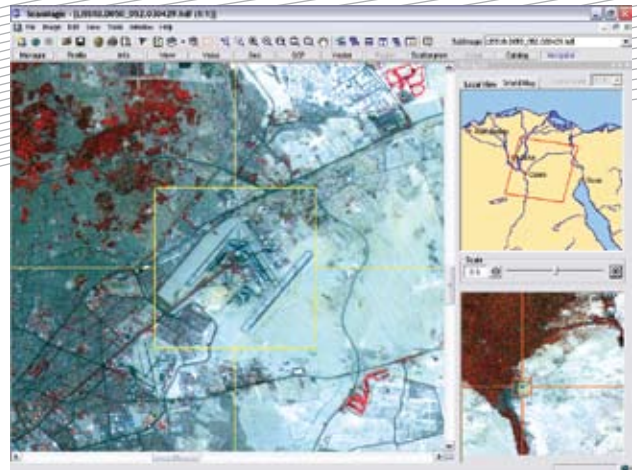
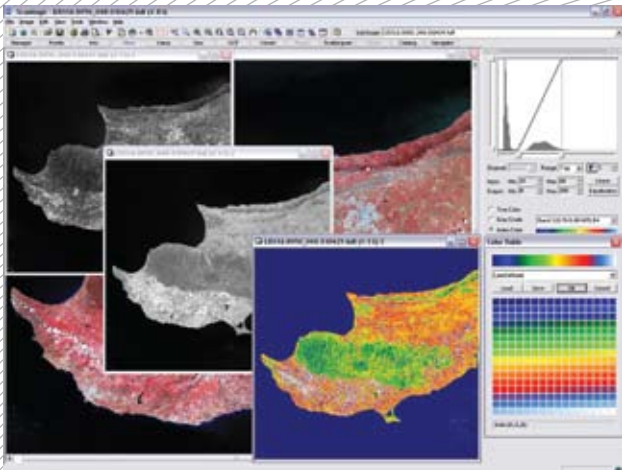


ScanMagic®

NEAR-REAL-TIME IMAGE PROCESSING

The application is built based on modern image processing technology and is a user-friendly stand-alone multifunctional software solution for preview, analysis and processing of Earth observation data, as well as for cataloging the imagery results





APPLICATION ERGONOMICS

- Stand-alone intuitive application for MS Windows/ Linux OS.
- Multi-document graphical interface in Windows style.
- Multi-lingual application interface.
- On the fly processing.
- Network license support.
- A set of tutorial materials: user's guide, exercises, training video.

IMAGE IMPORT AND EXPORT

- Support of more than 70 generic, GIS and RS data formats.
- Image type auto detection while importing and direct access to any raster data formats without conversion.
- Generation of image print preview and printing.

GEOMETRIC CORRECTION

- Image reprojection into any map projection.
- Arbitrary multispectral and spatial arrangement.
- Geometric correction using "image-to-map" (vector) or "image-to-image" (raster) or "image-to-map service" technology.
- Affine and polynomial transformation up to 5th order.

IMAGE ANALYSIS

- Metadata and geolocation parameters retrieval and viewing.
- Measuring geographic coordinates along with cursor movements.
- Image brightness properties analysis, building scattergrams.
- Automatic image segmentation.

IMAGE VISUALIZATION

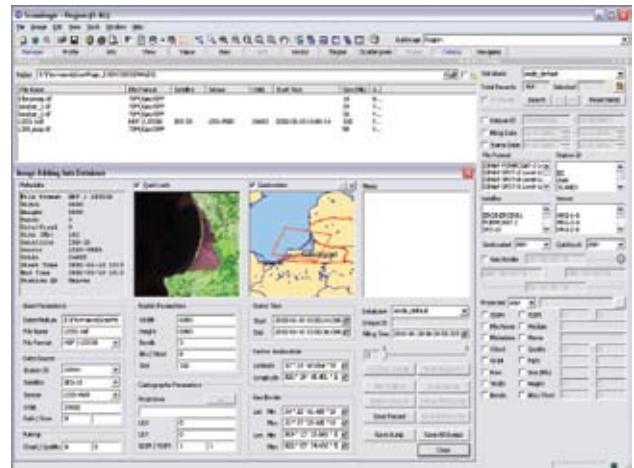
- Visualization of raster data in RGB, Grayscale and Index Color.
- Handy navigation and scaling tools in view window.
- Combining several view windows.
- User data 3D visualization applying map-services' DEMs.

IMAGE ENHANCEMENT

- Graphical tools of brightness and contrast control, linear and non-linear contrasting, histogram equalization.
- Contrast/Brightness enhancement.
- Image resolution enhancement (Image Fusion).

OPERATIONS WITH VECTOR LAYERS

- Supporting most popular vector formats.
- Overlaying vector maps on the image.
- Vector editor for vector maps creation and editing.
- Operations with point, linear and polygonal objects and attributive data preview.
- On-the-fly map reprojection.



