

V5.0 of INPHOâ€™s Photogrammetric System

INPHO (Germany) has updated and integrated their software into a complete, perfectly tuned and integrated system. MATCH-AT 5.0, MATCH-T 5.0, DTMaster 5.0 and OrthoMaster 5.0 are released at one time, along with the new ApplicationsMaster 5.0. This module serves as the common core of the V5.0 system for project set-up and administration. All V5.0 applications are sharing a new common project file V5 containing all project related parameters, including cameras.

Highlights of the versions 5.0 are:

MATCH-AT 5.0 (for automatic aerial triangulation) comes with significantly enhanced matching strategies, especially for imagery from digital frame cameras. New tie point patterns and new tie point density options are now considered as well. These improvements result in even stronger photo connections than before. The results of self-calibration are now stored as a correction grid. The correction grid is applied in all photogrammetric applications from INPHO for rigorously compensating distortions detected by self-calibration. Especially with digital aerial cameras a proper correction of these distortions is important, as they can cause considerable height errors, for instance.

MATCH-T 5.0 (for automated DTM extraction) incorporates a new multi-image matching strategy resulting in considerably better DTM derivation than in previous versions. Auto-selection of optimal ray intersections and best overlap situations results in faster processing and better quality of extracted points. MATCH-T now derives DTMs from satellite images as well.

DTMaster 5.0 (for stereo DTM editing) offers automatic filtering of local areas in LIDAR or MATCH-T data. Three major categories are separated from the ground points: points on vegetation, points on buildings, and gross errors. Anaglyph stereo mode can now be activated if there is no stereo capable graphics board available. DTMaster derives DTM data from satellite images as well.

OrthoMaster 5.0 (for orthophoto generation) now offers rigorous orthorectification of single satellite images, too. The exterior orientation is computed by using the given orbital information of satellites along with generating RPCs. By control point measurement it is now also possible to improve the quality of RPCs delivered by satellite image vendors. In addition to the hybrid raster DTM, the built-in terrain modeling module supports also TIN based DTM interpolation. Control points can now be superimposed on the orthophotos for checking the geometric quality.

The new version 5.0 of INPHOâ€™s photogrammetric system can be downloaded from INPHOâ€™s website.

<https://www.gim-international.com/content/news/v5-0-of-inpho-s-photogrammetric-system>
