

category major pre-alpine crustal domains: Alpine & Hercynian forland, Hercynian belt, Alpidic orogenic belt, Alpidic (Indosinian) ensialic chains. Then the thematic tectonic maps concerning different aspects of the alpidic evolution of the former domains were prepared. As concerning of alpine (Indosinian) reworking following categories are established: area with slight Alpine and Indosinian disturbances, area with strong Indosinian and intermediate grade Alpine disturbances. The older blocks in autochthonous and allochthonous position are recognized.

On the basis of the structural units map columns of tectonic ages with characteristics of tectonic events for each tectonic unit have been drawn.

On the map of pre-alpine structural features following structural subdivisions are recognized: structures formed by paleozoic deformation events (paleozoic rocks with variscan structures only, older rocks but with only variscan structures, undeformed in prealpine events pre-variscan paleozoic rocks), structures developed in baicalian folding events overprinted by variscan structures, main structural variscan features (domains with different type of folding and foliation), vergence.

AN OUTLINE OF THE METAMORPHIC EVENTS RECORDED IN THE WESTERN CARPATHIANS (CZECHO-SLOVAKIA)

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The main features of the Alpine and pre-Alpine metamorphisms in the Western Carpathians (WC) are outlined in this paper, in order to give the basic information for interregional correlations within the ambit of the IGCP Project No. 276.

The WC consist of three main structural zones. The outer zone is made up of non metamorphic sediments of the flysch belt. The central zone includes two tectonic units: the Taticum and the Veporicum. The inner zone is the Gemicum.

Taticum, Veporicum and Gemicum include metamorphic sequences of different age and petrologic features. For each of these three structural domains, the available data concerning the lithology, the petrologic features and the chronological frame are critically summarized, and the main open problems are focused.

Due to the very complex history of the WC, the present knowledge on the timing, regional distribution and petrological features of the variously aged metamorphic stages is sometimes not sufficient for presenting sharp statements, notwithstanding the huge

amount of new data published in the last ten years. Therefore, some aspects described in this paper are rather problematic.

However, the basic features of the Alpine and Variscan metamorphisms are relatively well clear. The Alpine metamorphism turns out to be characterized by medium to high pressures. The Variscan metamorphism displays low pressure conditions in the certainly monometamorphic, low-grade sequences. In the high grade pre-Alpine terranes, barrovian-type conditions have been also reported as related to the Variscan event: however, they could also be a record of a pre-Variscan history, survived after the prevailing Variscan effects, as some chronological data and geo-petrographic hints may suggest.

THE AGE OF FRIDO UNIT METALIMESTONES: IMPLICATIONS ABOUT A PALEOTECTONIC ROLE OF THE SANGINETO LINE.

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The occurrence in the Frido Unit metalimestones at the Calabria-Lucania border of nanofossil associations not older than the Oligocene is reported. Therefore the HP/VLT metamorphism of the unit-till now referred to as Eo-alpine - must be interpreted as already related to the Apenninic tectogenetic phases. This strengthens the hypothesis of the persistence as far as the Oligocene of a relic of the oceanic Tethys, kinematically disengaged from earlier deformed segments like the area originating the Calabrian ophiolitic units.

AN OVERVIEW OF THE LATE-VARISCAN MAGMATIC EVOLUTION IN THE ALPINE BELT

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After the major orogenic episodes, the pre-Mesozoic Alpine basement was subjected to large-scale shearing effects accompanying lithosphere distensional thinning, Basin and Range tectonics and high geothermal regimes. As a result of intrusion of mantle-derived melts and induced crustal anatexis, almost all pieces of basement within the Alpine belt underwent abundant late-Variscan magma emplacement.

After the *late-Devonian* collisional stage, low-pressure regional regimes ultimately