About Fledermaus (vn8)

Fledermaus. - Not just a pretty picture.

Fledermaus is an interactive 4D geo-spatial processing and analysis tool. With a wide variety of industry standard formats accepted, the intuitive 4D display and interaction allows clients to rapidly gain insight and extract more information from their underlying data. Extensive grid functionality includes interpolating, masking, cropping, and resampling. Images may be cropped and draped atop 3D surfaces. Fledermaus also allows data from remotely operated vehicles, ships or other entities, to be visualised in real-time. Additional analysis tools allow for seafloor interpretation and characterization, object and surface change over time, object tracking, and cable and pipeline route planning. Fledermaus has integration with ESRI software, and enables a two-way link to geodatabases in ESRI ArcGIS software. 3D mesh technology allows users to examine their data and assess structural integrity in ways that bathymetric grids are inherently limited to do. Fledermaus is the gold standard for presentation and communication, with movie-making tools and integrated video playback. Fly-throughs and time/space notes are used to create presentations with slides advancing through 3D/4D space. Fledermaus also includes industry-leading solutions for multibeam backscatter and water-column processing. The extensive functionality of Fledermaus allows its use across many phases of a project from the planning, processing and QC, through to analysis and production of images, plots and animations.

Fledermaus has the base version, plus add-ons for ancillary data processing, ESRI compatibility, and pipeline and cable analysis:

Fledermaus 8	Interactive 4D geo-spatial processing and analysis. Extensive grid and image functionality, including the draping of imagery atop 3D surfaces. 3D mesh technology allows users a far better picture of underwater objects. Visualize vessel tracks and video feeds with integrated video playback. Use time/space notes and fly-throughs to create movies and presentations. A robust toolkit with applications servicing multiple industries and supporting each phase of the workflow.
Backscatter add-on	Backscatter add-on; creates corrected backscatter mosaics and supervised seafloor characterisations based on the Geocoder algorithm. It includes multi-frequency mosaicking and intra-vessel normalization. An ideal tool for seafloor characterization, inferring sediment types, and habitat mapping workflows.
Midwater add-on	Midwater add-on; intuitive and rapid extraction of features from huge multibeam and single beam water column data files. Easy analysis in Fledermaus with multiple visualisation metaphors, temporal beamline, fan, points, and volume objects. Ideal for users requiring granular control over time and playback.
Offshore add-on	Tools for the planning, monitoring and review of seabed engineering and construction projects. Plan routes for cables and pipelines, and calculate their length. Generate long and cross profiles for engineering projects.
GIS add-on	GIS add-on; link directly to ArcGIS to transfer data directly from/to a geodatabase. For example a Seabed Survey Datamodel template can be either created, updated or amended all from Fledermaus without having to use ArcGIS.

QPS.

FLEDERMAUS features list	Fledermaus 8
Cross-Platform: Windows, Mac & linux	√
Create a 3D surface model and multi-variate surfaces from a variety of ungridded and gridded data types	√
Interpolate, mask, crop or resample grids to get the best possible interpretation of the seafloor	√
Import of ancillary data including images, Esri shapefiles, AutoCAD DXF and DWG, points, lines, 3DS models and ENCs	√
Drape sidescan mosaics, backscatter, charts and other imagery onto surfaces	√
Show object and surface change over time using time stamped data	√
Perform slope, rate of change and surface difference calculations	√
Interactively digitize and label	√
3D Mesh technology	√
Real-time tracking of objects (vessels, animals, etc.) via serial cable, UDP packet or logged string*	
Generate and export points, lines polygons, contours, grids in industry-standard formats	√
Create time/space notes for movie-making and 3D/4D presentations	√
Auto-generated flight paths using the presentation system; output to MPEG movies	√
Produce high-resolution graphics for reports, posters and publications	√
Create slides directly in scene with easy text/image insertion, and export to presentation	√
Export Google Earth KML and KMZ files Node-less surface interpretation tools	√
Create corrected backscatter mosaic data using FMGeocoder Toolbox	Add-on
Semi-automated seafloor characterization	Add-on
Analyse and interpret integrated bathymetry and backscatter data	√
Synchronised video playback	√
Support for navigation peripherals	√
Pipe and cable route planning*	Add-on
Calculate and export fixed pipeline length data files*	Add-on
Generate and export long and cross profiles for use in engineering analyses*	Add-on
Fledermaus workflow automation using command line tools and popular scripting languages	√
Seamless workflow with integration to ESRI ArcGIS software	Add-on
Intuitive and rapid extraction of features from huge multibeam and single beam water column data files	Add-on
Seep Hunter automated algorithm for hydrocarbon and methane seep detection in water column data	Add-on

Note: feature not incl. in Fledermaus 8.0 but to be released in later versions