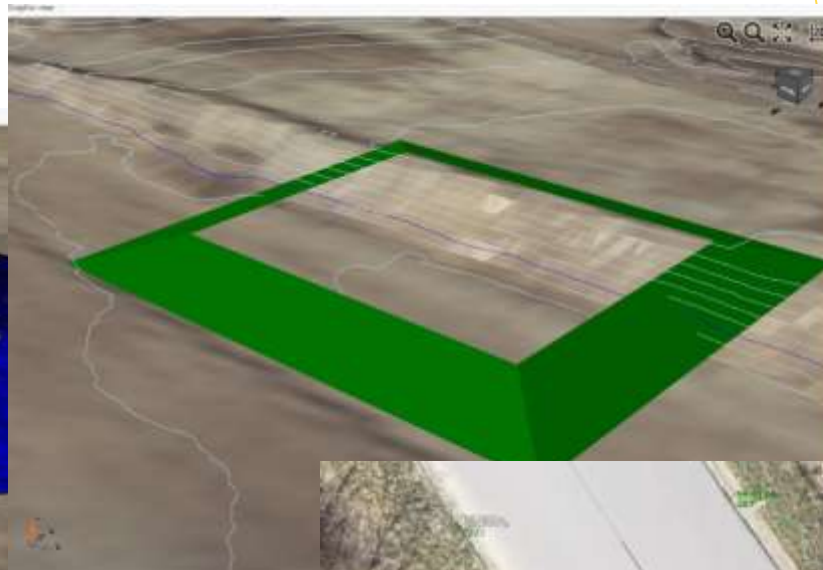
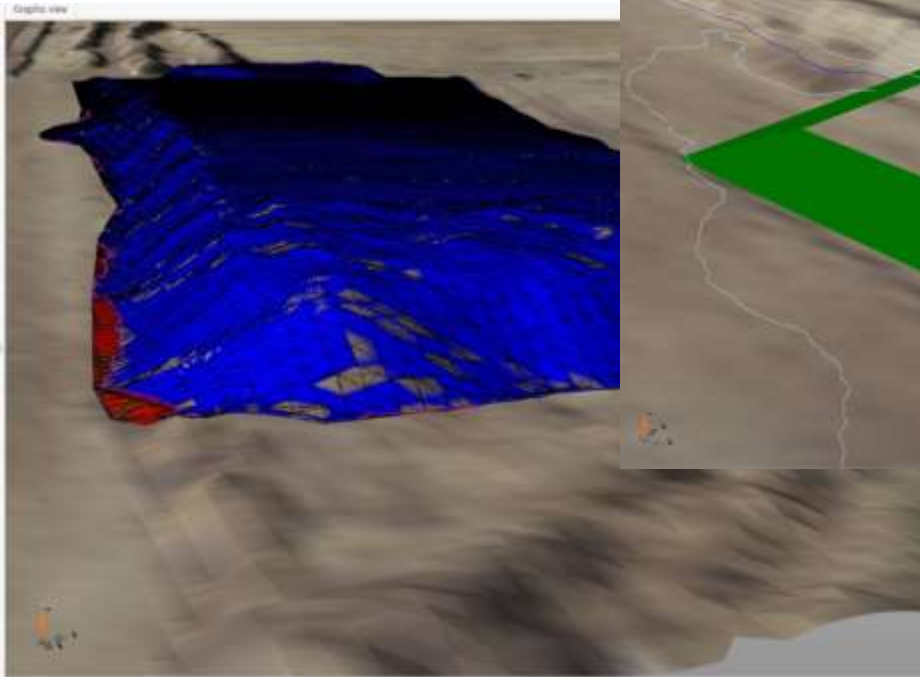


Az X-PAD történet - GeoMax Office Fusion

A Fotogrammetriától a 3D vektoros szerkesztésig



GIS OPEN 2023 - Székesfehérvár

GeoSite Kft - Horváth Zsolt

GeoMax Office Fusion – Terep-Iroda-Terep

Office Fusion



Ultimate



GeoMax Office Fusion – Terep-Iroda-Terep

Office Fusion



Ultimate



- **Digitális szintező**
- **LIDAR**
- **GNSS post-proc**
- **BIM**

GeoMax Office Fusion – X-PHOTO Modul

X-PHOTO processing manager

STARTING DATA CAMERA ORIENTATIONS 3D RECONSTRUCTION

View Photos Navigation Ground Control Points Coordinate system: EOV2014 (HUNGARY_EOV2014_HD1972EOV_GR5E7) Tools: Camera parameters Settings

Photo	
Used	<input checked="" type="checkbox"/>
File name	DJI_0101.JPG
Date	2020.03.19. 12:43
Size	8.2 Mbytes
Width (px)	5472
Height (px)	3648
Res. horizontal	72
Res. vertical	72
Lens parameters	
Producer	DJI
Model	FC6310S
Focal length (mm)	8.8
Focal length eq. 35...	24.0
Field of view	73°26'01.0"
Exposure settings	
Exposure time	1/240 s
Aperture	f 4.6

Total: 456 Used: 456 Registered: -

Map Google Map WMS Server <NONE>

GeoMax Office Fusion – Képek betöltése

X-Plane processing manager

STARTING DATA CAMERA ORIENTATIONS 3D RECONSTRUCTION

View Photos Navigation Ground Control Points Coordinate system: EOVS2014 (HUNGARY_EOV2014 HD1972EOV GR567) Tools: Camera parameters Settings

