

# Project report

Date: Sat Aug 31 2024 14:16:33  
Build with: Z+FLaserControl 10.0.2.37426  
Project: Cal. Hogas  
Master scan position: 1  
Available systems: Default, UTM  
Coordinate: Latitude: 46.9316 Longitude: 26.3662  
H-Acc: 3.6 V-Acc: 6 Satelites: 8 Flags: stand alone 3D solution  
taken from Scan Hogas Sc. 27.zfs

47 of 47 scan positions used for registration.

## Quality standard deviation of the cloud to cloud registration

d:3.9 mm

## Coordinate system: Default

1.000000	0.000000	0.000000	0.0000	m
0.000000	1.000000	0.000000	0.0000	m
0.000000	0.000000	1.000000	0.0000	m
0.000000	0.000000	0.000000	1.0000	

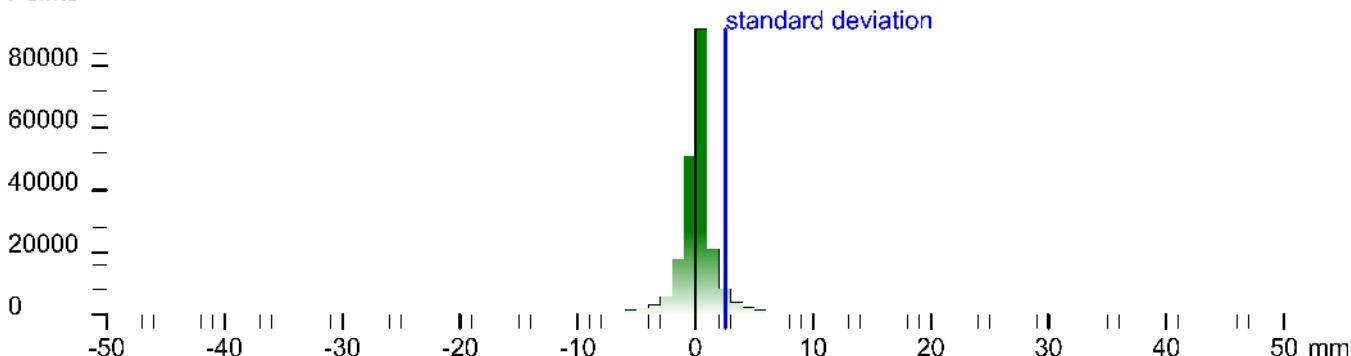
# Scan position '1'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment, compensated'  
Master scan position

Result registration to 2. Cloud to cloud standard deviation:2.6 mm

## Deviation histogram

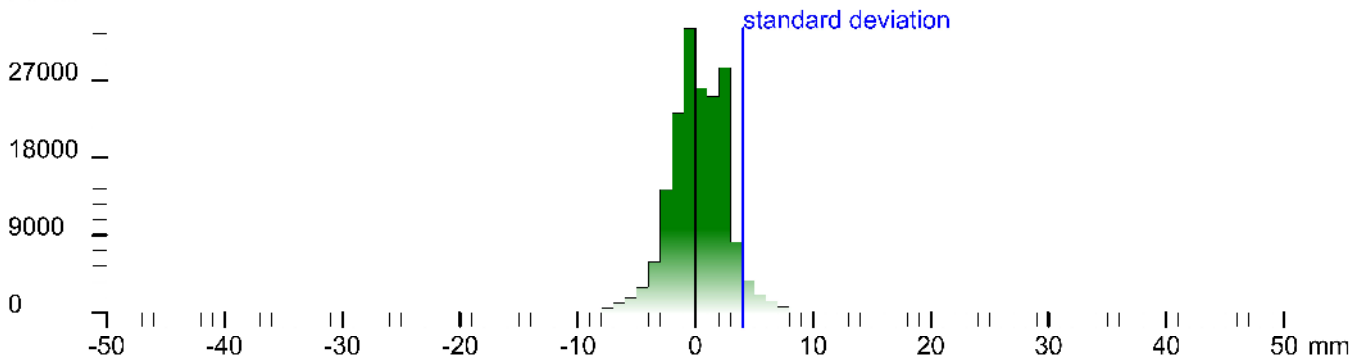
Points



Result registration to 23. Cloud to cloud standard deviation:4.0 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 1'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 10:54:57 26.08.2024

**Metadata**    **Value**

**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "1" -file "Hogas Sc. 1" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

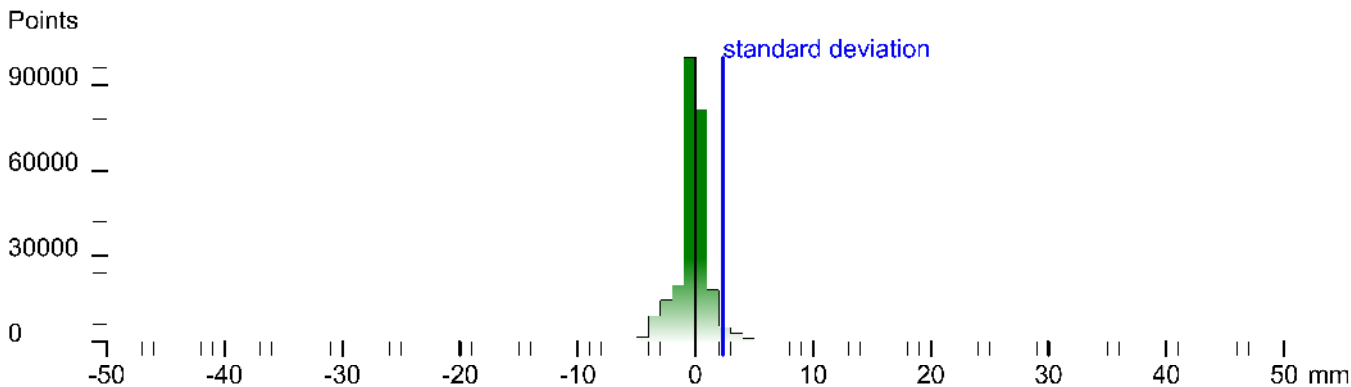
Sun position info: Altitude: 49.339° Azimuth: 147.969° Azimuth to Scan 0 = 121.282°

# Scan position '10'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 9: 2.9 mm

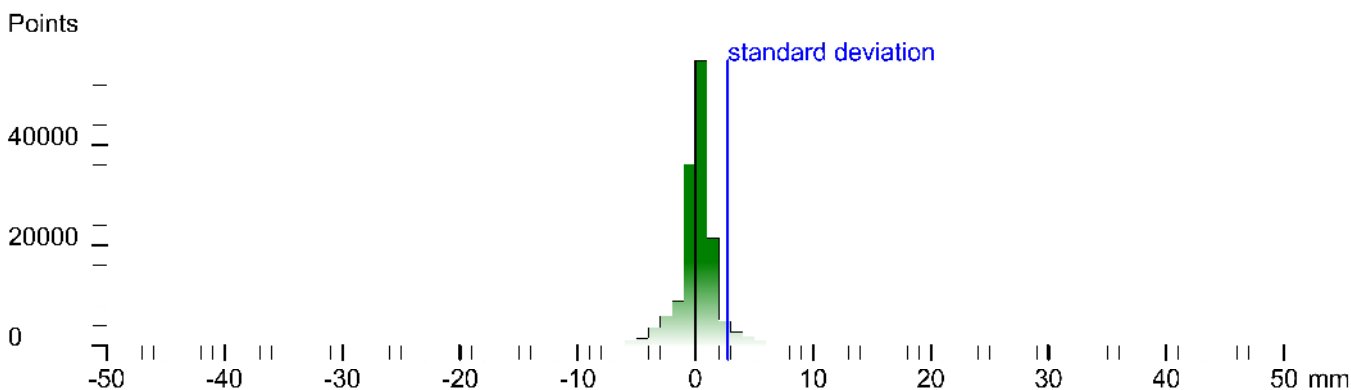
Result registration from 9. Cloud to cloud standard deviation:2.3 mm

## Deviation histogram



Result registration to 11. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram



## Scan 'Hogas Sc. 10'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:56:32 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "10" -file "Hogas Sc. 10" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

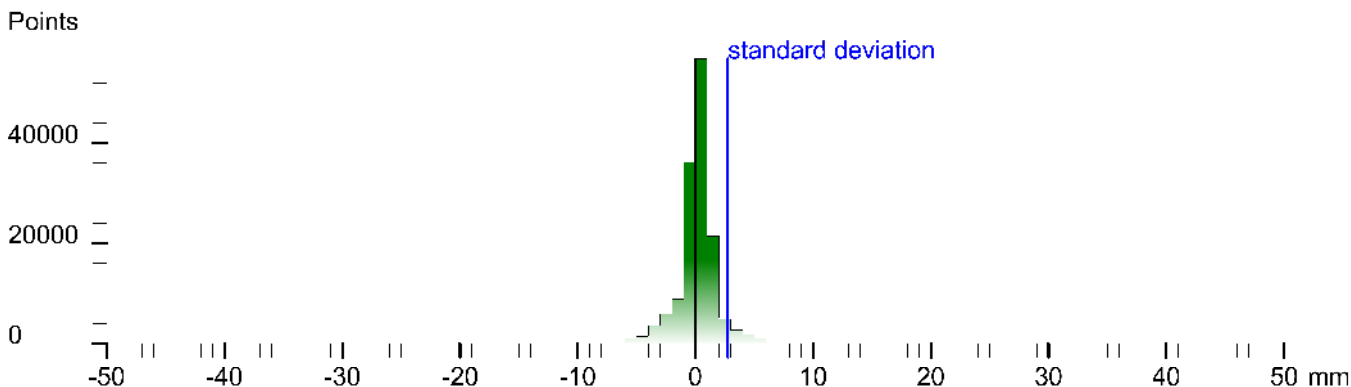
Sun position info: Altitude: 52.995° Azimuth: 171.712° Azimuth to Scan 0 = 341.277°

# Scan position '11'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 10: 2.6 mm  
from 12: 1.9 mm

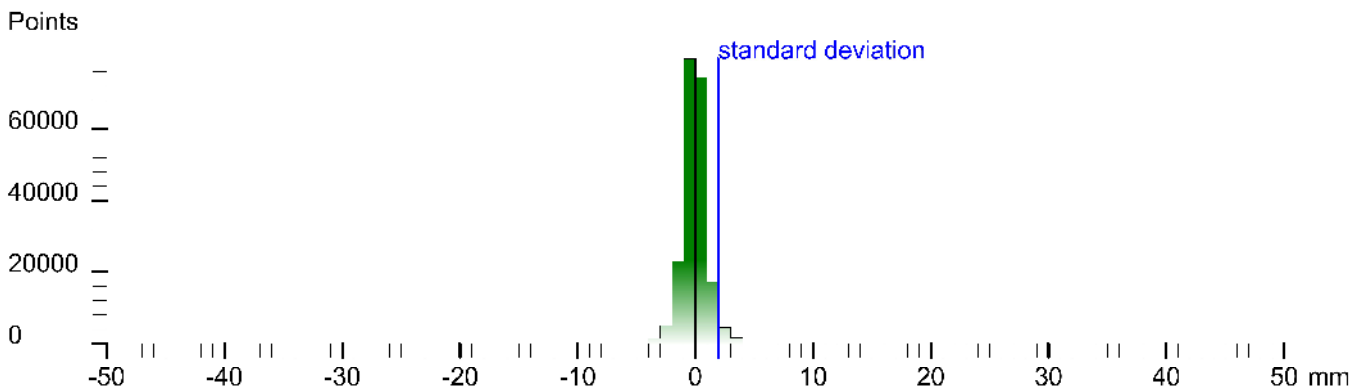
Result registration from 10. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram



Result registration from 12. Cloud to cloud standard deviation:1.9 mm

## Deviation histogram



## Scan 'Hogas Sc. 11'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 12:03:23 26.08.2024

**Metadata** **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "11" -file "Hogas Sc. 11" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

Sun position info: Altitude: 53.136° Azimuth: 174.569° Azimuth to Scan 0 = 345.991°

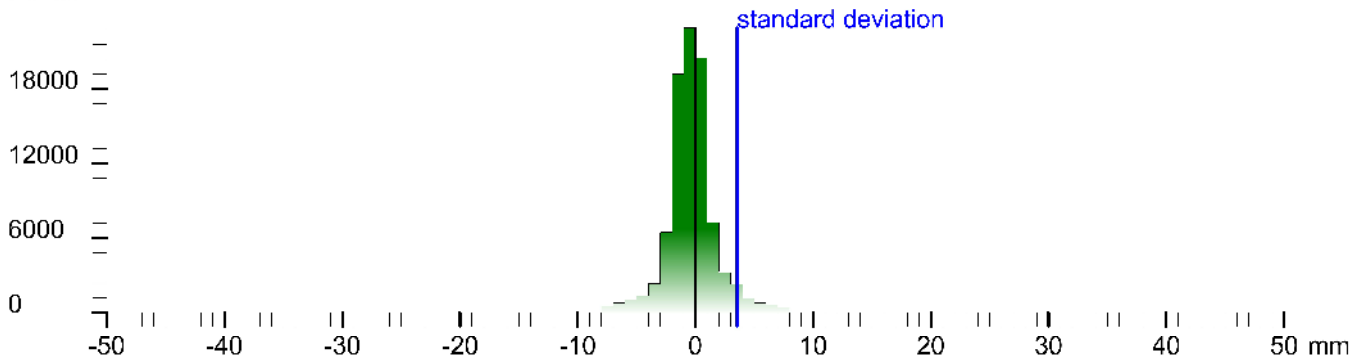
# Scan position '12'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 13: 3.5 mm  
from 14: 3.7 mm

Result registration from 13. Cloud to cloud standard deviation:3.5 mm

## Deviation histogram

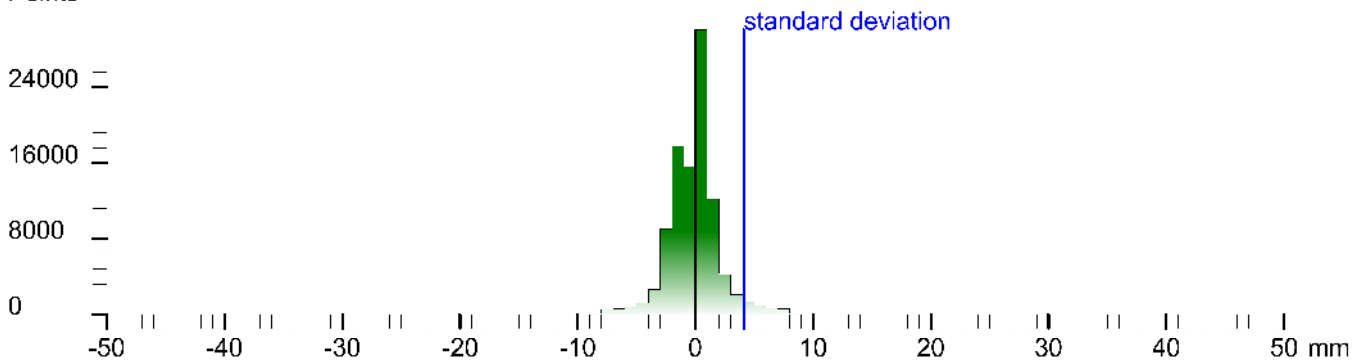
Points



Result registration from 14. Cloud to cloud standard deviation:4.1 mm

## Deviation histogram

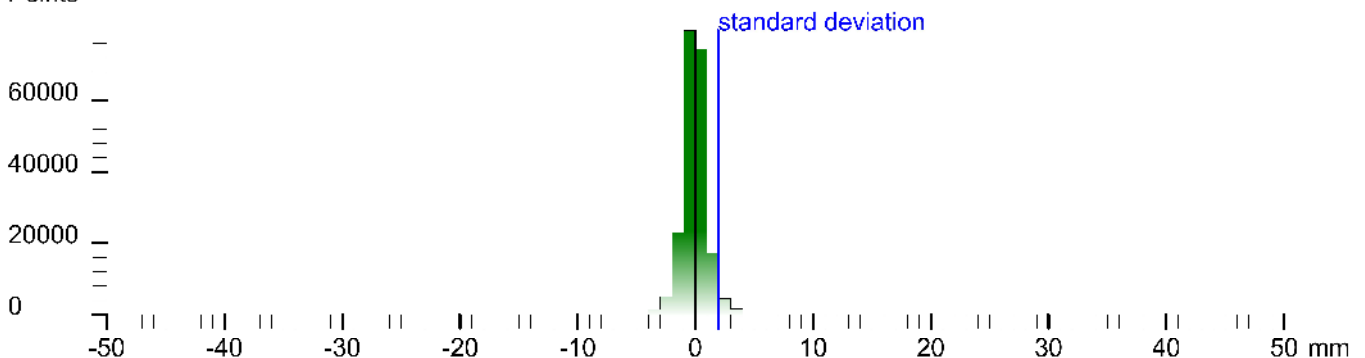
Points



Result registration to 11. Cloud to cloud standard deviation:1.9 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 12'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 12:09:16 26.08.2024

**Metadata**    **Value**  
**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "12" -file "Hogas Sc. 12" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 53.210° Azimuth: 177.029° Azimuth to Scan 0 = 350.591°

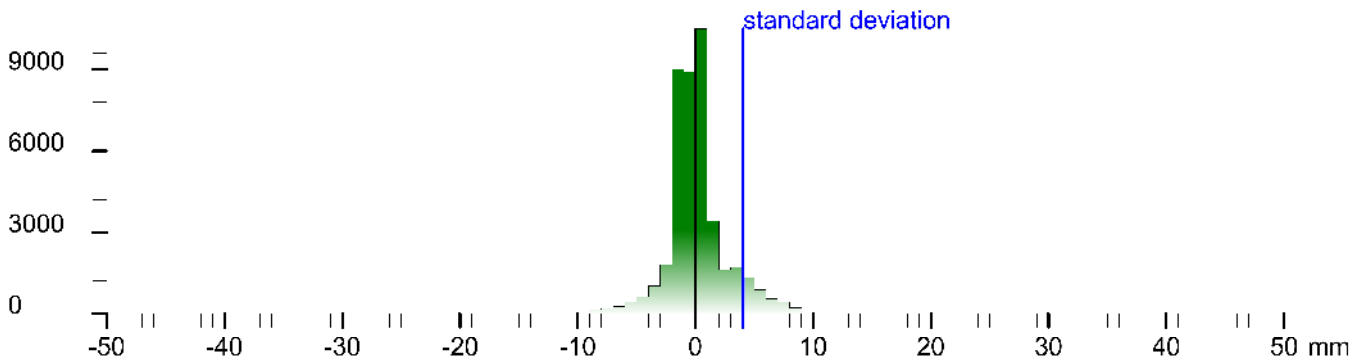
# Scan position '13'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 14: 3.7 mm  
from 29: 9.4 mm  
from 9: 4.1 mm

Result registration from 14. Cloud to cloud standard deviation:4.1 mm

## Deviation histogram

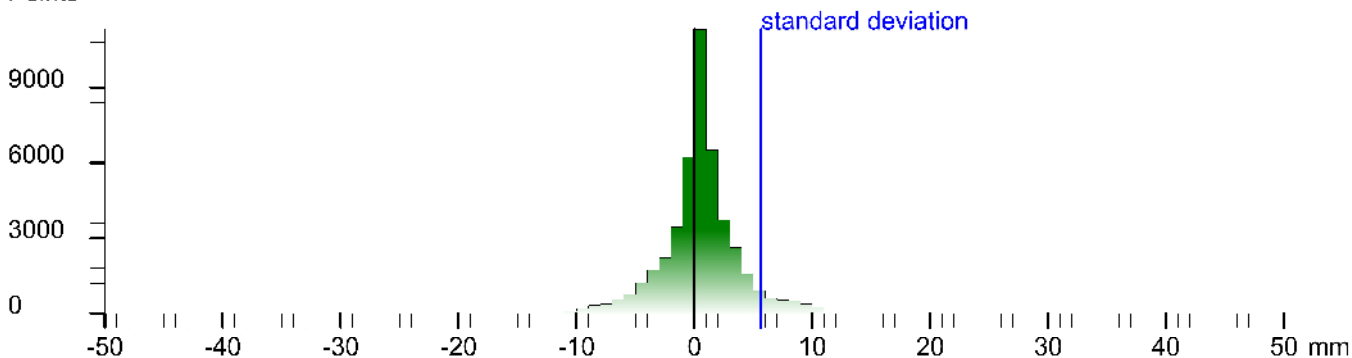
Points



Result registration from 29. Cloud to cloud standard deviation:5.7 mm

## Deviation histogram

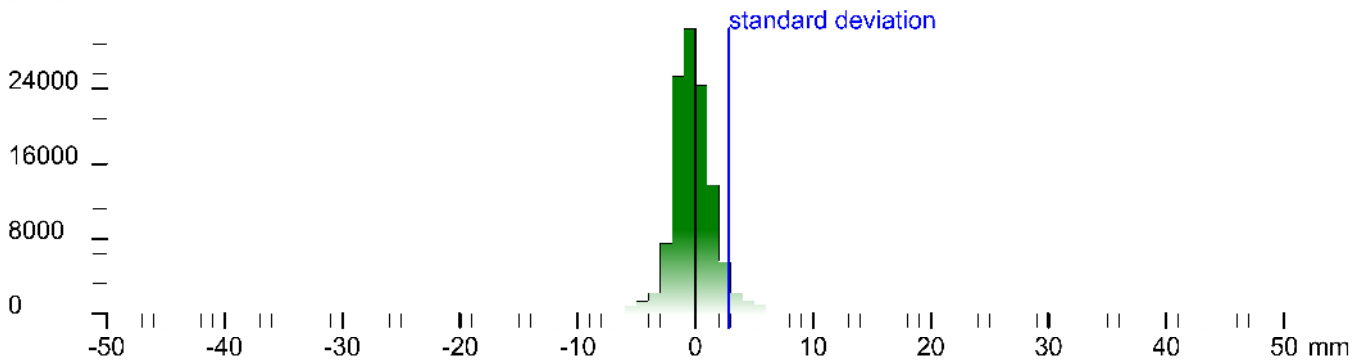
Points



Result registration from 9. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram

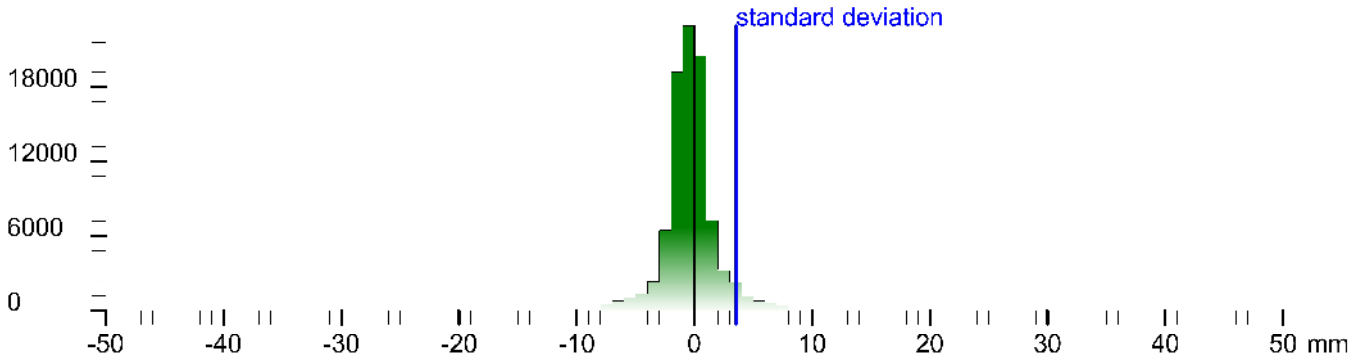
Points



Result registration to 12. Cloud to cloud standard deviation:3.5 mm

### Deviation histogram

Points



### Scan 'Hogas Sc. 13'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'

Laser class of scanner: 1

Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s

Scan taken at 12:16:08 26.08.2024

**Metadata**    **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "13" -file "Hogas Sc. 13" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 53.240° Azimuth: 179.906° Azimuth to Scan 0 = 101.979°



