

SARscape® Family of Data Analysis Modules for ENVI



Integrate SAR with your remotely sensed data. Get the information you need.

The use of Synthetic Aperture Radar (SAR) data has become increasingly popular in recent years, offering professionals in a wide array of industries a measurable, analytical approach to getting information about an area or object of interest. SAR is a sophisticated data type, acquired from airborne and space borne platforms, and can produce two or three-dimensional datasets of surface areas. When combined and merged with spectral imagery, SAR provides the additional, critical layer of information you need.

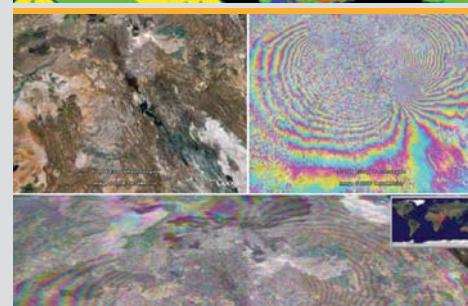
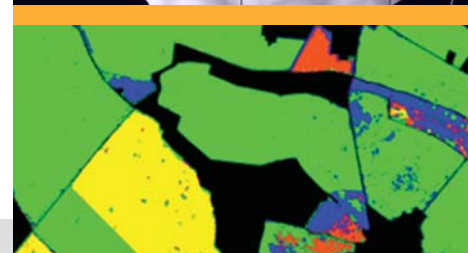
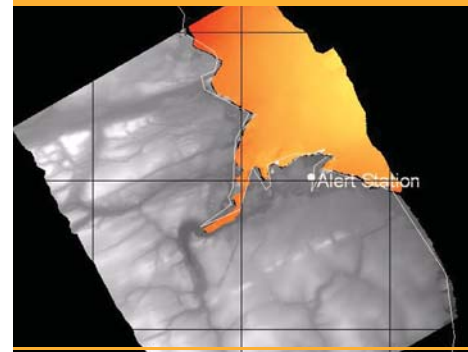
Now, the developers of ENVI offer the SARscape® Family of Modules, feature rich add-ons that allow you to easily read, process, analyze and output your SAR data, while giving you the option to integrate that information with your other geospatial data and tools. This unique data analysis capability takes your data from hard-to-interpret numbers to meaningful, contextual information. And, because the SARscape® Modules are integrated with ENVI, you have the added benefit of superior spectral analysis tools and functions in one package.

Why Use SAR Data?

SAR is a non-subjective approach to analyzing an area of interest. Used alone or in conjunction with other remotely-sensed data, SAR data provide a unique layer of information - exposing new details to help you make the most informed decisions possible. SAR allows you to:

- Generate accurate maps
- Perform change detection
- Measure small movements of objects

SARscape® supports Windows 2000/XP/Vista and Linux 2.6 operating systems. To learn more technical information about the SARscape Family of Modules for ENVI, or to purchase today, visit www.ittvis.com/ENVI/SARscape.



SARscape® for ENVI Product Family

The SARscape Family of Modules for ENVI offers comprehensive, SAR-specific tools, combined with the superior spectral image processing capabilities of ENVI. The family consists of two core modules: The SARscape Basic Module and the SARscape Interferometry Module.

SARscape® Basic Module for ENVI

The SARscape Basic Module for ENVI includes processing functionality for generating airborne and space borne SAR products, based on intensity and coherence. This module provides you with multiple capabilities, including:

- Focusing and Multilooking
- Coregistration
- Despeckling
- Feature Extraction
- Geocoding
- Radiometric Calibration
- Mosaicking
- Segmentation and Classification

In addition, as a SARscape Basic Module user, you have the choice of two accessory modules: The Focusing Module, which allows you to extend focusing capabilities to RADARSAT-1, ENVISAT ASAR, and ALOS PALSAR, and The Gamma and Gaussian Filter Module, which includes SAR-specific filters and algorithms based on Gamma/Gaussian-distributed scene models.

SARscape® Interferometry (InSAR/DInSAR) for ENVI

The SARscape Interferometry (InSAR/DInSAR) Module allows you to process Interferometric SAR (2-pass interferometry, InSAR), and Differential Interferometric SAR (n-pass interferometry, DInSAR) data. This module provides capabilities for:

- Generating Digital Elevation Models (DEMs)
- Generating Land Displacements
- Generating Coherence Maps

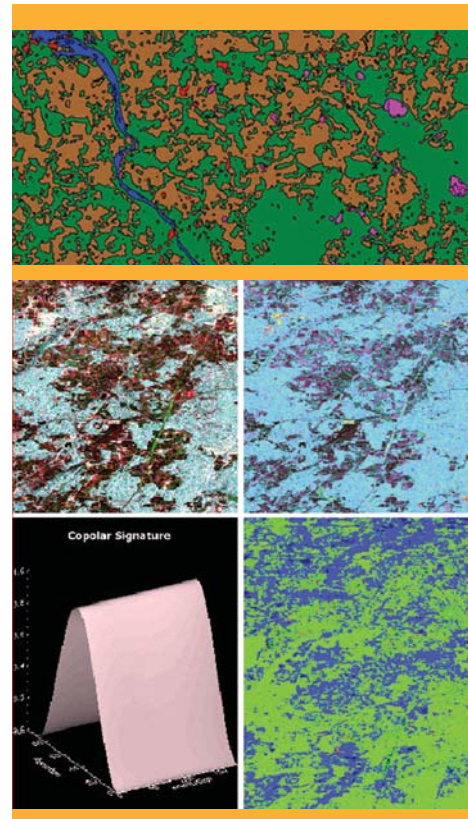
There are also two accessory modules for the InSAR/DInSAR Module. The ScanSAR Interferometry Module allows you to generate interferograms over large areas. The SAR Polarimetry/Polarimetric Interferometry (Pol/PollnSAR) Module allows you to process polarimetric data, such as ALOS PALSAR, RADARSAT-2, and TerraSAR-X-1, and polarimetric interferometric SAR data, such as ALOS PALSAR.

Download detailed technical information, get pricing, or purchase a module in the SARscape family of modules for ENVI at www.itvis.com/envi/SARscape.

ENVI and SARscape®

— when you need every piece of the puzzle

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Popular SAR Data Applications

Agriculture – Estimate crop area and monitor plant growth

Military – Identify objects and detect shifts in movement

Environmental Research – Track oil spills and land cover changes

Disaster Management – Assess flood, fire, and earth movement damages

Insurance – Provide information on damages

Urban Planning – Check elevation statistics & site stability

