Release Guide

ERDAS IMAGINE 2020

Version 16.6.0

1 October 2019

Contents

About This Release

This document describes the enhancements for ERDAS IMAGINE 2020 (v16.6.0), 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.

Development of ERDAS IMAGINE 2020 focussed on ensuring that virtually all aspects of ERDAS IMAGINE run in 64-bit. Consequently, the installer has been split into three separate installers: ERDAS IMAGINE 2020 64-bit; ERDAS IMAGINE 2020 32-bit; and ERDAS ER Mapper 2020.

In addition, there are new Operators, such as the Compute Grey-Level Co-Occurrence Matrix 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

Full 64-bit Installer

On modern 64-bit computers, being able to run as a true 64-bit application allows full exploitation of the computer's resources, including addressing more than 4GB of memory.

Over the previous few releases Hexagon has been moving more and more ERDAS IMAGINE executables to run 64-bit. With each such release a few non-GUI applications (jobs) were made available in both 32-bit and 64-bit and the user was able to configure which one was run by the Session Manager. In ERDAS IMAGINE 2018 we released the main Ribbon GUI (ewkspace.exe) in both 32-bit and 64-bit, but whether applications launched from either of these configurations ran as 32-bit or 64-bit (if available) was still variable, depending on the 64-bit configuration settings. This mixed approach presented some problems, not least the lack of transparency to the user as to whether the job they were about to execute would run 32-bit or 64-bit.

Consequently, ERDAS IMAGINE 2020 has been clearly split into two separate installers (plus a third one for ERDAS ER Mapper): One in which the entire suite runs as 32-bit applications and one in which the entire suite runs as 64-bit. This means that if someone starts ERDAS IMAGINE 2020 64-bit they can be sure that any feature they utilize will be running 64-bit and is therefore capable of exploiting larger amounts of system memory and other resources.

This split also makes any configuration tasks much more straightforward. If you want to use Python with ERDAS IMAGINE 2020 32-bit, then you need a 32-bit version of Python. If you want to configure CSM/MSP to work with ERDAS IMAGINE 2020 64-bit, then you just need 64-bit CSM/MSP, etc.

Note that all three installers (ERDAS IMAGINE 2020 64-bit, ERDAS IMAGINE 2020 32-bit, and ERDAS ER Mapper 2020) can be installed on a single computer if needed.

If 64-bit is so great, why do we still have ERDAS IMAGINE 2020 32-bit? Unfortunately, not every program could be ported to 64-bit, usually because there was a dependency on a third-party component that is only made available in 32-bit. These occurrences are very limited compared to the number of programs that have been successfully included into ERDAS IMAGINE 2020 64-bit. However, there is a possibility that a production workflow is depending on one of these capabilities and so ERDAS IMAGINE 2020 32-bit is being provided so that customers who need these capabilities can continue to use them if needed.

The functionality that is only available in ERDAS IMAGINE 2020 32-bit is as follows:

- Image Equalizer
- Image Catalog
- StereoSAR DEM
- IMAGIZER
- External Projections
- Surfacing Tool (deprecated in favour of Terrain Prep tool)
- ESRI Grid support
- MultiGen OpenFlight format support
- Oracle Geospatial Raster support
- ArcSDE support
- TerraModel TIN support
- IRS Sensor Model
- MapInfo support
- Geodatabase support

Depending on component availability, some of these capabilities may find their way back into a 64-bit version of ERDAS IMAGINE in the future.

ArcGIS 10.7

ERDAS IMAGINE 2020 (32-bit) has been tested and declared Supported when using an installed and licensed version of ArcGIS 10.6, 10.6.1 and 10.7 in order to provide Geodatabase support libraries.

Alternatively, the IMAGINE Geodatabase Support component (based on ArcGIS Engine 10.7) can be installed to provide Geodatabase support.

Please note that at this time ArcGIS 10.7.1 is not supported.

New Licensing

ERDAS IMAGINE 2020 is delivered with version 16.6.9.110 of the Hexagon Geospatial Licensing 2020 tools. However, if there is a newer version available for download it is strongly recommended that customers upgrade to the newer version. The appropriate download can be found on the Downloads section of the Hexagon Geospatial web site:

https://download.hexagongeospatial.com/search?lang=en&product=b3b4786d3d4742ae8d1e7aeee50dae69

Since Hexagon Geospatial Licensing 2020 v16.6.9.110 is integrated into the ERDAS IMAGINE 2020 installer, any computer where you install will have any existing installation of Hexagon Geospatial Licensing automatically updated to v16.6.9.110. If in doubt, refer to Windows' Add or Remove Programs utility to determine the currently installed version.

New Technology

New Operators for Spatial Modeler

Hexagon has continued to add new operators to Spatial Modeler. New (or modified) operators with a brief description of their capabilities are described below. See the ERDAS IMAGINE 2020 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.

Classify Buildings
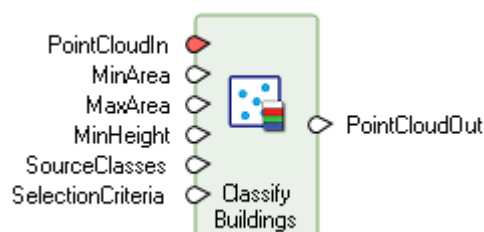
The operator identifies points from the input point cloud that fall on buildings and reassigns them to the Building class (Class 6). The operator requires that the points that fall on the ground in the point cloud have already been classified, that is, assigned to the Ground class (Class 2). If the ground points in the input point cloud are not classified, you can classify them using the Classify Ground operator.

The classification is performed by analyzing the geometric relationship of the non-ground points to their neighbors, looking for planar areas above ground that satisfy the specified height and area criteria.

Extract Building Footprints
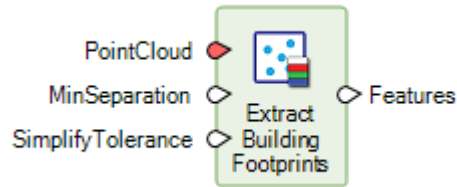
The operator extracts building footprints based on points in the point cloud that have already been classified as Building points (Class 6). The operator requires that the points in the point cloud that fall on the ground and on buildings have already been classified to the Ground class (Class 2) and the Building class (Class 6) respectively.

Compute Ground Sampling Distance
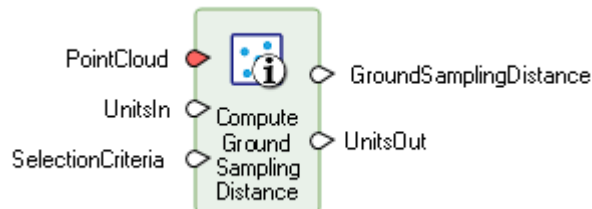
This operator computes the ground sampling distance for a point cloud by analysing the distance between adjacent points. By default, the first 1000 points having last and single returns are included in the computation. You may override this by putting data on the SelectionCriteria port. Typically, the output from this operator is used to specify the cell size when converting from point cloud to raster.

Calculate Cell Size
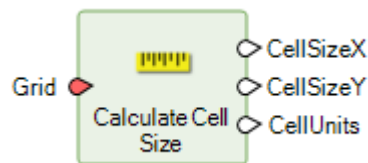
This operator calculates appropriate ground-space pixel dimensions for an input grid or image that is to be resampled. This is most frequently required if the input grid is a referenceable grid to be orthorectified (such as a NITF image with embedded RPCs), or if the input grid is to be reprojected to a different CRS.

The algorithm used has also been integrated into standard ERDAS IMAGINE resample dialogs so that the default pixel size populated into the dialogs should attempt to retain the optimal level of precision (without over-sampling).

Grow Features
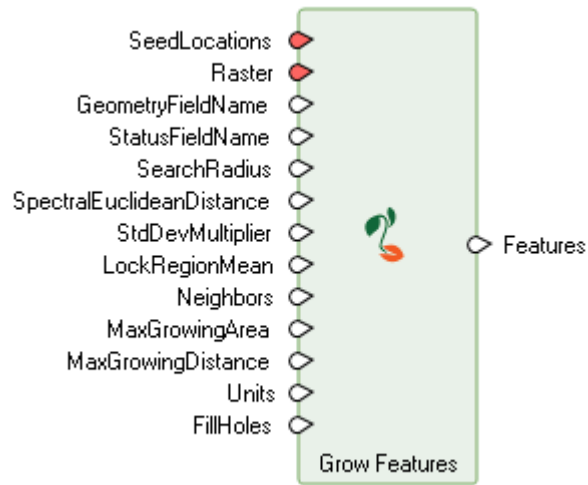
Grow features operator extracts features from raster data and seed pixel(s) by growing the seed pixel(s) into larger regions. Regions are grown by adding neighbouring pixels that are spectrally similar to the seed pixel(s). Each neighbour pixel is evaluated to measure if it is spectrally similar to the seed and, if it is, it is incorporated into the region. The enlarged region then has new neighbours to be evaluated. This process continues until no new neighbours are added to the region being grown (or one of the other growing constraints is met).

The improved region growing algorithm has also been integrated into the 2D Views vector editing tools:
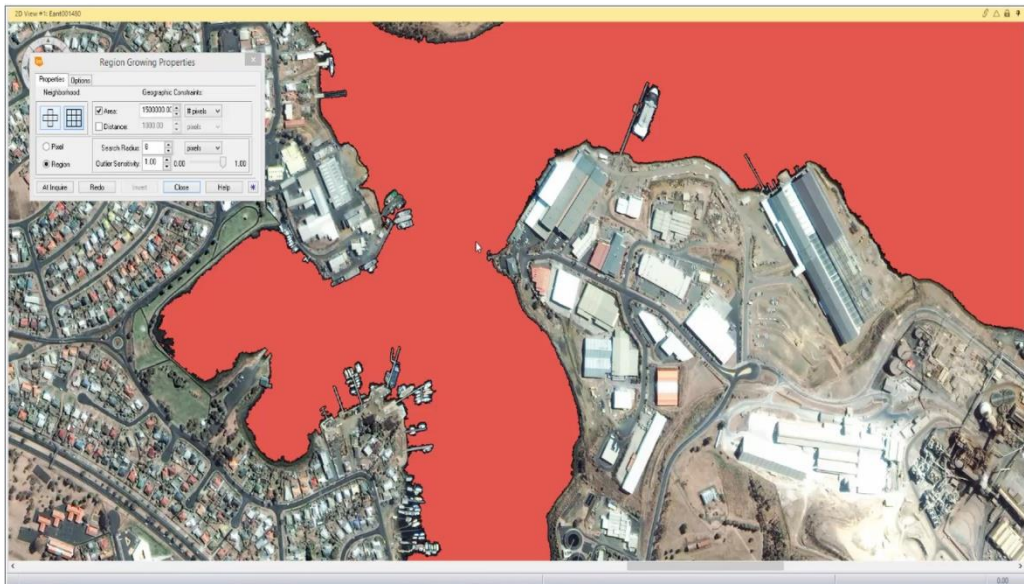
Initialize CART Regressor
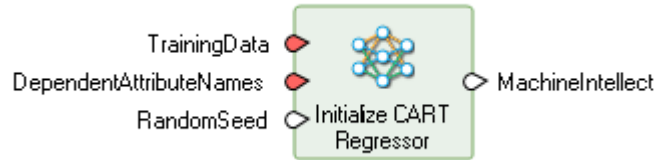
This operator defines and trains a CART regressor that is used as an input for estimating data using the Regression Using Machine Learning operator.

Initialize Random Forest Regressor
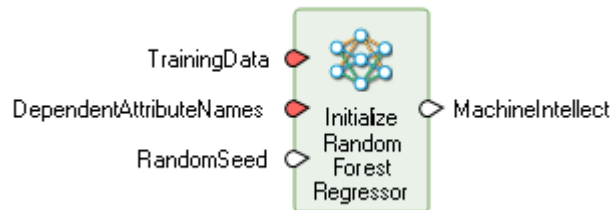
This operator defines and trains a Random Forest regressor that is used as an input for estimating data using the Regression Using Machine Learning operator.

Predict Using Machine Learning
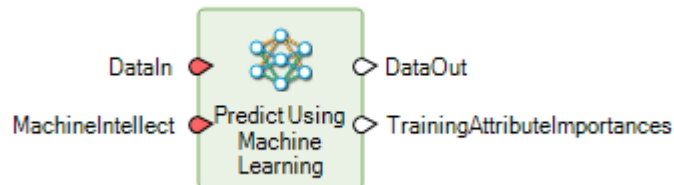
This operator performs regression on the input data using the trained regressor specified on the MachineIntellect port. The input data can be of type IMAGINE.Features or IMAGINE.Raster.

Augment Training Data
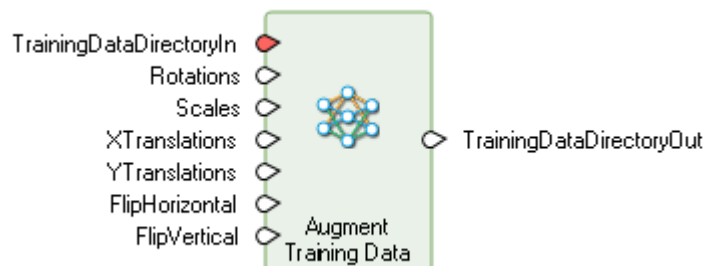
This operator creates additional training data for Classify Using Deep Learning by modifying existing training data. Depending on the selected options, it will produce rotated, scaled, translated and flipped versions of the input training data.

Assess Object Detection Accuracy
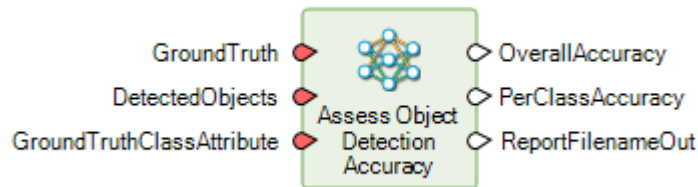
Object detection accuracy assessment is a process in which the result from object detection is compared to ground truth data to measure the agreement between the two. This operator performs accuracy assessment by comparing the rectangular bounding box and class attribute of the objects that represent the ground truth with the objects detected from the object detection.

Densify Geometry
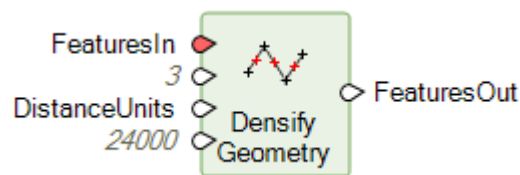
Densify Geometry operator adds vertices to the geometry of the input features using a maximum distance factor. If the distance between two vertices is larger than MaxDistance, a new vertex is inserted halfway between the two vertices. This repeats until no segment between vertices is larger than MaxDistance, or until the output geometry exceeds the size of MaxSize.

Smooth Geometry
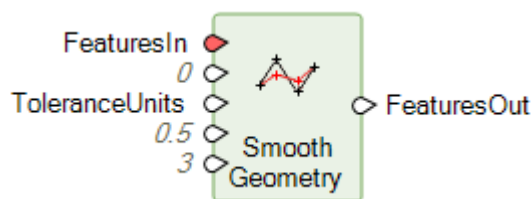
Smooth Geometry operator smooths the geometry of the input features using a weighted-average smoothing algorithm. Smoothing shifts the position of points on a geometry in order to remove small perturbations and capture only the most significant trends. Unlike simplification, smoothing preserves the number of points in a geometry but improves their appearance. The operator offers control over the algorithm through a densification tolerance, look-ahead count, and weighting factor.

Arrange Items
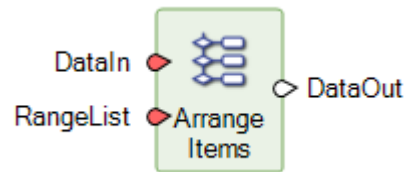
Selects, arranges, and duplicates values from a list or table given the order specified on the RangeList port, to create an output list or table.

Examples:

Given DataIn [-2 , 0 , 2 , 3 , 7 , 8] and RangeList [0 , 1 , 3 , 0 , 3 , 5], DataOut results in [-2 , 0 , 3 , -2 , 3 , 8]

Given DataIn [-2 , 0 , 2 , 3 , 7 , 8] and RangeList [0:2 , 1:4], DataOut results in [-2 , 0 , 2 , 0 , 2 , 3 , 7]

This operator is often used in conjunction with the output created by the Sort Items operator so that a set of values can be ordered in the same manner as another set of values. For example, consider two Tables, one consisting of Class Names and another consisting of the Histogram values associated with those Class Names. If the Class Names Table is sorted alphanumerically, the Table of Histogram values could be re-organized so that the Histogram values are still ordered correctly against their corresponding Class Names by using the Indices output by Sort Items as the RangeList input to this operator.
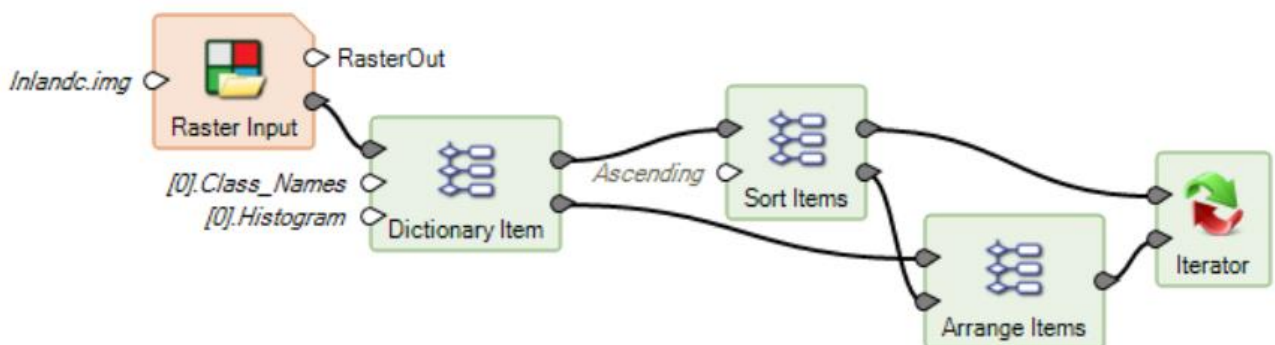
Catch Error
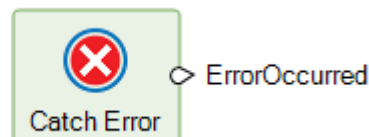
This operator transforms the condition of whether an error occurs in the execution of the contained submodel into a boolean result.

This operator can be useful, for example, in allowing an iterative submodel to execute to completion over a collection of dataset references of uncertain applicability. If the submodel illustrated below were placed into an Iterator fed by a Multi Filename Input operator result, any file names that were not appropriate for the Raster Input operator contained in the Catch Error submodel would end up in the BadFilenameOut list.

Contents of an Iterator operator using Catch Error:
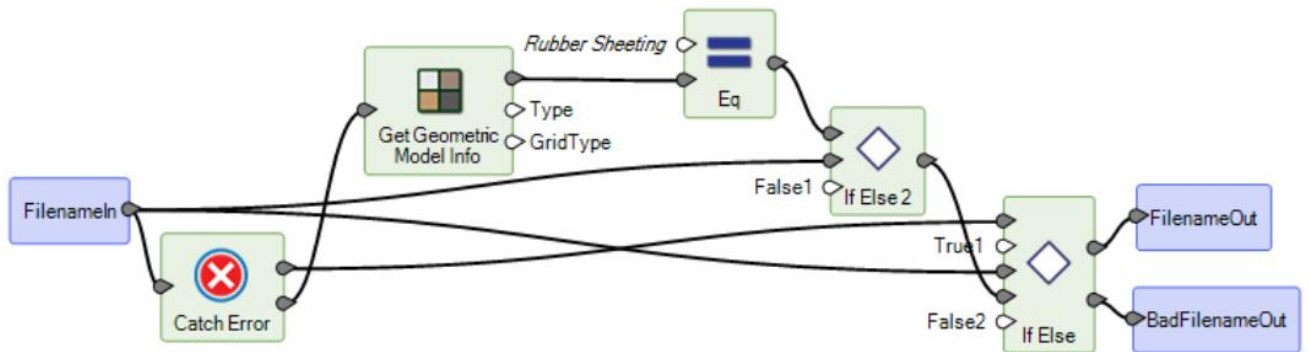
Catch Error submodel:

Color Input
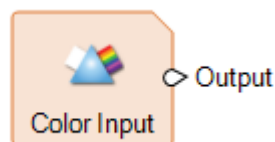
Creates a Color. Double-click the operator to open its configuration dialog. The Color Chooser opens. The Color to be output is placed on the Input port, which is hidden by default.

Combine
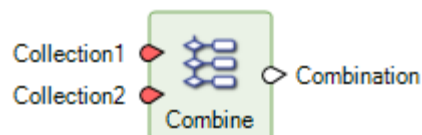
Combines multiple lists into a single list. A new List/Table is created consisting of each element of the Lists/Tables provided, in the order provided (**Collection1'**s element will be followed by **Collection2**'s element, etc.). This is an expandable operator, so you can add as many **Collection** ports as required.

The model below shows how to Combine two Tables together.
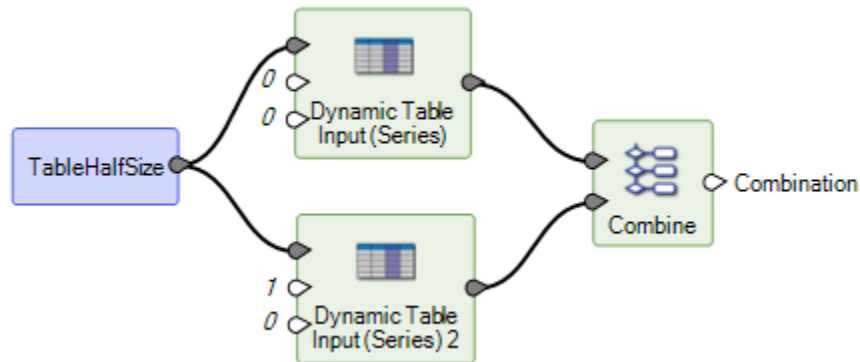
Compute GLCM Texture
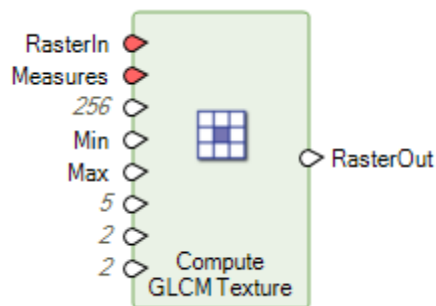
Computes a texture feature for an input image. The specified texture feature is computed from various statistical properties of a per-pixel internally generated gray-level co-occurrence matrix (GLCM).

Texture Computations using a Grey-Level Co-Occurrence Matrix are usually considered to be "second order" measures of texture present in the original image. Traditional texture measures are usually considered "first order" since the texture measures are statistics calculated from the original image values, like variance, and do not consider pixel neighbor relationships. Conversely "second order" measures consider the relationship between groups of two (usually neighboring) pixels in the original image.

Such texture measures are considered highly useful as derived information for input into other processes such as image classification, especially Machine Learning, and other purposes, such as to identify built-up areas in the example below:
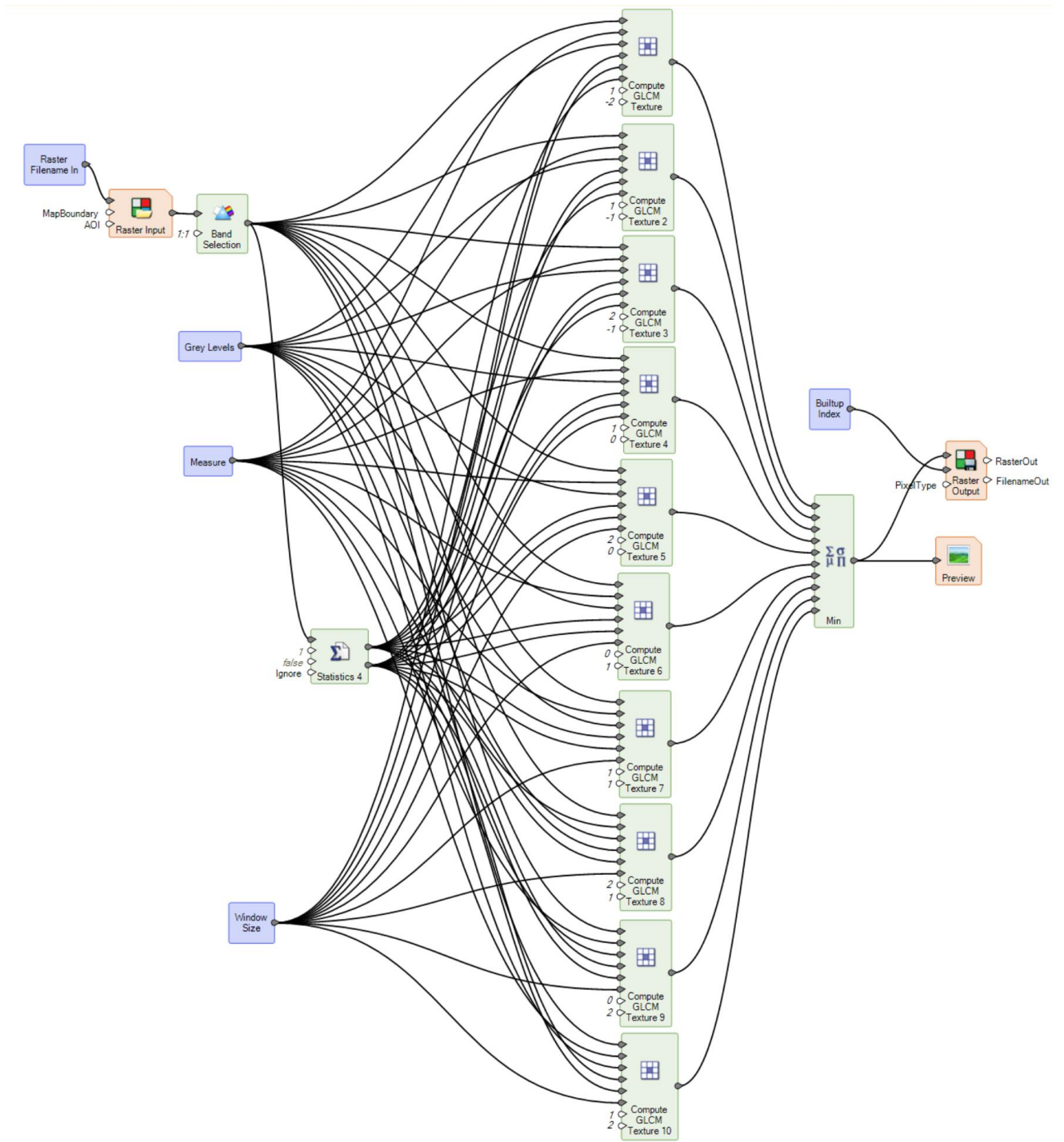
Note that GLCM calculations are highly compute intensive and so benefit from the presence of a GPU-enabled graphics card running OpenCL.