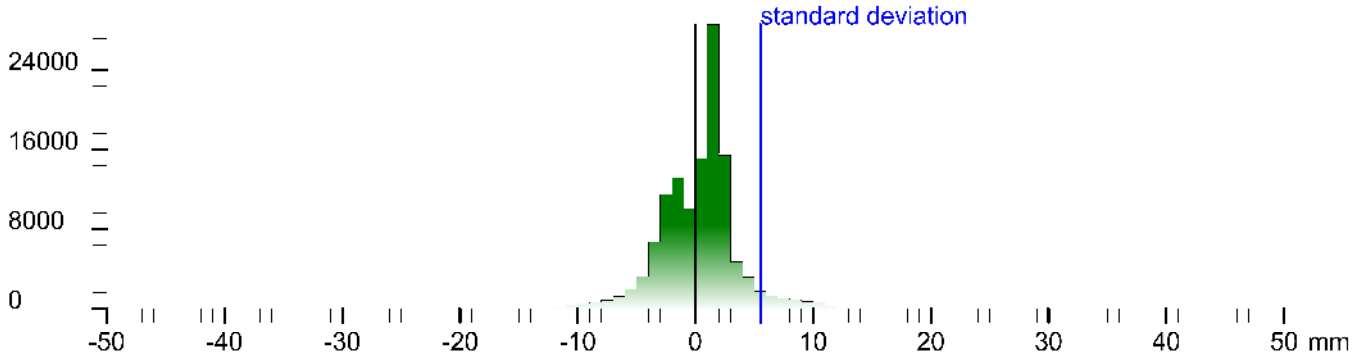
# Scan position '14'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 15: 5.4 mm

Result registration from 15. Cloud to cloud standard deviation:5.5 mm

## Deviation histogram

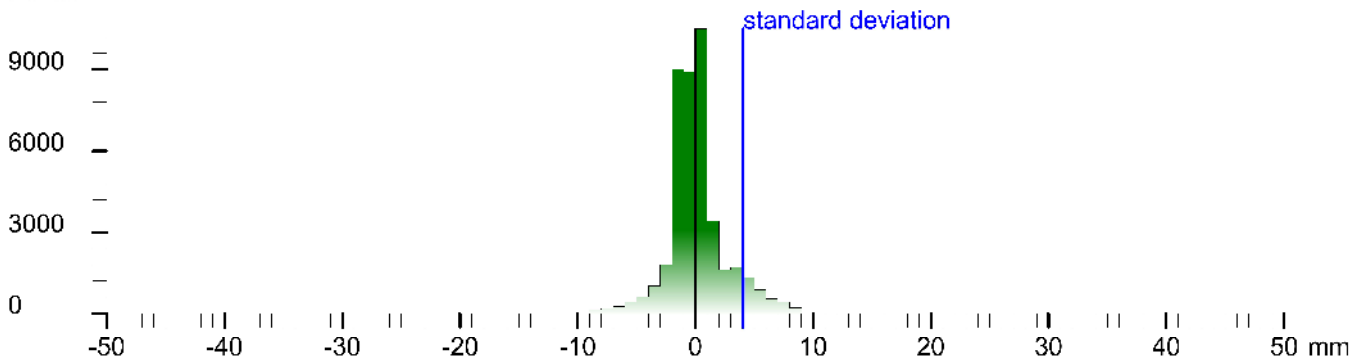
Points



Result registration to 13. Cloud to cloud standard deviation:4.1 mm

## Deviation histogram

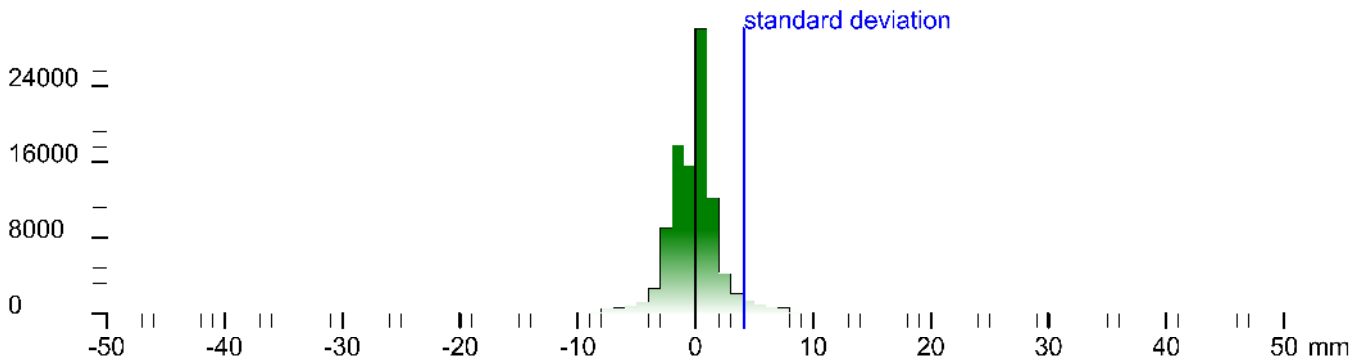
Points



Result registration to 12. Cloud to cloud standard deviation:4.1 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 14'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 12:23:30 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "14" -file "Hogas Sc. 14" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

Sun position info: Altitude: 53.210° Azimuth: 182.782° Azimuth to Scan 0 = 68.216°

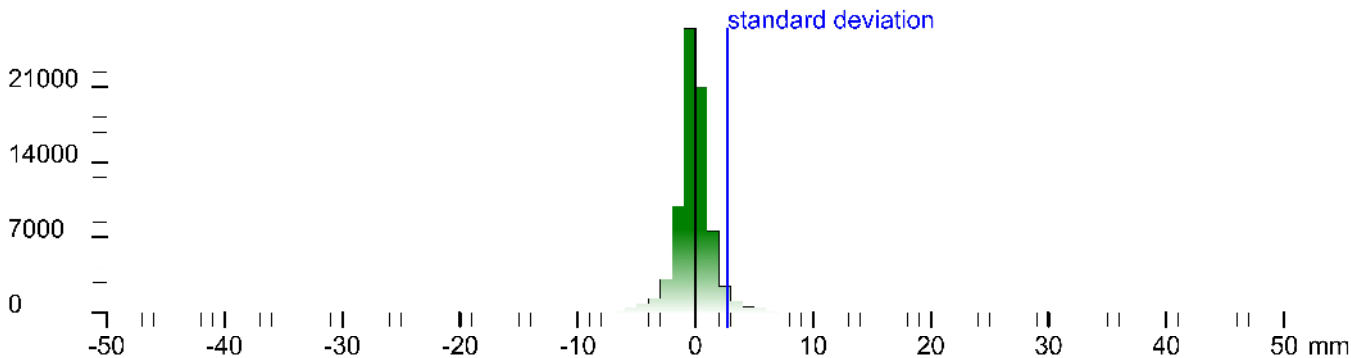
# Scan position '15'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 16: 4.7 mm

Result registration from 16. Cloud to cloud standard deviation:2.7 mm

## Deviation histogram

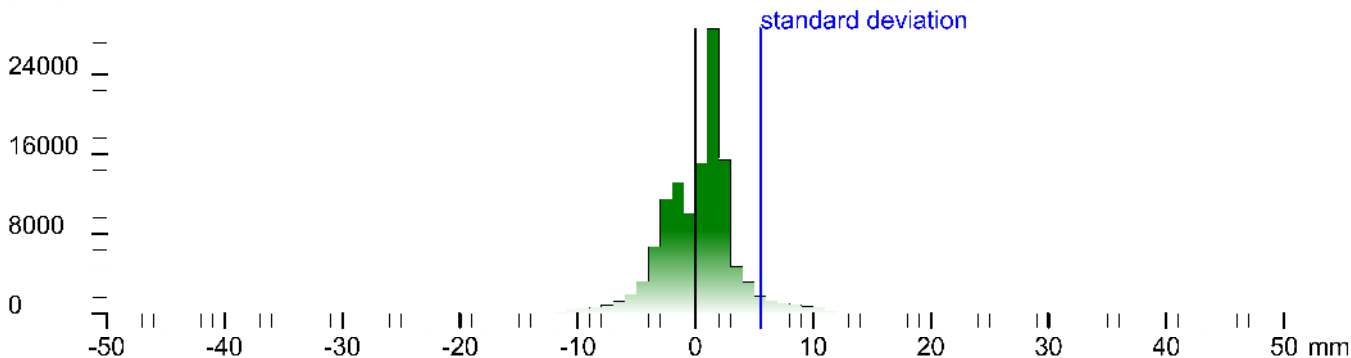
Points



Result registration to 14. Cloud to cloud standard deviation:5.5 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 15'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 12:31:43 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "15" -file "Hogas Sc. 15" -path "Cal, Hogas" -project "Cal, Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

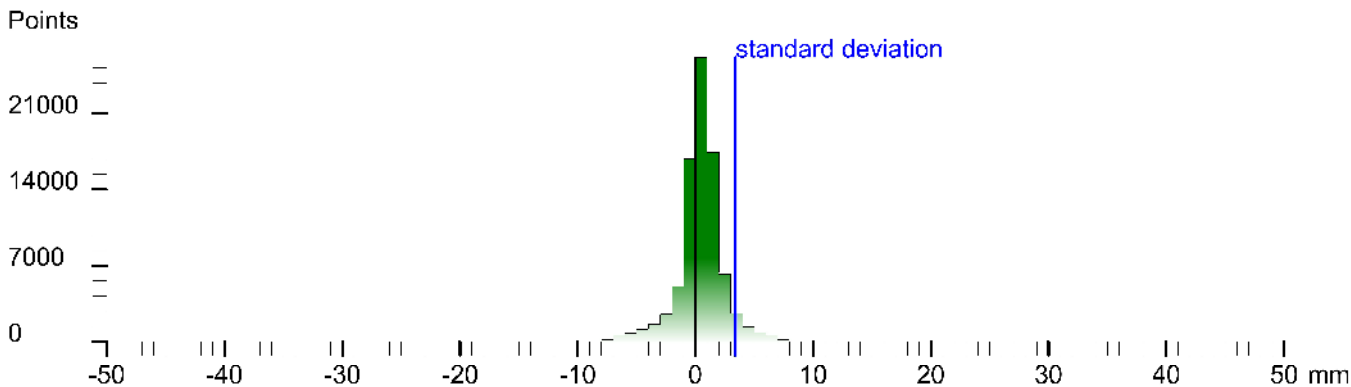
Sun position info: Altitude: 53.103° Azimuth: 186.060° Azimuth to Scan 0 = 290.858°

# Scan position '16'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 17: 3.3 mm

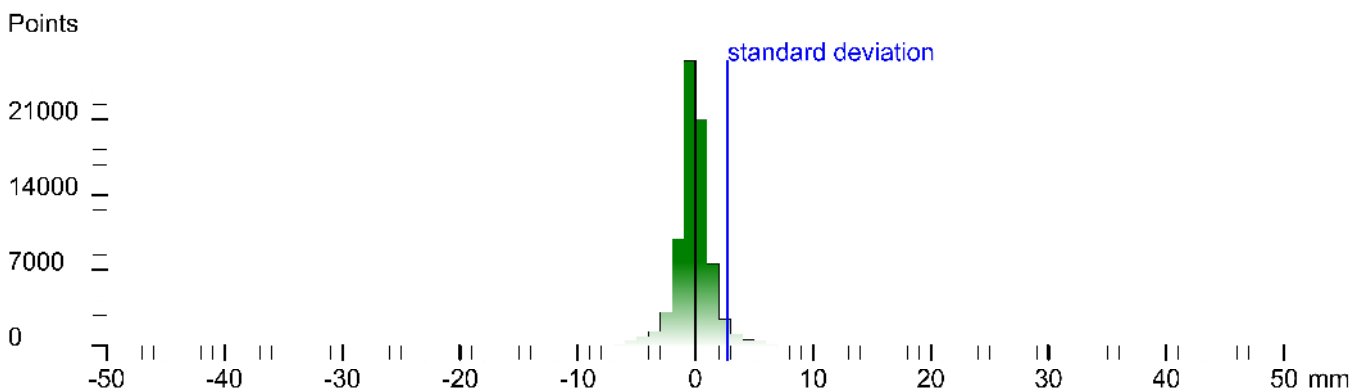
Result registration from 17. Cloud to cloud standard deviation:3.4 mm

## Deviation histogram



Result registration to 15. Cloud to cloud standard deviation:2.7 mm

## Deviation histogram



## Scan 'Hogas Sc. 16'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 12:38:50 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "16" -file "Hogas Sc. 16" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 52.946° Azimuth: 188.912° Azimuth to Scan 0 = 47.742°

# Scan position '17'

Scan position is member of group(s):

Status registration 'registered with bundleadjustment with cloud to cloud'

Optimized

Connection standard deviation

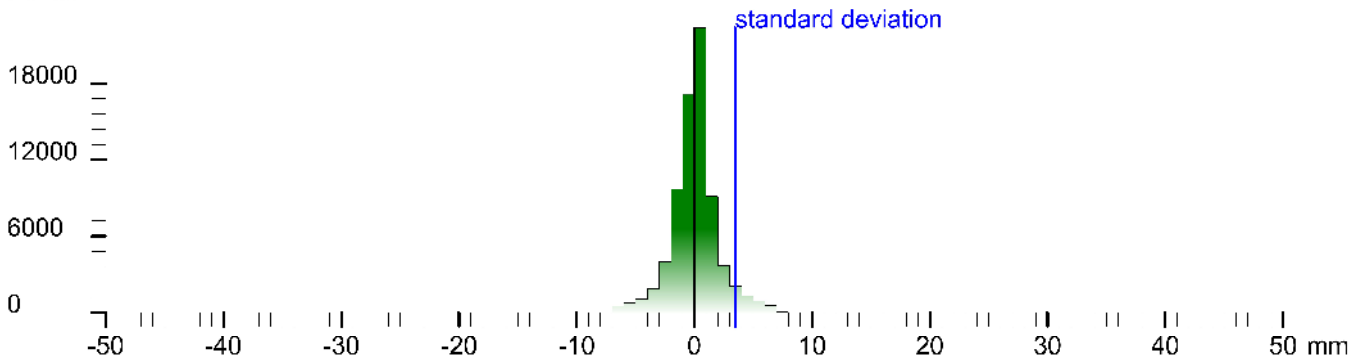
from 18: 4.5 mm

from 20: 5.0 mm

Result registration from 18. Cloud to cloud standard deviation:3.5 mm

## Deviation histogram

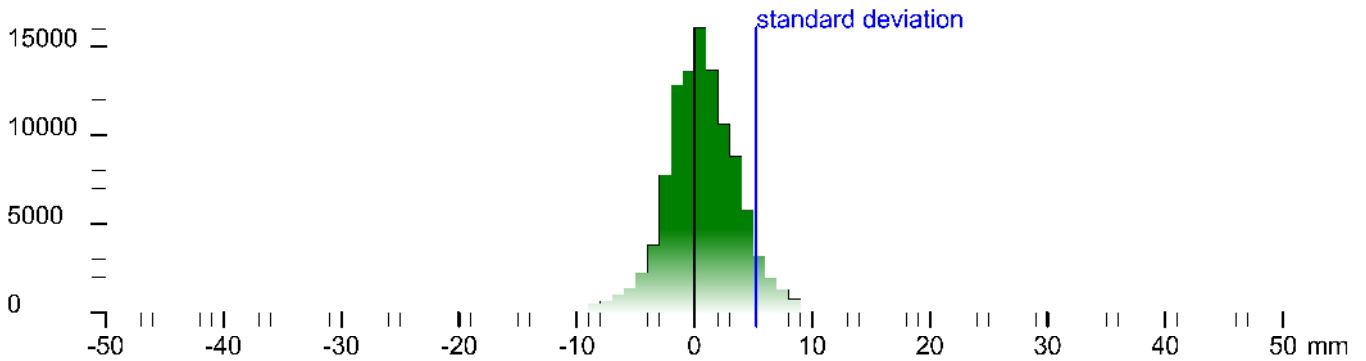
Points



Result registration from 20. Cloud to cloud standard deviation:5.3 mm

## Deviation histogram

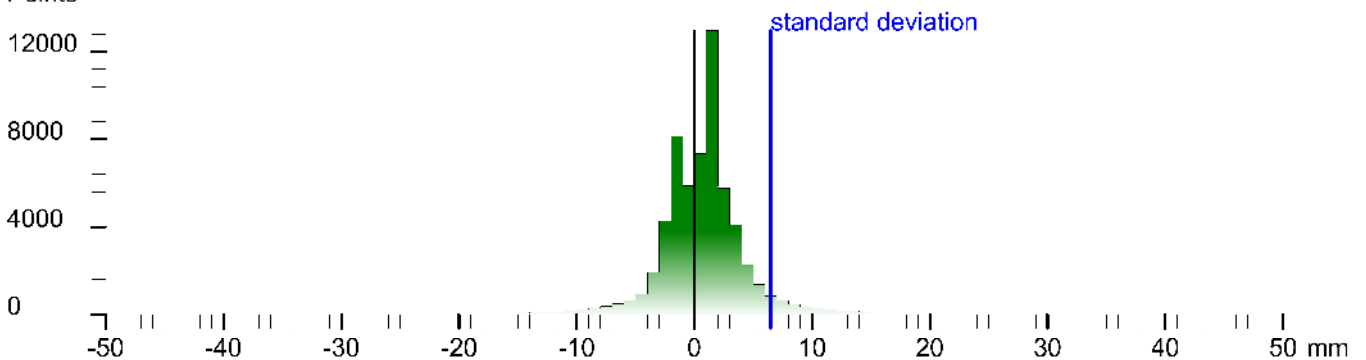
Points



Result registration to 30. Cloud to cloud standard deviation:6.5 mm

## Deviation histogram

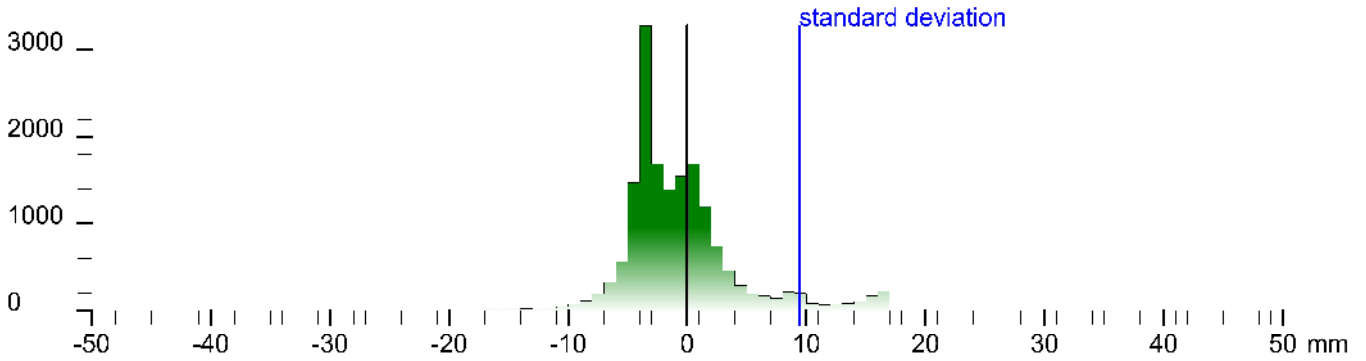
Points



Result registration to 31. Cloud to cloud standard deviation:9.4 mm

### Deviation histogram

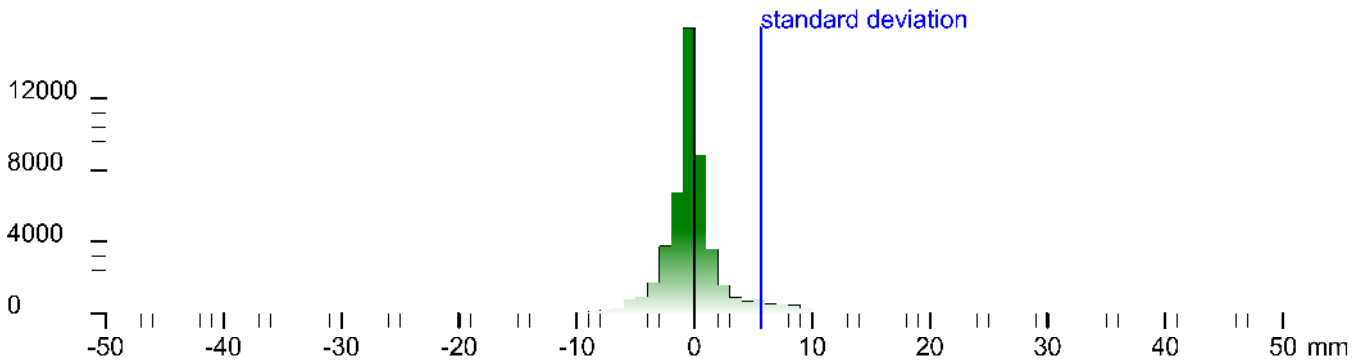
Points



Result registration to 44. Cloud to cloud standard deviation:5.6 mm

### Deviation histogram

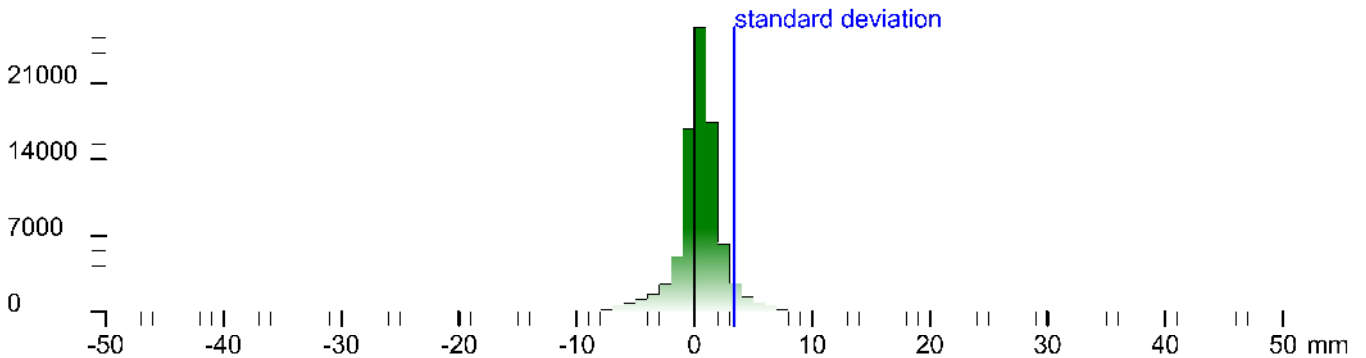
Points



Result registration to 16. Cloud to cloud standard deviation:3.4 mm

### Deviation histogram

Points



## Scan 'Hogas Sc. 17'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'

Laser class of scanner: 1

Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s

Scan taken at 12:46:21 26.08.2024

**Metadata**      **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "17" -file "Hogas Sc. 17" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

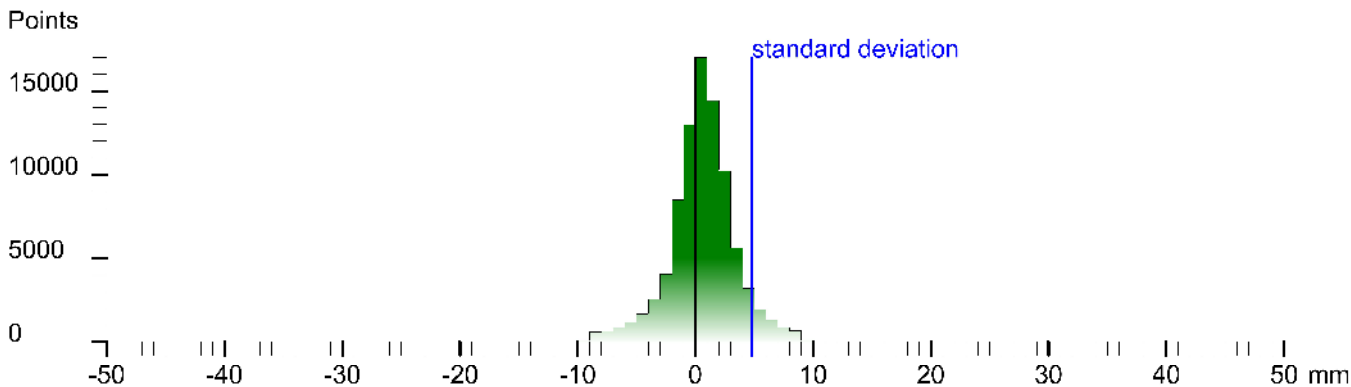
Sun position info: Altitude: 52.695° Azimuth: 192.143° Azimuth to Scan 0 = 132.548°

