



RELEASE GUIDE

ERDAS IMAGINE 018 UPDATE 1

May 31, 2018



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ABOUT THIS RELEASE

This document describes the enhancements for ERDAS IMAGINE 2018 Update 1 (v16.5.1), including IMAGINE Photogrammetry (formerly LPS Core) and ERDAS ER Mapper. Although the information in this document is current as of the product release, see the Hexagon Geospatial Support website for the most current version.

This release includes both enhancements and fixes. For information on fixes that were made to ERDAS IMAGINE for this release, see the Issues Resolved section.

This document is only an overview and does not provide all the details about the product's capabilities. See the online help and other documents provided with ERDAS IMAGINE for more information.

Update 1 for ERDAS IMAGINE 2018 is primarily aimed at improving the NNDiffuse pan sharpening technique which was initially introduced with ERDAS IMAGINE 2018. The update provides OpenCL-based GPU acceleration for the technique, which in some instances can result in a two orders of magnitude increase in performance. The algorithm has also been fine-tuned to provide even better color fidelity compared to the original Multispectral data.

In addition, there are new Operators, such as the Linear Regression operator, as well as numerous software quality improvements.

ERDAS IMAGINE PRODUCT TIERS

ERDAS IMAGINE® performs advanced remote sensing analysis and spatial modeling to create new information. In addition, with ERDAS IMAGINE, you can visualize your results in 2D, 3D, movies, and on cartographic-quality map compositions. The core of the ERDAS IMAGINE product suite is engineered to scale with your geospatial data production needs. Optional modules (add-ons) providing specialized functionalities are also available to enhance your productivity and capabilities.

IMAGINE Essentials® is the entry-level image processing product for map creation and simple feature collection tools. IMAGINE Essentials enables serial batch processing.

IMAGINE Advantage® enables advanced spectral processing, image registration, mosaicking and image analysis, and change detection capabilities. IMAGINE Advantage enables parallel batch processing for accelerated output.

IMAGINE Professional® includes a production toolset for advanced spectral, hyperspectral, and radar processing, and spatial modeling. Includes ERDAS ER Mapper.

IMAGINE Photogrammetry maximizes productivity with state-of-the-art photogrammetric satellite and aerial image processing algorithms.

NEW PLATFORMS

ARCGIS 10.6

ERDAS IMAGINE 2018 Update 1 has been tested and declared Supported when using an installed and licensed version of ArcGIS 10.1 through 10.6 in order to provide Geodatabase support libraries. Alternatively, the IMAGINE Geodatabase Support component (based on ArcGIS Engine 10.5) can be installed to provide Geodatabase support.

NEW LICENSING

ERDAS IMAGINE 2018 was delivered with version 16.5.0.11 of the Hexagon Geospatial Licensing 2018 tools. However it is strongly recommended that all ERDAS IMAGINE customers upgrade to v16.5.0.15 (or higher). The appropriate download can be found on the Downloads section of the Hexagon Geospatial web site:

<https://download.hexagongeospatial.com/downloads/other/geospatial-license-administrator-2018>

Hexagon Geospatial Licensing 2018 v16.5.0.15 is also integrated into the ERDAS IMAGINE 2018 Update 1 installer, so any computer where you install Update 1 should also have any existing installation of Hexagon Geospatial Licensing 2018 automatically updated to v16.5.0.15. If in doubt, refer to Windows' Add or Remove Programs utility to determine the currently installed version.

NEW TECHNOLOGY

GPU ACCELERATION FOR THE NNDIFFUSE PAN SHARPENING OPERATOR

The Nearest-neighbor diffusion-based (NNDiffuse) algorithm, originally developed by Sun, Chen and Messinger at Rochester Institute of Technology, is a state of the art pan sharpening technique, which was introduced as an Operator (and dialog) in ERDAS IMAGINE 2018 so that you can build Spatial Models capable of deriving information from high resolution, multispectral data.

The original implementation was provided as a CPU-only computation and so could take considerable time to complete its processing.

With Update 1 the algorithm has been re-implemented to make use of GPU acceleration via OpenCL. If an appropriate OpenCL driver and hardware device is present, the algorithm will make use of it. If not then it will fall back to operating on the CPU.

EXAMPLE OF OPENCL ACCELERATION

Using an HP ZBook with Intel Core i7-6820HQ CPU @ 2.70GHz, 64GB RAM, Windows 10 Pro and a Quadro M5000M graphics card from NVIDIA Corporation, a NNDiffuse Pan Sharpening was performed. Input data consisted of a DigitalGlobe image tile of WorldView-2 imagery in NITF format, 16-bit, 8-band. The Multispectral was 4,096 columns by 4096 rows and the Pan was 16,384 columns by 16,384 rows.

Using the original CPU implementation provided by ERDAS IMAGINE 2018, the pan sharpening process took just short of 17 hours (i.e. 1016 minutes and 32 seconds)



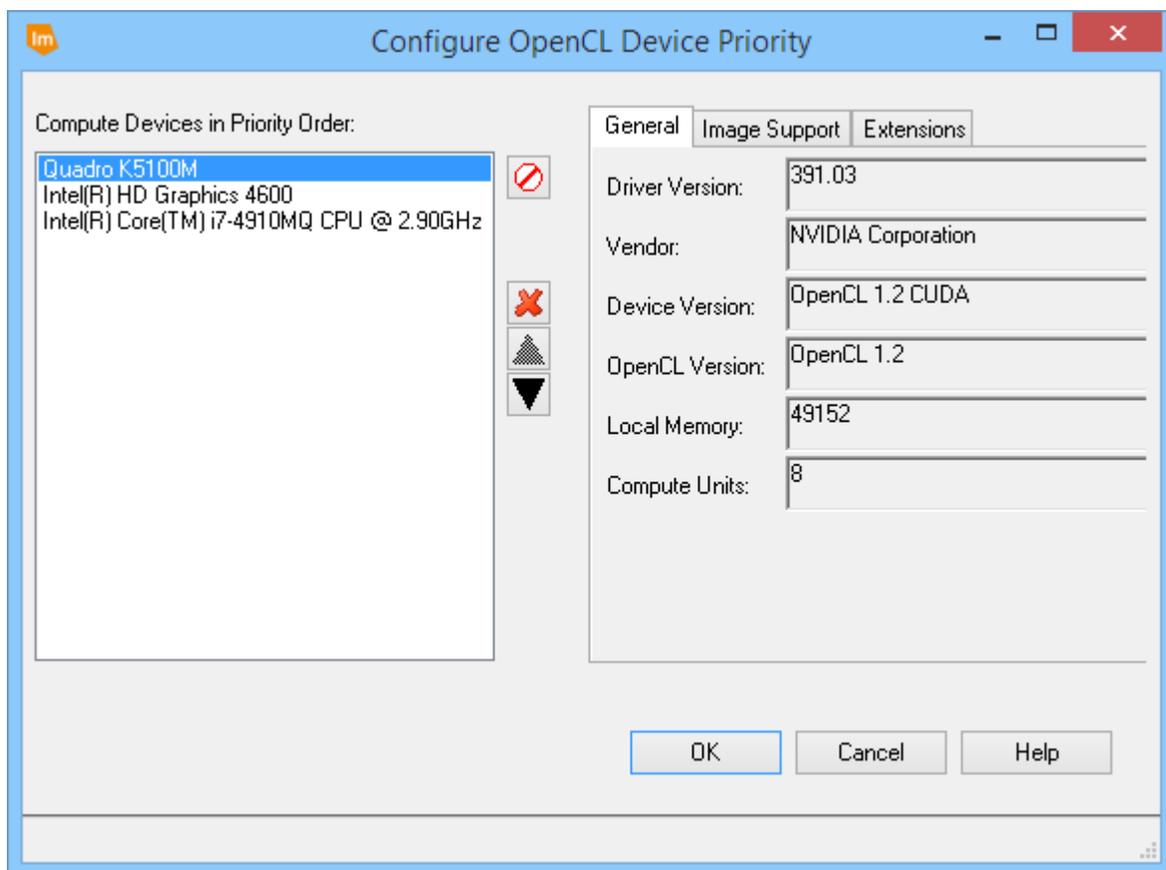
In comparison, the OpenCL accelerated implementation provided by Update 1 took only 6 minutes and 18 seconds to complete.

That represents a performance gain of over two orders of magnitude.

CONFIGURING OPENCL

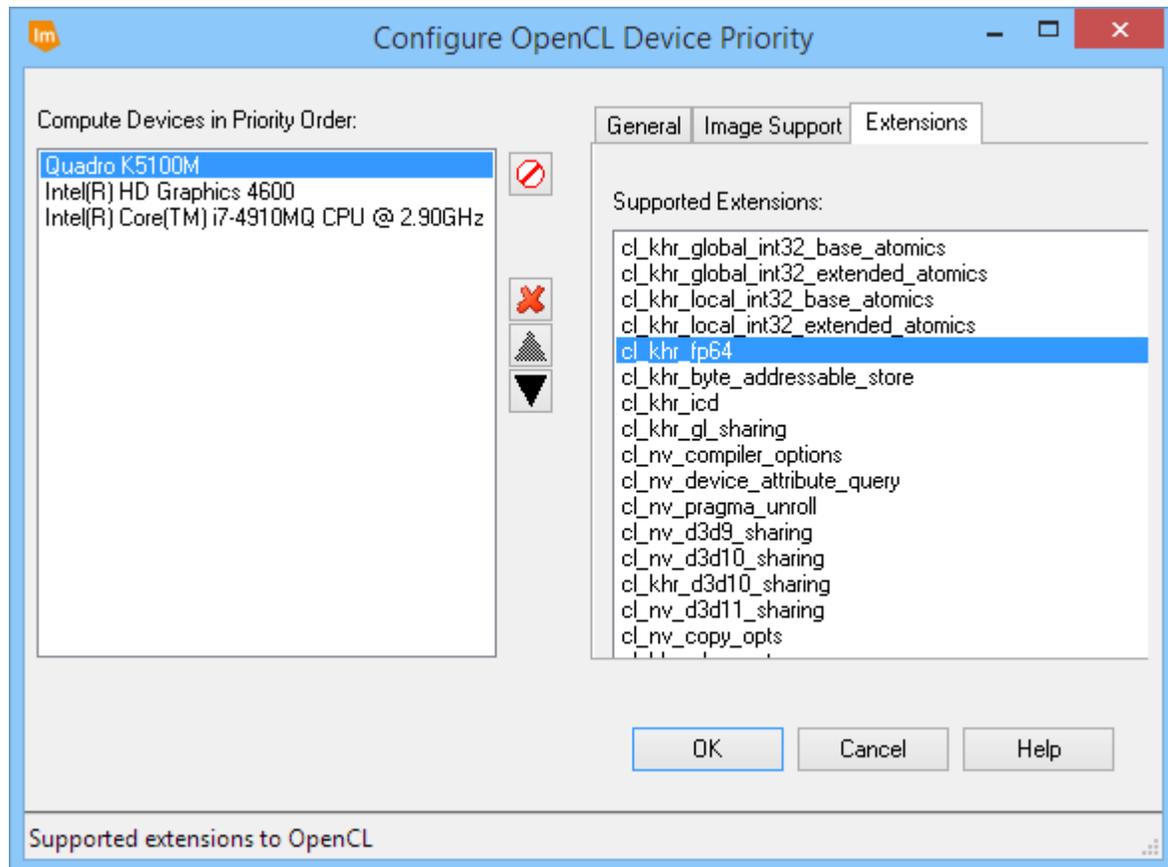
In order to make use of OpenCL acceleration your computer must have both a hardware device capable of processing using OpenCL, as well as an appropriate OpenCL driver installed for that hardware. The device and driver must support at least OpenCL 1.2 with the double precision extension (cl_khr_fp64).

Since there may be more than one device capable of supporting OpenCL on your computer you should also check the **Configure OpenCL** utility in ERDAS IMAGINE. To start this utility select **File > Configuration > Configure OpenCL**. The Configure OpenCL utility will start.

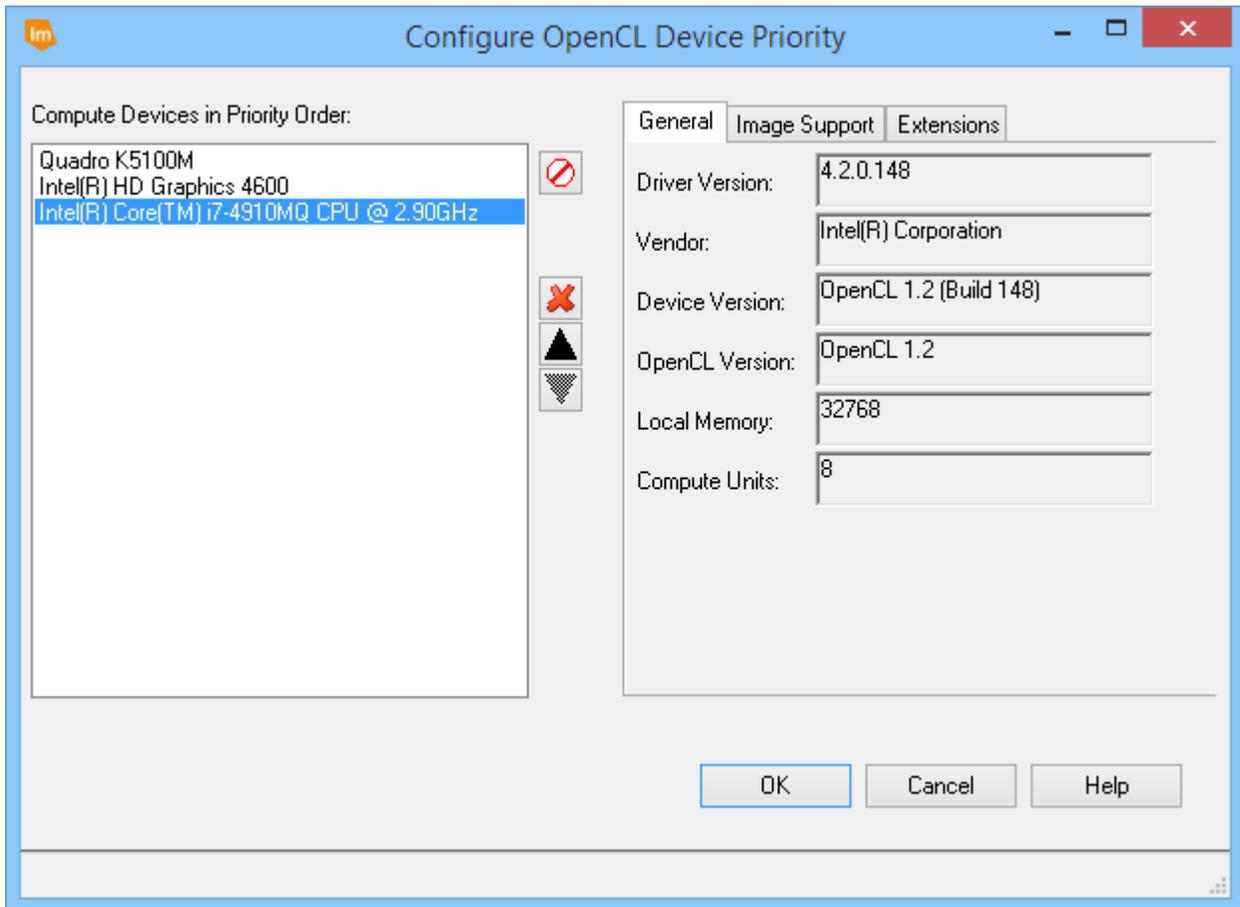


In the example shown above, the computer has three possible devices capable of running OpenCL. The Up / Down nudgers can be used to specify the priority order in which ERDAS IMAGINE attempts to use those devices. In this case, the Quadro K5100M card will be utilized first.

Clicking on the Extensions tab will show what the selected device supports so that you can check to confirm if `cl_khr_fp64` is in the list:



Also note the third device in the Compute Devices listing. Modern Intel CPUs are capable of running OpenCL if an appropriate driver is installed. So even computers without a dedicated GPU device can attempt to gain modest improvements in performance by installing OpenCL.



