От фотоснимков к точным 3D-моделям

Фотометр

Bentley
Sustaining Infrastructure

ustinov.fr
ФОРУМ ГЕОДЕЗИСТОВ

Context Capture

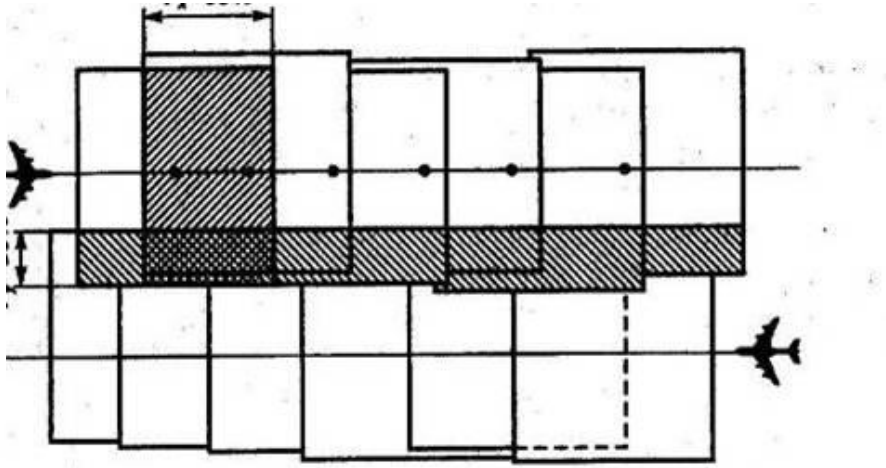
Программное обеспечение

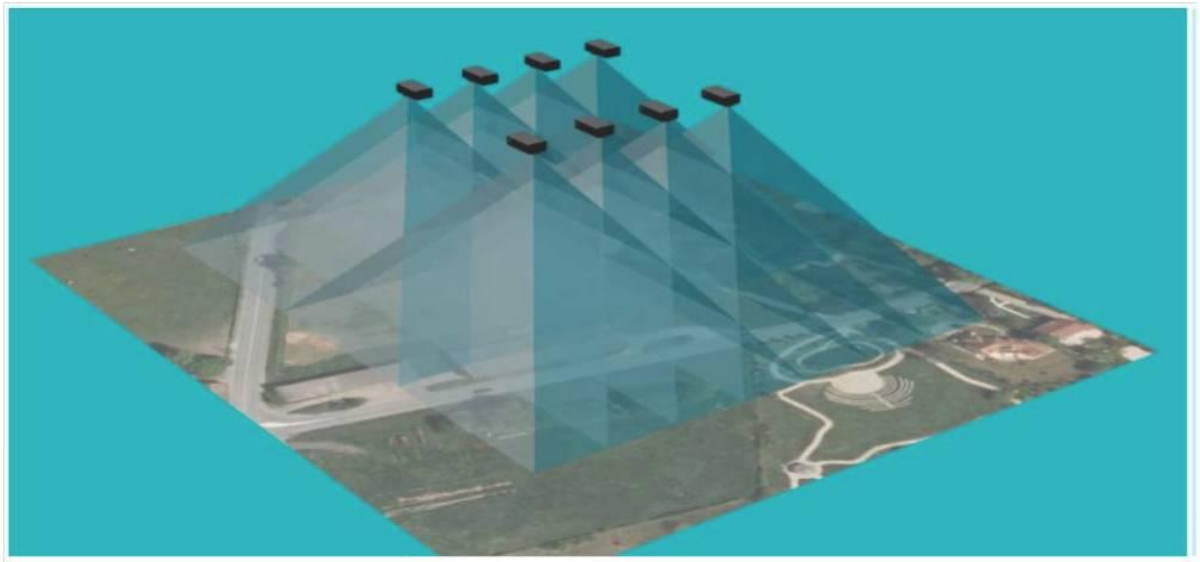
Context Capture

- Качество
- Интерфейс
- Интеграция с продуктами пост обработки
- Требования к ПК

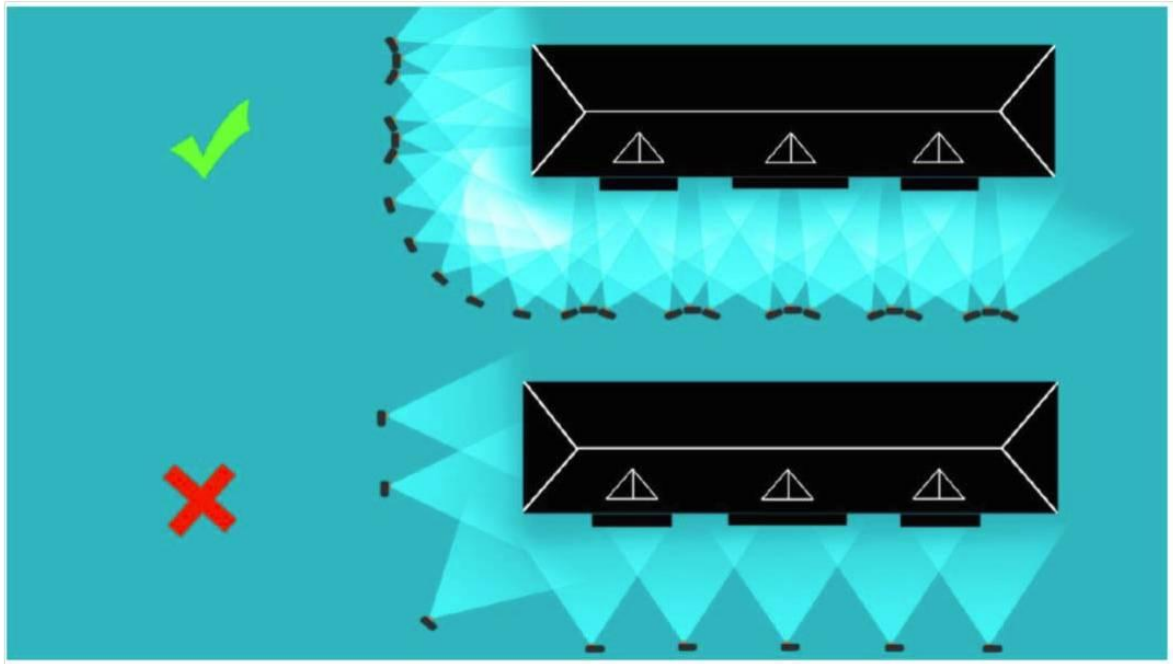
Технология пилотирования

Перекрытия:
Продольное перекрытие 80 %
Поперечное перекрытие 60 %

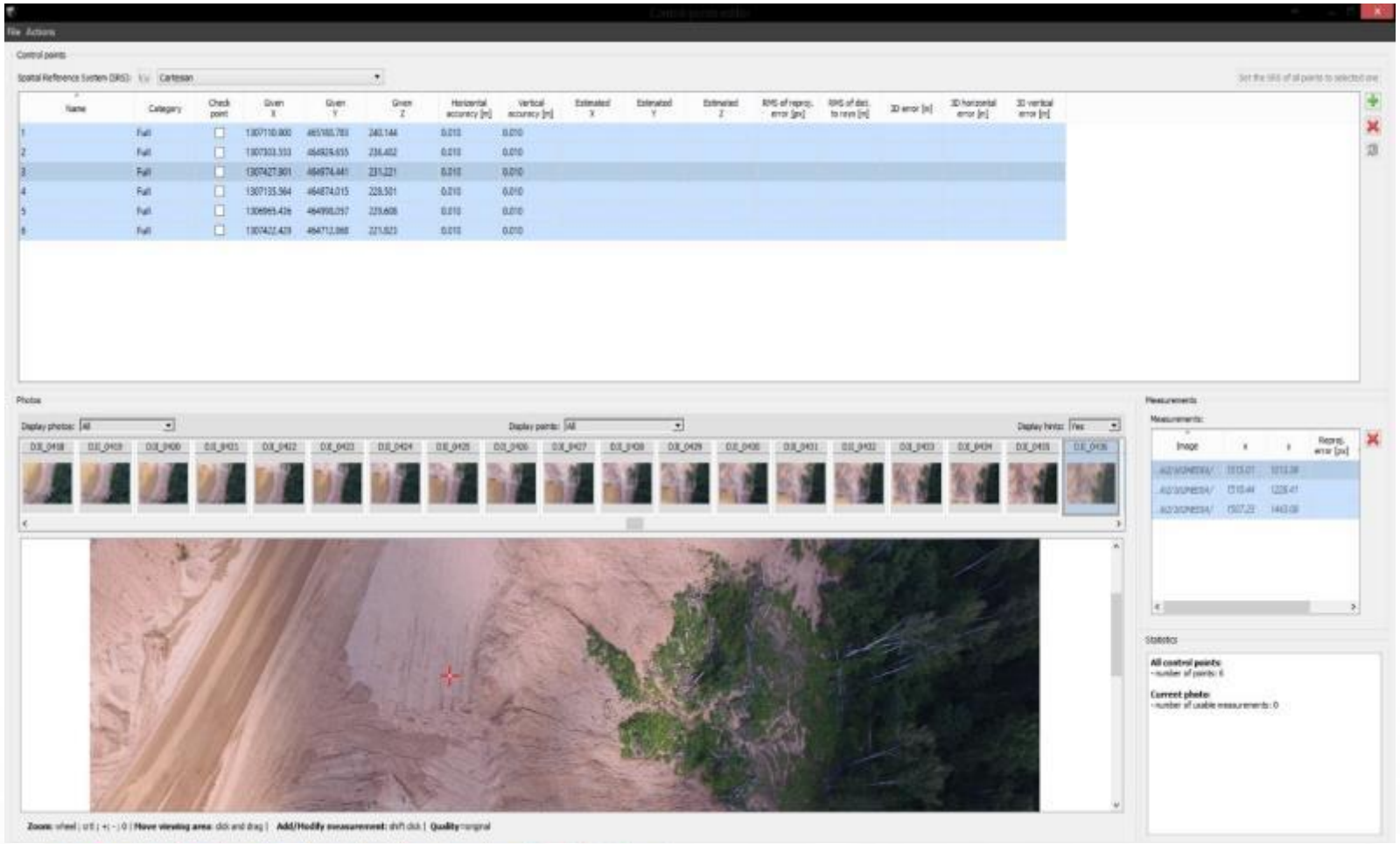


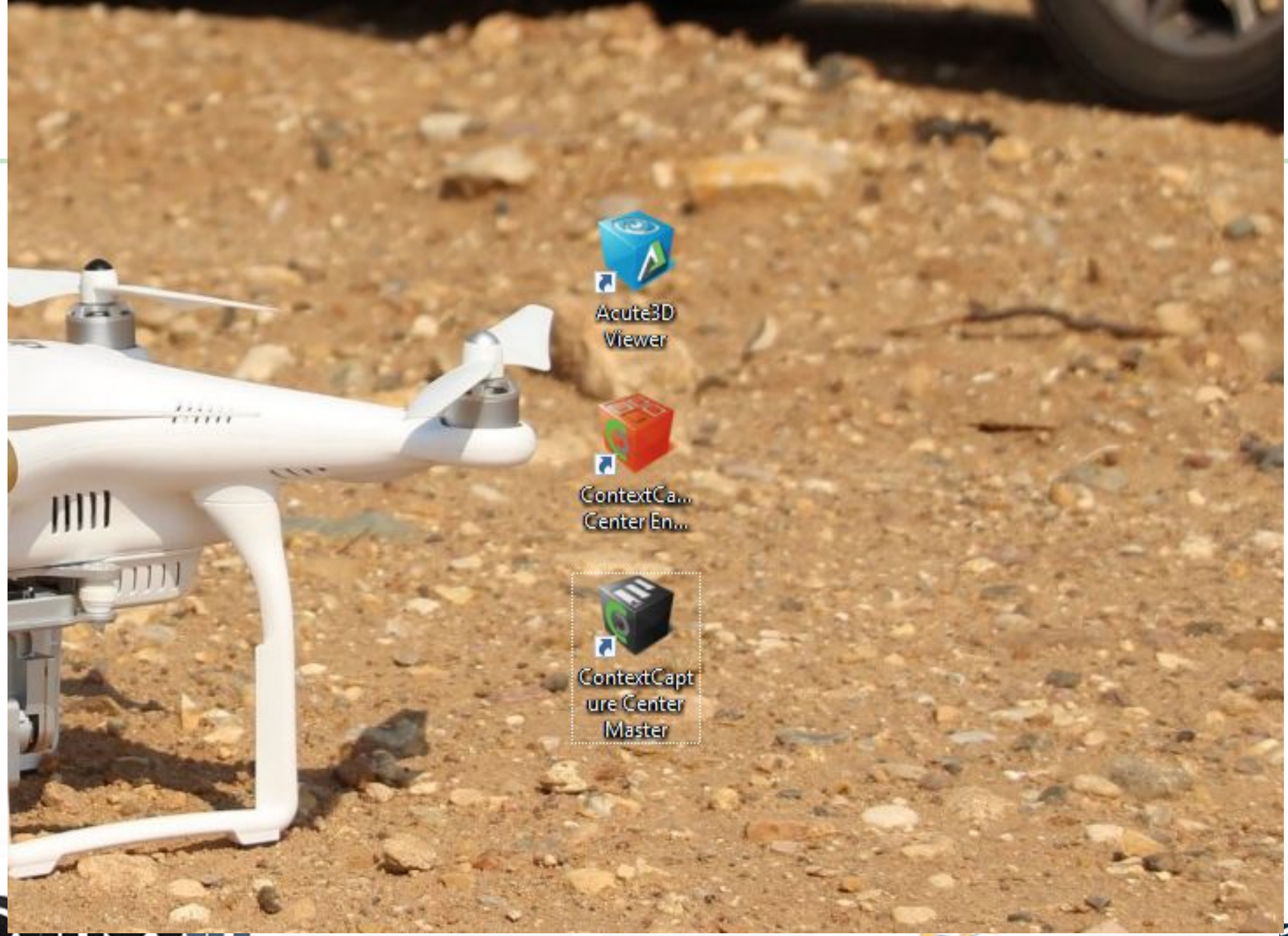


Технология пилотирования



Нанесение контрольных точек




Acute3D
Viewer
ContextCa...
Center En...
ContextCapt
ure Center
Master

ContextCapture Master - Desktop edition

Project Block Reconstruction Production Tools Help

You are not logged in. Login

contextcapture™

contextcapture™

Learn

Get started with our video tutorials

Learn more about ContextCapture

Create

Start a new project

New project...

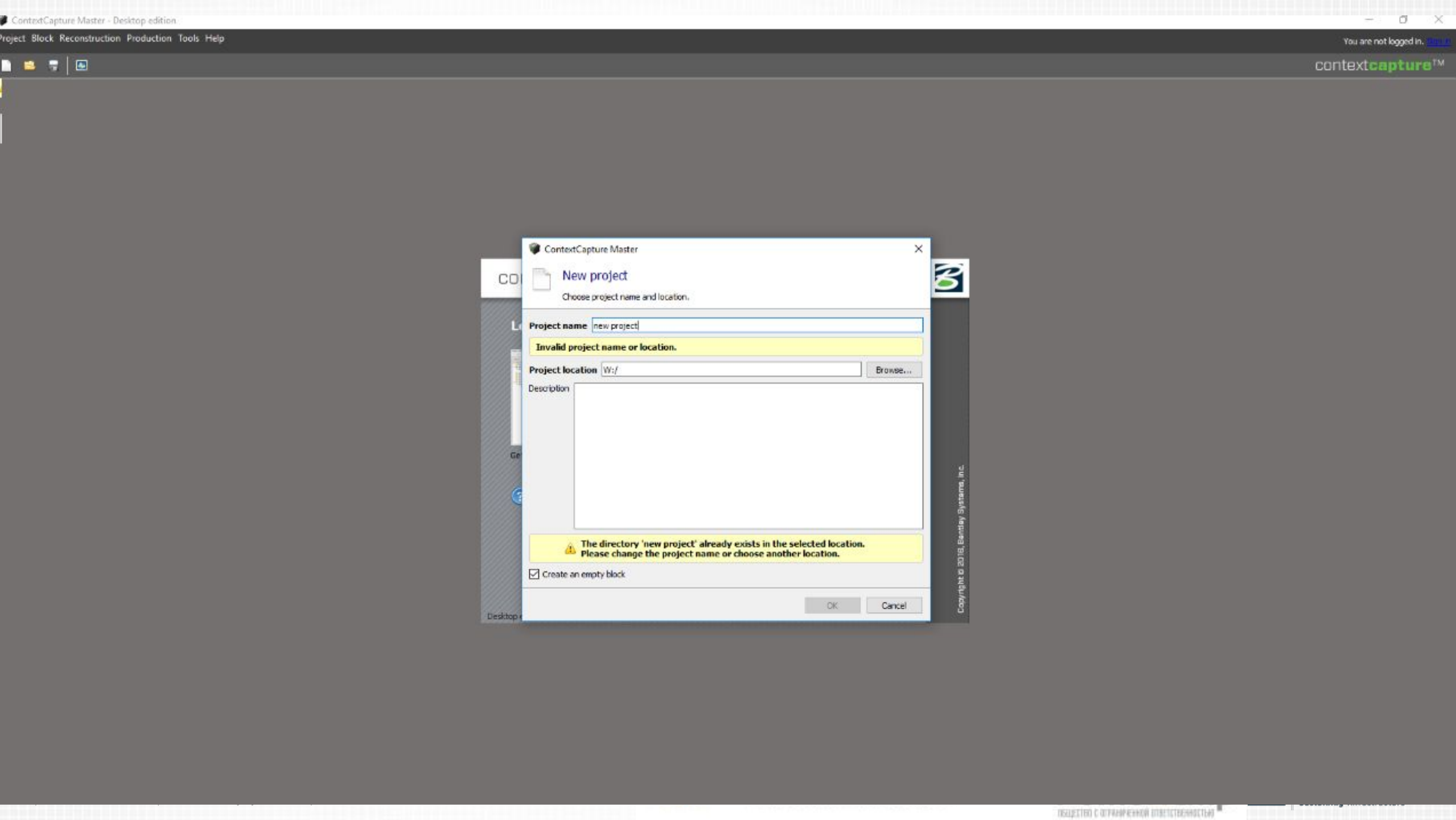
Open a recent project

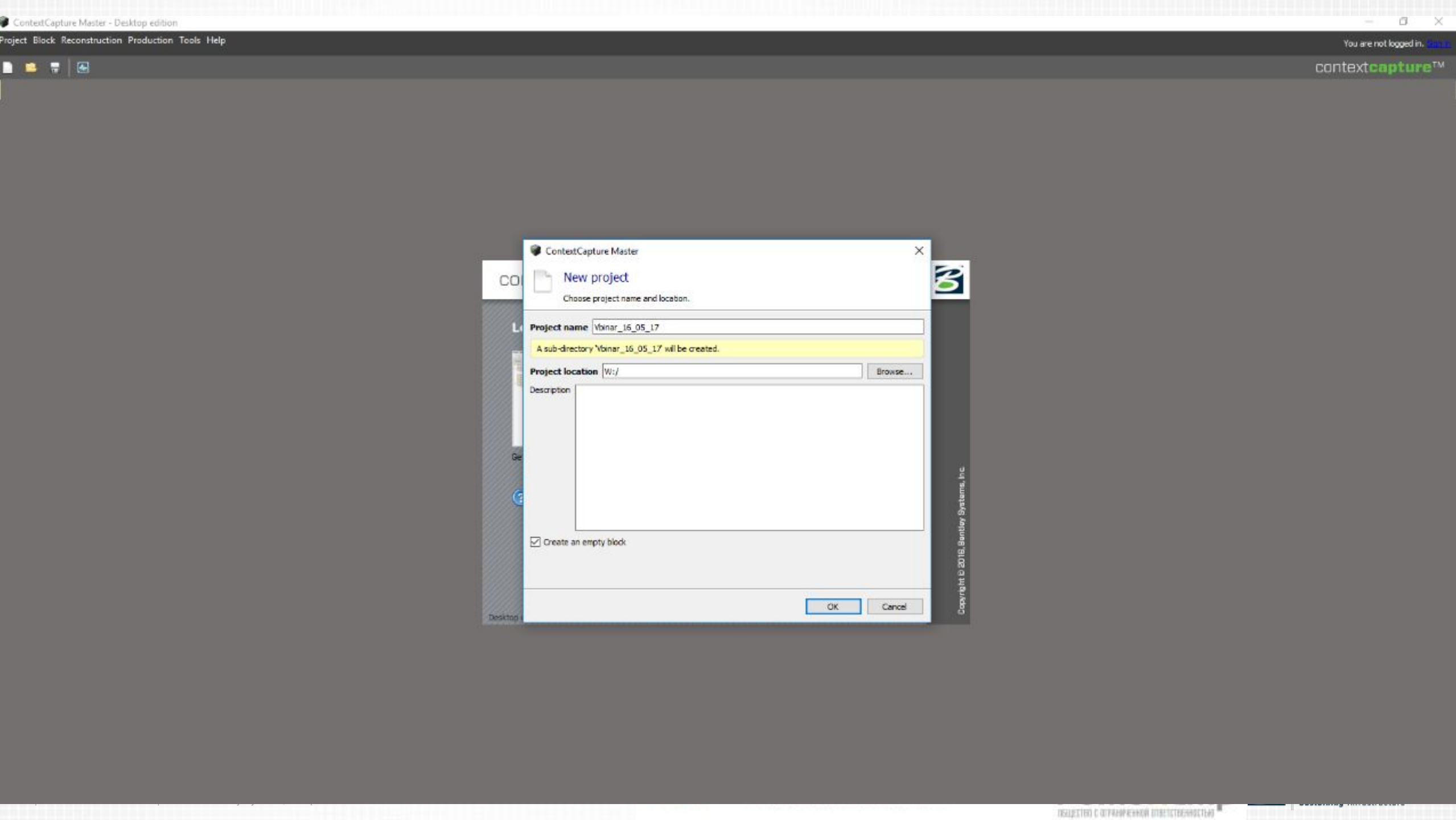
new project

Open an existing project

Open...