# Scan position '18'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 20: 4.6 mm

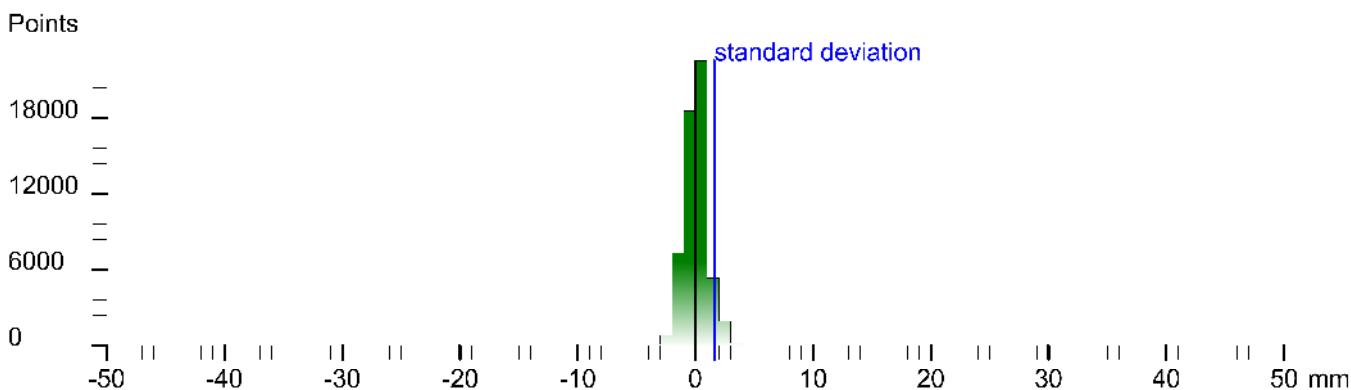
Result registration from 20. Cloud to cloud standard deviation:4.8 mm

## Deviation histogram



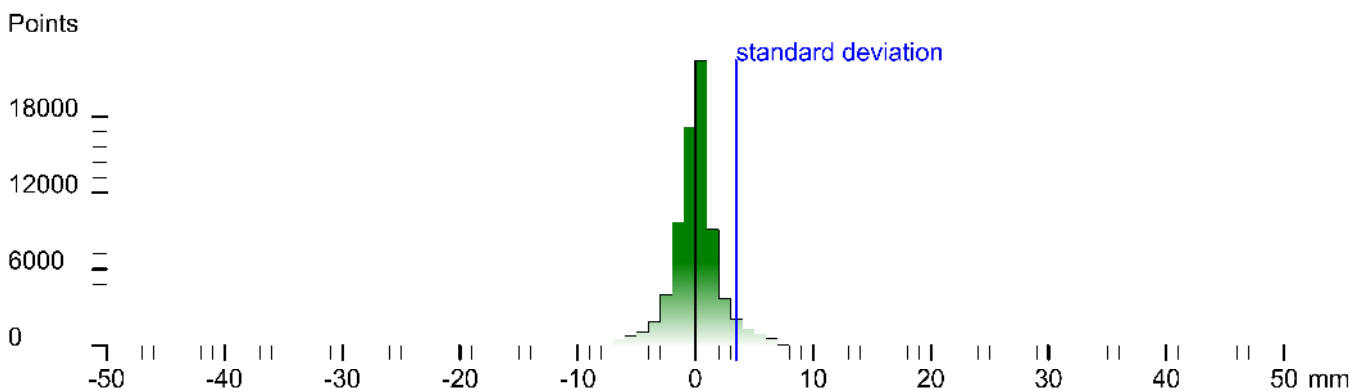
Result registration to 19. Cloud to cloud standard deviation:1.6 mm

## Deviation histogram



Result registration to 17. Cloud to cloud standard deviation:3.5 mm

## Deviation histogram



## Scan 'Hogas Sc. 18'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 12:54:11 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "18" -file "Hogas Sc. 18" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

Sun position info: Altitude: 52.368° Azimuth: 195.334° Azimuth to Scan 0 = 361.001°

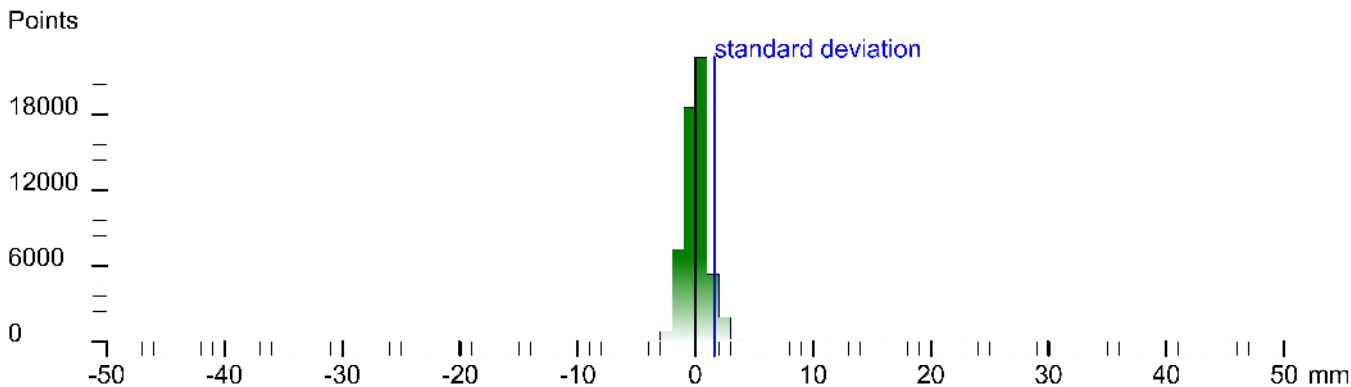


# Scan position '19'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 18: 1.3 mm

Result registration from 18. Cloud to cloud standard deviation: 1.6 mm

## Deviation histogram



## Scan 'Hogas Sc. 19'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution: 'High' Quality: 'Balanced' Pixel distance: 6.3mm @ 10m Data rate: 273438pts/s  
Scan taken at 13:01:21 26.08.2024

**Metadata**    **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "19" -file "Hogas Sc. 19" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 52.023° Azimuth: 198.088° Azimuth to Scan 0 = 20.894°

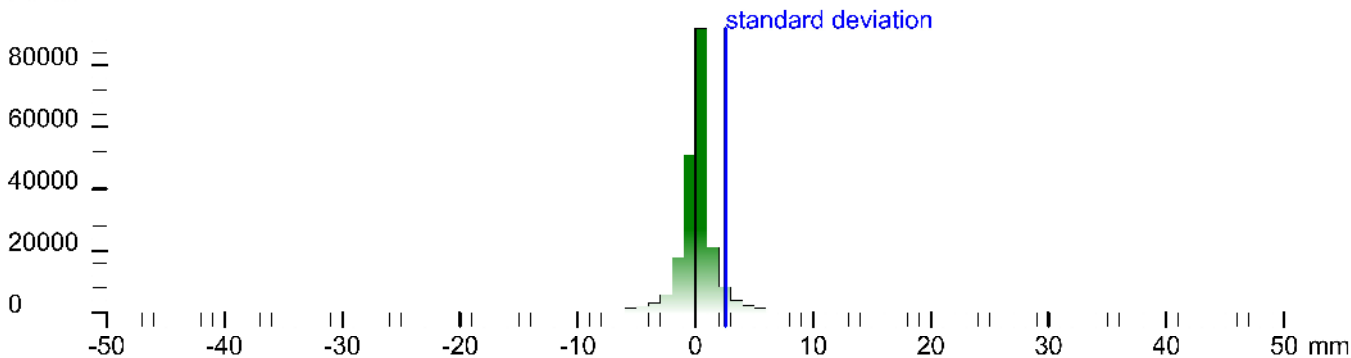
# Scan position '2'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 1: 3.7 mm

Result registration from 1. Cloud to cloud standard deviation:2.6 mm

## Deviation histogram

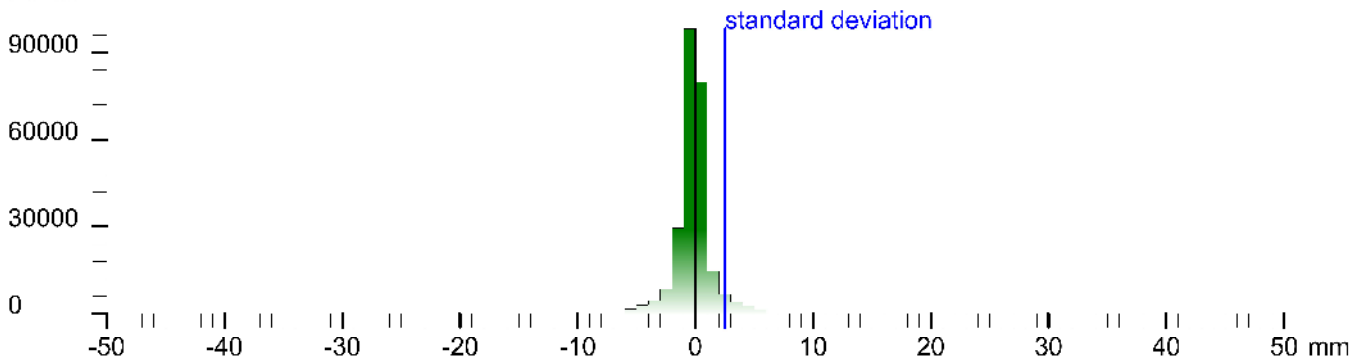
Points



Result registration to 3. Cloud to cloud standard deviation:2.5 mm

## Deviation histogram

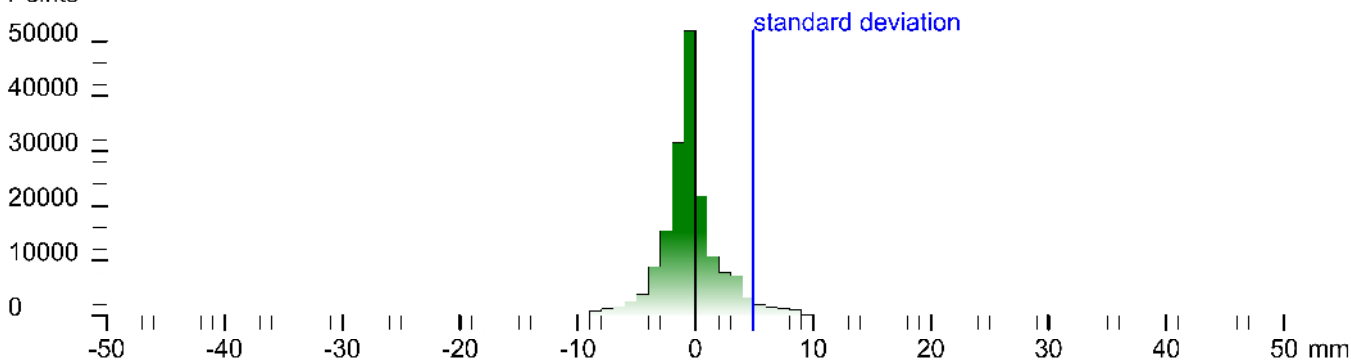
Points



Result registration to 25. Cloud to cloud standard deviation:4.9 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 2'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:01:48 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "2" -file "Hogas Sc. 2" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 49.949° Azimuth: 150.456° Azimuth to Scan 0 = 184.337°

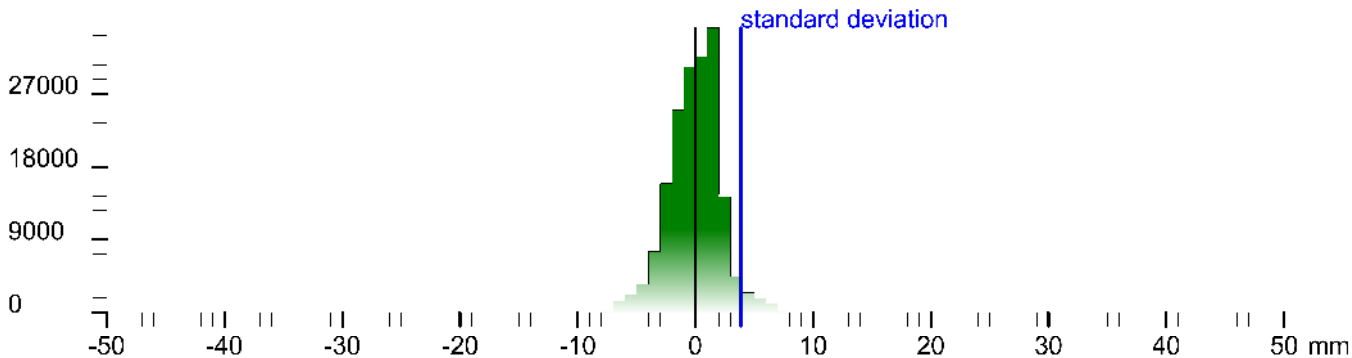
# Scan position '20'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 23: 5.1 mm  
from 25: 4.4 mm

Result registration from 23. Cloud to cloud standard deviation:3.9 mm

## Deviation histogram

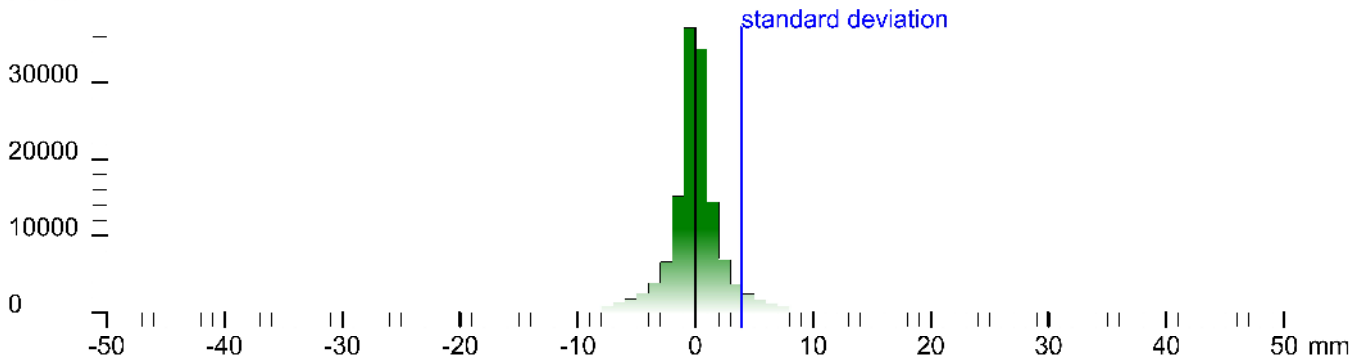
Points



Result registration from 25. Cloud to cloud standard deviation:3.9 mm

## Deviation histogram

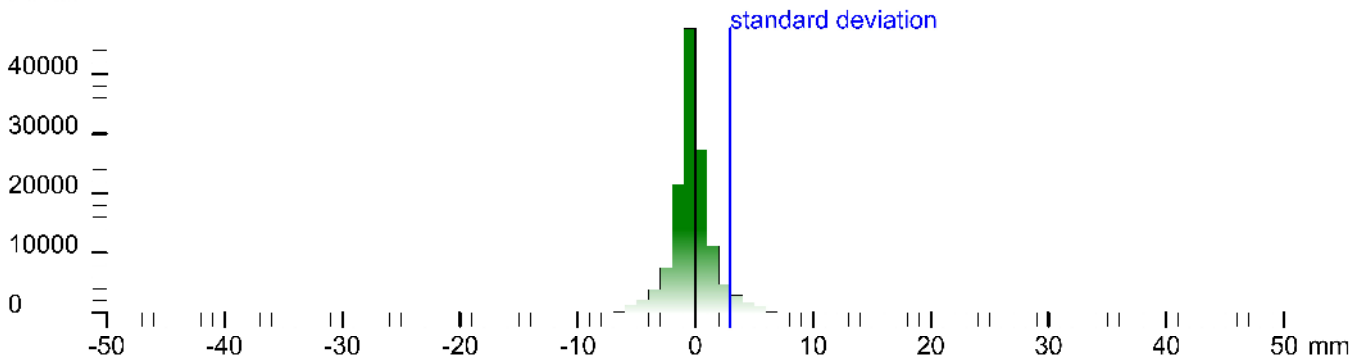
Points



Result registration to 21. Cloud to cloud standard deviation:2.9 mm

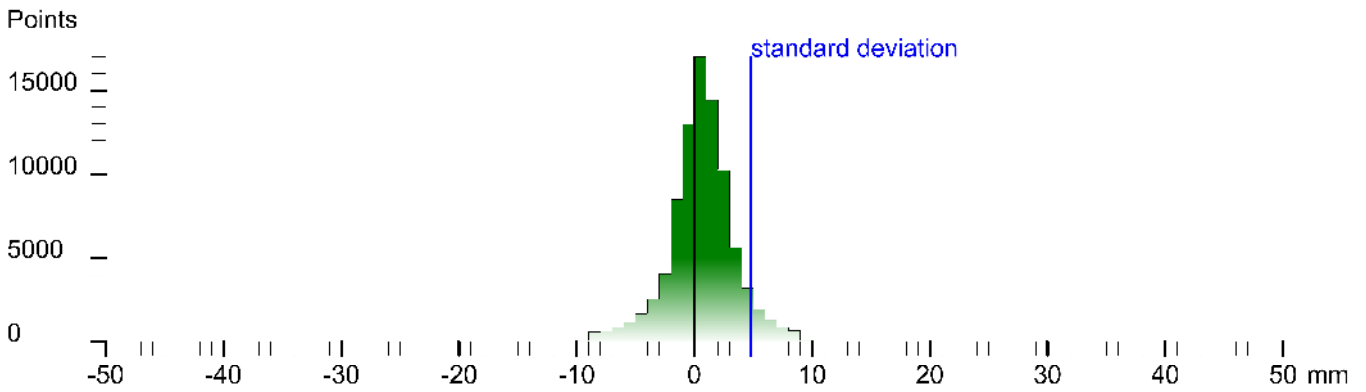
## Deviation histogram

Points



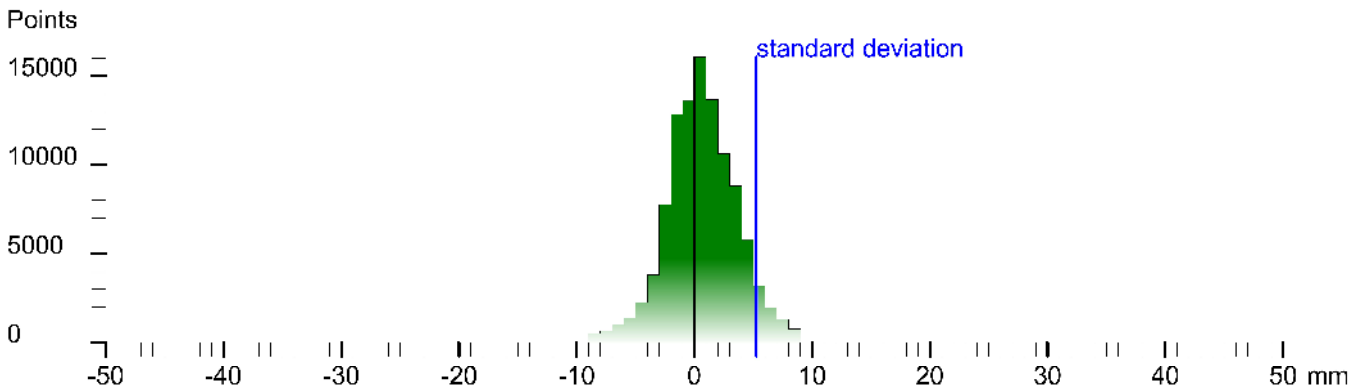
Result registration to 18. Cloud to cloud standard deviation:4.8 mm

### Deviation histogram



Result registration to 17. Cloud to cloud standard deviation:5.3 mm

### Deviation histogram



## Scan 'Hogas Sc. 20'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'

Laser class of scanner: 1

Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s

Scan taken at 13:08:22 26.08.2024

**Metadata**    **Value**

**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10,0,1" -memorize 1 -scanpos "20" -file "Hogas Sc. 20" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

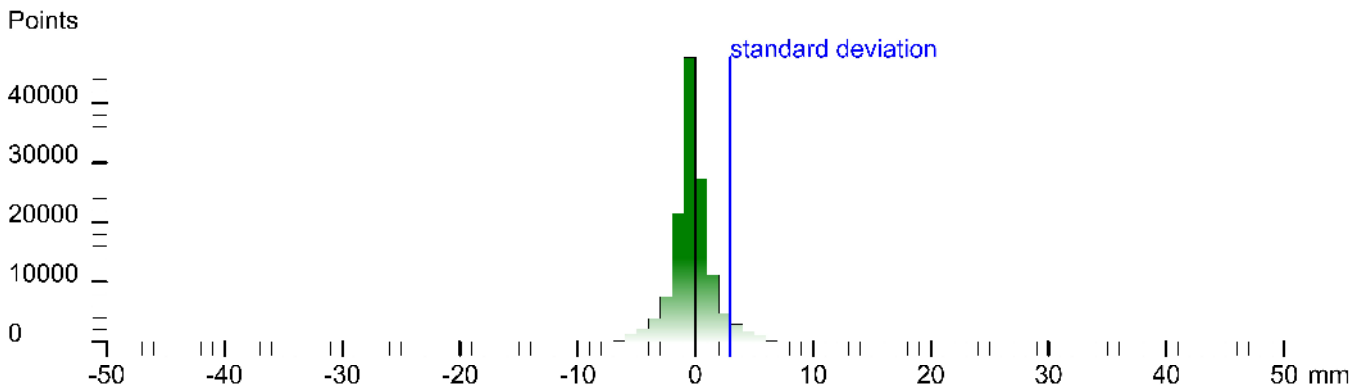
Sun position info: Altitude: 51.624° Azimuth: 200.799° Azimuth to Scan 0 = 109.056°

# Scan position '21'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 20: 3.1 mm

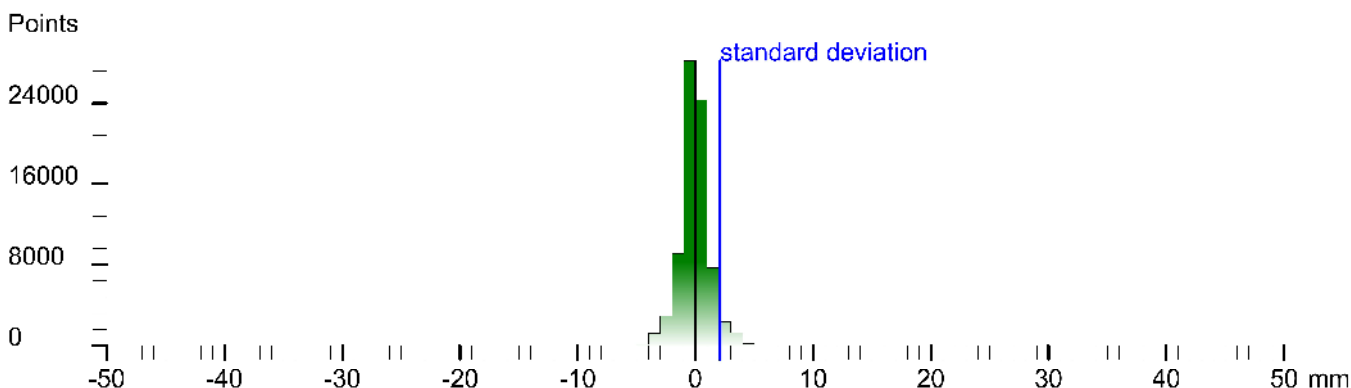
Result registration from 20. Cloud to cloud standard deviation:2.9 mm