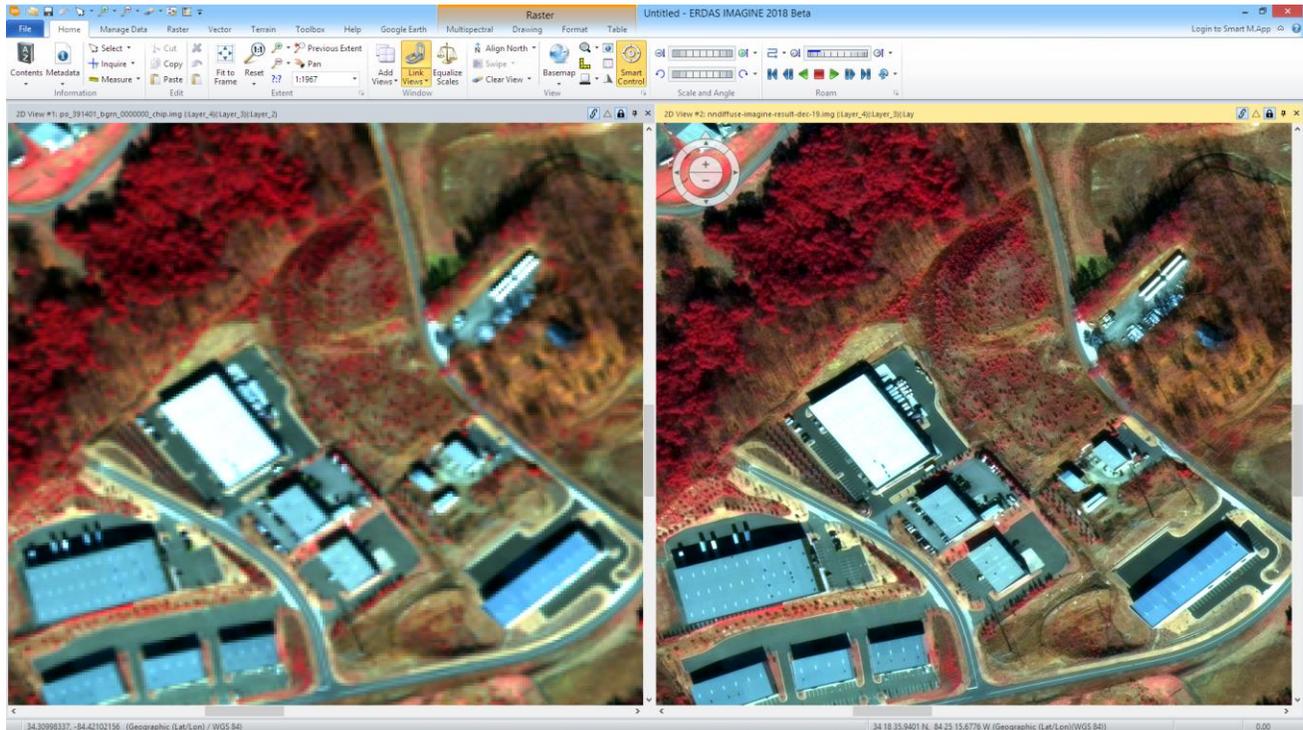
BACKGROUND PIXELS

The NNDiffuse Resolution Merge dialog has also been enhanced to provide for better handling of background pixels that have not been set to NoData in the input imagery. In the case of Unsigned Integer input data, locations where all bands are 0 will be treated as NoData and any locations that contain real pixel values will never have a value less than 1 in the output file.

If different handling of background data is desired, you can always click the View button and modify the underlying Spatial Model using the Spatial Model Editor to implement the exact approach desired.

EXAMPLE OF NNDIFFUSE PAN SHARPENING

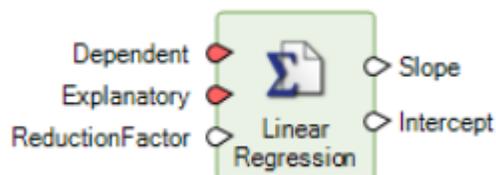
The example below shows how the NNDiffuse sharpened image (shown on the right) retains the spectral fidelity of the input, lower resolution multispectral image (shown on the left) while increasing the spatial resolution four-fold (from 2m pixels to 0.5m pixels):



OTHER NEW OPERATORS FOR SPATIAL MODELER

Hexagon Geospatial has continued to add new operators to Spatial Modeler. New (or modified) operators with a brief description of their capabilities are described. See ERDAS IMAGINE 2018 Help for full details of each operator, as well as the Hexagon Geospatial Community > [Spatial Recipes](#) page, for examples of Spatial Models that use many of these capabilities.

LINEAR REGRESSION



Computes slope and intercept parameters for a linear regression model predicting each band of a Dependent raster dataset from an Explanatory dataset by a least squares fit.

A Slope matrix and an Intercept table are computed: if Dependent has M bands and Explanatory has N bands, Slope will be MxN and Intercept will be Mx1.

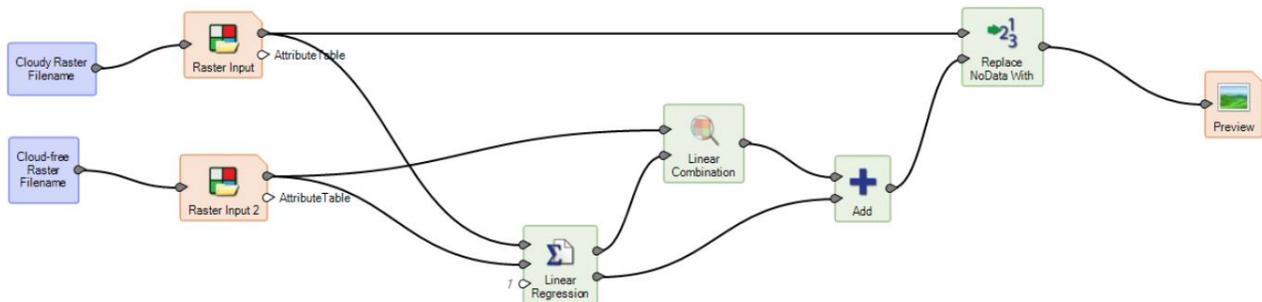


A prediction of the Dependent raster can be computed as:

$$\text{Predicted} = \text{LinearCombination}(\text{Explanatory}, \text{Slope}) + \text{Intercept}.$$

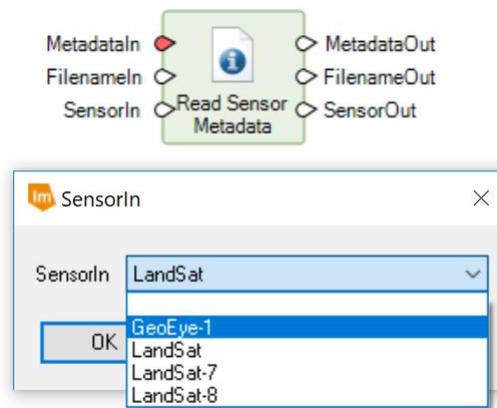
This prediction minimizes the mean squared error of (Predicted - Dependent)

In the example below, the Linear Regression operator is used to color-match an older image to a newer one for the purpose of filling in masked cloud holes in the newer image.

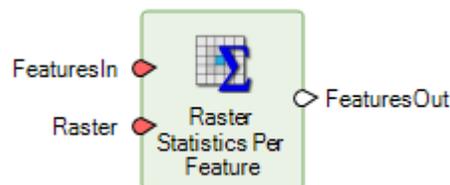


READ SENSOR METADATA

The [Read Sensor Metadata](#) operator has been enhanced to include Landsat 8, 7 and often 5, in the list of sensors which can be automatically parsed.



RASTER STATISTICS PER FEATURE



Contrary to the original Help documentation, the [Raster Statistics per Feature](#) operator does work with Area, Point and Line geometry types.

GENERAL ERDAS IMAGINE

DIGITALGLOBE TIL

The DigitalGlobe TIL raster format reader, which enables data that has been split into multiple physical image files to be treated as a single image, has been improved in several significant ways:

- An image consisting of JPEG 2000 encoded tiles will now be recognised as having pyramid layers present
- Overlapping tiles (as defined in the TIL header) are now supported by ERDAS IMAGINE
- A problem whereby Level 1B data (as opposed to 2A or other levels) could cause the TIL importer to exit abnormally has been addressed
- Previously the TIL raster format reader would not retain the projection information associated with Level 3 orthorectified data. This has been corrected.

ASTER L1T HDF

About a year ago, USGS/NASA LPDAAC introduced a new ASTER data product, L1T, which is orthorectified, in UTM projection, WGS84 datum. This is now the standard ASTER product but there was previously no way to import these L1T data into ERDAS IMAGINE that preserved accurate UTM georeferencing.

The HDF raster format reader can now directly ingest these ASTER images files, preserving projection information while doing so.

FORMOSAT-5 DIMAP FORMAT

Data from the FormoSat-5 sensor in DIMAP v2 format can now be read directly in ERDAS IMAGINE.

SENTINEL-1 GRD XML FORMAT

An enhancement has been added to be able to read the Sentinel-1 GRD (Ground Range Detected) data in XML format. Previously it was possible to read this data in a standard TIFF format (from the “measurement” folder of the Sentinel-1 data package) and the TIFF raster DLL could be used to display it.

However, many customers find it more convenient to directly read all Sentinel-1 product types via the XML header for consistency.

BINARY POINT FORMAT (BPF)

Several improvements have been made to the BPF reader, notably

- When performing a Save As.. to LAS format, attributes are now transferred from the BPF file to the LAS
- When performing a Save As.. to LAS format, projection information is now preserved
- BPF stores values as Floats while LAS stores as Integer. So when converting from BPF to LAS, scaling needs to be applied to preserve precision. This was being done in the Import BPF to LAS application, but not for the "Save As" functionality. This has now been implemented.



RPF IMPROVEMENTS

The RPF Exporter has been improved in a couple of areas:

- Previously the RPF Maketoc process used the security classification of the last RPF frame for setting the classification of the a.toc file. The software now scans all frames and uses the highest classification.
- RPF Maketoc has several NITF fields on the user interface but these were not being populated from the NITF preferences. ERDAS IMAGINE is now using the "NITF Static" preferences to populate the user interface so the operator does not have to retype the values every time they create a product.

RSM IMPROVEMENTS

The user will now receive a warning message when attempting to add imagery with RSM models associated with them to a Block file (using IMAGINE Photogrammetry) reminding the user to use the Mixed Sensor Model option if they wish to perform adjustments on the models.

Also, in the Set Geometric Model dialog, if an RSM model is detected, the Existing Calibration radio button will be automatically selected in order to streamline the most common workflow.

LANDSAT 5 FROM EARTHEXPLORER

The **Landsat 4,5,7 or 8 from USGS** importer now supports Landsat 5 imagery downloaded from the USGS EarthExplorer site.

PKZIP DEFLATE VARIANT OF TIFF

Some imagery vendors, including the [Hexagon Imagery Program](#) (HxIP) use the PKZip variant of Deflate when compressing TIFF imagery. This variant is now readable by ERDAS IMAGINE.

DON'T DISPLAY SPECIFIC NITF SEGMENTS

Certain NITF image segments will now be automatically excluded from display, or even showing up in the list of possible segments to load, into the 2D View. These segments do not contain imagery - just TRE/DES. They now only appear when using the **NITF Info** tab or **View NITF Metadata**. The segments are identified by:

- IID1 = PAN+TRE
- IID1 = PAN+S
- IID1 = PAN+FG

SIPS INTERPOLATION

When displaying imagery as an Image Chain, ERDAS IMAGINE uses a standardized SIPS XML file to determine the appropriate default image display parameters. One of these parameters is Interpolation and for most commercially available NITF images this is defined as LaGrange. Previously, when you displayed an NITF image as an Image Chain, the interpolation definition was ignored and the image always defaulted to Nearest Neighbor. With Update 1 the interpolation method is now defaulted correctly, as defined by the SIPS XML.

MGRS AND GEOTRANS

The use of MGRS coordinates in ERDAS IMAGINE has been updated to use [GeoTrans](#) v3.7 in any necessary coordinate transformations.



SYSTEM REQUIREMENTS

ERDAS IMAGINE

Computer/ Processor	64-bit: Intel 64 (EM64T), AMD 64, or equivalent (Multi-core processors are strongly recommended)
Memory (RAM)	16 GB or more strongly recommended
Disk Space	<ul style="list-style-type: none"> ● 4 GB for software ● 7 GB for example data Data storage requirements vary by mapping project ¹
Operating Systems ^{2,3}	<ul style="list-style-type: none"> ● Windows® 7 SP1 or higher, Professional and Ultimate (64-bit) ● Windows® 8 (Standard), Professional and Enterprise (64-bit) ⁴ ● Windows® 8.1 (Standard), Professional and Enterprise (64-bit) ⁴ ● Windows 10 Pro (64-bit) ⁴ ● Windows Server 2012 R2 (64-bit) ● Windows Server 2016 (64-bit)
Software	<ul style="list-style-type: none"> ● OpenGL 2.1 or higher (this typically comes with supported graphics cards⁵) ● Adobe® Reader® 7 or higher ● Internet Explorer® 9 or higher with JavaScript enabled, or Firefox® 32 or higher with JavaScript enabled ● Java Runtime 1.7.0.80 or higher - IMAGINE Objective requires JRE and can utilize any installed and configured JRE of version 1.7.0.80 or higher. ● Python 3.4.x (Python is optionally usable with Spatial Modeler. In most cases 64-bit Python is required; however, if you run 32-bit ERDAS IMAGINE / Spatial Model Editor, or configure smprocess to not run 64-bit, 32-bit Python is also required) ● Microsoft DirectX® 9c or higher ● .NET Framework 4.0 ● MSXML 6.0 ● OpenCL 1.2 with a device which supports double precision (cl_khr_fp64) if wishing to GPU accelerate NNDiffuse and other Operators
Recommended Graphics Cards	<ul style="list-style-type: none"> ● NVIDIA® Quadro® K5200, K4200, K2200, K420 ⁶

	<ul style="list-style-type: none"> • NVIDIA Quadro K5000, K4000, K600 ⁶
Recommended Stereo Display Monitors	<ul style="list-style-type: none"> • 120 Hz (or above) LCD Monitors with NVIDIA 3D Vision™ Kit ⁷
Peripherals	<p>All software installations require:</p> <ul style="list-style-type: none"> • One Windows-compatible mouse with scroll wheel or equivalent input device • Printing requires Windows-supported hardcopy devices ⁸ <p>Software security (Hexagon Geospatial Licensing 2018) requires one of the following:</p> <ul style="list-style-type: none"> • Ethernet card, or • One USB port for hardware key <p>Advanced data collection requires one of the following hand controllers: ⁹</p> <ul style="list-style-type: none"> • TopoMouse™ or TopoMouse USB™ • Immersion 3D Mouse • MOUSE-TRAK • Stealth 3D (Immersion), S3D-E type, Serial Port • Stealth Z, S2-Z model, USB version • Stealth V, S3-V type (add as a serial device) • 3Dconnexion SpaceExplorer mouse ¹⁰ • EK2000 Hand Wheels • EMSEN Hand Wheels • Z/I Mouse
ArcGIS and GeoMedia Interoperability	<ul style="list-style-type: none"> • ERDAS IMAGINE can be safely installed on a computer that has GeoMedia 2014, GeoMedia 2015, GeoMedia 2016 or GeoMedia 2018 installed. However for greatest compatibility, it is highly recommended to install matching versions (including Updates). • ERDAS IMAGINE 2018 requires GeoMedia 2018 for live linking. Order of installation does not matter. • ERDAS IMAGINE can interact with both types of personal Geodatabases (*.mdb and *.gdb). • ERDAS IMAGINE can be safely installed on a computer that has ArcGIS® versions 10.1 through 10.6. • ERDAS IMAGINE and IMAGINE Photogrammetry can interact with ArcGIS Server 10 Geodatabase servers (ArcSDE). To read or interact with an Enterprise Geodatabase, you must either:



	<ul style="list-style-type: none"> ● Install and license the appropriate version of ArcGIS for Desktop versions 10.1 through 10.6, OR ● Install the IMAGINE Geodatabase Support (based on ArcEngine 10.5), which requires no license
Database Engines	<ul style="list-style-type: none"> ● PostGIS 2.2: PostGIS can be used to store GeoMedia Features (.sfp) ● Oracle Server 12c 12.1.0.2.4 64-bit: Oracle Server 12c can be used to store Oracle GeoRaster (.ogr) (requires Oracle Spatial), SDE Raster (.sdi) (requires ArcGIS for Server) and Oracle Spatial Features (.ogv) (requires Oracle Spatial), as well as GeoMedia Features (.ofp). ● Microsoft SQL Server 2014: Microsoft SQL Server 2014 can be used to store GeoMedia Features (.sfp)

ERDAS IMAGINE SYSTEM REQUIREMENTS NOTES

¹ Disk I/O is usually the slowest task in geospatial data processing. Faster hard disks improve productivity. Reading data from one disk, writing temporary data to a second disk, and writing data to a third disk improves performance. Disk arrays improve productivity, but some RAID options slow performance. Network disk drives are subject to network limitations.

