

Introduction to Geomatica 10.2.1

As a geospatial software professional, your job is to get the most out of your data, extracting information to help make better decisions about your world. At PCI Geomatics, our job is to provide you with the best tools available to help turn spatial data into information.

With over 20 years experience in building image-processing software, we are the image experts. We strive to build technologies that leverage remotely sensed imagery, creating spatially accurate images, extracting information from them, combining them with other spatial layers, and publishing your results.

Geomatica 10.2.1 represents the culmination of these efforts to date. This release improves and adds to the capabilities for which Geomatica is known, helping you turn your images into answers.

What's new?

Geomatica version 10.2 is an update with significant enhancements to the Geomatica 10 suite. This update includes new features, along with improvements in the reliability, performance, usability, and functionality of Geomatica in addition to fixes of customer-identified bugs.

Sensor Support

PCI Geomatics is an industry leader in supporting sensors. Our list of supported sensors grows with each release, allowing you to take advantage of the newest and best sensors available to geospatial professionals.

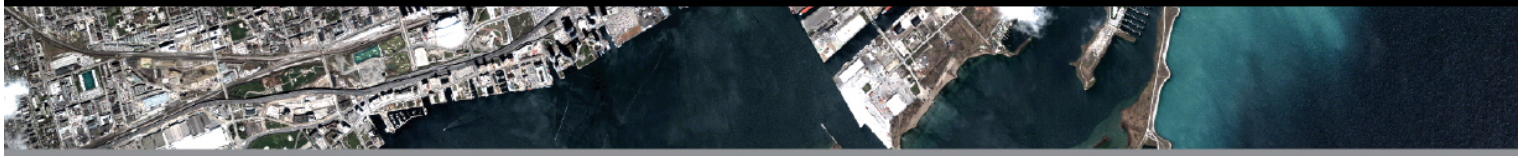
RapidEye

With the Geomatica Version 10.2.1 release, PCI Geomatics is pleased to announce the support for RapidEye. RapidEye is a constellation of 5 satellites consisting of five sun-synchronous Earth observation satellites which is unmatched in their ability to provide large area, multi-spectral images with frequent revisits in high resolution, collecting multi-spectral data at 5m resolution.

TerraSar-X

Geomatica Version 10.2.1 includes additional support for the high resolution X-band SAR imagery provided by TerraSar-X. Support now includes the following varieties of data:

- TerraSAR-X Level 1b SSC data
- TerraSAR-X Level 1b Geocoded Products (GEC and EEC)



SAR Polarimetry Workstation

All functions from the separate SPW install are now part of Geomatica. This includes 27 programs as shown below:

PSBOXCAR	PSINGEST	PSPOLSYN
PSCC	PSINQUIRE	PSPOLSYNC
PSCLOPOT	PSINTEN	PSPOLSYNR
PSCONV	PSINTRAT	PSSSCM
PSCREATE	PSLTD	PSSWIS
PSDTL	PSPEDHT	PSTOTPOW
PSEABA	PSPHDIFF	PSUSWIS
PSFREDUR	PSPOLDIS	PSVANZYL
PSINANG	PSPOLFIL	PSWHITE

These are available from EASI and Visual Modeler.

As well, a new version of the SPW (Version 2.1) is available and is compatible with Version 10.2.1.

The new SPW includes the following new functions: (also available in Geomatica)

- TOUZIDIS – The Touzi Discriminators for Polarimetric SAR

The Touzi Anisotropy and other discriminators make it easier to detect a particular target in a polarimetric SAR image (i.e. the anisotropy is extremely effective at discriminating ships from surrounding water-related clutter).

- TOUZIDEC – The Touzi Decomposition for Polarimetric SAR

The Touzi Decomposition introduces new parameters to describe the scattering behavior of symmetric, coherent targets (bright point targets), as well as, most importantly, parameters to describe incoherent targets (i.e. can be applied to anything across the entire scene). These new parameters remove certain ambiguities not previously well understood in previous decompositions, and provide vastly superior results in the general case to what conventional algorithms provided.

The SPW now supports the following sensors:

- RADARSAT-2 (improved official support)
- Cosmo-SKYMED
- Terrasar-X