Desktop edition v4.4.0.344


ContextCapture Master - Desktop edition
Project Block Reconstruction Production Tools Help
You are not logged in.
contextcapture™
ContextCapture Master
New project
Choose project name and location.
Project name new project
Invalid project name or location.
Project location W:/
Browse...
Description
The directory 'new project' already exists in the selected location.
Please change the project name or choose another location.
Create an empty block
OK
Cancel
Copyright © 2018, Bentley Systems, Inc.


ContextCapture Master - Desktop edition
Project Block Reconstruction Production Tools Help
You are not logged in.
contextcapture™
ContextCapture Master
New project
Choose project name and location.
Project name
Vbinar_16_05_17
A sub-directory 'Vbinar_16_05_17' will be created.
Project location
W:/
Browse...
Description
Create an empty block
OK
Cancel
Copyright © 2016 Bentley Systems, Inc.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Empty block

Please go to the 'Photos' tab or to the 'Point clouds' tab to add data to the block.

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

0 photo(s) in 0 photogroup(s), 0.0 megapixels
0 photo(s) in the main component
0 known position(s) and 0 known rotation(s)
0 control point(s) (0 full point(s), 0 horizontal point(s), 0 vertical point(s)) among which 0 check point(s)
0 user tie point(s)
0 automatic tie point(s)
Unknown resolution

Block ID: Block_1
Created: 5/16/2017 11:09 AM
Last modified: 5/16/2017 12:35 PM

Reconstructions

New reconstruction

Create a new reconstruction framework.

Delete reconstruction

Remove reconstruction from block.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Empty block

Please go to the 'Photos' tab or to the 'Point clouds' tab to add data to the block.

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

0 photo(s) in 0 photogroup(s), 0.0 megapixels
0 photo(s) in the main component
0 known position(s) and 0 known rotation(s)
0 control point(s) (0 full point(s), 0 horizontal point(s), 0 vertical point(s)) among which 0 check point(s)
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ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

User manual F1
Online video tutorials
CONNECT Advisor
Check for updates
About

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

lock_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Empty block

Please go to the 'Photos' tab or to the 'Point clouds' tab to add data to the block.

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

0 photo(s) in 0 photogroup(s), 0.0 megapixels
0 photo(s) in the main component
0 known position(s) and 0 known rotation(s)
0 control point(s) (0 full point(s), 0 horizontal point(s), 0 vertical point(s)) among which 0 check point(s)
0 user tie point(s)
0 automatic tie point(s)
Unknown resolution

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Created: 5/16/2017 11:09 AM
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Remove reconstruction from block.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

ContextCapture User Guide

Скрыть | Назад | Вперед | Домой | Печать | Параметры

Содержание | Указатель | Поиск | Избранное

- Getting Started
- Preparing the imagery dataset
- ContextCapture
- ContextCapture Master
  - ContextCapture Master
    - Project
      - General
      - Options
      - Reference manager
      - Basemap manager
      - Free Up Disk Space
    - Block
    - Reconstruction
    - Production
    - Job Queue Monitor
    - Web publishing
    - Retouching
    - Spatial reference system
- ContextCapture Engine
- Acute3D Viewer
- Acute3D Web Viewer
- Convert 3MX to Scalable Mesh
- ContextCapture S3C Composer
- ContextCapture MasterKernel SDK
- Job Monitoring
- Troubleshooting
- ContextCapture camera model
- Export UniqueMesh
- 3MX Web Deployment
- 3MX specification

ContextCapture Master

Project

The Project item manages all data relative to a scene processed by ContextCapture .

Project item interface

The project item is defined by a list of blocks and project options, managed from two tabs:

- The General tab manages the list of project blocks.
- The Options tab allows to set some options useful for computer clusters.

For the project, the Reference Manager allows to check resources, and to repair or update links.

The Basemap manager is used to manage basemap layers accessible from project 3D views.

Project file compatibility between ContextCapture editions is restricted. Reading of project files created from a higher edition is not permitted. See Software Editions.

General
Options
Reference manager
Basemap manager
Free Up Disk Space

You are not logged in.

contextcapture™ Center edition

Submit aerotriangulation...
Process a new block with completed or adjusted parameters.

Block ID: Block_1
eated: 5/16/2017 11:09 AM
odified: 5/16/2017 12:35 PM

New reconstruction
Create a new reconstruction framework.

Delete reconstruction
Remove reconstruction from block.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Empty block

Please go to the 'Photos' tab or to the 'Point clouds' tab to add data to the block.

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

0 photo(s) in 0 photogroup(s), 0.0 megapixels
0 photo(s) in the main component
0 known position(s) and 0 known rotation(s)
0 control point(s) (0 full point(s), 0 horizontal point(s), 0 vertical po
0 user tie point(s)
0 automatic tie point(s)
Unknown resolution

Block ID: Block_1
Created: 5/16/2017 11:09 AM
Last modified: 5/16/2017 12:35 PM

Job queue monitor

Job queue: C:\Users\User\Documents\Bentley\ContextCapture Desktop\Jobs

0 engine(s)

0 pending job(s)

0 running job(s)

0 failed job(s)

Open job queue directory...

Close

Reconstructions

New reconstruction

Create a new reconstruction framework.

Delete reconstruction

Remove reconstruction from block.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Empty block

Please go to the 'Photos' tab or to the 'Point clouds' tab to add data to the block.

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

0 photo(s) in 0 photogroup(s), 0.0 megapixels
0 photo(s) in the main component
0 known position(s) and 0 known rotation(s)
0 control point(s) (0 full point(s), 0 horizontal point(s), 0 vertical point(s)) among which 0 check point(s)
0 user tie point(s)
0 automatic tie point(s)
Unknown resolution

Block ID: Block_1
Created: 5/16/2017 11:09 AM
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New reconstruction

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Remove reconstruction from block.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

Photogroup	Status	No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.

Photo	Pose	Pose metadata	Component

0 photo(s), 0 photogroup(s), 0.0 megapixels

Photogroup

Name
Directory
Description
Camera
Lens
Number of photos
Image dimensions
Camera model type
Sensor size
Focal length
35 mm eq.
Fisheye focal Matrix
+ More...

No photos added. Use the commands 'Add photos' or 'Add entire directory' to add photos.

0 error(s), 0 warning(s)

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

- Add photo selection...
- Add entire directory...

No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.

Photo	Pose	Pose metadata	Component

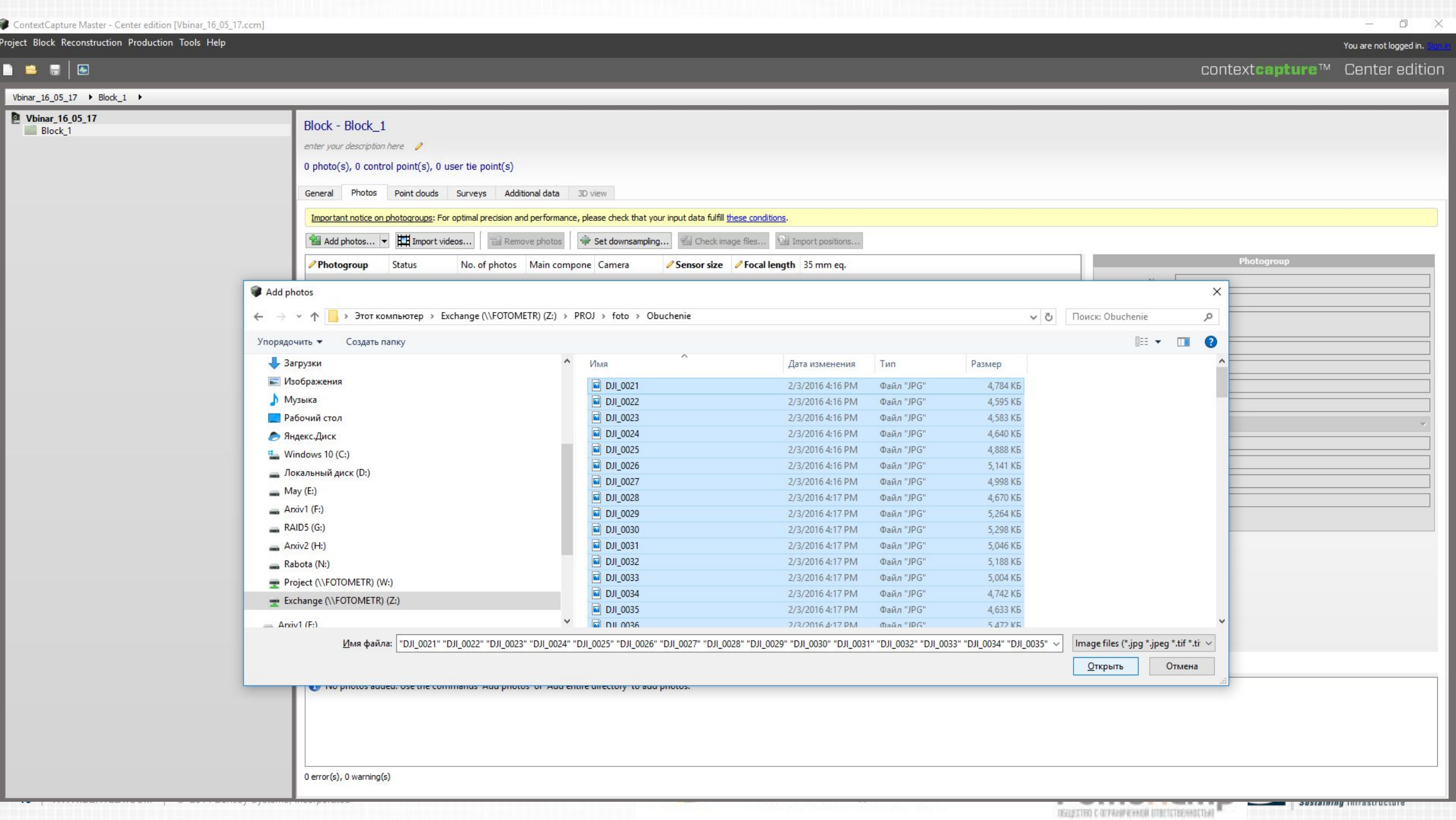
0 photo(s), 0 photogroup(s), 0.0 megapixels

Photogroup

Name
Directory
Description
Camera
Lens
Number of photos
Image dimensions
Camera model type
Sensor size
Focal length
35 mm eq.
Fisheye focal Matrix
+ More...

No photos added. Use the commands 'Add photos' or 'Add entire directory' to add photos.

0 error(s), 0 warning(s)


ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]
Project Block Reconstruction Production Tools Help
You are not logged in. Sign in
contextcapture™ Center edition
Vbinar_16_05_17 ▸ Block_1 ▸
Vbinar_16_05_17
Block_1
Block - Block_1
enter your description here
0 photo(s), 0 control point(s), 0 user tie point(s)
General Photos Point clouds Surveys Additional data 3D view
Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.
Add photos... Import videos... Remove photos Set downsampling... Check image files... Import positions...
Photogroup Status No. of photos Main compone Camera Sensor size Focal length 35 mm eq.
Photogroup
Add photos
Этот компьютер › Exchange (\\FOTOMETR) (Z:) › PROJ › foto › Obuchenie
Поиск: Obuchenie
Упорядочить Создать папку
Загрузки
Изображения
Музыка
Рабочий стол
Яндекс.Диск
Windows 10 (C:)
Локальный диск (D:)
May (E:)
Arxiv1 (F:)
RAID5 (G:)
Arxiv2 (H:)
Rabota (N:)
Project (\\FOTOMETR) (W:)
Exchange (\\FOTOMETR) (Z:)
Имя
Дата изменения
Тип
Размер
DJI_0021 2/3/2016 4:16 PM Файл "JPG" 4,784 КБ
DJI_0022 2/3/2016 4:16 PM Файл "JPG" 4,595 КБ
DJI_0023 2/3/2016 4:16 PM Файл "JPG" 4,583 КБ
DJI_0024 2/3/2016 4:16 PM Файл "JPG" 4,640 КБ
DJI_0025 2/3/2016 4:16 PM Файл "JPG" 4,888 КБ
DJI_0026 2/3/2016 4:16 PM Файл "JPG" 5,141 КБ
DJI_0027 2/3/2016 4:16 PM Файл "JPG" 4,998 КБ
DJI_0028 2/3/2016 4:17 PM Файл "JPG" 4,670 КБ
DJI_0029 2/3/2016 4:17 PM Файл "JPG" 5,264 КБ
DJI_0030 2/3/2016 4:17 PM Файл "JPG" 5,298 КБ
DJI_0031 2/3/2016 4:17 PM Файл "JPG" 5,046 КБ
DJI_0032 2/3/2016 4:17 PM Файл "JPG" 5,188 КБ
DJI_0033 2/3/2016 4:17 PM Файл "JPG" 5,004 КБ
DJI_0034 2/3/2016 4:17 PM Файл "JPG" 4,742 КБ
DJI_0035 2/3/2016 4:17 PM Файл "JPG" 4,633 КБ
Имя файла: "DJI_0021" "DJI_0022" "DJI_0023" "DJI_0024" "DJI_0025" "DJI_0026" "DJI_0027" "DJI_0028" "DJI_0029" "DJI_0030" "DJI_0031" "DJI_0032" "DJI_0033" "DJI_0034" "DJI_0035"
Image files (*.jpg *.jpeg *.tif *.ti
Открыть
Отмена
0 error(s), 0 warning(s)

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

0 photo(s), 0 control point(s), 0 user tie point(s)

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

Photogroup	Status	No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.

Adding 126 photos...
34%
Cancel

Photo	Pose	Pose metadata	Component

0 photo(s), 0 photogroup(s), 0.0 megapixels

Photogroup

Name
Directory
Description
Camera
Lens
Number of photos
Image dimensions
Camera model type
Sensor size
Focal length
35 mm eq.
Fisheye focal Matrix
+ More...

No photos added. Use the commands 'Add photos' or 'Add entire directory' to add photos.

0 error(s), 0 warning(s)

Block - Block_1

enter your description here

126 photo(s), 0 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

Photogroup	Status	No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.
Photogroup 1		126 photo(s)	0/126 photo(s)	DJI FC300X	6.24 mm	3.61 mm	20.8269 mm

Photo	Pose	Pose metadata	Component
DJI_0021.JPG	Position only	Position	None
DJI_0022.JPG	Position only	Position	None
DJI_0023.JPG	Position only	Position	None
DJI_0024.JPG	Position only	Position	None
DJI_0025.JPG	Position only	Position	None
DJI_0026.JPG	Position only	Position	None
DJI_0027.JPG	Position only	Position	None
DJI_0028.JPG	Position only	Position	None
DJI_0029.JPG	Position only	Position	None
DJI_0030.JPG	Position only	Position	None
DJI_0031.JPG	Position only	Position	None
DJI_0032.JPG	Position only	Position	None
DJI_0033.JPG	Position only	Position	None

126 photo(s), 1 photogroup(s), 1.5 gigapixels

Photogroup

Name	Photogroup 1
Directory	Z:/PROJ/foto/Obuchenie
Description	
Camera	DJI FC300X
Lens	
Number of photos	126
Image dimensions	4000 x 3000
Camera model type	Perspective
Sensor size	6.24 mm
Focal length	3.61 mm
35 mm eq.	20.8269 mm

+ More...

Block - Block_1

enter your description here

126 photo(s), 0 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

Photogroup	Status	No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.
Photogroup 1		126 photo(s)	0/126 photo(s)	DJI FC300X	6.24 mm	3.61 mm	20.8269 mm

Photogroup

Name	Photogroup 1
Directory	Z:/PROJ/foto/Obuchenie
Description	
Camera	DJI FC300X
Lens	
Number of photos	126
Image dimensions	4000 x 3000
Camera model type	Perspective
Sensor size	6.24 mm
Focal length	3.61 mm
35 mm eq.	20.8269 mm

+ More...

Import video frames

Import video frames

Extract video frames and add them to the block photos.

Input video file: ...

Settings

Start time: 0.00 seconds

End time: 0.00 seconds

Extract a photo every: 0.000 seconds

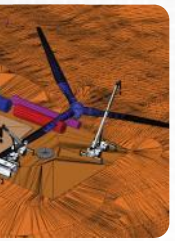
Photo output directory: ...

