ATLAS HYDROGRAPHIC
A company of the ATLAS ELEKTRONIK Group
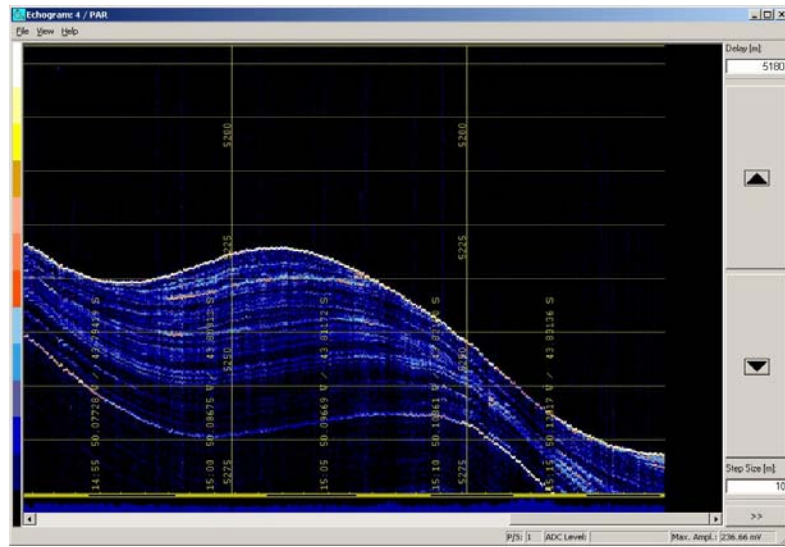

...a sound decision

Standardised for all ATLAS Echosounders

Fast and Reliable

Multi-User, Multi-Window

Intuitive Graphical User Interface

Object-Oriented Design

Windows™ Platform

ATLAS PARASTORE

SOFTWARE FOR SEDIMENT AND WATER COLUMN PROFILES

ATLAS PARASTORE is a flexible and powerful software package specifically designed to acquire, visualise, process, store, convert, quality control, replay and print sediment and water column profiles. It supports all frequency bands measured by ATLAS PARASOUND sub-bottom profilers and ATLAS HYDROSWEEP family multi-beam echosounders data.

ATLAS PARASTORE provides the possibility to display not only the amplitudes of the reception signals, but also the phase differences. The software has a dedicated multi-window graphical user interface and allows highly sophisticated investigations on sub-bottom and water column details.

ATLAS PARASTORE has been developed in close partnership with experienced users of the University of Bremen, Germany. It is widespread within the scientific community for demanding analyses.

Profile data are visualised in real-time during data acquisition for quality control. The recorded data are stored in the ATLAS Sounding Data (ASD) hybrid raw data format containing complete sounding profiles. Additionally, the data can be converted into a standard SEG-Y or PS3 format for further processing with arbitrary post-processing software packages.

The user may open several echogram windows, spectrogram windows and their associated single trace windows with different display settings like depth scaling and processing parameters.

The powerful multi-window feature of ATLAS PARASTORE is unique among profile data acquisition software packages.

FEATURES

- Profile data acquisition
- Supports ATLAS PARASOUND and ATLAS HYDROSWEEP family
- Sediment profile and water column data recording in ASD format
- Powerful visualisation of amplitude information and phase differences
- High-resolution online and offline printout
- Comprehensive numerical data processing methods
- Wide-ranging powerful graphical data processing tools
- Data replay in user-selectable speed
- Quality control
- Data export into SEG-Y or PS3 format
- High-performance standard computer
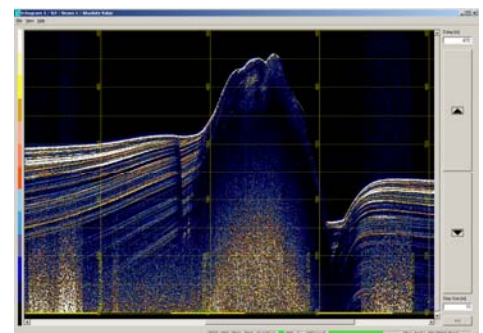
THE SOFTWARE AT A GLANCE …

