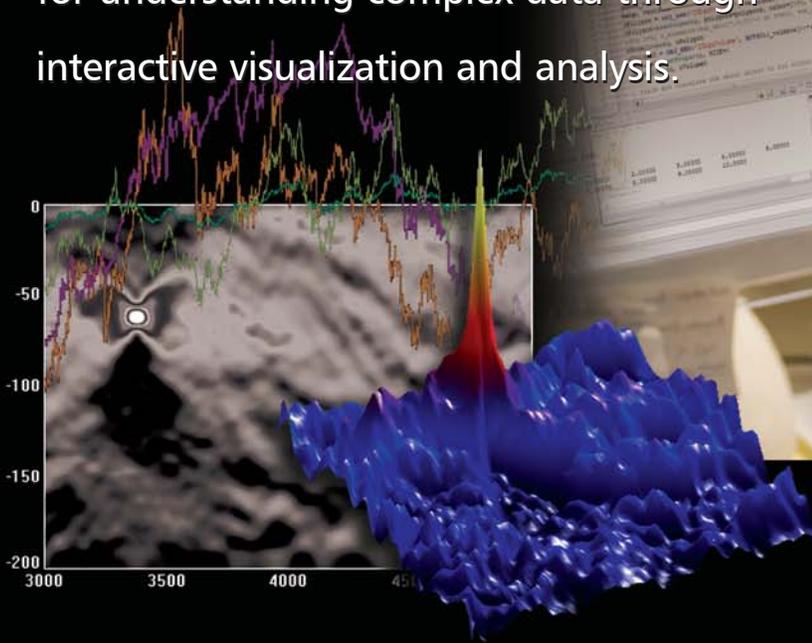




# ITT

Get the answers you need from your data.

IDL<sup>®</sup> is the preferred computing environment for understanding complex data through interactive visualization and analysis.



IDL

*Engineered for life*

# Powerful visualization. Interactive analysis. Modern environment.

When data is the foundation of your work – whether you are a scientist, researcher, developer or all of the above – you need a tool to get answers you need from the data. You need accurate answers based on proven processes, and powerful visualizations to help you interpret what you find.

IDL is the ideal timesaving computing environment for data analysis, visualization, and application development. From "quick-look" analysis and display to commercial programming projects, IDL combines the tools you need with a modern, familiar environment. Professionals like you across industries rely on IDL to interpret data, to expedite discoveries, and to deliver powerful applications to market.