Imported video frames

0 photo(s), 0 photogroup(s), 0.00 megapixels
Image dimensions: 0x0 pixels

⚠ **Please enter a video file name.**

Import | Close







Форматы

Форматы фото:

JPEG,TIFF, Panasonic RAW (RW2), Canon RAW (CRW, CR2), Nikon RAW (NEF), Sony RAW (ARW), Hasselblad (3FR), Adobe Digital Negative (DNG)

Форматы видео:

Audio Video Interleave (AVI), MPEG-1/MPEG-2 (MPG), MPEG-4 (MP4), Windows Media Video (WMV), Quicktime (MOV)

Block - Block_1

enter your description here

126 photo(s), 0 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

Photogroup	Status	No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.
Photogroup 1		126 photo(s)	0/126 photo(s)	DJI FC300X	6.24 mm	3.61 mm	20.8269 mm

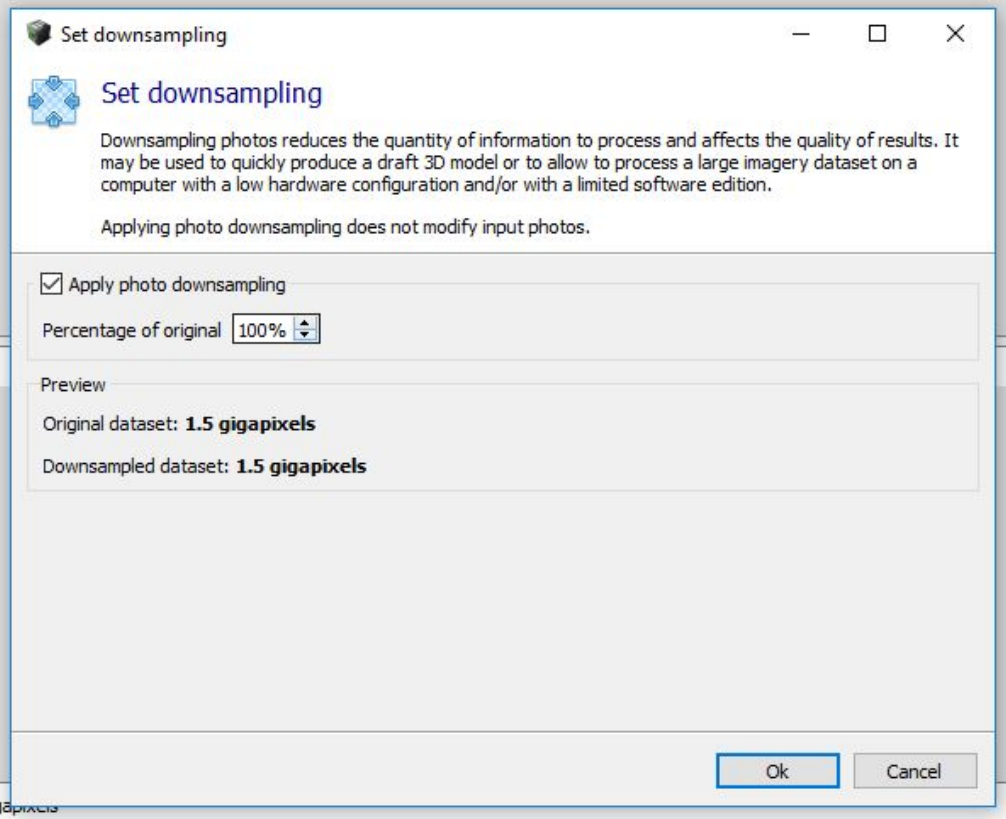
Photo
DJI_0021.JPG
DJI_0022.JPG
DJI_0023.JPG
DJI_0024.JPG
DJI_0025.JPG
DJI_0026.JPG
DJI_0027.JPG
DJI_0028.JPG
DJI_0029.JPG
DJI_0030.JPG
DJI_0031.JPG
DJI_0032.JPG
DJI_0033.JPG

126 photo(s), 1 photogroup(s), 1.5 gigapixels

Photogroup

Name	Photogroup 1
Directory	Z:/PROJ/foto/Obuchenie
Description	
Camera	DJI FC300X
Lens	
Number of photos	126
Image dimensions	4000 x 3000
Camera model type	Perspective
Sensor size	6.24 mm
Focal length	3.61 mm
35 mm eq.	20.8269 mm

+ More...



Block - Block_1

enter your description here

126 photo(s), 0 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

Photogroup	Status	No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.
Photogroup 1		126 photo(s)	0/126 photo(s)	DJI FC300X	6.24 mm	3.61 mm	20.8269 mm

Photo	Pose
DJI_0021.JPG	Position or
DJI_0022.JPG	Position or
DJI_0023.JPG	Position or
DJI_0024.JPG	Position or
DJI_0025.JPG	Position or
DJI_0026.JPG	Position or
DJI_0027.JPG	Position or
DJI_0028.JPG	Position or
DJI_0029.JPG	Position or
DJI_0030.JPG	Position or
DJI_0031.JPG	Position or
DJI_0032.JPG	Position or
DJI_0033.JPG	Position or

126 photo(s), 1 photogroup(s), 1.5 gigapixels

Photogroup

Name	Photogroup 1
Directory	Z:/PROJ/foto/Obuchenie
Description	
Camera	DJI FC300X
Lens	
Number of photos	126
Image dimensions	4000 x 3000
Camera model type	Perspective
Sensor size	6.24 mm
Focal length	3.61 mm
35 mm eq.	20.8269 mm

+ More...

Check image files

Check image files

Browse block photos and check image files integrity and dimensions.

Mode

- (•) Check image file header only (faster)
- ( ) Load the entire image file (slower)

Report

126/126 image files were successfully opened.

Start | Close

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

126 photo(s), 0 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Import point clouds... | Remove point clouds

Name	Description

0 point cloud(s)

Point cloud

Name
Description
Date created
Color mode
Attributes
Number of points
Resolution
Number of scans

Scans

Source position X
Y
Z

Block - Block_1

enter your description here

126 photo(s), 0 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Import point clouds... | Remove point clouds

Name	Description

Point cloud

Name

Description

Date created

Color mode

Attributes

Number of points

Resolution

Number of scans

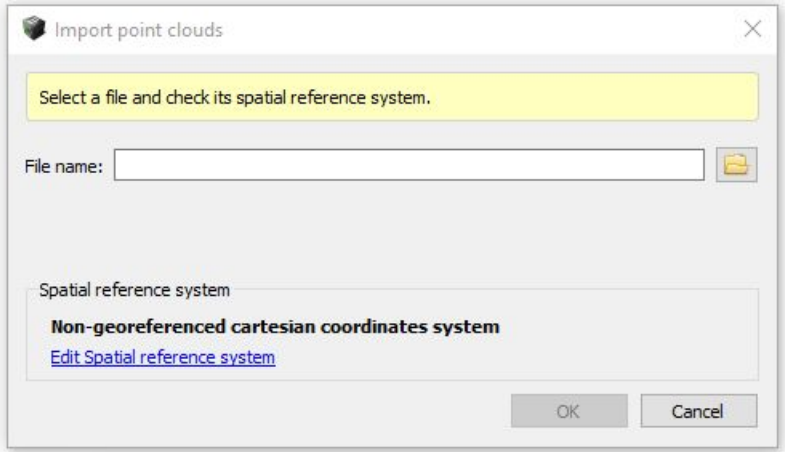
Scans

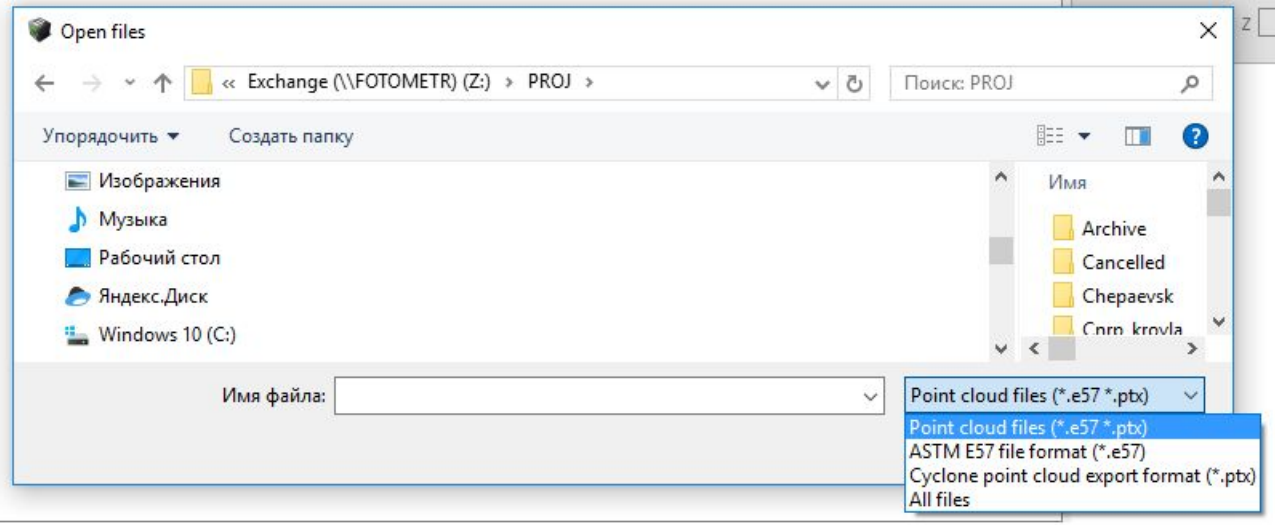
Source position X

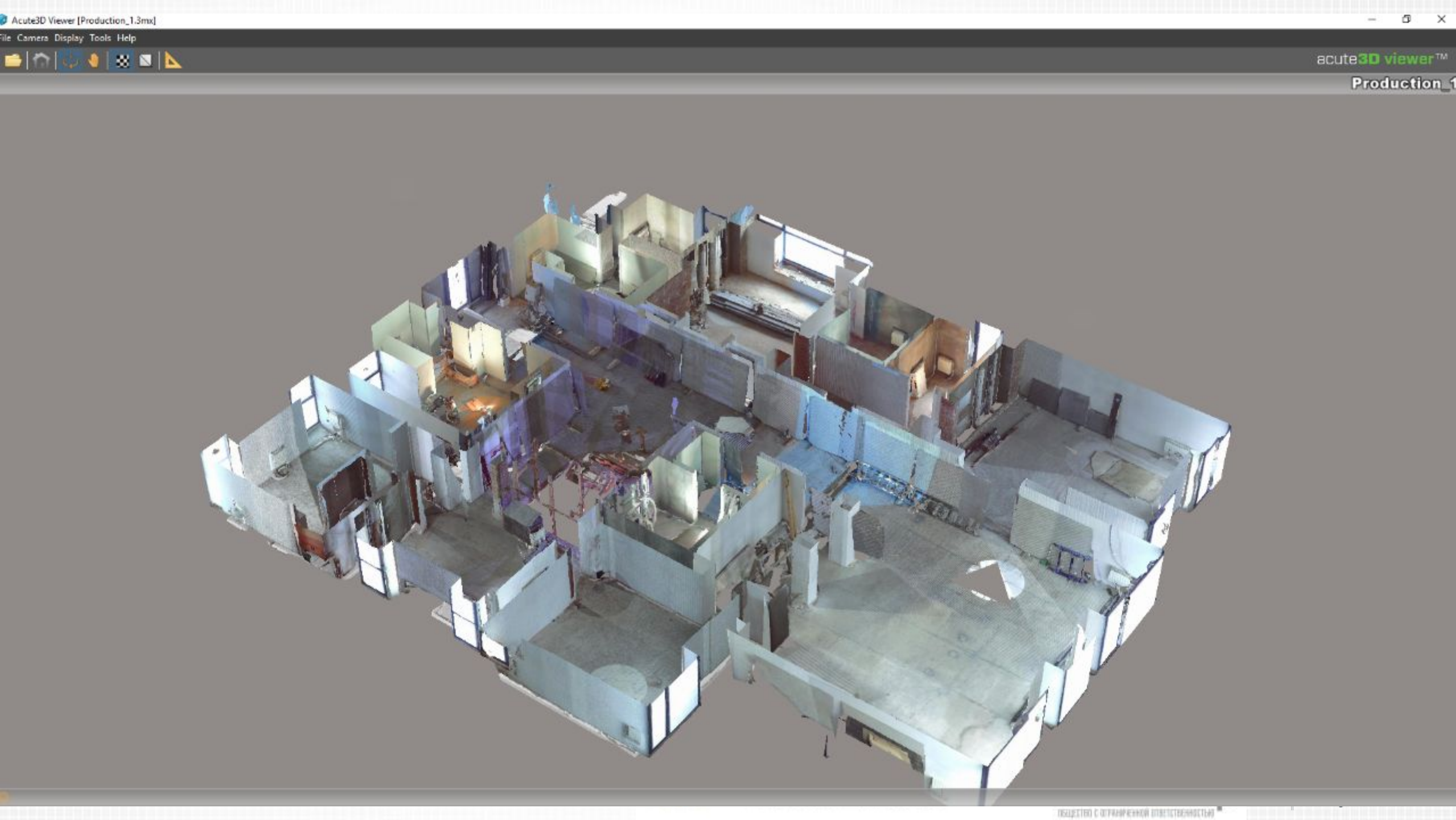
Y

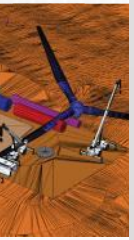
Z

0 point cloud(s)






Acute3D Viewer [Production_1.3mx]
File Camera Display Tools Help
acute3D viewer™
Production_1



Block - Block_1

enter your description here

126 photo(s), 0 control p

General | Photos | Point

Import point clouds...

Name

0 point cloud(s)

Import point clouds from a mobile scanner

Import point clouds from a mobile scanner

Import point clouds and trajectories obtained using a mobile scanner

- Input files
- File format
- Data properties
- Fields

Input files

Define the input point cloud and trajectory files.
Trajectories and point clouds are linked thanks to time stamps in both sets of files.

Point clouds

Add point clouds...

No point cloud data added

Click on the add button to add some files.

Trajectories

Add trajectories...

No trajectory dat

Click on the add button to a

⚠ **No point cloud files chosen. No trajectory files chosen.**

< Back | Next | Import | Cancel

Choose some point cloud files

Этот ... › Project (\\FOT... ›

Поиск: Project (\\FOTOMETR...

Упорядочить | Создать папку

RAID5 (G:)
- foto
- Project
- Tst98
- tst987

Имя
- 12
- 123tst
- 567test
- 2017.03.30 SUR

Имя файла:

Point cloud files (*.e57 *.las)

Открыть | Отмена

Point cloud

Name

Description

Date created

Color mode

Attributes

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

126 photo(s), 0 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Control points

0 control point(s) (0 full point(s), 0 horizontal point(s), 0 vertical point(s)), among which 0 check point(s).

0 valid control point(s).

Edit control points...

Tie points

0 user tie point(s).

Edit user tie points...

0 automatic tie point(s).

View automatic tie points...

Positioning constraints

0 positioning constraint(s).

Edit positioning constraints...

Control points editor

File Actions

Control points

Spatial Reference System (SRS): WGS 84

Set the SRS of all points to selected one

Default
Cartesian
WGS 84

Recent
WGS 84 / UTM zone 37N (EPSG:32637)
WGS 84, orthometric height (EGM96)
Local East-North-Up (ENU); origin: 54.507520N 36.248810E
Local East-North-Up (ENU); origin: 54.507550N 36.248830E
WGS 84 / UTM zone 42N (EPSG:32642)
Local East-North-Up (ENU); origin: 42.939040N 71.062340E
Local East-North-Up (ENU); origin: 54.507500N 36.248800E
WGS 84 / UTM zone 45N (EPSG:32645)

More
Spatial reference system database...

Name	Ca	Given psoidal height	Horizontal accuracy [m]	Vertical accuracy [m]	Estimated Longitude	Estimated Latitude	Estimated Ellipsoidal height	RMS of reproj. error [px]	RMS of dist. to rays [m]	3D error [m]	3D horizontal error [m]	3D vertical error [m]

Photos

Display photos: All Display points: All Display hints: Yes

Measurements

Measurements:

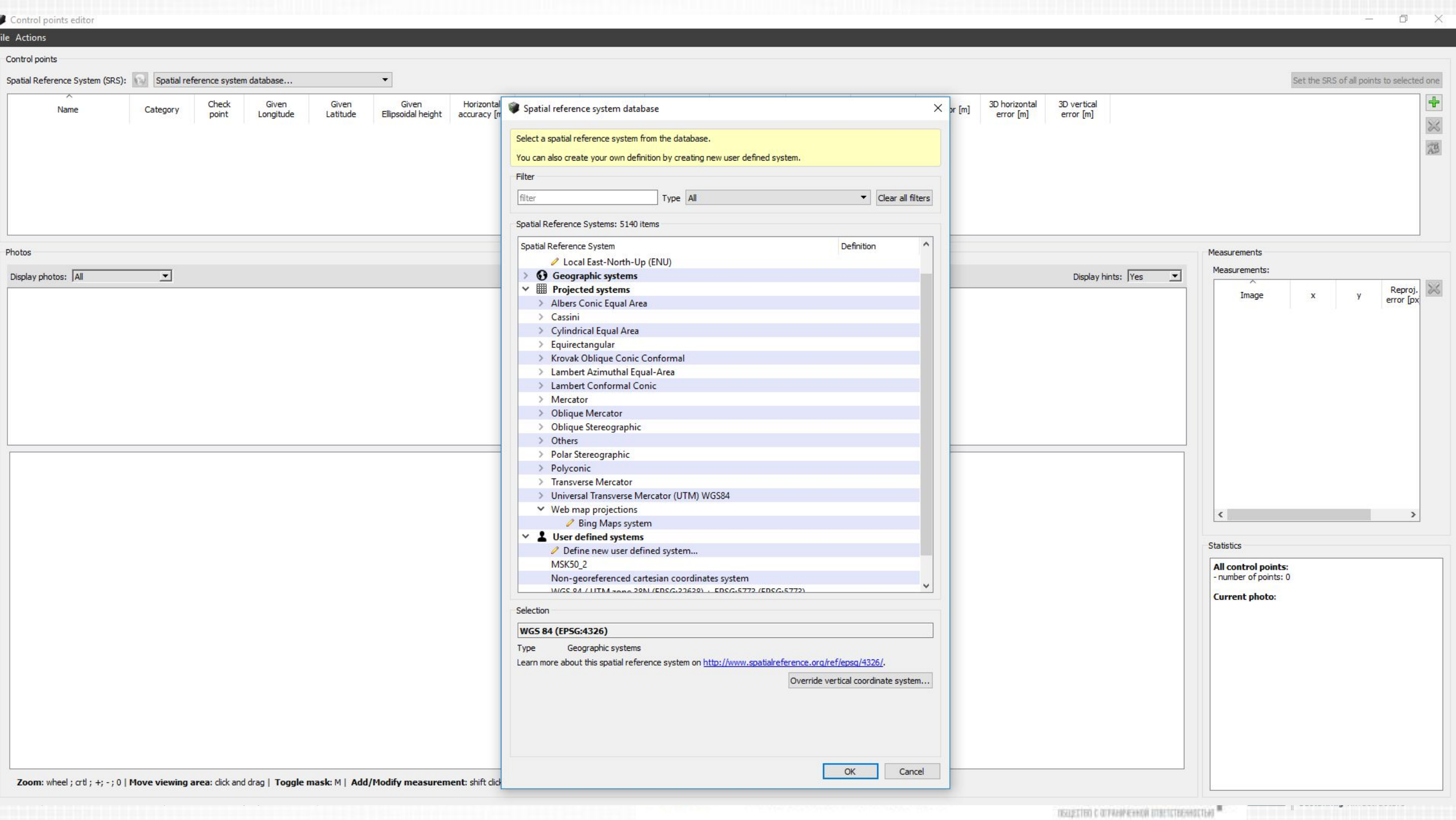
Image	x	y	Reproj. error [px

Statistics

All control points:
- number of points: 0

Current photo:

Zoom: wheel ; crtl ; +; - ; 0 | **Move viewing area**: click and drag | **Toggle mask**: M | **Add/Modify measurement**: shift click | **Quality**=cached (**Load original**: O)


Control points editor
File Actions
Control points
Spatial Reference System (SRS):
Spatial reference system database...
Set the SRS of all points to selected one
Name
Category
Check point
Given Longitude
Given Latitude
Given Ellipsoidal height
Horizontal accuracy [m]
3D horizontal error [m]
3D vertical error [m]
Photos
Display photos:
All
Display hints:
Yes
Measurements
Measurements:
Image
x
y
Reproj. error [px]
Statistics
All control points:
- number of points: 0
Current photo:
Zoom: wheel ; crtl ; +; - ; 0 | Move viewing area: click and drag | Toggle mask: M | Add/Modify measurement: shift click
Spatial reference system database
Select a spatial reference system from the database.
You can also create your own definition by creating new user defined system.
Filter
filter
Type
All
Clear all filters
Spatial Reference Systems: 5140 items
Spatial Reference System
Definition
Local East-North-Up (ENU)
Geographic systems
Projected systems
Albers Conic Equal Area
Cassini
Cylindrical Equal Area
Equirectangular
Krovak Oblique Conic Conformal
Lambert Azimuthal Equal-Area
Lambert Conformal Conic
Mercator
Oblique Mercator
Oblique Stereographic
Others
Polar Stereographic
Polyconic
Transverse Mercator
Universal Transverse Mercator (UTM) WGS84
Web map projections
Bing Maps system
User defined systems
Define new user defined system...
MSK50_2
Non-georeferenced cartesian coordinates system
Selection
WGS 84 (EPSG:4326)
Type
Geographic systems
Learn more about this spatial reference system on http://www.spatialreference.org/ref/epsg/4326/.
Override vertical coordinate system...
OK
Cancel