Create Dice Boundaries
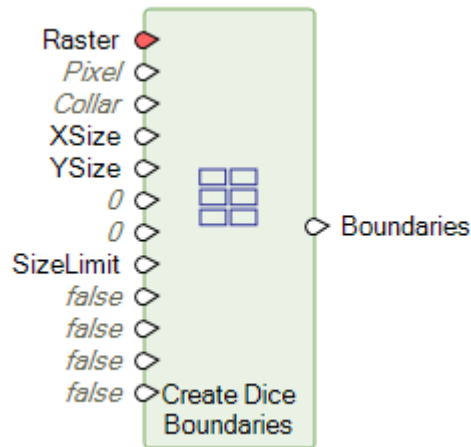
Create Dice Boundaries splits up the boundary of an image into smaller, regularly sized and spaced boundaries that can be used for subsetting. Neighboring new boundaries can overlap each other by an extent specified by the XOverlap and YOverlap ports.

The example Spatial Model shown below uses the Create Dice Boundaries operator to create a regular grid of area polygon geometries over an image, which could then be used for Zonal Change Detection or Deep Learning feature extraction.
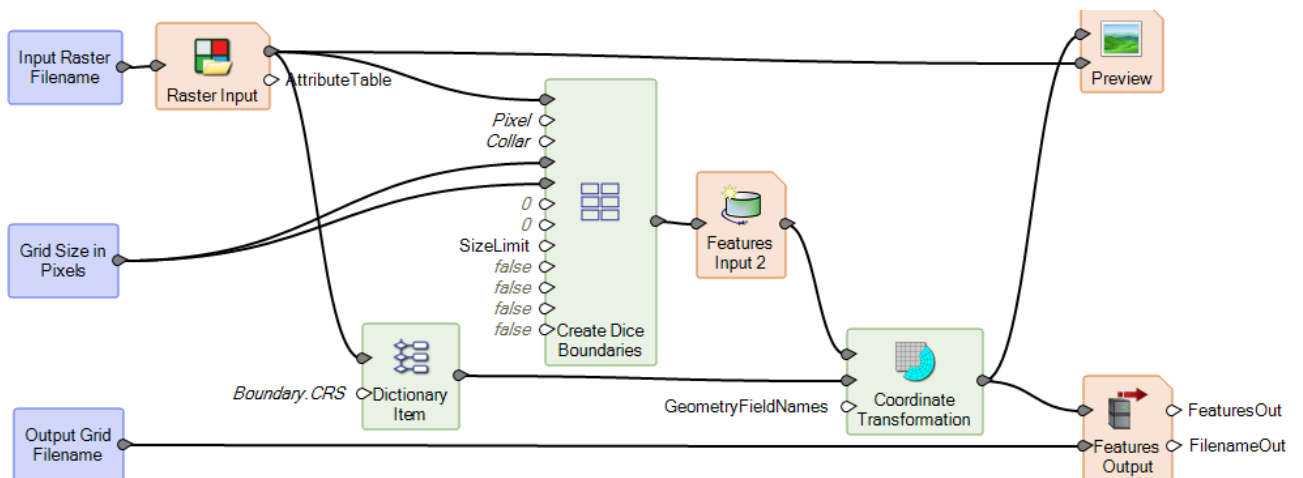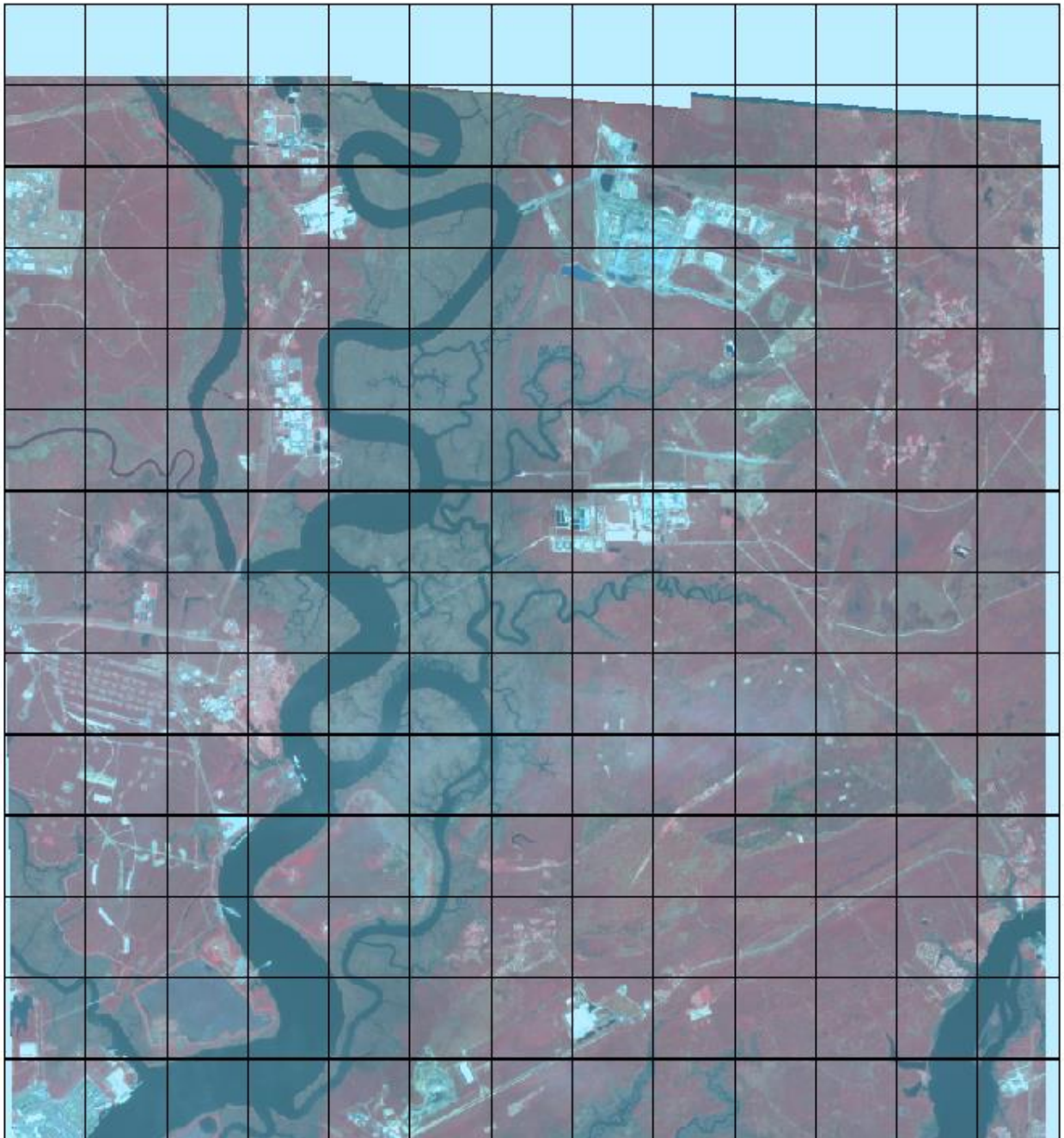
Create Image Pyramid
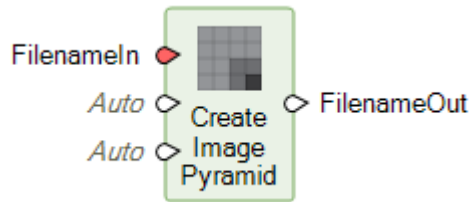
This operator ensures the existence of an image pyramid and statistics for an image dataset.

It produces or verifies the existence of a persistent, optimal sequence of images, each of which is progressively lower in resolution than the preceding image in the sequence. The primary use of an image pyramid is to increase rendering speed and reduce aliasing artifacts when visualizing the image at scales larger than its original resolution.

If you want to ensure that all image pyramids are of the type (Generator) and are created using the downsampling method specified or you want to force new image pyramids to be created, use the Delete Image Pyramid operator ahead of this operator.

It also ensures that image statistics are available for the image. This occurs even if a suitable image pyramid is already present.

One major advantage of this new mode of generating pyramid levels is the ability to create PYRX format pyramid files. These use ECW compression and consequently are not only fast but also take up far less disk space than traditional pyramid file formats.

In the example below, the original satellite image was 713MB in size. Three different formats of pyramid file were generated and the image displayed Fit to Frame. The PYRX pyramid file is 1/10th the size of the other two formats while maintaining display quality.
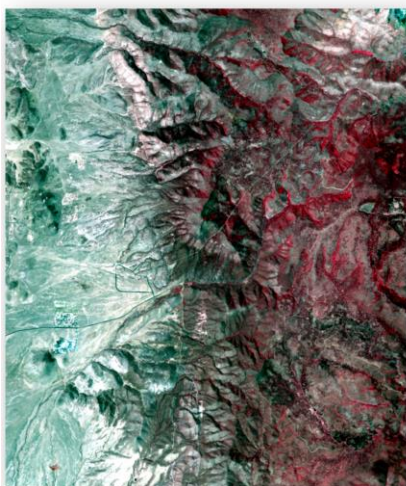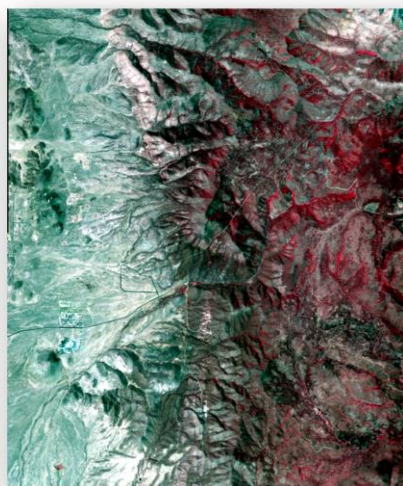
RRD – 248 MB   RSET – 251 MB   PYRX – 25 MB
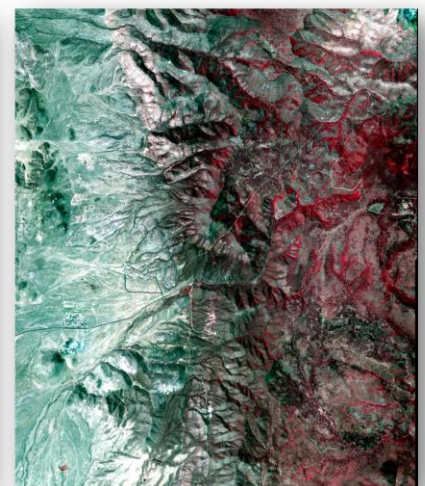
Please note that Create Image Pyramid replaces all the functionality formerly provided by Create RSETs. Create RSETs should no longer be used.

The new modes of generating pyramid files have also been built into the Raster Output operator, Image Commands tool (Home tab > Information group > Metadata pulldown > Edit Image Metadata) for batch creation of pyramids, the Image Metadata dialog (Home tab > Information group > Metadata pulldown > View/Edit Image Metadata), as well as any application that uses Spatial Modeler for performing its processing. The type of Generator used by default, as well as the associated downsampling technique, can be controlled via Preferences.

Note: if routinely running ERDAS IMAGINE 2020 32-bit (as opposed to the 64-bit version) you may encounter errors regarding insufficient memory when processes attempt to create .pyrx formatted pyramid files for larger image files. If this occurs there are two possible workarounds (other than running ERDAS IMAGINE 2020 64-bit):

- In the Preference Editor (File > Preferences) reduce the amount of memory allowed for the Spatial Modeler to run by changing Percentage of Available Memory to Consume to a lower value (such as 30%). This allows the ECW/JP2 Encoding engine more memory to perform the compression

- Or, alter the Pyramid Layer Generator preference from the default setting to "Always use the RRD Pyramid Generator". This effectively sets the software to produce pyramid files in the manner it did prior to the 2020 release.

Delete Image Pyramid
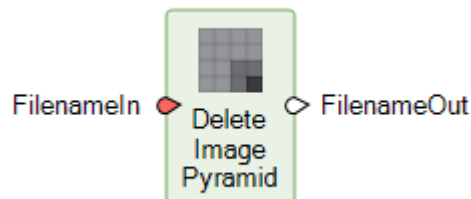
Delete Image Pyramid deletes existing image pyramid from a raster image.

All image pyramids that are discovered will be deleted (if possible). This includes:

- ERDAS Reduced Resolution Dataset (*.rrd)
- Extended compressed image pyramid (*.pyrx)
- NITF RSET
- Minifiles
- GDAL Overviews (*.ovr)

Pyramids that cannot be deleted include:

- Pyramids internal to IMAGINE Image (*.img)
- Pyramids from Wavelet Compression (*.ecw, *.jp2, *.sid)

Enhance Contrast Using CLAHE
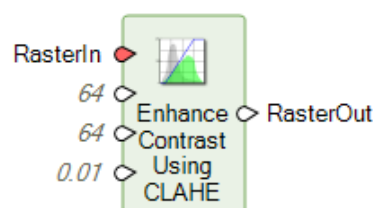
Contrast Limited Adaptive Histogram Equalization (CLAHE) algorithm is a technique used to enhance contrast in images. Traditional Histogram Equalization uses a single transformation derived from the image histogram to transform all pixels. As such it is difficult to derive a single transformation that can balance the contrast in dark, light and mid-tone areas of the histogram, especially when the data being displayed has a dynamic range larger than 8-bit (and the rendering software or display device only supports 8-bits per color channel).

So techniques such as CLAHE were developed to spatially adapt the transformation and reveal the detail in dark and bright areas of a raster while maintaining contrast in mid-tone areas. For example, CLAHE can enhance hidden detail in the shadows cast by large buildings, clouds, etc. In these locations the pixel DN values will be low, but for sensors with 10, 11, 12-bit or greater dynamic ranges there may still be a wide range of values present, but the global look-up table used to render the image to an 8-bit per color channel display bins all those shadow areas into a few dark bins (i.e., low visual contrast). The spatially adaptive nature of CLAHE allows the inherent contrast in these shadow areas to be broadened and brightened to balance with neighboring non-shadow areas.

For example, here's a 12-bit color image with both bright areas and dark shadows that with a standard LUT shows little detail in the shadows:

The screenshot below shows the result of using the Enhance Contrast Using CLAHE operator with a Contrast Retention Factor of 0.2:
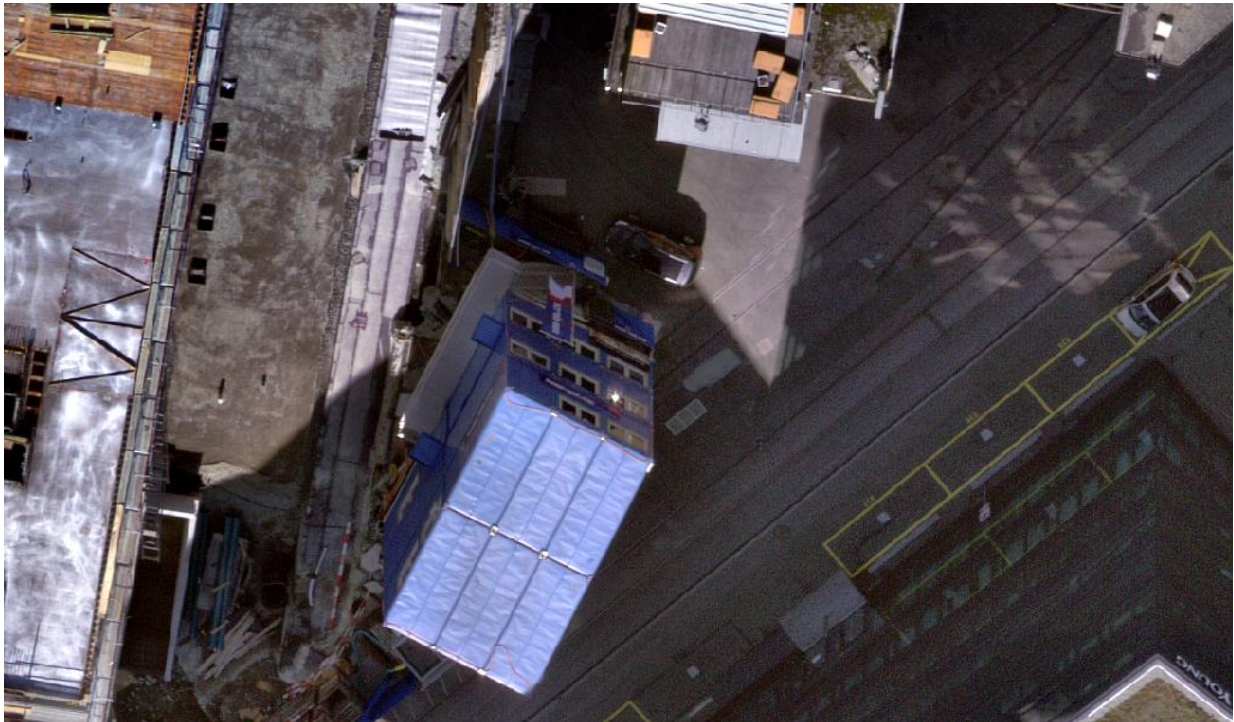
As can be seen, contrast is enhanced in the shadow areas without saturating the already bright areas.

Get TIFF Options
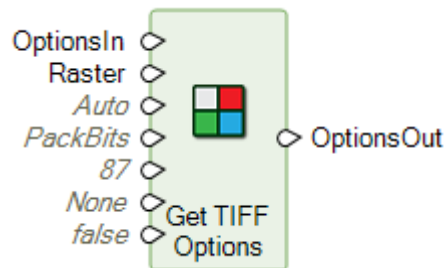
Creates the format specific output option dictionary for Tagged Image File Format (TIFF), which can then be fed to the Raster Output operator to control format-specific output parameters, such as wanting BigTIFF format, an alpha channel persisted, data compression, etc.

Resize Matrix
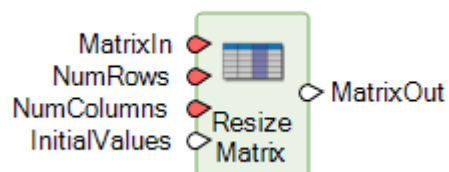
The purpose of this operator is to take an existing Matrix and alter the dimensions of that Matrix by either removing rows and/or columns or adding new rows and/or columns (or any combination thereof). If adding new rows and/or columns, the values to be used in those new cells can be specified. If removing rows, they are removed from the bottom of **MatrixIn**, and if removing columns, they are removed from the right side of **MatrixIn**. Similarly, if adding rows, they are added to the bottom of **MatrixIn**, and if adding columns, they are added the right side of **MatrixIn**.

If extending **MatrixIn** in one dimension only (either rows or columns), you may supply a Matrix for **InitialValues**. If extending the number of rows, the Matrix provided for **InitialValues** must have the same number of columns as **MatrixIn**. It may have either a single row or as many rows as are being added to the Matrix. If it contains a single row, all rows being added to the Matrix are filled with the single row. If extending the number of columns, the Matrix provided for **InitialValues** must have the same number of rows as **MatrixIn**. It may have either a single column or as many columns as are being added to the Matrix. If it contains a single column, all columns being added to the Matrix are filled with the single column.

Examples using a **MatrixIn** with five rows and nine columns:

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix}$$

- Setting **NumRows** of 8 and **NumColumns** of 14 will extend the Matrix by three rows and five columns and set the new cells to **InitialValues**, which must be a Scalar. If **InitialValues** is -1, **MatrixOut** would be

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 \end{bmatrix}$$

- If **InitialValues** is a Matrix with one row and nine columns,

$$\begin{bmatrix} 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \end{bmatrix}$$

column 0 of the added rows will be set to the value in cell 0,0 in the **InitialValues** Matrix, column 1 of the added rows will be set to the value in cell 0,1 in the **InitialValues** Matrix, etc. **MatrixOut** would be

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \\ 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \\ 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \end{bmatrix}$$

- If **InitialValues** is a Matrix with three rows and nine columns,

$$\begin{bmatrix} 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 \\ 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 \\ 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 \end{bmatrix}$$

the first added row will be set to the values in row 0 of the **InitialValues** Matrix, the second added row will be set to the values in row 1 of the **InitialValues** Matrix, and the third added row will be set to the values in row 2 of the **InitialValues** Matrix. **MatrixOut** would be

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 \\ 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 \\ 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 \end{bmatrix}$$

Resize Table
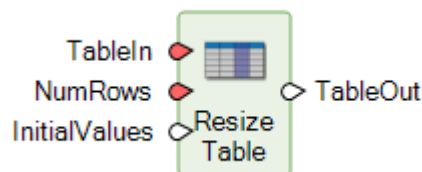
Adjusts the number of rows in a Table (up or down). The InitialValues port takes a Table as input and so this operator can be used to append Tables together.

Set Matrix Values
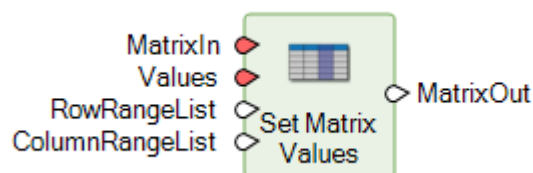
The purpose of this operator is to take an existing Matrix and modify specific cells of that Matrix with user-specified values.

If only **RowRangeList** or **ColumnRangeList** is provided (the cells in all columns of one or more rows or all rows of one or more columns are being set), you may supply a Matrix for **Values**. If only **RowRangeList** is provided, the Matrix provided for **Values** must have the same number of columns as **MatrixIn**. It may have either a single row or as many rows as are specified in **RowRangeList**. If it contains a single row, all rows specified in **RowRangeList** will be filled with the single row. If only **ColumnRangeList** is provided, the Matrix provided for **Values** must have the same number of rows as **MatrixIn**. It may have either a single column or

as many columns as are specified in **ColumnRangeList**. If it contains a single column, all columns in **ColumnRangeList** will be filled with the single column.

Note that both **RowRangeList** and **ColumnRangeList** are 0-based indices. I.e. the first row is row 0, the second row is row 1, etc.

Examples using a **MatrixIn** with five rows and nine columns:

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix}$$

- Setting a **RowRangeList** of 1:1,3:4 (three rows) and **ColumnRangeList** of 2:4 (three columns), will set the cells at 1,2, 3,3, and 4,4 to **Values**, which must be a Scalar. If **Values** is -1, **MatrixOut** would be

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & -1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & -1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & -1 & 1 & 1 & 1 & 1 \end{bmatrix}$$

- **RowRangeList** of 2:4 with no **ColumnRangeList** will set all cells in rows 2, 3, and 4 to **Values**. **Values** may be either a Scalar, a Matrix with one row and nine columns, or a Matrix with three rows and nine columns.

  If **Values** is a Scalar, all cells in rows 2, 3, and 4 will be set to that value. If **Values** is -1, **MatrixOut** would be

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 & -1 \end{bmatrix}$$

- If **Values** is a Matrix with one row and nine columns,

$$\begin{bmatrix} 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \end{bmatrix}$$

  column 0 of rows 2, 3, and 4 will be set to the value in cell 0,0 in the **Values** Matrix, column 1 of rows 2, 3, and 4 will be set to the value in cell 0,1 in the **Values** Matrix, etc. **MatrixOut** would be

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \\ 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \\ 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \end{bmatrix}$$

- If **Values** is a Matrix with three rows and nine columns,

$$\begin{bmatrix} 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 \\ 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 \\ 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 \end{bmatrix}$$

row 2 will be set to the values in row 0 of the **Values** Matrix, row 3 will be set to the values in row 1 of the **Values** Matrix, and row 4 will be set to the values in row 2 of the **Values** Matrix. **MatrixOut** would be

$$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 \\ 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 \\ 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 \end{bmatrix}$$

Set Table Values
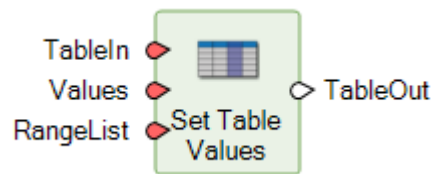
Set Table Values sets the values of specified rows in a Table.

If the same row number is specified multiple times in **RangeList**, the value of that row in the Table will be set each time. That means that if **Values** is a Table, the value of that row in **TableOut** will be what it was set to the last time that row was specified in **RangeList**. For example, if **TableIn** is [83,208,180,96,45,234], **RangeList** is [1:3,1:1] and **Values** is [34,27,160,69], **TableOut** will be [83,69,27,160,45,234].

Sort Items
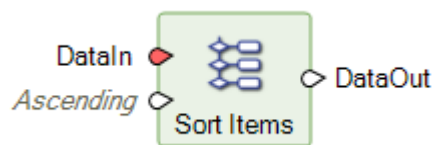
Takes a List or Table and creates a List or Table of values and a List of indices (0-based), which are sorted via the specified **Order** (Ascending/Descending).

For example:

- Ascending order. Given **DataIn** [15,12,17,13], **DataOut** is [12,13,15,17] and **Indices** is [1,3,0,2]
- Descending order. Given **DataIn** [15,12,17,13], **DataOut** is [17,15,13,12] and **Indices** is [2,0,3,1].

The output Indices are used in conjunction with the Arrange Items operator so that a set of values can be ordered in the same manner as another set of values. For example, consider two Tables, one consisting of Class Names and another consisting of the Histogram values associated with those Class Names. If the Class Names Table is sorted alphanumerically, the Table of Histogram values could be re-organized so that the

Histogram values are still ordered correctly against their corresponding Class Names by using the Indices output by this operator as the RangeList input to the Arrange Items operator.

Update Image with RPCs
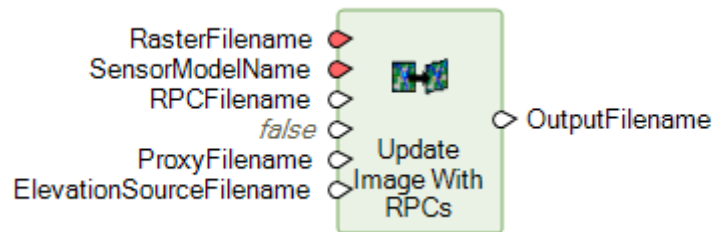
Some image format readers do not automatically recognize the associated Rational Polynomial Coefficient (RPC) information. In this case, the user must manually geometrically calibrate (update) the RPC information to the image so that ERDAS IMAGINE can use that information to accurately georeference the data. This operator uses the RasterFilename and SensorModelName to locate and use an RPC file to update the image.

The optional RPCFilename is offered as an input in case the operator fails to automatically locate the file.

Updated Operators

Classify Using Machine Learning
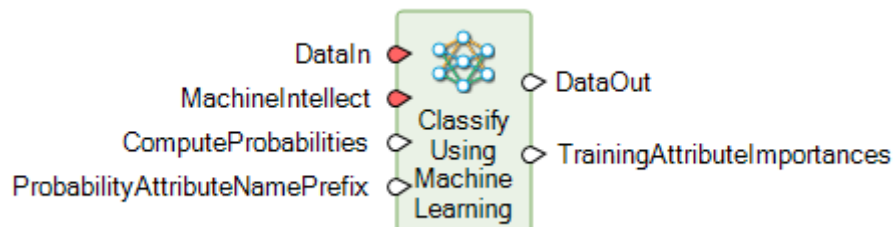
A new output port called TrainingAttributeImportances has been added. When the operator is run, this port produces a dictionary containing the names of the attributes used for classification and their associated importance to the classification. These values range from 0 to 1 and the summed importance of all training attributes is defined to be 1. If MachineIntellect does not support this output measure, all importances are equal to 1/<number of training attributes>.

The importance values can be extremely useful in identifying the most important input variables contributing to successful classifications (and perhaps more importantly in identifying the unimportant variables so they can be excluded from later classifications, making the classification process more efficient).

