



Release Guide

ERDAS Extensions 2020 for ArcGIS 10.7.1

Version 16.6.0

March 2020

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About This Release

This document describes the enhancements for 2020 (v16.6.0). 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 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 Extensions for more information.

New Platforms

ArcGIS Desktop 10.7.1

ERDAS Extensions 2020 supports the following ESRI desktop products:

- ArcGIS 10.7, and
- ArcGIS 10.7.1

Windows 10

ERDAS Extensions 2010 adds Microsoft Windows 10 Professional as supported platforms

Licensing

It is strongly recommended that customers upgrade to the newest version of Hexagon Geospatial Licensing 2020. If in doubt, refer to Windows' Add or Remove Programs utility to determine the currently installed 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>

New Technology

3D Stream in Stereo Analyst for ArcGIS

The 3D Stream option is added in the list of the Construction Tools when digitizing line or polygon features. Once selected, the 3D Stream digitizing will be available in the Stereo window only. The digitized line or polygon feature will be shown in the ArcMap window once the sketch finishes. 3D Stream provides a much smoother digitizing experience in the Stereo window, comparing to digitizing in stream mode from Stereo window or ArcMap window and updating/refreshing both windows simultaneously. The stream tolerance can be set by selecting Options from the **Editor** dropdown list.

3Dconnexion SpaceMouse Pro

Support for the 3Dconnexion SpaceMouse Pro as a digitizing device is added for providing you with an additional input device choice.



System Requirements

ERDAS Extensions

Computer/ Processor	64-bit: Intel 64 (EM64T), AMD 64, or equivalent (Multi-core processors are strongly recommended)
Memory (RAM)	16 GB or more strongly recommended
Disk Space	<ul style="list-style-type: none"> • 6 GB for software • 1 GB for example data • Data storage requirements vary by mapping project¹
Operating Systems ^{2,3}	<ul style="list-style-type: none"> • Windows 10 Pro (64-bit)
Software	<ul style="list-style-type: none"> • Either one of the following: <ul style="list-style-type: none"> ○ ArcGIS 10.7.1 ○ ArcGIS 10.7 • OpenGL 2.1 or higher (this typically comes with supported graphics cards²) • Microsoft DirectX[®] 9c or higher • .NET Framework 4.0
Recommended Graphics Cards for Stereo Display	<ul style="list-style-type: none"> • NVIDIA[®] Quadro[®] K5200, K5000, K4200, K4000, K2200, K600, K420 ³
Recommended Stereo Display Monitors	<ul style="list-style-type: none"> • 120 Hz (or above) LCD Monitors with NVIDIA 3D Vision[™] Kit, or 3D PluraView system from Schneider Digital ³
Peripherals	<p>All software installations require:</p> <ul style="list-style-type: none"> • One Windows-compatible mouse with scroll wheel or equivalent input device • Printing requires Windows-supported hardcopy devices ⁴ <p>Software security (Hexagon Geospatial Licensing 2020) requires one of the following:</p> <ul style="list-style-type: none"> • Ethernet card, or • One USB port for hardware key <p>Advanced data collection requires one of the following hand controllers:</p> <ul style="list-style-type: none"> • TopoMouse[™] or TopoMouse USB[™] • Immersion 3D Mouse • 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 SpaceMouse Pro • 3Dconnexion SpaceExplorer mouse • EK2000 Hand Wheels • EMSEN Hand Wheels • Z/I Mouse

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

³ Graphics cards and Stereo Monitors certified with previous versions of ERDAS Extensions may also be compatible, but are not certified in the current version.

⁴ HP-RTL drivers are recommended. Windows 64-bit print servers require 64-bit print drivers.