Control points editor

File Actions

Save Ctrl+S
Import...
Export...
Exit Ctrl+Q

RS): WGS 84

Set the SRS of all points to selected one

Category	Check point	Given Longitude	Given Latitude	Given Ellipsoidal height	Horizontal accuracy [m]	Vertical accuracy [m]	Estimated Longitude	Estimated Latitude	Estimated Ellipsoidal height	RMS of reproj. error [px]	RMS of dist. to rays [m]	3D error [m]	3D horizontal error [m]	3D vertical error [m]

Photos

Display photos: All Display points: All Display hints: Yes

Measurements

Measurements:

Image	x	y	Reproj. error [px

Statistics

All control points:
- number of points: 0

Current photo:

Vagno — Блокнот

Файл Правка Формат Вид Справка

```
3 36.4174945 55.6477838 17.59
2 36.4212469 55.6465572 17.31
1 36.4201371 55.6482995 17.48
4 36.4206181 55.6466820 16.81
```

Zoom: wheel ; crtl ; +; - ; 0 | **Move viewing area**: click and drag | **Toggle mask**: M | **Add/Modify measurement**: shift click | **Quality**=cached (**Load original**: O)

Control points editor

File Actions

Control points

Spatial Reference System (SRS): WGS 84

Set the SRS of all points to selected one

Name	Category	Check point	Given Longitude	Given Latitude	Given Ellipsoidal height	Horizontal accuracy [m]	Vertical accuracy [m]	Estimated Longitude	Estimated Latitude	Estimated Ellipsoidal height	RMS of reproj. error [px]	RMS of dist. to rays [m]	3D error [m]	3D horizontal error [m]	3D vertical error [m]
1	Full	☐	36.4201371	55.6482995	17.480	0.010	0.010								
2	Full	☐	36.4212469	55.6465572	17.310	0.010	0.010								
3	Full	☐	36.4174945	55.6477838	17.590	0.010	0.010								
4	Full	☐	36.4206181	55.6466820	16.810	0.010	0.010								

Photos

Display photos: All Display points: All Display hints: Yes

DJI_0021	DJI_0022	DJI_0023	DJI_0024	DJI_0025	DJI_0026	DJI_0027	DJI_0028	DJI_0029	DJI_0030	DJI_0031	DJI_0032	DJI_0033	DJI_0034	DJI_0035	DJI_0036	DJI_0037	DJI_0038	DJI_0039	D
																			

Measurements

Measurements:

Image	x	y	Reproj. error [px

Statistics

All control points:
- number of points: 4

Current photo:

Zoom: wheel ; ctl ; +; - ; 0 | **Move viewing area:** click and drag | **Toggle mask:** M | **Add/Modify measurement:** shift click | **Quality**=cached (**Load original**: O)

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

You can specify here additional knowledge on the acquisition in order to help the aerotriangluation.

Block type: Generic — Generic block type.

Minimum viewing distance: — Leave this field empty if unknown.

Maximum viewing distance: meters — Leave this field empty if unknown.

Generic
Vertical views only
Structured aerial dataset

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

Project Block Reconstruction Production Tools Help

You are not logged in.

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

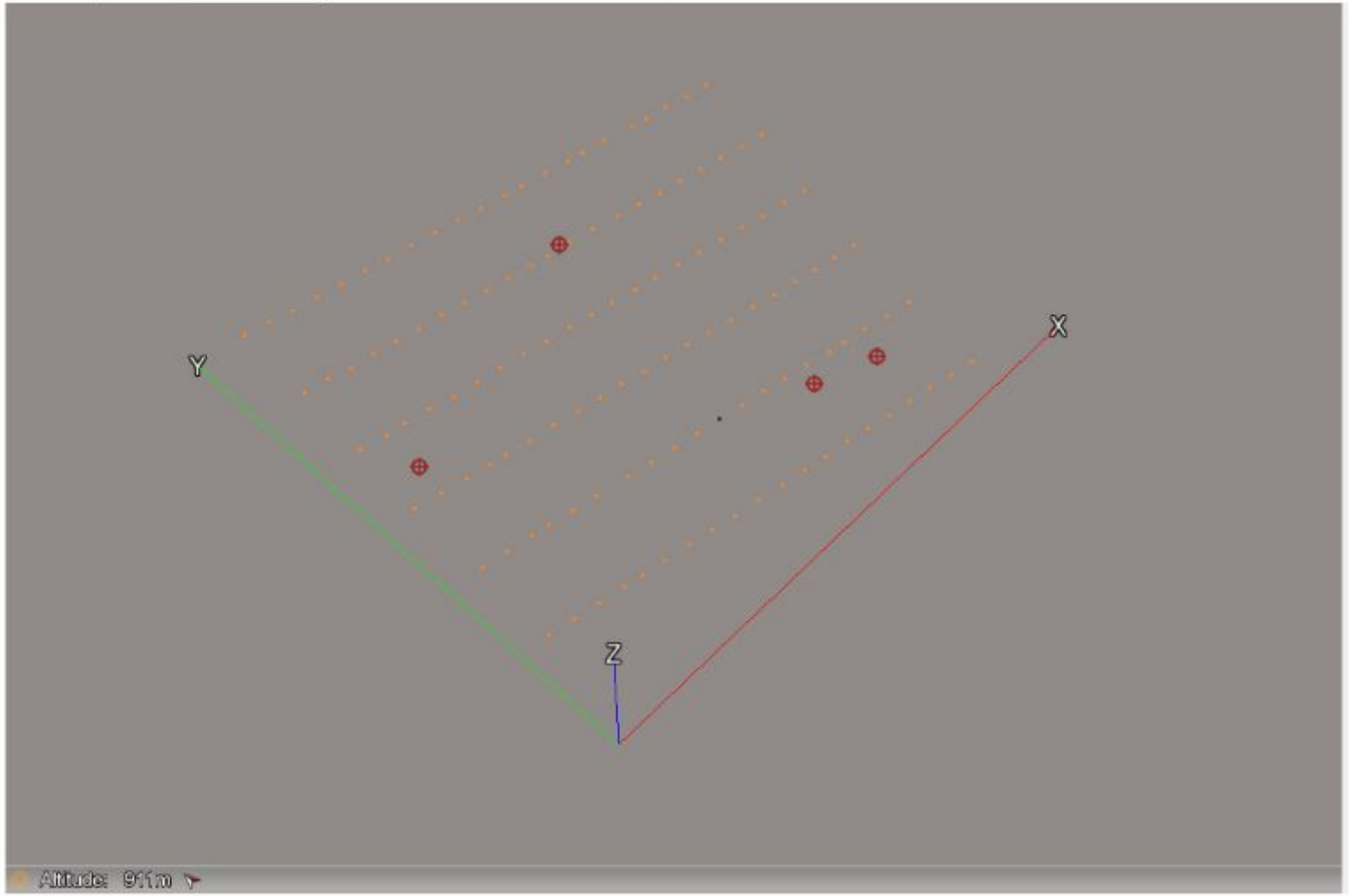
Block - Block_1

enter your description here

126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Show photos: Without component | Camera size



Preview — View | Open

Photo

Name	DJI_0342.JPG
Directory	Z:\PROJ\foto\Obuchenie
Date taken	2/3/2016 2:25 PM
Size	4 MB
Mask file	
Component	None

Pose

Spatial reference system:	WGS 84 (EPSG:4326)
Position Longitude	36.419255
Latitude	55.646656
Height	75.526494
Rotation (ECEF)	unknown

Pose metadata

Spatial reference system:	WGS 84, orthometric height (EGM9
Position Longitude	36.419255
Latitude	55.646656
Height	60.100000
Rotation (ECEF)	unknown

Photogroup

Name	Photogroup 1

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 ▸

Vbinar_16_05_17
Block_1

Block - Block_1

enter your description here

126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Incomplete photos

You can estimate missing photo information by aerotriangulation.

Photos positioning level: **georeferenced**

126 photo(s) in 1 photogroup(s), 1.5 gigapixels
0 photo(s) in the main component
126 known position(s) and 0 known rotation(s)
4 control point(s) (4 full point(s), 0 horizontal point(s), 0
0 user tie point(s)
0 automatic tie point(s)
Unknown resolution

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

Reconstructions

New reconstruction

Create a new reconstruction framework.

Delete reconstruction

Remove reconstruction from block.

Aerotriangulation definition

Aerotriangulation definition

Aerotriangulation consists in automatically and accurately estimating the position, rotation, and camera properties (focal length, principal point, lens distorsion) for each input photograph.
The aerotriangulation starts from the input block and creates a new completed or adjusted block according to selected parameters.

- Output block name
- Components
- Positioning/georefere...
- Settings

Output block name

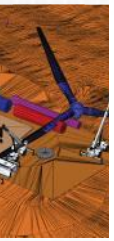
Choose the name and the description of the aerotriangulation output block.

ID: **Block_2**

Name: Block_1 - AT

Description: Result of aerotriangulation of Block_1 (2017-May-16 15:44:10)

< Back | **Next** | Submit | Cancel




Block - Block_1

enter your description here

126 photo(s),

General | Pho

Aerotriangulation definition

Aerotriangulation definition

Aerotriangulation consists in automatically and accurately estimating the position, rotation, and camera properties (focal length, principal point, lens distorsion) for each input photograph. The aerotriangulation starts from the input block and creates a new completed or adjusted block according to selected parameters.

- Output block name
- Components
- Positioning/georefere...
- Settings

Positioning/georeferencing

Choose how the aerotriangulation should place and orient the block.

Positioning mode

- ○ **Arbitrary**
  Block position and orientation are arbitrary.
- ○ **Automatic vertical**
  The block vertical direction is oriented according to input photo orientation. Block scale and heading remain arbitrary.
- ○ **Use positioning constraints on user tie points** (disabled)
  The block is rigidly placed/oriented/scaled thanks to predefined constraints.
- ○ **Use photo positioning metadata for adjustment (126/126 photos have positioning metadata)**
  The block is adjusted according to the photo positions from pose metadata (advised with **accurate** metadata).
- ◉ **Use photo positioning metadata for rigid registration (126/126 photos have positioning metadata)**
  The block is rigidly registered to the photo positions from pose metadata (advised with **inaccurate** metadata).

0 valid control point(s).
Control points must be provided in the block definition to enable the positioning modes below.

- ○ **Use control points for adjustment** (disabled)
  The block is accurately adjusted to control points (advised with **accurate** control points).
- ○ **Use control points for rigid registration** (disabled)
  The block is rigidly registered to control points without handling long-range geometric distortion (advised with **inaccurate** control points).

< Back | Next | Submit | Cancel

126 photo(s)
0 photo(s) i
126 known
4 control po
0 user tie p
0 automatic
Unknown re

Block ID: Block_1
Created: 5/16/2017 11:09 AM
Last modified: 5/16/2017 3:26 PM

Submit aerotriangulation...
Process a new block with completed or adjusted parameters.

Reconstructio

New reconstruction
Create a new reconstruction framework.

Delete reconstruction
Remove reconstruction from block.




Block - Block_1

enter your description here

126 photo(s),

General | Pho

Aerotriangulation definition

Aerotriangulation definition

Aerotriangulation consists in automatically and accurately estimating the position, rotation, and camera properties (focal length, principal point, lens distorsion) for each input photograph.
The aerotriangulation starts from the input block and creates a new completed or adjusted block according to selected parameters.

- Output block name
- Components
- Positioning/georefere...
- Settings

Settings

Choose aerotriangulation settings including estimation policies and low-level settings.

Preset: Default — Load preset... | Save preset...

Keypoints density	Normal	
Pair selection mode	Default	Maximal distance: 3 photo(s)
Component construction mode	One-pass	

Estimation policies

Tie points	Compute	
Position	Compute	Tolerance 0
Rotation	Compute	
Optical properties estimation mode	One-pass	
Focal length	Adjust	
Principal point	Adjust	
Radial distortion	Adjust	
Tangential distortion	Keep	
Aspect Ratio	Keep	
Skew	Keep	
Estimation groups	Per photogroup	

Low-level settings

< Back | Next | Submit | Cancel

Submit aerotri
Process a new block wit adjusted parameters.

Block ID: Block_1
Created: 5/16/2017 11:09 AM
Last modified: 5/16/2017 3:26 PM

New recons
Create a new reconstru

Delete reconst
Remove reconstruction

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Warning: your license works in offline mode. If the license server cannot be contacted, your license will expire in 7 day(s).

Vbinar_16_05_17 ▸ Block_1 - AT ▸

Vbinar_16_05_17
Block_1
Block_1 - AT

Block - Block_1 - AT

Result of aerotriangulation of Block_1 (2017-May-16 15:46:06)

126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Aerotriangulation processing...

Extracting keypoints (photo 16/126)...

6%

View aerotriangulation settings | Monitor job queue

Cancel

Cancel aerotriangulation.

ContextCapture Center Engine

```
ContextCapture Center version 4.4.5.33 running << C:\Program Files\Bentley\ContextCapture Center\bin\CCEngine.exe >> fro
m directory << C:\Program Files\Bentley\ContextCapture Center\bin >>
[2017-May-16 16:03:46] Starting CCEngine.exe on User@Fotometr

================================================
Welcome to ContextCapture Center version 4.4.5.33
================================================
Processing the following job types: AT TileProduction RasterProduction
The Engine will profile jobs
[2017-May-16 16:03:47] Starting Engine on job queue "W:/"
[2017-May-16 16:04:52] Starting job "job_20170516T130450_Vbinar_16_05_17_B2_AT"
```

Block ID: Block_2
Created: 5/16/2017 3:46 PM
Last modified: 5/16/2017 4:04 PM

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Warning: your license works in offline mode. If the license server cannot be contacted, your license will expire in 7 day(s).

Vbinar_16_05_17 ▸ Block_1 - AT ▸

- **Vbinar_16_05_17**
  - Block_1
  - Block_1 - AT

Block - Block_1 - AT

Result of aerotriangulation of Block_1 (2017-May-16 15:46:06)

126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Complete photos

The block is ready for reconstruction.

Photos positioning level: **georeferenced**

Aerotriangulation report: View | Open

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

126 photo(s) in 1 photogroup(s), 1.5 gigapixels
126 photo(s) in the main component
126 known position(s) and 126 known rotation(s)
4 control point(s) (4 full point(s), 0 horizontal point(s), 0 vertical point(s)) among which 0 check point(s)
0 user tie point(s)
94694 automatic tie point(s)
Resolution ranges from 0.018 meters to 0.027 meters

Block ID: Block_2
Created: 5/16/2017 3:46 PM
Last modified: 5/16/2017 4:09 PM

Reconstructions

New reconstruction

Create a new reconstruction framework.

Delete reconstruction

Remove reconstruction from block.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

roject Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Warning: your license works in offline mode. If the license server cannot be contacted, your license will expire in 7 day(s).

Vbinar_16_05_17 ▸ Block_1 - AT ▸

- Vbinar_16_05_17
  - Block_1
  - Block_1 - AT

Block - Block_1 - AT

Result of aerotriangulation of Block_1 (2017-May-16 15:46:06)

126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Important notice on photogroups: For optimal precision and performance, please check that your input data fulfill these conditions.

Add photos... | Import videos... | Remove photos | Set downsampling... | Check image files... | Import positions...

Photogroup	Status	No. of photos	Main compone	Camera	Sensor size	Focal length	35 mm eq.
Photogroup 1	✓	126 photo(s)	126/126 phot...	DJI FC300X	6.24 mm	3.50614 mm	20.2277 mm

Photo	Pose	Pose metadata	Component
DJI_0021.JPG	Complete	Position	Main
DJI_0022.JPG	Complete	Position	Main
DJI_0023.JPG	Complete	Position	Main
DJI_0024.JPG	Complete	Position	Main
DJI_0025.JPG	Complete	Position	Main
DJI_0026.JPG	Complete	Position	Main
DJI_0027.JPG	Complete	Position	Main
DJI_0028.JPG	Complete	Position	Main
DJI_0029.JPG	Complete	Position	Main
DJI_0030.JPG	Complete	Position	Main
DJI_0031.JPG	Complete	Position	Main
DJI_0032.JPG	Complete	Position	Main
DJI_0033.JPG	Complete	Position	Main

126 photo(s), 1 photogroup(s), 1.5 gigapixels

Photogroup

Name	Photogroup 1
Directory	Z:/PROJ/foto/Obuchenie
Description	
Camera	DJI FC300X
Lens	
Number of photos	126
Image dimensions	4000 x 3000
Camera model type	Perspective
Sensor size	6.24 mm
Focal length	3.50614 mm
35 mm eq.	20.2277 mm

+ More...