## Deviation histogram



Result registration to 22. Cloud to cloud standard deviation:2.1 mm

## Deviation histogram



## Scan 'Hogas Sc. 21'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 13:14:46 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrl "LRCServer 10.0.1" -memorize 1 -scanpos "21" -file "Hogas Sc. 21" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

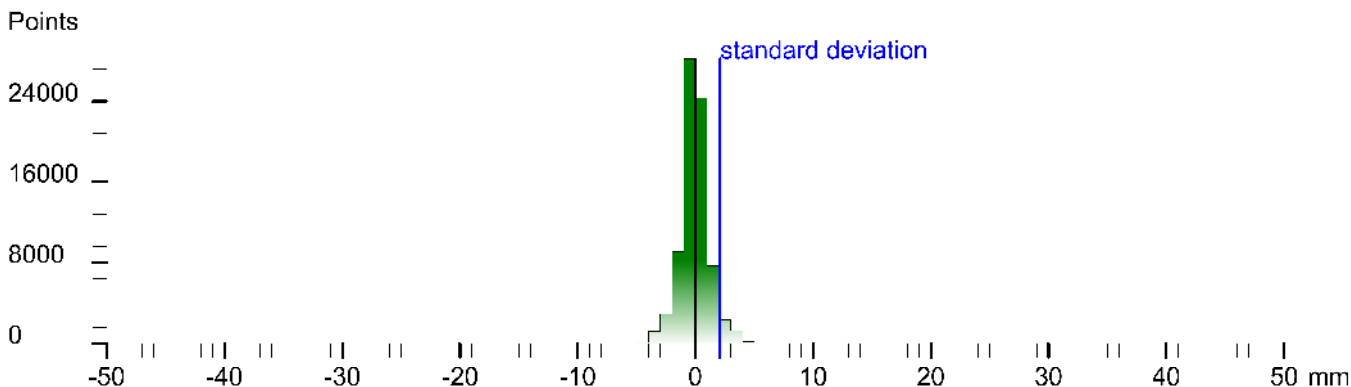
Sun position info: Altitude: 51.240° Azimuth: 203.085° Azimuth to Scan 0 = 317.587°

# Scan position '22'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 21: 2.0 mm  
from 24: 2.8 mm

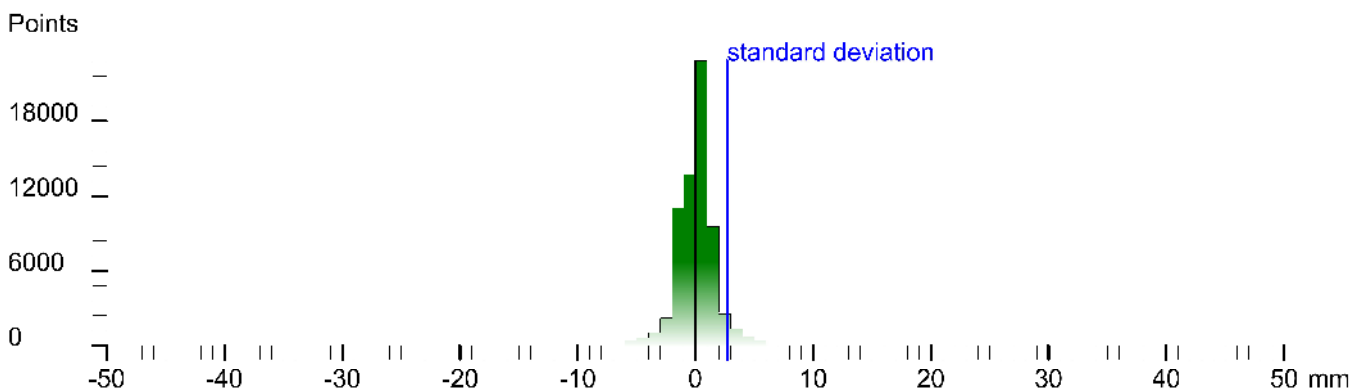
Result registration from 21. Cloud to cloud standard deviation:2.1 mm

## Deviation histogram



Result registration from 24. Cloud to cloud standard deviation:2.7 mm

## Deviation histogram



## Scan 'Hogas Sc. 22'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 13:21:09 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "22" -file "Hogas Sc. 22" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

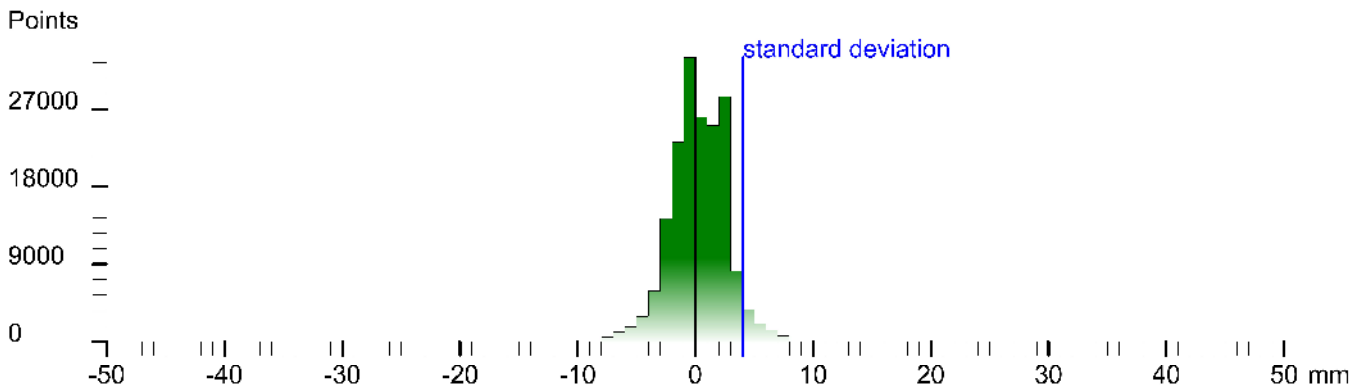
Sun position info: Altitude: 50.745° Azimuth: 205.707° Azimuth to Scan 0 = 296.428°

# Scan position '23'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 1: 4.6 mm

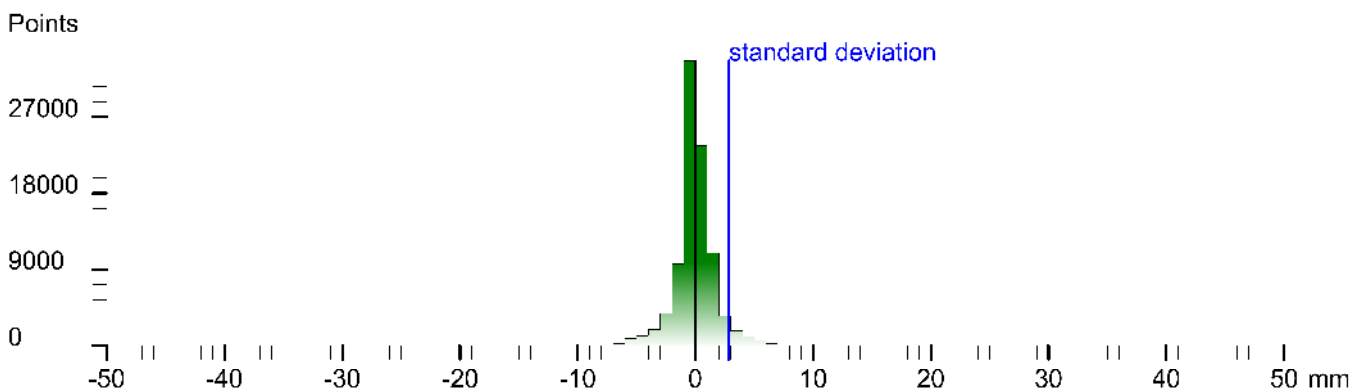
Result registration from 1. Cloud to cloud standard deviation:4.0 mm

## Deviation histogram



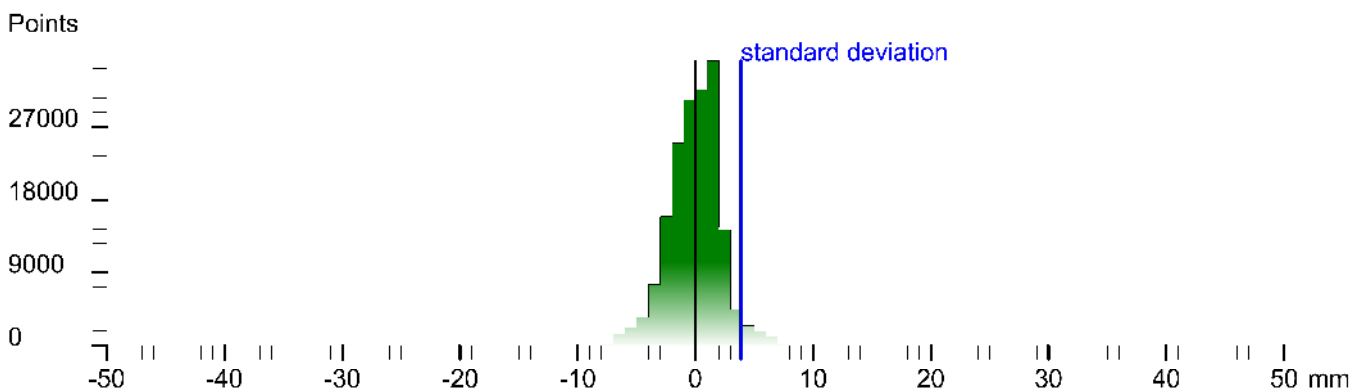
Result registration to 24. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram



Result registration to 20. Cloud to cloud standard deviation:3.9 mm

## Deviation histogram



## Scan 'Hogas Sc. 23'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 13:27:38 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**



Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "23" -file "Hogas Sc. 23" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

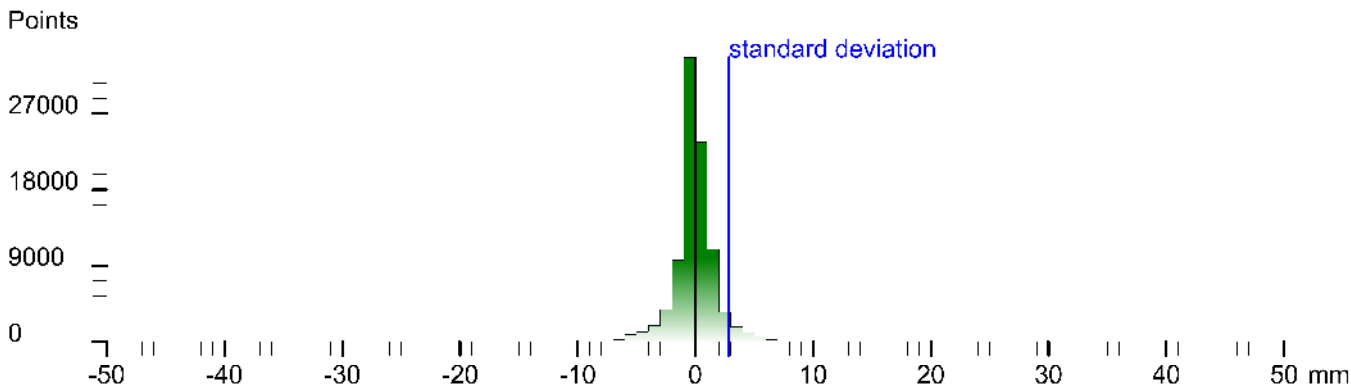
Sun position info: Altitude: 50.281° Azimuth: 207.911° Azimuth to Scan 0 = 39.840°

# Scan position '24'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 23: 3.3 mm

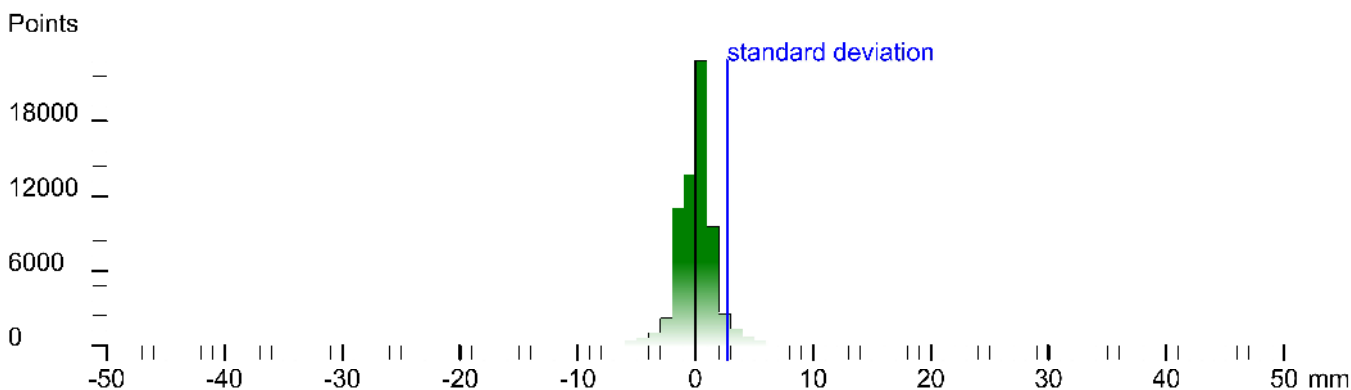
Result registration from 23. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram



Result registration to 22. Cloud to cloud standard deviation:2.7 mm

## Deviation histogram



## Scan 'Hogas Sc. 24'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 13:34:53 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "24" -file "Hogas Sc. 24" -path "Cal, Hogas" -project "Cal, Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

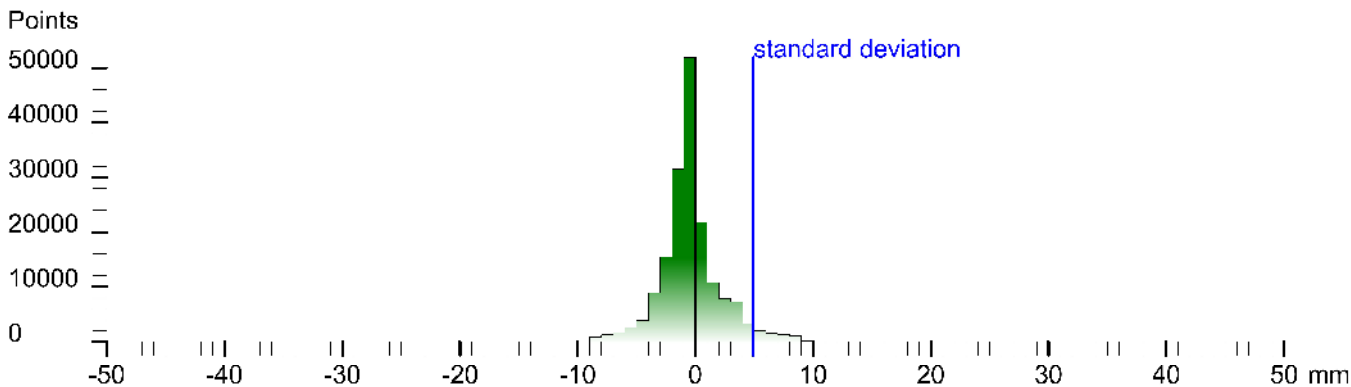
Sun position info: Altitude: 49.697° Azimuth: 210.432° Azimuth to Scan 0 = 280.077°

# Scan position '25'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 2: 4.8 mm

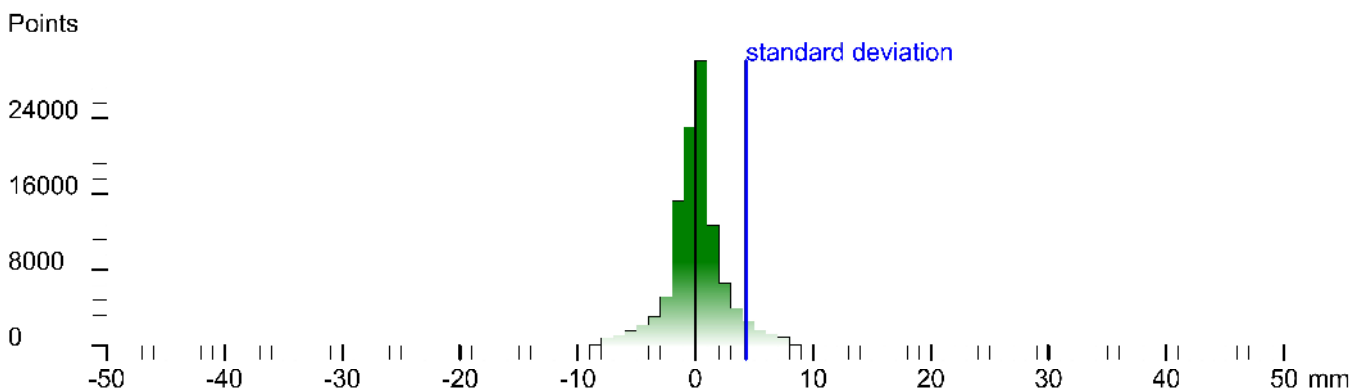
Result registration from 2. Cloud to cloud standard deviation:4.9 mm

## Deviation histogram



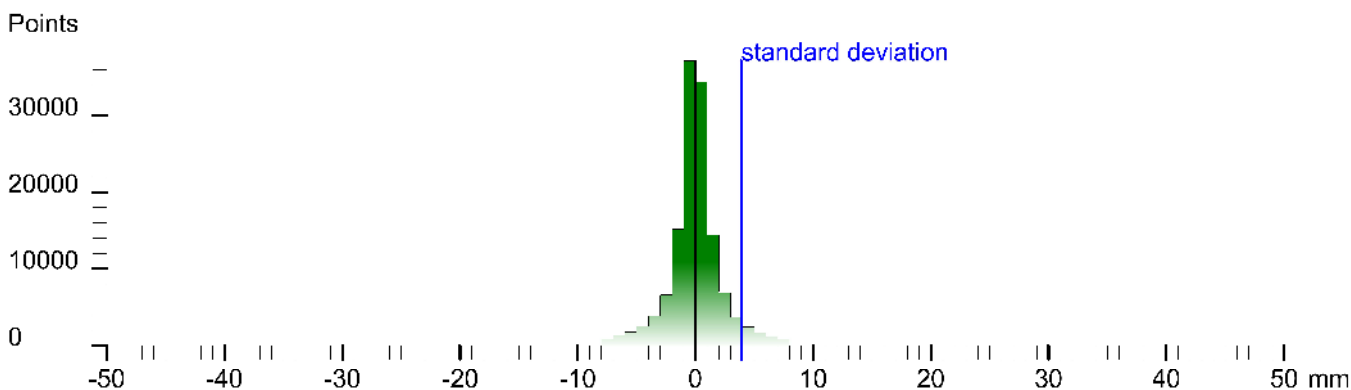
Result registration to 26. Cloud to cloud standard deviation:4.3 mm

## Deviation histogram



Result registration to 20. Cloud to cloud standard deviation:3.9 mm

## Deviation histogram



## Scan 'Hogas Sc. 25'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 13:41:19 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "25" -file "Hogas Sc. 25" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

Sun position info: Altitude: 49.069° Azimuth: 212.896° Azimuth to Scan 0 = 117.762°

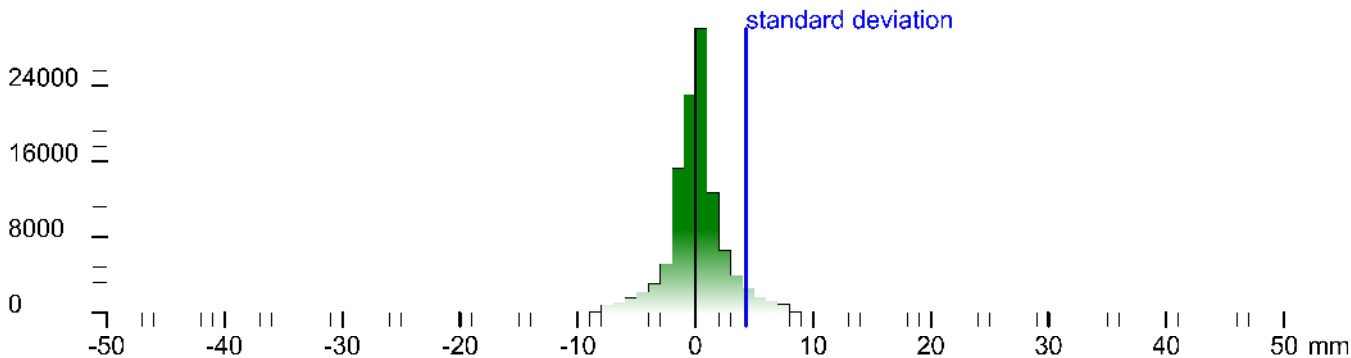
# Scan position '26'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 25: 4.5 mm

Result registration from 25. Cloud to cloud standard deviation:4.3 mm

## Deviation histogram

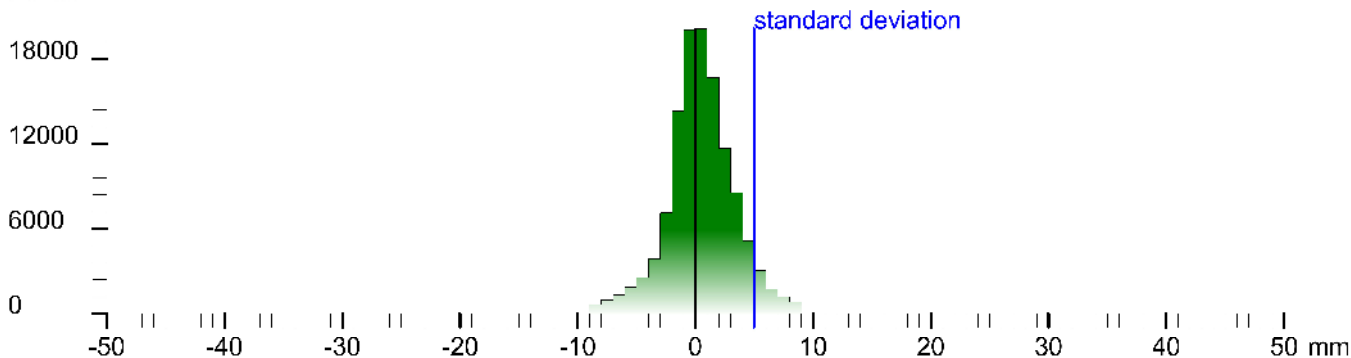
Points



Result registration to 27. Cloud to cloud standard deviation:5.0 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 26'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 13:48:10 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "26" -file "Hogas Sc. 26" -path "Cal, Hogas" -project "Cal, Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 48.397° Azimuth: 215.301° Azimuth to Scan 0 = 289.430°

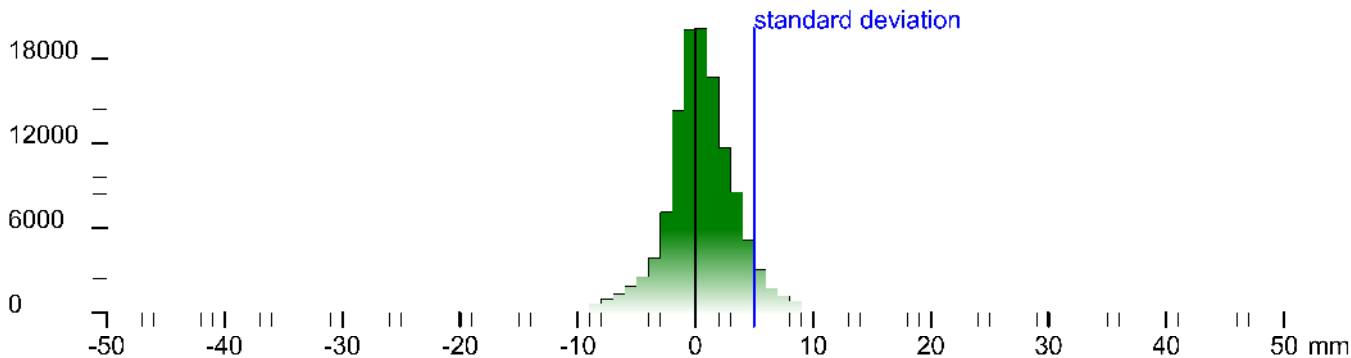
# Scan position '27'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 26: 5.0 mm

