



- Image measurements can be transitioned between and along strips
- On-line/Off-line bundle adjustments in Relative mode (no control information) and Absolute mode
- Real-time panning for image movement in mono or stereo
- Automatic and interactive image manipulation and enhancement tools
- Transfer image measurements and triangulation results to third-party triangulation packages via ISPM
- Camera and Self-calibration capability with automatic parameter selection
- GPS/INS data processing with shift/drift computations and Antenna Offset
- User-selectable statistical indicators and blunder detection methods
- IKONOS block adjustment utilizing Space Imaging Rational Functions
- Graphical error analysis and integrated measurements and images
- Displays graphic symbols of points to be measured on images and the status of the mensuration process for each points based on number of rays, type of points, and magnitude of residuals
- Auto increment point id during measurement
- Auto Rotate Mono to Stereo Pair
- Automatic Thresholding Filter in point list based on Sigma
- Automatic Blunder Detection in Bundle
- Auto probing of DTM when extracting control point from raster maps
- Automatic transfer active point to all displayed/overlapping photos
- Automatic advance to next point for measurement (manual)
- Automatic processing of RO, AO, Single Photo Resection (SPR) solutions after bundle adjustment (Bulk Orientation)
- User defined hot-key access to start any applications
- Shortcut keys in orientations: F1-Help, F2-Zoom out all detail level views, F3-Zoom in all detail level views, F4-Grab Point, F5-Save Measurements, F6-Zoom all detail views to user-specified "N" magnification, F7-Toggle matching on/off, F8-Toggle Common Point Lock on/off, F9-Select Stereo Pair photos, F10-Toggle mono cursor to system/mapping cursor, F11-Shift all photos left, F12-Shift all photos right, CTRL-D (W, R)- Delete, Withhold, Reinstate active point respectively
- Drag and drop ISPM project file onto any program shortcut on the Desktop to start the program with that project
- Automatic photo coordinate adjustment if wrong camera used for aero-triangulation
- EO Analysis to check the quality of GPS/INS for an application without measuring image points (or automatic tie/pass point generation) and performing aerial triangulation
- Provides default window layouts for single and multiple strip acquisition scenarios
- Newly created window layouts from the can be saved for future use
- IKONOS Rational Function Coefficients refinement

Benefits:

- Offers a flexible, window-based image display to allow for the simultaneous display of as many windows as needed of the same or mixed sensors at various magnifications for efficient location, identification, transfer, and measurement of points in overlap region
- Performs bundle adjustment and control file densification without having to translate points to third party products.
- The use of on-line bundle adjustment and data integrity checks saves time, since errors are detected while imagery is currently on the workstation and does not have to be reloaded from storage devices
- Provides a sophisticated, easy-to-use package for editing measurements so that points can be re-measured, withheld, added, deleted, or reinstated. A particular point can be selected for editing by pointing to an entry in a list, by key-in of the point's identifier, or by pointing to the image
- Improved throughput due to optimized point presentation, easy-to-use mensuration tools, and by a pre-planning step that allows for a high degree of automation in image presentation
- Simultaneous bundle adjustment results can be available as soon as control and transfer points are measured
- A high degree of flexibility is built into the configuration of the mensuration environment so the user can tailor the system to the job
- User-selectable statistical indicators and blunder detection methods assure clean measurements



ImageStation Digital Mensuration

About ImageStation Digital Mensuration

ImageStation Digital Mensuration provides a powerful multi-image point transfer and measurement environment for a photogrammetric triangulation workflow. The image point coordinates generated by ISDM can be used directly or formatted by the ImageStation Photogrammetric Manager (ISPM) for input into one of the Z/I-supported and third-party triangulation packages. Flexible, window-based image display of multiple images provides efficient transfer and measurement of points in multi-overlap regions. The use of auto-correlation and on-line integrity checks improves accuracy, increases productivity, and increases reliability. The accessibility of the image enhancement and image manipulation functions greatly assists the operator in performing the mensuration task.

Why is ImageStation Digital Mensuration right for your photogrammetric triangulation workflow?

A flexible, window-based image display to allow for the simultaneous display of as many windows as needed of the same or mixed sensors at various magnifications for efficient location, identification, transfer, and measurement of points in overlap region

The product performs bundle adjustment and control file densification without having to translate points to third-party products

The use of online bundle adjustment and data integrity checks saves time, since errors are detected while imagery is currently on the workstation and does not have to be reloaded from storage devices

The product provides a sophisticated, easy-to-use package for editing measurements so that points can be re-measured, withheld, added, deleted, or reinstated. A particular point can be selected for editing by pointing to an entry in a list, by key-in of the point's identifier, or by pointing to the image

Improved throughput due to optimized point presentation, easy-to-use mensuration tools, and by a pre-planning step that allows for a high degree of automation in image presentation

Simultaneous bundle adjustment results can be available as soon as control and transfer points are measured

A high degree of flexibility is built into the configuration of the mensuration environment so the user can tailor the system to the job

User-selectable statistical indicators and blunder detection methods assure clean measurements

Key Features

- Multi-photo display with tabular measurement results windows
- Works in monoscopic or in stereoscopic mode
- Automatic or manual Interior Orientation
- Automatic or manual Relative Orientation, manual Absolute Orientation, and Single Photo Resection
- Simultaneous measurements for aerotriangulation on a group of images from different strips, with step-by-step transition to the next sequential group of images
- Any number of images can be displayed. Image measurement can be done either manually and/or semi-automatically
- An on-line bundle adjustment (integrated bundle adjustment (Photo-T)) can be performed (either in Relative mode or absolute mode) for measurement quality