Initialize Naïve Bayes
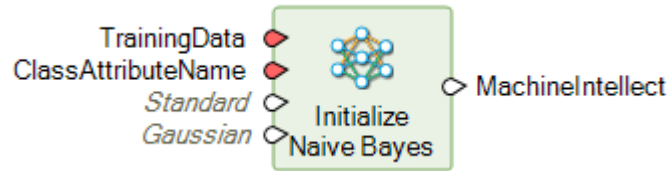
This operator defines and trains a Naive Bayes classifier that is used as an input for classifying data using the Classify Using Machine Learning operator.

A new input port called TrainingAttributesScaling can be used to scale the training attribute values to a similar range. Scaling may improve training speed and classification accuracy.

Orthorectify
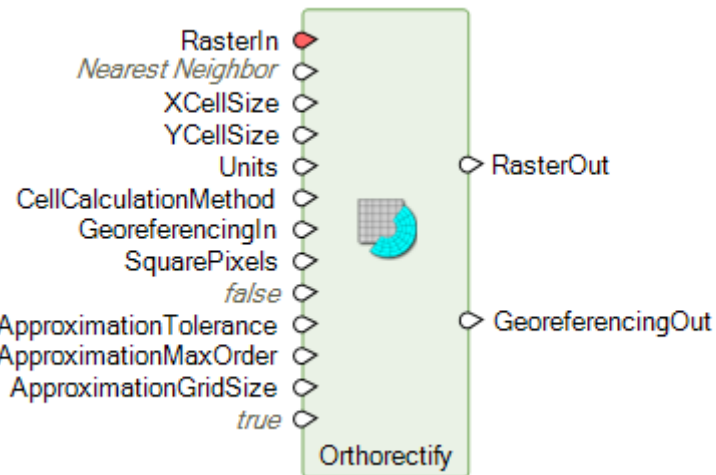
Data in a raster stream may be georeferenceable rather than being georectified (in older parlance, the data is geometrically calibrated with a 2D or 3D geometric model as opposed to being rectified to a projected coordinate system). Under normal circumstances, Spatial Modeler will maintain the georeferenceable state, but some workflows might require that a georeferenceable raster be persisted in its georectified state. The Orthorectify operator fulfils this role.

In ERDAS IMAGINE 2020 the Orthorectify operator has been updated with a number of new ports in order to combine functionality that previously required use of a Warp operator.

- CellCalculationMethod
- AllowApproximation
- ApproximationTolerance
- ApproximationMaxOrder
- ApproximationGridSize
- UsePyramids

Set to NoData
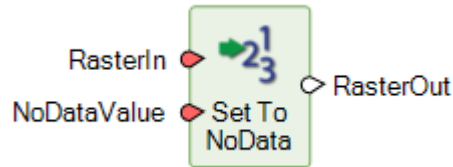
The input NoDataValue port now accepts a Raster as input. This is useful for using one raster layer to mask another.

If the input to NoDataValue is Scalar, the input raster stream is filtered so that every pixel value that matches the value specified on the NoDataValue port is marked as NoData in the output raster stream.

If the input to NoDataValue is Raster, pixel locations in that raster that are marked as NoData are marked as NoData in the output raster stream. Note that areas outside the raster extent of the NoDataValue raster are considered NoData.

Any pixels in the input raster stream that were already marked as NoData remain marked as NoData. The original value of pixels marked as NoData is not maintained.

Shared Operators

The following operators are licensed for use by licensed users of IMAGINE Advantage, IMAGINE Professional, GeoMedia Advantage, and GeoMedia Professional.

Spatial Models using these operators will not be executable using IMAGINE Essentials or GeoMedia Essentials.

Accumulate Flow
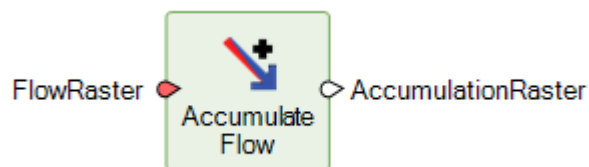
The Accumulate Flow operator is part of a collection of grid operators used for hydrological analysis. It takes a FlowRaster and computes the flow accumulation for the entire surface.

The AccumulationRaster produced by the Accumulate Flow operator contains data where each pixel value indicates the total number of pixels that contribute to the flow into that pixel. Pixels with a value of zero indicate headwater pixels (pixels that have no inflow, only outflow). Pixels with a value of NoData indicate no flow. The AccumulationRaster can be used as part of hydrological analysis workflows to identify river/stream networks or to identify drainage outlets, which can be used to find watershed (drainage basin) areas.

Calculate Flow
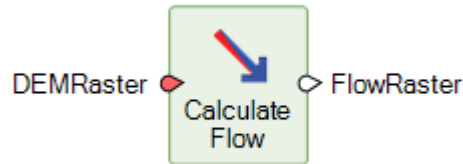
Calculate Flow operator is part of a sequence of operators to identify drainage networks and watersheds.

Calculate Flow operates on a Raster of continuous surface elevation data, such as a Digital Elevation Model (DEM). It generates a FlowRaster where each pixel value represents the direction that runoff would flow (in effect, the steepest slope) over the terrain.

For each pixel, the slope of the line segment connecting the center of the pixel with the centers of the eight adjacent pixels is computed, taking both horizontal and vertical distance into consideration. The horizontal distance between the pixel center and the centers of the four directly adjacent pixels is equal to the pixel resolution. The horizontal distance between the pixel center and the centers of the four diagonally adjacent pixels is equal to the square root of two times the pixel resolution.

Runoff is assumed to flow in the direction of the steepest downhill slope. "Ties" are allowed, that is, runoff can flow in more than one direction. Result pixel values indicate flow direction.

For the purpose of hydrological analysis, one should first run the Fill Depressions operator on the DEMRaster to create a depression-less surface. This depression-less surface when used as the input DEMRaster to the Calculate Flow operator will produce a FlowRaster with no ambiguous flow. This new FlowRaster can then be used as input to the Accumulation Flow operator.

Fill Depressions
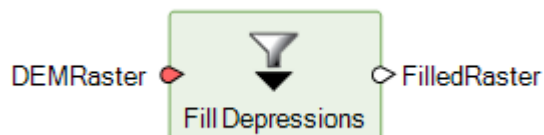
Fill Depressions operator is part of a collection of raster operators for hydrological analysis. It can be used as part of a sequence of raster operators to identify drainage networks and watersheds.

Fill Depressions operates on a Raster of continuous surface elevation data, such as a Digital Elevation Model (DEM). It generates a FilledRaster where minor depressions in the surface have been removed.

Find Watersheds
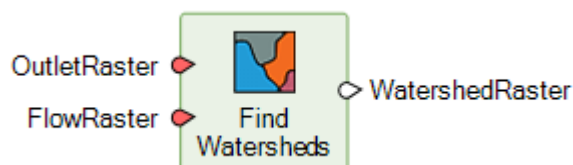
In hydrological analysis, a watershed, or drainage basin, is defined as an area of land where all water (rainfall, streams, rivers, etc.) drains to a common outlet. Watersheds can be small, as in the area of land that drains

into a single reservoir or into a single stream segment, or large, as in the area of land that drains into the mouth of a major river. The Find Watersheds operator is part of a collection of raster operators used for hydrological analysis. It uses a FlowRaster to find the watershed areas where water drains to common flow outlets identified by the OutletRaster.

FlowRaster must contain data that indicates the downhill drainage flow direction for each cell.

OutletRaster contains data that uniquely identifies the common flow outlets for which watershed areas are to be found. The pixels that define a common flow outlet for a watershed should be assigned the same integer value. OutletRaster can define common flow outlets for multiple watersheds and each should be assigned a unique integer value. All pixels that do not define watershed flow outlets must be assigned to NoData. OutletRaster can define common flow outlets as a single or small set of pixels at the mouth of a stream or river, as a linear set of pixels defining a stream network or stream segments, or as clumps of pixels defining ambiguous flow zones.

WatershedRaster produced by the Find Watersheds operator contains data showing the watershed areas found for each uniquely identified common flow outlet defined in the OutletRaster. The pixels that define a watershed area are assigned the same integer value as its associated common flow outlet pixels. All pixels that are not assigned to a watershed are set to NoData.

Interpolate Using IDW
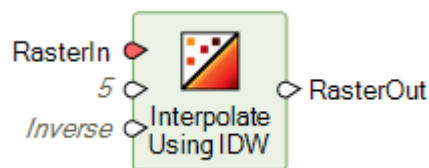
Interpolate Using IDW performs an interpolation function that uses an Inverse Distance Weighting (IDW) algorithm to attempt to create a continuous raster data set from data that is incomplete. It computes values for NoData locations based on neighboring pixels with values.

The operation works best with semi-continuous data such as contours or remote sensing imagery with gaps. For very sparse point data such as spot heights, geological surveys, clustered data, and random points, apply a kriging process to interpolate a continuous data set. Interpolate Using IDW should be used when processing the following scenarios:

- For height density and/or regular spaced data points, such as elevation data, temperature data, rainfall data, or data from any continuously varying surface.
- To fill in small gaps in satellite data, airphoto mosaics, or Digital Elevation Model (DEM) mosaics.
- When there is a low degree of confidence in the exactness of the original data.
- To create a DEM from contour or ridge-and-channel data.

Format Support

Cloud Optimized GeoTIFF

ERDAS IMAGINE 2020 enables access to public and private Amazon S3 cloud storage services via the Retriever pane. One of the most effective formats to use via these services is the Cloud Optimized GeoTIFF (COG) format.

Data accessed in this manner can be used in Spatial Model Editor or displayed via Image Chain.
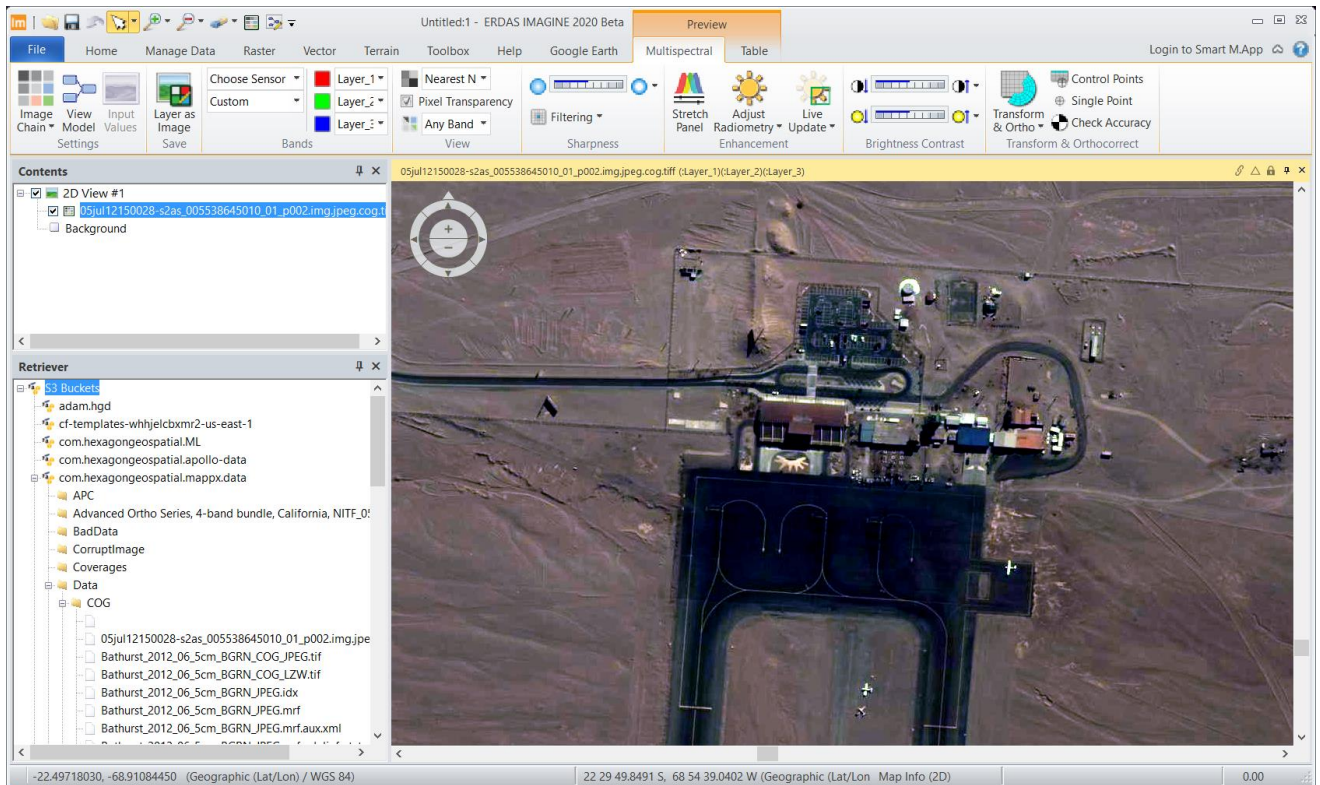
MIE4NITF

Time-series datasets are now being stored and delivered in the MIE4NITF standard. This can consist of hundreds, even thousands, of individual image frames stored in a NITF.

ERDAS IMAGINE 2020 has been enhanced to enable opening multiple MIE4NITF frames into tools such as the Flicker tool in order to "play" the time-series, as well as being able to open individual frames for further exploitation.
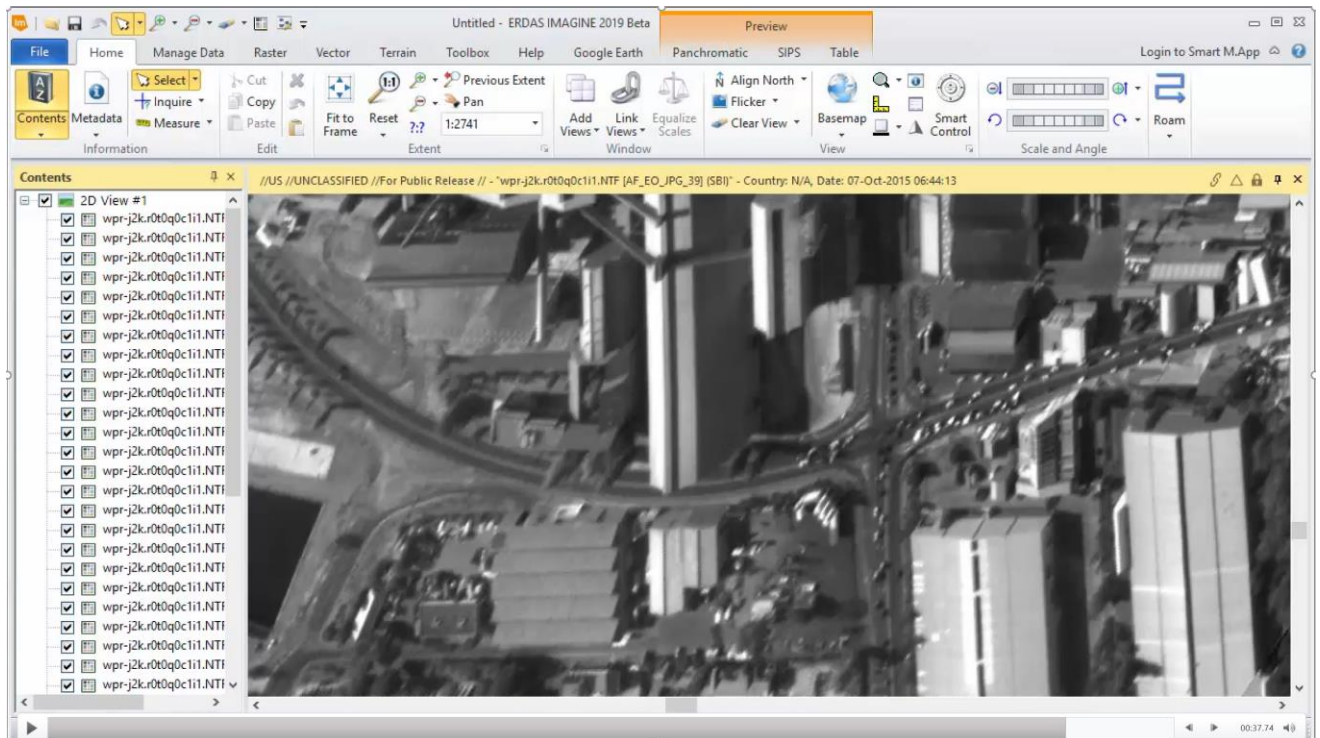
GeoPackage

Spatial Modeler and the Image Chain are capable of reading raster data stored in the popular GeoPackage format. Vector features can also be accessed through the Spatial Modeler.
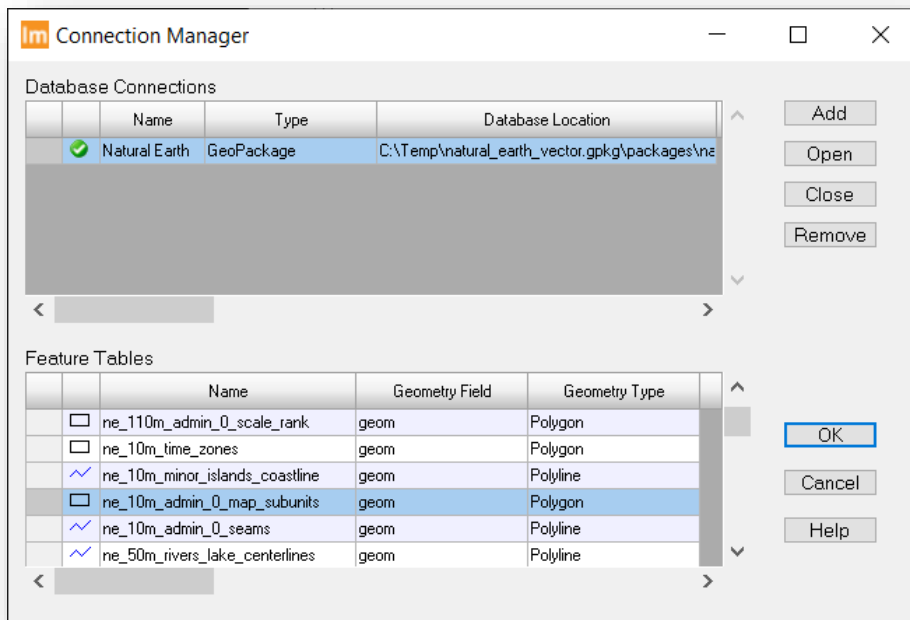
Luciad Terrain Service

Luciad Terrain Services from LuciadFusion can be consumed in ERDAS IMAGINE as standard raster data sources, enabling their use for orthocorrection and other purposes.
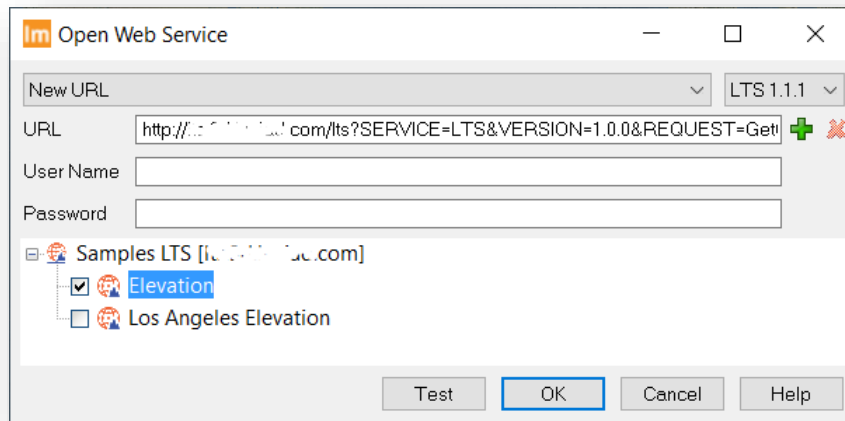
NetCDF

Spatial Modeler and the Image Chain are capable of reading raster data in the NetCDF format.

WMS display optimizations

ERDAS IMAGINE's 2D View works largely on the basis of pulling tiles from the source data for display. These tile requests (which cover an extent larger than the extent of the 2D View) appear to be causing WMS servers problems when they are expecting to return just one tile covering the entire desired extent.

Consequently, for ERDAS IMAGINE 2020 we have introduced a second display mode/option for use with all WMS data layer types. This option is presented as a checkbox button in the Ribbon interface called "Continuous Roaming" and defaults to Off (that is, the new behavior).

Turning this checkbox on will result in requests to the WMS server being for tiles rather than for the View extent. The benefit of turning the mode on is that tile requests can be sent and data rendered to screen while the extent is being panned or zoomed (for example, while the middle mouse button is still held down and the data being dragged). The downside is that the overall time to fill a View extent may be longer.

Conversely if the mode is off (that is, the new behavior), the data request is only for the extent of the current View. This can be returned and rendered faster than with tiles. However the downside is that the request can only be sent when the roaming / zooming action stops (for example, when the middle-mouse button is released when panning, or the Auto Roam mode is stopped or paused). So while the data is being actively "moved", you will see black around the prior data extent until you release the mouse. But for WMS layers the impression is generally that of increased performance.

General ERDAS IMAGINE

Image Chain Printing

Imagery that has been displayed using the Image Chain can now be included into Map Compositions, sent to print devices and included in Send To… operations (Send to PowerPoint, Send to JPEG, Send to Geospatial PDF, etc).

Optimal Seamline Generation

Seamline generation is a crucial step in the mosaicing workflow to create seamless image mosaics. Images to be mosaiced usually have radiometric inconsistences and/or unresolved geometric misalignments. Seamlines are generated with a goal of avoiding such areas of radiometric inconsistency and large misalignments so that the resulting mosaic look seamless.

A new seamline generation option that uses graph cut energy minimization framework to achieve the above stated goal is added in MosaicPro. Pixel values and gradients are employed as cost functions and graph cuts used to find the optional seamlines between/among images.

3Dconnexion SpaceMouse Pro

Support for the 3Dconnexion SpaceMouse Pro as a digitizing device is added for Viewplex based stereo viewers (Stereo Point Measurement tool, Terrain Editor, ORIMA, and PRO600) providing you with an additional input device choice.

Copy Selected Breaklines

A new breakline editing capability that lets you copy an existing Breakline and place the copy at a specified offset from the selected Breakline is introduced in Terrain Editor. The capability can be accessed from the Terrain Editor Operators drop down menu, which is available in the Terrain Editing Panel.
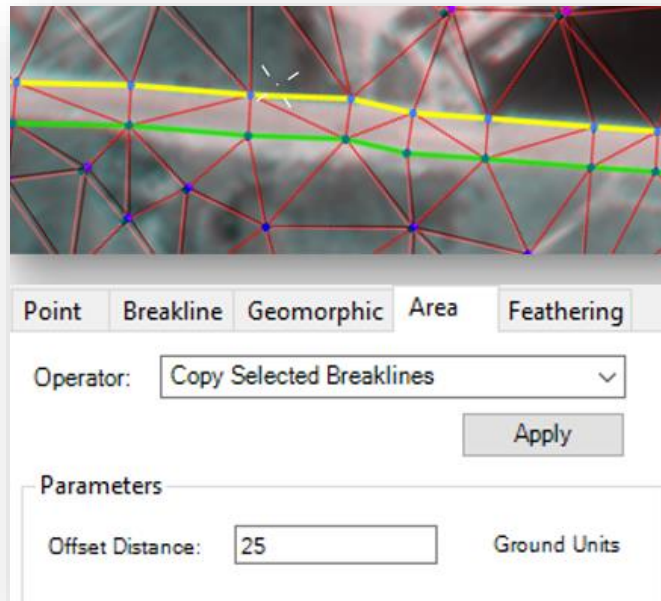
Editing Breakline Vertices

Breakline vertex editing capability is enhanced. Breakline vertices can now be edited in the same way as editing mass points. Selecting the breakline that the vertex is part of is no longer necessary.

Dynamic update of Contours during Breakline editing

Contours are now dynamically updated as breaklines are being edited, giving users an immediate feedback of the effects of the edits that is being made. Prior to ERDAS IMAGINE 2020, contours get dynamically edited while points are being edited, but were not updated when editing a breakline until the editing until the breakline is completed. With this update, contours are dynamically updated when either points and/or breakline are being edited.

Consistent Style Library locations

ERDAS IMAGINE 2020 now looks for style libraries *only* in the associated subdirectories of the etc directory in each of our "hives" ($PERSONAL, C:/ProgramData/ERDAS/ERDAS IMAGINE 2020, $IMAGINE_HOME). The software no longer looks directly in $PERSONAL or etc or in the sub-directories outside of etc (e.g. $IMAGINE_HOME/Colors or $PERSONAL/LineStyles).

- Arrow styles: etc/Arrows
- Colors: etc/Colors
- Fill styles: etc/FillStyles
- Line styles: etc/LineStyles
- Symbols: etc/symbols
- Text styles: etc/TextStyles

If you have customized style libraries stored in any of the old locations you need to move them to the new locations in order to use them in ERDAS IMAGINE 2020 or later.