Result registration from 26. Cloud to cloud standard deviation:5.0 mm

## Deviation histogram

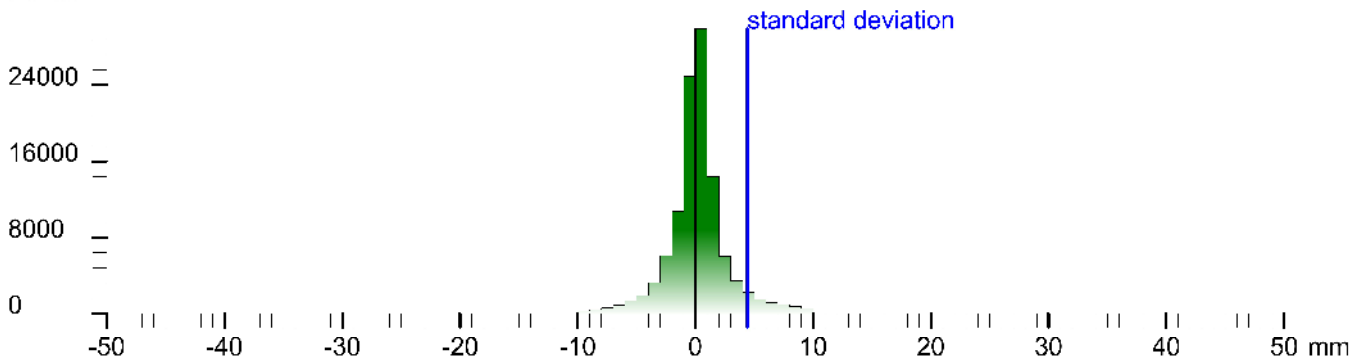
Points



Result registration to 28. Cloud to cloud standard deviation:4.4 mm

## Deviation histogram

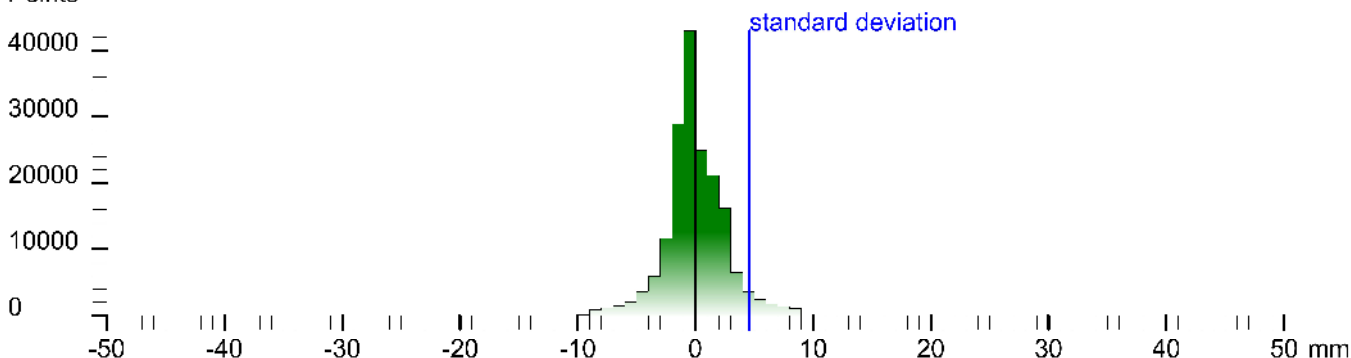
Points



Result registration to 8. Cloud to cloud standard deviation:4.6 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 27'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 13:54:38 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "27" -file "Hogas Sc. 27" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

Sun position info: Altitude: 47.790° Azimuth: 217.316° Azimuth to Scan 0 = 319.115°

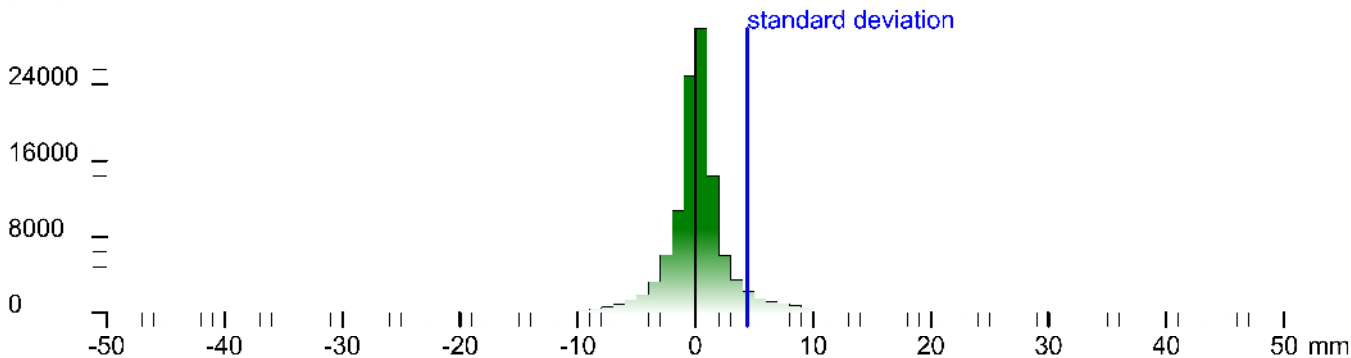
# Scan position '28'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 27: 4.4 mm

Result registration from 27. Cloud to cloud standard deviation:4.4 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 28'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 14:01:26 26.08.2024

**Metadata**    **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "28" -file "Hogas Sc. 28" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution h -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 47.045° Azimuth: 219.611° Azimuth to Scan 0 = 68.302°



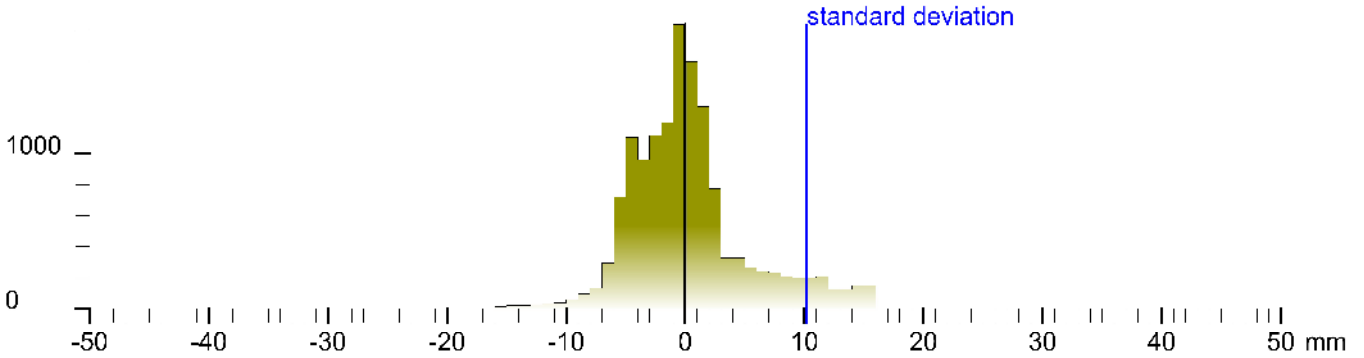
# Scan position '29'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 31: 10.9 mm

Result registration from 31. Cloud to cloud standard deviation:10.2 mm

## Deviation histogram

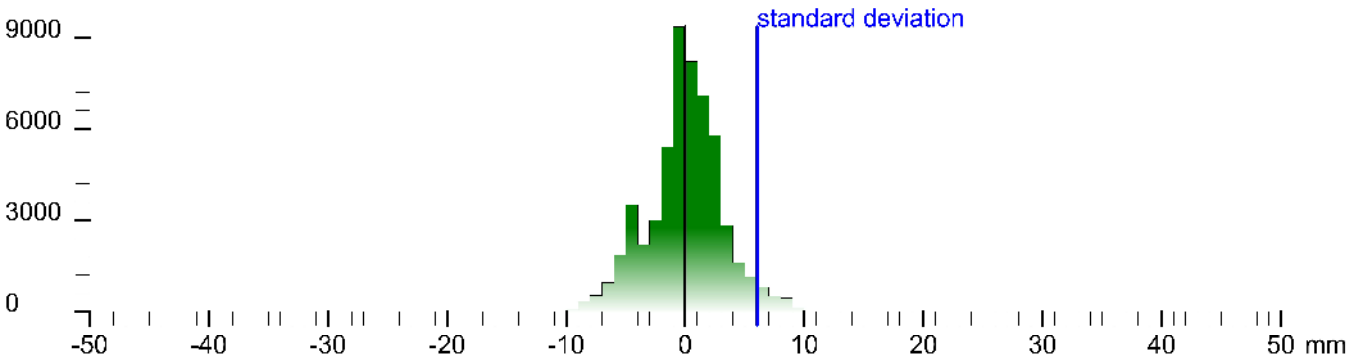
Points



Result registration to 43. Cloud to cloud standard deviation:6.0 mm

## Deviation histogram

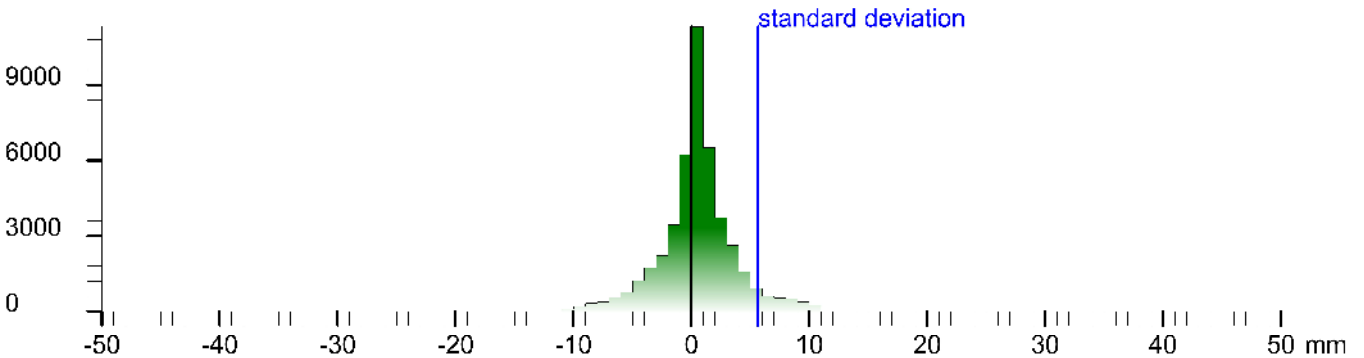
Points



Result registration to 13. Cloud to cloud standard deviation:5.7 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 29'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 14:11:03 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "29" -file "Hogas Sc. 29" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams last

Level system info: Level available.

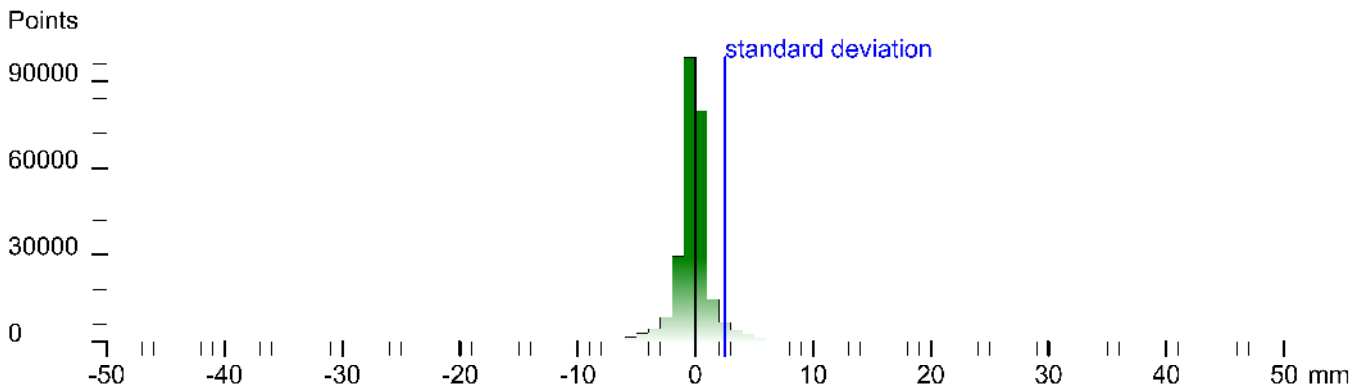
Sun position info: Altitude: 45.919° Azimuth: 222.788° Azimuth to Scan 0 = 185.070°

# Scan position '3'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 2: 2.6 mm

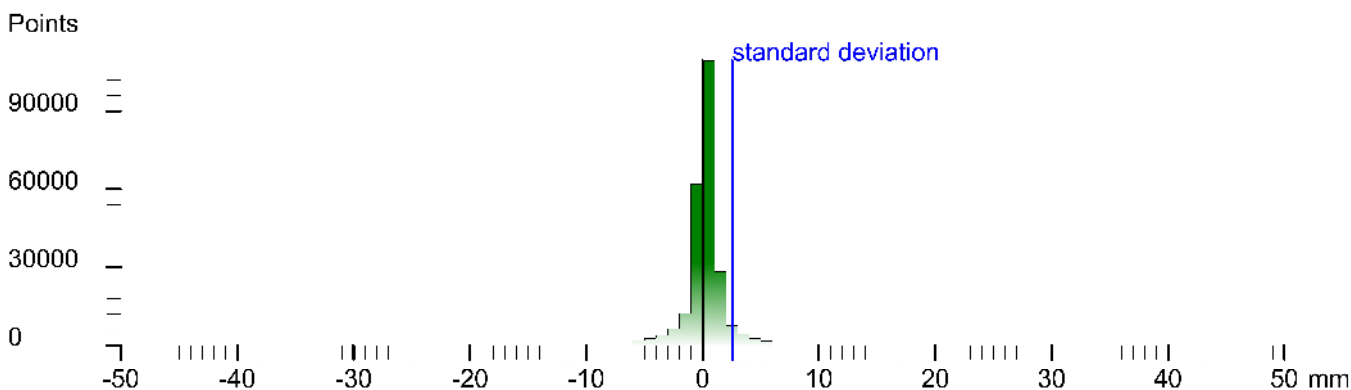
Result registration from 2. Cloud to cloud standard deviation:2.5 mm

## Deviation histogram



Result registration to 4. Cloud to cloud standard deviation:2.5 mm

## Deviation histogram



## Scan 'Hogas Sc. 3'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:08:47 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "3" -file "Hogas Sc. 3" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "f-cam" -panoramaparams fast

Level system info: Level available.

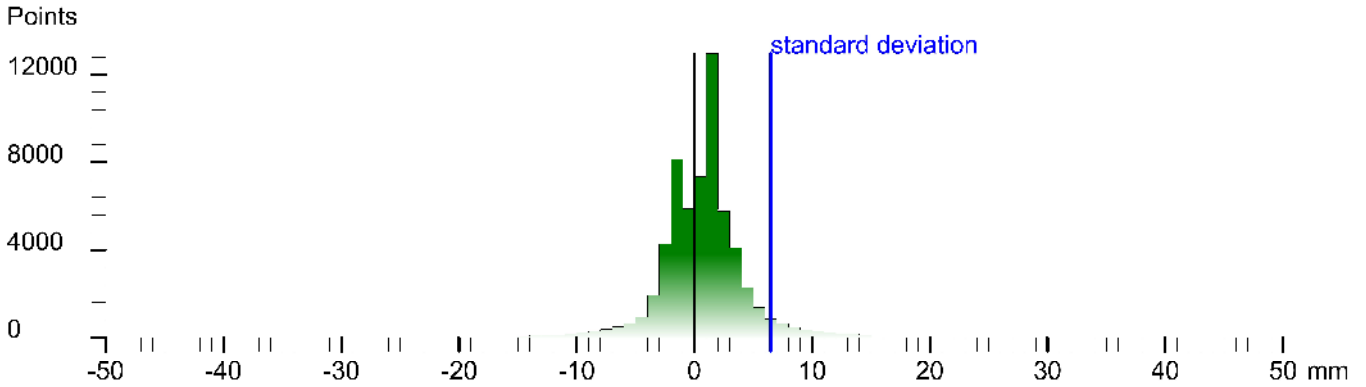
Sun position info: Altitude: 50.513° Azimuth: 153.001° Azimuth to Scan 0 = 188.728°

# Scan position '30'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 17: 7.0 mm

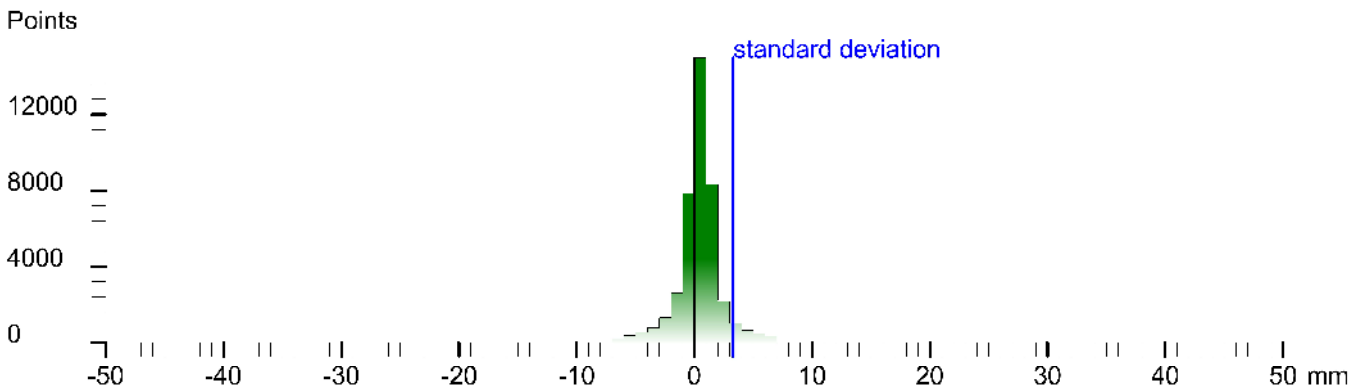
Result registration from 17. Cloud to cloud standard deviation:6.5 mm

## Deviation histogram



Result registration to 31. Cloud to cloud standard deviation:3.3 mm

## Deviation histogram



## Scan 'Hogas Sc. 30'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 14:20:06 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "30" -file "Hogas Sc. 30" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 44.847° Azimuth: 225.547° Azimuth to Scan 0 = 324.413°

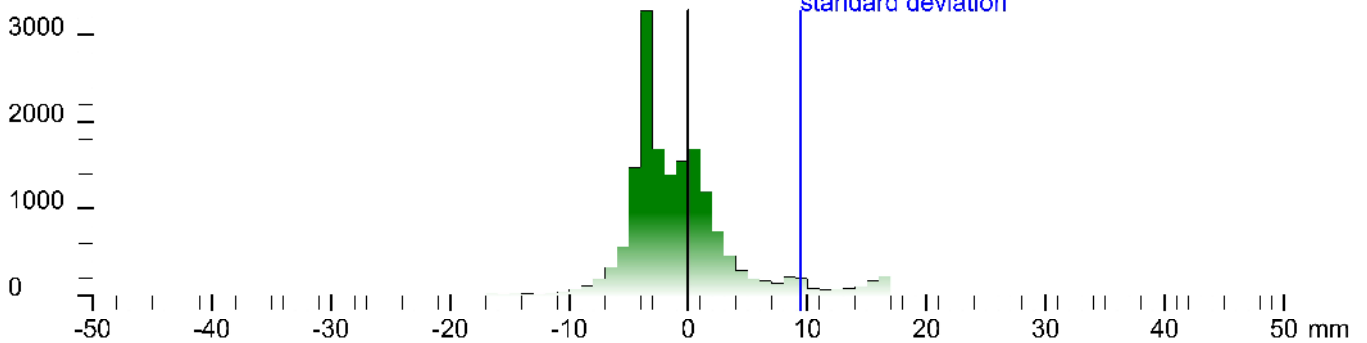
# Scan position '31'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 17: 11.3 mm  
from 30: 6.9 mm  
from 43: 13.3 mm

Result registration from 17. Cloud to cloud standard deviation:9.4 mm

## Deviation histogram

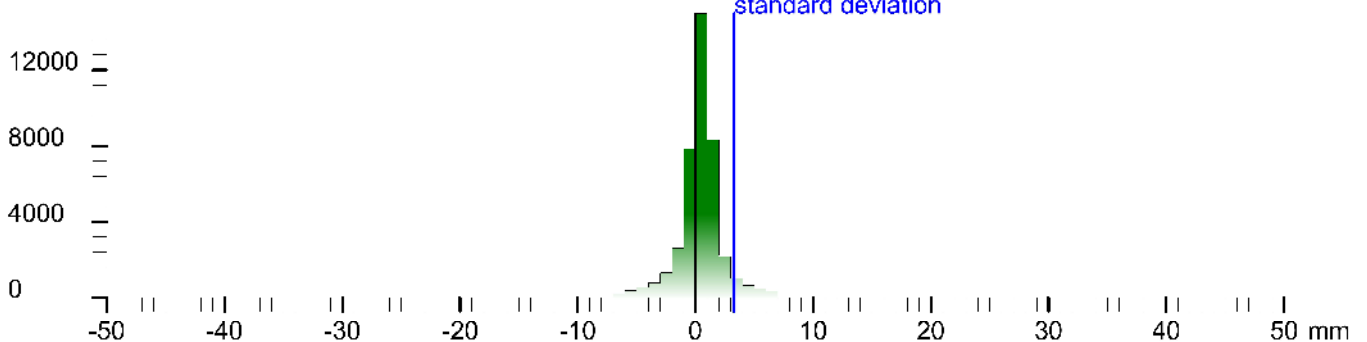
Points



Result registration from 30. Cloud to cloud standard deviation:3.3 mm

## Deviation histogram

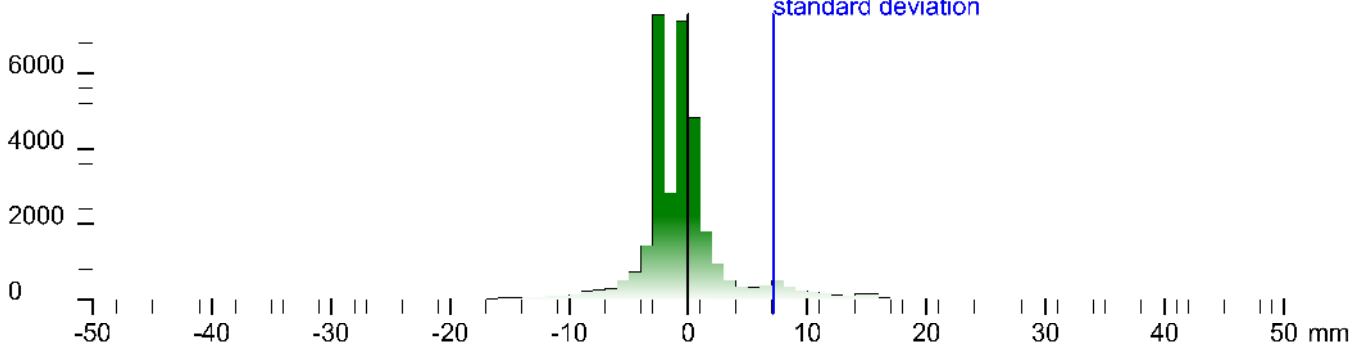
Points



Result registration from 43. Cloud to cloud standard deviation:7.1 mm

## Deviation histogram

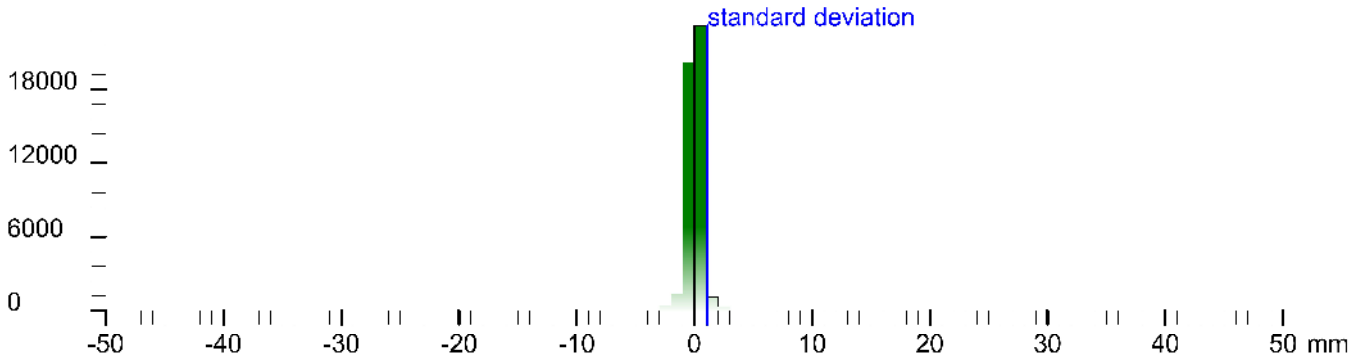
Points



Result registration to 32. Cloud to cloud standard deviation:1.1 mm

### Deviation histogram

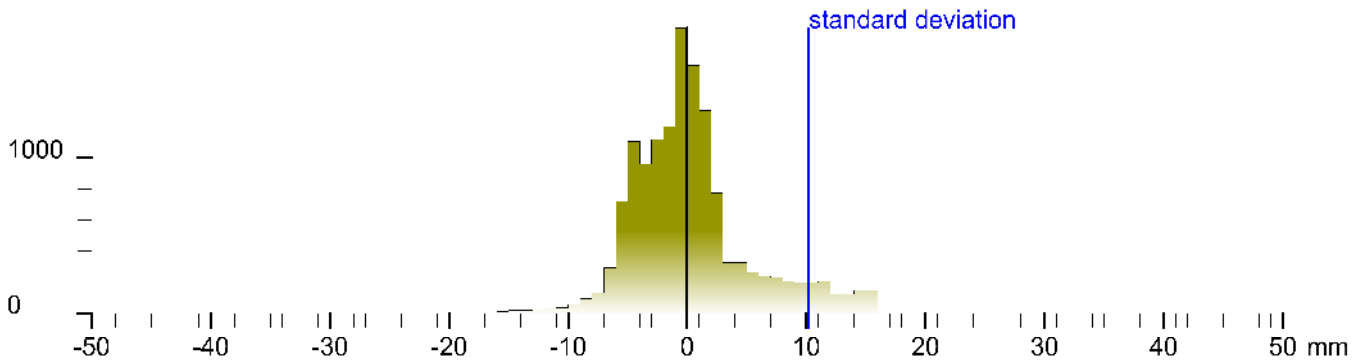
Points



Result registration to 29. Cloud to cloud standard deviation:10.2 mm

### Deviation histogram

Points



### Scan 'Hogas Sc. 31'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'

Laser class of scanner: 1

Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s

Scan taken at 14:29:36 26.08.2024

**Metadata**    **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10,0,1" -memorize 1 -scanpos "31" -file "Hogas Sc. 31" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "f-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