Access

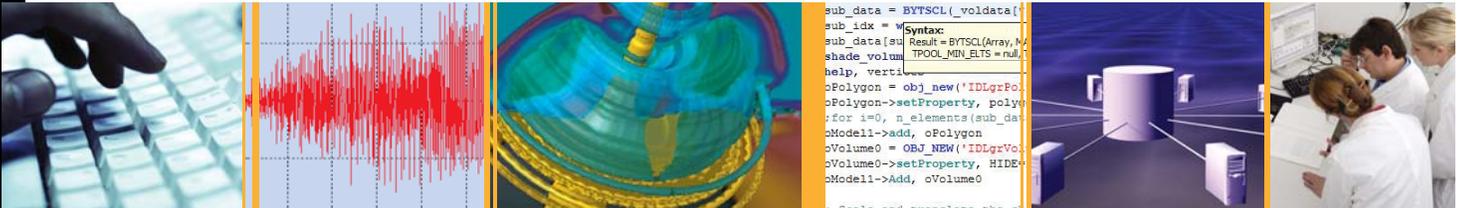
Analyze

Visualize

Develop

Integrate

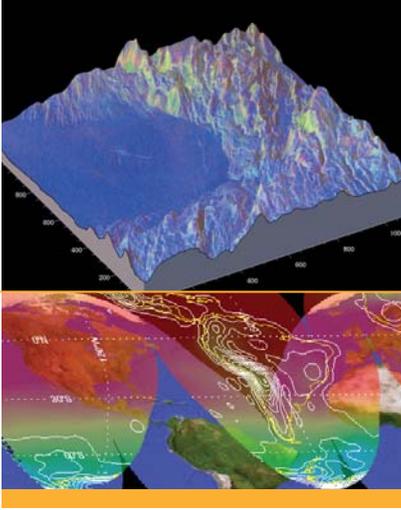
Share



Developed as a flexible tool for understanding information from complex datasets, IDL requires less code and programming expertise to produce dynamic visualizations and analyses. And, since the IDL development environment is based on the Eclipse framework, it is a truly cross-platform solution, allowing you to easily develop, integrate, and distribute applications to a wider community.

Learn more about IDL.

Your solution to getting the answers you need from your data.



## Access Virtually Any Type of Data

IDL provides built-in support for the data sources, data types, file formats, and file sizes you use. Use IDL to access common formats like TIFF, JPEG, DICOM, and DXF, hierarchical scientific data formats like HDF, HDF-EOS, CDF, and netCDF, as well as custom binary and ASCII formats. And, since IDL is designed for large, multi-dimensional data, no job is too complex. Receive data from remote servers or write files to a disk at a remote location using common protocols. IDL acts as a client to HTTP and FTP servers, and provides access to common Open Geospatial Consortium (OGC) servers such as Web Map Service (WMS) and Web Coverage Service (WCS).

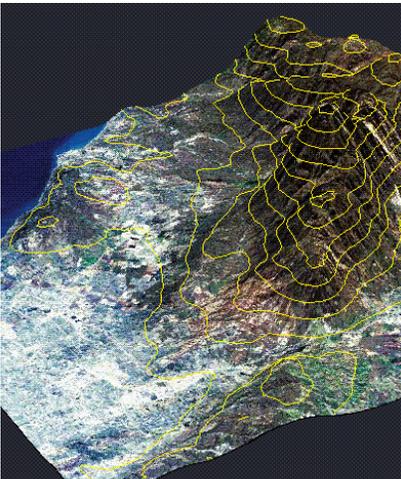
## Analyze Your Data

From ad-hoc data analysis to commercially distributed applications, IDL has the data analysis capabilities you need, including:

- Simple syntax, dynamic data typing, and array-oriented operations
- A rich library of high-performance routines to analyze your data
- Built-in functionality suitable for many data trends, with tools for 2- and 3-dimensional gridding and interpolation, routines for curve and surface fitting, and the ability to perform multi-threaded computations
- The ability to add your own specialized routines to the library by writing procedures more quickly than in C or FORTRAN

## Image Processing

If you need to convert raw images to information, IDL contains an extensive library of image processing and analysis routines. IDL allows you to extract useful information from nearly any type of digital image with tools for transforming image geometry, mapping, masking and statistics, warping, analyzing regions of interest, and contrasting and filtering.

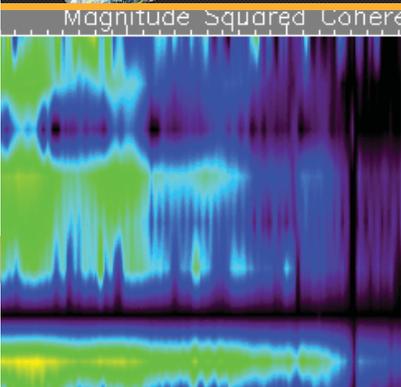


## Signal Processing

IDL has advanced tools for processing signal data, including transforms for signal decomposition, windowing algorithms, routines for smoothing, convolving and applying digital filters to remove noise, and correlation and covariance techniques to analyze signals with random components. IDL also has a built in wavelet toolkit that provides GUI and programmatic wavelet analysis of multi-dimensional data.

