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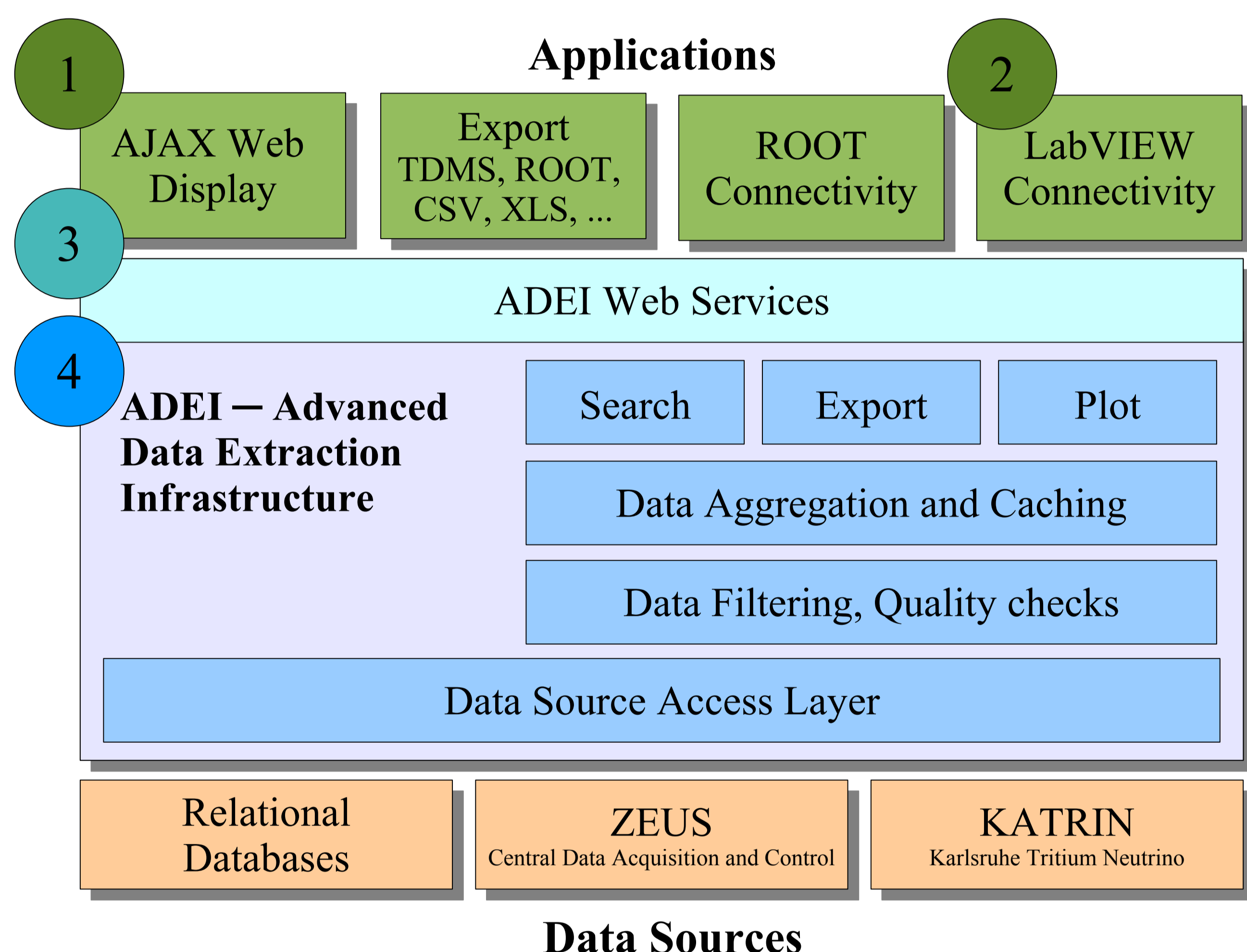
One challenge for physics experiments with international collaborations and distributed data acquisition systems is to provide an easy access to the data of all measurement and control devices in the experiment.

