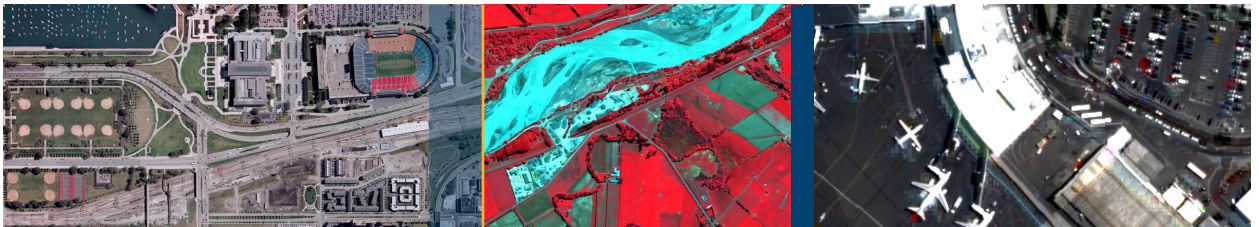




ENVI Support for JPEG2000

The Growing Use of the JPEG2000 File Format

JPEG2000 is quickly being adopted as an industry standard file format for digital imagery. JPEG2000 is open source, with non-proprietary defined standards, ensuring that you are never tied to a particular provider for support. Unlike the basic JPEG format, JPEG2000 can handle as many bands as your data has from panchromatic to hyperspectral, and supports non-byte data types. This makes it ideal for handling imagery from all current aerial and satellite data providers, and for archiving non-byte multiband data like LANDSAT.



The ENVI Product Family and JPEG2000

The ENVI product family consists of [ENVI](#), [ENVI EX](#), and add-on modules for enhanced functionality. Together they are considered the premier software solutions for processing and analyzing geospatial imagery. All ENVI products have supported JPEG2000 since it first emerged, and ENVI products work directly with JPEG2000 for visualization and analysis – you do not need to convert your JPEG2000 files to another format to use them with ENVI. All the robust processing and analysis tools in the ENVI product family are available directly with your JPEG2000 data, for input and output.

JPEG2000, ENVI, and ArcGIS®

ENVI products not only work directly with JPEG2000, but they are tightly integrated with ArcGIS products. ENVI products make it easy to export JPEG2000 files directly to your ArcGIS geodatabase, push display layers with JPEG2000 data to ArcMap, or send raw JPEG2000 data to ArcMap. With ENVI, integrating JPEG2000 with your GIS into one seamless workflow is fast and easy.

ITT Enterprise Solutions and JPEG2000

Another benefit of JPEG2000 is that it is designed with client-server systems in mind. Servers can compress and stream out highly compressed image segments to a JPEG2000 client via the JPIP (JPEG2000 Internet Protocol) standard. This allows you to stream only the parts of the image you need, without having to decompress the entire file to get the data bounds you need or to stream over the entire data set for the client to decompress.

The [Enterprise IAS Server](#) from ITT is designed for exactly this type of application – compressing and streaming JPEG2000 data to as many remote clients as desired, even over minimal bandwidth. This solution is excellent for archiving and compressing vast data reserves and for getting necessary data to users in the field who typically experience constrained bandwidth.

Easy-to-use tools. Proven functionality. Fast results.

From reading and preparing, to exploring, analyzing, and sharing — ENVI and IAS provide the tools you need to quickly get information from your JPEG2000 files.

Did you know?

JPEG2000 allows the user to define the level of compression. You can compress the data preserving all of the original numerical values, get higher compression with visually lossless data, or get incredibly high compression, 95% or higher, with lossy compression. JPEG2000 also offers compression schemes so that you can specify if you want your data to be optimized for visual performance or for analytical speed.

To learn more, contact an ENVI representative at 303.786.9900 or on the web.