

COSMO-SkyMed compatible IP software

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e-GEOS

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HDF5 group homepage

(<http://hdf.ncsa.uiuc.edu/>)

The screenshot shows the HDF5 group homepage. At the top left is the logo "HDF The HDF Group". A navigation bar contains links for "Home", "Why HDF?", "Products", "Services", "About Us", "News", and "Contact Us", along with a search box labeled "-- Search HDF --". On the left side, a "Quick Links" menu lists "LINKS" with sub-items: "HDF5", "HDF4", "Tools", "Projects", "Downloads" (circled in red), "Documentation", and "Employment". The main content area features a "Welcome" banner with the text "SOLUTIONS TO DATA CHALLENGES". Below the banner, there are two sections: "THE HDF GROUP" with a brief description of the group's mission, and "HDF TECHNOLOGIES" with a description of the technologies and their application in NASA's Earth Observing System.

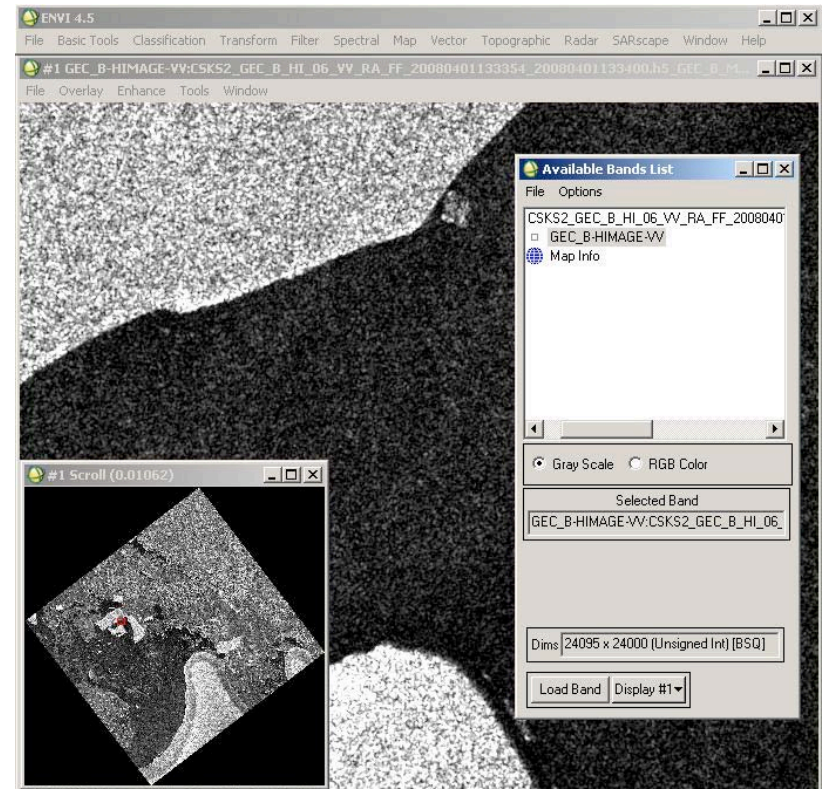
Simple HDF5 viewer

The screenshot displays the HDFView application interface. The main window shows a grayscale satellite image of a terrain. A Properties dialog box is open, showing a table of 38 attributes for the selected object (S01). The table includes columns for Name, Value, Type, and Array Size. The attributes listed are:

Name	Value	Type	Array Size
Rank	19	8-bit unsigned character	1
Reference Dechirping TL	4.901479487179487E-5	64-bit floating-point	1
Sampling Rate	1.95E9	64-bit floating-point	1
Synthetic Aperture Durati	2.747057225347372	64-bit floating-point	1
Doppler Ambiguity	0	16-bit integer	1
Azimuth Bandwidth per ...	7752.173657066709	64-bit floating-point	1
Azimuth Focusing Band...	7970.29702970297	64-bit floating-point	1
Azimuth Focusing Trans...	7970.29702970297	64-bit floating-point	1
Azimuth Multilooking Tra...	0.0	64-bit floating-point	1
ECEF Beam Pointing for...	-0.9670335654934374	64-bit floating-point	15 x 3
Range Bandwidth per L...	2.120047598563602E8	64-bit floating-point	1
Range Focusing Bandw...	2.1647851562500003E8	64-bit floating-point	1
Range Focusing Transi...	0.0	64-bit floating-point	1
Range Multilooking Tran...	2.120047598563602E8	64-bit floating-point	1
RAW Statistics Block Size	366, 947	32-bit unsigned integer	2
Centre Geodetic Coordi...	[-5.954820758789006, -49.64888934066133, 0.0	64-bit floating-point	3

ENVI / IDL

- ENVI 4.4 (and following) and the latest version of SARSCAPE are fully compatible with COSMO-SkyMed hdf5 products
- www.itvis.com/envi (add-on to be downloaded)
- HDF5 libraries in IDL



SARscape (SARMAP)

www.sarmap.ch

- Full SAR processing capability
- Stand alone or with ENVI
- www.sarmap.ch



Company

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Overview

Synthetic Aperture Radar (SAR) systems can acquire data in different ways, such as:

- Single or dual channel mode (for instance HH or HH / HV or VV / VH);
- Interferometric (single- or repeat-pass) mode;
- Polarimetric mode (HH,HV,VH,VV);
- By combining interferometric and polarimetric acquisition modes.