Objectives

- Uniform access to a distributed system of data sources
- Fast and intuitive Browser through experiment database
- Integration with major control and data analysis systems
- Support for long running experiments and high data rates
- Platform independent programming interface

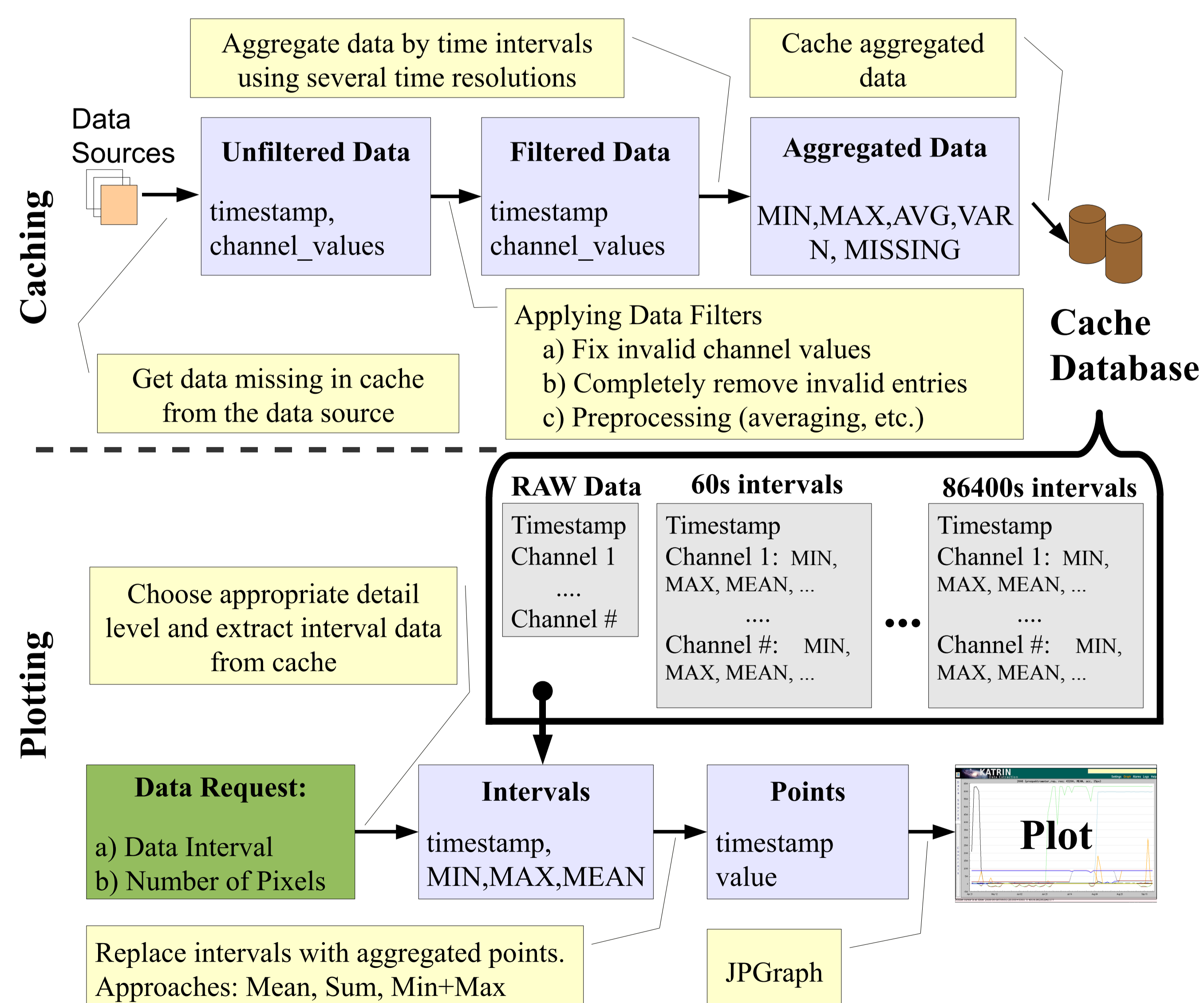
ADEI Architecture

- Pluggable data sources with customizable filtering support
- Cache to accelerate plotting of charts and data searches
- Simple web services abstracting data storage