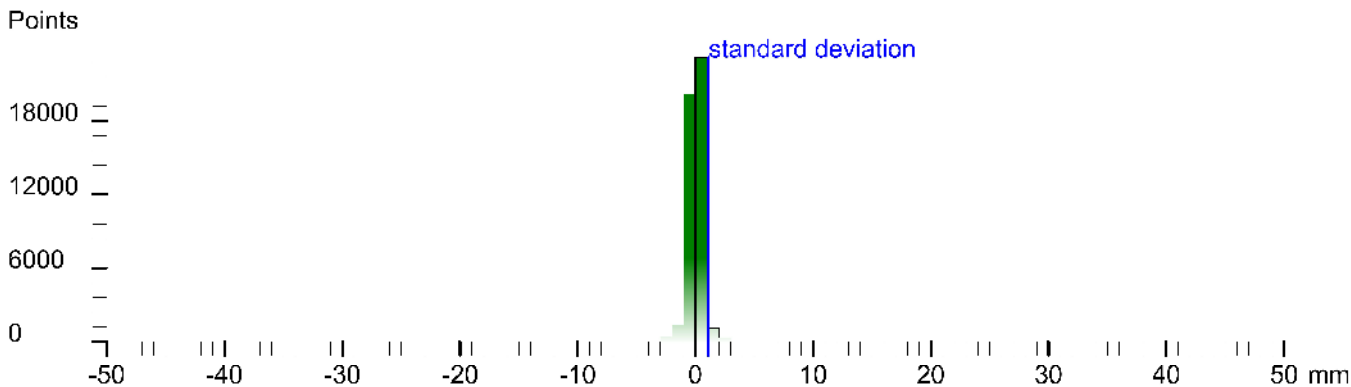
Sun position info: Altitude: 43.724° Azimuth: 228.214° Azimuth to Scan 0 = 199.236°

# Scan position '32'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 31: 1.1 mm

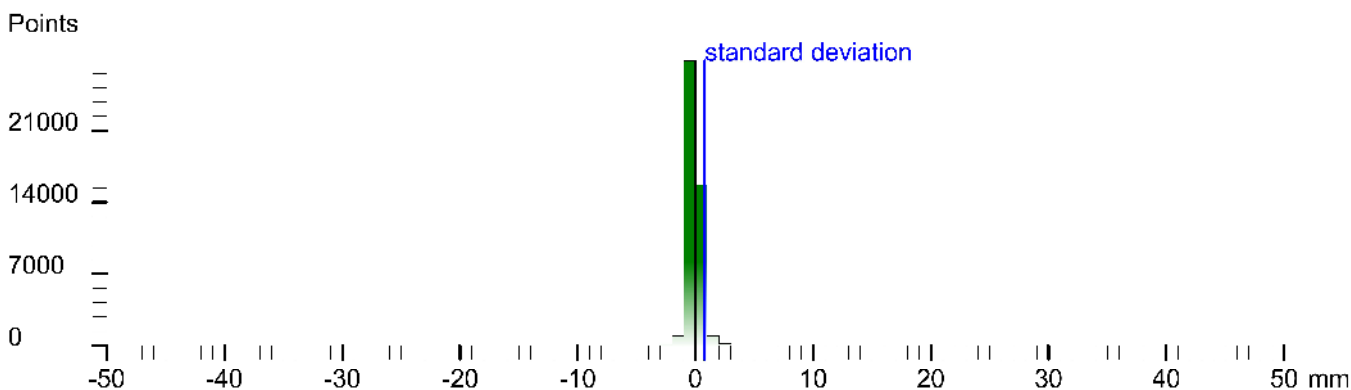
Result registration from 31. Cloud to cloud standard deviation:1.1 mm

## Deviation histogram



Result registration to 33. Cloud to cloud standard deviation:0.8 mm

## Deviation histogram



## Scan 'Hogas Sc. 32'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 14:37:38 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "32" -file "Hogas Sc. 32" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

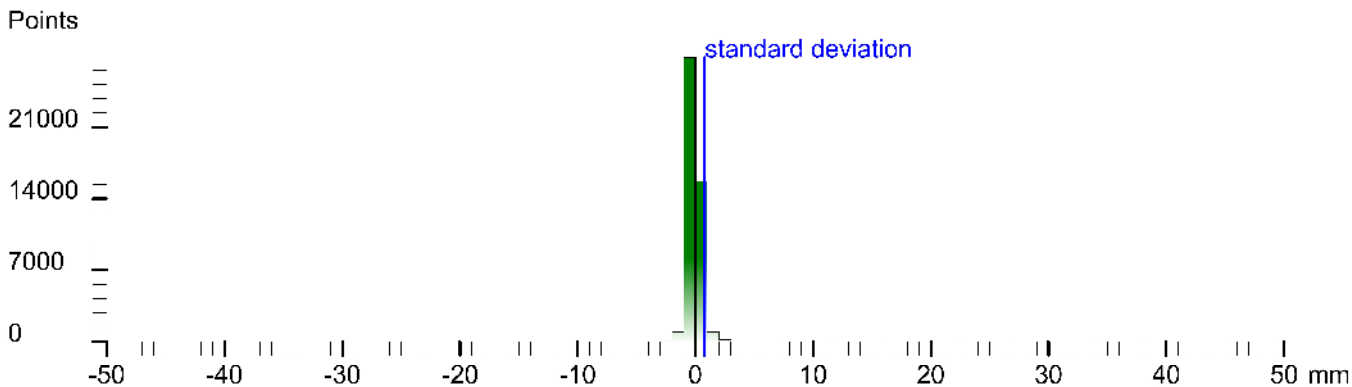
Sun position info: Altitude: 42.686° Azimuth: 230.509° Azimuth to Scan 0 = 204.694°

# Scan position '33'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 32: 0.8 mm

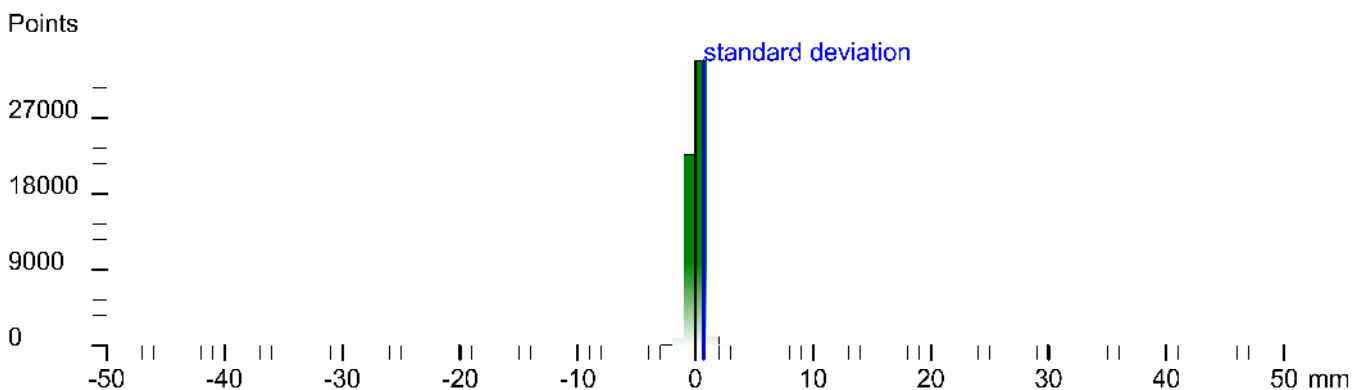
Result registration from 32. Cloud to cloud standard deviation:0.8 mm

## Deviation histogram



Result registration to 34. Cloud to cloud standard deviation:0.7 mm

## Deviation histogram



## Scan 'Hogas Sc. 33'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 14:42:35 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "33" -file "Hogas Sc. 33" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "-i-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 42.020° Azimuth: 231.909° Azimuth to Scan 0 = 103.148°

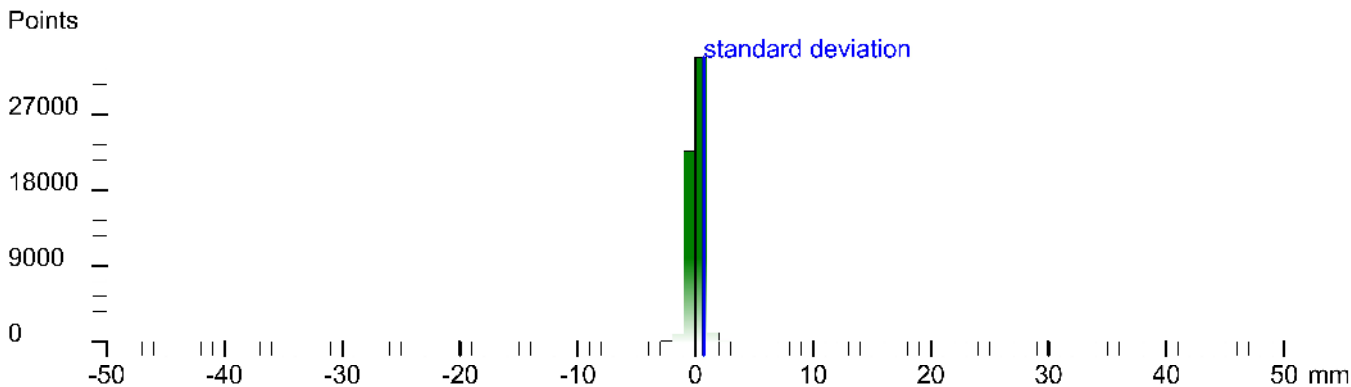


# Scan position '34'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 33: 0.7 mm

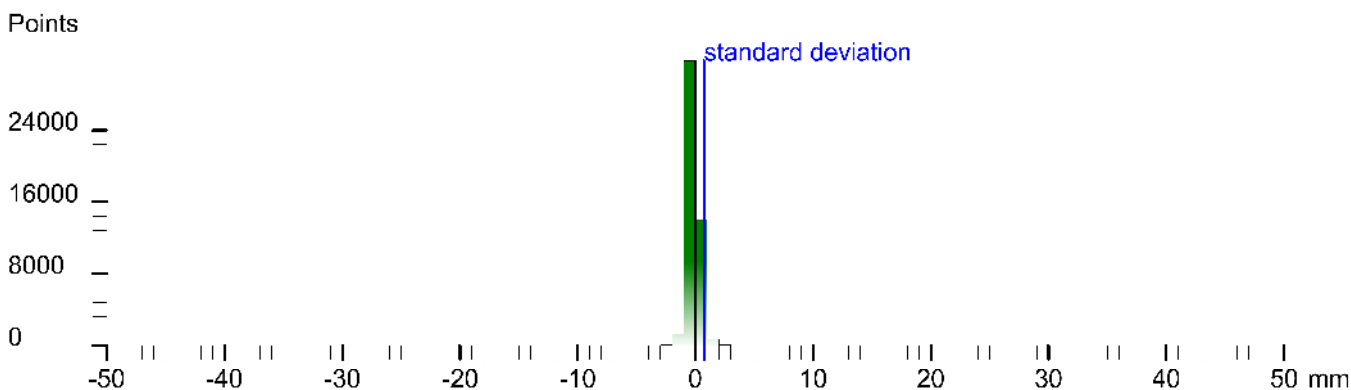
Result registration from 33. Cloud to cloud standard deviation:0.7 mm

## Deviation histogram



Result registration to 35. Cloud to cloud standard deviation:0.7 mm

## Deviation histogram



## Scan 'Hogas Sc. 34'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 14:46:56 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "34" -file "Hogas Sc. 34" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "l-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

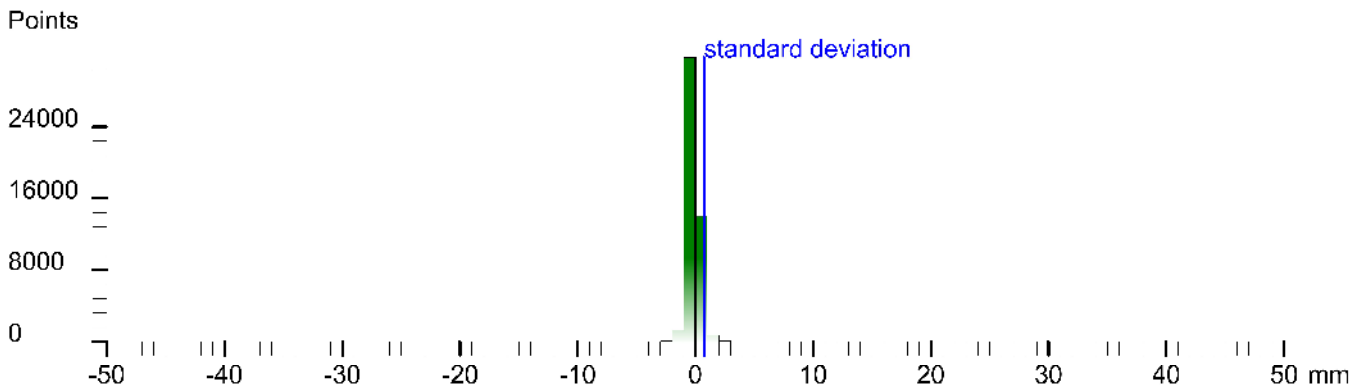
Sun position info: Altitude: 41.478° Azimuth: 233.010° Azimuth to Scan 0 = 365.557°

# Scan position '35'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 34: 0.7 mm

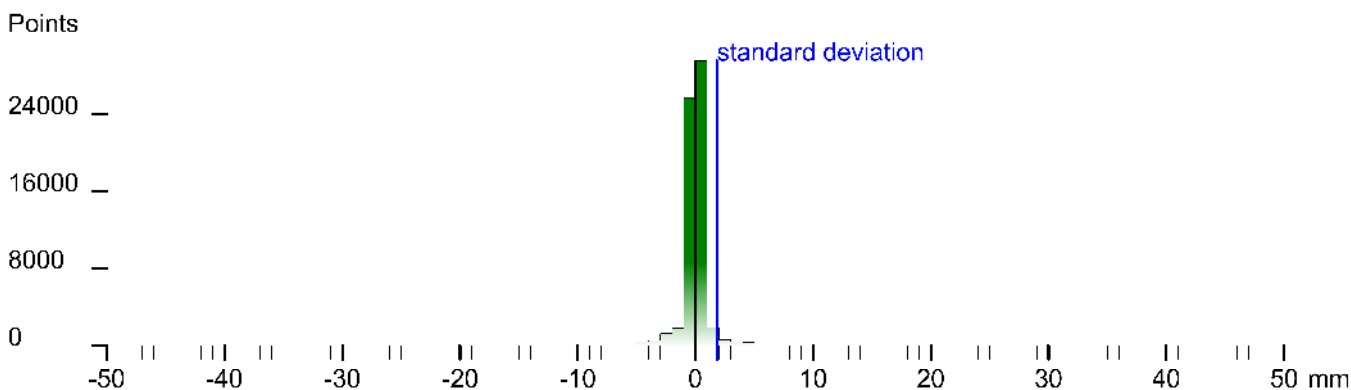
Result registration from 34. Cloud to cloud standard deviation:0.7 mm

## Deviation histogram



Result registration to 36. Cloud to cloud standard deviation:1.8 mm

## Deviation histogram



## Scan 'Hogas Sc. 35'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 14:52:18 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "35" -file "Hogas Sc. 35" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "l-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

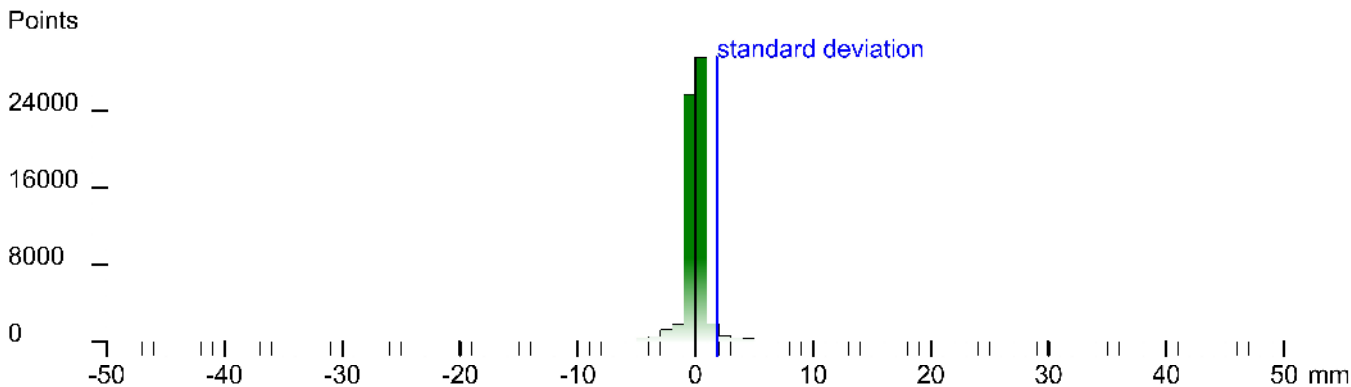
Sun position info: Altitude: 40.650° Azimuth: 234.632° Azimuth to Scan 0 = 372.057°

# Scan position '36'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 35: 1.8 mm

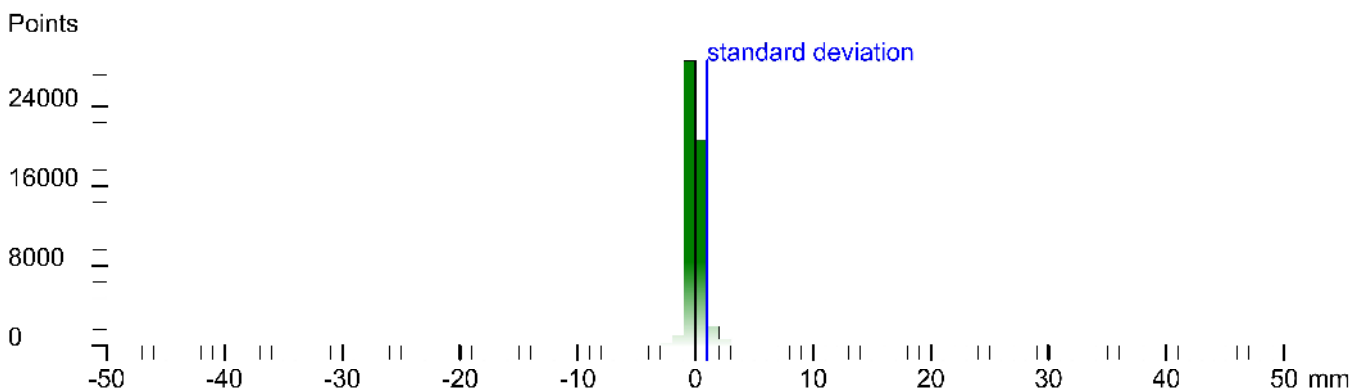
Result registration from 35. Cloud to cloud standard deviation:1.8 mm

## Deviation histogram



Result registration to 37. Cloud to cloud standard deviation:1.0 mm

## Deviation histogram



## Scan 'Hogas Sc. 36'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 14:57:43 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "36" -file "Hogas Sc. 36" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

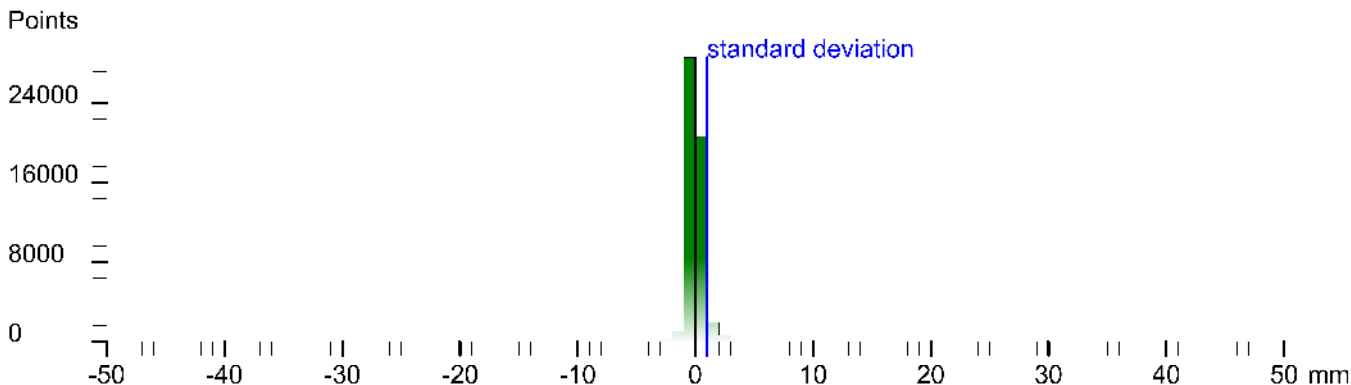
Sun position info: Altitude: 39.948° Azimuth: 235.956° Azimuth to Scan 0 = 199.218°