Obviously, different acquisition modes are subject to different processing techniques. They are:

Processing of SAR Intensity

The product generation is limited to the intensity processing.

Interferometric SAR (InSAR/DInSAR/PS) Processing

The product generation includes intensity, and interferometric phase processing.

Polarimetric SAR (PolSAR) Processing

The product generation includes intensity, and polarimetric phase processing.

Polarimetric-Interferometric SAR (PolInSAR) Processing

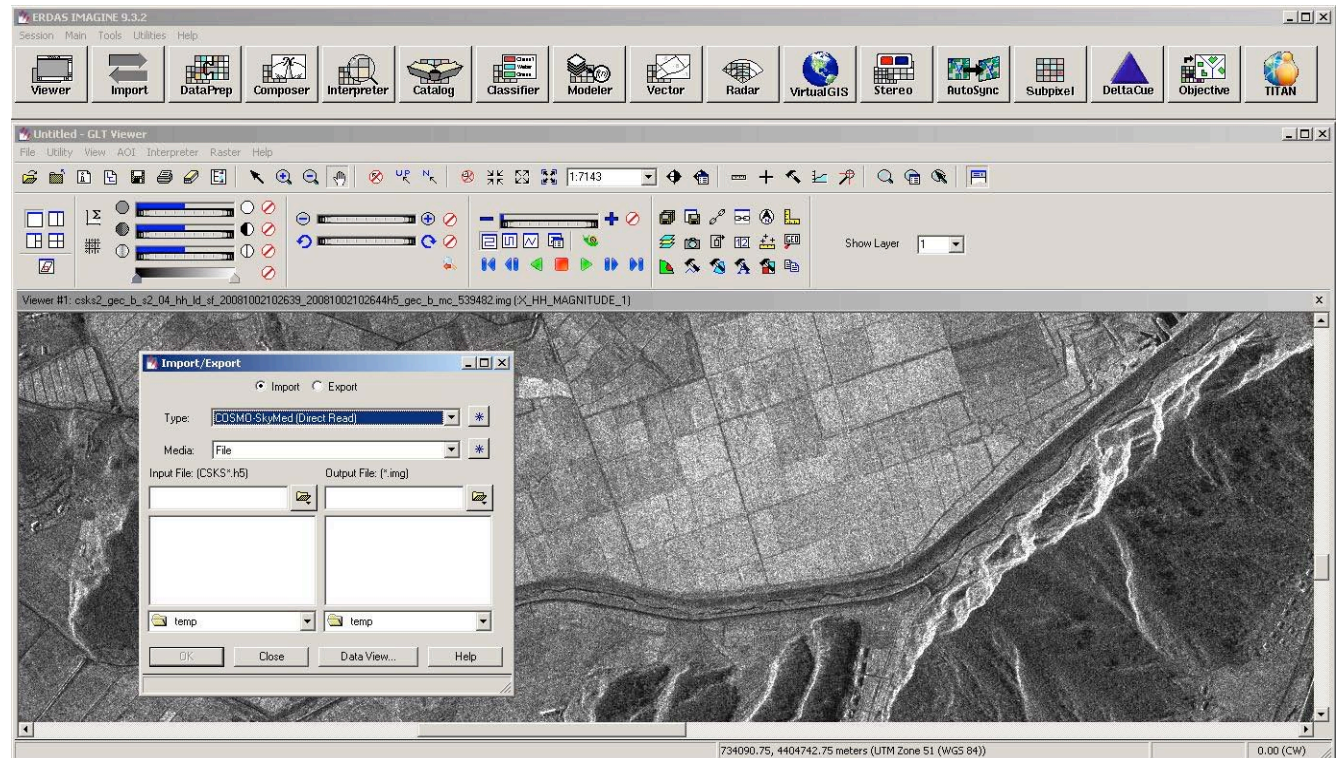
The product generation includes intensity, polarimetric, and interferometric phase processing.

In order to support these processing techniques, SARscape® provides following modules:

- **Basic** - It includes a set of processing steps for the generation of SAR products based on intensity including multi-purpose tools. This module is complemented by:
 - **Focusing** - It supports the focusing of RADARSAT-1, ENVISAT ASAR, and ALOS PALSAR data.
 - **Gamma and Gaussian Filtering** - It includes a whole family of SAR specific filters. They are particularly efficient to reduce speckle, while preserving the radar reflectivity, the textural properties and the spatial resolution, especially in strongly textured SAR images.
- **Interferometry** - It supports the processing of Interferometric SAR (2-pass Interferometry, InSAR) and Differential Interferometric SAR (3-pass Interferometry,

ERDAS

- The new release 9.3.2 (end Feb. 2009) is fully compatible with COSMO-SkyMed hdf5 products
- Full SAR processing capability
- www.erdas.com



Socet Set

- Socet Set 5.5 (April 2009) will be able to import COSMO-SkyMed constellation data
- www.socetset.com

PHOTOMOD

- PHOTOMOD Software is now able to read and process the new COSMO-Skymed data
- www.racurs.ru

GAMMA Software

- GAMMA Software is now able to read and process the new COSMO-Skymed SSC and GEC data
- www.gamma-rs.ch