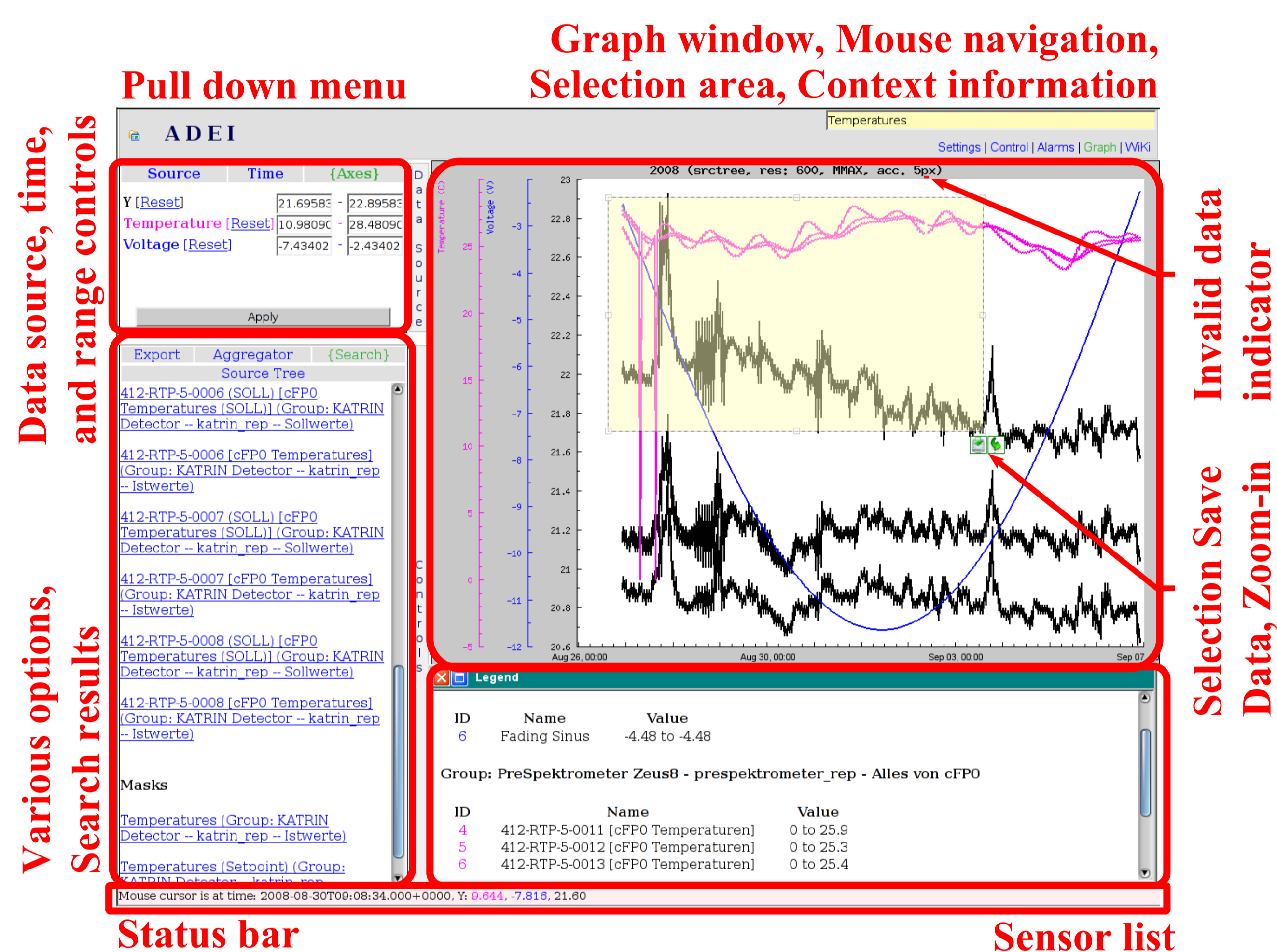
4 ADEI Data Flow

- Hierarchical data organization: sources, groups, channels
- Filter out invalid data and reduce its amount
- Aggregate and cache data on several detail levels
- Plot aggregated data using multiple supported algorithms