² Server Operating Systems are not supported for IMAGINE Photogrammetry, ORIMA or ERDAS ER Mapper.

³ The 3D stereo viewing and peripheral requirements of IMAGINE Photogrammetry limit its operating system options.

⁴ ERDAS ER Mapper is not supported on Windows 8. It is considered Viable on Windows 8.1.

⁵ Windows provides a generic OpenGL driver for all supported graphics cards. However, an OpenGL-optimized graphics card and driver are recommended for these applications.

⁶ Graphics cards certified with previous versions of IMAGINE Photogrammetry and ORIMA may also be compatible, but are not certified in the current version.

⁷ Stereo Monitors certified with previous versions of IMAGINE Photogrammetry and ORIMA may also be compatible, but are not certified in the current version.

⁸ HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

⁹ Stealth S-Mouse (S2-S model) and MOUSE-TRAK are the only supported hand controllers in Stereo Analyst® for ERDAS IMAGINE.

¹⁰ 3Dconnexion SpaceExplorer mouse is supported in IMAGINE Photogrammetry.

ISSUES RESOLVED

IMAGINE ESSENTIALS

Issue ID	Summary – IMAGINE Essentials	Description / How to Reproduce
IM-39607	Warptool throws errors “cannot create canvas bitmap” when collecting GCPs	<p>When collecting several GCPs using a ECW VMC as a reference image, Warptool begins to throw errors. Several hundred points may need to be taken over the image area before the error occurs. Error warnings can be dismissed but reoccur with increasing frequency to the point where the gcp collection process cannot be continued.</p> <p>Excerpt from the Session Log: 28/09/16 11:01:06 warptool(9924): Setting GCP #171 Destination X: 213258.163981 Y: 636391.700151 from Matching 28/09/16 11:01:06 warptool(9924): Setting GCP #171 Input X: 5.760417 Y: 1.148750 from Viewer 28/09/16 11:02:17 SessionMgr(9036): ERROR: #64 from IGdiBitmapSurface::IGdiBitmapSurface 28/09/16 11:02:17 SessionMgr(9036): ERROR: IGdiBitmapSurface::IGdiBitmapSurface failed 28/09/16 11:02:17 SessionMgr(9036): ERROR: #37 from IGdiBitmapSurface::IGdiBitmapSurface 28/09/16 11:02:17 SessionMgr(9036): ERROR: CreateNewBitmapAndSelect failed 28/09/16 11:02:17 SessionMgr(9036): ERROR: #1 from CreateNewBitmapAndSelect 28/09/16 11:02:17 SessionMgr(9036): ERROR: Cannot create canvas bitmap</p>
IM-36120	Windows locale issues	<p>There are locale related issues in feature preview and zonal change detection workflow (among others).</p> <p>532951 -- Modified to special handling of a single char decimal. (Fixes the feature preview issue)</p> <p>533042 -- Modified to use localeIndependentDoubleScan() and stream imbue locale to fix the zonal change convert json string double values back error in european locale (IM-35874)</p>





IM-44048	Still some cases where statistics are missing rows/columns with 3x3 pyramids	<p>Pixels are missing when computing statistics while generating 3x3 pyramids. Using ERDAS IMAGINE 2018 or older. To replicate:</p> <ol style="list-style-type: none">1. Start ImageInfo and open radare.img2. Edit Compute Pyramid Layers/Statistics3. Check Compute Pyramid Layers4. Make sure the Algorithm is 3X35. Check Compute Statistics6. Make sure the skip factors are both 1. Click OK7. Open SM check_histogram_count.gmdx8. Run it using radare.img as the input raster9. Notice that the number of pixels in the histogram (69903360) is less than the number of pixels in the image (69930666).10. Clear the model11. Open radare.img in ImageInfo again if needed12. Edit Compute Pyramid Layers/Statistics13. Un_check Compute Pyramid Layers14. Check Compute Statistics15. Make sure the skip factors are both 1. Click OK16. Open SM check_histogram_count.gmdx again17. Run it using radare.img as the input raster again18. Notice that the number of pixels in the histogram (bottom branch) now matches the number of pixels in the image (top branch)
IM-43326	ERDAS IMAGINE does not show Google Earth tab upon installing Google Earth Pro (64-bit) installer	<p>ERDAS IMAGINE 2018</p> <ol style="list-style-type: none">1. Install Google Earth Pro (64-bit).2. Launch ERDAS IMAGINE and observe that no Google Earth tab is displayed.
IM-43020	Symbology file (.evs file) for Machine Learning shapefile report files is not working correctly	<p>After reviewing some parcels (mark some to Correct, some Wrong, etc.), create Shapefile report file. Open it in 2D Viewer and see that all parcels have the same style.</p>

IM-44436	Cannot save custom color	<p>After creating a custom color using Color Chooser's Custom tab it is not possible to save this new color. ERDAS IMAGINE 2018 crashes after entering the name for the color and clicking OK in the Save Color dialog. If you run ERDAS IMAGINE 2018 as an administrator, the new color only lasts for the current ERDAS IMAGINE session. If you restart ERDAS IMAGINE the new custom color can no longer be found.</p> <p>This problem does not occur using ERDAS IMAGINE 2016 v16.1.</p> <ol style="list-style-type: none"> 1. Go to \$IMAGINE_HOME\etc\ and make sure that "colors" folder and all of its files are not read-only. 2. Start ERDAS IMAGINE 2018 without admin privileges. 3. Display the image "Inlandc.img" as pseudo color in a 2D View. 4. Click Table tab > View group > Show Attributes. 5. Click on any color in the Color column and choose "Other" from the list. 6. Select Custom tab in Color Chooser dialog and change the RGB values. 7. Click Save button to open the Save Color dialog. Enter a name for the new custom color and save it in the Menu category, then click OK. 8. ERDAS IMAGINE crashes. 9. Open the menu.clb file found in \$IMAGINE_HOME\etc\colors, and observe that the new custom color was not added to the list <p>Try it again running ERDAS IMAGINE 2018 with administrator privileges.</p> <ol style="list-style-type: none"> 1. Go to \$IMAGINE_HOME\etc\ and make sure that "colors" folder and all of its files are not read-only. 2. Start ERDAS IMAGINE 2018 with admin privileges. 3. Display the image "Inlandc.img" as pseudo color in a 2D View. 4. Click Table tab > View group > Show Attributes. 5. Click on any color in Color column and choose "Other" from the list. 6. Select Custom tab in Color Chooser dialog and change the RGB values. 7. Click Save button to open the Save Color dialog. Enter a name for the new custom color and save it in the Menu category, then click OK. 8. New color is available in Menu category for the current ERDAS IMAGINE session. 9. Open the menu.clb file found in C:\Program Files\Hexagon\ERDAS IMAGINE 2018\etc\colors. The new color has not been added. 10. Close ERDAS IMAGINE and start a new session. New custom color is not available.
IM-44555	configure_all.exe re-configures CSMs	<p>If you run configure_all.exe (either the 32 or 64 bit versions), the original (default) CSMs are added to the CSM configuration.</p> <p>This did not occur pre 2018. This is undesirable because if user already has CSMs configured, these new entries most likely reference a different folder location (can only have one). If user has similar CSMs configured, their settings are overwritten.</p>
IM-44376	HISTOA DISP_FLAG not set in correct event for PEDF/LinLog remap	<p>A change made for ERDAS IMAGINE 2018 has resulted in the HISTOA DISP_FLAG in previously existing processing events (perhaps just the first one) being set to 1 when PEDF (and probably LinLog) correction is being applied.</p>





IM-44572	<p>Displaying multiple layers in 2D View is slower in v16.5 than in v16.1</p>	<p>Open all 306 images from one of the datasets (not fit to window). Notice that after the message at the bottom left of ewkspace says "Opening 306 of 306:" it takes a significant amount of time before the image is actually displayed. This didn't happen in v16.1. The problem is that we're trying to get the title for the view and we're querying all layers from the bottom of the stack up for their titles. Need to do it from the top of the stack down.</p>
IM-44360	<p>Some tiles are missing while displaying two images in a 2D Viewer, when at least one image has a Piecewise geometry model</p>	<p>To reproduce the problem:</p> <ol style="list-style-type: none"> 1. Open piewisecalib.img in a 2D View. 2. Using Inquire Cursor (Legacy), go to [specific location]. 3. Open affinecalib.img in the same viewer. Everything looks fine. 4. Hide the piewisecalib layer, you'll see missing tiles on the left edges. Pls see the attachment. <p>NOTE If the both images are opened as pseudo color images, they look fine in the viewer. No tiles are missing.</p> <p>Some warning and error messages from the Session Log: 16/04/18 12:28:07 SessionMgr(412): WARNING: #4531 from `anonymous-namespace':::ReadMaskPixels 16/04/18 12:28:07 SessionMgr(412): WARNING: The request for mask data @(-17, 10) of size (513, 513) appears to exceed the amount available from the previous read of source pixels @(7167, 8181) of size (530, 513); resampling should eventually fail 16/04/18 12:28:07 SessionMgr(412): ERROR: #5410 from `anonymous-namespace':::ResampleBlockInterpolateInternal 16/04/18 12:28:07 SessionMgr(412): ERROR: No memory for source data read and further subdivision of destination is impossible</p>
IM-12074	<p>ERDAS IMAGINE does not import / Direct read certain MODIS HDF files</p>	<p>When trying to read directly MODIS HDF data, ERDAS IMAGINE throws the error: "MODIS_Grid_16DAY_250m_500m_VI_0_GRID~250m 16 days red reflectance: Name too long" Even after accepting all the error message, the HDF file does not display in the 2D View. Discovered that ERDAS IMAGINE 2013 v13.0.2 as well as with ERDAS IMAGINE 2014 can't import the HDF file. Error message presented when trying to import the HDF file: 22/10/13 23:12:05 C:/Intergraph/ERDAS IMAGINE 2013/bin/Win32Release/imgcopy.exe -w Importing HDF Data -t IMAGINE Image -g FALSE -p FALSE -s 1 d:/{user}/modis/mod13q1.a2009065.h20v08.005.2009083104347.hdf d:/{user}/imported_mod13q1a2009065h 20v080052009083104347.img 22/10/13 23:12:05 SessionMgr(7568): Unloading [dllimport.em]... 22/10/13 23:13:29 SessionMgr(7568): ERROR: #345 from imgcopy 22/10/13 23:13:29 SessionMgr(7568): ERROR: eimg_FileCopy failed 22/10/13 23:13:29 SessionMgr(7568): ERROR: #8159 from eimg_FileCopy 22/10/13 23:13:29 SessionMgr(7568): ERROR: eimg_LayerStackCopyVA failed 22/10/13 23:13:29 SessionMgr(7568): ERROR: #12085 from eimg_LayerStackCopyVA 22/10/13 23:13:29 SessionMgr(7568): ERROR: eimg_LayerCopy failed 22/10/13 23:13:29 SessionMgr(7568): ERROR: #9238 from eimg_LayerCopyVA 22/10/13 23:13:29 SessionMgr(7568): ERROR: eimg_LayerCreate failed</p>

		<p>22/10/13 23:13:29 SessionMgr(7568): ERROR: #6105 from eimg_LayerCreateVAPtr 22/10/13 23:13:29 SessionMgr(7568): ERROR: eimg_LayerCreateInternal fail 22/10/13 23:13:29 SessionMgr(7568): ERROR: #6630 from eimg_LayerCreateInternal 22/10/13 23:13:29 SessionMgr(7568): ERROR: FileLayerNameSet failed 22/10/13 23:13:30 SessionMgr(7568): imgcopy.exe exited with status -1. 22/10/13 23:17:17 eWkSpace(7212): Unloading [import_data.eml]</p>
IM-14988	Export TIFF Subset does not place Calibrated image in correct location	<p>Customer reported that with TIFF / BigTIFF/ BigGeoTiff / GeoTIFF and JFIF exporter, if subset area is defined in Export Option dialog (either by bounding box or by the inquire box), the image extent in exported image will have the extent of the entire image (not the extent of the defined subset area), in that way the subsetted image is shifted to an unrealistic location. This issue occurs both in ERDAS IMAGINE 2014 and 2013.</p> <p>Recreated the problem with customer data. Found that whatever method is chosen for subsetting the image in the TIFF exporter (either by defining ULX-Y, LRX-Y, or by using the InquireBox), the exported image shows the ULX-Y of the original image.</p> <ol style="list-style-type: none"> 1. Display the image in the viewer (exported to TIFF) 2. Click Manage Data tab > Export Data. 3. Select "TIFF" for Format. Select the Input image . 4. Set Output File to some directory and click OK for Export dialog. 5. In Export TIFF Data dialog, click "Export Options". 6. Click Home tab > Inquire > Inquire Box to open Inquire box in the 2D View. Define subarea within the input image. 7. In Export Options dialog, click "From Inquire Box" and draw / or define your own ULX-Y, LRX-Y. Click OK to close Export Options dialog. 8. In Export TIFF Data, click Batch button to display command for this process. 9. Check "-upperleft 323212 4307788 -lowerright 323369 4307506" parameters to see if the defined coordinate are reflected in the command in Batch Command Editor. 10. Click Run Now in Batch Command Editor. 11. Display exported file in the 2D View and also open Image Metadata for this data. <p>Notice the exported image is placed at the top left corner of original image and the coordinate information is incorrectly assigned.</p>
IM-14968	Export TIFF Subset does not place ortho image in correct location	<p>Customer reported that with TIFF / BigTIFF/ BigGeoTiff / GeoTIFF and JFIF exporter, if subset area is defined in Export Option dialog (either by bounding box or by the inquire box), the image extent in exported image will have the extent of the entire image (not the extent of the defined subset area), in that way the subsetted image is shifted to an unrealistic location. This issue occurs both in ERDAS IMAGINE 2014 and 2013.</p> <p>Recreated the problem with a customer data. Found that whatever method is chosen for subsetting the image in the TIFF exporter (either by defining ULX-Y, LRX-Y, or by using the InquireBox), the exported image shows the ULX-Y of the original image.</p> <ol style="list-style-type: none"> 1. Display the customer's image in the viewer (exported to TIFF) 2. Click Manage Data tab > Export Data. 3. Select "TIFF" for Format. Select the Input image . 4. Set Output File to some directory and click OK for Export dialog. 5. In Export TIFF Data dialog, click "Export Options".