Photo name	Latitude	Longitude	Altitude	Relat
DJL_0101.JPG	N 48°03'57.8460"	E 21°38'40.6310"	54.920m	
DJL_0102.JPG	N 48°03'57.7615"	E 21°38'41.3269"	54.820m	
DJL_0103.JPG	N 48°03'57.6881"	E 21°38'41.9254"	54.820m	
DJL_0104.JPG	N 48°03'57.6209"	E 21°38'42.5497"	54.620m	
DJL_0105.JPG	N 48°03'57.5502"	E 21°38'43.1569"	54.720m	
DJL_0106.JPG	N 48°03'57.4849"	E 21°38'43.7548"	54.720m	
DJL_0107.JPG	N 48°03'57.4095"	E 21°38'44.2576"	54.820m	
DJL_0108.JPG	N 48°03'56.7981"	E 21°38'44.6959"	54.720m	
DJL_0109.JPG	N 48°03'56.8842"	E 21°38'44.0103"	54.820m	
DJL_0110.JPG	N 48°03'56.9629"	E 21°38'43.3788"	54.620m	
DJL_0111.JPG	N 48°03'57.0359"	E 21°38'42.7809"	54.620m	
DJL_0112.JPG	N 48°03'57.1079"	E 21°38'42.1843"	54.720m	
DJL_0113.JPG	N 48°03'57.1782"	E 21°38'41.5877"	54.920m	
DJL_0114.JPG	N 48°03'57.2473"	E 21°38'40.9544"	54.720m	
DJL_0115.JPG	N 48°03'57.3171"	E 21°38'40.3517"	54.720m	
DJL_0116.JPG	N 48°03'57.3900"	E 21°38'39.7177"	54.820m	
DJL_0117.JPG	N 48°03'57.4620"	E 21°38'39.1174"	54.720m	
DJL_0118.JPG	N 48°03'57.5364"	E 21°38'38.5166"	54.820m	
DJL_0119.JPG	N 48°03'57.6021"	E 21°38'37.9129"	54.720m	
DJL_0120.JPG	N 48°03'57.6739"	E 21°38'37.2836"	54.820m	
DJL_0121.JPG	N 48°03'57.7462"	E 21°38'36.6815"	54.720m	
DJL_0122.JPG	N 48°03'57.8211"	E 21°38'36.0504"	54.820m	
DJL_0123.JPG	N 48°03'57.8937"	E 21°38'35.4497"	54.820m	
DJL_0124.JPG	N 48°03'57.9617"	E 21°38'34.8572"	54.820m	
DJL_0125.JPG	N 48°03'58.0342"	E 21°38'34.2398"	54.920m	
DJL_0126.JPG	N 48°03'58.1078"	E 21°38'33.6354"	54.770m	

Start: 12:43:15 End: 13:01:45 Duration: 00:18:30 Distance: -

Map Google Satellite WMS Server «NONE»

GeoMax Office Fusion – Illesztőpontok adatai

X-PHOTO processing manager

STARTING DATA CAMERA ORIENTATIONS 3D RECONSTRUCTION

View Photos Navigation Ground Control Points Coordinate system: EOVS2014 (HUNGARY_EOV2014_HD1972EOV_GRS67) Tools: Camera parameters Settings

Use	Name	Y	X	Z

Import Ground Control Point

Import Ground Control Point
Select the ASCII file in which GCP are stored

Data type

File name: D:\Dron_dar\Felmeresek\BUJ_ALALLOMBUJ_ALALL_FELM_0318.txt

Schema: < Custom >

Preview

201	843570.499	305456.192	97.517	ALAPFOJT
202	843404.028	305482.389	98.944	ALAPFOJT
203	843489.479	305572.500	99.411	ALAPFOJT
205	843412.912	305665.043	99.504	ALAPFOJT
204	843531.957	305486.370	98.834	ALAPFOJT
207	843625.165	305651.943	98.994	ALAPFOJT
208	843726.587	305469.443	102.950	ALAPFOJT

Next > Cancel

Map Google Map WMS Server <NONE>

GeoMax Office Fusion – Illesztőpontok adatai

STARTING DATA CAMERA ORIENTATIO... GROUND CONTROL P... OPTIMISE ORIENTATI... 3D RECONSTRUCTION

new Photos Navigation Ground Control Points Coordinate system: EOVS2014 (HUNGARY_EOV2014_HD19/2EOV_GR567) Tools: Camera parameters Settings

Use	Name	Y	X	Z
GCP	- 201	843570.49...	305456.19...	97.517m
GCP	202	843404.02...	305482.38...	98.944m
GCP	203	843489.47...	305572.50...	99.411m
GCP	205	843412.91...	305665.04...	99.506m
GCP	206	843531.95...	305656.37...	98.636m
GCP	207	843625.16...	305651.96...	98.996m
GCP	208	843726.58...	305469.44...	102.95...
GCP	209	843621.61...	305509.77...	99.541m

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Map Google Map WMS Server -NONE-

GeoMax Office Fusion – A feldolgozás paramétereit

X-PHOTO processing manager

STARTING DATA → CAMERA ORIENTATIO... → GROUND CONTROL P... → OPTIMISE ORIENTATI... → 3D RECONSTRUCTION

View Photos Navigation Ground Control Points Coordinate system: EOVS2014 (HUNGARY_EOV2014_HD1972EOV_GRS67) Tools: Camera parameters Settings

Use	Name	Y	X	Z
GCP	201	843570.49...	305456.19...	97.517m
GCP	202	843404.02...	305482.38...	98.944m
GCP	203	843489.47...	305572.50...	99.411m
GCP	205	843412.91...	305665.04...	99.506m
GCP	206	843531.95...	305656.37...	98.636m
GCP	207	843625.16...	305651.96...	98.996m
GCP	208	843726.58...	305469.44...	102.95...
GCP	209	843621.61...	305509.77...	99.541m

X-PHOTO settings

Camera orientation

Calculation mode: Global
(Faster - suitable for larger datasets)

Photos matching strategy: Use telemetry data
(Photos are matched using the telemetry data)

RTK

Use GNSS RTK navigation data: No

Advanced options

Max tie points detected (per photo): 30000

Tie points detection level: Normal

Tolerances

Max RMS error on photos (px): 5.00

OK Cancel

Map Google Map WMS Server <NONE>

GeoMax Office Fusion – Kamera tájékozás, ritka pontfelhő

X-Photo processing manager

STARTING DATA CAMERA ORIENTATIO... GROUND CONTROL P... OPTIMISE ORIENTATI... 3D RECONSTRUCTION

Tools: Recalculate orientation Orientation accuracy Settings

Camera orientations

Mode	Global
Photos pairing strat...	Use telemetry data
Date elaboration	2023.04.24. 16:18
Time elaboration	02:17:07

