglind** > rain on snow, avalanches, floods, landslides, debris flow



- **Sora river basin /Gorenjska (Slovenia)**

- Drought / Flash drought (all types – topsoil, hydrological in surface waters, in groundwaters)
- Floods and debris flow

**Slovenia
2022 – drought declared as natural disaster in
agriculture, hydrological drought, heat and the
largest historic fire**



Source: <https://www.delo.si/novice/slovenija/kljubujejo-suhim-pipam-pomaga-jim-tudi-dez/>



Marko Kervec
PHOTOGRAPHY

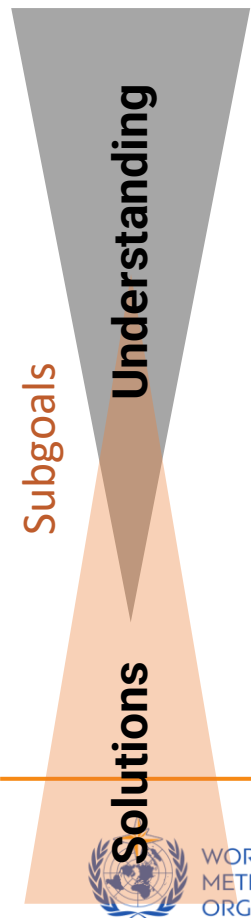


2023- devastating floods



The project overall aims > outputs

To support **risk managers** and **policy makers** to address the **compound risks of weather extremes** by improving risk management and CC-adaptation mechanisms.



1 Improved **understanding** of past & future **weather extremes** under Climate Change



Digital library - Easy-access point for alpine-wide information on weather extremes including a WebGIS platform - data visualisation tool for risk analysts)

2 Improved **understanding** of past & future **compound/cascading impacts and risks**



X-RISK-CC manual - Concept how to uptake the newly created scientific knowledge by risk managers and practitioners

3 Develop concrete **risk management measures** for the **pilots** (active involvement of stakeholders).



Pilot area dossiers
Proposal **Pilot action plans**

4 **Increasing resilience** of AS by upgrading **transnational guidelines** and **policy options**



Digital sourcebook

More about the project:

<https://www.alpine-space.eu/project/x-risk-cc/>

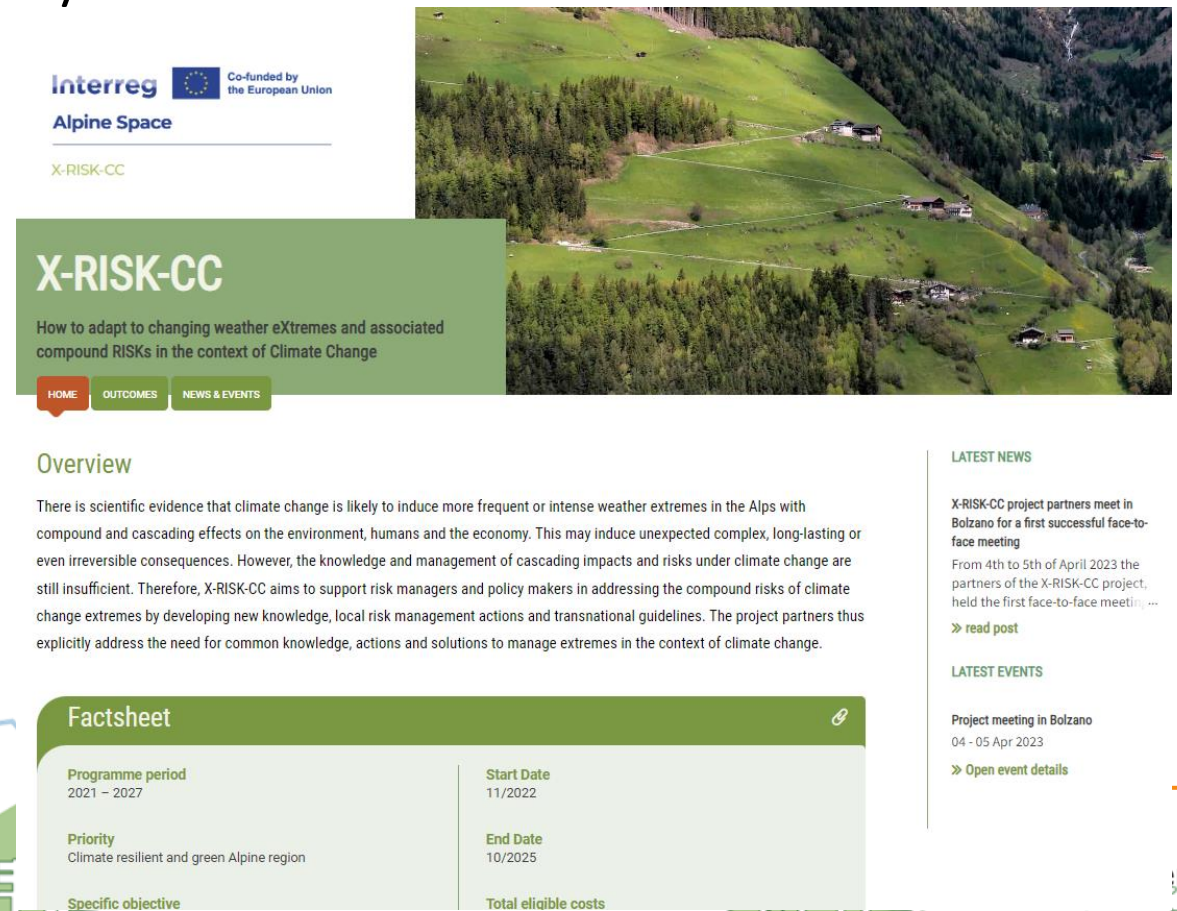
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Interreg  Co-funded by
the European Union
Alpine Space