		<ol style="list-style-type: none"> 6. Click Home tab > Inquire > Inquire Box to open Inquire box in the 2D View. Define subarea within the input image. 7. In Export Options dialog, click "From Inquire Box" and draw / or define your own ULX-Y, LRX-Y. Click OK to close Export Options dialog. 8. In Export TIFF Data, click Batch button to display command for this process. 9. Check "-upperleft 323212 4307788 -lowerright 323369 4307506" parameters to see if the defined coordinate are reflected in the command in Batch Command Editor. 10. Click Run Now in Batch Command Editor. 11. Display exported file in the 2D View and also open Image Metadata for this data. <p>Notice the exported image is placed at the top left corner of original image and the coordinate information is incorrectly assigned.</p>
IM-38435	TIL direct-read importer crashes with DG Level 1B data (if not R1C1)	<ol style="list-style-type: none"> 1. Go to Import 2. Select type as DigitalGlobe TIL 3. Specify the input image as Cadiz, Spain_40cm_1BStereo_4band_GeoTIFF\053894986010_01_P001_MUL\14AUG28110738-M1BS_R2C1-053894986010_01_P001.til 4. Click OK 5. Click OK in the tertiary dialog. <p>The import progress meter gets to 29% and then crashes.</p>
IM-44408	CADRG Batch Export does not export multiple input images	<p>CADRG Batch Export only writes the first image in the input list</p> <ol style="list-style-type: none"> 1. Manage Data > Export Data > CADRG 2. Input File: 1_250k_8_1_5_1_250k_8_5.img 3. Select Output File & Folder 4. Select 'Merge' from Product Build Mode menu 5. Select Scale = 1:250 JOG Radar (larger scale used to increase speed of processing) 6. Select Batch 7. From Batch Command Editor set Variables as 'One or more inputs, one output' 8. Select 'Add Files' and pick the second image 1_250k_8_1_6_1_250k_8_5.img 9. Select 'Run Now' 10. Display RPF Product 11. File Open Raster Layer 12. Select RPF Product generated above, Raster Options – Fit to Frame 13. OK Answer yes to compute Pyramid layers if not already computed <p>Process runs without errors but only exports the first file in the input list. Session log shows the product is partially generated using only the first image. Manually exporting both files generates the full RPF product using both input IMG files.</p> <p>The solution is to use the File > Batch Export Images into One RPF option. A note should be made in the Help file to this effect.</p>
IM-43932	Exporting uncompressed TIFF to JPEG2000 fails with error ".Layer_1 Node	<p>When exporting an uncompressed TIFF file to JPEG 2000 format it fails with the error message ".Layer_1 Node already exists for file <filename>.aux". This problem does not occur in ERDAS IMAGINE 2016 v16.1. This may be related to IM-43586.</p> <ol style="list-style-type: none"> 1. Open the Export tool – click Manage Data tab > Export Data 2. In the Export tool set the format to JPEG 2000 3. Select the file "73048_0_0027.tif" as the input file.

	already exists for file"	<ol style="list-style-type: none"> 4. Enter a name for the output file and click OK. 5. Use the default settings in the Export to JPEG 2000 dialog and click OK. 6. Progress meter opens and it begins to process, but then an error message opens saying: ":Layer_1 Node already exists for file e:/output/73048_0_0027_2018export.aux"
IM-43439	Bad jp2 creation when converting between tif and jp2 using EncoderFactory: :CreateEncoder	<p>ERDAS APOLLO has a custom utility that is used to convert between image types. It is producing invalid jp2 files.</p> <p>Same conversion in ERDAS IMAGINE 2018 seems to work without issue.</p> <pre>"C:\Program Files\Hexagon\ERDAS APOLLO\lib\bin\x64urelease\ImagineRasterProcessor" -meta -s c:\apolldata\9_SID_Images_0.tif -o c:\apolldata\temp\9_SID_Images_0.jp2 -imagine_home "c:\Program Files\Hexagon\ERDAS APOLLO\lib" -arch x64 -arch_mode urelease</pre>
IM-43422	Landsat importer cannot import specific Landsat 7 .tar.gz	<p>LE07_L1TP_019036_20180117_20180212_01_T1.tar.gz</p> <p>Problem could be that it has a gap_mask subdirectory in the tar file and etar doesn't know what to do with that.</p>
IM-43366	Error when exporting a specific ECW file	<ol style="list-style-type: none"> 1. Launch ERDAS IMAGINE 2018 2. Launch Export from Manage Data > Conversion > Export 3. Select the format as ECW 4. Load the image RemapData_yellowstone.ecw 5. Provide the output location and click Ok and Ok on Export ECW Data 6. Observe that an Error thrown -GDAL Error (not recognized as a supported file format) which is not the case with ERDAS IMAGINE 2016 v16.1 <p>NOTE: This error observed only with this file and in this case output was created successfully.</p> <p>Session log:</p> <pre>10/02/18 16:27:33 SessionMgr(10996): Connection success for the external process 'eWkspace' 10/02/18 16:30:35 eml export_data.eml; 10/02/18 16:33:06 C:/Program Files/Hexagon/ERDAS IMAGINE 2018/bin/Win32Release/exportecw.exe -inputfilename d:/000009-02-2018/test/remapdata_yellowstone.ecw -outputfilename c:/users/agangumo/appdata/local/temp/.imagine1650/remapdata_yellowstone.ecw -gui 10/02/18 16:33:07 exportecw: 0 10/02/18 16:33:08 exportecw: 0</pre>