Cameras

Used	456
Registered	456

Tie points

Total	874128
Minimum for photo	3558
Maximum for photo	19342
Average for photo	15457
Average RMS (px)	0.54

Visibility

Cameras	<input checked="" type="checkbox"/>
Positions	<input type="checkbox"/>
File Names	<input checked="" type="checkbox"/>
Flight path	<input checked="" type="checkbox"/>

z
y
x

Flip cloud Select photos:

GeoMax Office Fusion – Kamera tájékozás, ritka pontfelhő

X-PHOTO processing manager

STARTING DATA | **CAMERA ORIENTATIO...** | **GROUND CONTROL P...** | **OPTIMISE ORIENTATI...** | **3D RECONSTRUCTION**

Tools: Recalculate orientation Orientation accuracy Settings

Camera orientations

Mode: Global

Photos pairing strat.: Use telemetry data

Date elaboration: 2023.04.24. 16:18

Time elaboration: 02:17:07

Cameras

Used: 456

Registered: 456

Tie points

Total: 874128

Minimum for photo: 3558

Maximum for photo: 19342

Average for photo: 15457

Average RMS (px): 0.54

Visibility

Cameras:

Positions:

File Names:

Flight path:

Orientation accuracy (px)

Use	Photo name	RMS (px)
<input checked="" type="checkbox"/>	DJL_0101.JPG	0.55
<input checked="" type="checkbox"/>	DJL_0102.JPG	0.53
<input checked="" type="checkbox"/>	DJL_0103.JPG	0.52
<input checked="" type="checkbox"/>	DJL_0104.JPG	0.53
<input checked="" type="checkbox"/>	DJL_0105.JPG	0.56
<input checked="" type="checkbox"/>	DJL_0106.JPG	0.56
<input checked="" type="checkbox"/>	DJL_0107.JPG	0.60

Close

Flip cloud Select photos:

GeoMax Office Fusion – Illesztőpontok megadása

STARTING DATA > CAMERA ORIENTATIO... > **GROUND CONTROL P...** > OPTIMISE ORIENTATI... > 3D RECONSTRUCTION

DJI_U4b5
GCP: -

DJI_U4b6
GCP: -

DJI_U4b7
GCP: -

DJI_U4b8
GCP: 202

DJI_U4b9
GCP: 202

Settings

View: [Map]

GCP	Y	X	Z
201	---	---	---
202	0.0	-0.0	0.00
203	---	---	---
205	---	---	---
206	---	---	---
207	---	---	---
208	0.0	-0.0	0.00
209	-0.0	0.0	0.00

X-PHOTO settings

Ground Control Points

Autodetect targets on ground: Yes

Targets type: ● Black circle target

Targets size (Ø):

Distance tolerance:

Elevation tolerance:

OK Cancel

Select GCPs on the photos. GCPs selected: 0 / 8

Hold CTRL and press left button to add a GCP

Filter by GCP: < NONE > Show tie points Photo: DJI_0498.JPG Data: 2020.03.19. 12:59:18 Delete markers

GeoMax Office Fusion – Tájékozás illesztőpontokkal

STARTING DATA CAMERA ORIENTATIO... GROUND CONTROL P... OPTIMISE ORIENTATI... 3D RECONSTRUCTION

STATION Calculate orientation accuracy

Calculate orientati	Type	Name	ΔX	ΔY	ΔZ	Δ Total
	GCP	201	---	---	---	---
	GCP	202	---	---	---	---
	GCP	203	---	---	---	---
	GCP	205	---	---	---	---
	GCP	206	---	---	---	---
	GCP	207	---	---	---	---
	GCP	208	---	---	---	---
	GCP	209	---	---	---	---
	GCP					
	GCP					
	GCP					

Calculate orientation accuracy

GCP

Name	Y	X	Z
209	043021.614m	308808.773m	98.547m

Calculate orientati

GCP

Name	Number of photos	Photos used	Photos not used
	32	31	1

Photos

- Number of photo
- Photos used
- Photos not used

Adjust GCPs position (all GCPs should be adjusted). GCPs adjusted: 8 / 8

Press left mouse button to hold the GCP and adjust its position.

Target color: Yellow Photo zoom: Photo size:

Adjust GCPs position (all GCPs should be adjusted). GCPs adjusted: 1 / 8

Press left mouse button to hold the GCP and adjust its position.

Target color: Yellow Photo zoom: Photo size:

GeoMax Office Fusion – 3D felépítés

STARTING DATA

Calculate orientation accuracy

Type	Name	ΔY	
✓ GCP	201	-0.00	0
✓ GCP	202	-0.00	0
✓ GCP	203	0.005	-
✓ GCP	205	-0.00	0
✓ GCP	206	-0.00	-
✓ GCP	207	0.008	-
✓ GCP	208	-0.03	-
✓ GCP	209	0.005	-

Calculate orientation accuracy

GCP

Name

Y

X

Z

Photos

Number of photos: 31

Photos used: 1

Photos not used: 1

3D elaboration settings

3D reconstruction

Elaborate dense cloud **Yes**
Use GPU (if available): Yes - Level: Medium - Min pixels: 5

Elaborate DSM **Yes**
Hole fill mode: Inner - Cell size: 1.000m

Elaborate orthophoto **Yes**
Quality: Normal - Resolution: 0.050m - Max tile size: 20000px

Elaborate 3D mesh **Yes**
Max triangles: 2000000

Elaborate photos overlay map **Yes**
Quality: Normal - Resolution: 1.000m


Save X-PAD Office Fusion document and turn off the PC. Please close all other applications. **Yes**

OK Cancel


3D RECONSTRUCTION

Settings


Use photo **On**




Use photo **On**



Use photo **On**



Use photo **On**



Adjust GCPs position (all GCPs should be adjusted). GCPs adjusted: 8 / 8

Press left mouse button to hold the GCP and adjust its position

Target color: Yellow Photo zoom: Photo size:

GeoMax Office Fusion – Digitális felület modell (DSM)