X-RISK-CC

X-RISK-CC

How to adapt to changing weather eXtremes and associated compound RISKS in the context of Climate Change

[HOME](#) [OUTCOMES](#) [NEWS & EVENTS](#)

Overview

There is scientific evidence that climate change is likely to induce more frequent or intense weather extremes in the Alps with compound and cascading effects on the environment, humans and the economy. This may induce unexpected complex, long-lasting or even irreversible consequences. However, the knowledge and management of cascading impacts and risks under climate change are still insufficient. Therefore, X-RISK-CC aims to support risk managers and policy makers in addressing the compound risks of climate change extremes by developing new knowledge, local risk management actions and transnational guidelines. The project partners thus explicitly address the need for common knowledge, actions and solutions to manage extremes in the context of climate change.

Factsheet

Programme period 2021 – 2027	Start Date 11/2022
Priority Climate resilient and green Alpine region	End Date 10/2025
Specific objective	Total eligible costs

LATEST NEWS

X-RISK-CC project partners meet in Bolzano for a first successful face-to-face meeting

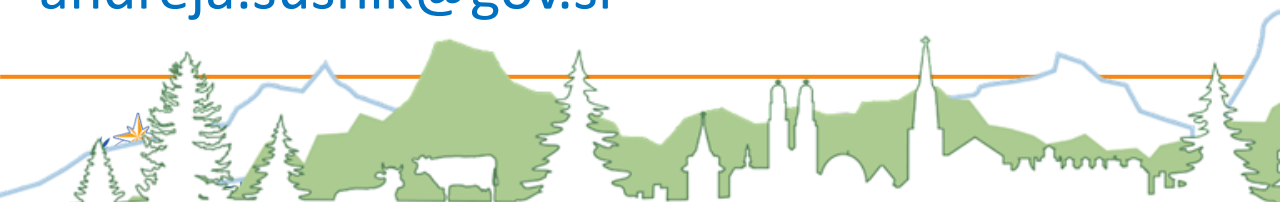
From 4th to 5th of April 2023 the partners of the X-RISK-CC project, held the first face-to-face meeting...

[» read post](#)

LATEST EVENTS

Project meeting in Bolzano
04 - 05 Apr 2023

[» Open event details](#)



Clim4Cast project

„Central European Alliance for Increasing Climate Change Resilience to Combined Consequences of Drought, Heatwave, and Fire Weather through Regionally-Tuned Forecasting“

Time frame: Mar 2023 - Feb 2026 (3 years)

Budget: 1.913.954,00 EUR (80 % ERDF funds)

Programme: Interreg Central Europe 2021-2027

8 project partners , 26 associated partners (observers) , 7 CE countries



Partnership



Lead partner

(CZ)

(CZ)

MASARYK - Department of Geography
UNIVERSITY



TECHNISCHE
UNIVERSITÄT
WIEN
Vienna University of Technology

(AT)

(PL)



Institute of Soil Science
and Plant Cultivation
State Research Institute

Leibniz Centre for
Agricultural Landscape
Research



Leibniz-Zentrum für
Agrarlandschaftsforschung
(ZALF) e.V.

(D)

(SI)



ARSO METEO
Slovenian Environment Agency

Croatian Hydrological and
Meteorological Service



(HR)

(SK)



*Slovak Hydrometeorological
Institute*

8 project partners:

- Research (institutes, universities)
- National hydromet. services

26 associated partners (observers):

- Ministries, institutes, municipalities, companies
- Agriculture, forestry, environment, civil protection, insurance

Project focus



Aim

Address the absence of tools that monitor, predict and spread awareness of DHF on an operational basis

Topic

Forecasting drought, heatwaves, and fire weather (DHF) in Central Europe

How

Developing multi-temporal DHF forecast component & its integration in existing national DHF monitoring platforms

Main tasks

Forecasting tool for DHF and their compound effects

- Collect best practices on monitoring and prediction of DHF and compound events
- Mid-range (~10 days), extended (~50 days) and seasonal (~6 months) DHF forecasts functionalities to the national EWS systems

Integrated strategy to increase awareness on DHF and climate change effects

- Collect data on occurrence & impacts of DHF events
- Methodology for attribution of occurrence of DHF events to CC
- Strategy on improved climate change awareness



DHF response action plan through efficient EWS

- Existing status of DHF response & best practices
- Institutions communication and engagement action plan within existing legal frameworks

Interreg
CENTRAL EUROPE



Co-funded by
the European Union

Clim4Cast



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www.interreg-central.eu/projects/clim4cast



#Clim4Cast

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Thank you for your attention!

www.gwpcee.org

www.droughtmanagement.info/idmp-activities/idmp_cee/