

ABD SOFTWARE PACKAGE: UNIVERSAL TOOL FOR ANALYSIS OF MONITORING DATA

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Abstract. Needs for an accumulation and analysis of big data organized as time series are not uncommon. ABD software package described in the paper enables the users to solve various practical and scientific problems of real (non ideal) monitoring data processing. The package includes the time series database management system, powerful research complex and interactive environment of data visualization. Various tools for statistical analysis allow the researcher to analyze the structure of the time series, to reveal dependences and relationships between the signals, to monitor changes in the object under investigation. Some used technologies (for example, special modifications of sliding window, analysis of time series with gaps) do not have world analogues.

Keywords: monitoring, ecological monitoring, biomedical monitoring, variations of geophysical fields, seismicity, time series database, time series analysis, algorithms and software for time series analysis, ABD.