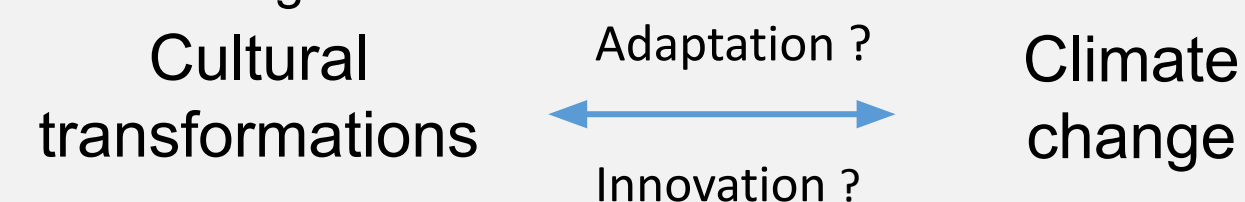


Monitoring changing mountains

The RefLab program focuses on a monitoring of social and environmental change in mountain areas. It aims to cross questions between natural and social sciences, to develop suitable methodologies for carrying out long-term observations and research. It is based on a network of mountain huts considered as privileged laboratories for tourist diversification & territorial intelligence

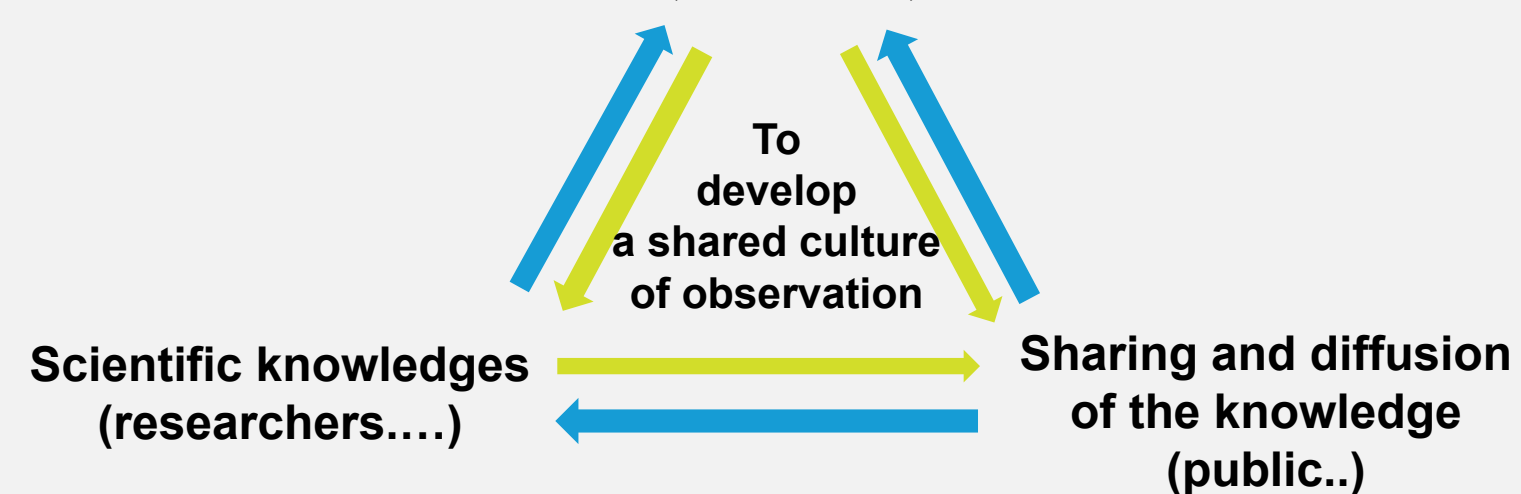
A participative observatory

RefLab is based on a partnership gathering voluntary professionals (hut keepers, mountain guides), protected areas, sport federations, rescue services and tourist offices, who contribute the orientation of the program, the collection and enhancement of data.. Each year an "end-season debriefing" enable to share information in order to build a collective and territorial intelligence



