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Ophiolites and other (ultra)basic rocks from the West-Central Alps : new data for a puzzle

This paper is a summary of a communication presented at the Davos meeting of the SGS and SSMP on "Birth and Early Evolution of Alpine Ocean Basins" (Sept. 2002). It present new data one the age, tectonic position and geodynamic significance of all the (ultra)basic rocks of the West-Central Alps that are generally considered in the recent literature as ophiolites of Mesozoic age (see Figure 1). These data require in several cases a serious reconsideration of their geological interpretation:

- Some are genuine Mesozoic ophiolites. Recent age determination provide new insights one the kinematics of continental break-up and inherent complications.
- Others are Mesozoic but not ophiolites.
- Others may be ophiolites but are not Mesozoic. This is the case of the metabasites ascribed to a so-called "Valais ocean" in the Versoyen and Visp areas.

The new data favour the concept of a slowly propagating and "punctuated" opening of the Alpine Tethys, complicated by aborted attempts and jumps of the spreading ridge.