X-PROTO processing manager

STARTING DATA > CAMERA ORIENTATIO... > GROUND CONTROL P... > OPTIMISE ORIENTATI... > 3D RECONSTRUCTION

Save in X-PAD Fusion Report Settings

Elaboration 1
Dense cloud
DSM 1

DSM
Name: DSM 1
Visible:
Date elaboration: 2023.04.24. 21:40
Time elaboration: 00:00:00
Settings
Fill mode: Inner
Cell size: 1.000m
Properties
Triangles: 274645

Y 843081.577m, X 305567.925m, Z 0.000m

Show GCPs: Point size: Normal Selection tools: Clean: Edit: Delta Fixed

GeoMax Office Fusion – Ortofotó előállítás

X-PHOTO processing manager

STARTING DATA > CAMERA ORIENTATIO... > GROUND CONTROL P... > OPTIMISE ORIENTATI... > 3D RECONSTRUCTION

Save in X-PAD Fusion | Report

Settings | tings

Elaboration 1

- Dense cloud
- DSM 1
- Orthophotos group 1
 - Orthophoto 1

Orthophotos

Name	Orthophotos group 1
Visible	<input checked="" type="checkbox"/>
Date elaboration	2023.04.24. 21:46
Time elaboration	00:03:24

Source

Data source: DSM
DSM quality: Normal

Settings

Resolution: 0.050m
Max size (px): 20000
File format: Jpg

Select X-PHOTO session

X-PHOTO session: BUJ_AA
Elaboration: Elaboration 1

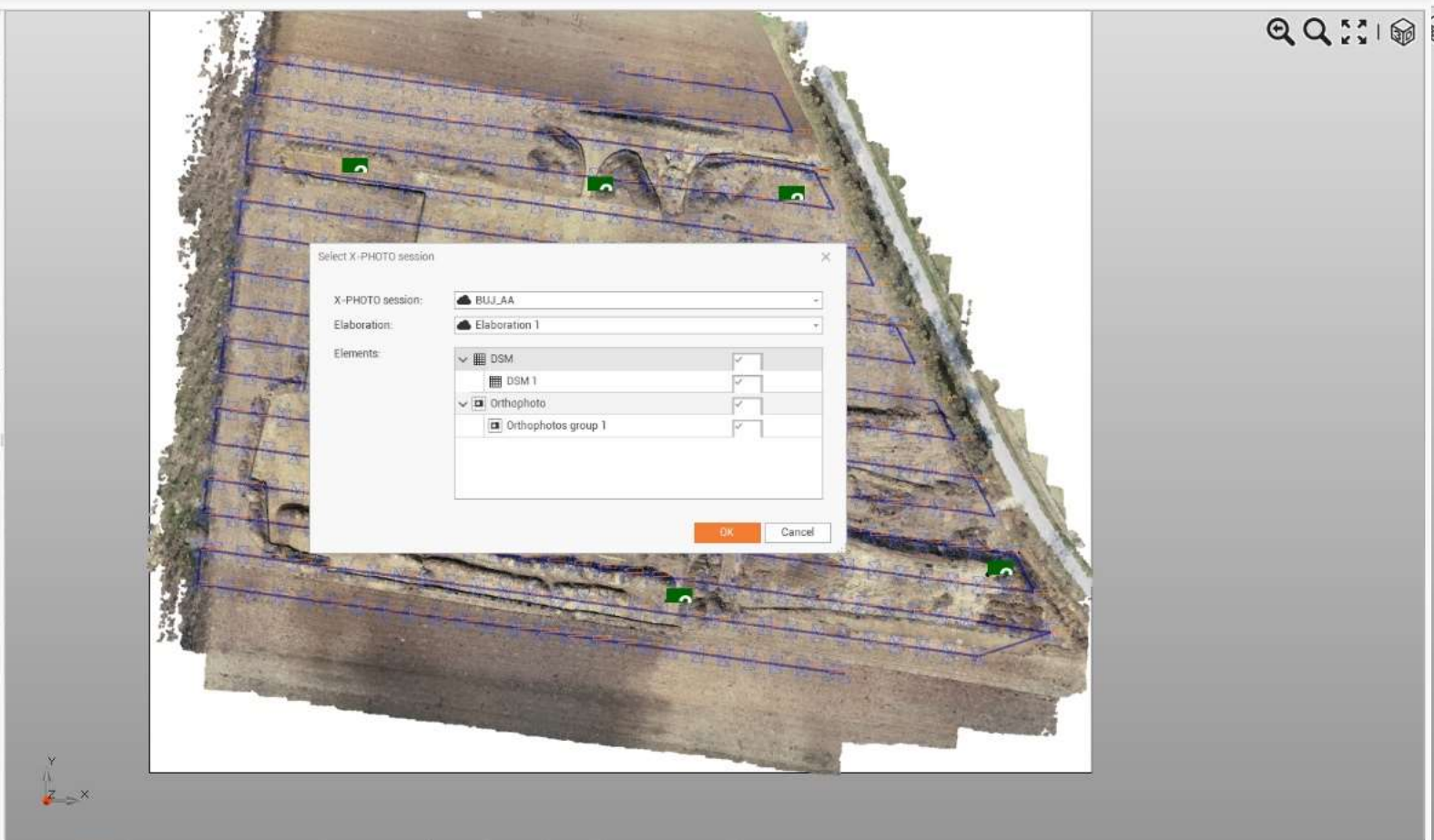
Elements:

<input checked="" type="checkbox"/> DSM	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> DSM 1	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Orthophoto	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Orthophotos group 1	<input checked="" type="checkbox"/>

