corner reflector even where a corner reflector is much smaller than the resolution cell (Drury,1987). Thus new lineament patterns have been mapped which don't only complete those derived from TM-data but also accentuate absolutely new ones. Even E–W striking structures were distinguished, of which it was supposed that they were generally underrepresented in the SAR images. As mentioned above, possibly aligned corners along these structures helped to highlight the linear features and thus to map them as lineaments. Minor jointing of the 3. and 4. deformation system is less resolved in both satellite imageries and must be extracted from aerial photographs. In contrast to the main fault sets conjugated joints or shears are more frequently developed which will also appear in the distribution diagrams of the outcrop data. Considering the different ways how ERS-1-SAR and Landsat-TM operate and considering the anisotropic character of the rock body which will lead to variable fracturing, the overall structural inventory can therefore only be analysed in a comparative examination of all evaluated data sets.

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# THE EFFECT OF TRANSMAGMATIC FLUIDS IN THE EVOLUTION OF HERCYNIAN OROGENIC MAGMATIC ACTIVITY IN THE CENTRAL TIEN-SHAN (CENTRAL ASIA)

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The Kurama Volcanic Belt in the Central Tien-Shan is a segment of the crust with extensive magmatic activity of various ages characterized by a specific metallogeny.It represents a typical example of epithermal fluid-magmatic systems of Hercynian age. It is proposed that there is a substantial association of three depth levels of the system: (1) deep mantle-core magmatic chamber, (2) abyssal granitoid batholith, (3) subvolcanic granite-porphyry intrusions that initiated the formation of a part of ore deposits. The interconnection of these levels is due to transmagmatic fluids that initiated magmatic differenciation and carried some ore components from the deepest levels.

The Kurama epithermal system was formed in Hercynian time at an orogenic stage. Extensive granite-porphyry intrusions ($C_3$ – $P_1$) intersect and replace granites and diorites of the Karamazar abyssal batholith (C1-23). In both the batholith and porphyry intrusions activity of transmagmatic fluids appeared. These are: (1) Mg-K metasomatism of magmatic stage in the exocontact zone of porphyry intrusions and magmatic replacement of host rocks by syenite-diorites, (2) appearence of large porphyroblasts (megacrystals) of orthoclase in various dykes of porphyries, (3) K-feldspathization of a magmatic stage in linear zones inside the batholith, (4) significant shift of eutectic point in the quartz-feldspar system during the magma evolution, (5) specific features of geochemistry of porphyry intrusions. Transmagmatic fluids had a high activity of potassium and at the final stages that of fluorine. It caused a considerable differentiation of magmas, formation of ignimbritic chambers, intense magmatic replacement of host rocks and intense hydrothermal activity including ore deposition.