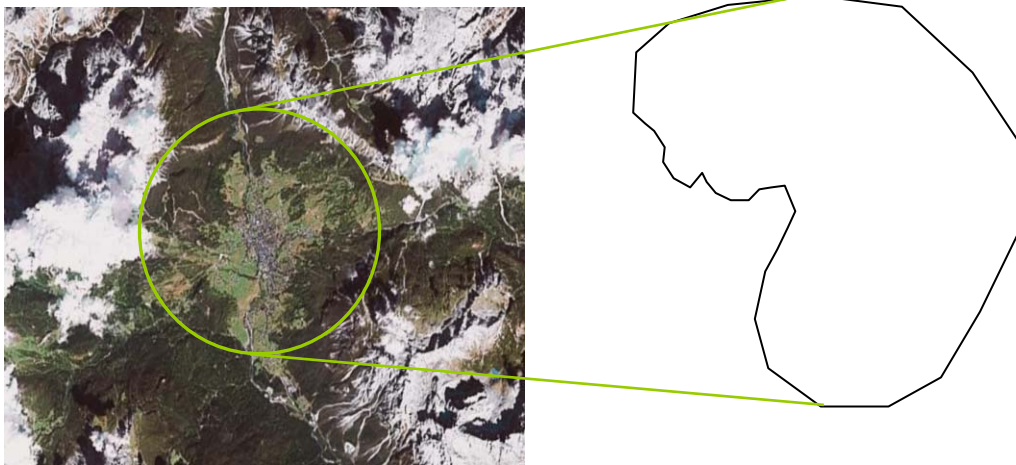


# Test-bed “Cortina Basin” (Italy – Regione Veneto)



## Location of the test bed

Veneto Region, Belluno province, with a population of almost 6000 inhabitants, rises up at a height of 1224 m. The study area comprises a surface of about 100 Km<sup>2</sup>, completely included in the Cortina d'Ampezzo municipality.



**Fig.** Map of the Test-bed

## Geographic description of the test bed

Cortina d'Ampezzo, the “Queen of the Dolomites” rises up in the center of a splendid amphitheatre in the Eastern Alps. The mountains above the basin make up a large crown from which rise up, elegant and majestic, the Croda Rossa, the Tofane, the Pomagagnon, the Cristallo, the Faloria, the Sorapiss.

The Cortina basin formation is due to their particular lithological composition joined to the glacial modeling by which has been affected during last glacial period. In fact, the large rock faces which border the area are all made by dolomite belonging to the Main Dolomite Formation. These rocks, with sub-horizontal dipping, are supported by weaker and softer rocks (Raibl, Durrenstein e San Cassiano Formations) which form gently dipping slopes with the establishment of vegetation. On this geological situation, overlapped of the Boite stream glacier which, together with the branch which came down from Tre Croci pass, contributed to model and to enlarge the Cortina Basin. After the glacial period, the steep rock walls of dolomite produced a great amount of landslides which the majority of that covered the underlying clastic rocks. In great measure of quaternary deposits consists of landslide processes build-up. The area hosts a great number for plant-animal species, mainly roe deers and camoises at the highest elevation. The increase in the number of deers and the reappearing of animals like bear and lynx, very sensible to the pollution components remarks that the environment conditions are getting better. The area is provided by natural resources extremely rich and diversified. To preserve it in the 1990 has been created The Dolomiti Ampezzane Natural Park.

## Relevance of test bed regarding MONITOR

This area represents a test bed for trans-national co-operation with Austria and Province of Bolzano to study with SAR technique the stability of basin slopes

**Existing basic data:** Geological maps, satellite air photos, geomorphological maps

## Previous activities in the test-bed

Geological studies and survey, inclinometric monitoring, warning systems

## Main objectives of the analysis in the Test-bed

Estimation of slope stability / movement in the Cortina Basin

## Interfaces to the Project (Conflict Potentials)

- Threat elements of the area are:
- Landslides
- Avalanches
- Flood phenomena

## Planned Activities/Outputs

Acquisition of slopes points displacement rate by SAR analyses with Permanent Scatterers technique.

## SWOT-analysis of the test-bed

<b>Strengths:</b>	<b>Weaknesses:</b>
<ul style="list-style-type: none"> <li>▪ Presence of the Dolomiti d'Ampezzo National Park created in 1990 with the aim of protect the environment and to promote sustainable tourism.</li> <li>▪ Great richness of natural and environmental resources</li> <li>▪ Worldwide reputation of Cortina as vacations place</li> </ul>	<ul style="list-style-type: none"> <li>▪ The strong tourist influx Cortina is submitted and the daily tourism have a heavy impact on the environment and on the traffic of the area.</li> <li>▪ Traffic pollution and disposal of the scraps represent problems which are difficult to solve in an effective way for a town that often has as an increase of ten times of the population during the week end</li> <li>▪ Presence of active landslide phenomena that interfere with populated areas (e.g. Fiames/Acquabona debris flow and the Mortisa/Staulin mud-flows)</li> </ul>
<b>Opportunities:</b>	<b>Threats:</b>
<ul style="list-style-type: none"> <li>▪ La conca di Cortina d'Ampezzo è candidata per essere inserita nel catalogo Unesco delle località considerate patrimonio mondiale dell'Umanità</li> <li>▪ The reappearing of animals like lynx and bear shows that the environment conditions are getting better.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The realization of Cortina ring-road would favour a decreasing of traffic in the town, but could also recall heavy traffic along Longarone – Calalzo – Cortina – Dobbiaco way.</li> <li>▪ The expensiveness of flats in Cortina (to 15.000 EUR/m<sup>2</sup>) feed a strong building venture that the administration of the municipality hardly tries to embark</li> </ul>