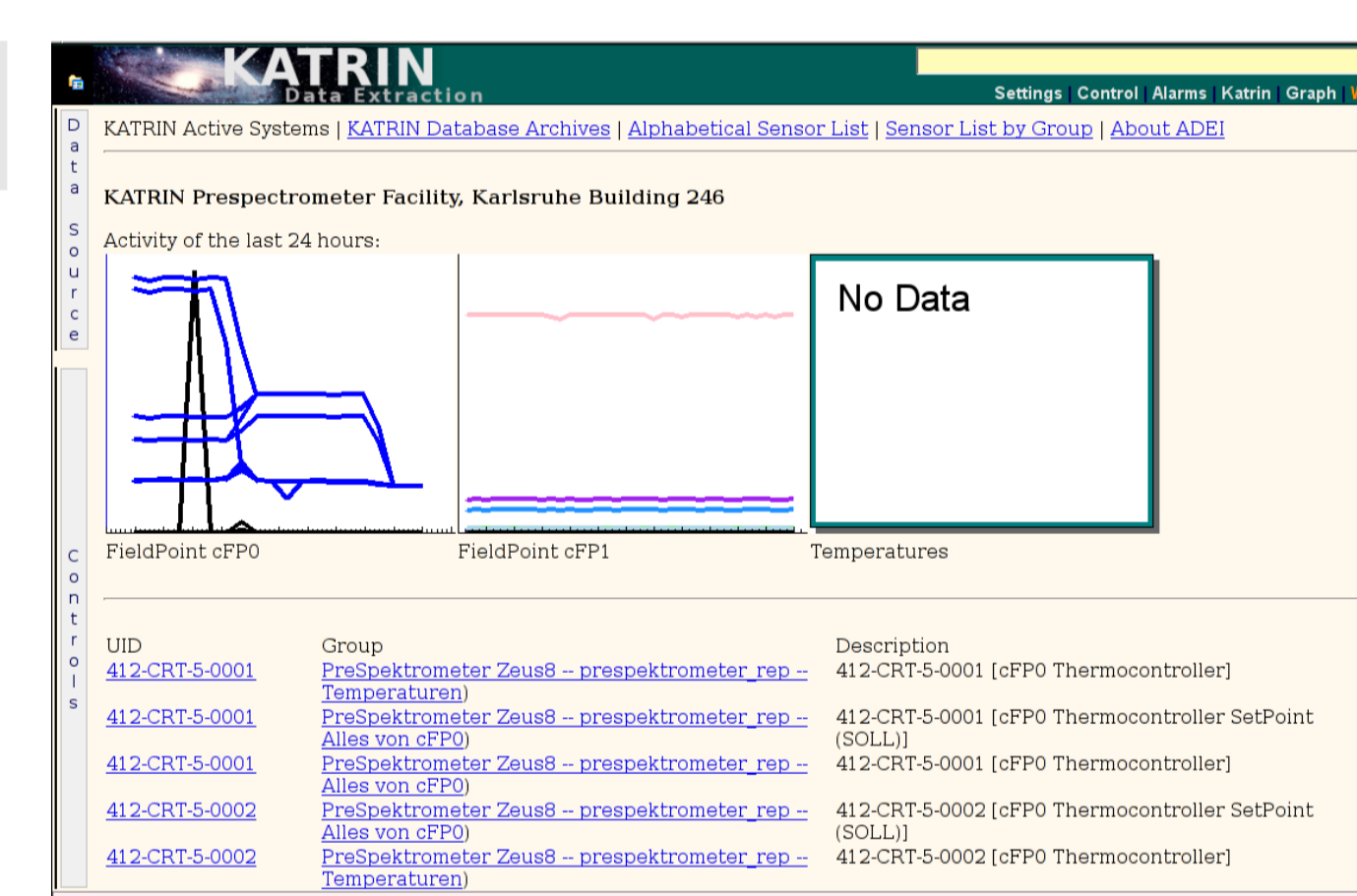
1 ADEI Web Display (Web 2.0)

- Fast and flexible navigation
- Support for multiple axes
- Reporting invalid data
- Multiple modes of data aggregation
- Bookmarking of data views
- Integrated Wiki engine
- Major browser support: Mozilla, Safari, Opera, Internet Explorer, Chrome, Konqueror
- Multiple export formats: CSV, Excel, ROOT, TDMS, ...
- Search for channel names, dates, and data values