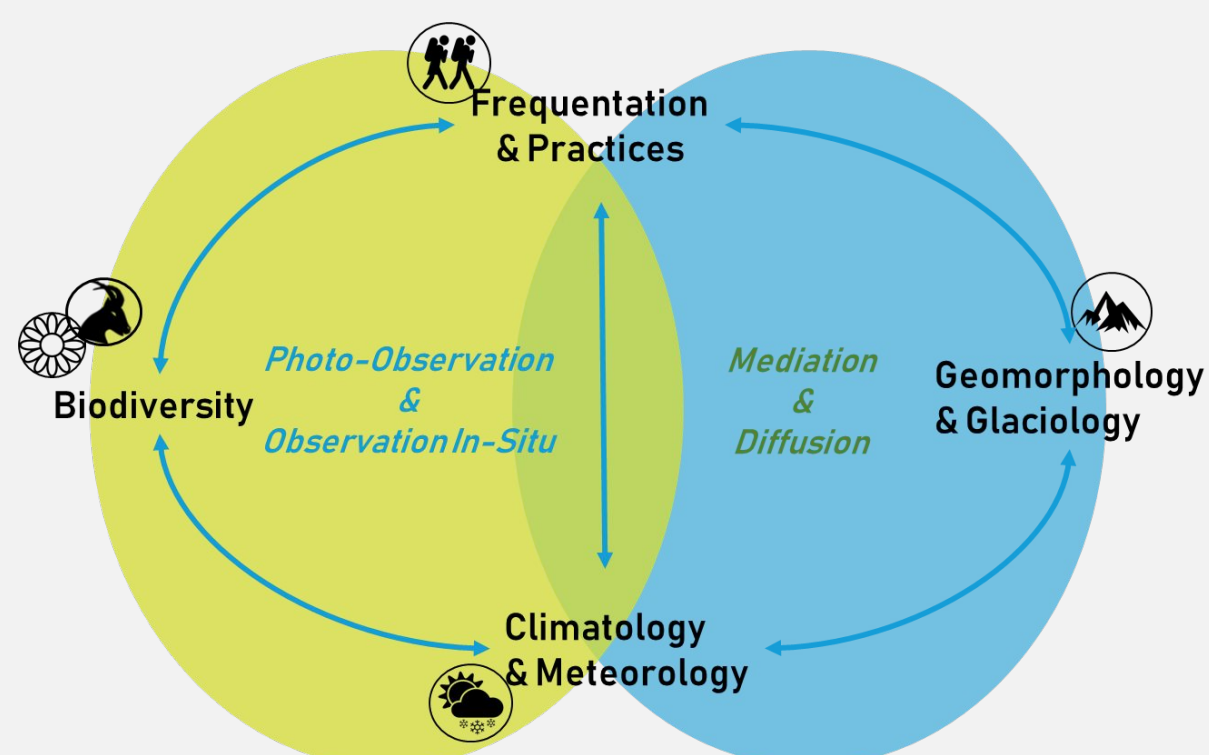
Operational knowledges (with and for the stakeholders & professionals)

- Collective and territorial intelligence...
- Observations, education, scientific tourism...



Concept and interdisciplinary approach

The main research topics are related to tourism and sports, meteorology and climate, biodiversity, geomorphology, risks and safety. They are based on quantitative and qualitative surveys and data collection, participatory observations, photo-reports and collaborative workshops. The results are used in the scientific field, as well as in tourism engineering, professional training and environmental education



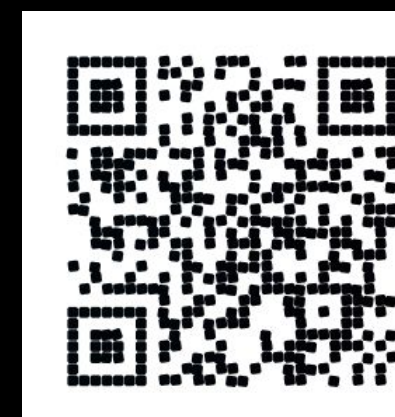
Mountain Huts as « Sentinels » of Social and Environmental Change