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	• 6 GB for software • 7 GB for example data • Data storage requirements vary by mapping project[1]
Operating Systems [2, 3]	• Windows 10 Pro (64-bit) [4] • Windows Server 2016 (64-bit) • Windows Server 2019 (64-bit)
Software	• OpenGL 2.1 or higher (this typically comes with supported graphics cards[5]) • 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 3.6.x or 3.7.x (Python is optionally usable with Spatial Modeler). • Microsoft DirectX® 9c or higher • .NET Framework 4.0 • OpenCL 1.2 with a device that supports double precision (cl_khr_fp64) if wanting to GPU accelerate NNDiffuse and other Operators • An NVIDIA card with CUDA capabilities is recommended for use with Deep Learning
Recommended Graphics Cards for Stereo Display	• NVIDIA® Quadro® K5200, K5000, K4200, K4000, K2200, K600, K420 [6]
Recommended Stereo Display Monitors	• 120 Hz (or above) LCD Monitors with NVIDIA 3D Vision™ Kit, or 3D PluraView system from Schneider Digital [7]
Peripherals	All software installations require: • One Windows-compatible mouse with scroll wheel or equivalent input device • Printing requires Windows-supported hardcopy devices [8] Software security (Hexagon Geospatial Licensing 2020) requires one of the following: • Ethernet card, or • One USB port for hardware key Advanced data collection requires one of the following hand controllers: [9] • 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	• ERDAS IMAGINE can be safely installed on a computer that has GeoMedia 2018 or GeoMedia 2020 installed. However, for greatest compatibility, it is highly recommended to install matching versions (including Updates). • ERDAS IMAGINE 2020 requires GeoMedia 2020 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 10.6 through 10.7.1. • ERDAS IMAGINE and IMAGINE Photogrammetry can interact with ArcGIS Server 10.6 – 10.7.1 Geodatabase servers (ArcSDE). To read or interact with an Enterprise Geodatabase, you must either: • Install and license the appropriate version of ArcGIS for Desktop versions 10.6 through 10.7.1, OR • Install the IMAGINE Geodatabase Support (based on ArcEngine 10.7) - requires no license
Database Engines	• PostgreSQL 9.6 with PostGIS 2.3: PostGIS can be used to store GeoMedia Features (.pfp) • Oracle Server 12c 12.2 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 2017 64-bit: Microsoft SQL Server 2017 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-21970	ERDAS IMAGINE is creating gaps between images when zooming out (lost blocks) - caused by 3x3 pyramid algorithm	Customer reported that ERDAS IMAGINE 2014 v14.1 is creating gaps between multiple images in the viewer when zoomed fully out. The customer's images are 8-bit IMG files. When zooming in, the gap between images disappears. Gaps are not visible when creating pyramid layers by using 2x2 kernel, but are visible when using a 3x3 kernel.
IM-39368	Viewer ERROR: bad allocation associated with large volume of image color table attributes	Viewer does not handle images associated with a large number of attributes (i.e. color table). Test file displays with color scheme and without error in v10.1 & v11.0.5. Gets the bad allocation error in v13.0.2. Thematic input has 25 million rows and displays initially without error. The attribute table (with no color scheme) is displayed fine (except for scrolling to the very bottom). Get an error when trying to add colors from the view. Successfully added colors and class names using standalone raster attribute editor. Image is redisplayed fine after that. It apparently used the cache; it was still gray. Exited ERDAS IMAGINE, restarted, displayed the file. Colors are seen but now a "bad allocation" error is generated. 08/07/14 09:35:09 SessionMgr(8668): ERROR: #2606 from erdas::viewerApp::ViewerControl::QueryAndOpenFile 08/07/14 09:35:09 SessionMgr(8668): ERROR: bad allocation
IM-41039	Unable to load Chinese or Arabic named data from Recent button	1. Launch ERDAS IMAGINE 2018, 64-bit (bld:491) 2. Load the data using Chinese characters in the filename 3. Clear the viewer and try to reload the data from Recent button on the File chooser, from quick access tool bar. 4. Observe that a warning thrown saying Data could not be found or invalid.
IM-48233	New ribbonized Inquire Cursor is not recognized by applications such as Region Growing Properties tool	The "At Inquire" button in the Region Growing Properties tool only works with the legacy Inquire Cursor. If the new ribbonized Inquire Cursor is active in a 2D View and the user clicks the "At Inquire" button in the Region Growing Properties tool a warning message is displayed that states "No Inquire Cursor in Window". Steps to reproduce the problem: # Display the attached image in a 2D View # Activate the Inquire Cursor (Home tab > Information group > Inquire) # Open the Region Growing Properties tool (Drawing tab > Insert Geometry group > Grow menu > Growing Properties) # Click the "At Inquire" button in the Region Growing Properties tool. # A message pops up warning "No Inquire Cursor in Window".
IM-46524	Elevation values messed up when Basemap removed from 2DView	Steps to reproduce: # Display lanier.img in a 2DView. # Left-click in the Elevation Part of the status bar and select Use Elevation Library. # Move the cursor around in the 2DView and notice that the elevation is around 350 meters. # Open the OpenStreetMap basemap in the 2DView containing lanier.img. # Move the cursor around in the 2DView and notice that the elevation is still around 350 meters. # Right-click on Basemap in the TOC and Remove Layer. # Move the cursor around in the 2Dview and notice that the elevation is now WAY below sea level (negative).

IM-46446	Elevation units are wrong in measure tool if target units are changed	Steps to reproduce # Display and image in the 2DView. # Set the view's elevation source to "Use Elevation Library" and set the units to "feet". # Move your cursor around over the image and verify that the status bar is showing you the elevation in feet. # Start the measure tool. # Measure a Point. # See that the elevation is shown in the Point Measurement Description, but, although the value is in feet, the units say "meters."
IM-46523	Elevation part of status bar does not remember or use the proper vertical units for saved elevation sources	Steps to reproduce: # Open lanier.img in a 2DView. # Click in the Elevation Part of the status bar and select Use Elevation Library. # Click in the Elevation Part of the status bar and select "Show in Feet". # Move the cursor around in the 2DView and notice that the elevation is around 1200 feet. # Open lndem.img in Image Metadata and verify that it has Elevation Info and the Elevation Units are "feet". # Click in the Elevation Part of the status bar and select Choose Elevation Source # Select lndem.img as the Source File. # Change the Input vertical units to "feet". # Click OK. # Move the cursor around in the 2DView and notice that the elevation still shows around 1200 feet. # Click in the Elevation Part of the status bar and select Use Elevation Library again. # Move the cursor around in the 2Dview and notice that the elevation now shows around 350 feet. You can get the same problem switching between any two previously-used elevation sources with different vertical units.
IM-46522	Elevation Source Selector for 2D View should initialize input vertical units from Elevation Info	Steps to reproduce: # Open lndem.img in imageinfo and verify that it has Elevation Info and the Elevation Units are "feet". # Open lanier.img in a 2D View. # Click in the Elevation Part of the status bar and select Choose Elevation Source # Select lndem.img as the Source File. # Notice that the Input vertical units remains "meters". It should be "feet".
IM-34455	Save as NITF is not responding (nothing happens) to an image that has been opened as Image chain	1. Open any image as Image Chain. 2. File > Save as > All layers as NITF, give proper location to save the output. 3. Click yes for the dialog "save all the layers" Observe that nothing happens.
IM-44349	Cloud Cover segment not displaying correctly as Image Chain (looks fine as Raster)	Using a NITF with multiple image segments, including a cloud cover (CC) segment: # Start a 2D View, click the File Open icon (i.e. as Raster) and select the above NITF file. # In the Sub-Image tab turn on both the MONO and NODISPLY checkboxes. # Raster Options tab select Fit to Frame and click OK # The cloud layer has correctly displayed as solid 255s (cloud) and transparent 0s (no cloud) # Clear the View # File / Open / Raster as Image Chain and select the same NITF file. # Sub-Image tab turn on both the MONO and NODISPLY checkboxes. # Raster Options tab select Fit to Frame and click OK # This time the cloud layer has incorrectly displayed as solid grey across the entire extent.

IM-37916	ImageChain 1:1 display with Lagrange resampling is slower in ERDAS IMAGINE 2018 when compared to ERDAS IMAGINE 2016 Update 1.	This is observed in the following 3 scenarios.. * if the multispectral image is opened in map space. * if both the pan and multispectral images are opened in image space. * if both the pan and multispectral images are opened in map space. Steps to reproduce, by taking the above 2nd scenario as example - Make sure that both the Pan and Multispectral images are copied into the same folder. - Select File --> Open --> Raster as Image Chain - In the file chooser that launches, select both the Pan and Multispectral images. - Go to the Raster Options tab and make sure that the Fit to Frame option is ON. - Click OK in the file chooser. - Once the images are displayed, go to Multispectral and Panchromatic tabs and change the resampling method for both the images as Lagrange. - From the Home tab click on the Reset option. Note the time it takes for the Reset. This time is slower in the above 3 cases when compared to ERDAS IMAGINE 2016 Update 1.
IM-37917	ImageChain w/Lagrange resampling, jump to one end of an image using Inquire Cursor is slower in ERDAS IMAGINE 2018	- Select File --> Open --> Raster as Image Chain - In the file chooser that launches, select the Multispectral image. - Go to the Raster Options tab and make sure that the Fit to Frame option is ON. - Click OK in the file chooser. - Once the images are displayed, go to Multispectral tab change the resampling method as Lagrange. - From the Home tab click on the Reset option. - Launch the Inquire Cursor and feed in the coordinates of bottom right side corner and hit enter. Note the time it takes for the Inquire Cursor to move and display the image. This time is slower compared to ERDAS IMAGINE 2016 Update 1
IM-29894	ERDAS IMAGINE is ignoring the overviews for grayscale (and RGB) TIFF image with JPEG compression	Overviews are not considered by Image Chain for grayscale image with JPEG compression. Due to this it is taking a long time to load the image even though the image has a full set of overviews. For the same image if we use another compressions like LZW then overviews are considered and displays the image in seconds. Also, RGB (also w/ JPEG compression) version of same image displays very quickly, indicating the overviews are being seen and used. Pyramid info for gray scale image is showing as no pyramid layers present in ERDAS IMAGINE 2016 software.
IM-47229	Problem of opening as image chain for image calibrated with DEM with NoData	An image was geometrically calibrated using a DEM that was of smaller extent than the image (or which otherwise contained NoData locations) When opening as Image Chain in the Viewer, the Low Right quadrant is not correct. It should be no data area (background color), but showing partial raster.
IM-46335	Selecting vector symbol from "Other" group throws errors and sometimes crashes	To recreate: # Display a polygon shapefile # Vector tab > Style > Styles group > Properties button (to open Fill Style Chooser) # Custom Tab > Use Pattern checked on > open Symbol menu > Other > Pick any Menu, any Symbol. Errors are thrown. # Repeat steps above, then no errors! Behavior is inconsistent. Sometime crashes occur. Sometimes errors don't occur. 02/10/18 12:26:26 viewer vector "shapefile.shp"; 02/10/18 12:28:26 SessionMgr(17748): ERROR: #1 from eant_CoordSysConversionConvertAndTransformYScale 02/10/18 12:28:26 SessionMgr(17748): ERROR: Error returned from eant_CoordSysConversionScaleAndTransformY 02/10/18 12:28:26 SessionMgr(17748): ERROR: #2 from eant_CoordSysConversionScaleAndTransformY 02/10/18 12:28:26 SessionMgr(17748): ERROR: Error returned from eant_CoordSysConversionScaleY 02/10/18 12:28:26 SessionMgr(17748): ERROR: #3 from eant_CoordSysConversionScaleY

IM-47264	"Choose Sensor" doesn't use its .SAF settings correctly still	Open a three-band RGB image into a 2D View as raster. Go to the Multispectral tab. In the Bands group note that it has defaulted to Choose Sensor and a RGB order of Layer_1, Layer_2, Layer_3 (it should based on default Preferences). Now, not a lot of people realize, but "Choose Sensor" is just a standard .SAF file, with wavelengths set in it. So you should be able to pull down the Common Band Combinations list. "False Color Infrared" shouldn't show up on the list - it shouldn't be present based on the wavelengths defined in 3BandDefault.saf.
IM-46915	"Choose Sensor" doesn't use its .SAF settings correctly	Open a three-band RGB image into a 2D View as raster. Go to the Multispectral tab. In the Bands group note that it has defaulted to Choose Sensor and a RGB order of Layer_1, Layer_2, Layer_3 (it should be based on default Preferences). Now, Choose Sensor is just a standard .SAF file, with wavelengths set in it. So you should be able to open the Common Band Combinations list and select True Color. But when you do, the RGB display order changes to Layer_1, Layer_1, Layer_1, which is incorrect. False Color Infrared should not be present based on the wavelengths defined in 3BandDefault.saf. Choose Sensor option has similar problems for other numbers of bands too.
IM-46880	Clearing View with Subset's Inquire Box up crashes ERDAS IMAGINE	Display an image in a 2D View (e.g. lanier.img) On the Multispectral tab start Subset and Chip With the Subset and Chip dialog (and its associated Inquire Box) still active, click the Clear View icon on the Quick Access Toolbar. ERDAS IMAGINE crashes Doesn't happen in ERDAS IMAGINE 2016 v16.1
IM-41174	ERDAS IMAGINE crashes with Measurement tool operation	1.Launch ERDAS IMAGINE 2018 2.Load a WorldView-2 GeoTIFF image. 3.Now Click Measure button from Home tab > Information group 4.Select Shadow height from Layover from Measurement tab > Measure 5.Observe Cursor changes to cross 6.Keep the cursor as cross and clear the viewer from quick access tool bar 7.Now with cross Cursor click on the viewer and observe ERDAS IMAGINE crashes
IM-48070	Viewer Banner (Title Bar) is Erased	When a 2D View is resized smaller and then expanded to original size, parts or all of the View Title Bar Text is erased.
IM-47497	Problem with HxIP basemap not reprojecting	Failure Scenario 1. Display orthorectified IMG image (projected to UTM) 2. Fit Layer to Window (note that View projection is UTM) 3. Click the Basemap button and select HxIP 4. Provide login credentials, Test and (if successful) click Add and then OK 5. Note that the background of the first image displays as red x's Success Scenario 1. Click the Basemap button and select HxIP 2. Provide login credentials, Test and (if successful) click Add and then OK 3. Note that the basemap displays fine. View projection is Lat/Lon 4. Display orthorectified IMG image (projected to UTM) 5. In the Contents pan, right click on the IMG image and select Fit Layer to Window 6. Note that both images display fine There's an issue with the projection the data is being requested in.

IM-48186	Variables option cannot be changed in Batch Command Editor for Map Model to World File process	When trying to use the Map Model to World File image metadata command in a batch process, the Variables menu in the Batch Command Editor is greyed out and stuck at "Original commands". You cannot choose the option "One input, one or more outputs". The command was only half auto-variablized, i.e., a variable is created for the input file, but a variable is not created for the output world file. The original command in ERDAS IMAGINE 2016 is: *imagecommand c:/input/input1.tif -exportworld c:/output/input1.tfw -meter imagecommand* The "original" command in ERDAS IMAGINE 2018 is: *imagecommand '$(Input)' -exportworld c:/output/input1.tfw -meter imagecommand* You can work around this by creating an output variable and inserting it into the command but it is not straightforward to the user.
IM-45559	Multi-point Geometric correction dialog crashes while trying to mark a GCP	1) Launch ERDAS IMAGINE and open a WorldView-2 GeoTIFF image into a 2D View 2) Go to Multispectral tab -> Control Points 3) Select Worldview RPC under the Set Geometric model dialog and Hit OK 4) Close the dialogs that come up [by clicking Cancel repeatedly] and now click on the Create GCP icon on Multipoint Geometric correction window and click on the main viewer to collect the point, note that it throws an error message, Click OK on it Observe that the warptool.exe crashes after clicking OK on the error message
IM-44393	64-bit exporttif outputting "E" for "Software" TIFF tag	# Make sure exporttif is configured to run 64-bit. # Manage Data tab | Conversion group | Export Data. # Set the Format to "TIFF" (not "TIFF Direct Write"). # Select any input image. # Enter an output filename. # Click OK. # Take all defaults and click OK on the Export TIFF Data dialog. # Open the resultant TIFF in Image Info. # Click on the TIFF Info tab. # Expand the Image folder and click on the TIFF Tags folder. # The value of the Software tag is "E". # If you do this workflow again with exporttif configured to run 32-bit, the value of the Software tag is "ERDAS IMAGINE".
IM-19706	Area Fill tool corrupts TIFF images	After using the Area Fill tool on a TIFF image and saving the image, it becomes corrupted and does not appear correct when you clear it from the 2D View and display it again. This problem does not occur in ERDAS IMAGINE 2014 v14.1 How to reproduce: 1. Open the TIFF image in a 2D View with the No Stretch raster option enabled. 2. Draw an AOI polygon in any area of the image. Make sure that the AOI is selected. 3. Select TIFF image in the Contents panel. 4. Open the Area Fill tool by clicking on the Fill button in found in the Edit group under the Multispectral tab. 5. In the Area Fill tool, make sure that the Function option is set to Constant and leave the Fill With values is set to 0.0. 6. Click the Apply button to convert the pixel values within the AOI polygon to the new pixel value. An Attention message opens "This layer is using a data stretch lookup table. When editing pixel values you may want to remove the data stretch lookup table. Do you want to do this now? Click Yes. 7. Another warning message displays "Since this function modifies the pixel values of the image, you may wish to recalculate the statistics and histogram for the layer before doing any other operation that depends on this data." Click OK. 8. Close the Area Fill tool. 9. Save your image. 10. Remove your image from the 2D View and redisplay it. Notice that the image has changed, but not like it should have. 11. This problem does not happen when using an IMG format image instead of a TIFF image.

IM-10616	ERDAS IMAGINE JFIF (JPEG) cannot read Progressive JPEG profile	Customer reported that they cannot import JPG with JGW file into IMG or TIFF formats. They are also not able to open the JPG file in ERDAS IMAGINE. However they can open/ import the JPG file in ER Mapper 2013
		The importer gives error message while importing : "Unsupported SOF Marker type 0xc2
		While opening the file in the 2D View ERDAS IMAGINE gives : "File open error (0-Unknown error"
IM-44698	Artifacts in Sentinel-2 images when directly viewing the *.safe file in 2D View as well as after importing	Customer reported that they can find artefacts in Sentinel-2 images when directly viewing the *.safe file in a 2D View as well as after importing the *.safe file into *.img by means of the Sentinel-2 Direct Read and Sentinel-2 manifest importers. The artifacts seems to be due to the granule tile borders.
		Seems to affect only imagery from before December 2016 when the data structure of Sentinel-2 was re-organized.
		Steps to Reproduce: 1. Open the Sentinel2 *.safe file in IMAGINE Viewer. Zoom to a granule edge. You see the broken straight lines artifacts in between granule tiles. 2. Import the Sentinel 2 *.safe file by means of the Sentinel 2 Direct Read and Sentinel-2 manifest importer. Then open the imported output file in IMAGINE Viewer. Zoom to a granule edge. You see the broken straight lines artifacts in between granule tiles.
IM-39173	Opening a hyperspectral image in ImageInfo takes long time	To reproduce the problem open a hyperspectral image in a 2D Viewer. Go to IMAGINE Home tab and click Metadata button. Notice that it takes quite long time before the image info is shown on ImageInfo dialog box. On one test machine, it takes more than 10 seconds to open an AVIRIS scene in ImageInfo, It has 224 bands and whose width and height are 530 pixels and 301 pixels.
IM-12677	Request to add missing ground control point gcc files in ERDAS IMAGINE example data	Request to add missing ground control point gcc files in the ERDAS IMAGINE example data in the download page.
		In the ERDAS IMAGINE 2014 Online Help documentation, in the "Refine the DEM Extraction Workflow exercise", it has been mentioned about using two Ground Control Points files (gcc files) : "uluru_reference-gcp.gcc" and the "uluru_input-gcp.gcc" file. However the customer couldn't find those two gcc files in the ERDAS IMAGINE example data.
		These are now downloadable as part of the ERDAS IMAGINE Radar Example Data download.
IM-43563	Tiff files with Thai characters in their names fail	An ERDAS APOLLO customer is seeing failures due to ERDAS IMAGINE not being able to handle tiff files with Thai characters in them, for example:
		เชียงราย.tif
		The issue is not restricted to TIFF. If you rename an IMG file, create pyramids (rrds) and then attempt to open the IMG file, you get errors referring to the pyramids not being found.
IM-44567	64-bit ImageInfo displaying TIFF GTCitationGeoKey incorrectly	# Open a TIFF file in *64-bit* ImageInfo. # Click on the TIFF Info tab. # Expand the Image folder and the GeoTIFFKeys folder. # The GTCitationGeoKey is displayed in what looks like Chinese characters, although the values of the other tags look fine.
IM-46884	Pleiades DIMAP v2 image stats reversed for red and blue bands	If you calculate statistics (for example in Image Info) for a Pleiades DIMAP v2 image the resulting stats are correct. Whereas if you look at the "raw" DIM*.XML file (with all .aux files, etc., deleted first) ERDAS IMAGINE is trying to use the statistics it finds in the .XML header, but is associating the stats in the wrong order.
IM-44990	Socet GRID file opens in 32 bit but not 64 bit	Open a specifc type of Socet GRID *.dth file in a 32-bit 2D View. Image appears. Open the same file in 64 bit view. Get error: "Header identifier did not match"

IM-37447	Additional empty "Image" segments shouldn't be saved to IMG header	Open a multi-segment NITF image in a 2D View (using default settings so only one image segment is opened). File / Save As / Top Layer As.. to an IMG format output. Open the resulting IMG file in ImageInfo and click on the NITF tab. Note that despite the fact that there is only a single image segment physically present in the IMG, all the original Image segments have been copied across even though they do not have the associated data to go with them. Not only is not removing them confusing, it also causes ERDAS IMAGINE problems - e.g. if you try to Save All Layers as NITF, the NITF Exporter crashes.
IM-46218	TIFF pyramids not recognized (APM fails with .tiff)	APM fails with customers .tiff images. All is correct with customer's block setup. Image Info does not recognize pyramid layer algorithm. Images do not display correctly if you "fit to frame" in IMAGINE Viewer. And in IMAGINE Photogrammetry, image is displayed only on a small section of image footprint. Re-generating pyramids in IMAGINE Photogrammetry does not solve the problem. Only workaround is to convert the imagery to another format. So, I imported these files to .img format and re-attached them to the block file and then tested APM. APM run successfully collected 90+ points using default pattern.
IM-47024	JPEG2000 exporter in ERDAS IMAGINE gives error message with ArcGIS created *.img file	Customer reported that JPEG2000 exporter (Manage Data > Export Data > JPEG 2000) in ERDAS IMAGINE gives error message with ArcGIS created *.img file. The JPEG 2000 export process runs all the way through, and nearly at the end ERDAS IMAGINE gives an error, saying: "Layer_1INode already exist for file *.aux". The customer's *.img file was created by ArcGIS HillShade Tool from a DEM file created by ERDAS IMAGINE's MosaicPro . Even if the ERDAS IMAGINE JPEG 2000 exporter gives the following error message, it creates a valid output JPEG 2000 file. "The file *.jp2 cannot be deleted because it is in use by another application. Close the file and then press 'Retry' to continue, or press 'Cancel'.
IM-46584	Help - ML Review Tab Hyper link navigating to Review Tab of Zonal change	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Machine Learning Layout from File > Layout 3.Select ML Process tab and click F1 4.Observe ML Review Tab Hyper link navigating to Review Tab of Zonal change layout.
IM-35331	Errors when trying to display features from Oracle Features Proxy (.ofp) and Spatial Feature (.ogv)	Customer reported that ERDAS IMAGINE gives errors when they tried to display features from both Oracle Spatial Feature (.ogv) and Oracle Features Proxy (.ofp), The customer has been able to create a connection using both Oracle Spatial Feature (.ogv) and Oracle Features Proxy (.ofp), When trying to load .ogv, he gets the error: "Invalid input ProProjection structure", then "Invalid input units name". The feature shows up in the legend, but is not visible in the display (but the bounding box can be seen if turned on). When trying the .ofp, he gets the error: "Could not open layer. Invalid connection parameters". He gets nothing in the legend or display window.
IM-35332	ERDAS IMAGINE is unable to display features from Oracle Spatial Feature (.ogv) and Oracle Features Proxy	Customer reported that ERDAS IMAGINE is unable to display features from both Oracle Spatial Feature (.ogv) and Oracle Features Proxy (.ofp), when connected to the database using credentials of a user who is non-owner of the database. If the customer uses the credentials of the owner or the credentials of the System DBA, he can display the feature in ERDAS IMAGINE. However, customer is not seeing any problem with the same data in GeoMedia. It's only in ERDAS IMAGINE, which is not displaying the vector. Recreated the problem in ERDAS IMAGINE and in another popular GIS software.
IM-42876	Unable to open point features from an Oracle database	Using specific Oracle database connection, try to display any points features available in it. Notice that there are couple of error messages and the display fails.

IM-48922	Proxy gdb file access, without connecting to geodatabase throws error, which is not clear	ERDAS IMAGINE 2018 Update 2 could not use an existing .gdb Geodataabse proxy file to access the Geodatabase
IM-48919	Trying to display a Point Feature class in gdb (having single point) fails in ERDAS IMAGINE	ERDAS IMAGINE 2018 Update - Trying to display a Point Feature class in gdb (having single point) fails in ERDAS IMAGINE 2018 Update 2. Whereas Point Feature Class with >1 point displays fine.
IM-48918	Supported version of Geodatabase logged in session log needs to be updated	In ERDAS IMAGINE > File > Open > Vector layer > ArcGIS Geodatabase (*.gdb) > Click Connect. Session log reports: 17/05/19 15:24:52 SessionMgr(5324): Detected geodb version 10.7 17/05/19 15:24:52 SessionMgr(5324): Unsupported version of GeoDatabase support located. Please note that IMAGINE is only supported for version up to 10.2.
IM-47243	Fail to launch Texel Mapper	1. Launch ERDAS IMAGINE 2018 (64-bit) 2. Launch Texel Mapper from Toolbox tab > Common group > Stereo Analyst drop down. 3. It fails.
IM-45530	Unable to load ers file associated with TIFF file in ERDAS IMAGINE 2018	1.Launch ERDAS IMAGINE 2018 (64-bit) 2.Try to load a specific .ers file and observe Message thrown saying image has no layers. 3.Sessionlog saying ERS Raster error:Filetype unkown.
IM-44887	Output created using LaGrange resampling differs from the output generated using other resampling methods	Giving the image and the DEM provided as input to "Orthorectify without GCP" option, generate 2 outputs one with LaGrange resampling method and the other with any other resampling method from the rest available. Open the 2 outputs in 2 different viewers and notice that in one portion of the image the outputs differ.
IM-39311	Generating pyramids takes an unexpectedly long time because of the binary "use multithreading" hyperspectral preference	Pyramid layers are taking an unexpectedly long time to be generated for hyperspectral images.
IM-41083	unit test failure when locale is set to German (bug in etxt::tostring)	The locale on my development machine is set to German (Control Panel	Region	Formats tab	Format = "German (Germany)"). When running the eCommon etxtUnitTest::test_ToString_Double unit test, it fails, because the string has a comma as the decimal separator. The problem is that the fallback condition at the bottom of etxt::tostring is just calling etxt_Text_sprintf, which is ignoring the useCLocale parameter passed to etxt::tostring ().
IM-48813	DEM Tools Revalue function does not allow DEM recode values to be specified	DEM Tools Revalue application does not add recode values from Range(s) window to the Range list. The program does not run unless recode values are added to the Range list. Does not work with any data type (i.e 1, 2, 4, 8, 16 and 32 bit signed/unsigned integers, 32 and 64 bit float). Worked correctly in ERDAS IMAGINE 2016 To recreate: Open Terrain tab > DEM Tools > Revalue Input DEM: lndem.img Add 1300 to Range(s) window New Value: 0+ Select Add Range to List. There is no response to this request

IM-43195	64-bit VersionTool reporting garbage for Date/Time Stamp	Session | DLL Information Class: Raster Formats DLL Instance Information tab Instance: ADRG (and others) Description shows Date/Time Stamp: 蠝霔湢(ㅡ)□ฺﾋﾙ(呼)搽〈
IM-46366	Coordinate system option in Measurements panel automatically flips if zoom is performed in the viewer	• Launch the Preference Editor and change the preference for the following option to Lat/Lon (WGS 84). • Viewing category > Viewer > Show Coordinates As • Open an image in the viewer and select the Measure option from the Information group of Home tab. • In the Measurement tab under the Setup group notice that the Coordinate Type is Lat/Lon. • Measure a few points and notice that the measurements are displayed as Lat/Long. • Perform some zoom in the viewer. • Notice that the coordinate type in the measurements panel flips to Map.
IM-40172	Image Command does not print statistics when using 'Compute Statistics' and 'Print To File' together	Using the 'Compute Statistics' and 'Print To File' options together does not print image statistics to file when the .aux does not exist prior to running Image Command. If you run Image Command only using 'Compute Statistics' first and then run Image Command using 'Print To File', the image statistics are printed to file. To recreate: # Be sure doubl_float.aux does not exist # Run Image Command, open doubl_float.tif # Check 'Compute Statistics' and 'Print To File', specify .txt # OK Open the .txt with WordPad. Image statistics are not present.
IM-46755	SARVI index fails with "Empty data on port" error	On the Raster tab, open the Indices dialog Specify Input as lanier.img Set Category to All Select Index: SARVI Click Preview (or OK after providing an output filename) Error: Spatial Model failed in Multiply. The error was "Empty data on port".
IM-44665	If you try to save the session, ERDAS IMAGINE crashes	Go to File > Save > General Save Options > Session ERDAS IMAGINE crashes
IM-49543	Choosing this .TIL file in the file chooser caused IMAGINE crash	Clicking on a specific DigitalGlobe .TIL file in the file chooser causes ERDAS IMAGINE to crash.
IM-49605	Generate System Report showing wrong operating system information	1.Launch ERDAS IMAGINE 2.Generate System report from File > Session 3.Click OK (make sure all check boxes checked on) 4.Provide the path for report 5.Open the report generated and observe operating system information shown as Microsoft Windows 8 64-bit (Build 9200) for Windows 10 machine
IM-47470	Opening individual Algorithm file crashes ERDAS IMAGINE	1.Launch ERDAS IMAGINE 2.Copy Algorithm file RGB.alg to local folder C:\Program Files\Hexagon\ERDAS IMAGINE 2018\examples\ermapper\data_types\airphoto 3.Try to open the RGB.alg from File > Open > Algorithm 4.Observe ERDAS IMAGINE crashes.