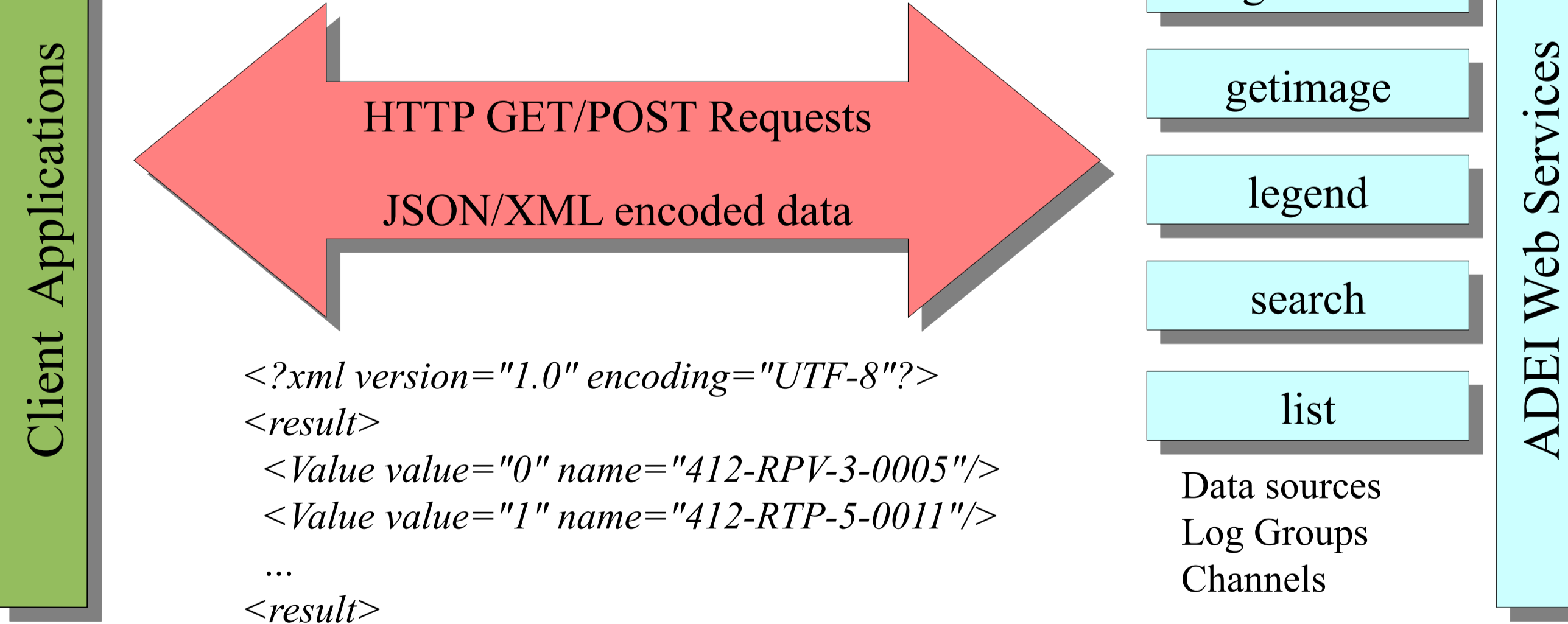
Wiki Engine

- Standard Wiki commands
- ADEI version information
- Wiki page inclusion
- ADEI plot thumbnails
- Automatic channel lists

