TRACE
Tracing Climate Change
by geomorphological approaches

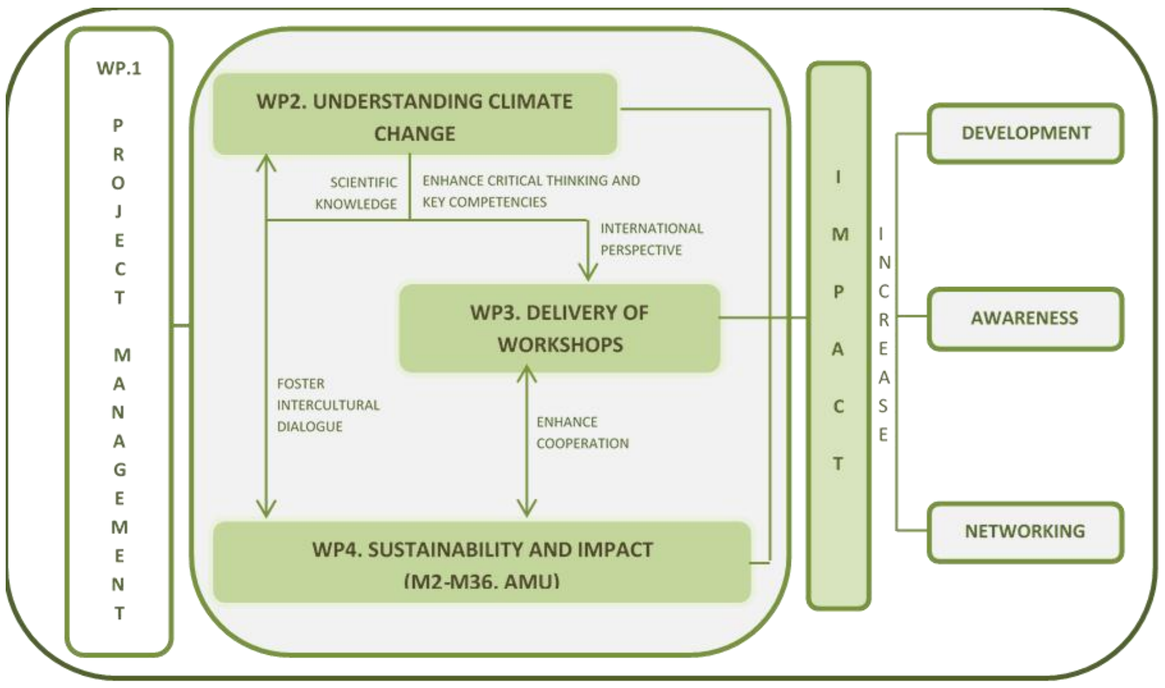
Co-funded by the European Union

TRACE - a Collaborative Project throughout the Erasmus Network

Introduction

Climate change is one of the most pressing global challenges, significantly influencing natural landscapes and geomorphological systems. Coastal and deltaic environments are particularly vulnerable, experiencing dynamic transformations driven by both natural processes and human activities.

The TRACE project addresses these challenges by promoting an interdisciplinary STEM-based approach for a better understanding of landscape evolution and climate-driven environmental change.



TRACE implementation plan

KEY RESEARCH TOPICS:

PALAEOGEOGRAPHY

- reconstruction of past landscapes and paleo-shoreline
- human interventions contributing to the climate change and reshaping terrestrial landscapes

MORPHOTECTONICS

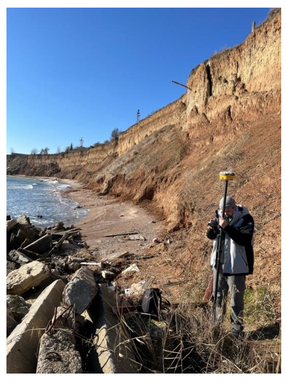
- understanding tectonic influences on landforms
- methodologies used to study the extent of tectonic influence on the Earth's surface

CLIMATE CHANGE

- analysis of long-, medium-, and short-term climate dynamics and the disruptions in their cycles due to anthropogenic Interventions
- climate sequences effect on coastal and deltaic environments

KEY CLIMATE VARIABLES

- assessment of indicators and coastal impacts (with focus on permafrost and sea-level changes)



Activities:

The project includes a range of research, educational, and dissemination activities

- Field campaigns for geospatial data collection and mapping
- Development of innovative educational materials
- Training workshops for students and young researchers
- Scientific conferences and stakeholder engagement
- Successful stories booklet

Results and Impact:

TRACE contributes to both scientific advancement and educational innovation

- Improved understanding of climate change processes in geomorphological environments
- Development of interdisciplinary STEM competences
- Strengthening international academic collaboration
- Creation of accessible and innovative learning resources
- Increased awareness of environmental change and sustainability

Visibility and Dissemination:

The project ensures strong visibility through digital platforms and outreach activities

- Website: https://trace.unibuc.ro/
- Social Media:

https://www.facebook.com/traceclimatechange

https://www.instagram.com/traceclimatechange/

https://www.tiktok.com/@traceclimatechange

https://www.youtube.com/@TRACEproject2023

Conclusions

The TRACE project provides a valuable framework for understanding the complex interactions between climate change and geomorphological processes. By integrating research, education, and practical training, it supports the development of future specialists and contributes to the sustainable management of coastal and deltaic environments.

Acknowledgements

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