

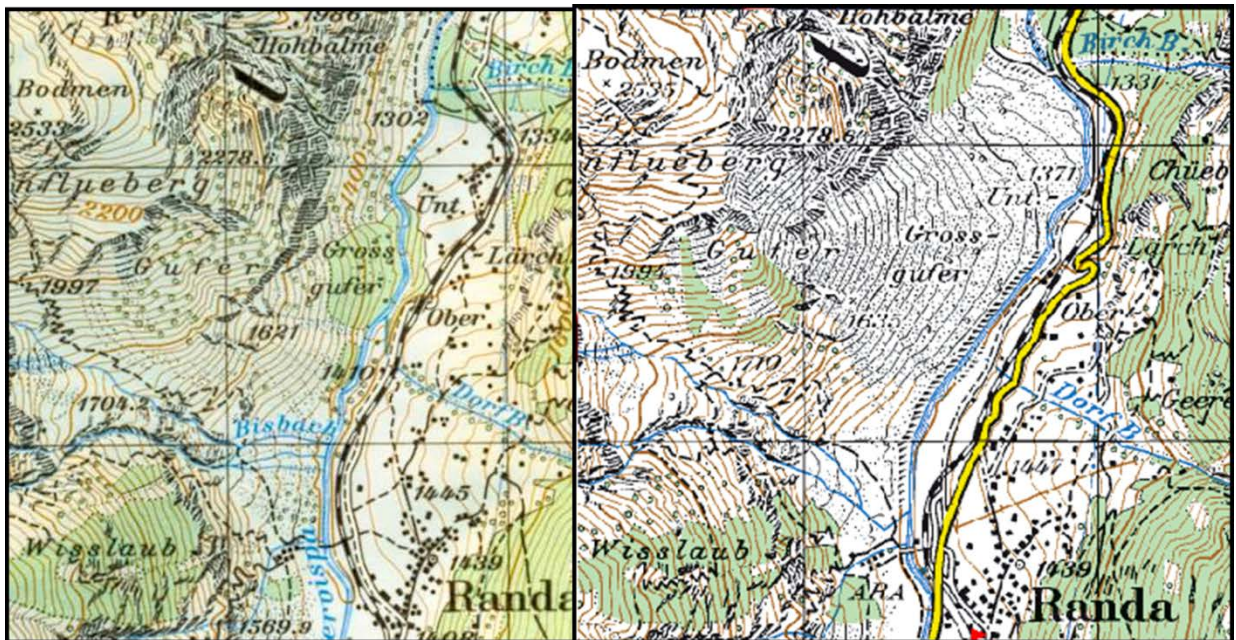
Module (2nd February, 2015)

NATURAL HAZARDS IN MOUNTAIN AREAS

LANDSLIDES HAZARDS EXERCISES

Exercise 1:

In 1991 something happened in Randa (small village close to Zermatt in Switzerland) that changed the topography of the area. Based on the two maps provided here, one from 1968 (left) and other from 2006 (right):



1. Could you identify the change?
2. What do you think that happened here?
3. What could be the consequences/hazards?

Exercise 2:

The Dorfbach area is shown in the picture; it is located in the opposite valley of the Randa maps shown before.



1. What processes do you identify in the picture? Describe them.
2. Could you distinguish different areas within the basin? Name and describe them.
3. Where are the areas with the highest hazard? And where those with the highest risk?

Exercise 3:

A man has just built a house above a very steep hill that has a beautiful view of the valley. But the rooms already have cracks in the walls on the side of the house near the steep hill. Some of the windows and doors have also become very difficult to open and close.

Close to this house, in the forested hillslopes, some trees look like those in the picture.

This man observed the river flowing in the bottom valley and noticed that the water level is much lower than it had been the day before.



1. What are some possible reasons for the cracks in the walls and windows?
2. What would cause trees to grow like this?
3. What are some possible causes for the low river water level?
4. What this man is witnessing and what he should do?