

4DiXplorer AG

c/o ETH Zurich P +41 (0)44 633 7068 Wolfgang-Pauli-Strasse 27 \mathbf{F} +41 (0)44 633 1192 8093 Zurich

W www.4dixplorer.com

@ info@4dixplorer.com Switzerland

SAT-PP

SAT-PP (SATELLITE IMAGE PRECISION PROCESSING) IS A SOFTWARE PACKAGE FOR THE ADVANCED PROCESSING OF (VERY) HIGH RESOLUTION SINGLE, STEREO AND MULTIPLE SATELLITE IMAGES.

SAT-PP supports the whole processing chain from radiometric preprocessing, ground control points (GCPs) measurement and image orientation to automatic DSM generation, orthophoto generation and feature extraction.

The software consists of different components:

- (a) User interface for project and data management, image format conversion and pre-processing, image display / roaming in mono and stereo modes.
- (b) Ground Control Point (GCP) and tie point measurement in manual and semi-automated modes.
- (c) Sensor orientation, designed for the high-resolution Linear Array sensor geometry.
- (d) On-line quality control and error analysis via interaction with graphics elements.
- (e) Derivation of quasi-epipolar images for stereo mapping and feature collection.
- (f) Automated DSM generation by using a precise and robust image matching approach and stereoscopic checking of the automatically matched features.
- (g) Generation of orthorectified images.
- (h) Mono-plotting functions, stereoscopic measurement and collection of objects with particular emphasis on 3D city modeling.
- (i) Pan-sharpened image generation.

The images/sensors which can be processed are: Ikonos, GeoEye, SPOT-5, Cartosat, ALOS/Prism, etc.

The package has proven its quality and performance in many geomatics projects.