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10/02/18 16:33:08 exportecw: 0
10/02/18 16:33:08 exportecw: 0
10/02/18 16:33:08 exportecw: 0
10/02/18 16:33:08 exportecw: 0
10/02/18 16:34:04 C:/Program Files/Hexagon/ERDAS IMAGINE
2018/bin/x64URelease/exportecw.exe -inputfilename d:/000009-02-
2018/test/remapdata_yellowstone.ecw -outputfilename
c:/users/agangumo/appdata/local/temp/.imagine1650/remapdata_yellowstone.ecw -
band
s 1 2 3 -photointerp RGB -compratio 20 -ecwversion 3 -resample Nearest Neighbor -
noDataColor Black -inputecwmode 1 -nthreads 8 -encodeCache 75
10/02/18 16:34:04 SessionMgr(10996): exportecw.exe exited normally.
10/02/18 16:34:05 exportecw: 0
10/02/18 16:34:06 exportecw: ERROR 4: `d:/000009-02-
2018/test/remapdata_yellowstone.ecw' not recognized as a supported file format.
10/02/18 16:34:06 exportecw:
10/02/18 16:34:06 SessionMgr(10996): Available Physical Memory = 10570.45 MB
10/02/18 16:34:06 SessionMgr(10996): Available Virtual Memory = 131071.73 GB
10/02/18 16:34:06 SessionMgr(10996): [exportecw] Cache max memory to encoding
= 7927.84 MB.
10/02/18 16:34:06 exportecw: 0
10/02/18 16:34:06 exportecw: 0
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10/02/18 16:34:06 exportecw:
10/02/18 16:34:06 exportecw: 00
10/02/18 16:34:06 exportecw: 00
```

		<p>10/02/18 16:34:06 exportecw: 10/02/18 16:34:06 exportecw: 00 10/02/18 16:34:06 exportecw: 10/02/18 16:34:06 exportecw: 0 10/02/18 16:34:06 exportecw: 10/02/18 16:34:08 exportecw: 0 10/02/18 16:34:10 SessionMgr(10996): exportecw.exe exited normally. 10/02/18 16:38:15 SessionMgr(10996): ERROR: #221 from GDALTryOpenDataset 10/02/18 16:38:15 SessionMgr(10996): ERROR: GDAL Error: `d:/000009-02-2018/test/remapdata_yellowstone.ecw' not recognized as a supported file format. 10/02/18 16:38:15</p>
IM-42512	<p>Importing Landsat 5 data throws error 'We don't have rights to modify file!'</p>	<p>ERDAS IMAGINE 2018 Manage Data Tab > Import data > Format : Import Landsat 4, 5, 7, or 8 from USGS Input data: Landsat5_USGSLT05_L1TP_043027_20111114_20160830_01_T1.tar.gz Try to import the data, observe that ERDAS IMAGINE throws below error: ERROR: We don't have rights to modify file! Seesion log info: 04/12/17 13:04:37 C:/Program Files/Hexagon/ERDAS IMAGINE 2018/bin/Win32Release/importusgs17.exe -inputfilename landsat5_usgs/lt05_l1tp_043027_20111114_20160830_01_t1.tar.gz -outputfilename d:/del/im64.img -gui 04/12/17 13:05:14 SessionMgr(6128): ERROR: #270 from importusgs17::main 04/12/17 13:05:14 SessionMgr(6128): ERROR: Importer::UntarAll failed 04/12/17 13:05:14 SessionMgr(6128): ERROR: #232 from Importer::UntarAll 04/12/17 13:05:14 SessionMgr(6128): ERROR: etar_EntryExtract failed 04/12/17 13:05:14 SessionMgr(6128): ERROR: #976 from etar_EntryExtract 04/12/17 13:05:14 SessionMgr(6128): ERROR: Error changing access time 04/12/17 13:05:14 SessionMgr(6128): ERROR: #2816 from efio_SetModTime 04/12/17 13:05:14 SessionMgr(6128): ERROR: We don't have rights to modify file! 04/12/17 13:05:14 SessionMgr(6128): importusgs17.exe exited normally.</p>
IM-42322	<p>Non-Ascii characters not supported in lggi::biif::DataSet::IsSupported and lggi::biif::DataSet::Open</p>	<p>Running something like DataSet::IsSupported(L"C:\desktop\слово.ntf"); will cause IsSupported to crash, and Open to attempt to open the incorrect file. It looks like the issue is in FileInputSource::FileInputSource in lggibiifFileInputSource.cpp where the filename is converted to ascii. Input incorrectly shows the fileName as "?????.ntf" instead of "слово.ntf".</p>
IM-44377	<p>PEDF remap is being applied</p>	<p>Somewhere prior to the release of ERDAS IMAGINE 2018, a bug was introduced that results in the PEDF remap trying to stretch to a full 16 bits instead of the 11 specified by the remap table.</p>





	incorrectly for certain data	Found two data sets that show this problem - both are uncompressed data. Found at least two, perhaps more, data sets that do not have this problem - they are J2K compressed.
IM-44007	Incorrect stats reported for DIMAP v2 Pleiades image	<p>When DIMAP XML header of Pleiades image is opened in ImageInfo, stats indicate a Skip of 1 x 1, which gives the impression that full stats have been calculated, but they have not. The Median is 0, which does not seem right for data with a range of 204 to 4094.</p> <p>Calculate stats with a skip of 1 x 1 and Direct Binning to see more believable stats. The other odd thing is that on the Pixel Data tab it thinks that there's a Mask present defining NoData (using value 0).</p> <p>But when the JP2 image is opened directly in ImageInfo, it reports that there is no NoData.</p> <p>Something does not seem right with the way the DIMAP v2 raster is reading data.</p>
IM-38496	Resample dialog produces Float output that has NoData problems	<p>Reported by customer who is trying to process Sentinel-1 imagery</p> <ol style="list-style-type: none"> 1. Display test_2_subset_reproj.img in a 2D View. 2. Click ImageInfo and observe that the image has NoData set as NaN (for Float). 3. Select Raster tab / Resolution group / Spatial / Resample Pixel Size 4. Fill in the output filename 5. Set pixel size to 30 x 30m, turn on Square Cells 6. Click OK to run the process (which is running an old PMDL model). 7. Open the resulting image (e.g. test_2_subset_resamp.img) in the 2D View. 8. Click ImageInfo button. <p>Error message (many times): "Condition set to ALLDATA, but found NODATA pixel value"</p> <p>Perform the resampling using new Spatial Modeler (e.g. resample.gmdx) - there are no such problems.</p>
IM-44564	OLH - SQL Server Features Proxy (*ofp) should be modified to SQL Server Features Proxy (*sfp)	<ol style="list-style-type: none"> 1. Launch ERDAS IMAGINE 2018 Help 2. Navigate to Feature Connection Manager dialog using URL 3. Observe that Files of Type was mentioned as SQL Server Features Proxy (*ofp). Should be modified to SQL Server Features Proxy (*sfp)
IM-41923	Save As functionality for Point Cloud formats uses first alphabetical plugin format when saving to LAS	<p>When adding a new Point Cloud format for BPF data, when it was active, the "Save As" on a LAS file no longer worked. It complained about the version number (from the LAS metadata).</p> <p>When the pf_bpf.dll file was deleted, the "Save As" functionality returned to normal. This was when loading a LAS file and doing a "Save As" on the top layer.</p> <p>It should not have been accessing the BPF plug-in at all in that case. Temporary fix - disabling write capability in the pf_bpf DLL. But this is just a temporary fix as we will need to be able to use the "Save As" function in BPF. And it should save as BPF, not LAS in that case. This should probably be another bug entry but PointCloudAccessLib forces the "Save As" to be LAS format. Then of course the save fails under BPF because the metadata is not meant for LAS in that case.</p> <p>But this bug here is more immediate because in this case it appears the wrong PF DLL is being accessed - it seems to be using the first one available with write access as opposed to looking for LAS itself. In the base Imagine code, the first one with write capability just happens to be pf_las so it works out.</p>

IM-43013	Most optimized resample methods have NoData problems	<p>It appears that the optimized resample methods have problems that make it possible for these resample methods to inappropriately give rise to NODATA in the interior of a resampled output.</p> <p>The following set of optimized resample methods may be impacted:</p> <ul style="list-style-type: none"> sources_gio/rm_gop/gop.cpp sources_gio/rm_rationalfunc/rationalfunc.cpp sources_rdo/rm_camera/camera.cpp sources_rdo/rm_framecamera/framecamera.cpp sources_rdo/rm_landsat/landsat.cpp sources_rdo/rm_pushbroom/pushbroom.cpp sources_rdo/rm_rubbers/rubbers.cpp sources_rdo/rm_spot/spot.cpp
IM-44369	Connection to a geodatabase fails with ArcGIS 10.6 installed	<ol style="list-style-type: none"> 1. Install ERDAS IMAGINE 2018 2. Install ArcGIS 10.6 3. Launch ERDAS IMAGINE 4. Right click in viewer and select Open Vector layer. 5. In file chooser select ArcGIS Geodatabase (*.gdb) and click Connect. <p>Notice that an error opens and the subsequent dialog used for selecting/connecting to a gdb file does not open.</p> <p>NOTE: Tried the following combinations and the connection to geodatabase was successful.</p> <ul style="list-style-type: none"> * ERDAS IMAGINE 2016 + ArcGIS 10.5.1 * ArcGIS 10.6 + ERDAS IMAGINE 2016
IM-39708	Column in shapefile's attribute table with German umlauts disappears when Enable Editing option turned on	<ol style="list-style-type: none"> 1. Open Flaeche_34.shp in 2D View 2. Display attribute table by clicking Table > Show Attributes. 3. Activate Enable Editing option from Drawing tab. 4. Attribute column will disappear. <p>It can be resolved by editing the .dbf file within some reader, like Notepad++, and search/replace the umlauts (ä, ö, ü, ß). Also simple model with Features Input and Features Output operators can fix it. In new shapefile created by such model all umlauts will be replaced by other symbols and the column will not disappear.</p>
IM-24340	Duplicate of IM-18956: Digitalglobe/EarthWatch til file with affine transformation	<p>No referencing information is read from \\au-wlv\Data\TIL\ManyTiles\054081433010_01_P001_MUL\14OCT07175542-M3DS-054081433010_01_P001.TIL</p> <p>This is because file has no RPC. It has affine matrix instead.</p>
IM-18956	DigitalGlobe TIL raster dll is not retaining projection information	<p>See DG WorldView-2 imagery</p> <p>If you open any individual GeoTIFF tile you will see that they have georeferencing information because this is Level 3 orthorectified data.</p> <p>However if you use the TIL dll to read all tiles at once, or use the TIL importer to convert to an IMG, the projection information is lost.</p> <p>TIL dll needs to handle L3 data.</p>
IM-21179	Copy/Paste of pixels into Map View does not	<ol style="list-style-type: none"> 1. Launch ERDAS IMAGINE. 2. Add View > Create New Map View. 3. Open a picture in Windows Paint.



	work under Windows 8.1	4. Try copy/paste it into the Map View. No picture is pasted into Map View.
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IMAGINE ADVANTAGE

Issue ID	Summary – IMAGINE Advantage	Description / How to Reproduce
IM-44069	Mosaic Color balancing crashes for Per image processing	<ol style="list-style-type: none"> 1. Raster Tab > Launch MosaicPro > Add these images: *wasia1.img, wasia2.img and wasia3.img* 2. Select all the images in table > select this icon *Make selected images visible* 3. Click *Display raster images* > Launch *Display color correction* dialog 4. under *Display Color Balancing dialog* select *Use Color balancing* > Set > Select *Manual Color manipulation* 5. Select *Per Image* and click *Compute Current* in the next dialog 6. It crashes when clicking *Compute Current*
IM-43867	MosaicPro crashes when adding images to a project	MosaicPro immediately crashes when loading specific images to a project. Some of the images in this project have the same extent.
IM-40411	MosaicPro may crash while mosaicking as well as reprojecting from WGS84/NUTM33 to ETRS89 / NUTM32	<p>Customer is mosaicking and reprojecting 5 images dataset using MosaicPro tool as well as mosaicprocesspro.exe via the command line. Customer found that changing the target projection seems to have an influence on the crash. Input data are in projection WGS84/NUTM33 EPSG 32633. Re-projection to 32632 or 25832 (neighboring UTM zone) causes the crash. Re-projecting to other projections (32634,4326,3857,...) works fine.</p> <p>Customer support after investigation found that if the two NE corner image (of the data sent by the customer) is excluded in the mosaicprocess, rest of the three images are reprojecting into EPSG 25832 without any problem. If the two NE corner images are separately used during mosaic and reprojection into EPSG 25832 CRS, then also there is no problem with MosaicPro.</p> <p>According to the customer, those data are derived from Sentinel-2 datasets. The processing taking place is a simple layer stack (in this case the 60m bands only) and masking to set NODATA in cloud areas, executed in the SpatialModeler. The final data are written using the 'Raster Output' Operator</p> <p>For reproducing the crash in commandline, do the following. Data contain the actual 5 image files, the input file list used for the cmd and the text file with executed cmds.</p> <ol style="list-style-type: none"> 1. Adjust paths in fileList.txt accordingly 2. Start mosaicprocesspro.exe on the command line, adjust the paths accordingly: <pre>"C:\IDK\IED_2016\root\bin\x64\Release\mosaicprocesspro.exe" -imagelist "E:\Testing\sentinel\test_mosaic\fileList.txt" -overlapfunction overlay -d -proj 'EPSG Coordinate Systems' 'ETRS89 / UTM zone 32N (25832)' -o "E:\Testing\sentinel\test_mosaic\mosaic_60m.ecw"</pre>

IMAGINE OBJECTIVE

Issue ID	Summary – IMAGINE Objective	Description / How to Reproduce
IM-36757	Outlier Clipper operator using Convex clip fails	<p>Using VCO Outlier Clipper operator with Clip type set to Convex fails with error “fe_process.exe exited with status -1073741819”. Outlier Clipper operator with Clip type set to Concave runs successfully.</p> <p>To recreate:</p> <ol style="list-style-type: none"> 1. Open Objective project outlier_clipper.lfp 2. Run <p>Error dialogue opens: Feature Extraction Process has stopped working Session log error: 15/11/16 14:19:44 SessionMgr(3844): fe_process.exe exited with status -1073741819.</p> <p>Compare:</p> <ol style="list-style-type: none"> 1. VCO Cleanup Operators > Outlier Clipper Properties tab > Clip type > Concave 2. Run <p>Model runs without error</p>
IM-43633	Error message when starting IMAGINE Objective	<p>When you first start IMAGINE Objective 2018 (16.5) an error message occurs that Bayesian could not be used, because JRE is missing.</p>
IM-42839	IMAGINE Objective Outlier Clipper set to "convex" causes errors	<p>Customer reported the following error when using the Vector Cleanup Operator 'Outlier Clipper', and Objective crashes.</p> <p>"Unable to read f:/testshape1.shpXML character encoding not supported"</p> <p>Error occurs only when the 'Clip' parameter of Outlier Clipper Operator is set to 'Convex'. When set to 'Concave' the process finishes successfully. Other operators such as Generalize, Orthogonality, and Convex Hull all finish successfully using the same input</p> <ol style="list-style-type: none"> 1. Create a new project. Create a new feature model. 2. Add 2 variables, 1 Raster, 1 Vector (shp). 3. Set Vector Cleanup Operators to Start / Stop. 4. Click the I/O tab and change the Input from Vector Layer to .shp vector layer. 5. Add the Outlier Clipper and choose Convex. 6. Run <p>You should get the following error message: "Unable to read f:/testshape1.shpXML character encoding not supported" and then Objective crashes.</p>

IMAGINE PHOTOGRAMMETRY

Issue ID	Summary – IMAGINE Photogrammetry	Description / How to Reproduce
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IM-43060	Running APM with ADS images as input crashes ERDAS IMAGINE	<p>Open the blockfile and run APM. Notice that ERDAS IMAGINE crashes. This happens with both 32-bit and 64-bit interfaces of ERDAS IMAGINE. The following is the log in the event viewer when APM is run from 64-bit interface.</p> <p>_Faulting application name: eWkspace.exe, version: 16.5.0.99, time stamp: 0x5a5e700c_ _Faulting module name: IXForm.dll, version: 16.5.0.99, time stamp: 0x5a5e6333_ _Exception code: 0xc0000005_ _Fault offset: 0x000000000000d2a4_ _Faulting process id: 0x4074_ _Faulting application start time: 0x01d38f77fe60a5bc_ _Faulting application path: C:\Program Files\Hexagon\ERDAS IMAGINE 2018\bin\x64URelease\Wkworkspace.exe_ _Faulting module path: C:\Program Files\Hexagon\ERDAS IMAGINE 2018\usr\lib\x64URelease\GeometricModels\IXForm.dll_ _Report Id: fab32bcb-4db2-45ca-b2fd-a16bee8efce9_ _Faulting package full name:_ _Faulting package-relative application ID:_</p>
IM-44352	Rectangle Profile Tool in Point Cloud Layer crashes for BPF	<p>Rectangle Profile Tool in the Point Cloud Layer crashes for BPF because the code tries to create temp LAS files for the profile windows but it assumes the metadata from the source is for LAS and not potentially some other format like BPF. It crashes when an exception is thrown because the version number is not correct for LAS. Propose to use a fix similar to that for IM-41923, which allowed for "Save As" in point cloud to save BPF as LAS.</p>
IM-43132	OLH: BPF as Point Cloud format info is not present in OLH	OLH: BPF as Point Cloud format info is not present in OLH
IM-43106	Help corresponding to Photogrammetric tab should be updated	<ol style="list-style-type: none"> 1. Launch ERDAS IMAGINE 2018 2. Load any block file (Ex: laguna.blk) 3. Click Photogrammetry tab and click F1 to launch help page -Photogrammetry Workspace 4. Observe that Terrain portion should be updated with Tridicon Semi- Global Matching and Xpro Semi- Global Matching instead of Semi- Global Matching because Hyper link on Semi- Global Matching is pointing to Xpro Semi- Global Matching only.
IM-39194	INPHO version 6 or 7 project fails to import to IMAGINE Photogrammetry	<p>There are some additional differences in camera format in INPHO version 7.1.0. It fails to import in IMAGINE Photogrammetry.</p> <p>Customer had to take \$DATE row out and then take part of \$CALIBRATION_SET out from its subcategory to make it work. It is related to Camera definition. Basically they have generated a new category called \$CALIBRATION_SET and hide camera calibration data there. CCD_INTERIOR_ORIENTATION, FOCAL_LENGTH etc. have been switched to this category. Change has happened after INPHO version 5. INPHO is now on version 7 but it was on new style already in version 6.</p> <p>Version 5 camera definition that works:</p> <pre>\$CAMERA \$TYPE : UCE97 \$DATE : 09:33:27 07/10/2013 \$BRAND : Custom \$KIND : CCDFrame</pre>

		<pre> \$CCD_INTERIOR_ORIENTATION : 192.3076923077 0.0000000000 6539.5000000000 0.0000000000 -192.3076923077 10004.5000000000 \$CCD_COLUMNS : 13080 \$CCD_ROWS : 20010 \$PIXEL_REFERENCE : TopLeftTopLeft \$FOCAL_LENGTH : 79.800000 \$PRINCIPAL_POINT_PPA : 0.000000 0.000000 \$PRINCIPAL_POINT_PPS : 0.000000 0.000000 \$GPS_ANTENNA_OFFSET : 0.000000 0.000000 0.000000 \$CAMERA_MOUNT_ROTATION : 0.000000 \$END Version 6-7 INPHO camera definition that crashes: \$CAMERA_DEFINITION \$ID : UCE97 \$BRAND : Custom \$KIND : CCDFrame \$CCD_COLUMNS : 13080 \$CCD_ROWS : 20010 \$PIXEL_REFERENCE : TopLeftTopLeft \$CAMERA_MOUNT_ROTATION : 0.000000 \$ACTIVE_CALIBRATION : 1 \$CALIBRATION_SET : \$ID : 1 \$MODE : manual \$DATE : 09:33:27 07/10/2013 \$CCD_INTERIOR_ORIENTATION : 192.3076923077 0.0000000000 6539.5000000000 0.0000000000 -192.3076923077 10004.5000000000 \$FOCAL_LENGTH : 79.800000 \$PRINCIPAL_POINT_PPA : 0.000000 0.000000 \$GPS_ANTENNA_OFFSET : 0.000000 0.000000 0.000000 \$END \$END </pre>
