

Advancing Your Analysis Capabilities

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Every new Noesis version is a definitive improvement over the last one. This is possible through constant implementation of user feedback, new functions and research in the future needs based on the vast experience of users around the world. The main structure of the software have been kept identical so that users can work with the new version immediately.

New Modular Design

The user can **choose from two basic Editions (Light and Professional)** and **add any combinations of two available modules (ASCII data/wave file support and Zonal Location)**. In this manner the user can "build" the package most suitable both for the analysis needs and budget.

For high-end users the **Enterprise Edition** is the best choice which **includes all modules** and the additional **Live-SPR** and **Periodic Statistics** functions.

In addition check the **Upgrade and Multiple License Discounts**.

Upgrading from Noesis v4.x

- * **New Pages.** A new and innovative pages function with simple graph arrangement method and workspace load/save.
- * **ASCII Waveform** import capability.
- * **Multi-Hit Extraction.** Noesis can split waveforms to multiple hits depending on user set h/w setup. This is effectively as re-acquiring the data.
- * **WFS file support** including **WFS Live-SPR.** For PCI-2 board owners with waveform streaming files the support of such files in Noesis will give them the large array of tools available in Noesis for WFS files. WFS Live-SPR can extract features and classify WFS data as they are acquired.
- * **DSP Filters/Windowing** in wave graphs and for feature extraction and wave export.
- * **Linear 3D location.** User who have the LOC module can now upgrade to include the spatial source location.
- * **RMS and Autocorrelation.** These functions are now available for any waveform.
- * **Waveform Segment Use.** Users can define sections of waveforms and use them for DSP calculation, Feature Extraction etc.
- * **Fast Data Loaders** to make using large AE files easy.
- * **Enhanced Bin Plots** with various bin mode values available.
- * **Time Mark Management** for AE DTA files.

Upgrading from Noesis v3.x

Noesis v3.0, v3.1, v3.3 or v3.5 users will benefit from the following added features :

- * **Live-SPR,** for data classification and processing during acquisition and **periodic statistics.** Available in the Enterprise Edition.
- * **Density (color-by-value)** plot.
- * **Filter entire time segments.**
- * **New Save Dialog and capabilities** for data export to virtually any format.
- * **Channel Stats** and **Amplitude Distribution** tables.

- * **New TDD Data Handling.** Can even be treated, filtered etc.
- * **Increased Flexibility via Wizards (Save, UPR, SPR).**
- * **New Frequency and Time Domain Features (v3.0)**
- * **Zonal Source Location (v3.0)** with Event correspondence and sequence determination.
- * **Noesis Pages** Functions (v3.0) for structured plot arrangement and management.
- * **TDA waveform file support,** for all TDA files (long waveforms etc.).
- * **Entire/Extended Feature Set from TDA** waveforms.
- * **Complex Data Filters** for Detailed Data Filtering. A very powerful filtering and data selection tool.
- * **Data Sorting** to any Feature.
- * Use of **Extracted Arrival Times in Location.**
- * **Importing External (User) Parametric File.**

Upgrading from Noesis v1.0 and v2.0

v2.0 Users will benefit from the following:

- * **Waveform Viewing in any split view.** Waveforms and DSP functions (FFT real, imag, Power Spectrum etc.) can be shown in any Noesis window.
- * **Features can be extracted** from waveforms. The available feature set contains Time and Frequency domain features to form an extended feature set.
- * **Calculated Features** can be added to the data from calculations on the existing features.
- * **New Unsupervised Pattern Recognition** algorithms.
- * **Menu and User Interface improvements throughout the software.**

v1.0 users will also benefit from:

Data Viewing and Graphics Management

Noesis 4.0 has **many more plot types, easier plot definition and customization** with numerous user options (**improved plot settings dialog**) and can **store the entire working environment in a compact file** (separate from the data) which can be used in other documents to easily recreate complex plot configurations. A **Copy Plot Settings** function also aids in simple plot configuration. New zooming capabilities have also been added.

Data Handling

Multiple Data File loading and handling. **Extended data selection modes, multiple selections** in all types of plots, dedicated **Data Filters etc.**

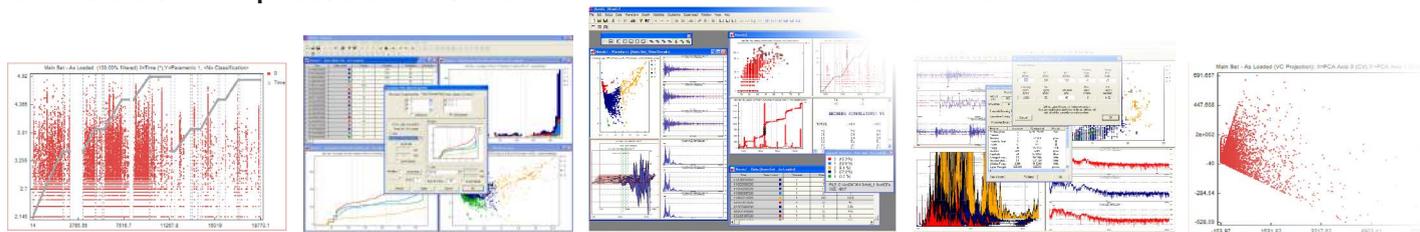
Time Driven Data full support etc.

Changes also include **Improved ASCII Data File support, File Merging** etc.

Pattern Recognition

The algorithms and user options have been extended to provide a better working environment for such complex tasks. The user is easier now to keep track of Data Set viewing, decide on the quality of the classification (confusion matrices etc), apply different algorithms and compare results.

Note: The above mentioned added functions for each of the previous Noesis versions include the main improvements and are indicative of the software development. Other functions added are not mentioned in this informative leaflet.



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Noesis is also available through Physical Acoustics Corp sales network. Contact PAC through www.pacndt.com.