IM-48520	Chart to Chart change detection throwing fault message in session log "Client Failed to connect to server"	1.Launch ERDAS IMAGINE 2.Launch Chart to Chart change detection from Raster > Change Detection > Change Detection Tools > Chart to chart 3.Provide the inputs as chart1-geo.tif, chart2-geo.tif 4.Provide the output name and click run 5.Observe Process run and output got generated but session log showing -Client Failed to connect to server +Session log:+ 17/04/19 14:47:17 SessionMgr(9640): Connection success for the external process 'eWkspace_64' 17/04/19 14:47:31 C:/Program Files/Hexagon/ERDAS IMAGINE 2019/bin/x64URelease/smguiprocess.exe $IMAGINE_HOME\etc\ZonalChange\ChartToChartChangeDetection.gmdx 17/04/19 15:01:30 C:/Program Files/Hexagon/ERDAS IMAGINE 2019/bin/x64URelease/smprocess.exe $IMAGINE_HOME\etc\ZonalChange\ChartToChartChangeDetection.gmdx Chart To Chart Change Detection.Chart 1=d:\2019\data_delete\chart\chart1-geo.tif Chart To Chart Change Detection.Chart 2=d:\2019\data_delete\chart\chart2-geo.tif Chart To Chart Change Detection.Change Image=d:\2019\16-04-2019\charttochartchange.img Chart To Chart Change Detection.Threshold=0.5 17/04/19 15:01:30 SessionMgr(9640): smguiprocess.exe exited with status 1. 17/04/19 15:01:31 SessionMgr(9640): Running spatial model ($IMAGINE_HOME\etc\ZonalChange\ChartToChartChangeDetection.gmdx) with port values (Chart To Chart Change Detection.Chart 1=d:\2019\data_delete\chart\chart1-geo.tif,Chart To Chart Change Detection .Chart 2=d:\2019\data_delete\chart\chart2-geo.tif,Chart To Chart Change Detection.Change Image=d:\2019\16-04-2019\charttochartchange.img,Chart To Chart Change Detection.Threshold=0.5). 17/04/19 15:01:31 17/04/19 15:01:34 SessionMgr(9640): Running command line: C:/Program Files/Hexagon/ERDAS IMAGINE 2019/bin/x64URelease/imagesegmentation_fls.exe -maxpixels "2000000" "C:\Users\agangumo\AppData\Local\Temp\SM-da28-05b1-b5f9-1e10-010952\d963f69d-9911-4a3e-9 aef-069d13813d12" "C:\Users\agangumo\AppData\Local\Temp\SM-da28-05b1-b5f9-1e10-010952\1bd12244-1cdf-493f-ae92-3d74f2a907b7" -scale "100" -scalemin "10" -scalemax "2000" -spectral "1" -texture "0" -shape "0.29999999999999999" -size "0.30000000000000004" -min "10" -max "100000" -randomcolor "1" -meter 17/04/19 15:01:34 SessionMgr(9640): Connection success for the external process 'FLS Segmentation' 17/04/19 15:01:35 SessionMgr(9640): Client Failed to connect to server :No connection could be made because the target machine actively refused it 17/04/19 15:01:36 SessionMgr(9640): Client Failed to connect to server :No connection could be made because the target machine actively refused it 17/04/19 15:01:37 SessionMgr(9640): Client Failed to connect to server :No connection could be made because the target machine actively refused it 17/04/19 15:01:38 FLS Segmentation(6664): Performing FLS Segmentation 17/04/19 15:01:38 FLS Segmentation(6664): Input File: C:/Users/agangumo/AppData/Local/Temp/SM-da28-05b1-b5f9-1e10-010952/d963f69d-9911-4a3e-9aef-069d13813d12 17/04/19 15:01:38 FLS Segmentation(6664): Pixel:Segment Ratio: 100 17/04/19 15:01:38 FLS Segmentation(6664): Spectral Weight: 1.00 17/04/19 15:01:38 FLS Segmentation(6664): Texture Weight: 0.00 17/04/19 15:01:38 FLS Segmentation(6664): Size Weight: 0.30 17/04/19 15:01:38 FLS Segmentation(6664): Shape Weight: 0.30 17/04/19 15:01:39 FLS Segmentation(6664): Segmenting Tile 1 17/04/19 15:01:48 FLS Segmentation(6664): Segmenting Tile 2 17/04/19 15:01:50 SessionMgr(9640): external process exited normally. 17/04/19 15:01:52 SessionMgr(9640): Spatial model ran successfully. 17/04/19 15:01:52 17/04/19 15:01:53 SessionMgr(9640): smprocess.exe exited normally.

IM-46613	Opening map composition file having '(' in the file path of referenced images, crashes ERDAS IMAGINE 2018	Launch ERDAS IMAGINE 2018.
		Open map composition file "withparentheses.map"
		Observe user is prompted to substitute raster file path. specifying to use the Original file through substitute crashes ERDAS IMAGINE.
		
		Whereas in ERDAS IMAGINE 2016 Update1, throws error.
		6/10/18 14:57:39 SessionMgr(7020): ERROR: #453 from efnp_FileNodeListGetNonNodePart
		26/10/18 14:57:39 SessionMgr(7020): ERROR: efnp_FileNodeListGetNonNodePart fail
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #774 from efnp_FileNodeListGet
		26/10/18 14:57:39 SessionMgr(7020): ERROR: FileNodeListParse failed
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #1457 from FileNodeListParse
		26/10/18 14:57:39 SessionMgr(7020): ERROR: Parse error; <FileNodeListItemSpec> at position 62 is preceded by a <DirectoryName>
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #1148 from edis_TrueColorCreateLayerByName
		26/10/18 14:57:39 SessionMgr(7020): ERROR: erdas::raster::GridCoverageIdentifierEFNP::FromFileNode failed
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #507 from erdas::raster::GridCoverageIdentifierEFNP::FromFileNode
		26/10/18 14:57:39 SessionMgr(7020): ERROR: efnp_FileNodeListGetNonNodePart failed
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #453 from efnp_FileNodeListGetNonNodePart
		26/10/18 14:57:39 SessionMgr(7020): ERROR: efnp_FileNodeListGetNonNodePart fail
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #774 from efnp_FileNodeListGet
		26/10/18 14:57:39 SessionMgr(7020): ERROR: FileNodeListParse failed
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #1457 from FileNodeListParse
		26/10/18 14:57:39 SessionMgr(7020): ERROR: Parse error; <FileNodeListItemSpec> at position 62 is preceded by a <DirectoryName>
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #595 from erdas::mapComposerApp::MapComposerControl::Open
		26/10/18 14:57:39 SessionMgr(7020): ERROR: erdas::mapComposerApp::MapComposerControl::Open failed
		26/10/18 14:57:39 SessionMgr(7020): ERROR: #549 from erdas::mapComposerApp::MapComposerControl::Open
		26/10/18 14:57:39 SessionMgr(7020): ERROR: edis_MapComposerBuildFrames failed
		26/10/18 14:57:39 SessionMgr(7020): WARNING: #1 from edis_MapComposerBuildFrames
		26/10/18 14:57:39 SessionMgr(7020): WARNING: Error filling in frames
		26/10/18 14:57:40
		26/10/18 14:57:40 SessionMgr(7020): WARNING: #1 from edis_MapComposerPopulateFrame
		26/10/18 14:57:40 SessionMgr(7020): WARNING: Couldn't open truecolor layers:
		26/10/18 14:57:40
		//ingrnet.com/in/sgi/geospatial/gs2/imaginedata/pixeldata/del/(copy)/limerick_2007_subset.img(copy)/limerick_2007_subset.img(:Layer_1)
		26/10/18 14:57:40
		//ingrnet.com/in/sgi/geospatial/gs2/imaginedata/pixeldata/del/(copy)/limerick_2007_subset.img(copy)/limerick_2007_subset.img(:Layer_2)
		26/10/18 14:57:40
		//ingrnet.com/in/sgi/geospatial/gs2/imaginedata/pixeldata/del/(copy)/limerick_2007_subset.img(copy)/limerick_2007_subset.img(:Layer_3)

IM-47986	Reprojecting MrSID image much slower in ERDAS IMAGINE 2018 vs ERDAS IMAGINE 2015	It was reported that ERDAS IMAGINE 2018 takes over two hours to reproject a 17 MB MrSID image, but the same image can be reprojected in ERDAS IMAGINE 2014 in 20-30 seconds. The same pattern can be observed with other larger MrSID files. Reprojecting similar images in other formats such as IMG or TIFF only takes 20-40 seconds in ERDAS IMAGINE 2018.
IM-11214	Double && in Preferences	File > Preferences Under User Interface folder you will see the entry "User Interface && Session"
IM-42604	After using Add/Change Projection in Edit Image Metadata, the Unit disappears in the metadata	Reported that after editing or adding Projection in a file, using Edit Image Metadata, the Unit disappears in the metadata. To recreate the problem, use the customer's data in Edit Image Metadata or ImageInfo 1. Set the Map Model as "Transverse Mercator" and Meters. 2. Set the projection as EPSG:25835 Note that the unit vanished from the metadata. When you set the Map Model again, the unit shows again.

IM-49222	Reprojecting ECW image to GDA2020 Conformal (NTv2) datum fails	Reprojecting an ECW image from EPSG:23855 (GDA94 datum) to the GDA2020 Conformal (NTv2) datum takes a very long time (~12 hours) and eventually the process fails. There is no EPSG code for the same projection as EPSG:23855 instead using the GDA2020 Conformal (NTv2) datum, so it has to be set manually. The projection parameters are outlined below. Reprojecting to the EPSG:7855, which is essentially the same projection but using the GDA2020 datum instead of GDA2020 Conformal (NTv2), works and only takes a couple of hours. Steps to reproduce the problem: # Start the Reproject Images tool and select the image "input_image.ecw" as the input file. # Enter a name for the output file and make sure the file format is ECW. # Set the Processing Option to "Resample to Output File". # Set the Resampling Method to "Nearest Neighbor". # Choose "Rigorous Transformation". # Use the Projection Chooser to set the output map projection using these parameters: ## Projection Type: UTM ## Spheroid Name: GRS1980 ## Datum Name: GDA2020 Conformal (NTv2) ## UTM Zone: 55 ## North or South: South ## Axis Order: E,N # Click OK and wait while it processes and eventually stops.
IM-37584	Raster attributes lost after reprojection	When reprojecting a thematic raster image, the output image does not retain the same raster attributes that were included in the input image. Steps to reproduce the problem: Start the Reproject Images tool (Raster tab > Geometry group > Reproject) Select the thematic image (with attribute field called "CLC Land Cover") as the input file. Enter a name for the output file. Use the default settings in the Reproject tool and click OK to begin reprojecting the data. Display the input image in one 2D View and the reprojected image in a separate 2D View. Display the raster attribute tables for both images (Table tab > View group > Show Attributes). Notice that the column titled "CLC Land Cover" with the class names is missing from the reprojected image.
IM-41736	Image Chain / Sensor Look Angle is Disabled	When displaying an image as an Image Chain, the "Sensor Look Angle" option in the lower right corner is grayed out. However the Up_is_Up in the Smart Control works. The "Sensor Look Angle" option is not grayed out if the image is displayed not using image chains.
IM-48811	Login to Smart M.App link in ERDAS IMAGINE ribbon is no longer functional	Login to Smart M.App link used in the ERDAS IMAGINE ribbon is no longer functional. The broken link opens a page error. This is due to a change in the address of the Smart M.App marketplace.
IM-40404	Bubble help for Launch Command Window button is outdated	Click the Help tab to search for the Session Command History window. It states that that the path is Application Menu > Session Options menu, but it is actually File tab > Session > Launch Command Window. The Application menu is from an older version of ERDAS IMAGINE and is no longer used.
IM-49188	Ribbon tabs not being hidden when switching to Spatial Modeler through title bar	# Open ERDAS IMAGINE 64-bit # Open a raster image in 2D View # Open Spatial Modeler # switch to the 2D View layer # switch to the Spatial Modeler layer by clicking on its title bar (not in the table of contents or inside of the layer itself) Note that the ribbon tabs for the raster image have not been hidden.

IM-41512	Confusing error message in zonal change project when regions shapefile is locked	Use two ERDAS IMAGINE sessions in parallel.
		ERDAS IMAGINE Session1: 1) Open regions.shp 2) On Drawing tab click Enable Editing
		ERDAS IMAGINE Session2: 1) Switch to the Zonal Change Layout and create a new project 2) Specify Before and After images 3) Go to Process tab and click Edit Project. 3) Click Add New Regions > One Per File. Select regions.shp
		Get an error message "The new region is empty. It will not be created". But it is not empty.
		When loading regions.shp via Add New Regions > One Per Polygon the error message is more appropriate: Spatial Model failed in Features Input. The error was "erdas::sb_CGP::VectorSource_X::OnExecute failed Cannot open specified Vector source".
IM-39921	Formula does not apply to first row of vector attribute table	Open an image. Open a vector layer over the top. On the Drawing tab select Enable Editing. On the Table tab, select Show Attributes. In the attributes CellArray select a numeric attribut column Select, for example, rows 5 to 10. Right click on the column titles and select Formula. In the Formula dialog type the value 2 and click Apply. First problem is that you lose the row selection – it should not remove your selection. Second problem is that row 5 is still a 1, not a 2. The edit was not applied to the first selected row.
IM-46339	Large Shapefile causes problems with viewing vector attribute table	A Shapefile with a lot of records (~1.8 million arcs) causes a problem when scrolling down through the vector attribute table. When scrolling to the bottom of the table it bounces back up to the first record. The workaround is to right-click in the Record column and select Goto to open the Row Position dialog and then click the Last button or enter the desired row number and click Goto.
IM-46430	Shapefile with a lot of arcs (~1.8 million) causes Features Input operator error	A Shapefile with a lot of records (~1.8 million arcs) causes a problem when processing it through the Features Input operator. When running the spatial model, it fails at the Features Input operator with the message "Read fewer bytes than expected." The customer also reports that the Convert To Raster operator fails using the same input Shapefile with the error message "The object reference was not set to an object entity". They claim that it does work sometimes, but not reliably and if it works, not all of the records are converted to the output raster image. Session log: SessionMgr(5768): Executing spatial model: c:/steve/convert_to_raster.gmdx SessionMgr(5768): Read fewer bytes than expected. SessionMgr(5768): Read fewer bytes than expected. SessionMgr(5768): ERROR: #2348 from HexGeo::SpatialModeler::Operator::InternalApply SessionMgr(5768): ERROR: HexGeo::SpatialModeler::Operator::SetErrorMessage failed SessionMgr(5768): ERROR: #1985 from HexGeo::SpatialModeler::Operator::SetErrorMessage SessionMgr(5768): ERROR: Spatial Model failed in FeaturesInputCGP. The error was "Read fewer bytes than expected.". SessionMgr(5768): ERROR: #2348 from HexGeo::SpatialModeler::Operator::InternalApply SessionMgr(5768): ERROR: HexGeo::SpatialModeler::Operator::SetErrorMessage failed SessionMgr(5768): ERROR: #1985 from HexGeo::SpatialModeler::Operator::SetErrorMessage SessionMgr(5768): ERROR: Spatial Model failed in FeaturesInputCGP. The error was "Read fewer bytes than expected.". SessionMgr(5768): Spatial model execution failed.

IM-43624	Vector features stored in ArcGIS Geodatabase with units set to degrees causes "Units are not of same type" errors	A long stream of error messages are displayed when opening vector feature data that has its projection units set to decimal degrees and is stored in an ArcGIS Geodatabase. It appears that ERDAS IMAGINE does not recognized the map units. The projection is Geographic (Lat/Lon), WGS 84, decimal degrees. The same data exported to a Shapefile does not cause any problems when opening it. Displaying the Geodatabase features in ArcGIS does not cause any issues.
IM-46621	File Chooser does not show shapefiles for Copy Vector Layer, Rename Vector Layer, and Delete Vector layer	This was only reproducible in 64-bit ERDAS IMAGINE 1) Launch ERDAS IMAGINE > Vector tab > Copy Vector Layer 2) Observe that both input and output has default *.arcinfo as formats 3) Now launch input file chooser by clicking open button > go to any location where Shapefiles are present 4) Observe that until the file format is re-selected as Shapefile, the Shapefiles are not visible in the file chooser 5) Next open the output File chooser by clicking open button of Output (note that default output format is Shapefile) 6) Now give an output name and click OK, observe that the output format is *.arcinfo 7) Unless the output format is re-selected in the file chooser, the output is not produced Case is same for Rename Vector layer and Delete Vector layer
IM-45038	ERDAS IMAGINE crashes while deleting ID attribute from vector data	1.Launch ERDAS IMAGINE 2.Load a specific Shapefile and display attribute table. 3.Select the Drawing tab and Enable editing. 4.Select table tab and click on Column Properties 5.ID got selected itself on Column Attributes dialog 6.Click delete and then Ok. Observe ERDAS IMAGINE crashes.
IM-44889	Zonal Change Process failing with Image difference algorithm	1.Launch IMAGINE 2018 v 16.5, Launch Zonal Change Layout. 2.Create a New Project , load input images and Zone files Data location:\\alpha\JIRA_data\IM-44888 * TheVillagesSubset2007.ecw * TheVillagesSubset2008.ecw * TheVillagesParcelsSubset.shp 3.After Loading inputs, Select Algorithm as Image Difference and Click Run Region 4.Let Image Difference Value Parameter Threshold as default Zero and Click ok observe that process failing. >> Session log attached for reference. NOTE: * The same workflow is not giving an indication of process failing in IMAGINE 32 bit. * The same workflow if tried with same raster input for both Before image and After image (EX: TheVillagesSubset2007.ecw) to make input image difference as zero, again also process failing, which should be theoretically wrong for end user. * Not giving user friendly pop-up message that Image difference threshold should not be Zero
IM-17921	Not replacing an not-existent Before image or After image caused IMAGINE crash	Take any projects from here \\alpha\teamspace\Pixel\Temp\ZCim14diff Open the project It tells you files are missing and to correct the path. If you do not select the right img file (by clicking Cancel, for instance), IMAGINE would crash. If you select the right img file and press substitute, error is thrown that shapefile link is incorrect and the project does not open.
IM-37622	Zonal Mean produces incorrect result (1.#QNAN) with float class raster (and NoData set to 0)	See model copied to \\alpha\Siebel_Bug_Data\1-KZ8EUF. It's basically takes a shapefile as raster as the Zones, a floating point image as the Class Raster and feeds them into Zonal Mean. Run the model once and note that the mean is stated as 1.#QNAN

IM-49444	With only Before or After Image in the Zonal Change Layout, closing it with/without saving crashes ERDAS IMAGINE	1) Launch IMAGINE > File > Layout > Zonal Change Layout 2) Process tab > New > create a new project C:\temp\example.zcp 3) Add only Before or After Image in the 2D Viewer, click Close in the Process tab, click Yes/No Observe that it crashes ERDAS IMAGINE while trying to close the Zonal Change layout with only Before or After Image in the layout Note: 1) If both Before and After images are loaded in the Zonal Change Layout and the Zonal Change layout is closed no crash is observed. 2) This is not reproducible in ERDAS IMAGINE 2016
IM-36621	Selecting Help tab > ERDAS IMAGINE Release Guide & HexGeoWiki, throws ewinopen crash dialog	Goto Help tab > select ERDAS IMAGINE Release Guide. Dialog opens stating, ewinopen has stopped working. Goto Help tab > select Reference Book > HexGeoWiki. Dialog opens stating, ewinopen has stopped working.
IM-33825	Image recode is not working from Raster tab > Thematic > Recode	1.Launch ERDAS IMAGINE, Load the Image landcover_cherokee.img 2.Select Recode from Raster tab > Thematic > Recode. 3.Recode dialog opens,click Setup Recode 4.Change the value of water-1 ,Coniferous Forest-2,Mixed Forest-2,Deciduous Forest-2 and remaining all -0 and click Ok 5.Provide the output File name and click OK and observe process failing with an error out of the Range LUT NOTE: The same work flow from Thematic tab > Recode producing output without any issues.
IM-22019	BigTIFF gives error messages when displaying in ERDAS IMAGINE	BigTIFF created by Intergraph ISIS does not display in ERDAS IMAGINE, but does in other GIS products. While the file extention is .btf, the TIFF DLL searches the file, determines it is a BigTIFF, and then gives multiple errors.

IM-43993	Error when creating RSETs for large Float IMG file	Make a local copy of the large (>2GB) .img and .ige files (only) Start Spatial Model Editor Start the Session Log Add a Generate RSETs operator Set the copy of the .img file as the input filename. Click Run .r1 seems to generate OK, but then you start seeing these messages in the Session Log: 28/03/18 12:18:37 SessionMgr(816): Connection success for the external process 'eWkspace_64' 28/03/18 12:19:14 SessionMgr(816): Executing spatial model 28/03/18 12:20:28 SessionMgr(816): ERROR: #22879 from eimg::details::SSLayerGetNames 28/03/18 12:20:28 SessionMgr(816): ERROR: <NULL> failed 28/03/18 12:20:28 SessionMgr(816): ERROR: #67 from <NULL> 28/03/18 12:20:28 SessionMgr(816): ERROR: eimg_FileImageNamesGet failed 28/03/18 12:20:28 SessionMgr(816): ERROR: #14930 from eimg_FileImageNamesGet 28/03/18 12:20:28 SessionMgr(816): ERROR: eimg_FileOpen failed 28/03/18 12:20:28 SessionMgr(816): ERROR: #5968 from eimg_FileOpen 28/03/18 12:20:28 SessionMgr(816): ERROR: h:/temp/super-stack_4-dates.img.r2: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format) 28/03/18 12:20:52 SessionMgr(816): ERROR: #22879 from eimg::details::SSLayerGetNames 28/03/18 12:20:52 SessionMgr(816): ERROR: <NULL> failed 28/03/18 12:20:52 SessionMgr(816): ERROR: #67 from <NULL> 28/03/18 12:20:52 SessionMgr(816): ERROR: eimg_FileImageNamesGet failed 28/03/18 12:20:52 SessionMgr(816): ERROR: #14930 from eimg_FileImageNamesGet 28/03/18 12:20:52 SessionMgr(816): ERROR: eimg_FileOpen failed 28/03/18 12:20:52 SessionMgr(816): ERROR: #5968 from eimg_FileOpen 28/03/18 12:20:52 SessionMgr(816): ERROR: h:/temp/super-stack_4-dates.img.r3: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format) 28/03/18 12:20:59 SessionMgr(816): ERROR: #22879 from eimg::details::SSLayerGetNames 28/03/18 12:20:59 SessionMgr(816): ERROR: <NULL> failed 28/03/18 12:20:59 SessionMgr(816): ERROR: #67 from <NULL> 28/03/18 12:20:59 SessionMgr(816): ERROR: eimg_FileImageNamesGet failed 28/03/18 12:20:59 SessionMgr(816): ERROR: #14930 from eimg_FileImageNamesGet 28/03/18 12:20:59 SessionMgr(816): ERROR: eimg_FileOpen failed 28/03/18 12:20:59 SessionMgr(816): ERROR: #5968 from eimg_FileOpen 28/03/18 12:20:59 SessionMgr(816): ERROR: h:/temp/super-stack_4-dates.img.r4: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format) 28/03/18 12:21:03 SessionMgr(816): Spatial model execution complete. The RSETs do seem to be created (and used) correctly.
IM-36660	Image Chain stretch panel enhancement not correctly responding by entering values from keyboard	1.Open Raster image (16-bit Multispectral) as Image chain data 2. Launch Stretch panel, change the type to Two Point Linear. 3. Change the Gray Max to 400 by entering from Keyboard and click enter. Observe that image changes to white. But when the same value is adjusted through moving the slider the colour changes as expected.
IM-36198	CGCF-ECW and CCGF-JP2 Not Persisting GeoTIFF Tag Correctly	Creatable Grid Covergage Fromat (CGCF) ECW and CCGF JP2 Not Persisting GeoTIFF Tag Correctly GeoTIFF tags are not persisted as "2240" as is found in the source TIFF. Rather, they are persisted as "Unknown-2240". This test was done using the "Save As" Viewer capability in ERDAS IMAGINE 2016 v16.1

IM-22018	CellArray with large number of rows is wrong when scrolled to bottom	Start Raster Attribute Editor on Segmentation or Clump output with upwards of 400,000 classes. Scroll to bottom - you see the first few rows instead of the last few rows. Resize the dialog to make it taller (or enlarge docked panel within the ribbon). Try again - it now works OK. Shrink the dialog back - the problem reappears. For larger CellArrays (a million rows) the resizing trick does not work. This makes it virtually impossible to see the last rows of the table. Use RasterToVector to create arc coverage with same amount of records. View coverage and view vector attributes - has similar problems. This affects all CellArrays in ERDAS IMAGINE when dealing with a long list.
IM-11221	ERDAS IMAGINE not recognizing Hebrew characters in the folder name	ERDAS IMAGINE 2013 and 2014 are not recognizing any files in the folder when the folder name is written in Hebrew character
IM-20577	GeoEye TIFF image without GTRasterTypeGeo Key tag delivers many repeat errors	When reading the GTRasterTypeGeoKey tag from a GeoEye TIFF image, the session log posts the following message 13 times: eWkspace(1724): ***WARNING NUMBER 1758 IN FUNCTION GeoTIFFGeoreferencingGet*** eWkspace(1724): >>>Cannot locate GTRasterTypeGeoKey; assuming RasterPixelIsArea<<<
IM-35798	ERDAS IMAGINE crashes on pressing Enter Key from keyboard after clicking on File > New white space	Launch ERDAS IMAGINE Select File > New Click on the White space below 2D View #1 New Options Press Enter Key Observe that ERDAS IMAGINE crashes
IM-20588	Spatial Profile tool crashes when trying to calculate a second line of sight profile	Observed while performing tests to validate a M.App X geoprocessing service. Display a DEM Fit to Frame. On the Panchromatic tab select Spatial Profile. Say OK to the warning that no vector layers are displayed. Draw a line corner to corner of the DEM. Observe that a profile is drawn. In the Spatial Profile tool click the Edit menu and select Overlay Sight. Specify the height off the ground as 6 feet and click Apply. Observe that line of sight is calculated and overlaid onto the profile. Leave the Line of Sight overlaid. Select the digitise polyline tool and draw a new profile line (shorter than the original if you want). Observe that memory usage gradually goes up to 4GB and the profile tool eventually crashes (after several minutes). 16/03/15 09:58:56 SessionMgr(7376): advprofile.exe exited with status -1073741819. Instead, if Sight overlay was turned off before creating the new line, it would have worked fine.
IM-19745	TIFF DLL not handling multi-page TIFFs correctly	ERDAS IMAGINE 2013 correctly handled multi-page TIFFs. In ERDAS IMAGINE 2014, a regression crept in where only the first page of the TIFF can be displayed. All the pages in the TIFF can be seen in the Multi-Image tab, and all of the pages can be selected as sub-images, but the selected TIFF page is not displayed. Rather, the first page is displayed.
IM-21166	Alone Algorithm File Crashes ERDAS IMAGINE	Sequence to Reproduce: (1) Install ERDAS IMAGINE 2015, but do not include ER Mapper (2) Copy <IMAGINE_HOME>/examples/ermapper/miscellaneous/test_patterns/HSI_Wheel.alg to a folder on the local disk. (Do not copy the Demo_wheel.* files). (3) Open / Algorithm on the copy of the ALG file ERDAS IMAGINE terminates abnormally. It does not terminate if you copy the Demo_wheel files.