IM-43597	RPC generation crashes	Using block file from ..\sources_highdrag\LPS_Data\LPS\spot, the RPC generation in x64 crashes when creating rpc_*.uai files. 32 bit works fine.
IM-43431	ERDAS IMAGINE crashes if Tridicon/XPro SGM is launched with non-supported sensors	Open a frame camera/satellite/ADS blockfile in ERDAS IMAGINE 2018 64-bit viewer. Try to launch XPro SGM. Notice that ERDAS IMAGINE 2018 crashes. If we do the same workflow with 32-bit then a message (attached screenshot) would show up.



IM-43782	Failure at the end of the process due to Tridicon intermediate files limitation	<p>In order to produce a DSM with 6 granules of satellite images, customer uses the Semi-Global Matching (SGM) tool. The first step of SGM is to calculate Tridicon Intermediate files for each couple of images. If a Tridicon intermediate file generated is bigger than 4GB, ERDAS IMAGINE returns an error and stop the process.</p> <p>To overcome this limitation, they already extract just the green band of each image and work with these, however there is still one couple which is bigger than 4GB.</p> <p>If possible please compute output intermediate image size in advance, for example displaying a warning to prevent knowing the issue at the end of the process.</p>
IM-44375	ERDAS IMAGINE hangs when creating DTM pyramids in a block file	<p>Software hangs at line 1751 in ..\sources_gio\trf_raster\RasterTerrainDataset.cpp when calling emet_MeterInfoCreate.</p> <ol style="list-style-type: none"> 1. Map \\sanads01\Share2 to Q 2. Open a block file from \\alpha\JIRA_data\IM-44375 3. In Contents area, highlight Terrain, select Table tab under Photogrammetry group and click Show Attributes to bring up the Terrain cell array. 4. Pyramid cell is red. 5. Click the cell to open Compute DTM Pyramid Layer dialog. Click OK and IMAGINE hangs. <p>Software does not hang if not calling emet_MeterInfoCreate.</p>
IM-43923	Remove Noise fails to launch	<p>After configuring the LASTools, from the *Preprocess* group of *LASTools* tab click on *Remove Noise*.</p> <p>A warning opens and the dialog fails to launch.</p>
IM-43922	Launching any LASTools command shows error in session log	<p>After configuring the LASTools extension, try to launch any command from the LASTools ribbon tab. Notice that the following error message opens.</p> <p>_LASToolsRibbon: log4cplus:ERROR PropertyConfigurator::configureLogger()- Invalid appender: DefaultAppender_</p>
IM-43865	Remove Duplicate fails to launch and crashes	<p>After configuring the LASTools, from the LASTools ribbon under Preprocess group click on the Remove Duplicate option.</p> <p>Notice that there is a crash dialog</p>

IMAGINE PROFESSIONAL

Issue ID	Summary – IMAGINE Professional	Description / How to Reproduce
IM-43459	Help - AutoGrid Help is absent	<ol style="list-style-type: none"> 1. Change Layout to the Machine Learning Layout. 2. Go to the ML Process tab and create a new project. 3. Add an image to analyse. 4. On the Project Properties group left-click Zones and select Autogrid 5. On the Autogrid dialog click the Help button. 6. Goes to the Help Errors page.

IM-43458	Help - ML Process tab Help is a copy of Zonal Change Detection help	<ol style="list-style-type: none"> 1. Change Layout to the Machine Learning Layout 2. Go to the ML Process tab and click the Help icon (far right corner) 3. Note that other than the first sentence, the Help seems to be the Help for the Zonal Change Detection process tab.
IM-43536	Deep Learning layout result is messed up unless feature request budget is set to zero	When running classification in the machine learning layout, we have found that the results are messed up unless we set the feature request budget to zero (in Preferences)
IM-43489	Zonal Change attention dialog from Machine Learning layout	When closing a Machine learning project, we get prompted to save the project. Message says "Save zonal change project before closing?" This needs to change.
IM-43229	Classify using Machine learning does not generate string outputs if compute probability is set to false	<p>Classify using Machine learning does not generate string outputs if compute probability is set to false.</p> <p>If you set compute probability is set to True, string output classes are created. When it is set to false, only numeric output classes are created.</p> <p>This is reproduced for SVM and Random Forest</p>
IM-43021	A better progress bar handling for Machine Learning process run is needed.	<ol style="list-style-type: none"> 1. In Machine Learning Layout, click Run Current Run. 2. Go to Process List dialog and watch that the progress bar for smprocess reaches to 100% quite quickly. 3. But when I select Load Results, nothing happens. <p>It turns out that I have to wait quite some time until smprocess really finishes. Then Load Results works fine.</p>
IM-42537	Zonal change > Image difference fails in Batch Region mode - fix the typo	<p>ERDAS IMAGINE 2018:</p> <ol style="list-style-type: none"> 1. Create a new project : Before - TheVillagesSubset2008 - Copy.img After - TheVillagesSubset2007 - Copy.img Parcel - TheVillagesParcelsSubset.shp 2. Set Algorithm as Image Difference in Region properties. 3. Run in 'Batch Region(s)' mode. 4. Observe that execution fails with below errors in session log: <pre>06/12/17 18:04:29 SessionMgr(11752): HexGeo::SpatialModeler::Operator::Execute failed 06/12/17 18:04:29 HexGeo::SpatialModeler::Operator::Execute failed 06/12/17 18:04:29 HexGeo::SpatialModeler::Operator::Execute failed 06/12/17 18:04:29 HexGeo::SpatialModeler::Operator::Execute failed 06/12/17 18:04:29 HexGeo::SpatialModeler::Operator::SetErrorMessage failed 06/12/17 18:04:29 Spatial Model failed in Data Input 2. The error was "Input file does not exist: d:/del/ads/Region0_Output/alg_parameters.json". 06/12/17 18:04:29 SessionMgr(11752): Spatial model failed.</pre>



IMAGINE SAR INTERFEROMETRY

Issue ID	Summary – IMAGINE SAR Interferometry	Description / How to Reproduce
IM-43306	Help is not in place for the command Displacement order from radar tools	<ol style="list-style-type: none"> 1. Launch IMAGINE 2018 2. Load a radar image Insar_match.img from example data 3. Activate Radar Analyst from Raster tab and select Tools from Radar tab 4. Launch the command Displacement Order 5. Click Help of the command and observe nothing happens.
IM-43713	Error removing temp file occasionally	Occasionally the temp files created during coregister are not deleted. The error is reported in the session log.
IM-43367	Coherence Texture not created in EZ Sentinel CCD	Coherence texture file is not created when asked for
IM-43365	AutoEnhance from Radar Utilities failing with improper message in Session Log	<ol style="list-style-type: none"> 1. Launch ERDAS IMAGINE 2018 2. Launch AutoEnhance from Raster > Radar Toolbox > Utilities 3. Load any SAR image 4. Provide the output file name and click Ok 5. Observe that Process fails and session log saying “There was No input file available”, which is not the case with ERDAS IMAGINE 2016 v16.1 <p>Note: Tried with different radar images, in all cases issue was reproducible.</p> <p>Session log:</p> <pre> 10/02/18 15:35:28 SessionMgr(8248): Connection success for the external process 'eWkworkspace_64' 10/02/18 15:38:32 eWkworkspace_64(9624): Loading [radar_auto.eml]... 10/02/18 15:43:39 C:/Program Files/Hexagon/ERDAS IMAGINE 2018/bin/x64URelease/smprocess.exe \$IMAGINE_HOME/etc/models/radar-colorize.gmdx Raster Input.Filename=d:/23-06-2017/sar/bluenuw-demodata/dims_op_oc_dfd2_204280199_1/tsx-1.sar.l1b/tsx1_sar__ssc____hs_s_sra_20090924t232619_20090924t232620/tsx1_sar__ssc____hs_s_sra_20090924t232619_20090924t232620.xml MagnitudeLayer.Value=1.000 Exponent.Value=2.300 AutoEnhancedImage.Filename=d:/000009-02-2018/autoenhance_848.img Sobel1.KernelName=7x7 Sobel 1 S obel2.KernelName=7x7 Sobel 2 FilterWindow.KernelName=5x5 Low Pass AutoEnhancedImage.PixelType=F32 AutoEnhancedImage.NoDataValue=0 Scale.Test=False 10/02/18 15:43:39 eWkworkspace_64(9624): Unloading [radar_autoenhance.eml]... 10/02/18 15:43:40 SessionMgr(8248): Running spatial model (\$IMAGINE_HOME/etc/models/radar-colorize.gmdx) with port values (Raster Input.Filename=d:/23-06-2017/sar/bluenuw-demodata/dims_op_oc_dfd2_204280199_1/tsx-1.sar.l1b/tsx1_sar__ssc____hs_s_sra_20090924t232619_20090924t232620/tsx1_sar__ssc____hs_s_sra_20090924t232619_20090924t232620.xml,MagnitudeLayer.Value=1.000,Exponent.Value=2.300,AutoEnhancedImage.Filename=d:/000009-02-2018/autoenhance_848.img,Sobel1.KernelName=7x7 Sobel 1,Sobel2.KernelName= </pre>

		<p>me=7x7 Sobel 2,FilterWindow.KernelName=5x5 Low Pass,AutoEnhancedImage.PixelType=F32,AutoEnhancedImage.NoDataValue=0,Scale.Test=False).</p> <p>10/02/18 15:43:40</p> <p>10/02/18 15:43:40 smprocess:</p> <p>10/02/18 15:43:41 SessionMgr(8248): HexGeo::SpatialModeler::Operator::Execute failed</p> <p>10/02/18 15:43:41 HexGeo::SpatialModeler::Operator::SetErrorMessage failed</p> <p>10/02/18 15:43:41 Spatial Model failed in Raster Input. The error was "No input file available".</p> <p>10/02/18 15:43:41 SessionMgr(8248): Spatial model failed.</p> <p>10/02/18 15:43:41</p> <p>10/02/18 15:43:41 SessionMgr(8248): smprocess.exe exited with status 1.</p>
IM-44571	Harmonize Displacement service titles	Harmonize Displacement service titles - make all the titles the same.
IM-44409	Time-series CCD - AGE files are not created for Magnitude	Time-series CCD. AGE files are not created for Magnitude. The coherence file of the same type works fine.
IM-44434	AGE and M3 do not create for Magnitude	AGE and M3 do not create for Magnitude, but coherence works OK. Time series CCD

SPATIAL MODELER

Issue ID	Summary – Spatial Modeler	Description / How to Reproduce
IM-43791	Documentation for Spatial Model 'Feature Input' Operator is incorrect regarding Database Connections	<p>'Features Input' operator documentation has link to a Database Connections topic where the different types of available database connections are listed. However, the Database Connections topic list of database types does not match the available types in the current version of Features Input operator.</p> <p>Specifically the Database Connections topic lists these databases:</p> <ul style="list-style-type: none"> Oracle Database Server ArcGIS Geodatabases (File and Personal)

		<p>ArcSDE Database Server</p> <p>SQL Database Server</p> <p>However the current available Database Connections for the 'Features Input' operator are actually:</p> <p>Oracle</p> <p>SQL Server</p> <p>PostGIS</p>
IM-43470	Help is broken for 'Select Attributes' dialog	<ol style="list-style-type: none"> 1. In Spatial Model Editor, drag and drop '_Select Attributes'_ operator. 2. Double-click on '_AttributeNames'_ input port and launch '_Select Attributes'_ dialog 3. Click Help button on this dialog <p>Help is broken and help errors page is displayed.</p>
IM-43223	Help: Mismatch between the Default number of ports in Machine Learning Operators in SM Editor and OLH pages	<ol style="list-style-type: none"> 1. Launch ERDAS IMAGINE > Toolbox Tab > Spatial Model Editor 2. Drag and drop these Machine Learning operators and launch Online Help page and compare the Default ports: <p>*Initialize Deep Intellect*</p> <p>*Classify Using Deep Learning*</p> <p>*Initialize Inception*</p> <p>*Classify Using K-Means</p> <p>Observe that there is a mismatch between the Default ports shown in Spatial Model Editor and OLH pages</p>
IM-44553	Help - Define Functional Attribute operator help page – update to show all ports figure	<ol style="list-style-type: none"> 1. Launch Spatial Model Editor 2. Drag Define Functional Attribute operator to Spatial Model Editor and launch Help 3. Observe that figure corresponding to Show all ports was missing.
IM-43564	Features Input operator: error if specify GeoMedia Warehouse Proxy (.gwp) as input for Features Input	<p>Help topic on Features Input Operator documents the use of GeoMedia Warehouse Proxy (.gwp) file(s) as input for the Features Input Operator. Attempting to use .gwp for simple Access warehouse as input however, results in errors such as:</p> <p>erdas::sb_CGP::VectorSource_X::OnExecute failed Unsupported file type</p> <p>Features Input operator seems to only support the following data sources:</p> <p>Oracle</p> <p>arcview shapefile</p> <p>* SQL Server</p> <p>* (specific geometry type not known)</p>
IM-43936	Help for Raster Statistics per Feature is wrong	<p>Raster Statistics per Feature Operator topic</p> <p>[https://hexagongeospatial.fluidtopics.net/reader/5VsIDRDWkTlfq4xcVz8V4w/HwnYyEfjzhgAg3dMq44qBw]</p> <p>In Description section it states “ If not needed, CalcMeanport has to be set to False”. There is no CalcMeanport port.</p> <p>In Limitation section it states “The operator only works for AreaGeometry field types. An error is generated otherwise.”. But I can use point features and no error is generated. I don't get the correct results – but I don't get an error either.</p> <p>Connections table is just wrong. All the stats ports are named incorrectly.</p>

IM-44003	Features Database Output operator forcing Oracle installer	<p>'Features Database Output' operator refuses to work, throwing an error "64-bit Oracle client is required but not installed" when you click Add in Output Connection.</p> <ol style="list-style-type: none"> 1. In Spatial Model Editor window add and connect Features Input and Features Database Output operators. 2. Within Features Input operator connect to PostGIS Database 3. Double click Features Database Output. Click Add. The "64-bit Oracle client is required but not installed" error opens.
IM-43122	Features Output operator may fail if input feature data is large	Current MAINTAIN_ORDER option implementation in Features Output operator may not work if the input feature data is too large to fit in the available memory.
IM-44552	Per Feature operators creating mostly 0's in output	Computing Variance Texture per Feature results in all 0s in the output attribute except for the features that touch the top of the image footprint. Also behaves the same way for Statistics Per Feature operator.
IM-43969	Initialize inception operator default ports should be corrected	<p>Initialize using deep intellect operator has all its ports shown by default. But according to the approved operator design the optional ports should be hidden by default. So, make the following ports hidden ports to make them in sync with the design.</p> <ul style="list-style-type: none"> * LearningRate * ValidationPercentage
IM-43968	Initialize deep intellect operator default ports should be corrected	<p>Initialize using deep intellect operator has all its ports shown by default. But according to the approved operator design the optional ports should be hidden by default. So, make the following ports hidden ports to make them in sync with the design.</p> <ul style="list-style-type: none"> * LayerCount * ProcessingWidth * ProcessingHeight * LearningRate * TrainingSteps * BatchSize * ValidationPercentage
IM-43967	Classify using deep learning operator default ports should be corrected	<p>Classify using deep intellect operator has all its ports shown by default. But according to the approved operator design the optional ports should be hidden by default. So, make the following ports hidden ports to make them in sync with the design.</p> <ul style="list-style-type: none"> * ClassAttributeBasename * ProbabilityAttributeBasename * AttributeNamePrefix
IM-43954	Default value for DistributionType in Initialize Naive Bayes is not correct	<p>Current default value for the DistributionType port for the Initialize Naive Bayes operator is Multinomial which is out of sync with the approved design and the online documentation. Change the default to Gaussian.</p>
IM-43946	Classify using K-Means operator default ports should be corrected	<p>Classify using K-means operator has all its ports shown by default. But according to the approved operator design the optional ports should be hidden by default. So, make the following ports hidden ports to make them in sync with the design.</p> <ul style="list-style-type: none"> * RandomSeed * ClassificationAttributes



		* ClassAttributeName
IM-42289	Deep Learning Train fails on a 13 layer convolution net if max. pooling layer has a stride definition of 1 X 1	<ol style="list-style-type: none"> 1. A CNN model is created with 13 layer network (model attached) 2. The model has 5 max pooling layers and stride is defined as 1 X 1 for each pool 3. The model is then trained on a dataset (UCMerced_LandUse) which has 2100 images distributed across 21 feature classes. <p>*Observation:*</p> <p>The training of the model fails probably because of resource exhaustion.</p> <p>*NOTE*: The same exact model can be trained successfully (on the same system) if the striding is defined as 3 X 3 for all the 5 max pooling layers.</p> <p>+Session Log records the following:+</p> <p>21/11/17 15:07:42 SessionMgr(14148): Executing spatial model: d:/test/models/dl_conv2d_13l.gmdx</p> <p>21/11/17 15:07:42 SessionMgr(14148): Running command line: C:/Program Files/Hexagon/ERDAS IMAGINE 2018/bin/x64URelase/mlpywrapper.exe "C:/Users/lpkota/AppData/Local/Temp/SPATIAL_MODELER-b8d4-a840-fa9d-9830-003300/modelgene2166627-a6f9-4124-a9d6-f527096a0e92.py" "C:/Users/lpkota/AppData/Local/Temp/SPATIAL_MODELER-b8d4-a840-fa9d-9830-003300/mlpy_jsoninput_94d50205-4685-4d86-8b6c-2f20e8415fc1.Json" "C:/Users/lpkota/AppData/Local/Temp/SPATIAL_MODELER-b8d4-a840-fa9d-9830-003300/mlpy_jsonoutput_8b112790-ae1b-446f-9952-2000f8b9b9dc.Json"</p> <p>21/11/17 15:08:08 SessionMgr(14148): OOM when allocating tensor with shape[27320832,4096]</p> <p>21/11/17 15:08:08 SessionMgr(14148): [[Node: FC1/kernel/Initializer/random_uniform/RandomUniform = RandomUniform[T=DT_INT32, _class=["loc:@FC1/kernel"], dtype=DT_FLOAT, seed=0, seed2=0, _device="/job:localhost/replica:0/task:0/cpu:0"]](FC1/kernel/Initializer/random_uniform/shape)]]</p> <p>21/11/17 15:08:08 SessionMgr(14148):</p> <p>21/11/17 15:08:08 SessionMgr(14148): Caused by op 'FC1/kernel/Initializer/random_uniform/RandomUniform', defined at:</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "mlpywrapper_x64.py", line 71, in <module></p> <p>21/11/17 15:08:08 SessionMgr(14148): File "mlpywrapper_x64.py", line 65, in main</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "mlpywrapper_x64.py", line 52, in mlpywrapper</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "C:/Users/lpkota/AppData/Local/Temp/SPATIAL_MODELER-b8d4-a840-fa9d-9830-003300/modelgene2166627-a6f9-4124-a9d6-f527096a0e92.py", line 243, in smmlpyfunction</p> <p>21/11/17 15:08:08 SessionMgr(14148): classifier.fit(x=train_x(training_data), y=train_y(training_data),batch_size=10, steps=10)</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\util\deprecation.py", line 281, in new_func</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\contrib\learn\python\learn\estimators\estimator.py", line 414, in fit</p>

