

Fledermaus Software Release Notes

Version 7.0.0

10 May 2009

ACROSS SUITE IMPROVEMENTS

Significant improvements that apply to almost all applications. These are changes to underlying libraries and toolkits.

- Improved Internal Rendering System.
- Greatly improved geo-location accuracy for objects.
- Improved transformation tools that work directly on the geo-referencing.
- New ability to click on a data object name and have the view move to that object.
- Improved geo-picking with further opportunities for interaction with the data.
- Enhanced profiling.

UPGRADED GEO-REFERENCING SYSTEM

- Completely re-written geo-referencing system, designed from the ground up to work with a robust projection library at the back end.
- All SD objects have a fully described geo-referencing data block.
- Objects can be converted automatically from their co-ordinate system to that of the SCENE.
- Includes time as part of the core geo-referencing (key frame)

FLEDERMAUS

- New “Keyframe” system within Fledermaus
 - all objects can have a series of “key-frames” which describe their location, orientation and state at a given point in time.
- Next Generation Shading Engine
 - improved shading engine
 - eliminates the need to prepare images and data sets

- allows multiple images to be “composited” as a single shade in a single step.
- Hierarchical List of Data Objects
 - Current SCENES only allow for a linear list of data objects; however this can become cumbersome when working with a large number of objects. Version 7 will have the ability to combine objects under a parent node, thus allowing common objects to be logically grouped and managed.

CROSSCHECK

- Mutli-threaded analysis engine to leverage multiple CPUs and multiple cores.

NEW APPLICATIONS

DMagic - Project Manager

- A completely new application with greater functionality and scope.
- Three mains changes and additions in this new application:
 - New comprehensive project structure and project management tools
 - Metadata creation, maintenance and viewing tools for all data types
 - Streamlined data import and SD object creation
- An improved framework for users (and the applications) to organize, manage, and interact with their data.
- Project Structure - A new metadata system which:
 - Is a common repository for summary information organized in an optimal format that creates, manages and utilizes ancillary summary files for any raw input data.
- Streamlined Data Import: eliminating the current ‘manually’ intensive repetitive steps required to import data.
- Eliminates .DTM / .GEO and .SHADE files
- Automatically produce a shade file from default values on import of gridded or point data

FMGEOCODER

- Interactively process, visualize, and analyze multibeam, sidescan and backscatter data
- Survey acquisition processing and QC in psuedo real time for backscatter and sidescan data
- Post survey mosaicing tool

- Statistics
- Perform corrections to maximize information content within the backscatter signals
- Sea floor characterization tool