

## Simple Corrections Models ProPack

### **SIMPLE CORRECTIONS MODELS PROPACK**

Extend the functionality of the PCI ProSDK through the Simple Corrections Models ProPack. The Simple Corrections Models ProPack enables flexible use and automation of PCI Geomatics' Polynomial and Thin Plate Spline geometric correction technology. These types of corrections do not rely on sensor characteristics, orbital parameters, rational functions or elevation information and can be applied to just about any type of remotely sensed imagery.

The Simple Corrections Models proPack consists of core PCI Pluggable Functions (PPFs) for computing polynomial and thin-plate spline correction models (POLYMODEL and TPSMODEL, respectively), plus other PPFs that provide complementary operations as described below.

### **SOME OF THE INCLUDED COMPLEMENTARY PPFs**

#### ***Project Management***

- CRPROJ
  - Creates a project file based on a list of input images and optionally GCP segments.
- MERGPROJ
  - Merges multiple project files.
- SUBPROJ
  - Subsets a project file based on a given set of images or area.

#### ***Ground Control Point (GCP) and Tie Point (TP) Management***

- GCPREAD
  - Imports ground control point data from a text file into a GCP segment in a PCIDSK file.
- GCPPRO

- Converts input ground control points (GCPs) to the specified output units.
- GCPWRIT
  - Exports ground control point data from a GCP segment in a PCIDSK file to a text file.

#### ***Digital Elevation Model (DEM) Creation***

- VDEMINT
  - Generates a raster DEM from elevation data in vector layers and observes 2D breakline constraints.
- NNINT
  - Generates a raster DEM from spot elevations read from a raster, using natural neighbour interpolation.

#### ***DEM and Vector Elevation Reference Transfer***

- DEMZREF
  - Transforms raster DEM elevation values from mean sea level to ellipsoidal.
- VECZREF
  - Transforms 3D vector elevation values from mean sea level to ellipsoidal.

#### ***Image Normalization***

- HOTSPOT
  - Performs a correction for hotspot effects in an image channel.

#### ***Adjustment***

- OEMODEL
  - Evaluates a block adjustment for a set of images in a project file and generates math model segments for each image.

- CPMMSEG
  - Evaluates a block adjustment for a set of images in a project file and generates math model segments for one image.

## **Orthorectification**

- ORTHO
  - Orthorectifies an image using an existing geometric model and, optionally, a digital elevation model.

## **Image Management**

- IMERGE
  - Merges multiple geocoded rasters into a single 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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