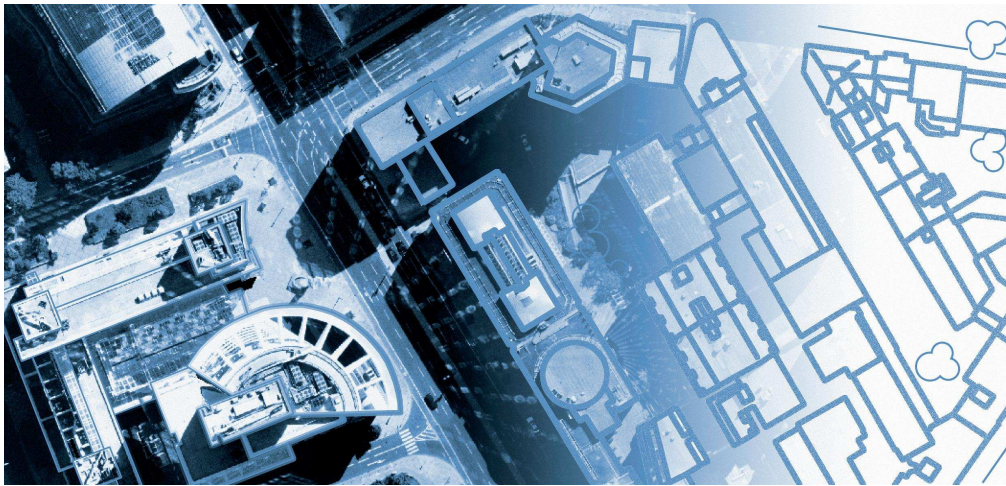


Summit Evolution

Production of geospatial data with precision, power and user-friendliness.

Summit Evolution from DAT/EM Systems International, is a user-friendly digital photogrammetric stereo workstation and allows a 3D feature collection directly into ArcGIS, AutoCAD or MicroStation.



Summit Evolution presents images while compiling directly into AutoCAD, MicroStation, or ArcGIS.

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.

Summit Evolution is not restricted to aerial frame and pushbroom imagery, but 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.

Online contouring within the **Summit Evolution** environment is provided by Capture Contour, an optional package based on SCOP++ technology.

Summit Evolution is part of INPHO's modular system.



Summit Evolution is a trademark of DAT/EM Systems International. All other brands and product names are trademarks of their respective owners.

Features

- Summit Evolution comes with a variety of software components:
 - Summit Evolution – digital photogrammetric software including orientation tools and project management
 - DAT/EM Capture – data collection program for collecting 3D features directly into AutoCAD or MicroStation
 - Stereo Capture for ArcGIS – turns our Summit Evolution photogrammetric stereoplotter into a 3D ground coordinate digitizer for ArcGIS. 3D features are collected directly into ESRI's ArcView, ArcEditor, and ArcInfo
 - Map/Editor – software for automatic batch and vector editing in AutoCAD or MicroStation
 - Super/Imposition – software allowing stereoscopic viewing of 3D vector data, superimposed onto the stereo imagery
- With its flexible orientation tools, Summit Evolution fits into any production workflow:
 - Automatic interior orientation
 - Automatic or manual 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
 - Project transformation from/into new coordinate systems
- Advanced imaging features make Summit Evolution a precise and easy-to-use stereo plotter:
 - 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
- Summit Evolution supports all types of source image:
 - Digitized aerial photographs (TIFF, TIFF JPEG, ECW, BMP and others)
 - ADS 40 digital aerial camera
 - DMC digital aerial camera
 - UltraCam digital aerial camera
 - Digital Globe QuickBird
 - Space Imaging IKONOS RPC
 - SPOT5 HRS

- IFSAR Stereo
- LIDAR Stereo Images
- Close-range imagery
- Orthophoto images (GeoTIFF)

Options

- CAD/GIS interfaces:
 - DAT/EM Capture for AutoCAD
 - DAT/EM Capture for Microstation
 - Stereo Capture for ArcGIS
- Hardware:
 - Optionally, INPHO provides all necessary hardware for Summit Evolution, including computers, monitors, stereo viewing systems and 3D cursors. Please contact INPHO for up-to-date information.
 - Additional optional hardware components are:
 - DAT/EM Keypad
 - DAT/EM handwheels and footdisk

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
- SUMMIT Evolution "Lite"
 - Stereo viewer for Summit Evolution projects, simple measurement and basic editing

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.

Recommendations

- High-end PC workstation
- Dual Intel Xeon processors
- 4 GB RAM
- High-capacity disk system
- Windows XP/2000
- Hardware for 3D data capture:
 - Stereo-capable graphics card(s) supporting OpenGL quad-buffer stereo
 - Stereo viewing system
 - 3D cursor
 - DAT/EM Keypad
- Supported CAD and GIS:
 - AutoCAD 2002 or higher
 - MicroStation V8 version 08.05.00.64 or newer
 - ArcGIS 9 Desktop Products ArcView, ArcEditor or ArcInfo