A Multi & Interdisciplinary Approach of Human-Climate-Biodiversity Relationship



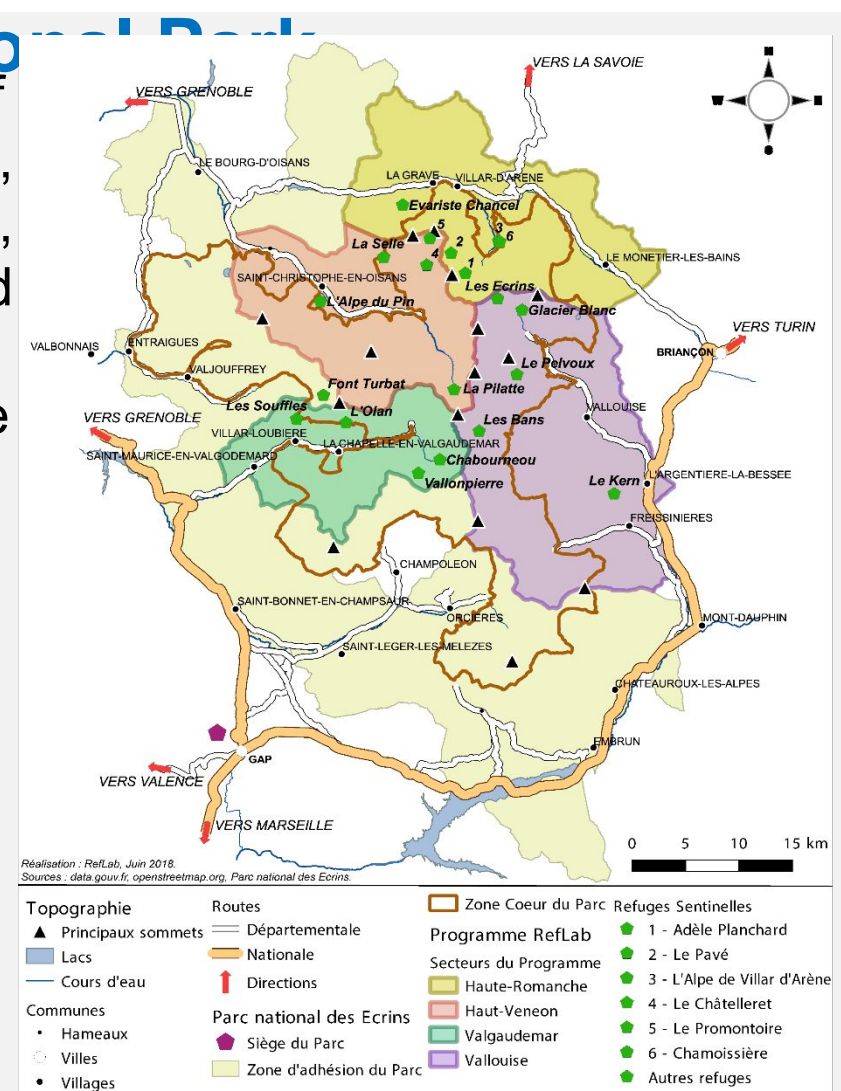
More
informations



An experimental study area in Écrins

16 mountain huts of diversified size, altitude, access, implantation place, management type, sports and tourist attendance
For next years a spin-off of the program is planned in other mountain areas