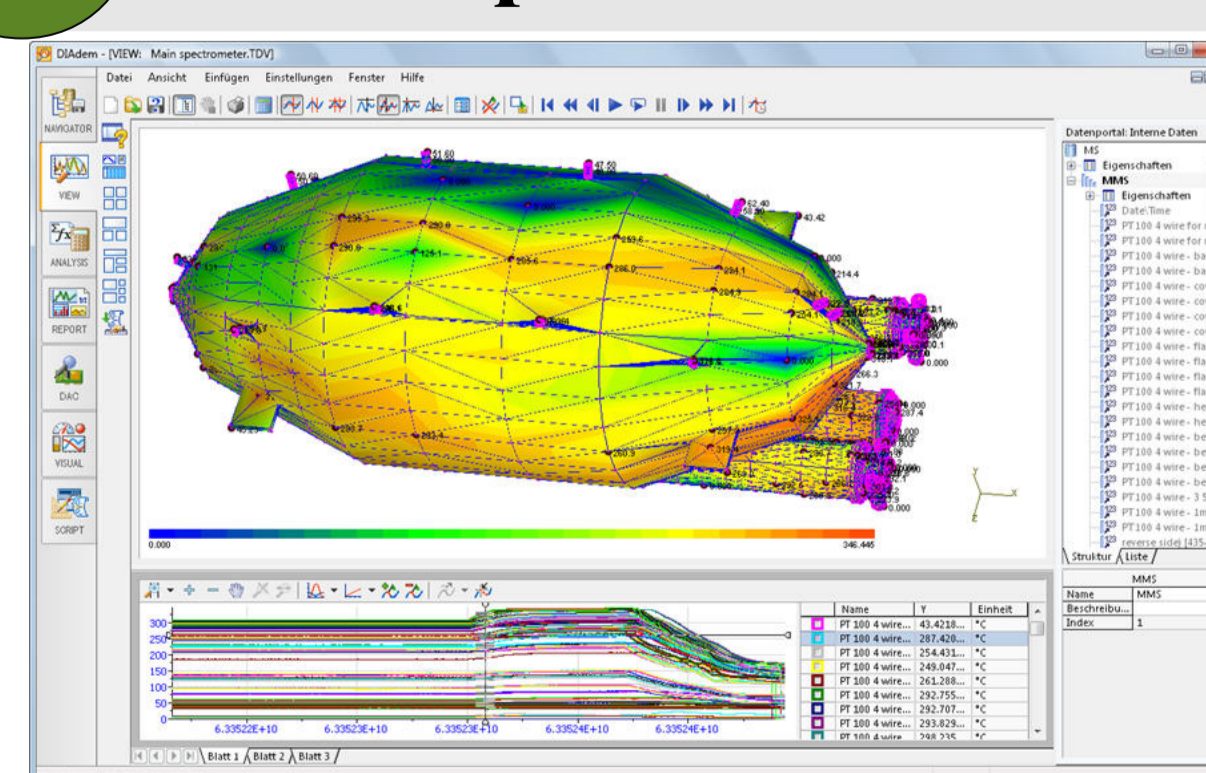


3 ADEI Web Services and Applications

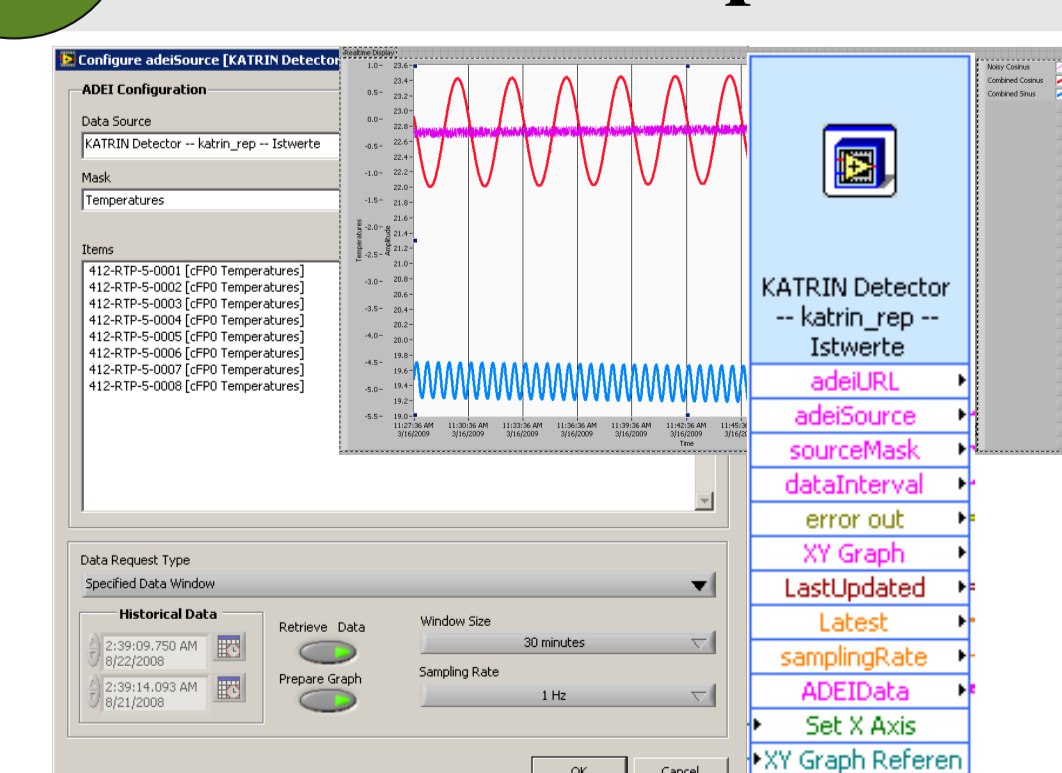
Sample Query: `http://adei.org/services/?service=list&target=items&db_server=katrin&db_name=prespec&db_group=0`



2 3D Temperature Monitor



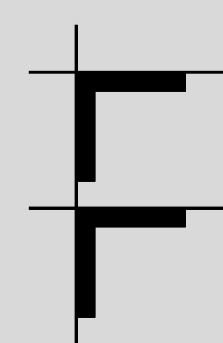
2 LabVIEW Express VI



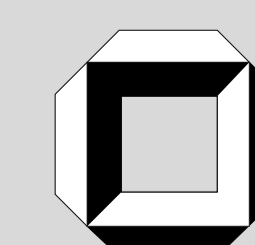
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