IM-13358	ERS DLL does not use ECW file referenced in ERS Header correctly	ERS DLL does not use ECW file referenced in ERS Header correctly. Add the two ERS header files referencing ECW files to MosaicPro Run the mosaic to a .ecw file A message appears once the process begins: ERS Raster error: Filetype Unknown error message when mosaicking .ers files. Mosaic slowly completes. Session Log: 02/12/13 10:01:47 C:/Program Files/Intergraph/ERDAS IMAGINE 2014/bin/x64URelease/mosaicprocesspro.exe -m c:/temp/mosaic_tmp_mos_008780 -temporary -background 0 -ignore 0 -excludeempty 0 -meter mosaic 02/12/13 10:01:56 SessionMgr(6056): ERROR: #46 from ersFileTitleIdentifyAndOpen 02/12/13 10:01:56 SessionMgr(6056): ERROR: erdas::ers::FileHandle::DoOpen failed 02/12/13 10:01:56 SessionMgr(6056): ERROR: #95 from erdas::ers::FileHandle::DoOpen 02/12/13 10:01:56 SessionMgr(6056): ERROR: ERS Raster error: Filetype unknown 02/12/13 10:01:58 mosaicprocesspro(4312): One or more input files or output files cannot be opened by 64 bit MosaicProcessPro. Starting in 32 bit. 02/12/13 10:01:58 C:/Program Files/Intergraph/ERDAS IMAGINE 2014/bin/Win32Release/mosaicprocesspro.exe -m c:/temp/mosaic_tmp_mos_008780 -temporary -background 0 -ignore 0 -excludeempty 0 -meter mosaic
IM-18862	Opening ERS file gives incorrect NODATA message in Session Log	Launch ERDAS IMAGINE. In 2D View, open an ERDAS ER Mapper (*.ers) file, In Session log, see "16/12/14 08:33:25 eWkspace(14248): The input NullCell Value is out of range for the current pixel type 16/12/14 08:33:25 eWkspace(14248): The input NullCell Value is out of range for the current pixel type……."
IM-20601	Computing pyramids on a Virtual Mosaic (VMCX) pointing to 15k by 5k PNG throws a series of errors	Computing RRDs on a VMCX pointing to 15k by 5k PNG throws a series of errors. In Image Metadata, open the VMCS file and compute Pyramids. ERDAS IMAGINE throws a series of errors. After some time, Image Metadata crashes.

IMAGINE Advantage

Issue ID	Summary – IMAGINE Advantage	Description / How to Reproduce
IM-22547	Incorrect and inconsistent output parameters for orthorectification in both ERDAS IMAGINE and IMAGINE Photogrammetry	In trying to create Operators for Spatial Model for orthorectification we needed to look at the default behavior for orthorectification of calibrated images. Generally, when rectifying or reprojecting an image you want the default settings to never result in a loss of pixel information. Obviously this cannot be eradicated entirely (except by gross oversampling), but you want to generally produce an output image where few pixels have been dropped out from the input image. A rough measure of this is that no matter how rotated or warped the model is, the output would generally have to have more pixels than the input in order to preserve every input pixel. Unfortunately not only do the ERDAS IMAGINE output defaults often not meet this requirement, they are also frequently inconsistent between the numerous approaches you can take to producing a transformed output image. We need to be both consistent and correct. See specific NITF sample image Open the image in a 2D View. Click Image Metadata and note that the image is 8820 columns x 4696 rows. Scenario1: Multispectral tab / Transform & Ortho tab / Transform & Ortho menu, select Ortho Using Existing Model. Note in the dialog that the output image defaults to having only 6599 columns x 6278 rows. Given the nature of this image's geometric model, which is a "shear" into a parallelogram shape, the reduction in columns means that 1/3rd of the original image pixels will be missing from the output. Go ahead and produce the output and take a look at it – it has a degraded appearance. Scenario2: Multispectral tab / Transform & Ortho tab / Transform & Ortho menu, select Reproject. Set to Geographic / WGS84, which is the same as Scenario1. Note strange default pixel dimensions. Produce the output – note that this one is 8820 columns x 4696 rows – same as the input.
IM-33588	Horrendous edge artifacts introduced with Bicubic resampling	See data geometrically calibrated using RPCs. On the Multispectral tab / Transform & Ortho / Ortho Using Existing Model. In the Resample dialog, specify square pixels, ignore 0 in stats, use Elevation Library and set resampling to Bilinear. Specify output filename and OK. Display results in a 2D View with background set to red. Observe perfectly crisp left-hand edge of the image. Now repeat, but this time select Bicubic resampling. Observe nasty edge artifacts of near-black introduced around the edges of the data.
IM-41647	Condor processes using 32-bit Batch process for the jobs submitted from 64-bit ERDAS IMAGINE	From Submitting node, Distributed processing is started using Batch Command Editor of ERDAS IMAGINE 64-bit. On the Processing node, the job is processed using 32-bit Batch process instead of 64-bit Batchprocess.
IM-22790	MosaicPro should default to Bilinear when resampling must occur	MosaicPro should default to Bilinear when resampling must occur to ensure the best quality image by default. By default Nearest Neighbor is used and creates blocky and lower quality data than MosaicPro can deliver. Several other tools default to Bilinear when resampling is needed. MosaicPro should follow the move to better default data output.

IM-46606	Adding images with "Active Areas by Corners" is generating very bad output, whereas the "Active Area by Edges" is giving good output	Customer reported that in MosaicPro by adding images with "Active Areas by Corners" is generating very bad output, whereas the "Active Area by Edges" is giving good output. "Active Areas by Corners" was occasionally mis-identifying corners thereby clipping too much from the input data.
IM-25246	MosaicPro: sometimes leaves holes when creating specific dataset	Occasionally Seamlines in MosaicPro would result in small (1 pixel) gaps in the output mosaic
IM-45744	Reset button not working as expected in MosaicPro > Adjust individual image radiometry	1.Launch ERDAS IMAGINE, Launch MosaicPro from Raster tab > Geometry 2.Add images, make them visible and select from table 3.Click Adjust individual image radiometry, Change the brightness by dragging Brightness bar 4.Click Reset Button and observe Brightness bar reverting to original state but image still persist with brightness change. NOTE: Instead of reset button at the bottom if we click the reset brightness beside the brightness bar image reverting to original state.
IM-43093	Mosaic Express does not include Lagrange resampling method	Mosaic Express does not include Lagrange resampling method
IM-44279	MosaicPro Workstation crashed when opening a specific project	In some instances, where input images overlap each other almost 100%, crashes could occur.
IM-44912	Some input image is missing in mosaicking output	There are only two input images, the left and the right. They look good in MosaicPro workstation. However, the left is missing in the output file.
IM-48504	Toggling raster display after editing seam polygon crashes MosaicPro	Launch ERDAS IMAGINE 2018 Open MosaicPro, load two overlapping airphotos. Make the images visible and display the rasters. Click 'Automatically generate seamlines for intersections' button and in 'Seamline generation options' dialog, click ok. Click 'Edit seam polygons' and draw a polygon at the intersection. Observe seam polygon is edited. Now click 'Display raster images' and observe MosaicPro crashes.
IM-46883	running mosaicprocesspro.exe from Command window ignores TIFF compression parameter	When running mosaicprocesspro.exe from the Command window, the TIFF compression argument is ignored. The compression setting from the TIFF preferences is used instead. The help documentation for mosaicprocesspro states that "If you do not specify this option when the output is a TIFF image, the compression type specified in the TIFF preferences is used."

IMAGINE Objective

Issue ID	Summary – IMAGINE Objective	Description / How to Reproduce
IM-39533	Running FLS Segmentation crashed fe_process	Specific data would cause FLS Segmentation to run out of memory and crash.

IMAGINE Photogrammetry

Issue ID	Summary – IMAGINE Photogrammetry	Description / How to Reproduce
IM-47032	IMAGINE Photogrammetry ATE Report cannot be loaded using the Ribbon function	After a successful ATE run it is actually not possible to load the ATE Report by activating the Photogrammetry ribbon function "Reports/Automatic Terrain Extraction (ATE) Report". It seems that the blockfile name and the blockfile path are not saved properly when executing ATE (see line 8 and 9 of the ATE reportfile). Error messages and warnings reported in the session log: 18/12/18 14:16:30 SessionMgr(7256): ERROR: #2277 from StartATEReport 18/12/18 14:16:30 SessionMgr(7256): ERROR: eatm_DTMExtractionReport Failed 18/12/18 14:16:30 SessionMgr(7256): WARNING: #598 from eatm_DTMExtractionReport 18/12/18 14:16:30 SessionMgr(7256): WARNING: No valid report file exists 18/12/18 14:16:40 SessionMgr(7256): ERROR: #2277 from StartATEReport 18/12/18 14:16:40 SessionMgr(7256): ERROR: eatm_DTMExtractionReport Failed 18/12/18 14:16:40 SessionMgr(7256): WARNING: #598 from eatm_DTMExtractionReport 18/12/18 14:16:40 SessionMgr(7256): WARNING: No valid report file exists
IM-46924	3D ASCII output from Create Mean Terrain has characters for space making the output not useful	* Launch ERDAS IMAGINE 2018 64-bit. * Open a blockfile in the viewer. * From the Photogrammetry tab, under Generate drop down menu, click Create Mean Terrain. * In the Create Mean Terrain dialog, select 3D ASCII as Output DTM Type. * Give the name of the output and click OK in the dialog. Open the output in a text editor and notice that there are characters for spaces in the file. This makes the file not useable in any other tools like Surfacing tool.
IM-44828	Unable to import a project into IMAGINE Photogrammetry	1.Launch ERDAS IMAGINE 2018 2.Load any block file 3.Launch Import Inpho project from Photogrammetry Tab > Conversion group 4.Try to import InphoProject file of Type .prj , observe that you are not able to import as block file loaded in the input file field and trying to load .prj from file chooser is not showing the file in the respective folder
IM-48674	Unable to open SPOT-7 DIMAP V2 (DIM_SPOT.xml) projected (PRJ) raster data	SPOT-7 DIMAP V2 projected (PRJ) PMS data fails to open in ERDAS IMAGINE 2018 Launch ERDAS IMAGINE 2018 Right-click > Open Raster from the file chooser > Files of type select > SPOT DIMAP V2 choose DIM file DIM_SPOT7_PMS_*_PRJ_*.XML Error message appears. "Unknown DIMAP format"

IM-47013	No footprints when loading a block file with offline terrain file	A specific .blk adjusted in ERDAS IMAGINE 2016 can be open as expected in the LPS Project Manager, with footprints, etc. displayed.
		But if opened as a photogrammetric project, in ERDAS IMAGINE 2016 or 2018, only the CellArray displays, the footprints do not. And when you fit to frame or zoom out an error message displays.
		This is caused by an offline LTF file under the Terrains folder. Once you remove it, the error message is gone.
IM-48409	Block files created with an older version (ERDAS IMAGINE 2016 and earlier) are not compatible with IMAGINE Photogrammetry 2018	Block files created with an older version (2016 and earlier) are not compatible with IMAGINE Photogrammetry 2018 for the purpose of making orthophotos. Orthorectification with 2018 fails, generates corrupted image. Data is TiFF aerial RCD30 data.
IM-47866	IMAGINE Photogrammetry Orthoresample error with ADS L1 blk project	Orthoresample function with ADS L1 blk project fails with ERDAS IMAGINE 2018 Update 2. If you attempt to orthorectify L1 imagery you get a "Failed to recognize Authority Code" error.
IM-46599	Under Photogrammetry tab, Import ISAT, Inpho, PATB and SS project is not showing up the input files unless the format in the Import window is re-selected	1) Launch ERDAS IMAGINE -> Open any block file 2) Under Photogrammetry tab -> Import ISAT Project 3) In the Import window click open for Input File and browse to a location with ISAT Project files Observe that the ISAT project icon is not shown. Also for other 3 formats Inpho project, SS project and PATB project also the case is same, that is, the respective format files do not show. But if Format is re-selected in the Import window, then the input files do show.
IM-41918	Deleted points in .las are still there after exporting to HPC file	Several point clouds in LAS format were edited in IMAGINE Professional to remove incorrect elevation points. The resulting LAS were now used in GeoMedia 3D using the HPC Point Clouds workflow to Construct a HPC and then insert the resulting HPC into an access warehouse, The two processes ran with no error. The HPC is now displayed in GeoMedia 3D. The points previously edited in ERDAS IMAGINE are still there.
IM-45013	Height Above Ground tool does not preview and throws error message	ERDAS IMAGINE 2018 1) Launch ERDAS IMAGINE > Terrain tab > Height Above Ground 2) Provide a classified LAS file as input 3) Give input raster elevation file 4) Give output name 5) Click Preview button Observe that it throws this error saying: No PreviewOperators in model.

IM-46256	Errors pop up if a file from recent list is opened on top of a point cloud preview	Data: GMDX, LAS, SHP and IMG files of the same project area Steps to reproduce: * Open the LAS, SHP and IMG files in the 2D View. * Clear the View and launch Spatial Modeler Editor. * Open a gmdx file and give the LAS file from the project as input to the Point Cloud Input operator. * Click on Preview. * Once the preview is up and the Preview View selected, from the Point Cloud tab select Classification in the Color by drop down menu. * From File > Recent select either the SHP or IMG file that were previously opened in the 2D View. Notice that error pop up. Session log: 26/09/18 14:38:44 SessionMgr(26760): ERROR: #124 from ArrangeLayersCB 26/09/18 14:38:44 SessionMgr(26760): ERROR: erdas::EmlFramework::ShellMeter::Create failed 26/09/18 14:38:44 SessionMgr(26760): ERROR: #56 from erdas::EmlFramework::ShellMeter::Create 26/09/18 14:38:44 SessionMgr(26760): ERROR: Trying to change a running meter from modal to non-modal is not supported!
IM-40464	Loading a specific LAZ file as Raster crashes ERDAS IMAGINE	1.Launch ERDAS IMAGINE 2018 2.Load the file specific .laz ,by selecting files of type as LAZ as Raster (.laz) (not LAZ as Point Cloud (*las)) 3.Observe ERDAS IMAGINE crashes. When the same file is opened as LAZ as Point Cloud(.las), ERDAS IMAGINE does not crash
IM-49425	ERDAS IMAGINE 2018 Update 2 is unable to open customer's *.las file	Customer reported that ERDAS IMAGINE is unable to open their las and laz files. According to the customer the same las file opens in a popular GIS application. In ERDAS IMAGINE the following error messages show in the session log, while opening the customer's las in a 2D View 24/06/19 00:30:42 SessionMgr(12944): Connection success for the external process 'eWkspace_64' 24/06/19 00:31:27 SessionMgr(12944): ERROR: #192 from vr_lidarvlLayerOpen 24/06/19 00:31:27 SessionMgr(12944): ERROR: erdas::laslib::GenericVlr::Read failed 24/06/19 00:31:27 SessionMgr(12944): ERROR: #228 from erdas::laslib::GenericVlr::Read 24/06/19 00:31:27 SessionMgr(12944): ERROR: emif_ConvertToMIF failed 24/06/19 00:31:27 SessionMgr(12944): ERROR: #6148 from emif_ConvertToMIF 24/06/19 00:31:27 SessionMgr(12944): ERROR: emif_MIFtoObject failed 24/06/19 00:31:27 SessionMgr(12944): ERROR: #6207 from emif_MIFtoObject 24/06/19 00:31:27 SessionMgr(12944): ERROR: Invalid object or design!
IM-47189	ERDAS IMAGINE crashes with point cloud polyline profile	1.Launch ERDAS IMAGINE 2.Load a point cloud image, Select point cloud Tab 3.From Profile group, select Polyline Profile 4.Draw a polyline and end it by single mouse click and double click Left Mouse button at the exact same point 5.Observe ERDAS IMAGINE crashes.

IM-45910	ERDAS IMAGINE 32-bit crashes while trying to pan in the HPC file's profile views after zoom is performed	* Launch ERDAS IMAGINE 2018 32-bit and load a HPC file. * From the Profile group of Point Cloud tab, click the Rectangle Profile option and draw a rectangle in the viewer. * In either the Sideview Profile viewer or the Frontview Profile viewer, zoom in and then pan using either the middle mouse button or the pan tool from the Home tab. Notice that ERDAS IMAGINE crashes. ERDAS IMAGINE 2018 64-bit doesn't crash but only shows up error while panning. Session log: _31/08/18 15:16:56 SessionMgr(3096): ERROR: #4 from EFGA_DERIVEPOLYCOEFS_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: EFGA_SOLVELINEAREQS failed_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: #4 from EFGA_SOLVELINEAREQS_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: egda_MatrixDivide failed_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: #6 from egda_MatrixDivide_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: egda_MatrixDivideF64 failed_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: #2 from egda_MatrixDivideF64_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: egda_MatrixLUDecomposition failed_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: #7 from egda_MatrixLUDecomposition_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: egda_MatrixLUDecompositionF64 failed_ _31/08/18 15:16:56 SessionMgr(3096): ERROR: #1 from egda_MatrixLUDecompositionF64_ _31/08/18 15:16:56 SessionMgr(3096):
IM-45741	While Exporting to ISAT project for which sensor models are Unsupported, the exportisat.exe process crashes	# Launch ERDAS IMAGINE # File > New > Photogrammetric Project and give the path of the Block fie to be saved # Select *Rational Functions* for Geometric Model Category and *Quickbird* *RPC* for Geometric Model on Model Setup dialog and Click OK # Leave the default settings on Block Property Setup dialog and Click OK # Now add NITF format QuickBird images to the block file # Save the Block file and go to Conversion group > *Export to ISAT Project* # Provide output project name and Hit OK # Observe that the exportisat.exe crashes while exporting to ISAT project Note: Similar is the observation for Formosat2 orbital pushbroom model, Triplesat RPC
IM-43782	Failure at the end of the process due to tridicon intermediate files limitation	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 pair of images. If a Tridicon intermediate file generated is bigger than 4GB, ERDAS IMAGINE returns an error and stop the process (since the Tridicon software does not support BigTIFF). If possible please compute output intermediate image size in advance, for example displaying a warning to prevent having to wait until at the end of the process before it fails.
IM-48126	ERDAS IMAGINE crashes while trying to get the report after changing the Remove Points over n Standard Deviations value multiple times	ERDAS IMAGINE 2018 Update 2 64-bit 1) Launch ERDAS IMAGINE > Load a specific Block File > Launch Stereo Point Measurement (SPM) 2) Under SPM > Tools > launch Tie Point Uncertainty Analysis 3) Change the value of Remove Points over n Standard Deviations to 0 and Apply > Click Report > Observe that Report launches 4) Now again Change the value of Remove Points over n Standard Deviations to 0 and Apply > Click Report and again repeat the same step Observe that ERDAS IMAGINE crashes while trying to get the report after changing the value of Remove Points over n Standard Deviations multiple times.

IM-47477	Under Stereo Point Measurement (SPM) Viewing Properties in Image Correlation texts are not properly visible for Correlation Contrast	1) Launch ERDAS IMAGINE > File > Open > Photogrammetric Project > open a specific Block project 2) Launch Stereo Point Measurement Tool from Point Measurement dropdown menu 3) In SPM under Tools Menu launch Viewing Properties, select Image Correlation tab Observe that the Text for 'Low' and 'High' are not visible properly

IMAGINE Professional

Issue ID	Summary – IMAGINE Professional	Description / How to Reproduce
IM-20641	Every so often an ECW in a batch list fails to calculate stats	Running a batch statistics/histogram calculation (32-bit application) with a total of more than 5000 ECWs; running 3 jobs in parallel. Each image is 4000 x 4000 x 3bands x ECW v2. Every so often, an ECW fails to calculate stats. Locate the ECW, open it in the Viewer, it displays fine and is visually fine. Open the ECW in Image Metadata, it looks fine. Calculate stats, and the process completes fine. Failure in Session log states: imagecommand.exe exited with status -1073741819.
IM-45743	Number of output files produced is not the same as number of inputs provided in Batch, Start Processing Later At	1.Launch Unsupervised Classification from Raster tab > Classification > Unsupervised 2.Provide the input file, specify output file, provide required number of classes and click on Batch 3.Now select variables as one input, one or more outputs 4.Add three more files, click on submit , select Start Processing Later At 5.Provide Simultaneous Processes as 4 and click OK 6.Provide the proper credentials and click Ok 7.Scheduled batch process listed and process become active at start time and done after a while. 8.Observe the output folder. The outputs produced are one or two files, rather than the expected four. This is not the case with Batch > Start Processing Now
IM-36818	Spatial Modeler batch command file (.bcf) is not saved from the Batch Command Editor	Spatial Modeler batch command file (.bcf) is not saved from the Batch Command Editor when accepting the default batch command name after clicking OK To recreate: - Open Spatial Model - select Run in Batch (opens the Batch Command Editor) - select Save. The Batch Command file chooser opens with the temp batch filename. - select OK. The batch command file is not saved in the default temp location If you manually add the .bcf extension, the batch command file is saved. If you change the name, the batch command file is saved. If you redirect to a different folder, the batch command file is saved. If you click <Enter> instead of OK, the file is saved.

| IM-8447 | Spectral Euclidean Distance value continues to change when clicking other areas than the nudgers | In the Region Growing Properties tool, the Spectral Euclidean Distance nudger is "sticking" when changing the value and then proceeding to grow regions in the 2D View. The Spectral Euclidean Distance value continues to be adjusted even though the mouse clicks are elsewhere in the ERDAS IMAGINE interface.

This problem does not occur in ERDAS IMAGINE 2011. The Region Growing Properties dialog did not have a thumbwheel for adjusting the Spectral Euclidean Distance in 2011, so maybe that is contributing to the problem.

Steps to reproduce:
Display the raster file lanier.img in a 2D View.
Open the Region Growing Properties tool (Drawing tab > Insert Geometry group > Grow menu > Growing Properties).
Click the Grow icon (Drawing tab > Insert Geometry group > Grow) to place a seed pixel in an area of water.
Click on the up nudger a couple of times to increase the Spectral Euclidean Distance value. Now click on an empty area in the Region Growing Properties tool and notice that the Spectral Euclidean Distance value continues to change and the polygon region in the 2D View continues to grow to reflect the change of the Spectral Euclidean Distance value. Even if you click elsewhere in the ERDAS IMAGINE interface, the Region Growing Properties tool remains active and the Spectral Euclidean Distance value continues to change. |
| --- | --- | --- |
| IM-45028 | Image Alarm crashes 64-bit version of ERDAS IMAGINE 2018 | Image Alarm tool crashes ERDAS IMAGINE 2018 64-bit. Session log reports "Unusual file mapping size 264248". The 32-bit versions of ERDAS IMAGINE 2018 and ERDAS IMAGINE 2016 Update 1 do not crash when using this tool.

Steps to reproduce:
Display Multispectral image in a 2D View
Start the Signature Editor. (Raster tab > Classification group > Supervised menu > Signature Editor).
Open a signature file derived from the Multispectral image.
Re-associate the signature file and the image. (Signature Editor > Edit menu > Image Association)
Select one of the rows in the Signature Editor.
Start the Signature Alarm tool. (Signature Editor > View menu > Image Alarm) and click OK.
Click inside the 2D View.
ERDAS IMAGINE 2018 crashes. |
| IM-47545 | Unsupervised classification generates output with a missing block of data | Unsupervised classification generates output with a missing block of data.
Failure appears be related to the number of classes to be created and to the output file type (i.e. TIFF). A specific lower and upper range fails when writing TIFF output. Using this same range works when writing IMG output. Specifying a different number of output classes works when writing TIFF output.

If the input TIFF file is converted to IMG and used as input, the problem is not seen.

These errors are seen when the failure occurs
06/02/19 11:37:39 SessionMgr(14936): etif_HandleBlockRead failed
06/02/19 11:37:39 SessionMgr(14936): etif_HandleBlockRead failed
06/02/19 11:37:39 classifyisodata(2656): Creating signature file: C:/Temp/imagine/name
06/02/19 11:37:39 SessionMgr(14936): etif_HandleBlockRead failed
06/02/19 11:37:40 SessionMgr(14936): etif_HandleBlockRead failed |
| IM-46109 | classifyisodata.exe crashes for running Unsupervised classification operator to an ECW output | In ERDAS IMAGINE, open Spatial Model Editor.
Drag and Drop Unsupervised classification operator.
Double click the operator and specify 'Input Raster Layer' and 'Output cluster layer'.
Input raster can be any format e.g. img.
Output format should be ECW.
Click ok and run the model.
Observe run fails and session log info is as below:
external process exited with status -1073741819. |

IM-47278	Geophysical Processing not working in ERDAS IMAGINE 2018	1.Launch ERDAS IMAGINE 2018. 2.Launch Geophysical Processing from Raster > Classification > Unsupervised 3.Provide the input as lanier.img , provide the output and click ok 4.Observe Process failing and session log showing errors Session log: 18/01/19 18:25:40 SessionMgr(11576): Connection success for the external process 'eWkspace' 18/01/19 18:26:08 eWkspace(6800): Loading [geophysical.eml]... 18/01/19 18:26:37 C:/Program Files/Hexagon/ERDAS IMAGINE 2018/bin/x64URelease/smprocess.exe $IMAGINE_HOME/etc/models/HorizonDip_NoClip.gmdx Raster Input.Filename=d:/2019/data_delete/lanier.img Raster Output.FilenameIn=d:/2019/16-01-2019/delete/geop.img Raster Output.PixelType=F64 Band Selection.BandRange=1:1 18/01/19 18:26:37 eWkspace(6800): Unloading [geophysicalalgorithms.eml]... 18/01/19 18:26:38 SessionMgr(11576): Running spatial model ($IMAGINE_HOME/etc/models/HorizonDip_NoClip.gmdx) with port values (Raster Input.Filename=d:/2019/data_delete/lanier.img,Raster Output.FilenameIn=d:/2019/16-01-2019/delete/geop.img,Raster Output .PixelType=F64,Band Selection.BandRange=1:1). 18/01/19 18:26:38 18/01/19 18:26:38 smprocess: 18/01/19 18:26:39 SessionMgr(11576): HexGeo::SpatialModeler::Operator::Execute failed 18/01/19 18:26:39 HexGeo::SpatialModeler::Operator::Execute failed 18/01/19 18:26:39 HexGeo::SpatialModeler::Operator::Execute failed 18/01/19 18:26:39 HexGeo::SpatialModeler::Operator::Execute failed 18/01/19 18:26:39 HexGeo::SpatialModeler::Operator::Execute failed 18/01/19 18:26:39 HexGeo::SpatialModeler::Operator::Execute failed 18/01/19 18:26:39 HexGeo::SpatialModeler::Operator::SetErrorMessage failed 18/01/19 18:26:39 Spatial Model failed in Raster Input. The error was "No valid input Filename available". 18/01/19 18:26:39 SessionMgr(11576): Spatial model failed. 18/01/19 18:26:39 18/01/19 18:26:39 SessionMgr(11576): smprocess.exe exited with status 1.
IM-47261	Loading JP2 output from Unsupervised classification crashes ERDAS IMAGINE	1.Launch ERDAS IMAGINE 2.Launch Unsupervised classification from Raster > Classification > Unsupervised 3.Provide the input as lanier.img 4.Provide the output as unsuper.jp2 (File of type:JPEG2000) 5.Provide the number of classes as 3 and click OK 6.Process fails,, ignore it and try to load output from File open > Recent button 7.Obvserve ERDAS IMAGINE crashes.
IM-47533	LaGrange resampling method not present in Geophysical Processing dialog	1.Launch ERDAS IMAGINE 2.Select Geophysical Processing from Raster > Classification > Unsupervised > Geophysical 3.Observe LaGrange resampling method not present but help page contain LaGrange also
IM-46046	Opening this Hyperspectral Image is slow through Image Chain	Open a specific .hdr hyperspectral image through Image Chain. Takes way too long.