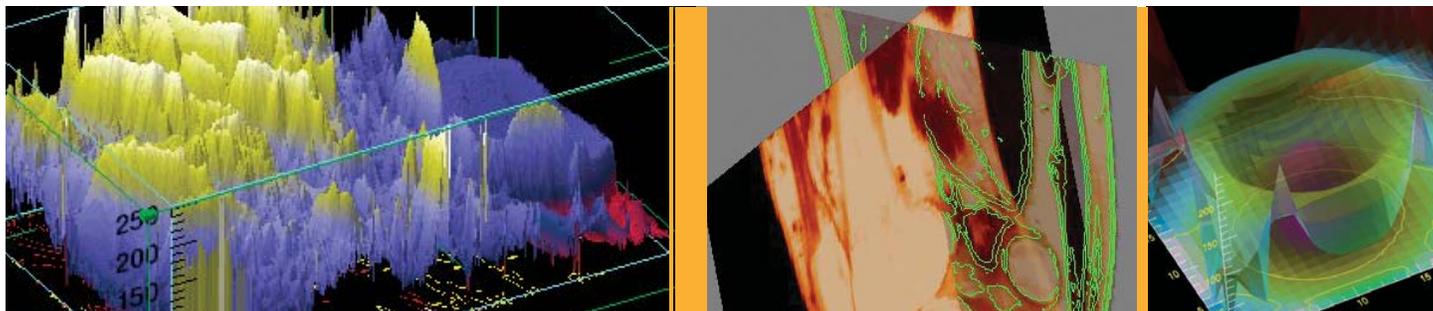
## Math and Statistics Routines

If you need to add mathematical and statistical functionality quickly and easily to an IDL application, **IDL Analyst** is a premium IDL product that combines advanced data visualization and analysis capabilities with the comprehensive mathematical and statistical routines of the IMSL™ C Numerical Library. This solution allows you to access proven algorithms and routines directly from the IDL environment without using additional software.



# Visualize Your Data

IDL is designed for visualizing large and complex datasets. Easily and quickly create powerful visualizations, ranging from simple 2D plots and image displays to complex, interactive 3D graphics designed to leverage OpenGL hardware acceleration and take advantage of multiple processors for rapid rendering.



## Pre-Built Functionality

Whether you're an experienced IDL programmer or an ad-hoc user, the iTools will reduce your programming time and effort. iTools provide interactive, pre-built applets for graphing, plotting, displaying, mapping, and more. Use them to open, analyze and visualize data and produce quality, publication-ready graphics or to build customized visualization environments.

## Develop an Application

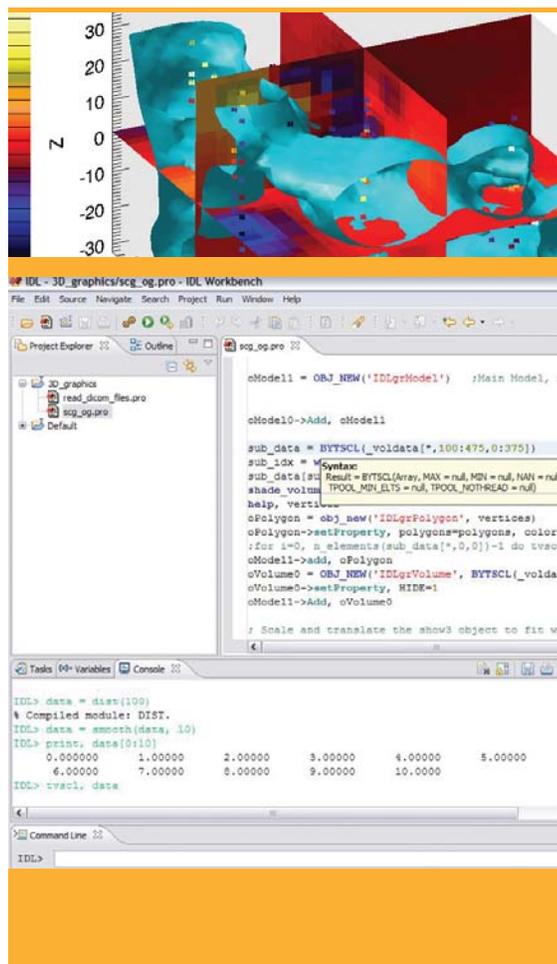
IDL's easy-to-use development environment - the IDL Workbench - is based on the popular Eclipse development platform. Providing a modern, familiar environment for users to develop and deploy commercial applications, it combines the advantages of a full-featured, cross-platform development framework with the tools you expect including:

