Bulletin Nº 356

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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 propaganting and " punctuated " opening of the Alpine Tethys, complicated by aborted attempts and jumps of the spreading ridge.

Also published in Bull. Soc. vaud. Sc. nat. 88.2 : 263-267, 2002