

Pansharpening ProPack

PANSHARPENING PROPACK

The Pansharpening ProPack extends the functionality of the PCI ProSDK by enabling the use of PCI Geomatics' exclusive pansharpening technology.

PCI Geomatics pansharpening technology applies an automatic image fusion that increases the resolution of multispectral (colour) image data by using a high-resolution panchromatic (B&W) image. Most Earth resource satellites, such as SPOT, IRS, Landsat 7, IKONOS, and Quickbird, provide multispectral images at a lower spatial resolution and panchromatic images at a higher spatial resolution. This allows you to easily fuse images acquired simultaneously by the same sensor. Alternatively, you can fuse images from different sensors. This technology works with 8-bit, 16-bit, or 32-bit real data types.

PCI Geomatics' exclusive pansharpening algorithm is implemented as the PANSHARP PCI Pluggable Function (PPF), which is the core of the Pansharpening ProPack. This PPF performs the following:

- Solves colour-distortion and operator- and data-dependency problems
- Achieves the best colour representation
- Preserves the mean, standard deviation, and histogram shape for each channel
- Fuses all spectral bands of a satellite image with the corresponding panchromatic band at once
- Minimizes colour distortion, maximize feature detail, and naturally integrate colour and spatial features

SOME OF THE INCLUDED COMPLEMENTARY PPFs

There are multiple general-purpose PPFs included in the Pansharpening ProPack along with the PANSHARP PPF. Some of Image Management PPFs are described below.

Image Management

- IMERGE
 - Merges multiple geocoded rasters into a single raster file.
- REPROJ
 - Reprojects images, bitmap segments and vector layers to a specified projection.
- CLIP
 - Clips layers based on a user defined clip region.
- TILE
 - Creates multiple subset tiles from a single file.
- PYRAMID
 - Builds an image pyramid for one or more image layers in a data file.

For more information, contact

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