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Issues Resolved

Stereo Analyst for ArcGIS

Issue ID	Summary – ERDAS Extensions	Description / How to Reproduce
EX-485	Vertical shift using NAVD 88 (CONTUS) (GEOID12B)	There is a height difference of 1.2 meters using the vertical datum NAVD 88 (CONTUS) (GEOID12B) or NAVD 88 (CONTUS) (GEOID12A).
EX-488	Do not add ESRI image server layer to Stereo tab	It is preferred that ESRI image server layer is not added to the Stereo tab.
EX-489	Computing pyramids for large ADS strips freezes in ERDAS Extensions 2018	<p>ERDAS Extensions 2018 fails to generate RRDs on large ADS L1 files that require the companion RDE file. 2016 SP2 works fine.</p> <p>To reproduce:</p> <ul style="list-style-type: none"> • Generate a block file add any large ADS L1 image • Generate pyramids during project import. Software freezes.
EX-502	ISAT project import takes hours	Using ERDAS Extensions 2018 for ArcGIS 10.6.1, the Import Photogrammetry Wizard will pause and stall on 20%.
EX-505	New icons for contrast stretch commands	To customize the contrast stretch commands, six new icons are required for Contrast Stretch By Histogram Equalize, Linear, Min Max, None, Percentage and Standard Deviations.
EX-537	Cannot load block files created with "us survey feet" in "Create Block File" tool in Stereo Analyst for ArcGIS	Any block file created by "Create Block File" tool using "Indian feet", "international feet" or "us survey feet" as units cannot be imported in Stereo Analyst for ArcGIS.
EX-592	Fail to import INPHO projects of version 9.2.2	The control point block in INPHO projects of version 9.2.2 uses multiple lines to represent a single control point, which leads to the failure of importing the data.

Terrain Editor for ArcGIS

Issue ID	Summary – ERDAS Extensions	Description / How to Reproduce
EX-368	Smooth Elevations operator creates spikes along the boundary.	Smooth Elevations changes points along the boundary of the drawn polygon in a way that spikes are created. The outermost points on the boundary should be used to calculate the smoothed surface but should not be changed in Z.



EX-475	Streaming Breakline / Multipoints continues after leaving stereo with F3	<p>This issue is particularly obvious in streaming mode, but it also happens without streaming when clicking into the 2D map outside the stereo mode.</p> <p>To reproduce:</p> <ul style="list-style-type: none">• Activate the "Add a Breakline tool" or "Add Multiple Terrain Point Tool"• Enable contour display in case of the "Add Multiple Terrain Point Tool"• Start streaming mode, stream a couple of points• Press F3• Move mouse to 2D window, draw an obvious shape such as a rectangle• Press F3 to get back into the stereo• Zoom out to observe the added points from the 2D window. <p>The desired way these tools should work is that they do not take input from the 2D window. They should behave like the building templates which only allow capturing in stereo.</p>
EX-476	"Add Multiple Terrain Point Tool" adds duplicate points after finishing sketch with double-click	<p>When using F2 to finish a sketch the tool works as desired. However, when using double-click to finish the sketch, the new feature is created correctly but a new sketch is initialized with a point at the location of the last click point of the previous sketch. In the next finish sketch operation, this results in a duplicate point in the target multipoint feature.</p> <p>The double-click should do the same as F2. Currently it appears as if the double click is already processed as the next (single) click for the new sketch.</p> <p>In streaming mode, the problem is more pronounced because after finishing the last sketch with double-click, streaming continues from the current mouse location. The desired behaviour is that streaming must always be initiated by a single click.</p>
EX-561	Autocorrelation fails to complete	<p>Using ERDAS Extensions 2018 for ArcGIS 10.6 or 10.6.1, the autocorrelation using eATE fails to complete.</p> <p>To reproduce:</p> <ul style="list-style-type: none">• Add a stereo pair and terrain data to the Stereo window• Start Terrain Editing from the Terrain Editor toolbar• Click Run Autocorrelation from the Terrain Autocorrelation toolbar. If the Run Autocorrelation icon is not enabled, increase the zoom scale from the Stereo View toolbar• Click in the Stereo window and press F3• Define the area for autocorrelation.

Contact Us



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Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's Geospatial division creates solutions that deliver a 5D smart digital reality with insight into what was, what is, what could be, what should be, and ultimately, what will be.

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