

# Software Using HDF4

Please help us keep your software information up to date by sending your HDF related research and software links to [help@hdfgroup.org](mailto:help@hdfgroup.org).

**Disclaimer: Although the HDF Group is pleased that these products support the HDF file format, the HDF Group is not in a position to endorse any particular product. Descriptions on this page come from the official pages of the software vendors, and any claims made are theirs.**

---

## Earth Science Related Software

[HDF Tools Related to Earth Sciences](#)

---

## Freely Available Software

### The HDF Group Software

#### The HDF Group Utilities

Utilities included in the HDF distribution are of the following type:

- conversion utilities (for eg. jpeg2hdf, hdf2or8)
- tools for analyzing the contents of an HDF file (hdp being one of the more useful)
- tools for manipulating HDF files (for eg. hdfcomp, hdfpack, ...)

#### The HDF Group Java Products

The HDF Java Products consist of HDF-Java wrappers around the HDF4 and HDF5 library, and HDFView, a Java-based tool for browsing and editing HDF4 and HDF5 files. HDF Object package APIs are provided with the HDFView tool.

For more information, see:

- [HDF-Java](#)
- [HDFView](#)

## Third-Party Tools

### [HDF Tools Related to Earth Sciences \(same as link at top\)](#)

#### HDF4Import

This is a Mathematica Package to allow Vdata import of HDF4 files in Mathematica.

#### NCO (netCDF Operators)

The netCDF Operators, or NCO, are a suite of file operators which facilitate manipulation and analysis of self-describing data stored in the (freely available) netCDF or HDF4 formats.

#### Pomegranate

Pomegranate is an open source python application that implements w10n-sci API. It can be installed to provide web services for remote access of science data files, or used as a standalone library/command line tool. Supported formats include NetCDF, HDF4, HDF5, GRIB and FITS.

---

## Commercial Software

## **ACTRAN**

ACTRAN is an acoustic code based on the use of Finite and Infinite Element Methods, developed by Free Field Technologies. For aeroacoustic applications, the sources are predicted separately, e.g. by CFD software. The use of HDF files allows for a much more efficient exchange of this huge amount of data across different platforms.

## **EASI/PACE**

This application is a powerful remote sensing software package, offering extensive capabilities in image classification, geometric correction, orthorectification, enhancement filtering, vector edit with image backdrop, terrain analysis and visualization, radar image processing, DEM extraction, atmospheric correction, and hyperspectral data analysis. It operates on Windows, Macintosh, and several UNIX platforms, and is available from PCI.

## **ENVI**

ENVI, the Environment for Visualizing Images, is an image application for processing, analyzing, and displaying multispectral, hyperspectral or radar remote sensing data. It operates on Windows, Unix, and Macintosh platforms. It supports numerous formats, including HDF.

## **ERDAS Imagine**

IMAGINE is a mapping and visualization tools that allows different types of geographic data to be combined with imagery and organized into a mapping project. It supports HDF-EOS and Landsat data, as well as SPOT data. Refer to the FAQs

## **HDF Explorer**

HDF Explorer is a data visualization program designed to read HDF and HDF5 files. Its main features are: reads all HDF data types, supports image generation from both scalar and vector data, easy browsing through 3D datasets, data exporting facilities, and an easy-to-use yet powerful interface. HDF Explorer is available for Windows NT/95. More information about HDF Explorer is available from Space Research, Inc.

## **IDL**

IDL is a software package for data analysis, visualization, and application development. IDL's features include: advanced image processing, interactive 2D and 3D graphics, insightful volume visualization, a high-level programming language, integrated mathematics and statistics, flexible data I/O, a cross-platform GUI toolkit, and versatile program linking tools. IDL offers support for virtually any data format including CDF, netCDF and HDF.

## **IGOR Pro**

WaveMetrics' IGOR Pro is a graphing, data analysis, and programming tool for scientists and engineers. It can handle large data sets, and imports data from a variety of file formats, including HDF. It is available on Macintosh and Windows.

## **Mathematica**

Mathematica, from Wolfram Research, Inc. supports HDF. Mathematica is an integrated technical computing system, which combines interactive calculation, visualization tools, and a programming language.

## **MATLAB**

MATLAB from The MathWorks, Inc. supports the HDF format. It is a high-level programming language for technical computing that combines numeric computation, advanced graphics and visualization.

## **PV-Wave**

This is a software environment from Visual Numerics for solving problems requiring the application of graphics, mathematics, numerics, and statistics to data and equations.

## **Slicer Dicer**

Slicer Dicer (formerly Spyglass Dicer) is a volumetric-data visualization program currently available for Windows XP, ME, 2000, NT, and 98 platforms. It reads netCDF and HDF data and DICOM, as well as arbitrary binary array data. You literally "slice and dice" the data volume to create 3D renderings of selected portions of the data rendered on orthogonal and oblique slices and on arbitrary rectilinear blocks and cutouts. Isosurface and projected volume renderings are also available. You can generate animation sequences featuring continuous rotations, moving slices, blocks, etc., parametric variation (time animation), oblique slice rotation, and varying transparency. Slicer Dicer comes with the optional program Seeker, a powerful browser for DICOM medical image files. Slicer Dicer is owned and marketed by PIXOTEC, LLC.

### **Tecplot**

Tecplot, from Amtec Engineering Inc., is a fast, interactive visualization program that allows users to view their data in a wide variety of ways: wire-mesh plots, contour lines and flooding, vector fields, light-source shaded plots, and many types of XY plots. It supports reading and writing of HDF files. Tecplot runs on most UNIX platforms and on IBM PCs running most versions of MicroSoft Windows (and soon on VMS).

### **Windows Image Manager (WIM)**

WIM is a general purpose image display and analysis program for MS Windows, with special features for Satellite Images.