

# IMAGINE OrthoBASE

## Overview

Introducing IMAGINE OrthoBASE, a Windows-based digital photogrammetry system that reduces the time and cost associated with creating orthorectified images through increased automation and innovative block triangulation techniques. IMAGINE OrthoBASE accepts files of unlimited size and quantity, less GCPs are required (and may not even be necessary), and camera calibration data is optional. With IMAGINE OrthoBASE, you can create planimetrically accurate orthorectified images for seamless ortho-mosaics. IMAGINE OrthoBASE enables you to triangulate and orthorectify a wide variety of commonly used image formats for mapping applications. Built-in sensor models are provided for standard aerial cameras, 35mm and digital cameras, videography, SPOT and IRS-1C. Generic sensor modeling tools are also provided for pushbroom satellite sensors. Due to the flexibility of data input and output, IMAGINE OrthoBASE is compatible with existing photogrammetric workflows, and, because all of the above data comes standard with IMAGINE OrthoBASE, it's a great investment for the future. IMAGINE OrthoBASE is an add-on module to IMAGINE Advantage.

## Key Differentiators

- **No Limitation or restriction** on camera or satellite sensor support
- **Cuts production costs** by using desktop scanners to digitize photography
- **Any imagery can be used**-in one package, aerial, terrestrial and oblique photography and imagery can be photogrammetrically processed
- **Less data required**-ground control points are optional
- **Saves time**-ground points are measured automatically
- **Easy to operate**-error is identified and removed automatically
- **Little training required**-Wizards and graphic interface tools linearize workflows and guide the user
- Add imagery to the project
- Define the sensor model
- Measure GCPs, tie points and check points
- Automatic tie point collection
- Aerial triangulation or self-calibration
- Orthorectification
- Color coding schemes are used to reflect the extent of processing completed within a block or strip of images
- Imagery can be taken off-line and then easily re-attached for further processing
- Hierarchical image pyramid layers are used to facilitate and increase the speed of image handling
- A series of images contained in a

## Main Capabilities of IMAGINE OrthoBASE:

Rigorous Sensor Modeling of Various Camera and Satellite Sensors

Supports Aerial, Oblique and Terrestrial (Ground-Based) Imagery

Semi-Automated Interior Orientation

Automatic Tie Point Collection

Ground Control Point Measurement

Aerial Triangulation

Self-Calibrating Bundle Adjustment Allows for the Use of 35mm, Digital Cameras, Video Cameras and Archival Photography

Sophisticated Automatic Error Checking Models

Orthorectification

through the process

## Project Tools

- Six icons within the IMAGINE OrthoBASE tool bar simulate a linear digital photogrammetric workflow:

strip or block can be added to the project at one time

- No internal software limitation on