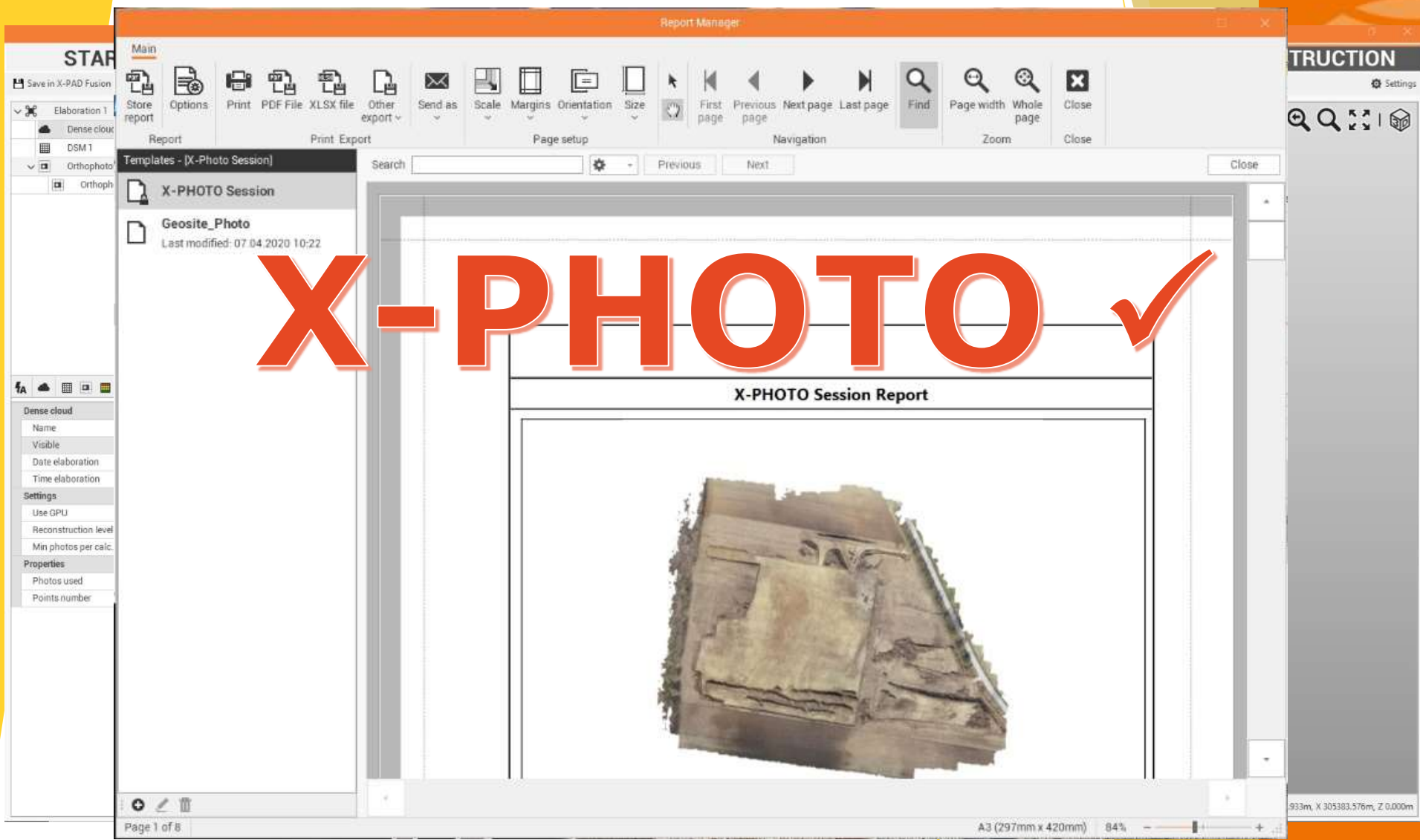
OK | Cancel

Show GCPs Point size: Large Selection tools: Clean Edit: Delta Fixed

Y 643269.935m, X 305696.582m, Z 0.000m 00m



GeoMax Office Fusion – Dokumentáció



X-PHOTO ✓

GeoMax Office Fusion – X-TOPO modul

The screenshot displays the GeoMax Office Fusion X-TOPO module interface. The main window shows a 3D terrain model with a breakline highlighted in green. The interface includes a top toolbar with various tools, a left sidebar with a Project Manager, and a right sidebar with Properties and Filters panels.

Project Manager (Left Sidebar):

- Surveys
 - BUJ_Felmeres_01
 - HaloPoint1
- Surfaces
 - DSM 1 - BUJ_AA
 - DSM 1 - BUJ_1m
 - DSM 2 - BUJ_0.2m
 - DSM 2 - Zone1_alaple...
 - DSM 2 - BUJ_AA
 - Difference DSM 2 - BU...
- Drawings
 - Main drawing
 - 3D mesh 1 - BUJ_AA** (circled)
 - Sections groupe
- Project Manager
- Layers
- Survey codes
- Filters
- Report
- Export
- Building Information Model

Properties Panel (Right Sidebar):

Selected objects 1

Surface

Name	DSM 2 - BUJ_AA
Visible	<input type="checkbox"/>
Locked	<input type="checkbox"/>
Color	0, 128, 0
Transparency (%)	
Use unique color	<input type="checkbox"/>
Render mode	Fixed color

Filters Panel (Right Sidebar):

Break lines	<input checked="" type="checkbox"/>
Boundary lines (inte...	<input checked="" type="checkbox"/>
Triangles	<input checked="" type="checkbox"/>
Triangle edges	<input type="checkbox"/>
Contour lines	<input checked="" type="checkbox"/>
Slope direction sym...	<input checked="" type="checkbox"/>
Cut-Fill lines	<input checked="" type="checkbox"/>
Design polylines	<input checked="" type="checkbox"/>
Calculation zones	<input checked="" type="checkbox"/>

Info Panel (Right Sidebar):

Break lines	0
Boundary lines (inte...	0
Boundary lines (ext...	0
Triangles	9084259
Vertices	4546434
Calculation zones	1
Min elevation	95.836m
Max elevation	113.927m

Top Toolbar: File, Home, View, Draw, Edit, Survey, Surfaces, Design 3D, Imaging, X-sections, Cadastral, Cloud, Output, Search.

Surface Tools: New empty surface, Settings, Breakline, Boundary external, Boundary internal, Add vertex, Delete vertex, Delete segment.

Triangles Tools: Add triangles, Delete triangles, Swap faces, Build surface.

Contour lines Tools: Generate, Add label, Remove label.

View Tools: By elevation, Fixed color, Triangle sides, Triangle center, Slope symbols.