Profile Data Acquisition, Visualisation and Processing for SBP and MBES

Multi-Window Data Display

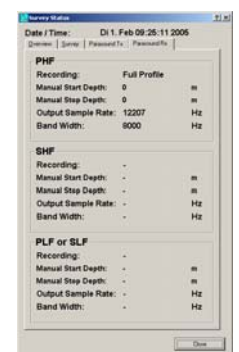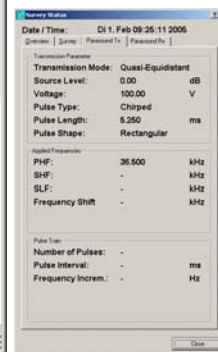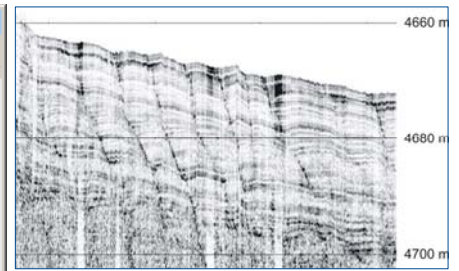**Supports ASD, SEG-Y and PS3**

Stacking, Clipping, Deconvolution

Online Print

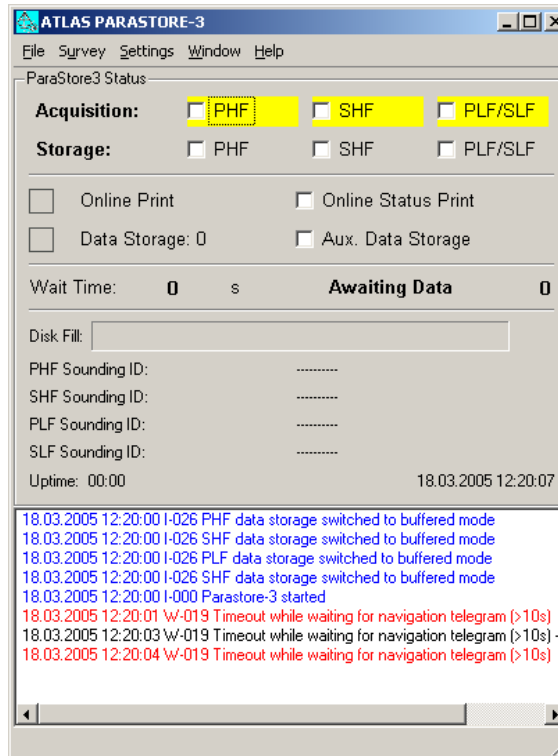**Profile Echogram and Spectrogram Display**

ATLAS PARASTORE

SOFTWARE FOR SEDIMENT AND WATER COLUMN PROFILES

FUNCTIONALITY

- Operation modes
    - Online data acquisition and storage mode
    - Offline replay mode
- Data visualisation windows for
    - Echogram for amplitude information and phase differences as colour-coded time-domain presentation with annotations
    - Singe trace for echograms
    - Spectrogram as colour-coded frequency spectra display
    - Singe trace for spectrograms
    - Ship's track and depth
- System control windows for
    - Acquisition control (selected frequency, storage path, file size)
    - Operation mode
    - Auxiliary data storage for time, position, heave, roll, pitch and others
    - General survey information & comments
- Configuration windows for
    - Online status print
    - Logging
    - Alarms for immediate reaction of the user
    - Switch account
- Survey status window for overview, survey status and transmission and reception information for SBP and MBES
- Online help functions are based on HTML documents which are automatically activating via the default Windows™ HTML browser
- Numerical data processing methods include
    - Low-pass filtering in the time-domain
    - Fast Fourier Transformation (FFT)
    - Correlation
    - Deconvolution

- Graphical data processing methods include
    - Selectable colour tables for amplitudes
    - Linear or logarithmic scale for tables
    - Stacking
    - Amplitude clipping
    - Threshold filtering
    - Negative flank suppression
    - Phase difference calculation
    - Colour saturation control
- Conversion of raw or processed data into international standard formats
    - SEG-Y and PS3 separately
    - SEG-Y and PS3 simultaneously
    - Reduced data storage possible
- Printed output configurable for
    - Echogram print
    - Spectrogram print
    - Status print
    - Position plot and screen dumps

TECHNICAL CHARACTERISTICS

- Network link to ATLAS HYDROMAP CONTROL software
- Multi-window generation for data presentation
- XML-formatted ASCII header and XDR-formatted binary section for ASD data
- Object-oriented software design

RECOMMENDED HARDWARE CONFIGURATION

- State-of-the-art high performance PC with appropriate processor, RAM and hard disk
- Two TFT monitors
- CD and/or DVD-RW drive for data exchange
- Sound card with loudspeaker
- 1 GBit/s Network Controller
- Operating system Windows™ XP

Contact

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