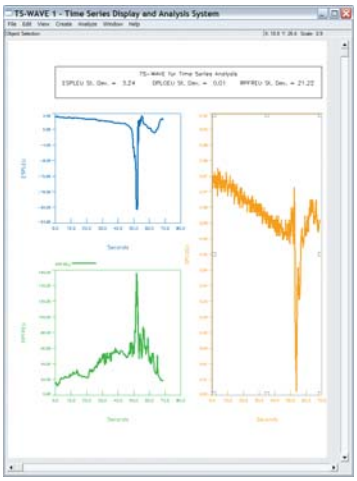
Visual Numerics

TS-WAVE™ 4.0

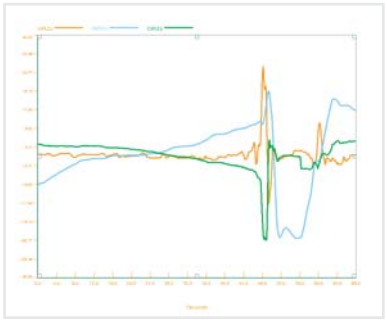
Advanced Time Series Data Analysis

If you work with time based data you need the most reliable application base you can find for custom time-series data analysis. TS-WAVE is easy to use and customize for proprietary data formats. It is the premier tool for the analysis and visualization of your data.

For those in the Aerospace industry who are working with telemetry data gathered from flight tests, range tests or satellite instruments, no product offers the data import features necessary for the import of proprietary and large file formats like TS-WAVE.



Main TS-WAVE window showing three graphs of flight test data



Detailed chart with three parameters on a single graph

The Most Extensive Application Foundation for Custom Time-Series Data Analysis

TS-WAVE, the time series analysis component of the PV-WAVE® Family of products, is the perfect balance between an off the shelf application and custom development. The core of TS-WAVE offers the most complete set of data management and display techniques for the visualization of time based data, and it provides the most reliable base for organizations building time-series data analysis applications. In addition, TS-WAVE provides a comprehensive interface for developing custom data handlers for reading and managing data. This sets TS-WAVE apart with its unparalleled ability to handle large, proprietary legacy datasets. Using the powerful PV-WAVE data import and user interface development features makes the development of data handlers easy. And, for custom data analysis, TS-WAVE includes an interface for extending its standard analysis capabilities.

Optimum Tool for Analysis and Visualization of Time Based Data

TS-WAVE provides a comprehensive and intuitive graphical user interface for the analysis and visualization of time-series data sets. The TS-WAVE user has control over the layout of pages and graph appearance. Through the use of templates, standard reports can be developed and run on new data sets as they become available. Batch processing allows standard reports to be run without user intervention. When textual rather than graphical output is required, TS-WAVE tabular file interfaces are ideal for the job.

WHAT'S NEW

- **ASCII To Binary Converter: Convert an ASCII file to a general purpose binary file and evaluate TS-WAVE without a custom data handler**
- **Multiple Pages: Work with multiple pages in a single TS-WAVE session. Share all data sources by all pages and create reports with pages in a single template**
- **Private User resources: Resources allow the user to control the default settings for the user interface and provides users with a custom set of resources**
- **Tabular files: Improved performance for writing tabular files, greater ability to pick ranges of data to include in the tabular file and more control of tabular file headers and format**
- **Documentation completely rewritten with a new tutorial and in-depth information for users and developers**

Easily Customized for Proprietary Data Formats

Often, TS-WAVE is used for telemetry data gathered from flight tests, range tests or satellites. As is true for many types of time series data, there is no industry standard format for telemetry data sets. Custom data readers are needed to efficiently read and manage the data. Often the data sets contain additional information about the source of the data and the parameters available in the data set. This additional information is important for the TS-WAVE user to easily display and analyze the data.

The data handler in TS-WAVE is a combination of standard user interfaces that perform such tasks as file selection and custom user interfaces for choosing subsets of the data for processing. Once the data source is selected, the standard TS-WAVE user interfaces are used for parameter selection, data display and processing.

Custom Analysis Using Full Functionality of PV-WAVE and the IMSL Numerical Libraries

Even though TS-WAVE is the most comprehensive time series analysis package of its kind, it provides easy to use interfaces for expanding the analysis capabilities of the core application. It allows users to take full advantage of the extensive features in PV-WAVE for flexible and sophisticated algorithm development.

TS-WAVE developers are provided with widgets and functions to select parameters from data sources, retrieve data from the data handlers and return new parameters to TS-WAVE. The user functions are written using PV-WAVE Advantage procedures, providing developers with the full suite of the IMSL™ Numerical Libraries mathematical and statistical algorithms available for use in their user functions.

Not only do users get the full advantages of the PV-WAVE applications development environment, and the complete features set of TS-WAVE for advanced time series analysis, they also get the pure power of the IMSL Numerical Libraries for deep analysis of their data. These factors are an unmatched advantage of using TS-WAVE.

Technical Experts Who Are the Best in the Industry

Visual Numerics' customers can rely on Visual Numerics' expert consulting team to help you find the best solution for your problem and to give you the support you need to ensure continued success. Our consultants and developers collaborate with customers to identify specific application requirements at the initial phase of every project. We can provide any level of support from custom algorithm development to simply helping customers better understand their analysis and visualization needs. Get the technical expertise and dedicated, hands-on help to accomplish the highest return on your application development investment.

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