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SARScape® 4.3 Modules of ENVI



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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 spaceborne 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.

The developers of ENVI image analysis software offer **SARscape[®] Modules for ENVI**, featuring rich addons 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.

The newest release of SARscape Modules for ENVI – version 4.3 – introduces significant improvements to simplify and advance your SAR analysis. New notable functionalities are available in the SARscape Interferometric Module to better relate the phase information with fine 2D displacements and their causes. In addition, the SARscape Basic Module now contains algorithms to simplify the extraction of features from SAR data including linear feature detection. Other advances in the Basic Module include the ability to mosaic raw data and improvements in the radiometric calibration.

SARscape 4.3 Modules for ENVI includes other advances such as the renaming of the SARscape Persistent Scatterers Module to SARscape Interferometry Stacking Module as a result of the addition of the Small BAseline Subset (SBAS) algorithm that enables the interferometric analysis of multi-temporal SAR data. This module now supports the very high resolution Cosmo-Skymed and TerraSAR-X data.



New supported products in SARscape 4.3 Modules for ENVI include ERS ENVISAT data. ALOS PALSAR GeoGRID data, fully polarimetric TerraSAR-X-1 acquisitions and various airborne sensors. The SARscape Interferometry Module includes advances such as atmospheric correction of ENVISAT ASAR data using MERIS data. calculating coherence statistics, and advanced displacement Other improvements modeling. include support for GLAS derived DEMS, a new Ground Control Points generation tool and new generate colour composites options.

SARscape Interferogram showing topography changes

SARscape 4.3 Modules for ENVI fully supports ENVI 4.8, the latest version of the software.