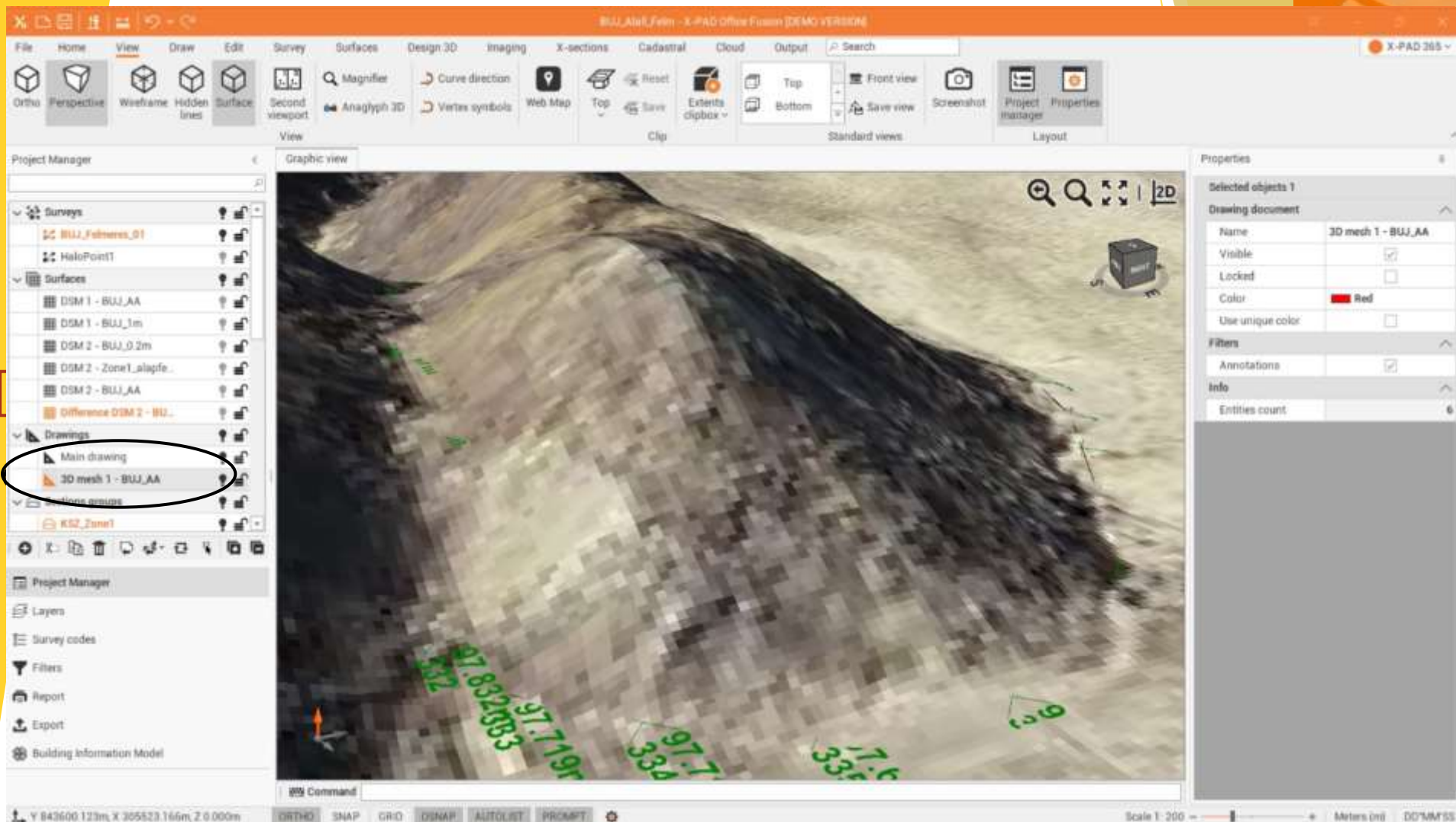
Volumes Tools: Calculate, Calculated volumes, Add zone.

Utilities Tools: Tools, Delete data.