0 error(s), 0 warning(s)

File Actions

Control points

Spatial Reference System (SRS): WGS 84

Set the SRS of all points to selected one

Name	Category	Check point	Given Longitude	Given Latitude	Given Ellipsoidal height	Horizontal accuracy [m]	Vertical accuracy [m]	Estimated Longitude	Estimated Latitude	Estimated Ellipsoidal height	RMS of reproj. error [px]	RMS of dist. to rays [m]	3D error [m]	3D horizontal error [m]	3D vertical error [m]
1	Full	☐	36.4201371	55.6482995	17.480	0.010	0.010								
2	Full	☐	36.4212469	55.6465572	17.310	0.010	0.010								
3	Full	☐	36.4174945	55.6477838	17.590	0.010	0.010								
4	Full	☐	36.4206181	55.6466820	16.810	0.010	0.010								

Photos

Display photos: That might view point (All / That might view point)

Display points: All

Display hints: Yes

DJI_0782 DJI_0785 DJI_0786 DJI_0855 DJI_0856 DJI_0857 DJI_0858 DJI_0859

Measurements

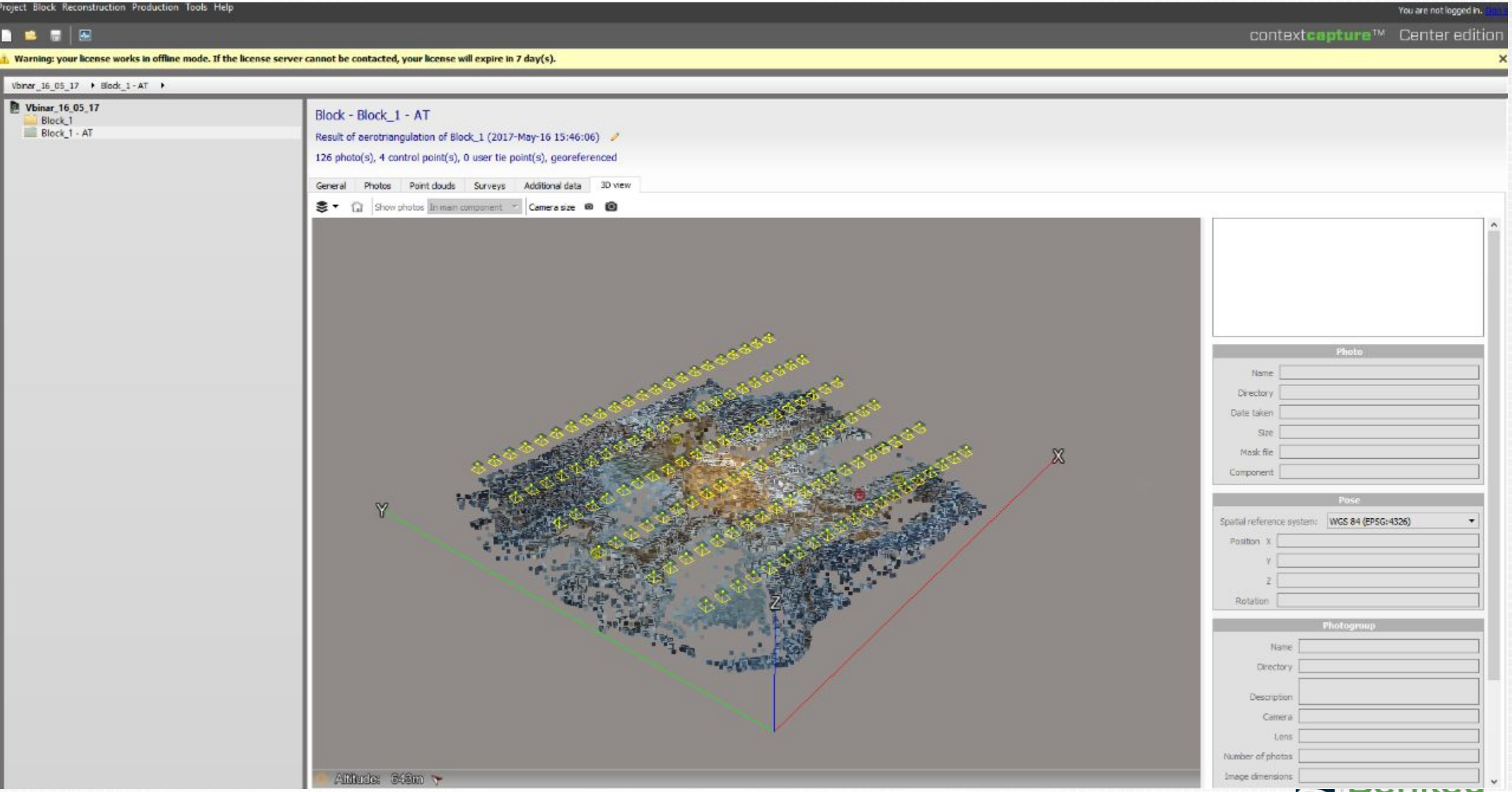
Measurements:

Image	x	y	Reproj. error [px]

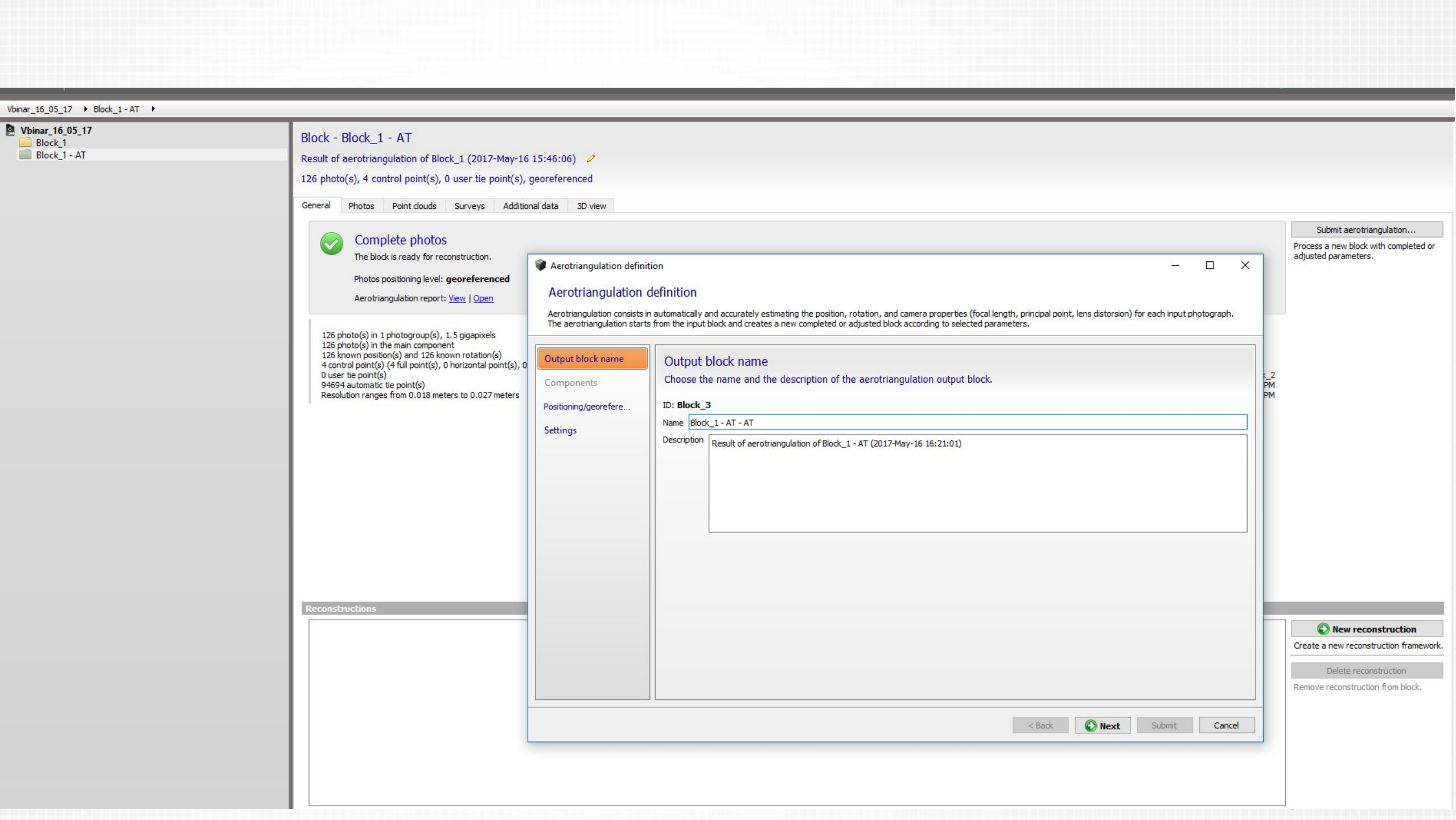
Statistics

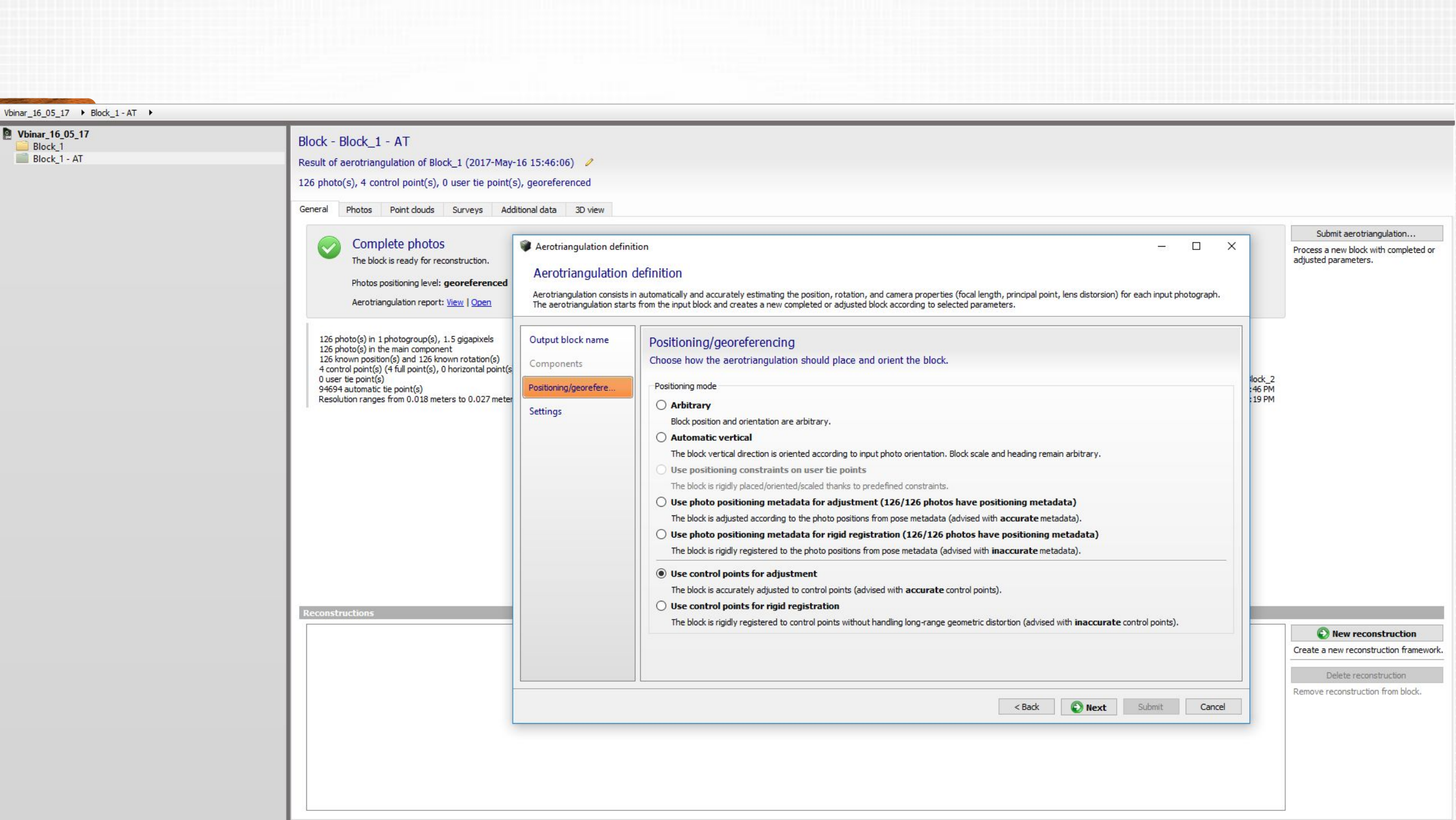
All control points:
- number of points: 4

Current photo:
- number of usable measurements: 0



Bentley Sustaining Infrastructure


Vbinar_16_05_17 ▸ Block_1 - AT ▸
Vbinar_16_05_17
Block_1
Block_1 - AT
Block - Block_1 - AT
Result of aerotriangulation of Block_1 (2017-May-16 15:46:06)
126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced
General
Photos
Point clouds
Surveys
Additional data
3D view
Complete photos
The block is ready for reconstruction.
Photos positioning level: georeferenced
Aerotriangulation report: View | Open
126 photo(s) in 1 photogroup(s), 1.5 gigapixels
126 photo(s) in the main component
126 known position(s) and 126 known rotation(s)
4 control point(s) (4 full point(s), 0 horizontal point(s), 0
0 user tie point(s)
94694 automatic tie point(s)
Resolution ranges from 0.018 meters to 0.027 meters
Submit aerotriangulation...
Process a new block with completed or adjusted parameters.
Aerotriangulation definition
Aerotriangulation definition
Aerotriangulation consists in automatically and accurately estimating the position, rotation, and camera properties (focal length, principal point, lens distorsion) for each input photograph.
The aerotriangulation starts from the input block and creates a new completed or adjusted block according to selected parameters.
Output block name
Components
Positioning/georefere...
Settings
Output block name
Choose the name and the description of the aerotriangulation output block.
ID: Block_3
Name Block_1 - AT - AT
Description Result of aerotriangulation of Block_1 - AT (2017-May-16 16:21:01)
< Back
Next
Submit
Cancel
Reconstructions
New reconstruction
Create a new reconstruction framework.
Delete reconstruction
Remove reconstruction from block.


Vbinar_16_05_17 ▸ Block_1 - AT ▸
Vbinar_16_05_17
Block_1
Block_1 - AT
Block - Block_1 - AT
Result of aerotriangulation of Block_1 (2017-May-16 15:46:06)
126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced
General
Photos
Point clouds
Surveys
Additional data
3D view
Complete photos
The block is ready for reconstruction.
Photos positioning level: georeferenced
Aerotriangulation report: View | Open
126 photo(s) in 1 photogroup(s), 1.5 gigapixels
126 photo(s) in the main component
126 known position(s) and 126 known rotation(s)
4 control point(s) (4 full point(s), 0 horizontal point(s
0 user tie point(s)
94694 automatic tie point(s)
Resolution ranges from 0.018 meters to 0.027 meter
Submit aerotriangulation...
Process a new block with completed or adjusted parameters.
Aerotriangulation definition
Aerotriangulation definition
Aerotriangulation consists in automatically and accurately estimating the position, rotation, and camera properties (focal length, principal point, lens distorsion) for each input photograph.
The aerotriangulation starts from the input block and creates a new completed or adjusted block according to selected parameters.
Output block name
Components
Positioning/georefere...
Settings
Positioning/georeferencing
Choose how the aerotriangulation should place and orient the block.
Positioning mode
Arbitrary
Block position and orientation are arbitrary.
Automatic vertical
The block vertical direction is oriented according to input photo orientation. Block scale and heading remain arbitrary.
Use positioning constraints on user tie points
The block is rigidly placed/oriented/scaled thanks to predefined constraints.
Use photo positioning metadata for adjustment (126/126 photos have positioning metadata)
The block is adjusted according to the photo positions from pose metadata (advised with accurate metadata).
Use photo positioning metadata for rigid registration (126/126 photos have positioning metadata)
The block is rigidly registered to the photo positions from pose metadata (advised with inaccurate metadata).
Use control points for adjustment
The block is accurately adjusted to control points (advised with accurate control points).
Use control points for rigid registration
The block is rigidly registered to control points without handling long-range geometric distortion (advised with inaccurate control points).
< Back
Next
Submit
Cancel
Reconstructions
New reconstruction
Create a new reconstruction framework.
Delete reconstruction
Remove reconstruction from block.

Vbinar_16_05_17
Block_1
Block_1 - AT

Block - Block_1 - AT

Result of aerotriangulation of Blo

126 photo(s), 4 control point(s),

General | Photos | Point clouds

Complete photos

The block is ready for re

Photos positioning level:

Aerotriangulation report:

126 photo(s) in 1 photogroup(s),
126 photo(s) in the main compone
126 known position(s) and 126 kn
4 control point(s) (4 full point(s), 0
0 user tie point(s)
94694 automatic tie point(s)
Resolution ranges from 0.018 met

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

Block ID: Block_2
ated: 5/16/2017 3:46 PM
ified: 5/16/2017 4:19 PM

Reconstructions

New reconstruction

Create a new reconstruction framewo

Delete reconstruction

Remove reconstruction from block.

Aerotriangulation definition

Aerotriangulation definition

Aerotriangulation consists in automatically and accurately estimating the position, rotation, and camera properties (focal length, principal point, lens distorsion) for each input photograph. The aerotriangulation starts from the input block and creates a new completed or adjusted block according to selected parameters.

Output block name
Components
Positioning/georefere...
Settings

Settings

Choose aerotriangulation settings including estimation policies and low-level settings.

Preset: Custom

Load preset...
Save preset...

Keypoints density	Normal	
Pair selection mode	Default	Maximal distance: 3 photo(s)
Component construction mode	One-pass	

Estimation policies

Tie points	Compute	
Position	Compute	Tolerance 0
Rotation	Compute	
Optical properties estimation mode	One-pass	
Focal length	Adjust	
Principal point	Adjust	
Radial distortion	Adjust	
Tangential distortion	Keep	
Aspect Ratio	Keep	
Skew	Keep	
Estimation groups	Per photogroup	

Low-level settings

< Back | Next | Submit | Cancel

Bentley Sustaining Infrastructure

Control points editor

File Actions

Control points

Spatial Reference System (SRS): WGS 84

Set the SRS of all points to selected one

Name	Category	Check point	Given Longitude	Given Latitude	Given Ellipsoidal height	Horizontal accuracy [m]	Vertical accuracy [m]	Estimated Longitude	Estimated Latitude	Estimated Ellipsoidal height	RMS of reproj. error [px]	RMS of dist. to rays [m]	3D error [m]	3D horizontal error [m]	3D vertical error [m]
1	Full	☐	36.4201371	55.6482995	17.480	0.010	0.010	36.4201371	55.6482995	17.480	0.01	0.000	0.000	0.000	-0.000
2	Full	☐	36.4212469	55.6465572	17.310	0.010	0.010	36.4212469	55.6465572	17.310	0.01	0.000	0.000	0.000	0.000
3	Full	☐	36.4174945	55.6477838	17.590	0.010	0.010	36.4174945	55.6477838	17.590	0.01	0.000	0.000	0.000	0.000
4	Full	☐	36.4206181	55.6466820	16.810	0.010	0.010								

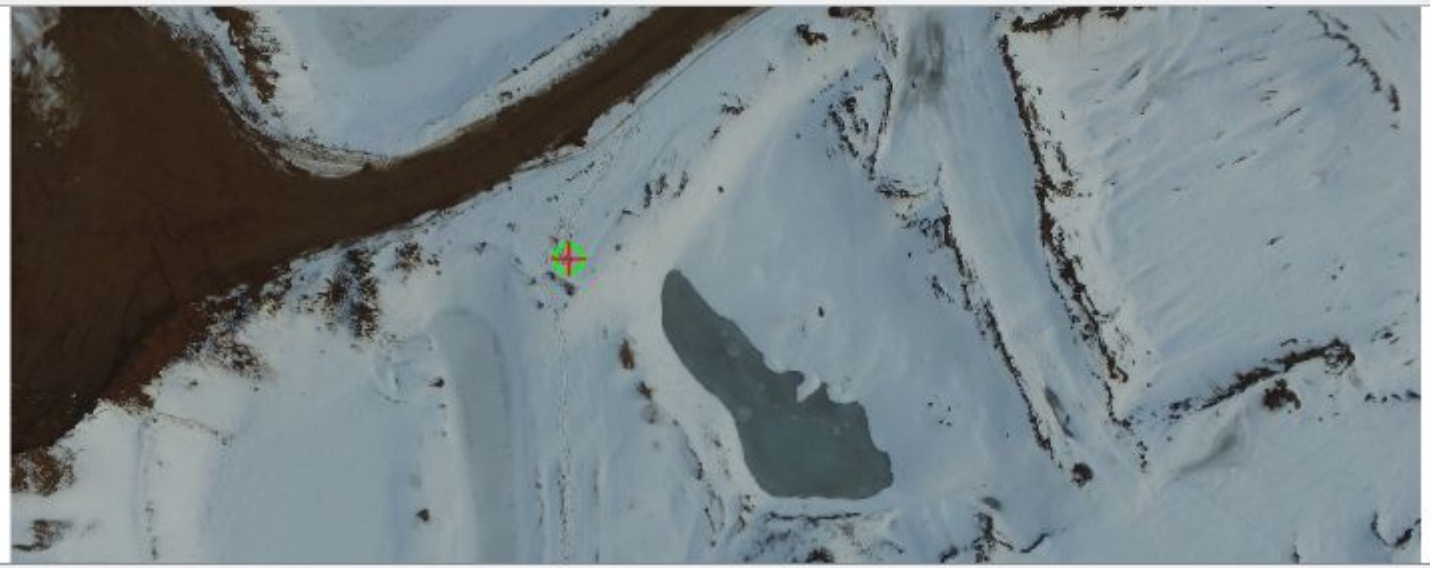
Photos

Display photos: That might view point

Display points: All

Display hints: Yes

DJI_0210 DJI_0211 DJI_0212 DJI_0213 DJI_0214 DJI_0865 DJI_0866 DJI_0867 DJI_0868 DJI_0869



Zoom: wheel ; ctrl ; +; - ; 0 | **Move viewing area:** click and drag | **Add/Modify measurement:** shift click | **Quality**=original

Measurements

Measurements:

Image	x	y	Reproj. error [px]
...oto/Obuchenie/	1584.53	715.24	0.01
...oto/Obuchenie/	1710.42	1905.26	0.01
...oto/Obuchenie/	243.84	312.02	0.01
...oto/Obuchenie/	280.93	1472.76	0.00
...oto/Obuchenie/	351.32	2615.85	0.00

Statistics

All control points:
- number of points: 4
- RMS of reproj. error: 0.01 px
- RMS of dist. to rays: 0.000 m
- RMS of 3D error: 0.000 m
- RMS of 3D horizontal error: 0.000 m
- RMS of 3D vertical error: 0.000 m

Current photo:
- number of usable measurements: 1
- RMS of reproj. error: 0.01 px
- RMS of dist. to rays: 0.000 m

roject Block Reconstruction Production Tools Help

You are not logged in. Sig

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸

Vbinar_16_05_17
- Block_1
- Block_1 - AT
- Block_1 - AT - AT

Block - Block_1 - AT - AT

Result of aerotriangulation of Block_1 - AT (2017-May-16 16:21:01)

126 photo(s), 4 control point(s), 0 user tie point(s), georeferenced

General | Photos | Point clouds | Surveys | Additional data | 3D view

Complete photos

The block is ready for reconstruction.