- A cross-platform user interface
- Code editing tools
- Code debugging capabilities
- Plug-in architecture for extensibility
- User assistance, such as hover help and content assist
- Internationalization of user interface menus and text

IDL also offers easy access to plug-ins and extensions, guided cheat sheets and tutorials, as well as RSS feeds to keep you up-to-date.

## Custom Visualization Building Blocks

While IDL provides a rich set of pre-built visualization tools, it also provides complete access to a full programmatic graphics API. Create your own customized, interactive visualization application with the graphics and graphical user interface (GUI) widgets creation capabilities. With IDL, you can do everything from creating a general application for distribution to developing a solution optimized for a specific hardware configuration.



## Integrate Your Applications

IDL is a flexible and extensible visualization, analysis, and development environment that easily integrates with the other software tools you use. IDL provides a host of ways to import code and functionality from other programming languages and advanced methods for exporting IDL capabilities to your applications written in other languages.

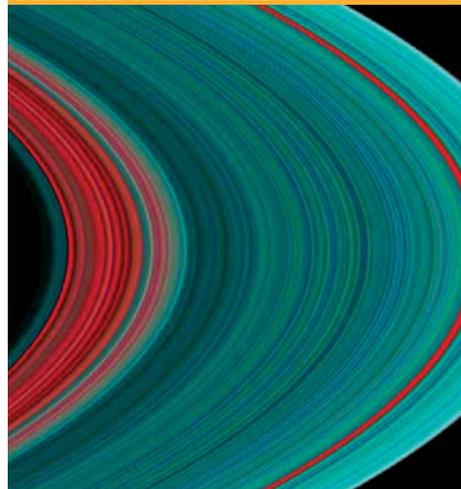
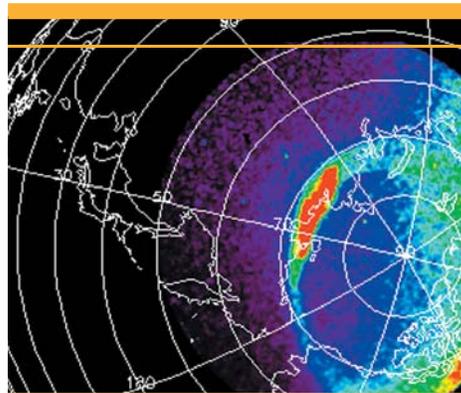
- Make the most of your investment in existing code. Call programs and libraries written in other languages from within IDL, or call IDL as a subroutine in applications written in other languages
- Import existing Java or COM objects into IDL applications and control them using IDL syntax
- Export your IDL code as a Java object for inclusion in applications written in Java running on any platform supported by IDL. Or, export your IDL code as a COM object for inclusion in a Windows application written in C#, Visual Basic, or any other COM-based programming environment

## Share Your Results

IDL allows you to share your IDL applications quickly and easily with colleagues who use IDL. The **IDL Virtual Machine** is a simple, no-cost way to distribute IDL applications to users who do not own an IDL license. For both commercial and non-commercial applications, IDL Virtual Machine can be bundled with your application and sent as a single file, or downloaded for free from the internet. And, IDL runtime licensing is available for situations where the developer requires greater flexibility.

Powerful visualization. Interactive analysis. Modern environment. IDL has all you need for your data analysis project.

Get started with IDL today. [www.itervis.com/IDL](http://www.itervis.com/IDL).



**Get the Answers You Need from Your Data.**



**Powerful visualization. Interactive analysis. Modern environment.**

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To learn more about IDL, IDL training options, tutorials and other resources, and custom implementation services, visit [www.itervis.com/IDL](http://www.itervis.com/IDL), or call 303-786-9900.



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