Structural analysis of the signals in the sub-surface radar

L. V. Labunets, V. V. Simakov

This paper provides an overview of modern mining techniques GPR measurements. The results of digital processing for radar gram of ice covers measured GPR series «PIKOR» are shown. The advantages of application of methods of multiresolution wavelet analysis of GPR signals, their empirical mode decomposition (EMD) with Hilbert - Huang transform, as well as a singular method of data analysis «Caterpillar» - SSA are justified.