IMAGINE SAR Interferometry

Issue ID	Summary – IMAGINE SAR Interferometry	Description / How to Reproduce
IM-45591	Coherence image produced by sentinel Swath CCD (mosaic) crashes 2D View	Coherence image produced by sentinel Swath CCD (mosaic) crashes viewer. Simply open the image after mosaic.

Spatial Modeler

Issue ID	Summary – Spatial Modeler	Description / How to Reproduce
IM-49746	Preview operator: Is not automatically re-projecting feature data when a Basemap is displayed	This problem occurs in ERDAS IMAGINE as well as in the Spatial Model Editor. A feature layer can be added to a 2D View window. When this occurs, the window recognizes and displays the data using the appropriate coordinate system. If a Basemap is displayed in the window, the feature data is automatically re-projected to register to the Basemap - in this case OpenStreetMap, which uses EPSG 3857. Following a similar workflow using the Preview command to display the feature data, the data is not automatically re-projected (correctly) when a Basemap is displayed in the Preview window.
IM-46647	OLH-Description of one port missing in help for Machine Intellect Information operator	1.Launch ERDAS IMAGINE 2018, and then launch Spatial Model Editor 2.Drag the Machine Intellect Information operator to Spatial Model Editor. 3.Observe MethodInformation port exists. 4.Launch help page and observe no description MethodInformation port and the screenshot also needs to be updated.
IM-46629	OLH-Description of one port missing in help for Image Segmentation FLS operator	1.Launch ERDAS IMAGINE 2018, and then launch Spatial Model Editor 2.Drag the Image Segmentation FLS operator to Spatial Model Editor. 3.Check ON the Show All Ports option and observe Max Tile Size port exists. 4.Launch Help page and observe no description for Max Tile Size port
IM-46028	Proximity (and Cost) Spread operator's Help references a deprecated capability	Start Spatial Model Editor Drag the Proximity Spread (or Cost Spread) operator onto the canvas Display the AutoStudyArea port Right-click on the Operator and select Help In the Help, look at the section for the AutoStudyArea port. It states: "If set to True, the StudyArea will be set to the same extent as the extent of OriginPointsRasterIn file. If set to False, the StudyArea is determined by the settings of Processing Properties dialog for the particular Spatial Model. Default setting is True." But there is no longer have a "Processing Properties dialog" Seems like the port has no purpose any more.
IM-46624	OLH-Description of two ports missing in help for Raster Attribute Output operator	1.Launch ERDAS IMAGINE 2018, and then launch Spatial Model Editor 2.Drag the Raster Attribute Output operator to Spatial Model Editor. 3.Check ON the Show All Ports option and observe Low Fill , High Fill exist. 4.Launch Help page and observe no description for Low Fill , High Fill ports and also show all ports figure missing.
IM-46623	OLH- No help for Sort Method in ICA operator.	1.Launch ERDAS IMAGINE 2018, and then launch Spatial Model Editor 2.Drag the ICA operator to S Spatial Model M Editor. 3.Click on SortMethod port and launch help from SortMethod dialog pop-up 4.Observe Help page navigating to errors page
IM-46735	OLH for Machine Intellect Information operator needs to be updated	A new output port, MethodInformation, was added to the operator in v16.5.2. But the OLH does not describe that port.

IM-46543	OLH-Create Centroid operator figure to be updated in help page.	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Spatial Model Editor and drag Create Centroid operator to Spatial Model editor 3.Launch online help and observe figure in help page and figure in UI are not same.
IM-46564	OLH- Multi Filename input operator should be updated with Default and show all ports figures.	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Spatial Model Editor, drag Multi Filename input operator to Spatial Model editor and launch help 3.Observe operator in UI having only three ports but help shows four ports. Shown in UI by checking ON Show all ports
IM-45008	Some operators to be updated with show all ports in the Help	1.Launch IMAGINE 2016, Spatial modeler, check on show all ports. 2.Drag these operators from the Surface category: * Aspect * Degreeslope * Insolatio * LeastCostPath * Percent Slope * Relief 3.Click on each operator help and observe that help needs to be updated with figures corresponding to show all ports.
IM-46027	Proximity Spread operator's Elevation Restriction dialog has no Help	Start Spatial Model Editor Drag the Proximity Spread (or Cost Spread) onto the canvas Display the Elevation Restriction port Double-click the Elevation Restriction port to bring up the Elevation Restriction dialog. Click Help Help goes to the generic Help Error page
IM-47761	Screenshot in the Generate Functional Attributes operator OLH should be updated	The screenshot of the Generate Functional Attributes operator in its OLH mentions it as Functional Attributes. So the screenshot should be updated. Please see the attached screenshot.
IM-46597	OLH- Create Buffer Ring operator help showing Inner Distance default value as Nearest Neighbor.	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Spatial Model Editor from File > New 3.Drag Create Buffer Ring operator to Spatial Model Editor and launch help 4.Observe Inner Distance port showing default value as Nearest Neighbor, which was incorrect.
IM-46596	OLH-Create Buffer Ring figures are placed instead of Create Buffer Zone in help page.	1.Launch ERDAS IMAGINE 2018 Update 2, Launch Spatial Model Editor. 2.Drag Create Buffer Zone operator and launch Help. 3.Oberve Create Buffer ring operator figures are placed instead of Create Buffer Zone
IM-46213	Join Features operator when Previewed for 2 features with different Projection types, Preview is not correct even after Fit to Frame	ERDAS IMAGINE 2018 Update 2 1) Launch ERDAS IMAGINE > Toolbox Tab > Spatial Model Editor 2) Open specific Spatial Model and then Preview 3) Observe that the preview is blank initially, now Do Fit to Frame for the 2D Viewer Observe that the Features are not visible properly until its zoomed in Note: 1) Here the FeaturesInLeft is having an input with State Plane projection and FeaturesIn Right is having UTM projection 2) Even the other way around i.e., FeaturesInLeft with UTM projection and FeaturesIn Right with State Plane also has the same problem 3) If both the Features of same projection, it shows the features properly after Fit to Frame

IM-46714	Summarize Related Features to Preview or Feature Output fails for specific geometry-based expression	ERDAS IMAGINE 2018 Update 2 Spatial Model contains two Features Input , Summarize Related Features, Preview and Features Output operators: -> on preview, displays blank Preview. -> running the model, errors out at Features output and creates a 1kb shp and shx file; 0kb dbf file. (02/11/18 15:20:32 SessionMgr(8900): Executing spatial model 02/11/18 15:20:32 SessionMgr(8900): erdas::sb_CGP::FeaturesOutput::OnExecute failed 02/11/18 15:20:32 Unable to cast object of type 'Intergraph.Geometry.GDOBlob' to type 'System.Byte[]'. 02/11/18 15:20:32 SessionMgr(8900): Spatial model execution failed.)
IM-46560	Default Values are not set in the ports of Create Buffer Ring and Create Buffer Zone operator	ERDAS IMAGINE 2018 Update 2 Default values of the Distance Units, Linear End Caps and Geometry Field Name are not set in the Operator UI as per the documentation of Create Buffer Ring and Create Buffer Zones operators Also if the Geometry Filed name is set it doesn't seem to add the field name in the output
IM-47759	Expression allowed in the Generate Functional Attributes operator errors out when executed	ERDAS IMAGINE 2018 Update 2 Open a specific Spatial Model containing a Generate Functional Attributes operator and click Preview 20/02/19 11:16:45 SessionMgr(57492): ERROR: #125 from featuresvlLayerCreate 20/02/19 11:16:45 SessionMgr(57492): ERROR: Error happened during compilation of the expression with message: System.CodeDom.Compiler.CompilerErrorCollection.
IM-48952	The datatype in the user interface (UI) for a port of some operators isn't in sync with OLH.	The datatype for a port of the following operators in the UI is HexagonGeospatial.FeaturesAnalysis.FunctionalAttribute. Whereas in the OLH it is IMAGINE.FunctionalAttribute. * SummaryAttribute1 port of Summarize Related Features operator * Functional Attribute1 port of Generate Functional Attributes operator * Functional Attribute port of Define Functional Attribute operator * SummaryAttribute1 port of Merge Features operator UI and OLH for these operators should be in sync.
IM-48349	Running "Raster Statistics per Feature" operator is hanging and eventually crashing ERDAS IMAGINE	Customer reported that they tried to run the "Raster Statistics per Feature" operator to get the mean value of a polygon. When they run the process, ERDAS IMAGINE is hanging and eventually crashing.
IM-48363	Input calibrated files are incorrectly placed in output PDF by Create Geospatial PDF operator	Run specific Spatial Model. Open the output pdf file. Observe output of ERDAS IMAGINE 2018 Update 2 are incorrectly placed. Valid output is created in ERDAS IMAGINE 2016 only.
IM-41134	Progress bar stays at 0% when running Machine Learning operators	All Python-based Machine Learning operators have this problem.

IM-46592	Executing Machine Learning (ML) Process - session log pointing to unknown classification server	1.Launch ERDAS IMAGINE 2018 Update 2 and change to Machine Learning Layout. 2.Select ML Train and train a model by collecting image chips for a few classes. 3.Now select ML Process tab, create a Project and try to execute the ML Process by selecting the model created in step2. 4.Observe that session log showing classification server pointing to C:/tf_jenkins/workspace/rel-win/M/….etc. This does not exist in the system. NOTE: In this work flow execution was success and classification done. Session log: 22/10/18 15:15:51 C:/Program Files/Hexagon/ERDAS IMAGINE 2018/bin/x64URelease/MachineLearningProcessChain.exe d:/2018/19-10-2018/lauoutproject2.mlp 1 Run 1 22/10/18 15:15:57 SessionMgr(3436): Starting classification server process... 22/10/18 15:16:27 SessionMgr(3436): Classifying C:/Users/agangumo/AppData/Local/Temp/SPATIAL_MODELER-5ec4-774c-9a62-155a-009920/cc4ac0f0-17a9-492c-ba2c-92a297e68855img 22/10/18 15:16:27 SessionMgr(3436): classification server: 2018-10-22 15:16:27.207485: I C:\tf_jenkins\workspace\rel-win\M\windows-gpu\PY\35\tensorflow\core\platform\cpu_feature_guard.cc:140] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 22/10/18 15:16:27 SessionMgr(3436): classification server: 2018-10-22 15:16:27.539761: I C:\tf_jenkins\workspace\rel-win\M\windows-gpu\PY\35\tensorflow\core\common_runtime\gpu\gpu_device.cc:1212] Found device 0 with properties: 22/10/18 15:16:27 SessionMgr(3436): classification server: name: Quadro M1200 major: 5 minor: 0 memoryClockRate(GHz): 1.148 22/10/18 15:16:27 SessionMgr(3436): classification server: pciBusID: 0000:01:00.0 22/10/18 15:16:27 SessionMgr(3436): classification server: totalMemory: 4.00GiB freeMemory: 3.35GiB
IM-47764	Doc: Classify using machine learning has a limitation on raster data type that needs to be documented	Raster Classification using Machine Learning fails if the data has No Data set or if the data type is Double. Here is the error message from the session log. 12:16:13 SessionMgr(9000): Input contains NaN, infinity or a value too large for dtype('float32').
IM-47505	Initialize Inception operator performs validation test even when no data is set aside for validation	It seems Initialize Inception always performs validation even when no data is set aside for validation. With Validation percentage set to zero, I still get some percentage values. In the session log, I see this Step 99: Validation accuracy = 84.0(N=100) This should not be the case if I have not reserved any data for validation.
IM-43613	Criteria Selection on the Probability field in Machine Learning Layout crashes ERDAS IMAGINE	On the File tab, change to the Machine Learning Layout Load a project that you've already trained and classified. Load the results. In the Change Likelihood Rank panel right click in the Row column and select Criteria... Use the Selection Criteria dialog to specify $"Probability" > .5 Click Select. ERDAS IMAGINE crashes
IM-42556	Session log records a warning message when running a model consisting of Machine Learning operators	Steps To Reproduce: (1) Create a valid model with any of the Machine Learning operators. (2) Run the model Observation: Session log records a warning message as below: {color:#d04437}11/12/17 13:54:21 eWkspace_64(17412): WARN com.hexgeo.smsdk.spatialmodeler.core.Data - SizeInBytes must be implemented for data type: IMAGINE.FeatureSubset{color}

IM-42504	Zonal Max operator does not support float data	Zonal Max operator only outputs integer data. This causes a problem if the input is data type is float - the output values lose precision. It really causes a problem if the input data type is float and the values are negative - the Zonal Max always outputs a value of 0 instead of the true negative zonal max value. Whereas the Zonal Attributes tool (Save Zonal Statistics To Polygon Attributes) outputs correct zonal max floating point values.
IM-42614	Select Attributes is throwing an error dialog on removing all the attributes from the included list	Steps to reproduce: (1) Create a spatial model as follows: Feature Input > Select Attributes > Initialize Naive Bayes > ... (2) In 'Feature Input' select any shapefile that has some attributes defined. (3) On 'Select Attributes' operator double-click on the 'AttributeNames' port to bring up Select Attributes dialog. (4) From the 'Available Attributes' list add couple of attributes to the 'Included Attributes' list. (5) Once the attributes are listed in the 'Included Attributes' list, remove both the listed attributed by clicking "<" tool bar icon. Observation: (6) An error dialog is thrown when the last attribute from the list is removed Session log records: _{color:#d04437}13/12/17 12:43:42 SessionMgr(4132): ERROR: #223 from ScrollList::SelectByPos(){color}_ _{color:#d04437}13/12/17 12:43:42 SessionMgr(4132): ERROR: eeml_ScrollListSelectByPos failed{color}_ _{color:#d04437}13/12/17 12:43:42 SessionMgr(4132): ERROR: #2 from eeml_ScrollListSelectByPos{color}_ _{color:#d04437}13/12/17 12:43:42 SessionMgr(4132): ERROR: Scrollist has no members in the set!{color}_
IM-48617	Convert to Surface operator fails if it is used in combination with other point cloud operators	Convert to Surface fails if it is used in combination with other point cloud operators. But if the intermediate result is saved to a file and the file is then used as an input to convert to surface operator, it works fine.
IM-48885	Stack Max operator does not output correct value if the input is a negative floating point number	Stack Max operator always returns a value of 2.22507e-308 if the input value is negative and the data is 64-bit floating point. It returns a value of 1.17549e-038 if the input is 32-bit floating point data. These are not the correct values. 2.22507e-308 is the maximum value for the floating point 64-bit data and 1.17549e-038 is the maximum value for the floating point 32-bit data. Stack Max operator provides the correct output value if the input is a negative 8-bit or 16-bit value. This problem does not occur with ERDAS IMAGINE 2016 Update 1.
IM-46535	Measure Area is affecting the geometries (some large holes are being filled)	ERDAS IMAGINE 2018 Update 2 A Spatial Model was built which takes an input shapefile, merges features and then measures the Area of each feature. The result of the merge appears to be correct, but the result of the subsequent Measure Area are wrong - large holes in the original geometries have been filled (i.e. removed). Measure Area should not affect the geometries at all! Measure Perimeter has the same effect on the geometries. Also tried Measure Length and Measure Center and they all modified the output geometries. As a workaround, use Generate Functional Attributes again.

IM-49761	Spatial Model changes datum of input feature data	When processing input feature data that are projected to Lambert Conformal Conic with the datum "MGI AT (EPSG: 1618)", the output features and raster data have a different datum, which causes a shift of approximately 300 meters in the X-direction. The output features data are assigned the datum "MGI". The output raster data is assigned the datum "Militar-Geographische Insttut [To WGS 84 8]".
IM-44602	Producing ER Mapper (*.ers) file from vector file throwing error in ERDAS IMAGINE 2018	1.Launch ERDAS IMAGINE 2018 2.Launch Spatial Model Editor, create model Features Input > Convert to Raster > Raster Output 3.Provide the input as *cities.shp* and output raster as *ermapp.ers* 4.Run the model and observe an error thrown Vector<T> too long
IM-46625	One extra port (Expression) shown for the operator Point Cloud Build Selection Criteria operator in UI	1.Launch ERDAS IMAGINE 2018 Update 2, launch Spatial Model Editor 2.Drag Point Cloud > Build Selection Criteria operator to Spatial Model Editor. 3.Check ON show all ports, observe Expression port present. This is not explained in Help.
IM-46381	OLH Default values disagree with Filter By Geometries operator	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Spatial Model Editor from File > New 3.Drag Filter By Geometries operator to Spatial Model Editor 4.Click SpatialOperator port and observe default value is set to Meet but OLH says default value is Touch
IM-39578	Convolve a F32 DEM using non-normalised Kernel, fails with Unable to allocate OpenCL Image message	Open specific spatial model in the Editor. Click Run See these messages in the Message panel and the model fails to run: Unable to allocate OpenCL Image Unable to allocate OpenCL Image Unable to allocate OpenCL Image Unable to allocate OpenCL Image Unable to allocate OpenCL Image Unable to allocate OpenCL Image Unable to allocate OpenCL Image Unable to allocate OpenCL Image If you change the Input Raster from Native Type to Float (which should be the same) the model runs successfully. Or, you can leave it as Native Type, but change Normalize to True on the input kernel. That works as well. Note – if you close ERDAS IMAGINE after attempting (and failing) to run this model, you get a Runtime Error.
IM-45023	Initial input values in Spatial Model Editor causes errors	Spatial Modeler reports an error on initial inputs. Test Model is in: \\alpha\JIRA_data\IM-45023 Open Spatial Modeler Scenario 1: # Load model from above folder # Run model # When the dialog opens, press "OK" without changing any values. # Output should report an error.

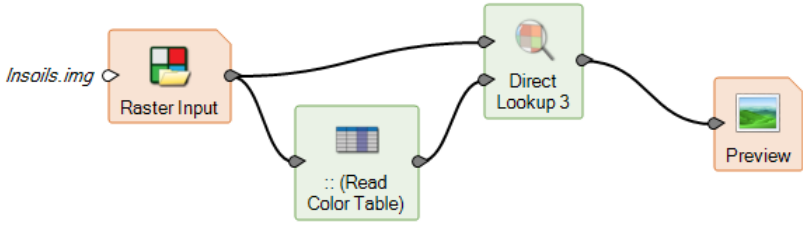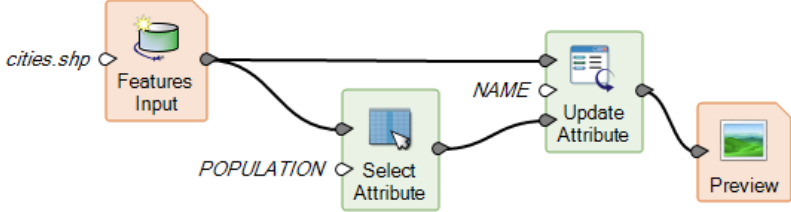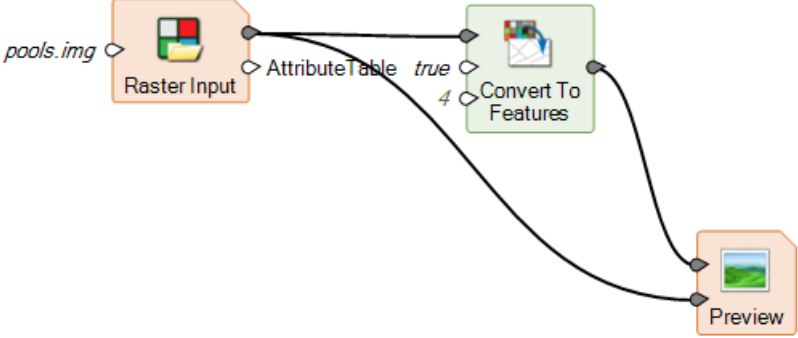| IM-45259	Slope to NTF give errors in the session log	Run a specific Spatial Model which generates slope from a DEM and outputs to NITF format. Notice the errors in the session log: 09/07/18 11:14:43 SessionMgr(18828): ERROR: #22935 from eimg::details::SSLayerGetNames 09/07/18 11:14:43 SessionMgr(18828): ERROR: <NULL> failed 09/07/18 11:14:43 SessionMgr(18828): ERROR: #67 from <NULL> 09/07/18 11:14:43 SessionMgr(18828): ERROR: eimg_FileImageNamesGet failed 09/07/18 11:14:43 SessionMgr(18828): ERROR: #14930 from eimg_FileImageNamesGet 09/07/18 11:14:43 SessionMgr(18828): ERROR: eimg_FileOpen failed 09/07/18 11:14:43 SessionMgr(18828): ERROR: #5968 from eimg_FileOpen 09/07/18 11:14:43 SessionMgr(18828): ERROR: c:/work/output.ntf.r2: eimg_FileOpen failed (33:Unsupported Raster format or non-Raster format) It looks like when outputting NITF in this case, we try to compute stats while generating RSETs, which tries to open the RSET as it's being generated (and fails). It doesn't seem to negatively affect the process though.
IM-46858	Rename Attributes does not work	Open a specific Spatial Model desinged to take an input shapefile, attempts to rename one of the attribute fields and write out a new shapefile. However if you click Preview (or Run) you'll get this error: Spatial Model failed in Rename Attributes. The error was "HexGeo::SpatialModelerFeatures::Feature::TransferFieldValue failed Unsupported field type".
IM-46567	OLH Default values disagree with Compute Affine Coefficients operator	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Spatial Model Editor from File > New 3.Drag Compute Affine Coefficients operator to Spatial Model Editor 4.Observe default value set for Scale X ,Scale Y ports are 0 but OLH says default values are 1
IM-46565	OLH Default values disagree with APM Parameters operator	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Spatial Model Editor from File > New 3.Drag APM Parameters operator to Spatial Model Editor 4.Observe default value set for PointsPerImage port is 25 but OLH says default value is 9
IM-46762	Some LAS inputs cause the Classify Ground Operator to crash ERDAS IMAGINE	Classify Ground operator causes ERDAS IMAGINE to crash with some point cloud input files. The cause of the problem has been identified with using point cloud files small enough not to need tiling. After a crash you may see a session log error that looks like: 14/11/18 09:22:16 SessionMgr(4972): Executing spatial model: //cheryltest/sfdc/00036404_cloud_crash/classifyground/groundpoints.gmdx 14/11/18 09:25:45 SessionMgr(4972): external process exited with status -1073741819.
IM-46705	Spatial Model failed in Add Attribute By Order	Customer submitted a model where errors are reported at the Add Attribute By Order operator. Tests indicate the source of the errors may be coming from how the Filter By Geometries Operator is sending the temporary output to the next operator. 31/10/18 13:47:05 SessionMgr(3336): ERROR: #2348 from HexGeo::SpatialModeler::Operator::InternalApply 31/10/18 13:47:05 SessionMgr(3336): ERROR: HexGeo::SpatialModeler::Operator::SetErrorMessage failed 31/10/18 13:47:05 SessionMgr(3336): ERROR: #1985 from HexGeo::SpatialModeler::Operator::SetErrorMessage 31/10/18 13:47:05 SessionMgr(3336): ERROR: Spatial Model failed in Add Attribute By Order. The error was "Table count 209 does not match FeaturesIn count 14.". 31/10/18 13:47:06 SessionMgr(3336): Table count 209 does not match FeaturesIn count 46.

IM-48093	Add Attributes by Location does not accept just DN values	Add Attributes by Location seems to rely on there being an attribute table present on the raster stream. Whereas, frequently there will not be if the raster stream has been generated as part of the model. Open specific Spatial Model in a Spatial Model Editor Click Run. Note that the second Add Attributes by Location fails with a message "can't find attribute table" The only difference between the two Add Attributes by Location operators is that in the second one, the input raster stream has been multiplied by 2, thereby invalidating its attribute tables (but still having DN values). If instead you attach the output of Attach Attributes to the Related Data port of Add Attributes by Location 2, it runs successfully. Help states that DN values should be supported. It needs to be.
IM-48392	Add Attributes By Location operator fails with float values	Add Attributes By Location operator fails when the input raster is of float data type. 9/04/19 17:46:18 SessionMgr(23780): ERROR: #1985 from HexGeo::SpatialModeler::Operator::SetErrorMessage 09/04/19 17:46:18 SessionMgr(23780): ERROR: Spatial Model failed in Add Attributes By Location. The error was "HexGeo::SpatialModeler::Typedefs<class HexGeo::SpatialModeler::Data>::CastRef failed 09/04/19 17:46:18 Unable to cast a class HexGeo::SpatialModeler::Data to a struct HexGeo::SpatialModeler::DoubleData".
IM-18871	ERDAS IMAGINE crashes while saving read-only Spatial Model	Open a read-only Spatial Model file Add a new operator to the Spatial Model Click on the Close button of Spatial Model Editor Click Yes button of 'Verify Save on Close' Dialog Observe that ERDAS IMAGINE crashes
IM-46622	ERDAS IMAGINE crashes with ICA operator if Count exceeds number of bands	1.Launch ERDAS IMAGINE 2018, launch Spatial Model Editor 2.Connect a Model as Raster Input > ICA 3.Provide inputs * Raster Input : sub4road1.img (a 3 band image) from examples > Objective * Count : 16 * Sort Method: ICASORT_SKEWNESS 4.Click Run to execute model , observe ERDAS IMAGINE crashes.
IM-46536	ERDAS IMAGINE crashes while creating Geometry using Create Bounding Box operator	1.Launch ERDAS IMAGINE 2018 Update 2 2.Launch Spatial Model Editor and open specific Spatial 3.Click on preview and observe ERDAS IMAGINE crashes.
IM-34996	Convert to Features output does not carry the attributes of the input if "IsClumped" option is OFF	ERDAS IMAGINE 2016 Update 1 - Give Lnsoils.img from the example data as an input to *Convert to Features* operator and generate an output using the default options. - Open the output shapefile in the viewer and check the Attribute table. Notice that the attributes from the input thematic image are missing. Repeat the same with the "IsClumped" option ON and notice that the attributes are carried to the output.
IM-49241	Add Attributes By Location takes wrong values if no related data found	If the operator Add Attributes By Location cannot find a suitable object to fill attributes, the attributes of the object with previous Primary Key value are taken to fill the attribute table. This is wrong. The entry should stay empty instead.
IM-49459	Update Statistics operator not properly setting skip factors, exclude values, etc.	Update Statistics operator is not writing the correct Statistics Parameters and Histogram Parameters (skip factors, exclude values, bin function, and AOI) to the image layers. It's writing out the default values, not what was actually used for the stats.