GEOGRAPHIC LOCATION

- Automatic geographic and cartographic image location.
- Universal Orbit/Sensor Model for easy georeferencing of remote sensing data from any generic format.
- Geographic location correction.
- Application of GCPs.
- Unique algorithm of automatic search for ground control points based on vector layers.

IMAGE MANAGER

- Quick operations with a multitude of image files.
- Metadata retrieval and data display in form of a list of attributes.
- Viewing image location on the world map.
- Vector coverage exporting in ESRI ShapeFile and Google KML formats.

UNIVERSAL TOOLS OF RS DATA CATALOGUING

- Creation, viewing and edition of customized catalogs of RS data.
- Batch processing of large volumes of RS data of different types and presentation formats.
- Automatic metadata, quicklooks and geolocation data retrieval.
- User-friendly search by attributes and catalog data visual display against the world map.
- Access to catalogs in LAN, catalogs import/export to exchange databases.

INTEGRATED TOOLS OF ACCESS TO WEB-MAP SERVICES

- Support of 2D and 3D map services: Microsoft Virtual Earth, Google Maps, Google Earth, Yahoo Maps, etc.
- Control interface unified for all services.
- Operations with multi-terabyte mosaics as with usual image in one of the application windows, using them as base maps for picking up GCPs.
- Combined display of RS data and data from map-services.
- Overlaying remote sensing data on the DEM of map service for 3D visualization.

BATCH PROCESSING OF RASTER AND VECTOR DATA

- Raster files built-in converter with the possibility to crop the specified image fragment and to re-define the map projection.
- Vector files converter with the possibility to unite and re-project into different map projections, as well as to crop vector map fragments.
- Batch reprojection of map coordinates.
- Values converter (changing representation formats or units of measurement).



Being a very quick, universal and functional, ScanMagic® is a perfect solution for remote sensing data processing in near real-time mode and enables to get value-added map products in a most cost-efficient way.

ScanMagic® will be a reliable help to all, who is dealing with image processing or is interested in geo-information technology.

SUPPORTED VECTOR FORMATS

ARCINFO BINARY COVERAGE	MAPINFO MIF/MID
CENSUS TIGER / LINE	MAPINFO TAB
ESRI SHP	MICROSTATION DGN
MGL	ORDNANCE SURVEY NTF
IHO S57	USGS SDTS VTP

SUPPORTED RASTER FORMATS

ARCINFO ASCII GRID	ERMAPPER ERS	LANDSAT GeoTIFF	QUICKBIRD NITF
ARCINFO BINARY GRID	ERS CEOS	LANDSAT HDF	RADARSAT CEOS
ASTER DEM	ESRI BIL	LANDSAT-5 L0	RAW
ASTER HDF	ESRI BIP	LANDSAT-5 L1A	RESURS MSU-E L0
ASTER L1A	ESRI BSQ	LANDSAT-5 L1B	RESURSAT L1A
ASTER L1B	EUROMAP FAST	MAPTECH BSB	RESURSAT L1B
ASTER L2	FengYun CHRPT	METEOR MSU-E L0	SAR CEOS
ATLANTIS MFF	FIT IMAGE	MODIS AQUA L0	SEAWIFS L3
ATLANTIS MFF2	FITS	MODIS HDF	SCANEX IRS LISS L0
BINARY BIL	FORMOSAT DIMAP	MODIS L1A	SCANEX IRS LISS L1A
BINARY BIP	GEOSOFT GXF	MODIS L1B	SCANEX IRS LISS L1B
BINARY BSQ	GeoTIFF	MODIS L3	SCANEX IRS PAN L0
BMP	GIF	MODIS TERRA L0	SCANEX IRS PAN L1A
CARTOSAT L1A	GOOGLE KML	MrSID	SCANEX IRS PAN L1B
CARTOSAT L1B	GOOGLE KMZ	NetCDF	SCANEX IRS SWIR L1A
CEOS	GOOGLE KML TILES	NIMA DTED0	SCANEX IRS SWIR L1B
ELAS	GOOGLE KMZ TILES	NIMA DTED1	SCANEX IRS WIFS L1A
ENVI BIL	HDF 4	NITF	SCANEX IRS WIFS L1B
ENVI BIP	HDF 5	NOAA APT	SOFTCHART GEO/ NOS
ENVI BSQ	IDRISI	NOAA HRPT	SPOT 1 / 2 / 3 SISA
ENVISAT IMAGE	IKONOS GeoTIFF	NOAA L1B	SPOT 4 CAP
EOSAT FAST	IKONOS NITF	PCI AUX	SPOT 5 DIMAP
EROS L0	IRS SUPER STRUCTURE	PCI DSK/ PIX	SPOT GEO
EROS L1A	JAPANESE DEM	PGM	TIFF
EROS L1B	JPEG	PIXMAP	USGS DOQ1
ERDAS IMG	JPEG 2000	PNG	USGS DOQ2
ERDAS LAN/GIS	LANDSAT CEOS	PPM	USGS SDTS DEM
ERMAPPER ECV	LANDSAT FAST	QUICKBIRD GeoTIFF	VTP BINARY TERRAIN