



1 Implementations of feedback approach in the distributed data mining system of heterogeneous data for DEMETER mission.

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The distributed data mining system of heterogeneous data for DEMETER mission (AIM-D) designed for separation small-value effects from data, masked by background from were created. The system based on hierarchical processing model with levels of ETL (Extract Transform Loading) procedures, OLAP (On-Line Analytical Processing) and AIM (Artificial Intelligence Method). It must be denoted that from one side the most efficient algorithms to search signs of the phenomena, which property is not defined definitely, is an artificial intelligence method (AIM) but from other side efficiency of the AIM determined by the formalized model used during data treatment.

For resolving of this problem feedback technology was used. By this way any of classical statistical or AI methods supported by the system are used for manual formalization the sign of phenomena and searching of phenomena are made automatically by the distributed system in the whole data area. During the data processing loop the new signs may be detected and defined as feedback processing transaction.

The article contains description of the system and explains some results produced by

it assistance and next steps for its upgrading.