IM-49456	Add Attributes by Location operator causes ERDAS IMAGINE to exit	ERDAS IMAGINE 2018 Update 2 See specific Spatial Model Open the model in Spatial Model Editor Double-click the <StringList> port on the Add Attributes by Location operator. This should open a dialog enabling you to select attribute names ERDAS IMAGINE exits.
IM-48930	Least Cost Path model hangs	See the data and model available here: https://community.hexagongeospatial.com/t5/Spatial-Modeler-Tutorials/Calculating-a-Least-Cost-Path-using-a-DEM/ta-p/6115 In ERDAS IMAGINE 2016 v16.1 you can open this model in the Spatial Model Editor and run it to completion in about 4 minutes. If you try to do the same in ERDAS IMAGINE 2018 it just hangs in the Least Cost Path operator.
IM-46540	Density Interpolation operator throwing error in combination with Create Center Point operator	The problem is with the way the Density Interpolation operator interprets the primary geometry field of the input features. Output features from the Create Centerpoint operator contain 2 geometry fields, the original input areas and the newly created centerpoints. The operator also correctly sets the primary geometry to GC_Centerpoint, which can be proven by passing features into the Features Information operator and observing the PrimaryGeometryFieldName port. When passing features directly from Create Centerpoint to Density Interpolation, the Density Interpolation operator incorrectly attempts to use the original area geometry field "Geometry" presumably because it appears first in the list.
IM-44641	Rapid Atmospheric Correction tool does not pass calibration file to Spatial Model	The calibration file is not getting passed from the Rapid Atmospheric Correction tool to the Rapid Atmospheric operator in the Spatial Model. When you try to run the tool, the process fails. Session log reports the error "No input file available". To work around this problem, click the View button in the Rapid Atmospheric Correction tool and it opens the spatial model. Double-click on the CalibrationFilename input port for the Rapid Atmospheric operator and select the calibration file, then run the spatial model.
IM-47466	Performing a sort on a Features Table column in Connection Manager dialog crashes Spatial Model Editor	A crash of the Spatial Model Editor application occurs when the Connections Manager dialog is used to make a proxy file connection (for Oracle, PostGIS, or SQL Server) if the Feature Tables list is then sorted (by selecting the 'Name' column and choosing the 'Sort A..Z' or 'Sort Z..A' option).
IM-46722	Previewing a raster with 0 rows and 0 columns crashes ERDAS IMAGINE	After analyzing why a customer's Spatial Model was crashing, in the end tracked it down to an error defining the output pixel dimensions that resulted in an output raster with no rows or columns. Previewing this crashes ERDAS IMAGINE.
IM-35174	Raster (Color) Attribute Output wipes Color Table with u8 output	See model attached. You can use Bands 4 and 3 from a Landsat dataset such as this one: \\alpha\ARRAY5\Cherokee County Data\Landsat\New Landsat Data\Landsat 5 May1997 Open the model in Spatial Model Editor. Click Run. Leave Stretch flag set to False (so you'll get floating point NDVI results), fill in the input images, click OK. Open the resulting image file as PseudoColor. Results look good (dark to light green color ramp is applied – let's ignore the fact that it seems to have created a valid color for NoData). Click Run again and give a different output file name. Change Stretch flag to True (to give u8 output). Open the resulting image file as PseudoColor. The image is displayed all black because the colors applied to each class are all black.

IM-35173	Attach (Color) Attributes does not work with Floating Point output	Open a specific Spatial Model in Spatial Model Editor. Click Preview. Leave Stretch flag set to False (so you'll get floating point NDVI results), fill in the input images, click OK. Results look good (dark to light green color ramp is applied). Click Run. Open the resulting image file as PseudoColor. No color ramp was saved to the output file (so it does not look the same as the Preview)
IM-47841	RGBtoIHS causes stats problem when data is out of specified range	A Spatial Model was build which performs a RGB to IHS on an input 8-bit RGB image. However, the actual data range of the input image exceeds the specified Max values on the RGB to IHS operator, causing problems in a subsequent Statistics operator.
IM-47534	Preview of DirectLookup not behaving well when Table is a color table	* Build a Model like this with a Thematic input image: * Click Preview * On the Multispectral tab, try changing the band combination. Notice that nothing happens. * Select the Panchromatic Image Chain. You'll get red Xs.
IM-46904	NDVI model from the Ribbon GUI ignores the 'stretch to Unsigned 8 bit' option	Running NDVI from the ribbon gui does not produce a properly rescaled image when using 'Stretch to Unsigned 8 bit'. The output value range is 0 – 1. After selecting the *Stretch to Unsigned 8 bit* option from the I/O options tab, the default spatial model opened from the NDVI dialogue's View button has the StretchFlag value in the Properties dialogue set to Integer (0) and produces the same unexpected result. If you change the StretchFlag value to Integer (1), the model rescales the output image to a 8 bit value range that appears to be correct.
IM-48405	Remove Item fails when DataIn is a Table	Remove Item operator says that it supports "Dictionary, List (of Data), and Data" for DataIn. There's a TableToList conversion, so you'd think that you could remove items from a Table. But it fails, even though the connection is not shown in red.
IM-48058	Example 2 missing from Spatial Modeler Guide	Apparently this got lost. All the current Guide says is "Example 2: Load/Save/Edit a Spatial Model".
IM-49513	Feeding an AOI to Features Input causes ERDAS IMAGINE to exit	ERDAS IMAGINE 2018 Update 2 Start Spatial Model Editor Add a Features Input operator Double-click the input port In the File Chooser select the All Files (*.*) filter option Select an .AOI file and OK the file Chooser Click Run ERDAS IMAGINE exits.

IM-49575	ERDAS IMAGINE crashes with model containing Update Attribute operator	1.Launch ERDAS IMAGINE 2.Launch Spatial Model Editor and Load the model and click on Preview. 3.Observe ERDAS IMAGINE crashes.
IM-47233	Set Primary Geometry operator UI does not present all available geometry fields with IFC format	Attempted to use Set Primary Geometry to select a geometry field in a model but was unable to select the field via the dialog, entering it manually worked fine. The model uses Generate Functional Attributes to create a new geometry field. This new field becomes primary after GFA executes. Wanted to use Set Primary Geometry to set the original geometry field back to primary. However, it was not in the drop down list on the UI.
IM-49844	Convert to Features operator fails in execution	 Click Preview Model fails in the Convert to Features operator
IM-40485	Alert messages in Python while running Spatial Model containing the Generate Surface operator	Customer reported that when running a python script that is using a Spatial Model containing the Generate Surface operator, they get alert messages about starting processing pyramid levels. The user had to manually click OK in order the Python script to process to the next pyramid levels. This continues until all the pyramids levels are processed.
IM-46859	Previewing a Model containing Rename Attributes has scale-dependent problems	Open specific Spatial Model in the Spatial Model Editor. Click Preview The model successfully previews the buffer "donuts" in a View Now zoom in in the Preview. At some stage the geometries stop drawing. Zoom back out and they re-appear.
IM-47572	Operators do not warn if an inappropriate object type is connected to them	The following two operators do not warn (red color connection) if an inappropriate object type is connected to them. # Initialize Deep Intellect – AddLayer1 port is expecting a Dictionary object type. But it does not warn if any other object type is connected to it. # Detect Objects Using Deep Learning – MachineIntellect port expects a MachineIntellect object type. But it does not warn if any other object type is connected to it.

IM-46526	Preview results from Convert to Surface operator are incorrect	ERDAS IMAGINE 2018 Update 2 A Spatial Model was built which takes vectors with a height attribute and runs them through Convert to Surface and sends to a Preview. Click Preview At first the results may appear correct. But if you zoom in to the area that has been interpolated, the results chop and change - sometimes large gaps appear, sometimes almost all the interpolated values disappear, etc. Also, when you open the Inquire Cursor, it reports NoData for the interpolated areas. However, when you click Run and output a file of the interpolation, the results look fine.
IM-49617	Error opening image with Elevation Info in Image Metadata in Spatial Modeler SDK	In an installation of Spatial Modeler SDK: # Launch Spatial Model Editor # Launch Image Metadata # Open lndem.img in the Image Metadata tool Error 10/07/19 12:34:26 imageinfo(21724): Error opening file [recalculateelevation.eml] for input! 10/07/19 12:34:28 SessionMgr(11492): ERROR: #8226 from eeml_Parse 10/07/19 12:34:28 SessionMgr(11492): ERROR: Problem in EML macrofile recalculateelevation.eml 10/07/19 12:34:28 10/07/19 12:34:28 SessionMgr(11492): ERROR: #1156 from elex_Parse 10/07/19 12:34:28 SessionMgr(11492): ERROR: Input is empty Error processing unknown file at or near "Unexpected End" 10/07/19 12:34:28 SessionMgr(11492): ERROR: #1 from eeml_Parse 10/07/19 12:34:28 SessionMgr(11492): ERROR: Input is empty
IM-49558	Point Cloud > Convert To Surface output is too small	Both 32- and 64-bit versions of the operator are generating output files that are much too small, only several pixels large.
IM-43943	Spatial Model Editor "hangs"	ERDAS IMAGINE 2018 Update 1: Open specific Spatial Model in Spatial Model Editor. Scroll over until you can see the Zonal Summary Max operator. Right click on it and select Run Just This. Once it has completed left-click on the Summary operator. The Spatial Model Editor may immediately go "busy". If not, try to pan the model using the middle mouse button. At some stage the Editor decides to go "busy" for a minute or so. Eventually you might get control back, but left-clicking on the Zonal Summary Max operator sets it off again and you have to wait, again.
IM-34174	Spatial Model operator Bitwise Not is giving output Binary(1) even if the input is Binary(1)	Customer reported that when using the Bitwise operator Not, if false is input, it returns a true, if true is input, it returns a true. Steps to reproduce: 1. Create new spatial model, drag Bitwise Not in 2. Use true as input, change to Binary(1) 3. Run model, output is Binary(1) However, using false, the result is the same.
IM-20602	Raster Input operator is failing while displaying VMCX file pointing to PNG in Spatial Model Editor	Display a VMCX file pointing to PNG using a Spatial Model (Port Input > Raster Input > Preview). Randomly Raster Input Operator is failing (cross mark).

IMAGINE Terrain Editor

Issue ID	Summary – IMAGINE Terrain Editor	Description / How to Reproduce
IM-42325	Recalculate Elevation for Images no longer offers millimeters as an elevation unit	Users need the ability to change elevation height units to millimeters. This cannot be done with the Recalculate Elevation for Images tool found under the Terrain tab (Manage group) or within the Image Metadata tool (or the Image Commands tool).
IM-41348	Geomorphic Edits not saved	In some cases when applying geomorphic edits, they are not being saved. This seems to happen randomly but more often when one closes the Terrain Editor dialog and clicking the save button from the popup dialog when prompted to save the changes.
IM-31142	Move AOI Home icon is changed in Terrain Editor	Launch ERDAS IMAGINE. Load a block file having DEM. Launch Terrain Editor. Go to Terrain Files and Display tab > Area of Interest section > Navigation > Center icon i.e 'Move AOI Home' icon is changed from house symbol to dot.
IM-46872	Unknown characters shown on Button Mapping Window Title	1.Launch ERDAS IMAGINE 2018 2.Load any photogrammetric project 3.Launch Terrain Editor window. 4.Launch Button Mappings from Edit > Devices > System Mouse 5.Observe that unknown characters shown on Button Mapping Window Title.
IM-46903	Terrain Editor produces errors when editing geographic LTFX DTMs	When points of a geographic LTFX DTM are edited with the Terrain Editor in a geographic projection blockfile, the changes are very often not saved. The effect could not be observed using UTM LTFX DTMs generated within a UTM blockfile.
IM-47462	Terrain Prep Tool cannot merge two overlapping LAS files using both Thin and Filter preprocessing options	If you try to create a DEM from two overlapping LAS files using either the Surface process (Rasterization) or the Merge process, it fails at the merge step if both the Thin and Filter preprocessing options are enabled. If you only use one of the preprocess settings (Thin or Filter) it works as it should.

IMAGINE Expansion Pack – 3D

Issue ID	Summary – IMAGINE Expansion Pack 3D	Description / How to Reproduce
IM-48196	ERDAS IMAGINE crashes while selecting Digitize Flight Path with Tablet in 3D view	1.Launch ERDAS IMAGINE (64-bit) 2.Close 2D view and create new 3D View 3.Select Scene tab and launch Flight Path Editor from Navigation group 4.Select New Configuration from Flight Path Editor > Utility > Digitize Flight Path With Tablet 5.Observe ERDAS IMAGINE crashes.
IM-45759	Unable to Start Movie Recording of type Microsoft AVI in 3D view, as file was defaulting to a .mpg extension	1.Launch ERDAS IMAGINE 2018 Update 2 2.Close 2D View and launch 3D View from Add views > Create New 3D View 3.Load data 4.Click on Start button from Scene tab > Recording 5.Provide the output movie file as test.avi. 6.Click OK and observe a dialog opens. Unable to start Movie recording. This is not the case with File of type IMAGINE Movie (*.mov)

IMAGINE Expansion Pack – AutoSync

Issue ID	Summary – IMAGINE Expansion Pack AutoSync	Description / How to Reproduce
IM-47057	AutoSync not displaying coordinates legibly	Start AutoSync workstation and load a specific project. Points have already been generated. Try to read the coordinates - you cannot because the significant digits have been displaced off the left side of the columns.
IM-47056	AutoSync not recognising RPC model as being valid	See the Community thread here: http://community.hexagongeospatial.com/t5/Spatial-Modeler/autosync-automatically/m-p/29178/highlight/false#M518 Start AutoSync workstation and load a specific project. Points have already been generated so click the Sigma button to try to solve the RPC models the input images are calibrated with. Error Invalid output geometric model
IM-45119	AutoSync workstation crashes while creating GCP with single input image	1.Launch ERDAS IMAGINE and launch Autosync Workstation 2.Create a Project as Georeference workflow 3.Provide input image as residential.image from Examples > Objective 4.Click on Create GCP button and Click on input image and observe AutoSync crashes.
IM-46612	AutoSync CellArray displays values with incorrect formatting	ERDAS IMAGINE2018: AutoSync CellArray format displays coordinate values in the cell array that are not right justified and contain an excessive number of decimal places. Autosync 2016 displays the cell array values as expected. Coordinate values are represented 8 decimal places. Residual values are represented with 16 decimal places. Compare with Autosync 2016. The numerical values are right-centered with the coordinate values represented with 3 decimal places and the Residual values represented with 6 decimal places.
IM-47855	Run APM does not do anything in AutoSync 2018 with data in custom datum and projection	Customer is using a custom datum and projection in Autosync for georeferencing ZY3 sensor data. According to the customer in ERDAS IMAGINE 2018 with Update 1 or 2, Autosync is unable to start the "Run APM" . The session log gives the following error message: 28/02/19 16:09:47 SessionMgr(13104): WARNING! The two images do not overlap with each other, output may not be generated. The problem does not occur if ERDAS IMAGINE 2018 without Updates is used.

IMAGINE Expansion Pack – NITF

Issue ID	Summary – IMAGINE Expansion Pack NITF	Description / How to Reproduce
IM-45772	SNIP NITF: 1.5 minutes to display image	ERDAS IMAGINE 2018 Update 2 Start ERDAS IMAGINE Click the File icon on the Quick Access Toolbar. Select a SNIP RIP .ntf file Go to the Sub-images tab. Click on the Multi checkbox. On my computer it took 2 minutes before I regained control of the File Chooser. Once you can, click OK to display the image. On my computer it took 1.5 minutes until the image displayed (at 1:1)
IM-45773	SNIP NITF: 26s to change a band	ERDAS IMAGINE 2018 Update 2 Start ERDAS IMAGINE Click the File icon on the Quick Access Toolbar. Select the SNIP RIP .ntf file Go to the Sub-images tab. Click on the Multi checkbox. Once the image is displayed go to the Multispectral tab and select a different band for the Green color gun. On my system it took 26s for the new band to display.
IM-45771	SNIP NITF: 2 minutes for File Chooser Sub-image tab to respond	ERDAS IMAGINE 2018 Update 2 Start ERDAS IMAGINE Click the File icon on the Quick Access Toolbar. Select the SNIP RIP.ntf file Go to the Sub-images tab. Click on the Multi checkbox. On my computer it took 2 minutes before I regained control of the File Chooser.
IM-45777	SNIP NITF: 5 minutes to open ImageInfo	ERDAS IMAGINE 2018 Update 2 Start ERDAS IMAGINE Click the File icon on the Quick Access Toolbar. Select the SNIP RIP.ntf file Go to the Sub-images tab. Click on the Multi checkbox. On my computer it took 2 minutes before I regained control of the File Chooser. Once you can, click OK to display the image. On my computer it took 1.5 minutes until the image displayed (at 1:1) Once the image is displayed click the ImageInfo button. On my system it took 5 minutes and 30s for ImageInfo to come up and populate with information (for one band). Each time you change band it takes another 5 minutes.
IM-49812	Chipping errors likely caused by delayed TRE/DES parsing	In ERDAS IMAGINE 2018 Update 2 it was discovered that NITF chipping of various classified data was erroring out. This same behavior did not occur with earlier versions. It also did not occur when the DPM was uninstalled. [~bshelley] traced this down in the debugger to the presence of TRE/DES in the data that had delayed parsing implemented in the DPM for Update.

ERDAS IMAGINE Installation

Issue ID	Summary – ERDAS IMAGINE Installation	Description / How to Reproduce
IM-48920	ArcGIS Geodatabase Compatibility Table in OLH should be updated with 10.6 and 10.6.1	ArcGIS Geodatabase Compatibility Table in OLH should be updated with 10.6 and 10.6.1 (supported versions) The table shows support till 10.5.1
IM-46782	Borrowing XML does not include IMAGINE SAR Feature	The XML file that controls the dependencies for Borrowing does not seem to include the IMAGINE SAR Feature module: "C:\ProgramData\Intergraph\Licensing\Borrowing\IMAGINE2018.xml"
IM-43159	Undesirable auto CSM configuration behavior	Observed in ERDAS IMAGINE 2018. The utility configure_all.exe now also automatically configures several CSMs delivered with the software (for 32 bit SICD,SIDD,VM sensor models, for 64 bit SICD,SIDD sensor models). This behavior is undesirable for the following reasons: (1) If CSMs were already configured by the user, most likely they are in a different location than the "Imagine native" CSMs. When both are in place, get a Warning window complaining that the "Data directory for CSMs" cannot be set to two locations. (2) ERDAS IMAGINE 2018 displays a Message window recommending that 32 and 64 bit CSM configurations be the same. But this auto CSM configuration does not do this (the VM sensor model is only configured in 32 bit). (3) If the user had already configured SICD and SIDD sensor models, their configuration is overwritten by the "native CSMs".
IM-43327	Unnecessary install directories	For some reason there are several new directories included with ERDAS IMAGINE 2018 that weren't there before (and aren't necessary for the software to run)
IM-48028	The following files don't have a valid signature	The following files that don't have a valid signature, * hdf.dll * mfhdf.dll
IM-37464	SIX CSM is not automatically configured on startup	SIX CSM is not automatically configured on installation.
IM-49536	Setup-Manager GUI is messed up on my Virtual Box with German OS	With eRDAS IMAIGNE 2018 onwards the Setup Manager (installer) the GUI is messed up on machine with a German OS. It seems to have some (unexpected, undesired) links to the right of the tree view where you select the product that are not there on a system with English OS.

ERDAS ER Mapper

Issue ID	Summary –ERDAS ER Mapper	Description / How to Reproduce
IM-40262	When Big ERS files are compressed in ER Mapper into ECW v3, it outputs into a completely different and bad looking image	Problem replicated with big ERS files, including that of the customer. ER Mapper is actually compressing the big ERS file with an extremely high compression ratio. Actual Compression ratio more than 500, even if the target compression ratio was just 2 or 3. When compressing the ERS file into JPEG 2000 format, the problem does not happen. Also, when using ERDAS IMAGINE ECW Exporter, that problem does not happen for ECW v3. Therefore, the problem seems to be only in ER Mapper ECWv3 exporter.

IM-45954	Execution of creating rotated tiff file is terminated	ERDAS ER Mapper 2018 Go to Toolbars > Common Functions > Ortho and Geocoding Wizard. Input file: -Copy file to a new location:...\examples\ermapper\applications\airphoto\1_geocoding\San_Diego_Airphoto_34_rectified.ers and San_Diego_Airphoto_34_rectified. Geocoding type: Rotation Go to Rotation Setup tab, Rotation angle: 45 Go to Rectify Tab specify output file and write to tif. and select Save file and Start Rectification. Observe process is terminated, whereas execution is successful for .ers, ECW
IM-48647	Regions to Vectors and Vectors to Regions Conversion commands Help are pointing to Raster to Vector conversion Help page	1) Launch ER Mapper > Toolbars > Classification Toolbar 2) Launch Regions to Vector conversion / Vector to Regions conversion command 3) Click on Help button Observe that it navigates to Raster to Vector conversion help page

PRO600

Issue ID	Summary – PRO600	Description / How to Reproduce
IM-46078	CALSPOT not working on PRO600 2018 Installation	The collect calspot command does not seem to work, and the PRO600 Library settings seem to match the help file for calspot.
IM-46058	PRO600 viewplex fails to load JPG images	* Open a specific blockfile and attach the JPG images associated with it. * Launch Terrain Editor and load the image pair in it. * Notice that the image pair is displayed fine. * Close Terrain Editor and launch PRO600. * After the viewplex is launched, try to load the image pair in the viewplex. Notice that an error pops up and the image pair fails to load. The same images work fine if converted to img. JPG images were able to load in the PRO600 viewplex fine with ERDAS IMAGINE 2013.
IM-45842	PRODTM hangs for a very long time while trying to measure masspoint manually	In PRO600, while trying to measure the points (mass points) in a grid in PRODTM, using measure tool, PRO600 / PRODTM hangs for a very long time. While working with the customer data, discovered: If import more than 20,000 points (grid 20X20 meter) from the DEM file (IMG format), the PRO600 hangs. For the same data, created a less dense grid (100X100 meter) where less than 5000 points are imported, now the PRO600 / PRODTM works fine.

Stereo Analyst for ERDAS IMAGINE

Issue ID	Summary – Stereo Analyst	Description / How to Reproduce
Various	Various issues for Stereo Analyst for ERDAS IMAGINE	Numerous issues have been addressed for the Stereo Analyst for ERDAS IMAGINE product (part of the IMAGINE Expansion Pack module) including the following problems/fixes: • Added a new escape event so that parallel lines get stopped (when you press escape) • Added escape to save/close buttons (This gets rid of the empty place holders - infinity points) • Add a new check for parts (faces) that are elements attached to other elements, check if these are empty • Stops crash when using parallel line then quitting. • Clicking quickly on the start button should not cause two errors to pop-up • After save as, if failure, the user can repair errors • Spelling in warning dialogue for large memory use fixed. • Add Element should no longer create zero points • Changed precision in vertices editor (to 6 decimal points) • Export features fixed • Added extra verification checks on save to make sure points have at least 1 point, lines have at least 2 and polygons have 3 or more points. • Restart application when closing all layers to ensure all memory is reset. • Label Added for version number • Set read only flag when reading TIL files • When escaping the second point of a parallel line, remove all vestiges of the line and set the measured width to 0 • After escaping or changing feature after using parallel tool, remove the entry in the table • If a user deletes the same face (attached element) twice, the software would crash • Fixed drop to ground (check for NULL pointer failing) • Check parts (tiles) of the file are not only there but can be opened • Auto-clean for projects • Remove "Infinity Point" generation when user selects to add element, but then does NOT add an element - i.e. escapes or chooses another feature • Added new controls for the feature attributes (add standard attributes if preference "Add standard attributes if missing" is turned on) • If attributes are added by the system, the user is informed • Cleaned up feature import dialogue • Cut is properly added to the undo stack • Moved the check for existing to the first thing done (can't check earlier) • Reversed the order of deletion so that multiple errors within the same feature can be autocleaned • Always clean empty faces (elements) that cannot be deleted from the interface • Autoclean added better messages for when an error occurs on save • Autoclean working consistently • Extra parallel line no longer created when 3D snap is on and parallel lines are being drawn. 3D snap is tested on the first point (not the measured point) if no snap, then behave like normal • Redo multiple deletes, no longer crashes • Added flags to allow reads while reading (image format inside another format) • Changing a vertex enables the save button • Enabled delete from table (Right click in ID column delete is enabled) • Header drawn correctly when no shapefile available • Modified error message for missing vertices • Added check for Duplicate Attributes (It was just adding 1 to the last in the list) • Select does not cancel current edits

		- Spelling mistake - Added check for calculated box. If out of bounds don't use - Fix Undo if no undo to undo - Removed Error message when final shape check is done (and fails), only the warning message is now returned, telling the user how to correct. - Fix vertex removal issue - Fix selection of faces - Fix undo selected face - Notify user of deletion to the face / element (automated) - Update error messages when checking for errors in digitizing - Update (and create) function to remove orphan parts of elements - Fix issue when the first part of a segment is removed - Slight modification to write/check function so that the check is completed on all appropriate layers before any writing - Cone fix - New preference for Minimum number of vertices (PolyLines and Polygon) - Implementation of delay (configurable) before saving - Secondary save on save error. (If an error occur when a tempv file is encountered, attempt the save again) - Crash on Save fixed (if tempv file error created and user continues) - Surface layer feature hang error (again when tempv file has been encountered) - Bug when selecting a feature, then dropping the feature to ground and splitting an element group and adding a part/face all at the same time. - Parrallel Line fix - New Preference to save all layers or just changed layers - Only save feature layers that have changed - If a rename fails (tempv, temp) when saving shapefile retry up to 3 times with a delay (300ms) between

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This Document is created and controlled by Hexagon Geospatial in the State of Alabama. As such, the laws of the State of Alabama will govern these Terms, without giving effect to any principles of conflicts of law. You hereby irrevocably and unconditionally consent to submit to the exclusive jurisdiction of the United States District Court for the Northern District of Alabama, Northeastern Division, or the Circuit Court for Madison County, Alabama for any litigation arising out of or relating to use of this Document (and agree not to commence any litigation relating thereto except in such courts), waive any objection to the laying of venue of any such litigation in such Courts and agree not to plead or claim in any such Courts that such litigation brought therein has been brought in an inconvenient forum. Some jurisdictions do not allow the exclusions or limitations set forth in these Terms. Such exclusions or limitations shall apply in all jurisdictions to the maximum extent allowed by applicable law.

Questions

Contact us with any questions regarding these Terms.