Summit Evolution

INPHO SOFTWARE

Digital photogrammetric stereo workstation to collect 3D features directly into ArcGIS, AutoCAD or MicroStation.

Summit Evolution is not restricted to aerial frame and pushbroom imagery, it also offers feature collection from close-range, satellite, IFSAR, Lidar intensity and orthophoto imagery.

Summit Evolution works in a project-based environment, using triangulated photo blocks generated by MATCH-AT or other software packages. The user can roam seamlessly throughout an entire project of any size:

- A wide range of efficient feature collection functions is offered via DAT/EM* Capture and Stereo Capture for ArcGIS, which are integral parts of Summit Evolution
- Vector data collected by Summit Evolution, or imported from GIS or CAD systems, are superimposed directly onto the stereo models, making it an excellent solution for mapping, change detection, and updating GIS data
- Automatic batch map-editing of collected data can be applied for best mapping performance. Routines for data generalization, checking, and automatic line editing are included as well

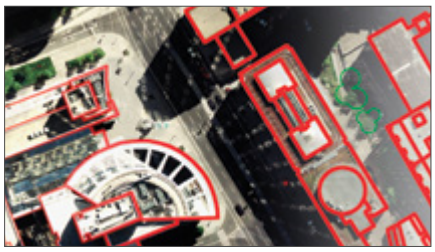
Product Highlights

- Feature collection from aerial frame and pushbroom, close-range, satellite, IFSAR, LiDAR intensity and orthophoto imagery
- Superimpose collected or imported vector data directly onto stereo models for effective and efficient interactive mapping, change detection and GIS updates
- Improve result quality with routines for data generalization, checking and automatic line editing and batch map editing
- Map independently on a specific CAD or GIS (support for AutoCAD, Microstation, ArcGIS)

Key Features

- Summit Evolution® presents images in perfect 3D-stereo with overlay vector data for compiling directly into AutoCAD®, MicroStation®, or ArcGIS®:
- Production of geospatial mapping data with precision, power and user-friendliness
- Roam seamlessly through projects of any size using a project-based environment for oriented image blocks

inpho®



* *Summit Evolution is a trademark of DAT/EM Systems International.*

Summit Evolution INPHO SOFTWARE

TECHNICAL SPECIFICATIONS

FEATURES OVERVIEW

Summit Evolution comes with a variety of software components:

- Summit Evolution: digital photogrametric stereo plotter including orientation tools and project management
- DAT/EM Capture: data collection program for collecting 3D features directly into AutoCAD, MicroStation, or ArcGIS.
- MapEditor: software for automatic batch and vector editing in AutoCAD or MicroStation
- SuperImposition: stereoscopic 3D vector data viewing superimposed onto the stereo imagery
- Contour Creator: automatic contour generation based on file and CAD/GIS input

With its flexible orientation tools, Summit Evolution fits into any production workflow:

- Automatic or manual interior and relative orientation
- Absolute orientation
- Orientation data import from inBLOCK, PATB, Applanix, Albany, Bingo, AeroSys
- Project data import from MATCH-AT, BAE Socet Set, Z/I Image Station, Phorex, BLK, DiAP, DVP
- Project transformation from / into new coordinate systems

Advanced imaging features make Summit Evolution a precise and easy-to-use stereoplotter:

- Handling of 8-bit and 16-bit imagery
- Measurement with subpixel accuracy
- Quick frame sequential imaging
- Smooth real-time panning and zooming
- On-the-fly epipolar resampling
- OpenGL for image rendering
- User-definable cursors
- Customizable GUI elements

BENEFITS

- Produces digital topographic and engineering-quality maps and geospatial data directly into ArcGIS, AutoCAD or MicroStation.
- Easy API integration of other CAD or GIS packages.
- Sophisticated, yet straightforward mapping functionality.
- Developed for comfortable ease-of-use by photogrammetric professionals.
- Applies cutting-edge technology

VERSIONS

- Summit Evolution is available with three different functional extensions:
  - Summit Evolution "Professional"
    - ◊ Unlimited functionality of Summit Evolution
  - Summit Evolution "Feature Collection"
    - ◊ Full 3D feature collection, but no orientation capabilities, the perfect match in combination with MATCH-AT
  - Summit Evolution "Lite"
    - ◊ Stereo viewer for Summit Evolution projects, simple measurement and basic drawing and editing tools

OPTIONS

- CAD/GIS interfaces:
  - DAT/EM Capture for AutoCAD
  - DAT/EM Capture for Microstation
  - DAT/EM Capture for ArcGIS
- Hardware:
  - Optionally, Trimble can provide all necessary hardware for Summit Evolution, including computers, monitors, stereo viewing systems and 3D cursors
  - Additional optional hardware components are:
    - ◊ DAT/EM Kepad or Android tablet or touchscreen for quick access to mapping makros, handwheels and footdisk as additional input devices

SYSTEM REQUIREMENTS

- PC workstation
- Dual Intel Xeon processors
- 4 GB RAM
- High-capacity disk system
- Windows 7 64 bit Ultimate, Professional or Enterprise
- Hardware for 3D data capture:
  - Stereo-capable graphics card(s) supporting OpenGL quad-buffer stereo
  - Stereo viewing system (usually any 3D Vision-Ready Display with NVIDIA's 3D Vision Kit)
  - 3D cursor
  - DAT/EM Keypad or Android tablet
- Supported CAD and GIS:
  - AutoCAD 2004 through 2013, including AutoCAD, Map3D and Civil3D
  - MicroStation V8, V8i, V8i SS2 or SS3, Bentley Map SS2 or SS3
  - ArcGIS ArcView, ArcEditor or ArcInfo version 9.1, 9.1.1, 9.2 , ArGIS 10.0, or ArcGIS for Desktop 10.1, with all available service packs

SUPPORTED FORMATS

- Summit Evolution supports all types of source image:
  - Frame aerial images (TIFF, TIFF JPEG, BigTIFF, JP2, ECW, BMP and others)
  - ADS 40/80 digital aerial camera
  - VisionMap A3
  - DMC digital aerial camera
  - UltraCam digital aerial camera
  - RPC satellites, including ALOS
  - SPOT5 HRS
  - CORONA KH-4A/B historical satellite imagery
  - PCI ProPack satellite and other projects
  - ENVI epipolar satellite projects
  - IFSAR Stereo
  - LIDAR Stereo Images
  - Close-range imagery
  - Orthophoto images (GeoTIFF)

For prices and distribution partner information please contact: sales@inpho.de

Contact your local Trimble Authorized Distribution Partner for more information

NORTH AMERICA
Trimble Navigation Limited
10368 Westmoor Drive
Wesminster CO 80021
USA

EUROPE
Trimble Germany GmbH
Am Prime Parc 11
65479 Raunheim
GERMANY

ASIA-PACIFIC
Trimble Navigation
Singapore Pty Limited
80 Marine Parade Road
#22-06, Parkway Parade
Singapore 449269
Singapore

© 2014-2016, Trimble Navigation Limited. All rights reserved. Trimble and the Globe & Triangle logo are trademarks of Trimble Navigation Limited, registered in the United States and in other countries. All other trademarks are the property of their respective owners. PN 022516-023C (05/16)