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\contrib\learn\python\learn\estimators\estimator.py", line 1317, in fit

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\util\deprecation.py", line 281, in new_func

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\contrib\learn\python\learn\estimators\estimator.py", line 430, in fit

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\contrib\learn\python\learn\estimators\estimator.py", line 927, in _train_model

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\contrib\learn\python\learn\estimators\estimator.py", line 1132, in _get_train_ops

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\contrib\learn\python\learn\estimators\estimator.py", line 1103, in _call_model_fn

21/11/17 15:08:08 SessionMgr(14148): File "C:/Users/lpkota/AppData/Local/Temp/SPATIAL_MODELER-b8d4-a840-fa9d-9830-003300/modelgene2166627-a6f9-4124-a9d6-f527096a0e92.py", line 135, in create_model_fn

21/11/17 15:08:08 SessionMgr(14148): Input27_result = tf.layers.dense(Input26_result, 4096, name='FC1')

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\layers\core.py", line 218, in dense

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\layers\base.py", line 320, in apply

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\layers\base.py", line 286, in __call__

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\layers\core.py", line 123, in build

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variable_scope.py", line 1049, in get_variable

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variable_scope.py", line 948, in get_variable

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variable_scope.py", line 349, in get_variable

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\layers\base.py", line 275, in variable_getter

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\layers\base.py", line 228, in _add_variable

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variable_scope.py", line 341, in _true_getter

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variable_scope.py", line 714, in _get_single_variable

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variables.py", line 197, in __init__

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variables.py", line 275, in _init_from_args

21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\variable_scope.py", line 690, in <lambda>





		<p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\init_ops.py", line 369, in __call__</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\random_ops.py", line 236, in random_uniform</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\ops\gen_random_ops.py", line 263, in _random_uniform</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\framework\op_def_library.py", line 768, in apply_op</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\framework\ops.py", line 2336, in create_op</p> <p>21/11/17 15:08:08 SessionMgr(14148): File "site-packages\tensorflow\python\framework\ops.py", line 1228, in __init__</p> <p>21/11/17 15:08:08 SessionMgr(14148):</p> <p>21/11/17 15:08:08 SessionMgr(14148): <code>*{color:#d04437}ResourceExhaustedError</code> (see above for traceback): OOM when allocating tensor with shape[27320832,4096]<code>{color>*</code></p> <p>21/11/17 15:08:09 SessionMgr(14148): <code>[[Node: FC1/kernel/Initializer/random_uniform/RandomUniform = RandomUniform[T=DT_INT32, _class=["loc:@FC1/kernel"], dtype=DT_FLOAT, seed=0, seed2=0, _device="/job:localhost/replica:0/task:0/cpu:0"]](FC1/kernel/Initializer/random_uniform/shape)]]</code></p> <p>21/11/17 15:08:09 SessionMgr(14148):</p> <p>21/11/17 15:08:10 SessionMgr(14148): Could not understand JSON for type: IMAGINE.File</p> <p>21/11/17 15:08:10 SessionMgr(14148): Spatial model execution failed.</p>
IM-43949	Raster Statistics per Feature swaps Primary Geometry from Point to Area	<p>The model converts single pixel classes to area geometries via Convert to Features. It then creates centroids, which adds a Point geometry field as the primary geometry, but Area is retained as a secondary geometry.</p> <p>When I then feed the Features to Raster Statistics per Feature, either the process is switching the primary geometry type back to Area, or it's entirely ignoring the point geometry, because the resulting (primary) geometries are Area again. They should remain Points.</p>
IM-43945	Add "deep learning" as keyword for these operators	<p>When you search for deep learning, you will not find these operators since "deep" is not one of the keywords.</p> <ul style="list-style-type: none"> * Machine Intellect Input * Machine Intellect Output * Initialize Inception
IM-43938	Why doesn't Raster Statistics per Feature give correct values?	Raster Statistics Per Feature, when using Point geometries, does not always return the expected values
IM-43916	Convert to Surface operator fails to write raster	ERDAS IMAGINE sometimes crashes while using the "Convert to Surface" operator
IM-43899	Normalize Height operator fails with error: Bad numeric Conversion:positive overflow	<p>Customer reported that Normalize Height operator fails with error: Bad numeric Conversion:positive overflow</p> <p>Customer is trying to make a model where point cloud is inputted as a LAS and goal is to get out point cloud where DEM effect is removed (points above the ground). They can create DEM using Surface operator but when they feed something to</p>

		Normalize Height operator nothing comes out and it ends up in errors. That has happened with two separate lidar datasets.
IM-43745	Changing the RadianceMap type in Analyze Radiance operator crashes software.	<ol style="list-style-type: none"> 1. Open the provided model in Spatial Model Editor. 2. It's a simple model trying to generate output in radiance units for a given DEM file. 3. Saved model has 'RadianceMap Type' defined as 'Radiation' and 'GroundReflectance' value as '1.000000' 4. Run the model and preview is displayed successfully. 5. Fit the displayed Preview to full frame. 6. Change the 'GroundReflectance' to 0.5 7. Model runs and preview is updated successfully. 8. Next change the 'RadianceMap Type' to 'Shaded Radiation' ERDAS IMAGINE software crashes immediately.
IM-43328	After Preview, model fails to Run – Feature Analysis pack issue	<ol style="list-style-type: none"> 1. Open the provided model in Spatial Model Editor 2. Click Preview Model will successfully Preview. <ol style="list-style-type: none"> 3. Click Run. Model fails to run with message stating "Object reference not set to an instance of an object." <ol style="list-style-type: none"> 4. Turn Preview off and Clear the results on all Operators. 5. Click Run. Successful.
IM-44447	SQL Server Proxy File ConnectInfo's Data Source parameter value is empty for windows authentication mode	The SQL Server Proxy File ConnectInfo's Data Source parameter value is empty for windows authentication mode.
IM-44690	Filter By Geometries operator failed with message Iterator not dereferencable	Customer reported that they used to filter vector objects within the Spatial Modeler in ERDAS IMAGINE 2016 v16.1 with no issue. But when they tried the same model with ERDAS IMAGINE 2018, it failed at operator Filter By Geometries with the message "Iterator not dereferencable".
IM-43754	ERDAS IMAGINE crashes while running model containing Normalize Height operator	Customer reported that ERDAS IMAGINE crashes while running customer's model with Normalize Height operator. Customer is using a terrain model (DTM), a (classified) point cloud that contains high tension lines and a line feature to define the high tension line. When the customer runs the model, almost immediately after the model hits the Normalize Height operator, ERDAS IMAGINE stops working.
IM-43404	Image Metadata is unable to show Datum and projection info written in SPOT6 / 7 JPEG2000 images	Customer reported that Image Metadata dialog is unable to show Datum and projection info written in the SPOT6 / 7 JPEG 2000 images, when the JPEG 2000 image has WGS84 / Geographic projection system. Image Metadata dialog shows the projection system as RAW in those JP2 files.



IM-33505	Temp File cannot be deleted when running model second time	<ol style="list-style-type: none"> 1. Open the model 2. Click Run 3. Specify an output PDF filename and Run. 4. Wait for model to successfully finish. 5. Click Run again. 6. Say yes, you wish to delete the existing output file. 7. Click Run in the autogenerated dialog. 8. While executing the Create Geospatial PDF operator a dialog is thrown showing the message in the screenshot. 9. Click Cancel and it seems to complete successfully. <p>That message continues to come up every time you subsequently try to run the model (unless you select all Operators and Clear Results first)</p> <p>Session Log: 19/05/16 12:38:38 SessionMgr(8968): Executing spatial model: //alpha/jira_data/im-33505/send_to_geospatial_pdf_v16-0-0.gmdx 19/05/16 12:38:45 SessionMgr(8968): Spatial model execution complete. 19/05/16 12:38:54 eWkworkspace(10820): File //alpha/jira_data/im-33505/charleston.pdf is deleted. 19/05/16 12:38:57 SessionMgr(8968): Executing spatial model: //alpha/jira_data/im-33505/send_to_geospatial_pdf_v16-0-0.gmdx 19/05/16 12:41:49 SessionMgr(8968): ERROR: #1118 from imgFileDestroy 19/05/16 12:41:49 SessionMgr(8968): ERROR: efiio_FileUnlink failed 19/05/16 12:41:49 SessionMgr(8968): ERROR: #4429 from efiio_FileUnlink 19/05/16 12:41:49 SessionMgr(8968): ERROR: Unable to delete the file h:\temp\SPATIAL_MODELER-e0ba-0197-3bce-6465-010820\1bc813e-20f5-4e13-a257-6b079fec5410.rrd 19/05/16 12:41:49 A write was attempted on a pipe or FIFO for which there was no process to read the data. 19/05/16 12:41:49 SessionMgr(8968): ERROR: #6952 from eimg::FileDestroy 19/05/16 12:41:49 SessionMgr(8968): ERROR: eimg::FileDestroy failed 19/05/16 12:41:49 SessionMgr(8968): ERROR: #6974 from eimg::FileDestroy 19/05/16 12:41:49 SessionMgr(8968): ERROR: eimg::FileDestroy failed 19/05/16 12:41:49 SessionMgr(8968): ERROR: #6972 from eimg::FileDestroy 19/05/16 12:41:49 SessionMgr(8968): ERROR: AFileDestroy failed 19/05/16 12:41:49 SessionMgr(8968): ERROR: #3762 from AFileDestroy 19/05/16 12:41:49 SessionMgr(8968): ERROR: FileDestroy function failed 19/05/16 12:41:53 SessionMgr(8968): Spatial model execution complete.</p>
IM-43864	Normalize Heights operator fails to process data in EPSG:3006	<p>Customer reported: LAS file with EPSG: 3006 fails with "invalid datum" error messages in Spatial Modeler.</p>
IM-43601	Python crashes loading ComputeHeightFromRelief.gmdx	<p>Run pybug.py in Python 3.4. Python crashes - if running in IDLE, you'll see:</p> <pre>{code:java} Loading model... >>> ===== RESTART ===== {code} (whereas you should see "...done!" and some info about the model.)</pre>
IM-43586	Raster Input -> Raster Output model fails with JP2 in and out when	<ol style="list-style-type: none"> 1. Create a Spatial Model with a Raster Input connected to a Raster Output. 2. Set the ReadMetadata port on the Raster Input to true. 3. Select the JP2 file in the data directory as the input raster. 4. Specify a JP2 file for the output raster.

	ReadMetadata is true	<ol style="list-style-type: none"> 5. Run the model. 6. Raster Output fails with the error messages below. <p>* If you turn off the ReadMetadata port, the model runs successfully.</p> <p>22/02/18 17:29:16 SessionMgr(1716): ERROR: #3435 from imgFileLayerNamesSet</p> <p>22/02/18 17:29:16 SessionMgr(1716): ERROR: hfaLayerMove failed</p> <p>22/02/18 17:29:16 SessionMgr(1716): ERROR: #7487 from hfaLayerMove</p> <p>22/02/18 17:29:16 SessionMgr(1716): ERROR: ehfa_EntryMove failed</p> <p>22/02/18 17:29:16 SessionMgr(1716): ERROR: #5923 from ehfa_EntryMove</p> <p>22/02/18 17:29:16 SessionMgr(1716): ERROR: :Layer_1 Node already exists for file c:/data/ri2r0.aux</p> <p>22/02/18 17:29:17 SessionMgr(1716): erdas::raster::CreatableGridCoverageFormatEIMG::TransferBandNaming failed</p> <p>22/02/18 17:29:17 eimg_LayerChangeName failed</p> <p>22/02/18 17:29:17 Name change of c:/data/ri2r0.jp2(:Band_1) to :Layer_1 failed</p>
IM-43582	Rapid Atmospheric operator not working in ERDAS IMAGINE 2018	<p>ERDAS IMAGINE 2018</p> <ol style="list-style-type: none"> 1. Load the Spatial Model found in \\alpha\JIRA_data\IM-43582 2. Click Preview 3. Fails with a "Failed processing meta-data file. Sensor is not supported." message <p>Same model runs fine in ERDAS IMAGINE 2016 v16.1</p>
IM-43427	CGA SpreadRasterAdapter might generate wrong results for all but the first tile	<p>This problem affects the following operators: Cost Spread, Least Cost Path, Path Back Network, and Proximity Spread. All those operators use CGA SpreadRasterAdapter internally. In ERDAS IMAGINE, the TileSize of Intergraph::GridAnalysis::RasterAdaptors::RasterAdaptor is set to 512 . So if the output file size is wider or taller than 512, the pixels not in the first tile might not be correct and all have value zero.</p>
IM-43358	Spatial Modeler does not create consistent Histograms or other Statistics	<p>ERDAS IMAGINE 2018</p> <p>See model copied to \\alpha\JIRA_data\IM-43358</p> <p>Open the model in a Spatial Model Editor and click Run.</p> <p>My initial reason for creating this model was to show that the Histogram created by Spatial Modeler is sometimes wrong. See the Sum value on the "GIS Statistics" operator. It does NOT represent the number of pixels in the image, despite being 1x1 statistics (in theory). $2433 \times 1433 = 3486489$</p> <p>However I also then noticed that other stats vary, even though the data should be identical on all 4 branches.</p>
IM-43329	View & Preview buttons on RGB Shaded Relief dialog don't work correctly	<p>Steps to demonstrate the problems.</p> <ol style="list-style-type: none"> 1. Raster tab Resolution group Spectral popup RGB Shaded Relief. 2. Select a multi-layer image (lanier.img will work) and a single-band image (Indem.img will work). 3. Click View. Model is displayed in Spatial Model Editor. 4. Click in the Spatial Model Editor canvas. Notice that the RGB Filename and Intensity Filename ports don't have the filenames set. Click on the RGB Input and Intensity Input operators and see that the values are set on those Filename ports. 5. Click the Run and/or Preview buttons on the Spatial Modeler tab. You are prompted for input filenames and there are no default values. 6. Click the Preview button on the dialog. You get an error: "Spatial Model failed in Intensity Input. The error was "No input file available"." You get no Preview.



IM-43319	Buffer Zones Properties dialog has an option that does nothing	<p>Drag the Buffer Zones operator into a Spatial Model Editor.</p> <p>Double-click the operator to open the Buffer Zones Properties dialog.</p> <p>Note the option to Merge Touching Buffers, but this checkbox does not do anything.</p>
IM-43321	Merge Features operator crashes ERDAS IMAGINE – Feature Analysis pack issue	<p>Open the model inbuffer2.gmdx in Spatial Model Editor</p> <p>Click Preview</p> <p>Once the data previews (incorrectly - see linked bug), double-click the Spatial Operator / Contained By port and change to Touch.</p> <p>As soon as you click OK, ERDAS IMAGINE will crash.</p>
IM-43320	Merge Features operator results in wrong results - Feature Analysis pack issue	<p>See the two models (and data) copied to \\alpha\JIRA_data\IM-43320</p> <p>I would expect both models to produce identical results, but inbuffer1.gmdx seems correct, while inbuffer2.gmdx incorrectly returns all the tax parcels.</p>
IM-43157	Help of Features related operators have incomplete info	<p>Help of Features related operators have incomplete info.</p> <p>To list a few:</p> <ul style="list-style-type: none"> * Intersect Features: Related operators, Metadata path and Example model is empty. * Set Primary Geometry: This has Description and Connections section only. * Define Functional Attribute: Example model is empty.
IM-43156	Intersect Features operator errors out in specific sequence of operators run - Feature Analysis pack issue	<p>ERDAS IMAGINE 2018</p> <p>Intersect Features operator errors out in specific sequence of execution</p> <p>In the attached model (intersectfeatures_preview.gmdx), (where Intersect Features operator is connected to Preview operator), preview works fine.</p> <p>Now connect Insert Features output operator in between Intersect features operator and preview. Hit run or preview. SM errors out stating as "Object reference not set to an instance of an object.", for both Intersect Features and Features Output operators', and preview in 2D view is blank.</p>
IM-43150	Least Cost Path operator generates erroneous 0-value columns	<p>If AutoStudyArea is set to TRUE, the result is correct. Otherwise, the erroneous 0-value columns show up.</p>
IM-43140	Classify Using Deep Learning operator updated with newly modified figure	<ol style="list-style-type: none"> 1. Launch Spatial Model Editor. 2. Drag the Classify Using Deep Learning operator to the Spatial Model Editor. 3. Launch the help and observe that operator shown in help and operator on Spatial Model Editor are shown differently.
IM-43119	Drag and drop operation for a LAS file onto Spatial Modeler is not creating an input operator	<ol style="list-style-type: none"> 1. Open Spatial Model Editor 2. Drag and drop any .las file to Spatial Model Editor canvas. 3. No Point Cloud Input operator is created. <p>Expected behavior - should create a Point Cloud Input operator with the las file as input name.</p>

