

Creating MrSID Files

You can export large images with high compression while still preserving image quality by choosing the MrSID (Multiresolution Seamless Image Database) file format. LizardTech's MrSID format uses a wavelet-based image compression technology, similar to that used by JPEG2000, that embeds into the file multiple image levels with differing resolution. The MrSID export provides a choice of lossless compression or lossy compression with a compression ratio that you specify, and you can also select the number of resolution levels to include with the file. The export also provides two methods of managing memory during the compression stage: a faster one-pass method that does not limit the amount of memory that can be accessed by the process, and a slower, two-pass method that limits memory use to enable the compression of very large images. MrSID export is available on Windows, Mac OS X, and Linux platforms.



Exported MrSID, 50:1 lossy compression

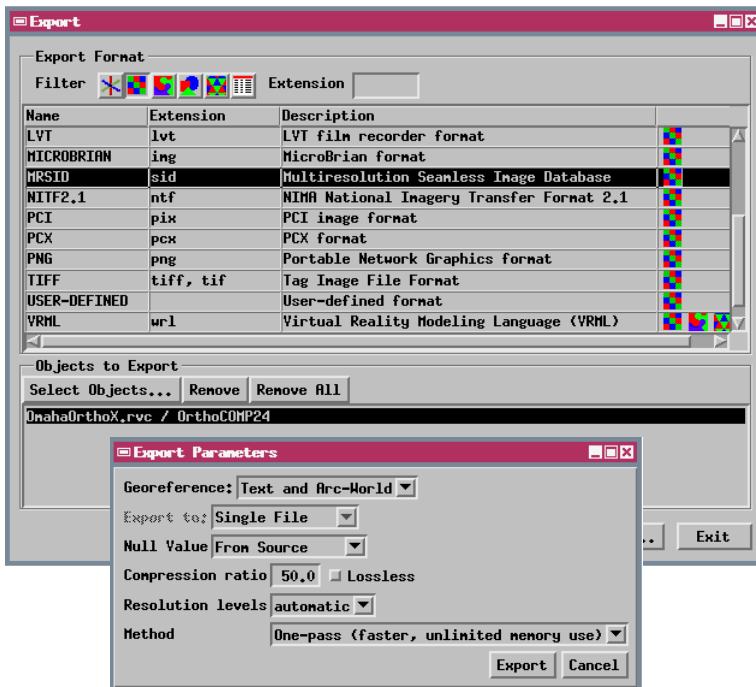


Source 24-bit color composite



Exported JPEG2000, 50:1 lossy compression

Comparison of MrSID and JPEG2000 export at 50:1 lossy compression for a 1-meter resolution, natural color orthoimage. The source image (center) is uncompressed; note the tennis court in the upper left corner of the image for scale. MrSID and JPEG2000 provide comparable color fidelity and retention of image detail in this example.



Export to MrSID format is metered using LizardTech's compression cartridge system. You can purchase cartridges that permit you to export a fixed amount of imagery (based on the uncompressed size of the input images) or you can purchase an unlimited cartridge.

Coordinate Reference System (CRS) information is embedded within the MrSID file automatically during export. MrSID supports several thousand CRSs provided by the European Petroleum Survey Group (EPSG) database. TNTmips supports all of the EPSG Coordinate Reference Systems but supports others as well. For best results with MrSID export you should use an EPSG-supported CRS. In addition to this embedded georeference, you can choose to have coordinate reference information exported to a separate file accompanying the MrSID image, with a choice of Arc/Info World, MapInfo .tab, descriptive text, and Google KML formats.