Photos positioning level: **georeferenced**

Aerotriangulation report: View | Open

Submit aerotriangulation...

Process a new block with completed or adjusted parameters.

126 photo(s) in 1 photogroup(s), 1.5 gigapixels
126 photo(s) in the main component
126 known position(s) and 126 known rotation(s)
4 control point(s) (4 full point(s), 0 horizontal point(s), 0 vertical point(s)) among which 0 check point(s)
0 user tie point(s)
94409 automatic tie point(s)
Resolution ranges from 0.018 meters to 0.027 meters

Block ID: Block_3
Created: 5/16/2017 4:21 PM
Last modified: 5/16/2017 4:29 PM

Reconstructions

New reconstruction

Create a new reconstruction framework.

Delete reconstruction

Remove reconstruction from block.

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm]

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸

- Vbinar_16_05_17
  - Block_1
  - Block_1 - AT
  - Block_1 - AT - AT
    - Reconstruction_1

Reconstruction - Reconstruction_1

enter your description here

No tiling, highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Ready for production

You can modify the spatial framework and processing settings before starting production.

No tiling
Incomplete reference 3D model
Highest precision

Reconstruction ID: Reconstruction_1
Created: 5/16/2017 4:34 PM
Last modified: 5/16/2017 4:34 PM

Productions

Production	Format	Status	Progress	Last submitted

Submit new production...

Define and submit new production.

Delete production

Remove production from the list.

Sustaining Infrastructure

ContextCapture Master - Center edition [Vbinar_16_05_17.ccm*]

roject Block Reconstruction Production Tools Help

You are not logged in.

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸

Vbinar_16_05_17
- Block_1
- Block_1 - AT
- Block_1 - AT - AT
  - Reconstruction_1

Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Spatial Reference System (SRS)

Spatial reference system: WGS 84 / UTM zone 37N (EPSG:32637)

Region of interest

Bounding box:

Import from KML...

Reset bounds...

X (meters):	min	337419.000000	max	337805.000000
Y (meters):	min	6169661.000000	max	6170045.000000
Z (meters):	min	8.000000	max	49.000000

Dimensions: 386 meters x 384 meters x 41 meters

Tiling

Mode Adaptive tiling — Adaptively subdivide reconstruction into boxes to meet target RAM usage.

Options

Target RAM usage 10 GB

☑ Discard empty tiles

Overview

The tiling contains **2 tile(s)**
Expected maximum RAM usage for a job: **9.9 GB**

roject Block Reconstruction Production Tools Help

You are not logged in. Sign

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸

- Vbinar_16_05_17
  - Block_1
  - Block_1 - AT
  - Block_1 - AT - AT
    - Reconstruction_1

Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Preset type: Default

Load preset...

Save preset...

Selection of matching pairs: Generic

Geometric precision: Highest — Highest precision, larger file size (tolerance of 0.5 pixel in input photos)

Medium
High
Highest
Ultra

Hole-filling

Geometric simplification: Standard

Color equalization mode: Standard

Untextured regions representation: Inpainting completion — Untextured regions color:

Resolution limit (meters): 0 — Clamp resolution if finer than the specified limit

Low-level settings

No item defined.

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Ready for production

You can modify the spatial framework and processing settings before starting production.

Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision

: Reconstruction_1
5/16/2017 4:34 PM
5/16/2017 4:50 PM

Productions

Production | Format | St

Submit new production...
Define and submit new production.

Delete production
Remove production from the list.

Production definition

Production definition

Define parameters of the new production.

- Name
- Purpose
- Format/Options
- Spatial reference system
- Extent
- Destination

Name

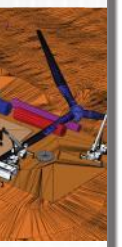
Enter production name and description.

ID: **Production_1**

Name: 3mx

Description:

< Back | **Next** | Submit | Cancel




Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Ready for production

You can modify the spatial framework and processing settings before starting production.

Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision

: Reconstruction_1
5/16/2017 4:34 PM
5/16/2017 4:50 PM

Productions

Production	Format	St

Submit new production...
Define and submit new production.

Delete production
Remove production from the list.

Production definition

Production definition

Define parameters of the new production.

- Name
- Purpose
- Format/Options
- Spatial reference system
- Extent
- Destination

Purpose

Choose the purpose of the production to submit.

Purpose of production

- (•) **3D mesh**
  Produce a 3D model optimized for visualization and analysis in third-party software.
  Produce the reference 3D model too.
- ( ) **3D point cloud**
  Produce a colored point cloud for visualization and analysis in third-party software.
  Produce the reference 3D model too.
- ( ) **Orthophoto/DSM**
  Produce interoperable raster layers for visualization and analysis in third-party GIS/CAD software or image processing tools.
- ( ) **3D mesh for retouching**
  Produce and export the reference 3D model for editing in a third-party software and importing back into ContextCapture Master for later productions. The reference 3D model includes an overlap between tiles.
- ( ) **Reference 3D model only**
  Produce a 3D model which can be used only inside ContextCapture Master, for quality control and as a cache for later productions. The reference 3D model is needed for orthophoto/DSM productions.

< Back | Next | Submit | Cancel

Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Ready for production

You can modify the spatial framework and processing settings before starting production.

Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision

: Reconstruction_1
5/16/2017 4:34 PM
5/16/2017 4:50 PM

Productions

Production | Format | St

Submit new production...
Define and submit new production.

Delete production
Remove production from the list.

Production definition

Production definition

Define parameters of the new production.

- Name
- Purpose
- Format/Options
- Spatial reference system
- Extent
- Destination

Format/Options

Choose output format and options for the production.

Format: ContextCapture 3MX — 3D multiresolution mesh format, optimized for exchange with Bentley applications.

- ContextCapture 3MX
- Bentley Scalable Mesh (3SM)
- Cesium 3D Tiles
- ESRI i3s scene database
- Google Earth KML
- Bentley DGN format
- Autodesk FBX
- OBJ wavefront format
- Collada (DAE)
- StereoLithography (STL)

Web

Texture compression: 75% quality JPEG

Maximum texture size: 8192 pixel

Level of detail (LOD)

Type 'Quadtree across tiles' is supported only for reconstructions using a tiling mode 'Regular planar grid'.

Type: Adaptive tree

Node size: medium (~35 kB/node)

Skirt: 4 pixel

Tile overlap: 0.25 meter

< Back | Next | Submit | Cancel

Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Ready for production

You can modify the spatial framework and processing settings before starting production.

Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision

: Reconstruction_1
5/16/2017 4:34 PM
5/16/2017 4:50 PM

Production definition

Production definition

Define parameters of the new production.

- Name
- Purpose
- Format/Options
- Spatial reference system
- Extent
- Destination

Spatial reference system

Choose the target coordinate system.

Spatial reference system: WGS 84 / UTM zone 37N (EPSG:32637)

Advanced options...

< Back | Next | Submit | Cancel

Productions

Production | Format | St

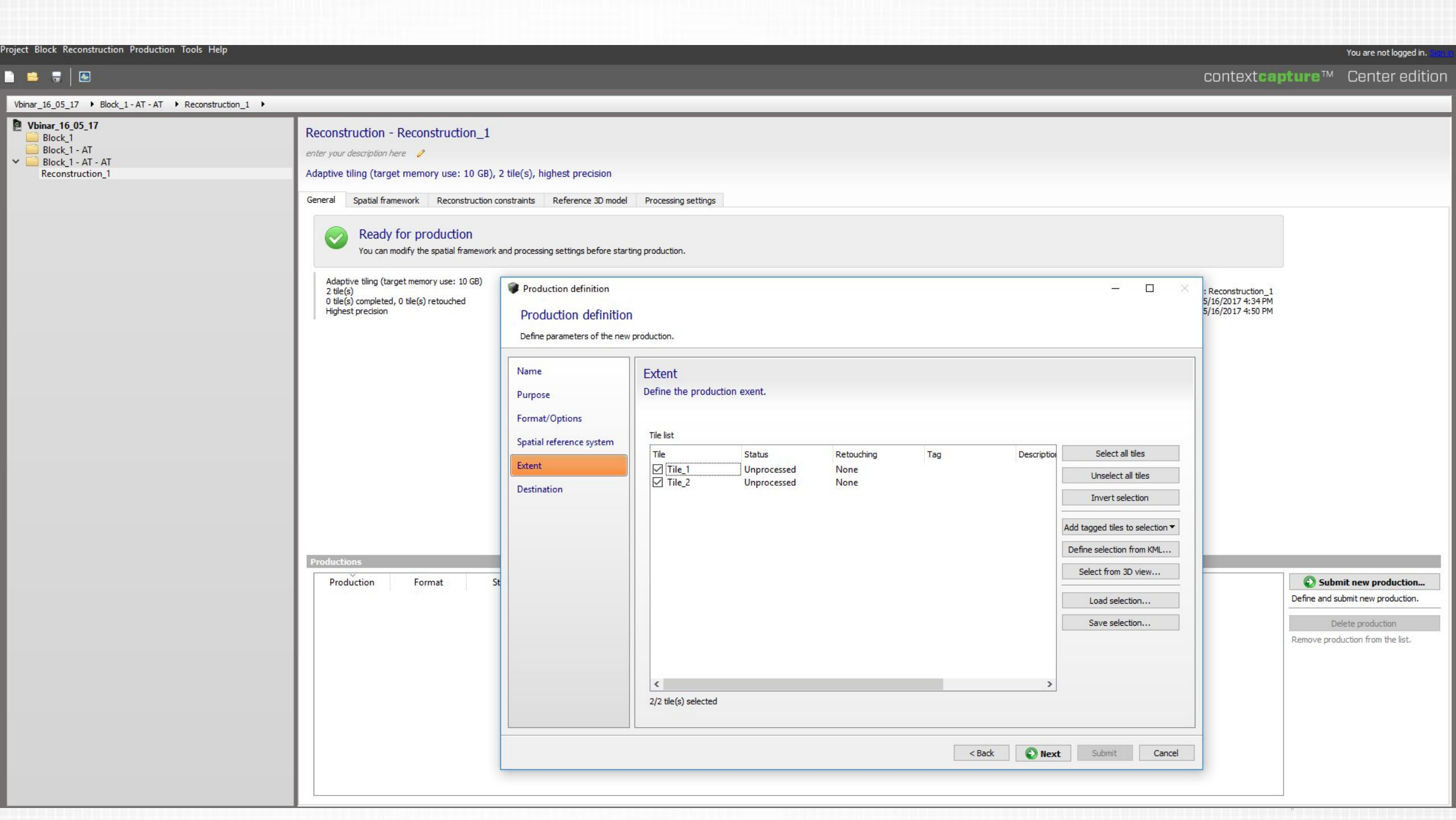
Submit new production...

Define and submit new production.

Delete production

Remove production from the list.

Bentley Sustaining Infrastructure


Project Block Reconstruction Production Tools Help
You are not logged in. Sign in
contextcapture™ Center edition
Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸
Vbinar_16_05_17
Block_1
Block_1 - AT
Block_1 - AT - AT
Reconstruction_1
Reconstruction - Reconstruction_1
enter your description here
Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision
General
Spatial framework
Reconstruction constraints
Reference 3D model
Processing settings
Ready for production
You can modify the spatial framework and processing settings before starting production.
Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision
: Reconstruction_1
5/16/2017 4:34 PM
5/16/2017 4:50 PM
Production definition
Production definition
Define parameters of the new production.
Name
Purpose
Format/Options
Spatial reference system
Extent
Destination
Extent
Define the production exent.
Tile list
Tile
Status
Retouching
Tag
Description
Tile_1
Unprocessed
None
Tile_2
Unprocessed
None
Select all tiles
Unselect all tiles
Invert selection
Add tagged tiles to selection
Define selection from KML...
Select from 3D view...
Load selection...
Save selection...
2/2 tile(s) selected
< Back
Next
Submit
Cancel
Productions
Production
Format
Submit new production...
Define and submit new production.
Delete production
Remove production from the list.

Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

Ready for production

You can modify the spatial framework and processing settings before starting production.

Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision

: Reconstruction_1
5/16/2017 4:34 PM
5/16/2017 4:50 PM

Production definition

Production definition

Define parameters of the new production.

- Name
- Purpose
- Format/Options
- Spatial reference system
- Extent
- Destination

Destination

Choose the production location.

Output directory

Directory W:/Vbinar_16_05_17/Productions/3mx Browse...

We recommend you to select an empty directory to avoid overwriting existing production results.

< Back | Next | Submit | Cancel

Productions

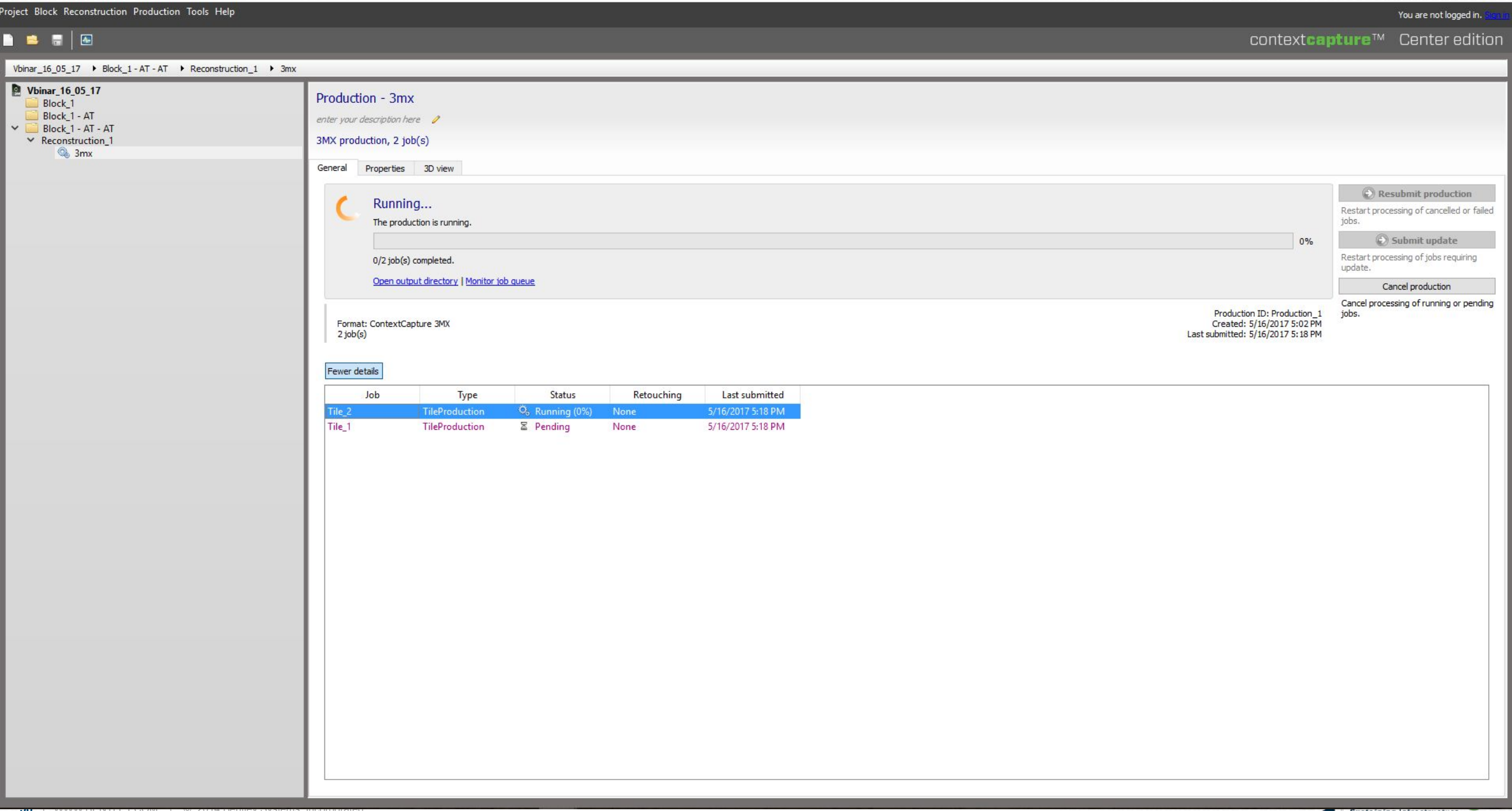
Production | Format | St

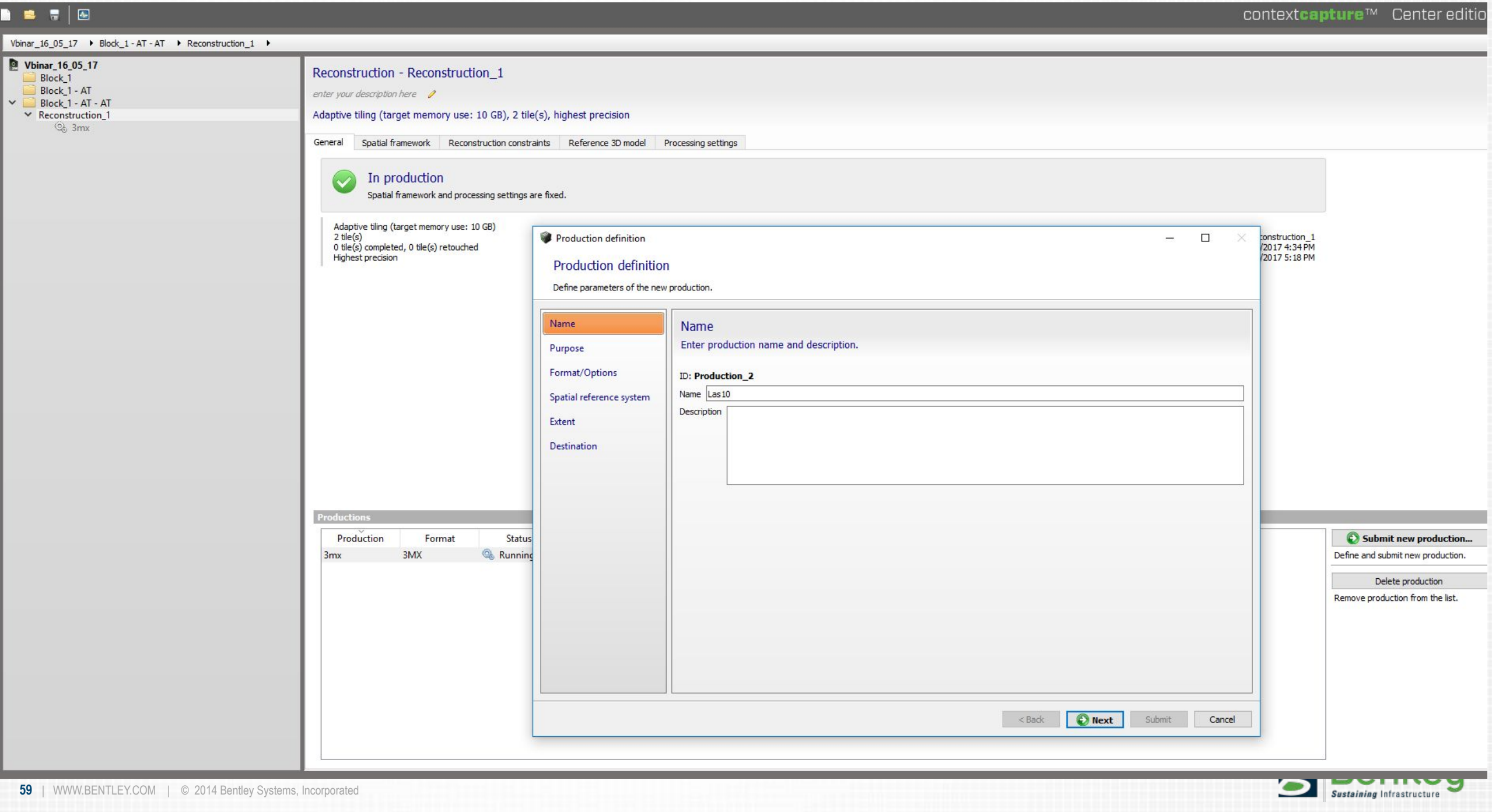
Submit new production...