IM-43105	ERDAS IMAGINE crashes with model containing Image pair and Image Pair Information operator.	<ol style="list-style-type: none"> 1. Load the attached model in the Spatial Model Editor 2. Provide the inputs as Left file: \KOMPSAT3\Stereo\K3_20130205130436_03856_00841311_L1R_Bundle\K3_20130205130436_03856_00841311_L1R_N.tif Right file: \KOMPSAT3\Stereo\K3_20130205130557_03856_00841311_L1R_Bundle\K3_20130205130557_03856_00841311_L1R_N.tif 3. Click on preview to execute the model and observe ERDAS IMAGINE crashes. <p>Note: It is also reproducible with 64-bit by executing the model 2-3 times.</p> <p>Event log: Faulting application name: eWkspace.exe, version: 16.5.0.108, time stamp: 0x5a6425e5 Faulting module name: tbbmalloc.dll, version: 2017.0.2016.1004, time stamp: 0x57f4099a Exception code: 0xc0000005 Fault offset: 0x00015e91 Faulting process id: 0x2d2c Faulting application start time: 0x01d3943bfc671070 Faulting application path: C:\Program Files\Hexagon\ERDAS IMAGINE 2018\bin\Win32Release\Wkspace.exe Faulting module path: C:\Program Files\Hexagon\ERDAS IMAGINE 2018\bin\Win32Release\tbb\tbbmalloc.dll Report Id: 755fc645-002f-11e8-838f-b8ca3a86789b Faulting package full name: Faulting package-relative application ID:</p>
IM-43102	Default and Show all ports showing same operator Eliminate Unwanted Areas	<ol style="list-style-type: none"> 1. Launch Spatial Model Editor 2. Drag the operator Eliminate Unwanted Areas and check show all ports 3. Observe that with and without show all ports the operator is same but online help is different for default and show all ports.
IM-44600	Previewing GeoCSV file throwing different errors in ERDAS IMAGINE 32 bit and 64 bit	<ol style="list-style-type: none"> 1. Launch Spatial Model Editor and preview the GeoCSV File attached (states.csv) using Features input and Preview. 2. Observe that Model execution shown as success but session log showing errors differently in 32 bit and 64 bit. <p>Expectation: Model should fail and Error message should be proper (64 bit session log)</p> <p>+Session log 32-bit:+ 04/05/18 16:34:05 SessionMgr(11824): Connection success for the external process 'eWkspace' 04/05/18 16:36:50 SessionMgr(11824): ERROR: erdas::viewlayer::features::FeaturesViewLayer::FeaturesViewLayer: Unspecified exception: erdas::viewlayer::features::FeaturesContext::Initialize 04/05/18 16:37:07 SessionMgr(11824): ERROR: erdas::viewlayer::features::FeaturesViewLayer::FeaturesViewLayer: Unspecified exception: erdas::viewlayer::features::FeaturesContext::Initialize</p>



IM-44324	LasClip operator does not work	<p>Data: LAS file and the corresponding shapefile in the attached zip file</p> <ol style="list-style-type: none"> 1. Launch Spatial Modeler. 2. Drag and drop the lasclip operator in the spatial modeler editor. 3. Give the las file and shapefile in the attached zip file as inputs to the lasclip operator. 4. Give the output filename and execute the operator. <p>Notice that there is a following message and the output is not generated.</p>
IM-43998	LASColor operator does not work	<p>After configuring the LASTools, from the spatial modeler execute the lascolor operator with the appropriate outputs. Notice that there is no output generated.</p> <p>* In ERDAS IMAGINE 2016 v16.1, the operator shows that it has run successfully but the output isn't generated.</p> <p>* In ERDAS IMAGINE 2018 v16.5, the following message is shown in the spatial modeler and the output is not generated.</p> <pre>lascolor.exe: process exited with non-zero code 1</pre> <p>The standalone lascolor.exe and the same option from the ribbon UI works fine and an output is generated.</p>
IM-43964	Output file extension for lasinfo operator should be txt	<p>This is an issue with LASTools for ERDAS IMAGINE 2016 v16.1 also.</p> <ol style="list-style-type: none"> 1. Drag and drop lasinfo operator. 2. Double click on the OutputFilename port. <p>Note - in file chooser that opens, the files of type are LAS or LAZ. Whereas the output of lasinfo should be txt similar to the same option from the ribbon LASTools tab.</p>
IM-44632	Creating a vector output within Spatial Modeler on German OS will truncate float attribute values	<p>Customer found that they still face the point-comma decimal separator issue when creating floating point attribute values on a German OS.</p> <p>Customer's model will compute the compactness for polygons and write this values into a attribute column of a new output shape. The values are correct within the model (multiply and select by attribute works correct). But as soon as the customer writes the floating point values into a file, the values are truncated. This only happens if they do set comma as decimal separator which is the default setting on a German OS.</p> <p>Customer confirmed that if they run the model via run model command (which means in the background) the values are saved correctly. If they run it directly within the Spatial Modeler, the values are truncated.</p> <ol style="list-style-type: none"> 1. Set decimal separator to " , " or locale to German 2. Load and run model inside the Spatial Model Editor <p>Open attribute table of the newly created file: 0.0000 is in the compactness column.</p>

IMAGINE EXPANSION PACK – AUTOSYNC

Issue ID	Summary – IMAGINE AutoSync	Description / How to Reproduce
IM-39847	AutoSync takes too long to compute active area	The process of computing the active area is too slow in AutoSync. Running APM with input and reference images that are both uncompressed IMG/IGE files around 3.5 GB each takes approximately three hours. Both the input and reference images have pyramid layers and are unsigned 8-bit.



		It appears to be the computing active area that is taking so long, the tie point creation is quite fast. When loading the same images into MosaicPro and computing the active area with an edge boundary search it only takes a few seconds. The input image is 18447 x 42312 and the reference image is 18526 x 35326.
IM-43935	AutoSync Edge Match generated incorrect calibrated results	When displaying the calibrated edge match result images (wasia1_mss_output.img and wasia2_mss_output.img) together in the Viewer, only the first image is visible. NOTE: The resampled Edge Match results are correct. Only the calibrated ones have problem.
IM-43870	Processing of APM takes a lot of time on AutoSync 2016 compared to earlier versions	Customers have reported that when using ERDAS IMAGINE 2016, the Autosync product can take a very long time to run the Automated Point Matching (APM) process to find common control points between the two images being matched. The time taken has increased significantly over previous versions of the software. The problem was found to be related to the process of computing the active area of the input imagery (e.g. if the input images had significant areas of background data, calculating the locations of the true image edges was taking too long). The solution was to use the same fast edge-detection algorithm as had been introduced into MosaicPro.

IMAGINE EXPANSION PACK – DELTACUE

Issue ID	Summary – IMAGINE DeltaCue	Description / How to Reproduce
IM-43143	DeltaCue Help: compactness formula documented incorrectly	<p>OLH documentation uses incorrect equation for compactness calculation</p> <p>Filtering Unwanted Change Concept topic</p> $C=A/P1*P2$ <p>Where:</p> <p>A = region area</p> <p>P1 = major axis of that region</p> <p>P2 = minor axis of that region</p> <p>As the change region grows longer in one dimension, the compactness tends to decrease. A perfectly square area would have a compactness of one.</p> <p>DeltaCue uses isoperimetric quotient, the ratio of the area of the shape to the area of a circle (the most compact shape) having the same perimeter, to measure the compactness. So the formula $C=A/P1*P2$ is not correct. The correct one is $C=A*Pi*4.0/(P*P)$, where A is the shape area, Pi is about 3.14, P is the shape perimeter. Using the above formula, the compactness of a square is about 0.785 and 0.142 for a rectangle with the ratio of its sides 1:20.</p> <p>Change from: A perfectly square area would have a compactness of one.</p> <p>Change to: A perfectly circular area would have a compactness of one.</p>

IMAGINE EXPANSION PACK – NITF

Issue ID	Summary – IMAGINE NITF	Description / How to Reproduce
IM-44570	Deadlock in Iggibiif	
IM-44041	Cannot open NITF images with a colon in IID1 field	Some new NITF data uses a colon in the IID1 field, like so - PIXQLA:002. IID1 is used by the NITF library as part of the name for the SBI file. When you try to open this data in ERDAS IMAGINE, it throws error messages about illegal characters (the position indicator corresponds to where the colon is) and it won't load.
IM-43324	Unable to display NITFs with invalid characters in Text Segments	<p>ERDAS IMAGINE 2018</p> <p>Attempting to open the image in a 2D View (as raster, not ImageChain) fails. You get a whole _ton_ of errors in the Session Log, no pixels are displayed, and the title bar is empty, although the file name is shown in the Table of Contents.</p> <p>ImageInfo crashes when trying to open these images.</p> <p>Similar errors to those above when using these images in a Raster Input or opening them in an ImageChain.</p>
IM-43368	Opening a specific NITF file as Image Chain fails and registers series of errors in session log	<ol style="list-style-type: none"> 1. Click File > Open > Raster as Image Chain. 2. Browse to /2004-dg-0000187-1 3. Select 03DEC04074120-M2AS_R1C1-000000098060_01_P001.NTF and click Open. 4. Image fails to load in the viewer and throws error dialogs as shown in attachments 5. Session log records the following: 12/02/18 17:29:58 SessionMgr(14132): Connection success for the external process 'eWkspace_64' 12/02/18 17:31:46 SessionMgr(14132): ERROR: #142 from biifFileOpen 12/02/18 17:31:46 SessionMgr(14132): ERROR: DataSet::Open failed 12/02/18 17:31:46 SessionMgr(14132): ERROR: #355 from DataSet::Open 12/02/18 17:31:46 SessionMgr(14132): ERROR: Unparsed cached item. 12/02/18 17:31:46 SessionMgr(14132): ERROR: #142 from biifFileOpen 12/02/18 17:31:46 SessionMgr(14132): ERROR: DataSet::Open failed 12/02/18 17:31:46 SessionMgr(14132): ERROR: #355 from DataSet::Open 12/02/18 17:31:46 SessionMgr(14132): ERROR: Unparsed cached item. 12/02/18 17:31:46 SessionMgr(14132): ERROR: #142 from biifFileOpen 12/02/18 17:31:46 SessionMgr(14132): ERROR: DataSet::Open failed 12/02/18 17:31:46 SessionMgr(14132): ERROR: #355 from DataSet::Open 12/02/18 17:31:46 SessionMgr(14132): ERROR: Unparsed cached item. 12/02/18 17:31:46 SessionMgr(14132): ERROR: #142 from biifFileOpen 12/02/18 17:31:46 SessionMgr(14132): ERROR: DataSet::Open failed 12/02/18 17:31:46 SessionMgr(14132): ERROR: #355 from DataSet::Open 12/02/18 17:31:46 SessionMgr(14132): ERROR: Unparsed cached item. 12/02/18 17:31:53 SessionMgr(14132): ERROR: #44 from erdas::phoenix::coverage::ImageIdentifiersRequestCachedData::ImageIdentifiersRequestCachedData





12/02/18 17:31:53 SessionMgr(14132): ERROR: eimg_FileImageNamesGet failed
12/02/18 17:31:53 SessionMgr(14132): ERROR: #14930 from eimg_FileImageNamesGet
12/02/18 17:31:53 SessionMgr(14132): ERROR: eimg_FileOpen failed
12/02/18 17:31:53 SessionMgr(14132): ERROR: #5968 from eimg_FileOpen
12/02/18 17:31:53 SessionMgr(14132): ERROR: //alpha/array4/datalibrary/quickbird/middle_east/iraq/2004-dg-0000187-1/03dec04074120-m2as_r1c1-000000098060_01_p001.ntf: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format)
12/02/18 17:32:06 SessionMgr(14132): ERROR: #579 from erdas::rendering::imagechain::ImageChainBroker::FindProvidersForDataset
12/02/18 17:32:06 SessionMgr(14132): ERROR: `anonymous-namespace`::GetResponse failed
12/02/18 17:32:06 SessionMgr(14132): ERROR: #49 from `anonymous-namespace`::GetResponse
12/02/18 17:32:06 SessionMgr(14132): ERROR: eimg_FileImageNamesGet failed
12/02/18 17:32:06 eimg_FileOpen failed
12/02/18 17:32:06 //alpha/array4/datalibrary/quickbird/middle_east/iraq/2004-dg-0000187-1/03dec04074120-m2as_r1c1-000000098060_01_p001.ntf: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format)
12/02/18 17:32:06 SessionMgr(14132): ERROR: #196 from `anonymous-namespace`::GDSHandlerEIMG::OpenDataset
12/02/18 17:32:06 SessionMgr(14132): ERROR: eimg_FileOpen failed
12/02/18 17:32:06 SessionMgr(14132): ERROR: #5968 from eimg_FileOpen
12/02/18 17:32:06 SessionMgr(14132): ERROR: //alpha/array4/datalibrary/quickbird/middle_east/iraq/2004-dg-0000187-1/03dec04074120-m2as_r1c1-000000098060_01_p001.ntf: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format)
12/02/18 17:32:16 SessionMgr(14132): ERROR: #1269 from setupDefaultChain
12/02/18 17:32:16 SessionMgr(14132): ERROR: ImageChainLayer::GetProviderList failed
12/02/18 17:32:16 SessionMgr(14132): ERROR: #1378 from ImageChainLayer::GetProviderList
12/02/18 17:32:16 SessionMgr(14132): ERROR: Unable to open image; the file may be invalid.
12/02/18 17:32:16 SessionMgr(14132): ERROR: #142 from biifFileOpen
12/02/18 17:32:16 SessionMgr(14132): ERROR: DataSet::Open failed
12/02/18 17:32:16 SessionMgr(14132): ERROR: #355 from DataSet::Open
12/02/18 17:32:16 SessionMgr(14132): ERROR: Unparsed cached item.
12/02/18 17:32:16 SessionMgr(14132): ERROR: #142 from biifFileOpen
12/02/18 17:32:16 SessionMgr(14132): ERROR: DataSet::Open failed
12/02/18 17:32:16 SessionMgr(14132): ERROR: #355 from DataSet::Open
12/02/18 17:32:16 SessionMgr(14132): ERROR: Unparsed cached item.
12/02/18 17:32:19 SessionMgr(14132): ERROR: #196 from `anonymous-namespace`::GDSHandlerEIMG::OpenDataset
12/02/18 17:32:19 SessionMgr(14132): ERROR: eimg_FileOpen failed
12/02/18 17:32:19 SessionMgr(14132): ERROR: #5968 from eimg_FileOpen
12/02/18 17:32:19 SessionMgr(14132): ERROR: //alpha/array4/datalibrary/quickbird/middle_east/iraq/2004-dg-0000187-

		<p>1/03dec04074120-m2as_r1c1-000000098060_01_p001.ntf: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format)</p> <p>12/02/18 17:32:34 SessionMgr(14132): ERROR: #241 from OpenURICommand::Execute</p> <p>12/02/18 17:32:34 SessionMgr(14132): ERROR: `anonymous-namespace':::GetResponse failed</p> <p>12/02/18 17:32:34 SessionMgr(14132): ERROR: #49 from `anonymous-namespace':::GetResponse</p> <p>12/02/18 17:32:34 SessionMgr(14132): ERROR: eimg_FileOpen failed</p> <p>12/02/18 17:32:34 //alpha/array4/datalibrary/quickbird/middle_east/iraq/2004-dg-0000187-1/03dec04074120-m2as_r1c1-000000098060_01_p001.ntf: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format)</p>
IM-35856	Investigate SxS error logs reported by CSM	<p>SxS errors appear in the log. It has been mentioned that these are innocuous, but we should attempt to eliminate them so that we will know that we will be properly alerted when there actually is a problem. They look similar to the following:</p> <p>"C:\ProgramData\Hexagon\GeoService Backend 2016\csmplugincache\x64release\2010\ggicmv3.dll: context creation failed (14001): The application has failed to start because its side-by-side configuration is incorrect. Please see the application event log or use the command-line sxstrace.exe tool for more detail."</p>
IM-44557	ewkworkspace hangs at #200 when opening 306 NITFs with RSETs	<p>Copy specific NITF-JPEG images locally, making sure that there are RSETs (.r1, .r2, .r3, & .r4) for each .ntf.</p> <p>Attempt to open all 306 NITF files in a 2Dview.</p> <ol style="list-style-type: none"> 1. Open ewkworkspace (do not use an instance of ewkworkspace where you have previously opened a NITF) 2. File Open Raster Layer 3. Select the first NITF and then shift-select the last NITF 4. Click OK <p>In the bottom left corner of ewkworkspace you will see "Opening 1 of 306:"... When it gets to "Opening 200 of 306" ewkworkspace will hang.</p>

IMAGINE EXPANSION PACK – STEREOSAR DEM

Issue ID	Summary – IMAGINE StereoSAR DEM	Description / How to Reproduce
IM-12386	StereoSAR DEM module producing incorrect results with example data.	<p>Customers have reported that when using ERDAS IMAGINE 2016, the StereoSAR DEM tool no longer produces acceptable output DEMs compared to previous versions.</p> <p>The problem was inadvertently introduced via a change to the way coordinates are referenced in "raw" satellite imagery which was not taken into account in the StereoSAR DEM tool. This meant that control points were not being correctly related to their image position.</p> <p>The solution was to correct StereoSAR DEM to use the newer coordinate referencing system.</p>



ERDAS IMAGINE INSTALLATION

Issue ID	Summary – ERDAS IMAGINE Installation	Description / How to Reproduce
IM-43118	Help - Minor corrections are needed in IMAGINE Online help	<p>ERDAS IMAGINE 2018</p> <p>In the topic Installing Microsoft® System CLR Types for Microsoft SQL Server, there is a statement as follows:</p> <ul style="list-style-type: none"> Follow these instructions to install Microsoft® System CLR Types for Microsoft SQL Server (2008 R2 and 2014 versions) for accessing features through *Oracle Feature Proxy (*.OFP)* in the Viewer and SME. <p>In the statement "Oracle Feature Proxy (*.OFP) *should be replaced with SQL Feature Proxy (*.SFP)*"</p> <p>In another page (Installing Oracle Data Access Components), in Step 3, for both 32-bit installer & *64-bit installers* change directory is mentioned as 32-bit installer.</p> <ul style="list-style-type: none"> **Change directory to the folder where the 32-bit installer is unzipped.** For 64-bit installer, it should be mentioned as **Change directory to the folder where the 64-bit installer is unzipped.**"
IM-42807	Borrowing only Essentials would borrow Advantage and Professional	<p>ERDAS IMAGINE 2018</p> <ol style="list-style-type: none"> Launch the borrowing tool. Select either *IMAGINE Essentials and Add-Ons* or *IMAGINE Essentials*. Click the Borrow button. Once the license is borrowed, remove the machine from LAN. Launch IMAGINE. <p>Notice in the nagging dialog there are modules other than only Essentials listed in there showing that they are also borrowed even though they weren't selected while borrowing. After ERDAS IMAGINE launch, cross checked the modules that require Advantage and Professional and they were launching.</p>
IM-43747	Cannot uninstall LASTools	<p>In the Configure Extension dialog, clicking Remove after selecting the LASToolsForIMAGINE_Extension.xml opens an error and the uninstallation fails.</p>
IM-23053	Configure Extensions - Not transparent if configuration has succeeded	<p>When configuring LASTools it is not so transparent if the configuration has succeeded or not. The process is so fast it sometimes appears to have done nothing.</p> <p>Also, because IMAGINE has to be re-started for the configuration to take effect, it is good to open a message that says "Configuration Succeeded. Restart IMAGINE for the configuration to take effect"</p>

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