



Vosges, a long and rich geologic history

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The study of geology in scientific classes is often too theoretical and abstract for the pupils. How can teachers make the link between some samples of rocks observed in a practical class and the geologic story of the region? There's nothing better than outdoor education to establish a relationship between the rock observed in macroscopic and microscopic scale in the classroom, with the outcrop scale and the landscape scale in the field: all of them are the result of a fascinating geologic history. Our pupils are lucky enough to live at the heart of a modest mountain massif that has a very rich geologic story: the massif from Vosges situated in the east of France.

During two expeditions we show the students all the following tectonic processes:

Accretion at the scale of the landscape with the Rhenish Ditch (tectonic and volcanic markers)

Obductionis observed due to ophiolites found in the massive of Thalhorn (peridotite, gabbro and sedimentary marine rocks of great depth).

Collisionis illuminated with numerous sites like the schists of Steige, the phyllite of Villé, the gneisses of Clémont. Subductionis captured by studying the outcrops of magmatic rocks within the continental crust (andesite, diorite, granodiorite).

At each of the stops we have the students, from a hand sample, to find its story in a more global context.

So the theory becomes reality.

A study of thin slides of rocks observed on the ground finishes these exits and so various scales of understanding are approached.

The long and rich geologic history of Vosges maybe reconstituted on hundreds of million years, allowing certainly giving another aspect to the living environment of our pupils.