

HFA -- Erdas Imagine .img

GDAL supports Erdas Imagine .img format for read access and write. The driver supports reading overviews, palettes, and georeferencing. It supports the erdas band types u8, s8, u16, s16, u32, s32, f32, f64, c64 and c128.

Compressed and missing tiles in Erdas files should be handled properly on read. Files between 2GiB and 4GiB in size should work on Windows NT, and may work on some Unix platforms. Files with external spill files (needed for datasets larger than 2GiB) are also support for reading and writing.

Metadata reading and writing is supported at the dataset level, and for bands, but this is GDAL specific metadata - not metadata in an Imagine recognised form. The metadata is stored in a table called GDAL_MetaData with each column being a metadata item. The title is the key and the row 1 value is the value.

Creation Issues

Erdas Imagine files can be created with any GDAL defined band type, including the complex types. Created files may have any number of bands. Pseudo-Color tables will be written if using the GDALDriver::CreateCopy() methodology. Most projections should be supported though translation of unusual datums (other than WGS84, WGS72, NAD83, and NAD27) may be problematic.

Creation Options:

- **BLOCKSIZE=blocksize**: Tile width/height (32-2048). Default=64
- **USE_SPILL=YES**: Force the generation of a spill file (by default spill file created for images larger 2GiB only). Default=NO
- **COMPRESSED=YES**: Create file as compressed. Use of spill file disables compression. Default=NO
- **NBITS=1/2/4**: Create file with special sub-byte data types.
- **PIXELTYPE=[DEFAULT/SIGNEDBYTE]**: By setting this to SIGNEDBYTE, a new Byte file can be forced to be written as signed byte.
- **AUX=YES**: To create a .aux file. Default=NO
- **IGNOREUTM=YES** : Ignore UTM when selecting coordinate system - will use Transverse Mercator. Only used for Create() method. Default=NO
- **STATISTICS=YES** : To generate statistics and a histogram. Default=NO
- **DEPENDENT_FILE=filename** : Name of dependent file (must not have absolute path). Optional
- **FORCETOPESTRING=YES**: Force use of ArcGIS PE String in file instead of Imagine coordinate system format. In some cases this improves ArcGIS coordinate system compatability.

Erdas Imagine supports external creation of overviews (with gdaladdo for instance). To force them to be created in an .rrd file (rather than inside the original .img) set the global config option HFA_USE_RRD=YES).

Layer names can be set and retrieved with the GDALSetDescription/GDALGetDescription calls on the Raster Band objects.

See Also:

- Implemented as `gdal/frmts/hfa/hfadataset.cpp`.
- More information, and other tools are available on the [Imagine \(.img\) Reader](#) page.
- Erdas.com