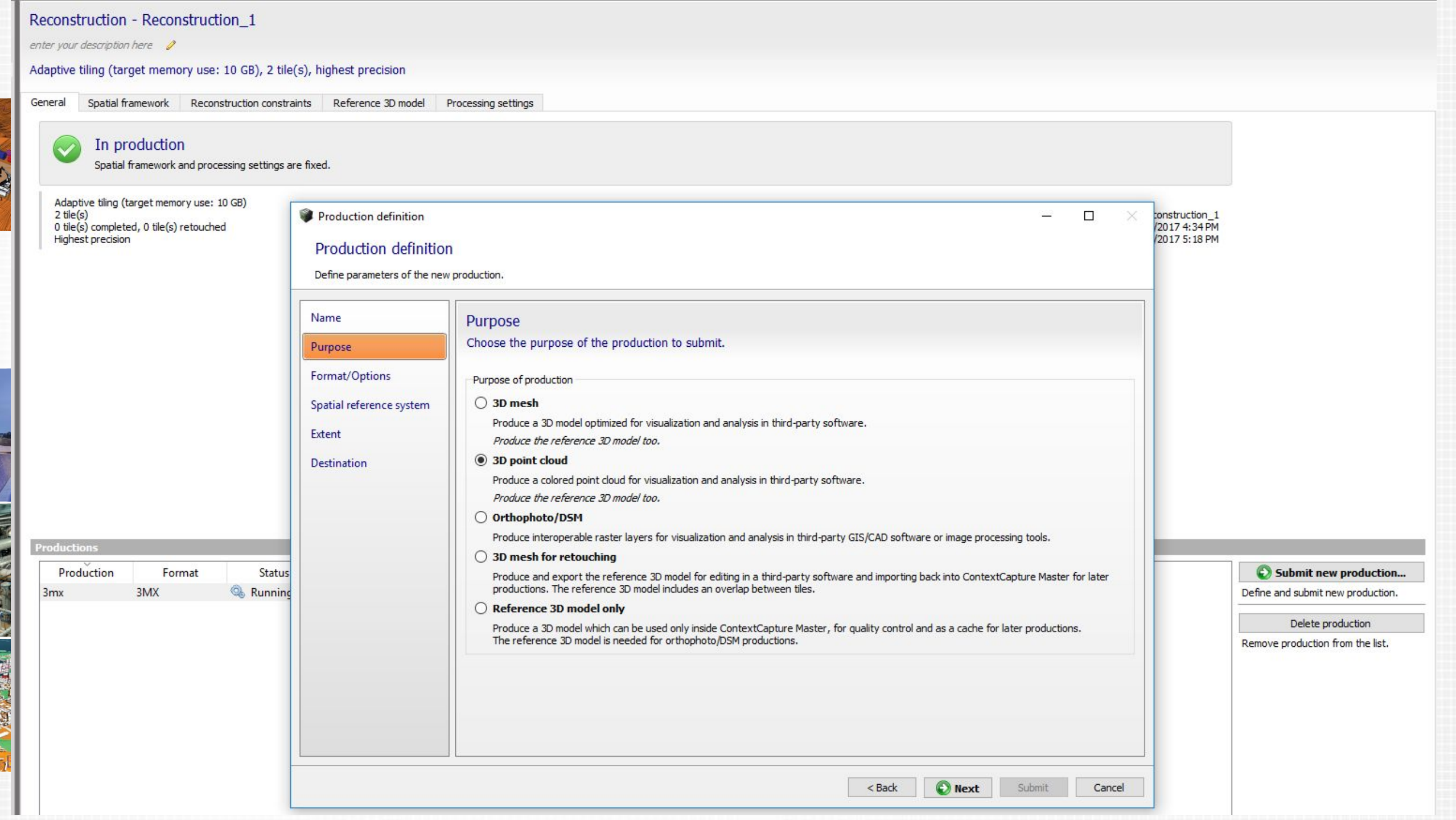
Define and submit new production.

Delete production

Remove production from the list.


Project Block Reconstruction Production Tools Help
You are not logged in. Sign in
contextcapture™ Center edition
Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸ 3mx
Vbinar_16_05_17
Block_1
Block_1 - AT
Block_1 - AT - AT
Reconstruction_1
3mx
Production - 3mx
enter your description here
3MX production, 2 job(s)
General
Properties
3D view
Running...
The production is running.
0%
0/2 job(s) completed.
Open output directory | Monitor job queue
Resubmit production
Restart processing of cancelled or failed jobs.
Submit update
Restart processing of jobs requiring update.
Cancel production
Cancel processing of running or pending jobs.
Format: ContextCapture 3MX
2 job(s)
Production ID: Production_1
Created: 5/16/2017 5:02 PM
Last submitted: 5/16/2017 5:18 PM
Fewer details
Job
Type
Status
Retouching
Last submitted
Tile_2
TileProduction
Running (0%)
None
5/16/2017 5:18 PM
Tile_1
TileProduction
Pending
None
5/16/2017 5:18 PM




Reconstruction - Reconstruction_1
enter your description here
Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision
General
Spatial framework
Reconstruction constraints
Reference 3D model
Processing settings
In production
Spatial framework and processing settings are fixed.
Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision
Production definition
Production definition
Define parameters of the new production.
Name
Purpose
Format/Options
Spatial reference system
Extent
Destination
Purpose
Choose the purpose of the production to submit.
Purpose of production
3D mesh
Produce a 3D model optimized for visualization and analysis in third-party software.
Produce the reference 3D model too.
3D point cloud
Produce a colored point cloud for visualization and analysis in third-party software.
Produce the reference 3D model too.
Orthophoto/DSM
Produce interoperable raster layers for visualization and analysis in third-party GIS/CAD software or image processing tools.
3D mesh for retouching
Produce and export the reference 3D model for editing in a third-party software and importing back into ContextCapture Master for later productions. The reference 3D model includes an overlap between tiles.
Reference 3D model only
Produce a 3D model which can be used only inside ContextCapture Master, for quality control and as a cache for later productions. The reference 3D model is needed for orthophoto/DSM productions.
< Back
Next
Submit
Cancel
Productions
Production
Format
Status
3mx
3MX
Submit new production...
Define and submit new production.
Delete production
Remove production from the list.

Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

In production

Spatial framework and processing settings are fixed.

Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision

onstruction_1
/2017 4:34 PM
/2017 5:18 PM

Productions

Production	Format	Status
3mx	3MX	Running

Submit new production...
Define and submit new production.

Delete production
Remove production from the list.

Production definition

Production definition

Define parameters of the new production.

- Name
- Purpose
- Format/Options
- Spatial reference system
- Extent
- Destination

Format/Options

Choose output format and options for the production.

Format: ASPRS LASer (LAS) — Public file format for interchange of 3-dimensional point cloud data.

Point sampling: 10 pixels

Compression: None

< Back | Next | Submit | Cancel

Reconstruction - Reconstruction_1

enter your description here

Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision

General | Spatial framework | Reconstruction constraints | Reference 3D model | Processing settings

In production

Spatial framework and processing settings are fixed.

Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s) retouched
Highest precision

onstruction_1
/2017 4:34 PM
/2017 5:18 PM

Production definition

Production definition

Define parameters of the new production.

- Name
- Purpose
- Format/Options
- Spatial reference system
- Extent
- Destination

Spatial reference system

Choose the target coordinate system.

Spatial reference system: WGS 84 / UTM zone 37N (EPSG:32637)

< Back | Next | Submit | Cancel

Productions

Production	Format	Status
3mx	3MX	Running

Submit new production...

Define and submit new production.

Delete production

Remove production from the list.

Project Block Reconstruction Production Tools Help

You are not logged in. Sign in

contextcapture™ Center edition

Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸ Las10

- Vbinar_16_05_17
  - Block_1
  - Block_1 - AT
  - Block_1 - AT - AT
    - Reconstruction_1
      - 3mx
      - Las10

Production - Las10

enter your description here

LAS production, 2 job(s)

General | Properties | 3D view

Pending...

The production has been submitted and is pending.

0%

0/2 job(s) completed.

Open output directory | Monitor job queue

Resubmit production

Restart processing of cancelled or failed jobs.

Submit update

Restart processing of jobs requiring update.

Cancel production

Cancel processing of running or pending jobs.

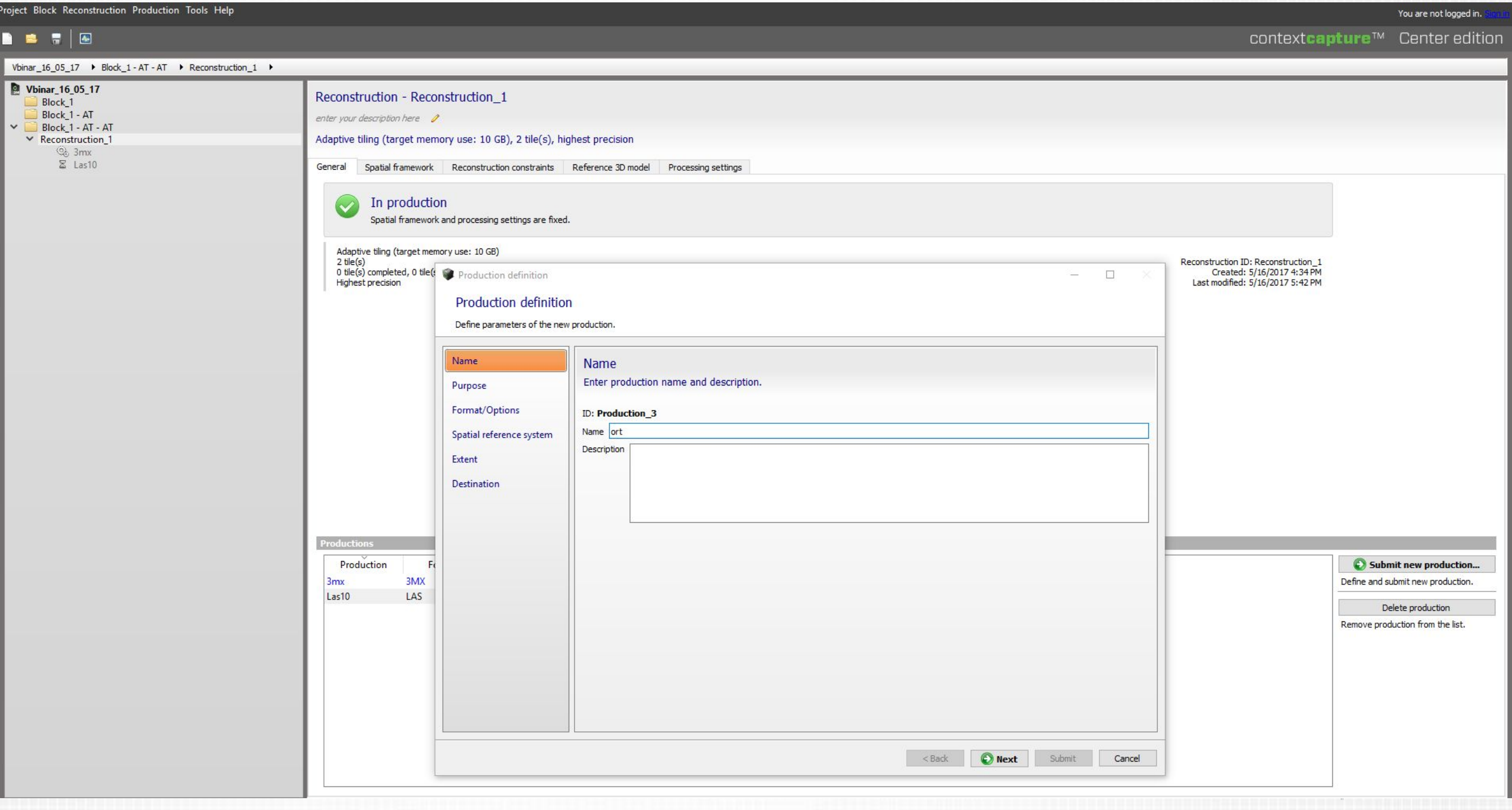
Format: ASPRS LASer (LAS)
2 job(s)

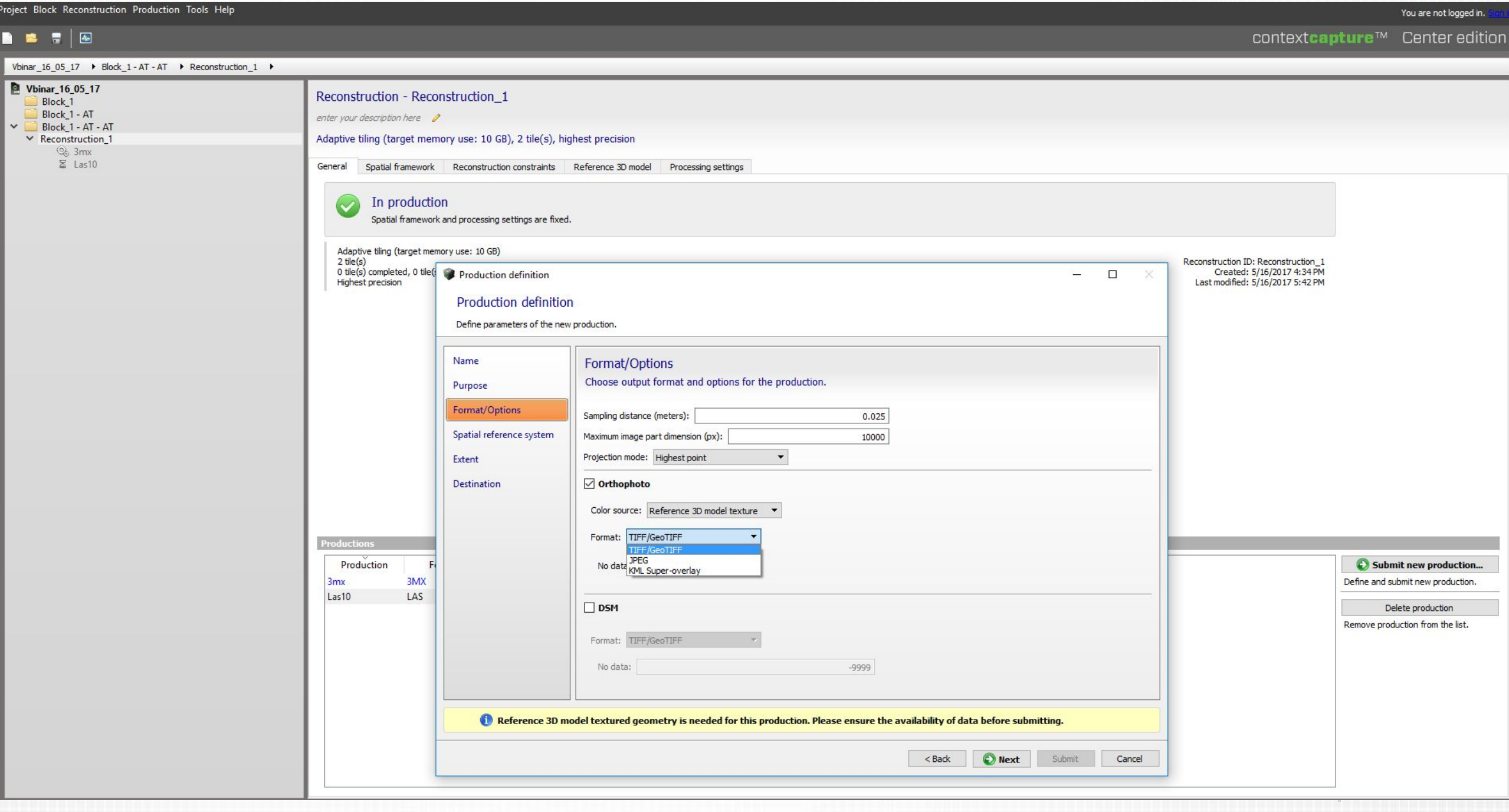
Production ID: Production_2
Created: 5/16/2017 5:42 PM
Last submitted: 5/16/2017 5:42 PM

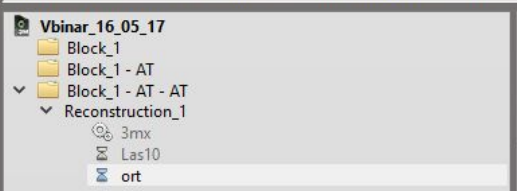
Fewer details

Job	Type	Status	Retouching	Last submitted
Tile_2	TileProduction	Pending	None	5/16/2017 5:42 PM
Tile_1	TileProduction	Pending	None	5/16/2017 5:42 PM

Sustaining Infrastructure


Project Block Reconstruction Production Tools Help
You are not logged in. Sign in
contextcapture™ Center edition
Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸
Vbinar_16_05_17
Block_1
Block_1 - AT
Block_1 - AT - AT
Reconstruction_1
3mx
Las10
Reconstruction - Reconstruction_1
enter your description here
Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision
General
Spatial framework
Reconstruction constraints
Reference 3D model
Processing settings
In production
Spatial framework and processing settings are fixed.
Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(s
Highest precision
Reconstruction ID: Reconstruction_1
Created: 5/16/2017 4:34 PM
Last modified: 5/16/2017 5:42 PM
Production definition
Production definition
Define parameters of the new production.
Name
Purpose
Format/Options
Spatial reference system
Extent
Destination
Name
Enter production name and description.
ID: Production_3
Name ort
Description
< Back
Next
Submit
Cancel
Productions
Production
3mx
3MX
Las10
LAS
Submit new production...
Define and submit new production.
Delete production
Remove production from the list.


Project Block Reconstruction Production Tools Help
You are not logged in.
contextcapture™ Center edition
Vbinar_16_05_17 ▸ Block_1 - AT - AT ▸ Reconstruction_1 ▸
Vbinar_16_05_17
Block_1
Block_1 - AT
Block_1 - AT - AT
Reconstruction_1
3mx
Las10
Reconstruction - Reconstruction_1
enter your description here
Adaptive tiling (target memory use: 10 GB), 2 tile(s), highest precision
General
Spatial framework
Reconstruction constraints
Reference 3D model
Processing settings
In production
Spatial framework and processing settings are fixed.
Adaptive tiling (target memory use: 10 GB)
2 tile(s)
0 tile(s) completed, 0 tile(
Highest precision
Reconstruction ID: Reconstruction_1
Created: 5/16/2017 4:34 PM
Last modified: 5/16/2017 5:42 PM
Production definition
Production definition
Define parameters of the new production.
Name
Purpose
Format/Options
Spatial reference system
Extent
Destination
Format/Options
Choose output format and options for the production.
Sampling distance (meters): 0.025
Maximum image part dimension (px): 10000
Projection mode: Highest point
Orthophoto
Color source: Reference 3D model texture
Format: TIFF/GeoTIFF
TIFF/GeoTIFF
JPEG
KML Super-overlay
No data
DSM
Format: TIFF/GeoTIFF
No data: -9999
Reference 3D model textured geometry is needed for this production. Please ensure the availability of data before submitting.
< Back
Next
Submit
Cancel
Productions
Production
3mx
3MX
Las10
LAS
Submit new production...
Define and submit new production.
Delete production
Remove production from the list.