# Scan position '37'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 36: 1.0 mm

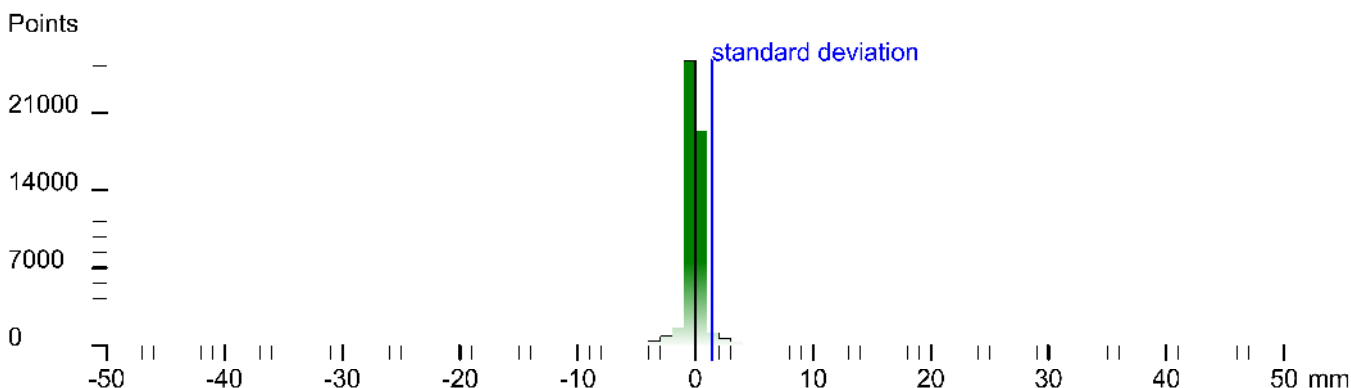
Result registration from 36. Cloud to cloud standard deviation:1.0 mm

## Deviation histogram



Result registration to 38. Cloud to cloud standard deviation:1.4 mm

## Deviation histogram



## Scan 'Hogas Sc. 37'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:02:04 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "37" -file "Hogas Sc. 37" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

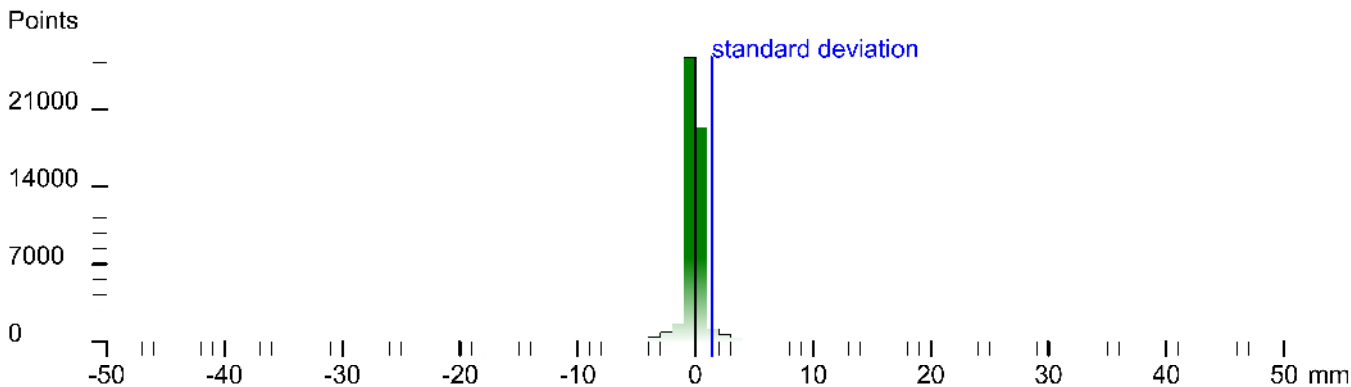
Sun position info: Altitude: 39.235° Azimuth: 237.257° Azimuth to Scan 0 = 311.632°

# Scan position '38'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 37: 1.4 mm

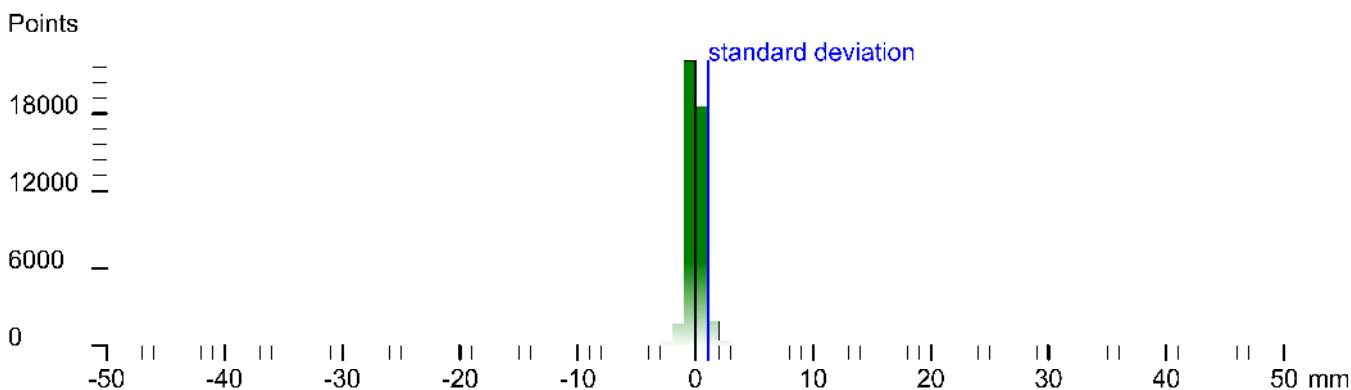
Result registration from 37. Cloud to cloud standard deviation:1.4 mm

## Deviation histogram



Result registration to 39. Cloud to cloud standard deviation:1.1 mm

## Deviation histogram



## Scan 'Hogas Sc. 38'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:07:00 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "38" -file "Hogas Sc. 38" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "l-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

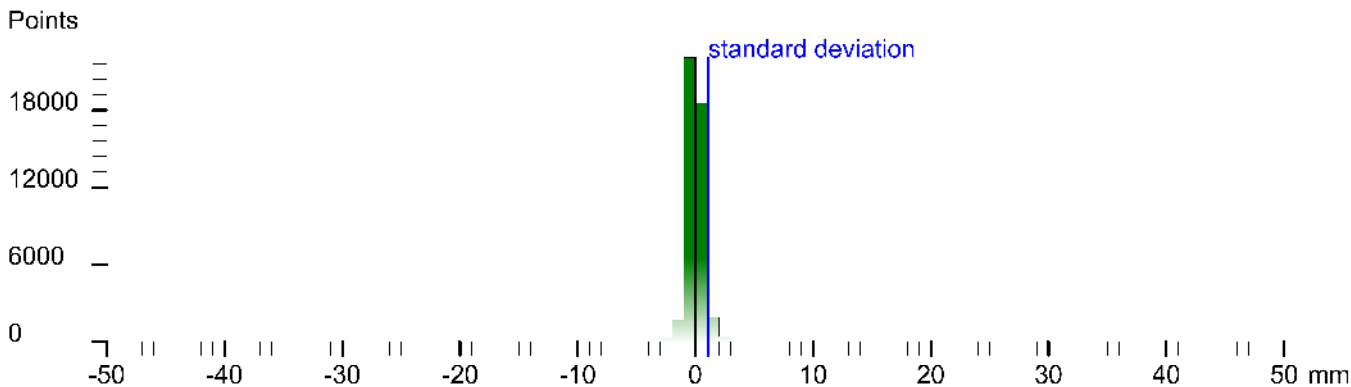
Sun position info: Altitude: 38.511° Azimuth: 238.535° Azimuth to Scan 0 = 292.472°

# Scan position '39'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 38: 1.1 mm

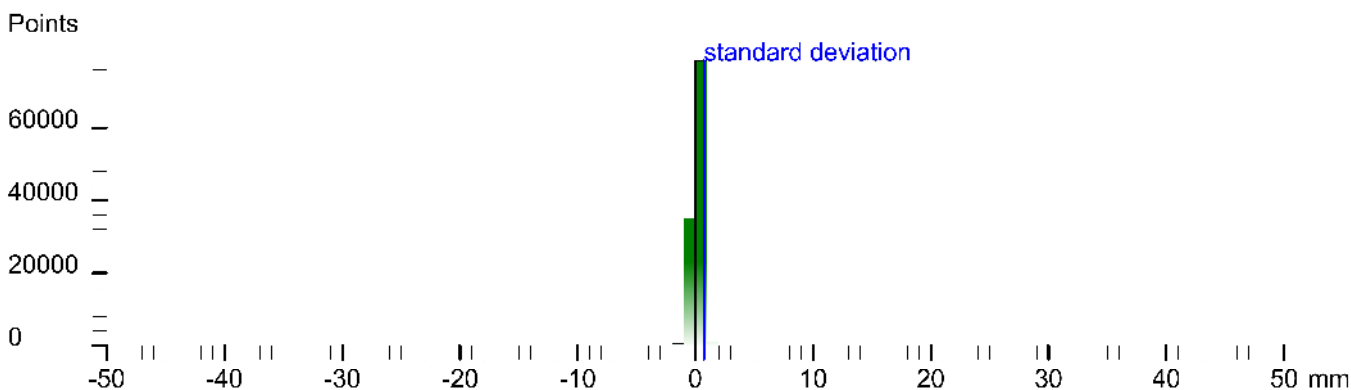
Result registration from 38. Cloud to cloud standard deviation:1.1 mm

## Deviation histogram



Result registration to 40. Cloud to cloud standard deviation:0.7 mm

## Deviation histogram



## Scan 'Hogas Sc. 39'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:11:46 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "39" -file "Hogas Sc. 39" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

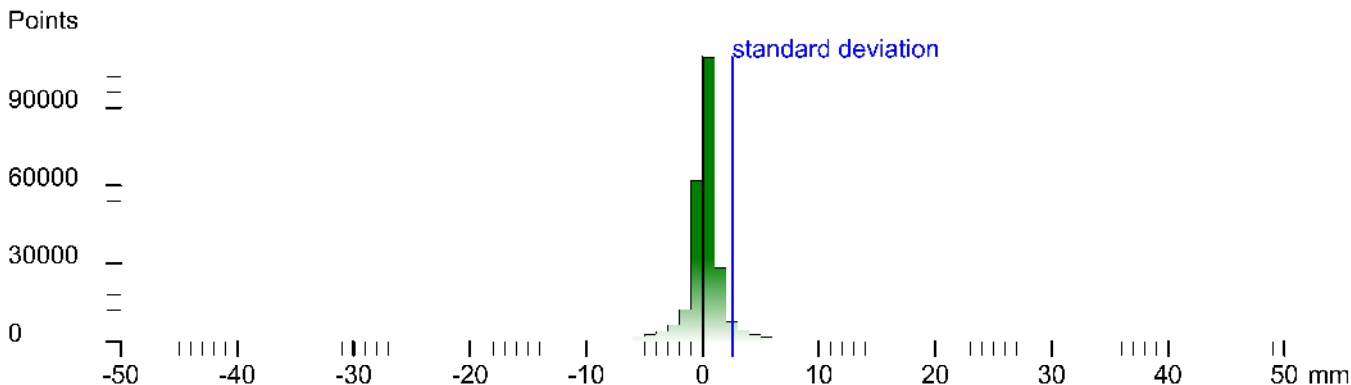
Sun position info: Altitude: 37.925° Azimuth: 239.541° Azimuth to Scan 0 = 299.835°

# Scan position '4'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 3: 2.7 mm

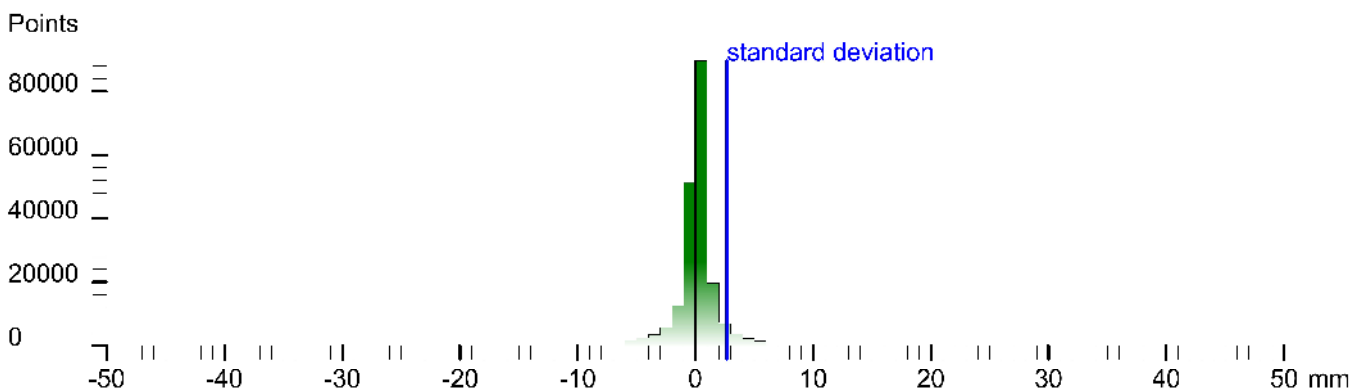
Result registration from 3. Cloud to cloud standard deviation:2.5 mm

## Deviation histogram



Result registration to 5. Cloud to cloud standard deviation:2.7 mm

## Deviation histogram



## Scan 'Hogas Sc. 4'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:15:11 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "4" -file "Hogas Sc. 4" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "f-cam" -panoramaparams fast

Level system info: Level available.

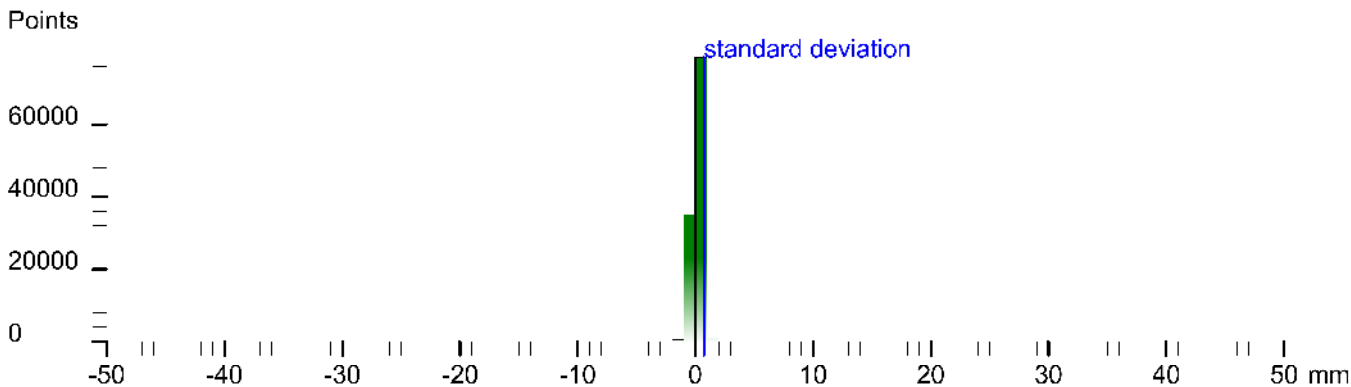
Sun position info: Altitude: 51.030° Azimuth: 155.599° Azimuth to Scan 0 = 196.268°

# Scan position '40'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 39: 0.7 mm

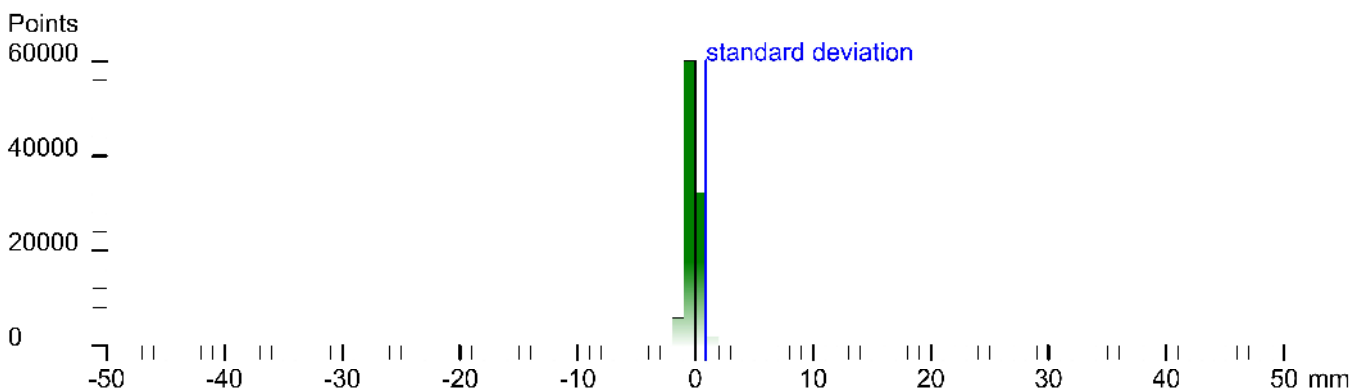
Result registration from 39. Cloud to cloud standard deviation:0.7 mm

## Deviation histogram



Result registration to 41. Cloud to cloud standard deviation:0.9 mm

## Deviation histogram



## Scan 'Hogas Sc. 40'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:16:50 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "40" -file "Hogas Sc. 40" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 37.184° Azimuth: 240.780° Azimuth to Scan 0 = 183.468°

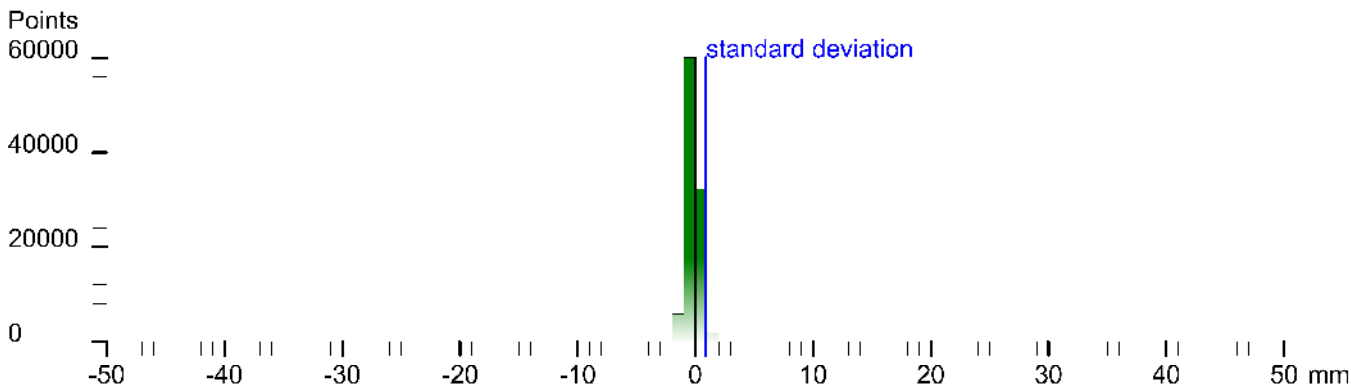


# Scan position '41'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 40: 0.9 mm

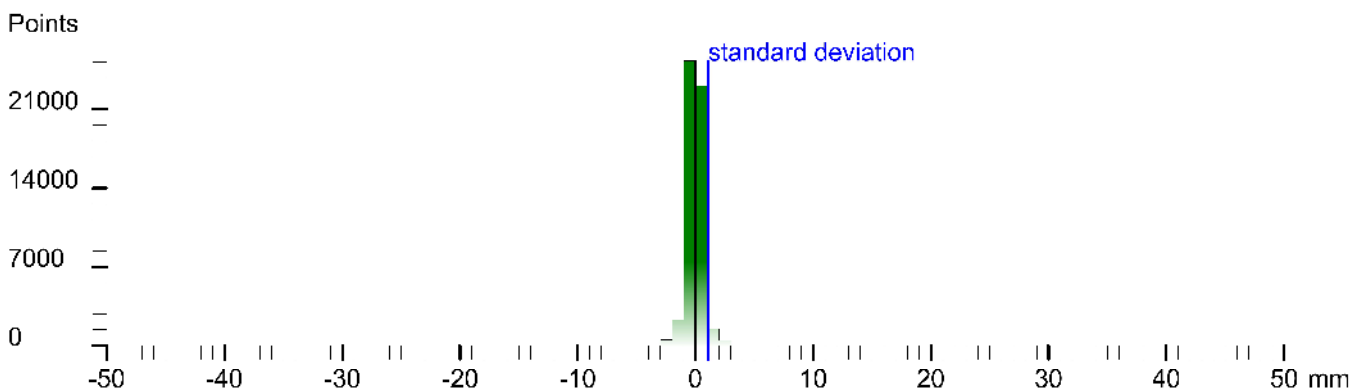
Result registration from 40. Cloud to cloud standard deviation:0.9 mm

## Deviation histogram



Result registration to 42. Cloud to cloud standard deviation:1.1 mm

## Deviation histogram



## Scan 'Hogas Sc. 41'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:21:43 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "41" -file "Hogas Sc. 41" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camora "-l-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

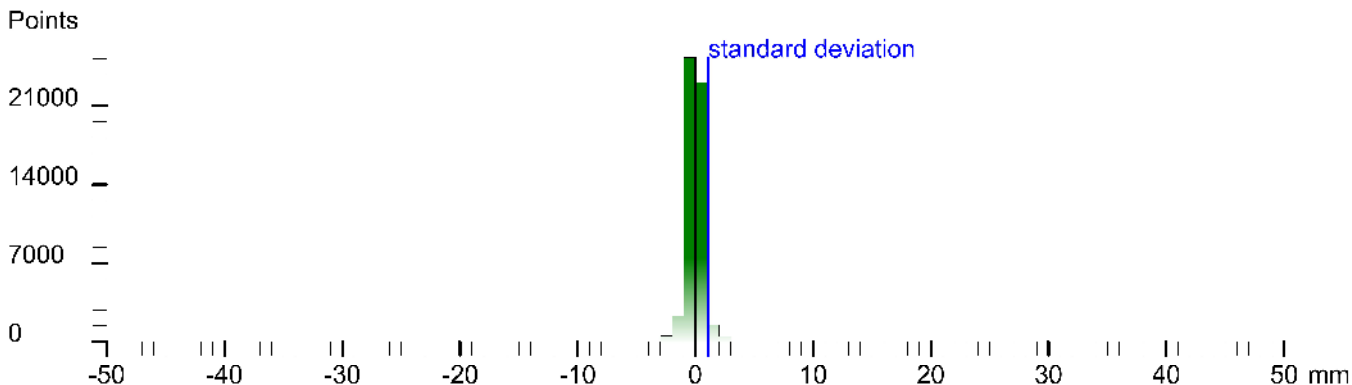
Sun position info: Altitude: 36.434° Azimuth: 241.998° Azimuth to Scan 0 = 209.271°

# Scan position '42'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 41: 1.1 mm

Result registration from 41. Cloud to cloud standard deviation:1.1 mm

## Deviation histogram



## Scan 'Hogas Sc. 42'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:25:54 26.08.2024

**Metadata**    **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "42" -file "Hogas Sc. 42" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "l-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 35.828° Azimuth: 242.958° Azimuth to Scan 0 = 111.064°

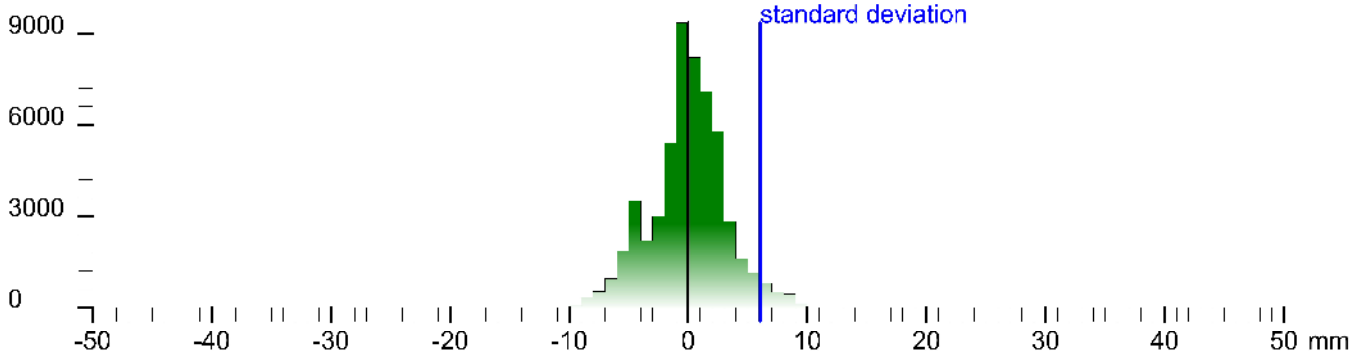
# Scan position '43'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 29: 8.4 mm  
from 44: 7.2 mm

