

# ROCKtheALPS

## Alpine Forests are Rock Stars!

RockTheAlps ([www.alpine-space.eu/rockthealps](http://www.alpine-space.eu/rockthealps)) is specifically dedicated to the enhancement of rockfall protection forest ecosystems service in risk management and prevention policy.

### PROJECT OBJECTIVES

#### ROCK-EU: Development of an innovative AS rockfall assessment methodology

The objective is to develop a common and harmonized methodology for defining the potential rockfall release and run-out zones in the whole Alpine Space. To date, such methodology does not exist. However, the basic principles have been developed and tested in the scientific community in the last 2 decades. This knowledge will be used and improved for building up an innovative spatial model dealing with Alpine Space countries specificities

#### TORRID: Construction of the first AS Toolbox for assessing the protective effect of forests against rOckfall

The objective is to develop a toolbox called TORRID that allows:

- 1) to identify & map forests that contribute to Rockfall Risk Reduction (RRR) in the Alpine Space,
- 2) to define optimal forest characteristics for an efficient RRR.

#### Production of the first harmonised map of protective services of forest ecosystems against rockfall for the entire AS

This mapping will be done in 2 steps:

- 1) localization and identification of protection forest by intersecting the maps of rockfall runout zone, damage potential, and forest coverage (applying ROCK-EU),
- 2) Evaluation of the mitigation efficiency provided by the forest stands (applying TORRID).

#### Implementation of an economic model to the economic assessment of rockfall protection forest ecosystems services T

The harmonised map of protective services of forest ecosystems against rockfall for the entire AS allow clearly displaying zones where nature based technics are potentially usable for risk mitigation. It's only the first step for evaluating the importance of rockfall protection forest ecosystems service. The last step of this process is to assess the economic impacts of this service. The development of an harmonized methodology for providing such evaluation and allowing cross comparison between countries, is one of the objectives of the project.

#### Implementation of guidelines, a Territorial Information System and recommendations

For sustainably promote and valorize the rockfall protection forest ecosystems service, there is a need of displaying, synthesizing the project's outputs and findings in formats which are readily accessible, usable by all relevant actors. 4 different formats are relevant and will be used for promoting the project results: digital maps, working events, factual data in newsletter form, synthetic guidelines (digital version)

### PROJECT DURATION

November 2016 - October 2019

### PROJECT PARTNERS



IRSTEA  
National research institute of science and technology for environment and agriculture



BRGM  
French Geological Survey



Alp'Géorisques



SFS  
Slovenian Forest Service



UL  
University of Ljubljana,



SFI  
Slovenian Forestry Institute



UNIPD  
University of Padova



DISAFA  
University of Turin



ERSAF  
Lombardia Region



PAT-SFF  
Autonomous province of Trento



POLITO  
Politecnico di Torino



BFW  
Federal Research and Training Centre for Forests, Natural Hazards and Landscape



BMLFUW  
Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management



LWF  
Bavarian State Institute of Forestry



BFH - HAFL  
Bern University of Applied Sciences

