



ScanEx Image Processor®

Thematic image processing

ScanEx Image Processor® is the multifunctional software application for in-depth thematic processing of satellite images and of geo-spatial data. It enables to get value-added products in form of maps, physical indices and models that serve as the basis to resolve a wide range of practical tasks

ScanEx Image Processor® has a modular structure and consists of the main (basic) and add-on (plugged in) modules, designed to resolve special tasks.

Basic configuration of this application enables to do the following:

- Import of dozens of different graphical and Earth remote sensing formats, export to popular graphical and conventional formats with the possibility of saving accompanying geolocated files
- Raster data visualization and systematic geometrical correction of remote sensing data
- Image transformation, ortho-rectification of raster based on ground control points, creation of image mosaics
- Loading, creation and editing of vector layers, automatic vectorization
- Spatial resolution enhancement, automatic co-registration of rasters
- Image atmospheric correction, change detection
- Arithmetic operations with raster layers, calculation of thematic products based on MODIS data
- Image classification and processing of classification results
- Operations with 3D models of the Earth

ScanEx Image Processor® add-on modules:

- **3D module of modeling and visualization** enables to create 3D models of landscapes and to overlay raster and vector layers; to model different types of objects and record video clips
- **Radar images processing module (SAR module)** enables to do segmentation and filtration of radar images, thematic calibration of segmentation results, having algorithms of detecting ships and oil spills on water surfaces
- **Digital elevation modeling (DEM) module** enables to build hydrologically correct DEMs based on vector data or stereo-pairs of scanner imagery

- **Modeling module** enables to calculate radiation balance, to do hydrological modeling of floods, freshets and overflows and to assess the dynamics of such processes
- **Software developer kit (SDK)** enables to write own scripts, to create user interface for them and to do stereo processing and radiometric correction of images
- **Thematic Pro classification and thematic interpretation module** enables to do segmentation of multispectral data, thematic calibration and interpretation of segmentation results

Minimum system requirements:

- Intel Pentium IV processor or compatible
- RAM 512 Mb
- 40 Gb of hard disk free space
- Monitor 1024x768 True Color
- ATI Radeon or Nvidia GeForce video card
- MS Windows XP/Vista

