

Early Cretaceous sediments of the Pré-Alpes

Contact persons: Karl Föllmi, Guillaume Charbonnier, Thierry Adatte (Uni Lausanne):
karl.foellmi@unil.ch, 021 692 43 63

Context

The goal of this master thesis is to study the stratigraphy, sedimentology and geochemistry of pelagic sediments of Early Cretaceous age deposited in the Briançonnais realm, which outcrop in different localities in the Swiss and French Pré-Alpes. Whereas the stratigraphy and micropaleontology is well studied in these successions, their geochemistry is less well established, with the exception of some sections and horizons.

The sections are in the Pré-Alpes and only accessible during the snow-free season. Different areas are possible and a collaborative effort of two or more students would be well feasible.

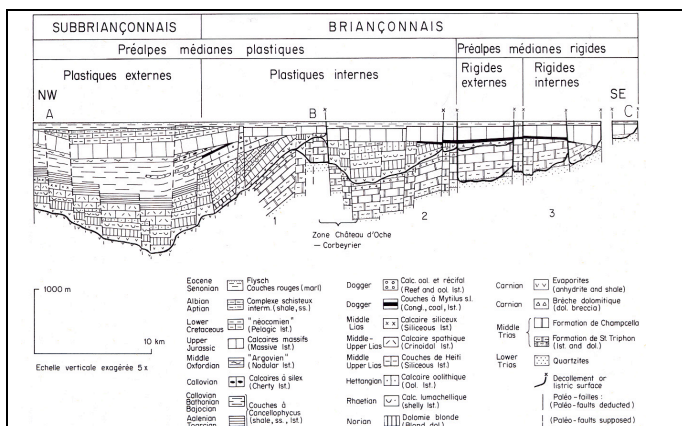
Objectives and Methods

A selection of representative sections should be studied and documented in detail for all stratigraphic and sedimentological aspects; furthermore they should be measured and sampled in detail. The samples should be analysed for their facies and microfacies, geochemistry (organic matter, phosphorus, stable carbon and oxygen isotopes) and mineralogy.

The goal is to put the results of the analyses and interpretations into the wider context of Early Cretaceous climate and global change.

Literature

Hable, R. (1997) Biostratigraphie, Sedimentologie und paläogeographische Entwicklung der Préalpes Médiannes des Chablais (Haute Savoie) vom Apt bis Unter-Eozän



Sites WEB

<http://www.unil.ch/Jahia/site/iste/op/edit/lang/en/pid/91752?matrix=9709yes>

Choice of orientation:

Sedimentary, Environmental and Reservoir Geology