10 research laboratories from Grenoble and Chambéry universities and CNRS

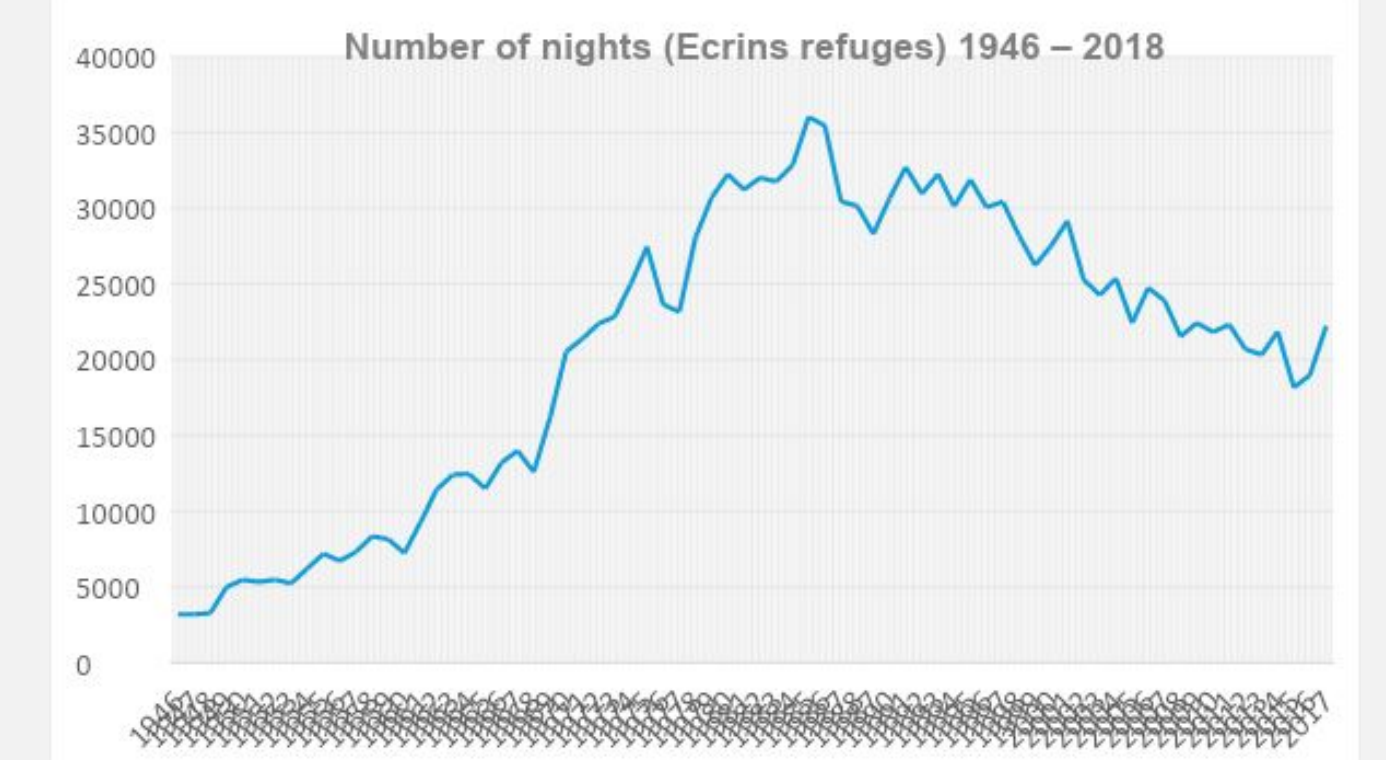
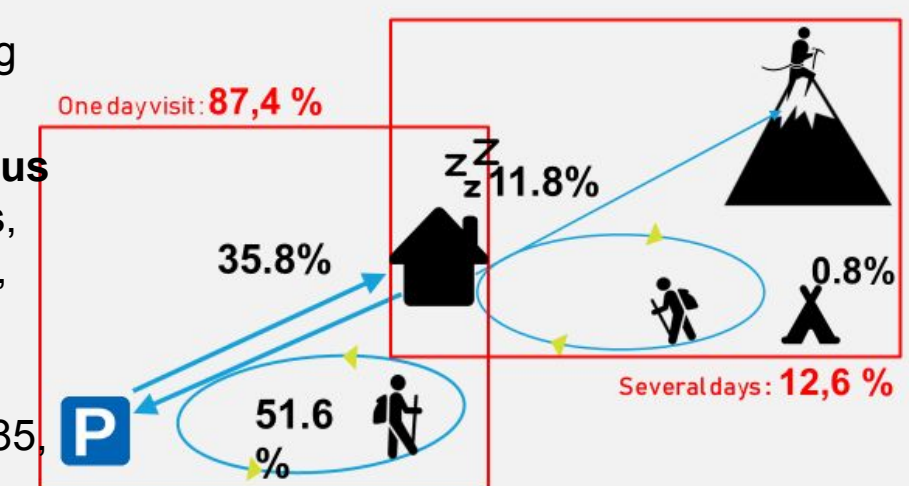


First results on mountain practises

35,8% of Haute Romanche aera visitors go to a mountain hut during their hike

A user audience with a **homogenous profile** (mainly CSP +, 45-55 years, male). But **emergence of a newer, younger audience**

The number of overnight stays in mountain huts decreases since 1985 and it's its recent renewal is very variable according to the huts



Fewer alpinists and more hikers and walkers in huts

Visitor numbers in huts **more depending on the weather**

Huts and mountain are lived as places for **disconnecting and resourcing experiences**, where **hut-keepers play an increased role** in welcoming new users, mediating their relationship with the environment and providing safety advice

The use of mountaineering routes is anticipated in late spring, reduced and modified during the summer due to the **retreat of glaciers**

Massive **transfer from snow routes to rock climbing routes**, and some old forgotten historical routes are becoming attractive again

Huts become places also dedicated to exhibitions, artists' residencies, concerts and balls, school visits, scientific tourism, well-being and contemplation...