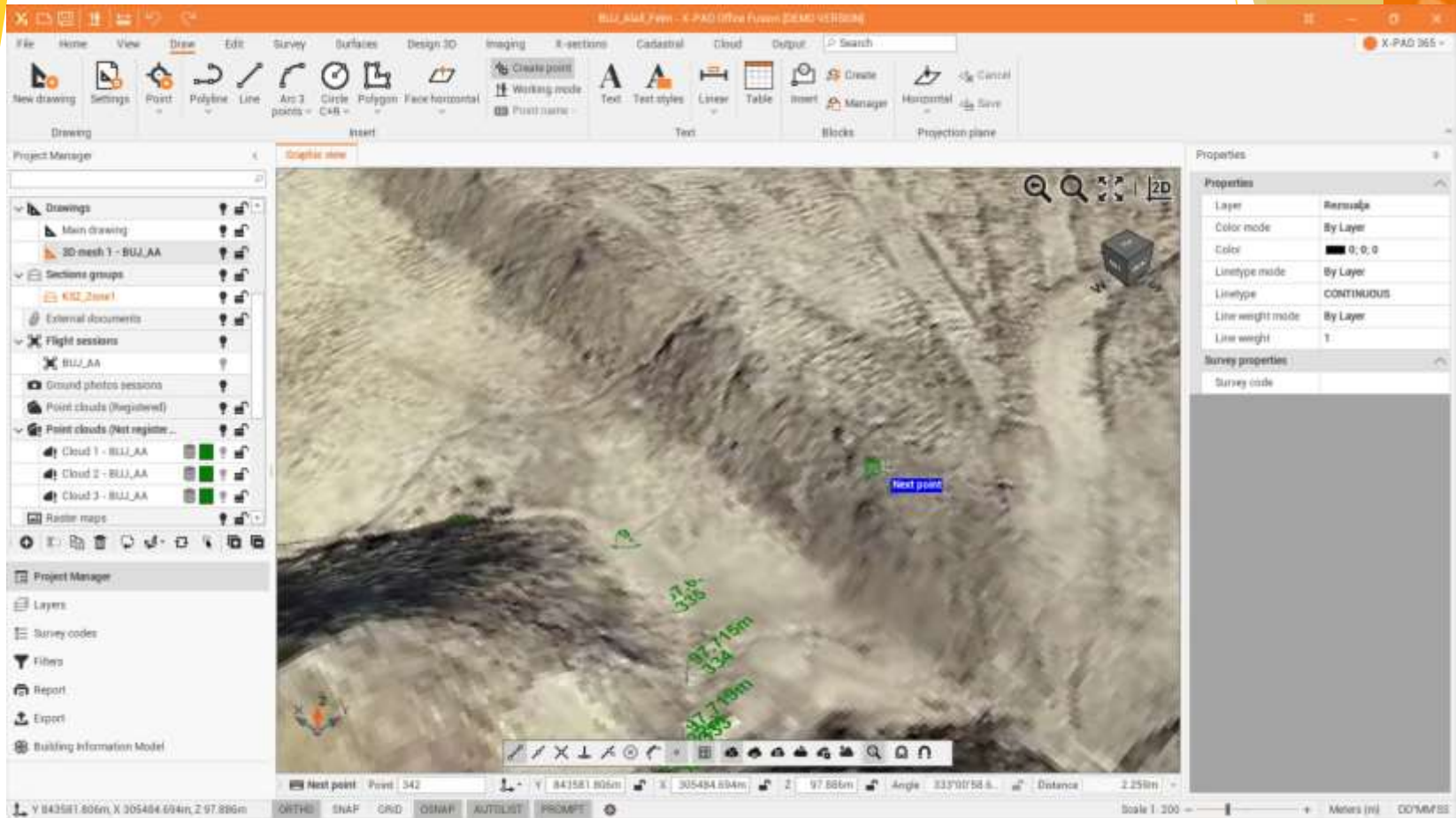
Bottom Status Bar: Y 843600 123m, X 305501.997m, Z 0 000m. ORTHO, SNAP, GRID, OGNAP, AUTOLIST, PROMPT. Scale 1:200. Meters (m). DDMMSS.

GeoMax Office Fusion – DSM vs 3D MESH

- DSM – Digitális felület modell
- 3D MESH – Raszterizált háló



GeoMax Office Fusion – Vektorizálás



GeoMax Office Fusion – Vektorizálás

The screenshot displays the GeoMax Office Fusion software interface in a 2D view. The main workspace shows a vectorized point cloud with several lines and points labeled with elevations in meters, such as 98.823m, 98.824m, 98.805m, 98.814m, 98.815m, 98.802m, 98.891m, 98.943m, 98.944m, 98.765m, 98.541m, and 98.941m. The interface includes a top menu bar with options like File, Home, View, Draw, Edit, Survey, Surfaces, Design 3D, Imaging, X-sections, Cadastral, Cloud, and Output. A toolbar below the menu contains various drawing and editing tools. On the left, the Project Manager shows a tree view of the project structure, including Surfaces, Drawings, and Point clouds. On the right, the Properties panel shows settings for the selected surface, including Name, Visible, Locked, Color, and Transparency. The bottom status bar displays coordinates (Y: 843710.799m, X: 305709.048m, Z: 0.000m) and other project settings.

Properties Panel - Selected objects 1

Surface	
Name	DSM 1 - BUJ_1m
Visible	<input type="checkbox"/>
Locked	<input type="checkbox"/>
Color	197, 0, 128, 0
Transparency (%)	<input type="text"/>
Use unique color	<input type="checkbox"/>
Render mode	Fixed color

Filters Panel

Break lines	<input type="checkbox"/>
Boundary lines (inte...)	<input type="checkbox"/>
Triangles	<input type="checkbox"/>
Triangle edges	<input type="checkbox"/>
Contour lines	<input type="checkbox"/>
Slope direction sym...	<input type="checkbox"/>
Cut-Fill lines	<input type="checkbox"/>
Design polylines	<input type="checkbox"/>
Calculation zones	<input type="checkbox"/>

Info Panel

Break lines	0
Boundary lines (inte...)	0
Boundary lines (exte...)	0
Triangles	274670
Vertices	138511
Calculation zones	0
Min elevation	96.465m
Max elevation	112.927m

GeoMax Office Fusion – Térfogatszámítás

The screenshot displays the GeoMax Office Fusion software interface. The central window shows a 3D terrain model with a color gradient from blue (low elevation) to red (high elevation). The interface includes a top menu bar with options like File, Home, View, Draw, Edit, Survey, Surfaces, Design 3D, Imaging, X-sections, Cadastral, Cloud, Output, and Search. Below the menu is a toolbar with icons for various functions. On the left, there is a Project Manager panel with a tree view showing Surveys, Surfaces, and Drawings. On the right, there is a Properties panel with a table of object properties and a list of filters. At the bottom, there is a Command line and a status bar showing coordinates and scale.

Selected objects 1		
Surface		
Name	DSM 2 - BUJ_AA	JJ_1m
Visible	<input type="checkbox"/>	
Locked	<input type="checkbox"/>	
Color	0, 128, 0	
Transparency (%)		96.465m
Use unique color	<input type="checkbox"/>	112.927m
Render mode	Fixed color	
Filters		
Break lines	<input checked="" type="checkbox"/>	0.500m
Boundary lines (int.)	<input checked="" type="checkbox"/>	10
Triangles	<input checked="" type="checkbox"/>	
Triangle edges	<input type="checkbox"/>	
Contour lines	<input checked="" type="checkbox"/>	
Slope direction sym.	<input checked="" type="checkbox"/>	
Cut-Fill lines	<input checked="" type="checkbox"/>	
Design polylines	<input checked="" type="checkbox"/>	
Calculation zones	<input checked="" type="checkbox"/>	
Info		
Break lines	0	
Boundary lines (int.)	0	
Boundary lines (ext.)	0	
Triangles	9084259	
Vertices	4546434	
Calculation zones	1	
Min elevation	95.836m	
Max elevation	113.927m	

GeoMax Office Fusion – Szelvények generálása

The screenshot displays the GeoMax Office Fusion software interface. The top menu bar includes File, X-sections, Draw, Output, and Search. The main workspace shows a 3D terrain model with a green cross-section line and a corresponding 2D cross-section plot below it. The plot includes a scale of 1:230 and a table of data points.