Production - ort

enter your description here

Orthophoto/DSM production, 4 job(s)

General | Properties | 3D view

Pending...

The production has been submitted and is pending.

0%

0/4 job(s) completed.

Open output directory | Monitor job queue

Resubmit production

Restart processing of cancelled or failed jobs.

Submit update

Restart processing of jobs requiring update.

Cancel production

Cancel processing of running or pending jobs.

Format: Orthophoto/DSM
4 job(s)

Production ID: Production_3
Created: 5/16/2017 5:45 PM
Last submitted: 5/16/2017 5:53 PM

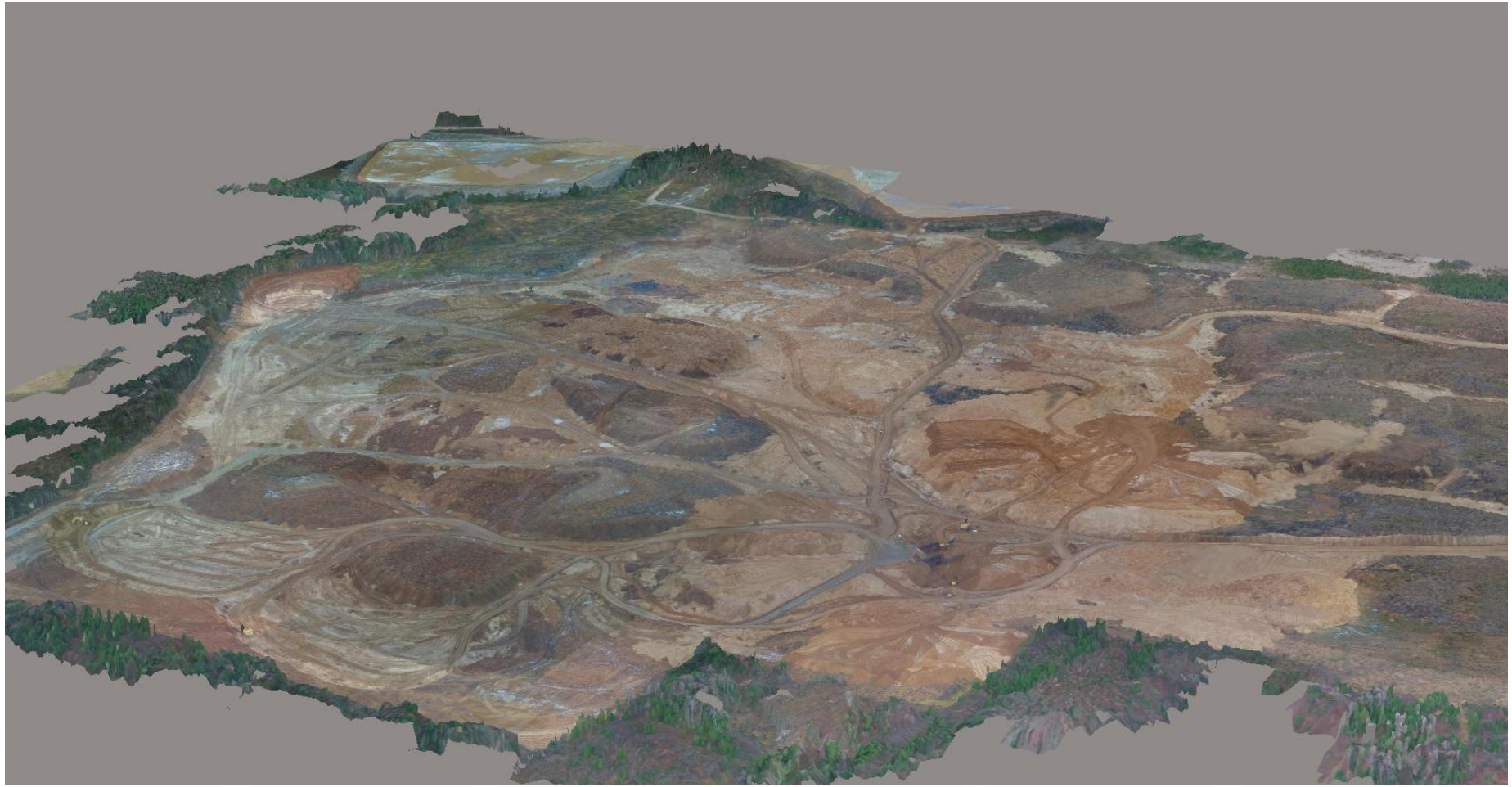
Fewer details

Job	Type	Status	Retouching	Last submitted
Part_1_1	RasterProduction	Pending	None	5/16/2017 5:53 PM
Part_2_1	RasterProduction	Pending	None	5/16/2017 5:53 PM
Part_1_2	RasterProduction	Pending	None	5/16/2017 5:53 PM
Part_2_2	RasterProduction	Pending	None	5/16/2017 5:53 PM

Примеры работ

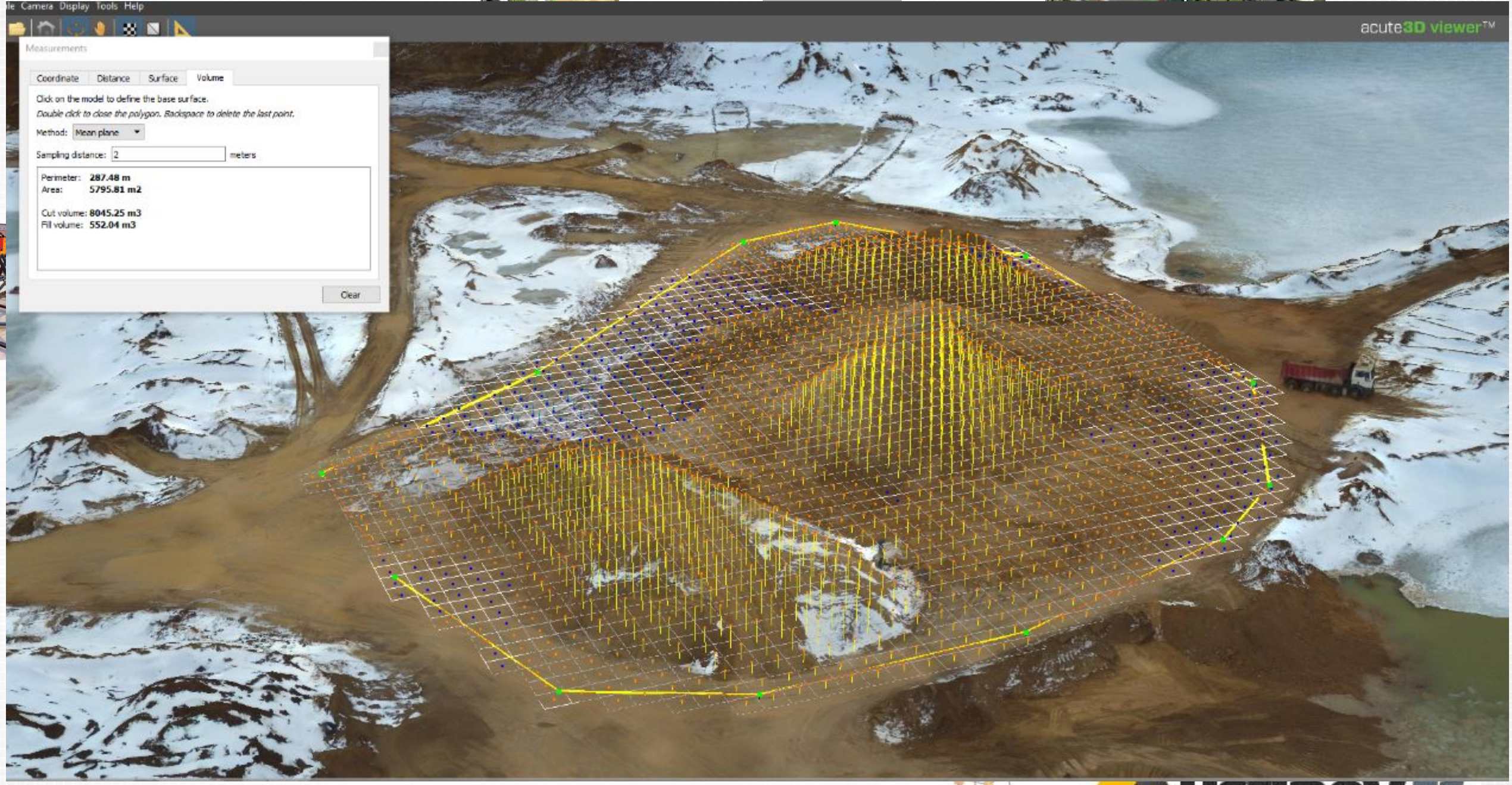
Примеры работ

Примеры работ



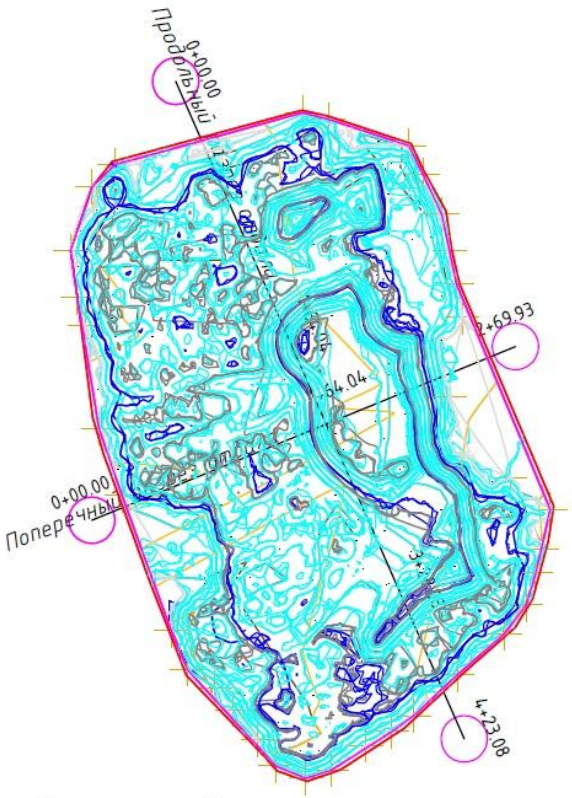
Фотометр

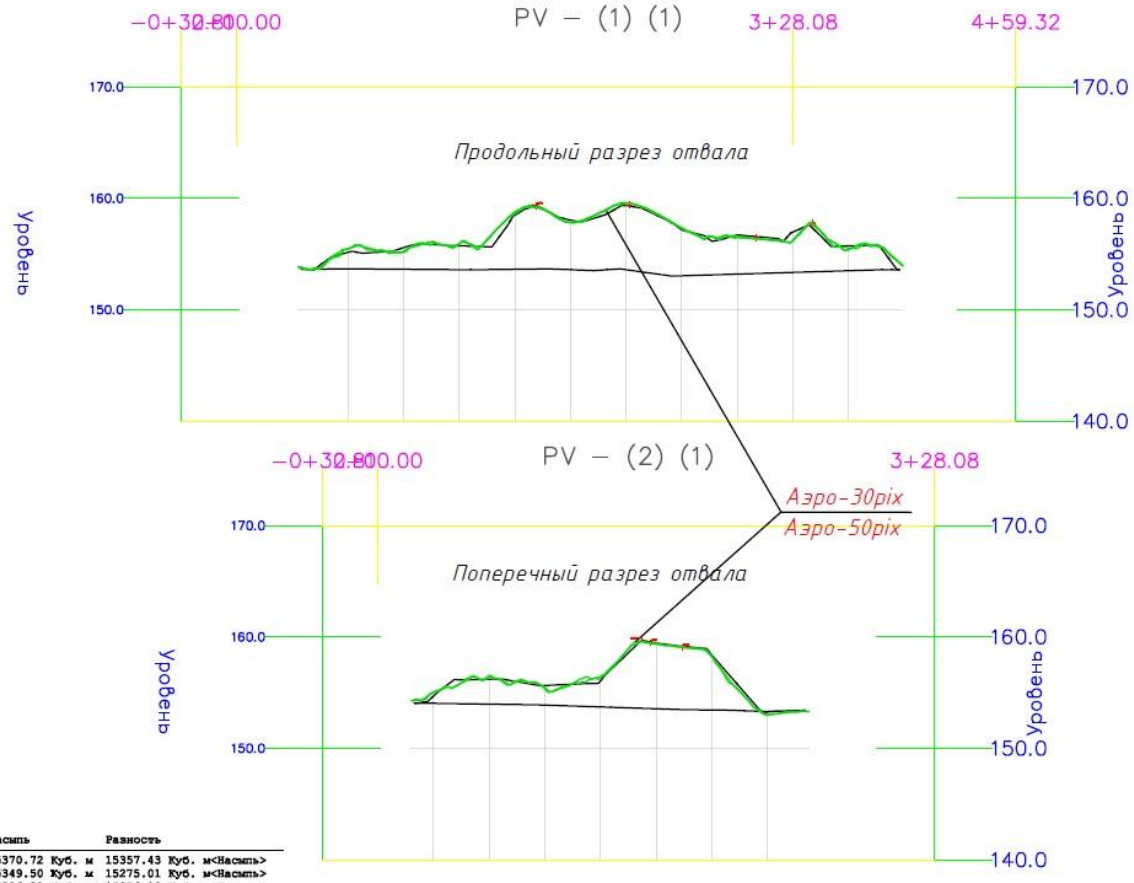
Bentley Sustaining Infrastructure



Подсчет объёма склада

План и разрезы расчёта и сопоставления объёмов в автокаде



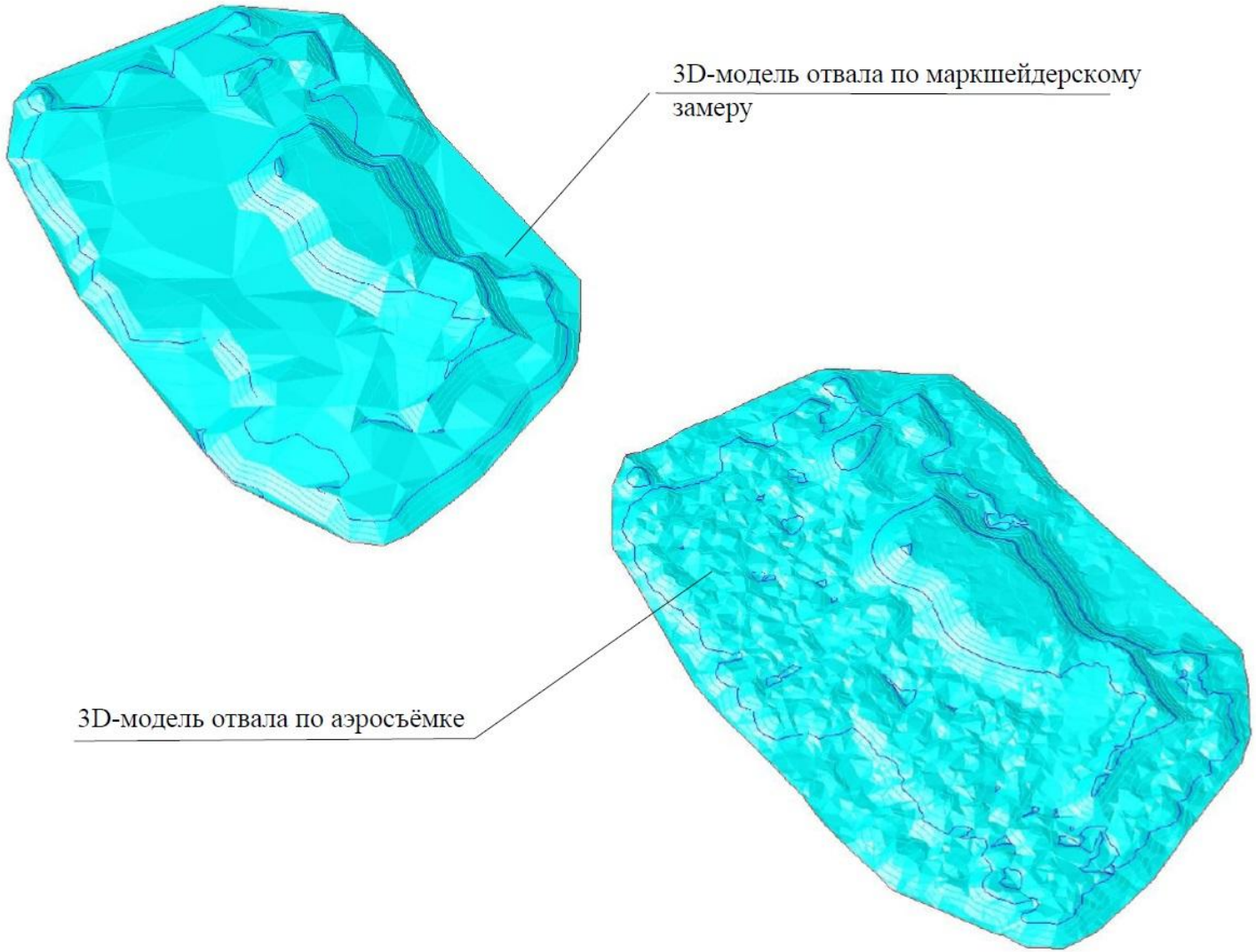


Сводка по выемке/насыпи

Имя	Коэффициент выемки	Коэффициент насыпи	2D площадь	Выемка	Насыпь	Разность
ОВМ_Тахеометр	1.00	1.00	7068.10кв. м	13.29 Куб. м	15370.72 Куб. м	15357.43 Куб. м<Насыпь>
ОВМ_Аэро_30pix	1.00	1.00	7067.86кв. м	74.49 Куб. м	15349.50 Куб. м	15275.01 Куб. м<Насыпь>
ОВМ_Аэро_50pix	1.00	1.00	7067.86кв. м	70.11 Куб. м	15326.21 Куб. м	15256.10 Куб. м<Насыпь>
Итог			21203.82кв. м	157.89 Куб. м	46046.42 Куб. м	45888.53 Куб. м<Насыпь>

Расхождение (Марк-Аэро_50pix)=101куб.м или 0.7%

Подсчет объёма склада



Подсчет объёма склада

- Объём, полученный на основе тахеометрической съёмки – **15 357,43 м³**
- Объём на основе облака точек **(ContextCapture)** Las файл с плотностью 30 pix – **15 275,04 м³**
- Объём на основе облака точек **(ContextCapture)** Las файл с плотностью 50 pix – **15 256,10 м³**

Расхождение в методах измерений тахеометр/аэросъемка – 101 м³ или 0,7% при допуске по нормативу до 5%.

Сводка по выемке/насыпи

Имя	Коэффициент выемки	Коэффициент насыпи	2D площадь	Выемка	Насыпь	Разность
ОБМ_Тахеометр	1.00	1.00	7068.10кв. м	13.29 Куб. м	15370.72 Куб. м	15357.43 Куб. м<Насыпь>
ОБМ_Аэро_30pix	1.00	1.00	7067.86кв. м	74.49 Куб. м	15349.50 Куб. м	15275.01 Куб. м<Насыпь>
ОБМ_Аэро_50pix	1.00	1.00	7067.86кв. м	70.11 Куб. м	15326.21 Куб. м	15256.10 Куб. м<Насыпь>
Итог			21203.82кв. м	157.89 Куб. м	46046.42 Куб. м	45888.53 Куб. м<Насыпь>

Расхождение (Марк-Аэро_50pix)=101куб.м или 0.7%

По возникшим вопросам вы можете обратиться к нам:

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(м) +7 (915) 425-95-88

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