

Since 2011, the Institute of Petrology and Structural Geology, Charles University in Prague, worked with CIP - Computer Integrated Polarization microscopy as fast, inexpensive measurement of c-axis orientation of uniaxial minerals, mostly quartz in high definition. CIP method is developed from the early nineties in Switzerland (Heilbronner & Pauli 1993) and later in many other workplaces.

The aim of this work was testing and calibration of optical and camera equipment to verify the accuracy and reliability of data obtained. Served as an independent measurement of EBSD (Electron Backscatter Diffraction) data obtained from the same part of the studied thinsections. The data obtained were analyzed by quantitative analysis of microstructures (PolyLX - MATLAB™ toolbox; Lexa 2003).

The samples used for testing the methodology mentioned were taken on the profile of Hvězdná and Zdobnice near Rokytnice in the Eagle Mountains by contact orlica-snieznik complex and its mantle. Field studies showed the existence of west dipping shear zone along the said contact and deformed orthogneiss show a macroscopic superposition of several deformation events.

The resulting frequency histograms similarities and differences of angles c-axes and angles misorientation grains have a high consensus in the azimuthal criterion, axes inclinations and grains misorientation show higher volatility and will need to continue to study the causes and advance in the calibration process.

Heilbronner, R. P. & Pauli, C. 1993. Integrated spatial and orientation analysis of quartz C-axes by computer-aided microscopy. *Journal of Structural Geology* **15**(3-5), 369-382.

Lexa, O. 2003. Numerical approaches in structural and microstructural analysis PhD thesis, Charles University in Prague <http://petrol.natur.cuni.cz/~ondro/polylx:home>.