Project Manager

- Surveys
 - BUJ_Fekeres_01
 - HaloPoint1
- Surfaces
 - DSM 1 - BUJ_AA
 - DSM 1 - BUJ_1m
 - DSM 2 - BUJ_0.2m
 - DSM 2 - Zone1_alapfelület
- Drawings
 - Main drawing
- Sections groups
 - KSZ_Zone1
- External documents
- Flight sessions
 - BUJ_AA
- Ground photos sessions
- Point clouds (Registered)
- Point clouds (Not registered)
 - Cloud 1 - BUJ_AA
 - Cloud 2 - BUJ_AA
- Raster maps
- Orthophotos
 - Orthophoto 1 - BUJ_AA

Properties

Property	Value
Layer	Default
Color mode	By Layer
Color	0, 0, 0
Linetype mode	By Layer
Linetype	CONTINUOUS
Line weight mode	By Entity
Line weight	1

Section [S7]

Section name: S7

Scale: 1:230

LINE POINT DISTANCE	ELEVATION
LINE 13334 POINT DISTANCE	13334.00
LINE 13335 POINT DISTANCE	13335.00
LINE 13336 POINT DISTANCE	13336.00
LINE 13337 POINT DISTANCE	13337.00
LINE 13338 POINT DISTANCE	13338.00
LINE 13339 POINT DISTANCE	13339.00
LINE 13340 POINT DISTANCE	13340.00
LINE 13341 POINT DISTANCE	13341.00
LINE 13342 POINT DISTANCE	13342.00
LINE 13343 POINT DISTANCE	13343.00
LINE 13344 POINT DISTANCE	13344.00
LINE 13345 POINT DISTANCE	13345.00
LINE 13346 POINT DISTANCE	13346.00
LINE 13347 POINT DISTANCE	13347.00
LINE 13348 POINT DISTANCE	13348.00
LINE 13349 POINT DISTANCE	13349.00
LINE 13350 POINT DISTANCE	13350.00
LINE 13351 POINT DISTANCE	13351.00
LINE 13352 POINT DISTANCE	13352.00
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LINE 13358 POINT DISTANCE	13358.00
LINE 13359 POINT DISTANCE	13359.00
LINE 13360 POINT DISTANCE	13360.00
LINE 13361 POINT DISTANCE	13361.00
LINE 13362 POINT DISTANCE	13362.00
LINE 13363 POINT DISTANCE	13363.00
LINE 13364 POINT DISTANCE	13364.00
LINE 13365 POINT DISTANCE	13365.00
LINE 13366 POINT DISTANCE	13366.00
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LINE 13368 POINT DISTANCE	13368.00
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LINE 13372 POINT DISTANCE	13372.00
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LINE 13376 POINT DISTANCE	13376.00
LINE 13377 POINT DISTANCE	13377.00
LINE 13378 POINT DISTANCE	13378.00
LINE 13379 POINT DISTANCE	13379.00
LINE 13380 POINT DISTANCE	13380.00
LINE 13381 POINT DISTANCE	13381.00
LINE 13382 POINT DISTANCE	13382.00
LINE 13383 POINT DISTANCE	13383.00
LINE 13384 POINT DISTANCE	13384.00
LINE 13385 POINT DISTANCE	13385.00
LINE 13386 POINT DISTANCE	13386.00
LINE 13387 POINT DISTANCE	13387.00
LINE 13388 POINT DISTANCE	13388.00
LINE 13389 POINT DISTANCE	13389.00
LINE 13390 POINT DISTANCE	13390.00
LINE 13391 POINT DISTANCE	13391.00
LINE 13392 POINT DISTANCE	13392.00
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LINE 13394 POINT DISTANCE	13394.00
LINE 13395 POINT DISTANCE	13395.00
LINE 13396 POINT DISTANCE	13396.00
LINE 13397 POINT DISTANCE	13397.00
LINE 13398 POINT DISTANCE	13398.00
LINE 13399 POINT DISTANCE	13399.00
LINE 13400 POINT DISTANCE	13400.00

GeoMax Office Fusion – 3D Design modul

The screenshot displays the GeoMax Office Fusion 3D Design module interface. The main window is titled "Export" and shows a list of export options under "Field formats", "Drawing formats", "Topographic data formats", "Points cloud", and "3D formats". A "Create X-PAD Survey file" dialog is open, showing a tree view of the project data. The 3D view shows a wireframe model of a terrain with a building structure. The interface includes a ribbon menu (File, Home, View, Draw, Edit, Surfaces), a Project Manager on the left, and a Properties panel on the right.

Export Dialog - Create X-PAD Survey file

Category	Item
Field formats	Create X-PAD Survey file
Drawing formats	Create DWG/DXF file for AutoCAD
Topographic data formats	Create TIN file (Ascension) (ASCI)
Points cloud	Create Point cloud (las) file
3D formats	Create OBJ file

Properties Panel

Property	Value
Layer	Rezsualja
Color mode	By Layer
Color	Black
Linetype mode	By Layer
Linetype	CONTINUOUS
Line weight mode	By Layer
Line weight	1

Project Manager

- Surveys
 - BUJ_Felmeres_01
 - HaloPoint1
- Surfaces
 - DSM 1 - BUJ_AA
 - DSM 1 - BUJ_1m
 - DSM 2 - BUJ_0.2m
 - DSM 2 - Zone1_alapfelulet
- Drawings
 - Main drawing
 - Sections groups
 - KSZ_Zone1
 - External documents
 - Flight sessions
 - BUJ_AA
 - Ground photos sessions
 - Point clouds (Registered)
 - Point clouds (Not registered)
 - Cloud 1 - BUJ_AA
 - Cloud 2 - BUJ_AA
 - Raster maps

GE  **MAX**



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GE  **SITE**

DRONE  **Site**
FORRÁS: DRONE SITE, PHOTO: MANDY