Result registration from 29. Cloud to cloud standard deviation:6.0 mm

## Deviation histogram

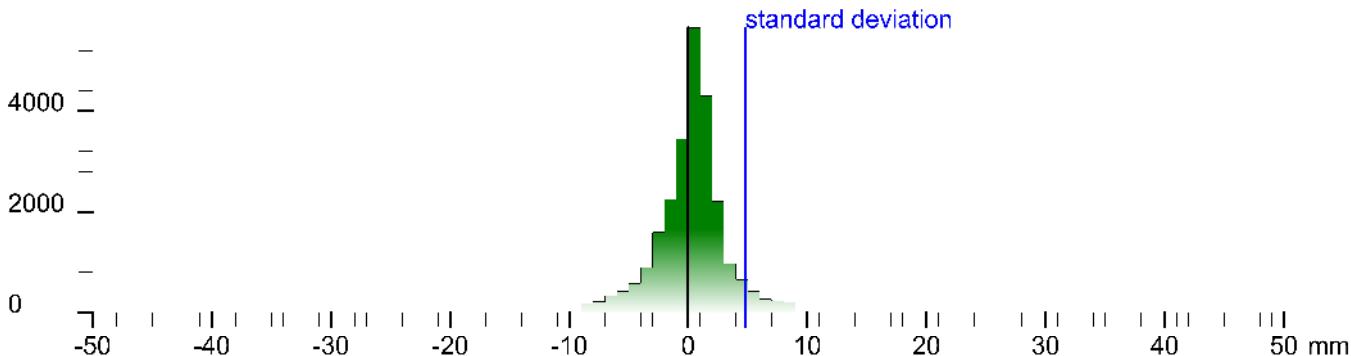
Points



Result registration from 44. Cloud to cloud standard deviation:4.8 mm

## Deviation histogram

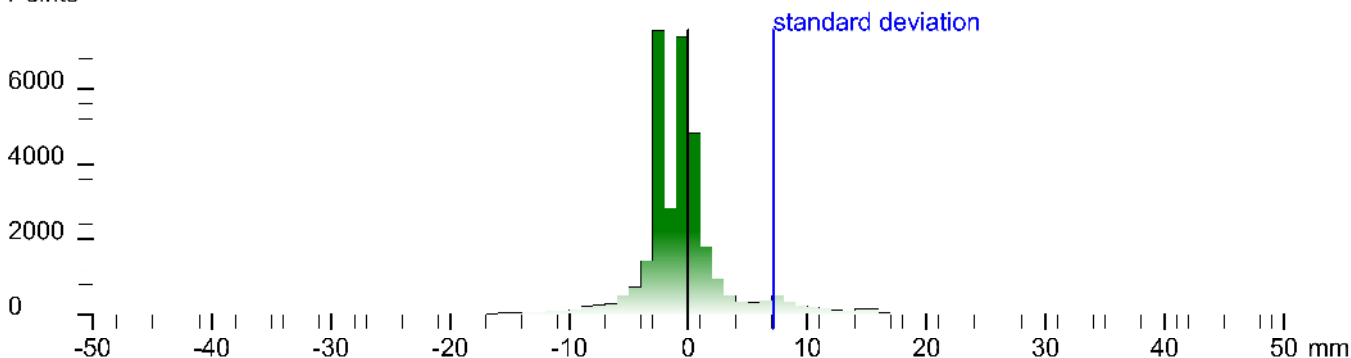
Points



Result registration to 31. Cloud to cloud standard deviation:7.1 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 43'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:36:42 26.08.2024

**Metadata** **Value**  
**comment**

## operator

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "43" -file "Hogas Sc. 43" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "l-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 34.136° Azimuth: 245.536° Azimuth to Scan 0 = 360.733°

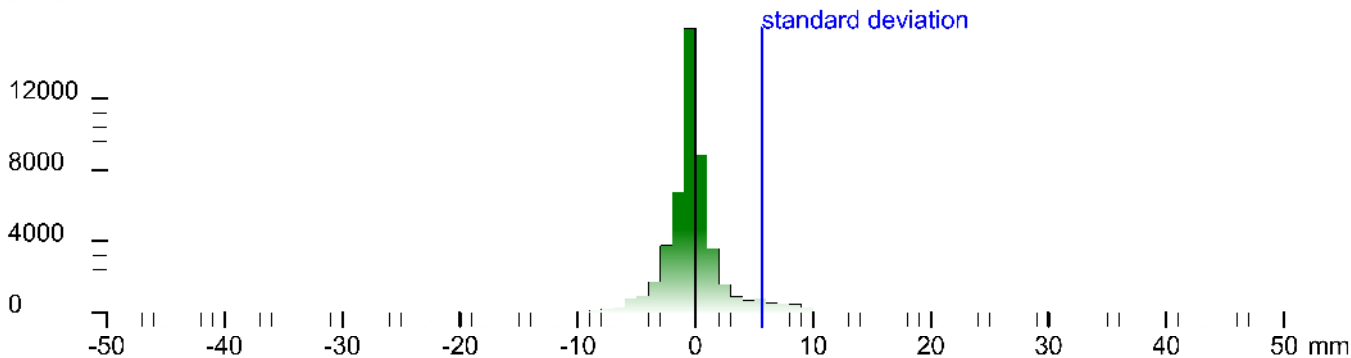
# Scan position '44'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 17: 5.8 mm

Result registration from 17. Cloud to cloud standard deviation:5.6 mm

## Deviation histogram

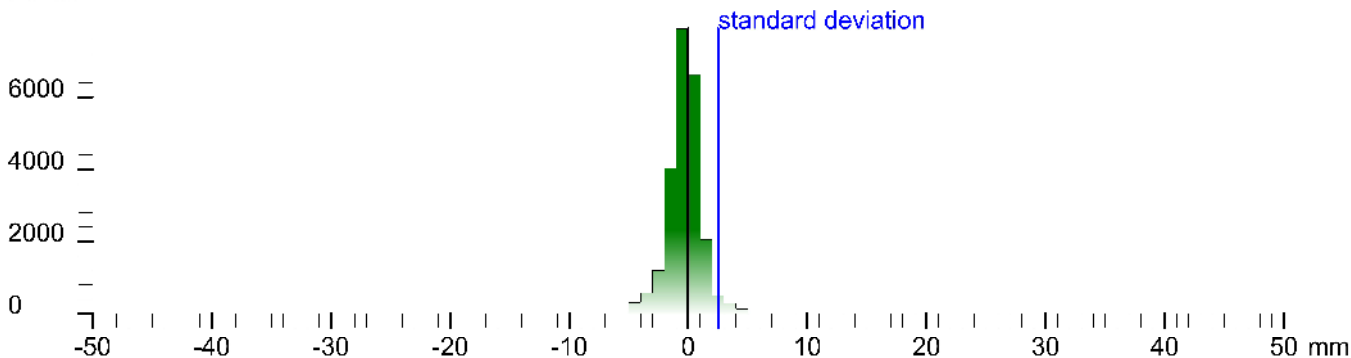
Points



Result registration to 45. Cloud to cloud standard deviation:2.5 mm

## Deviation histogram

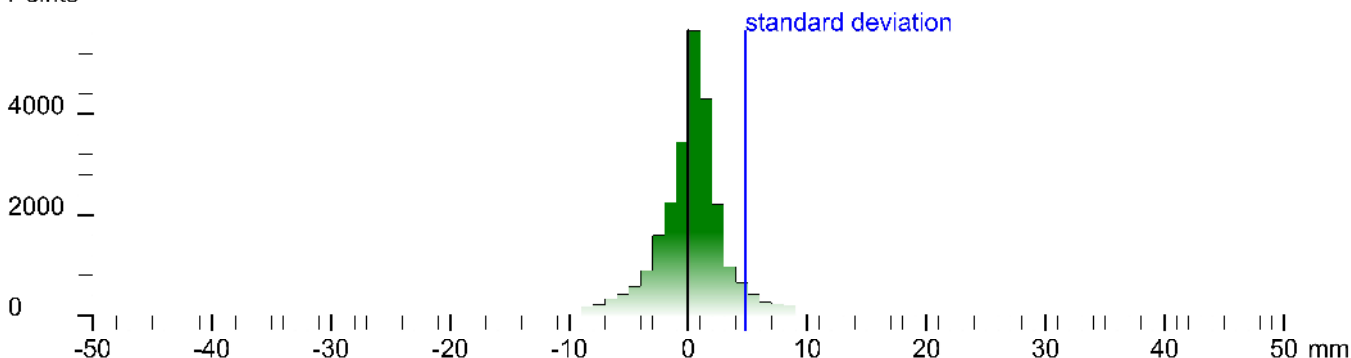
Points



Result registration to 43. Cloud to cloud standard deviation:4.8 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 44'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:42:42 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "44" -file "Hogas Sc. 44" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 33.198° Azimuth: 246.906° Azimuth to Scan 0 = 356.674°

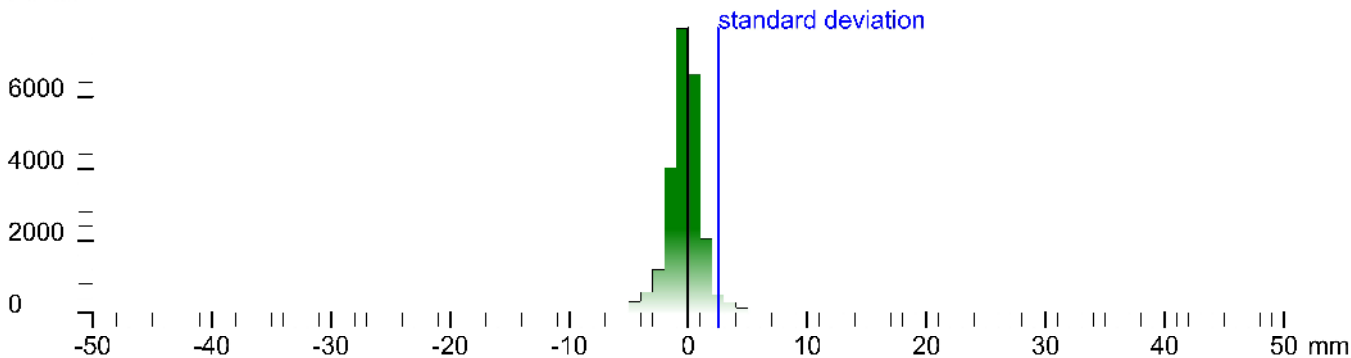
# Scan position '45'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 44: 2.5 mm

Result registration from 44. Cloud to cloud standard deviation:2.5 mm

## Deviation histogram

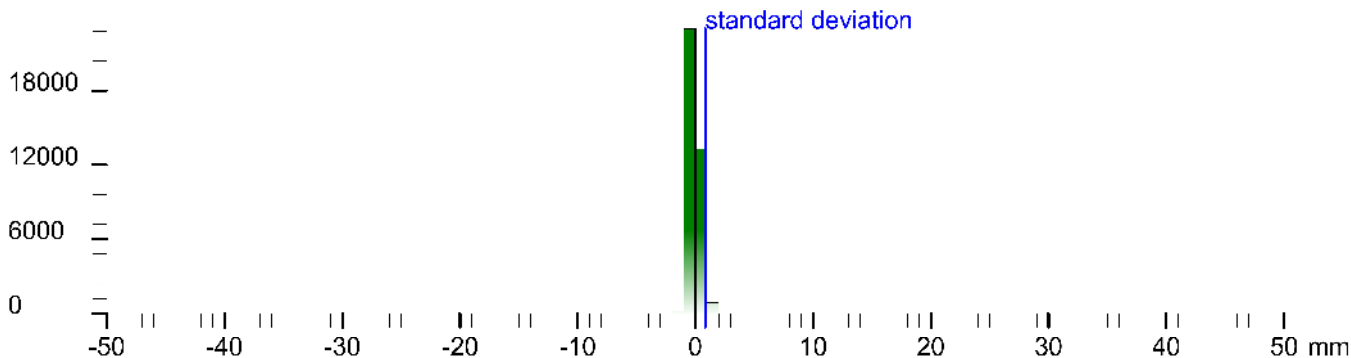
Points



Result registration to 46. Cloud to cloud standard deviation:0.8 mm

## Deviation histogram

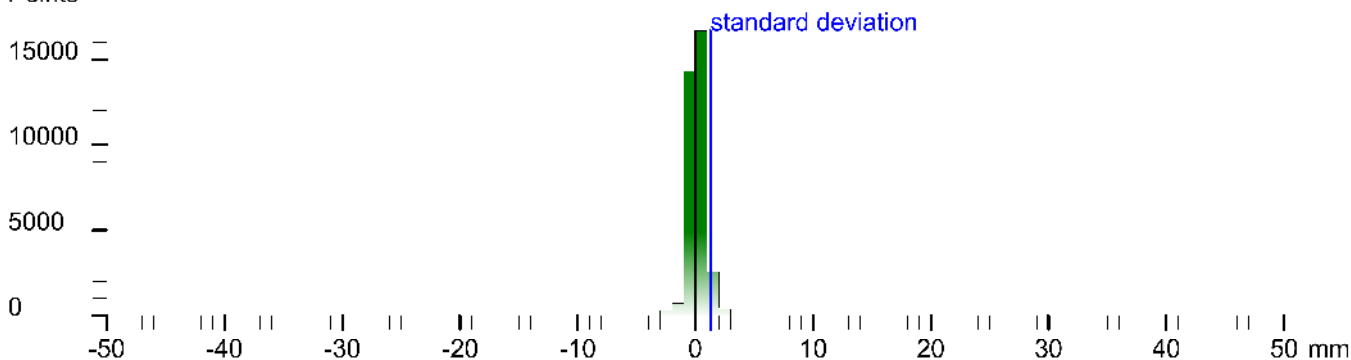
Points



Result registration to 47. Cloud to cloud standard deviation:1.3 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 45'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:47:37 26.08.2024

**Metadata**    **Value**  
**comment**  
**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "45" -file "Hogas Sc. 45" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 32.409° Azimuth: 248.029° Azimuth to Scan 0 = 271.140°

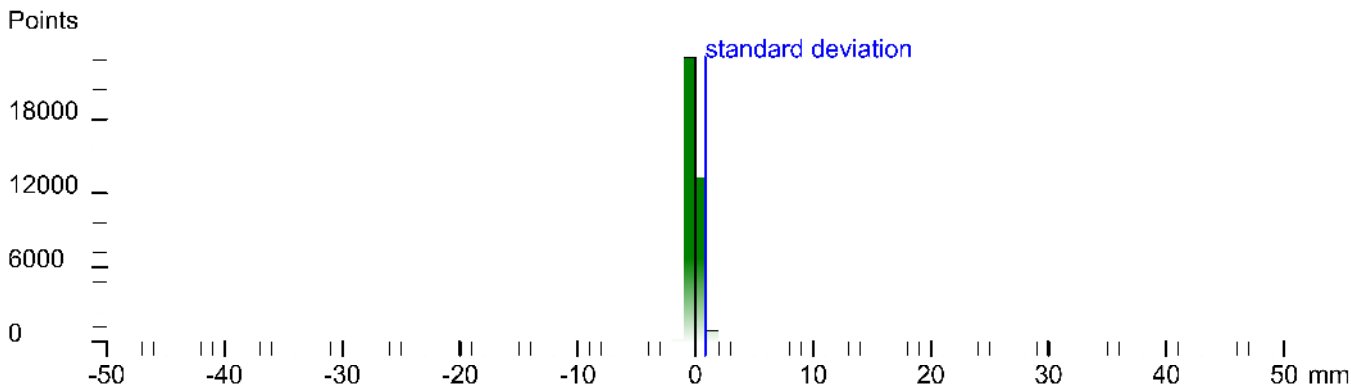


# Scan position '46'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 45: 0.8 mm

Result registration from 45. Cloud to cloud standard deviation:0.8 mm

## Deviation histogram



## Scan 'Hogas Sc. 46'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'Middle' Quality:'Balanced' Pixel distance:12.6mm @ 10m Data rate:136719pts/s  
Scan taken at 15:51:49 26.08.2024

**Metadata**    **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "46" -file "Hogas Sc. 46" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

Sun position info: Altitude: 31.774° Azimuth: 248.916° Azimuth to Scan 0 = 370.339°

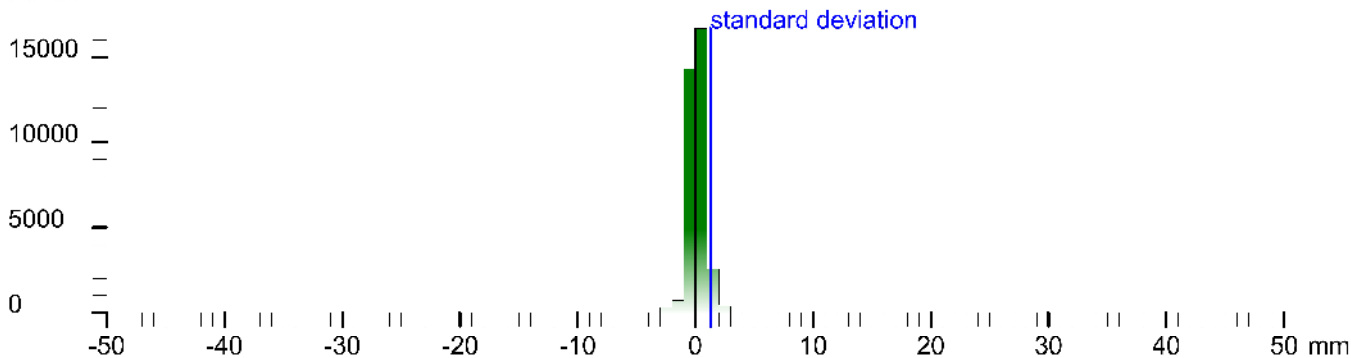
# Scan position '47'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 45: 1.3 mm

Result registration from 45. Cloud to cloud standard deviation: 1.3 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 47'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution: 'Middle' Quality: 'Balanced' Pixel distance: 12.6mm @ 10m Data rate: 136719pts/s  
Scan taken at 15:56:41 26.08.2024

**Metadata**    **Value**

**comment**

**operator**

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "47" -file "Hogas Sc. 47" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -nav -temperature "20.5" -resolution m -quality n -lfrom "0" -lto "181" -lfrom1 "20" -lto1 "340" -camera "l-cam" -panoramaparams fast

Level system info: No information about the level system stored in the ZFS header.

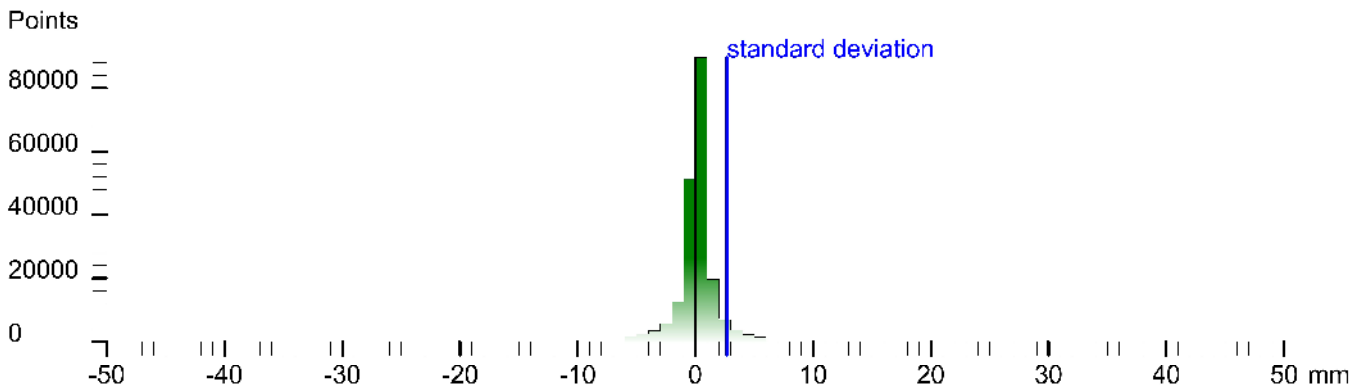
Sun position info: Altitude: 30.974° Azimuth: 250.011° Azimuth to Scan 0 = 201.098°

# Scan position '5'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 4: 2.7 mm

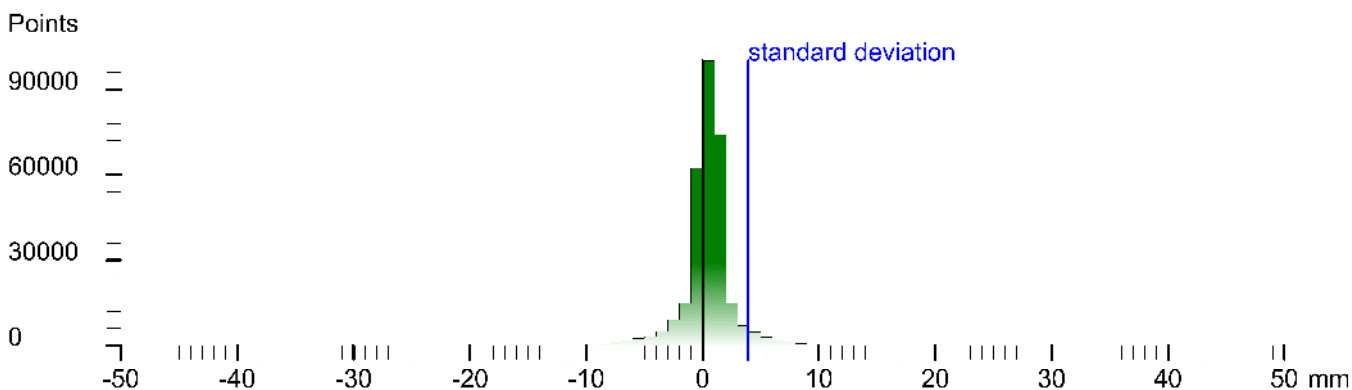
Result registration from 4. Cloud to cloud standard deviation:2.7 mm

## Deviation histogram



Result registration to 6. Cloud to cloud standard deviation:3.9 mm

## Deviation histogram



## Scan 'Hogas Sc. 5'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:22:18 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "5" -file "Hogas Sc. 5" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "f-cam" -panoramaparams fast

Level system info: Level available.

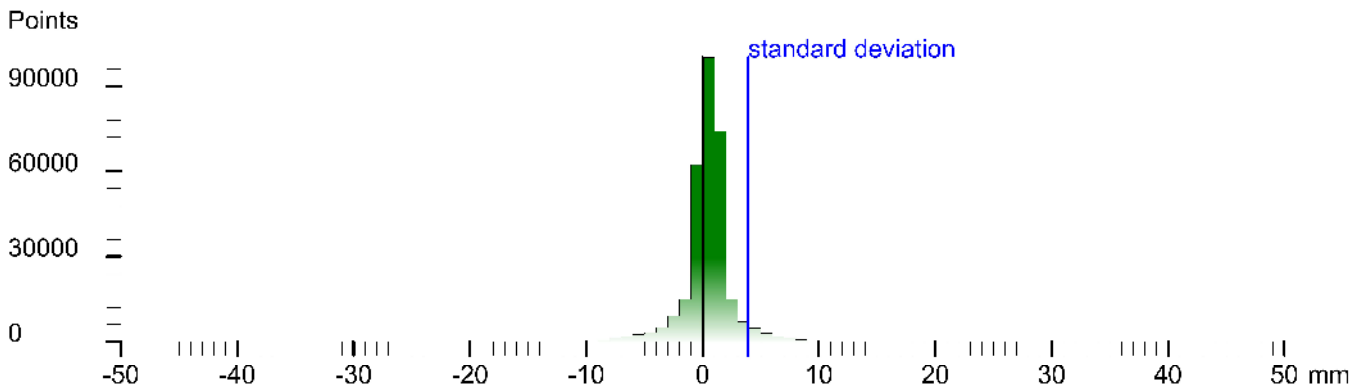
Sun position info: Altitude: 51.496° Azimuth: 158.249° Azimuth to Scan 0 = 201.014°

# Scan position '6'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 5: 3.9 mm

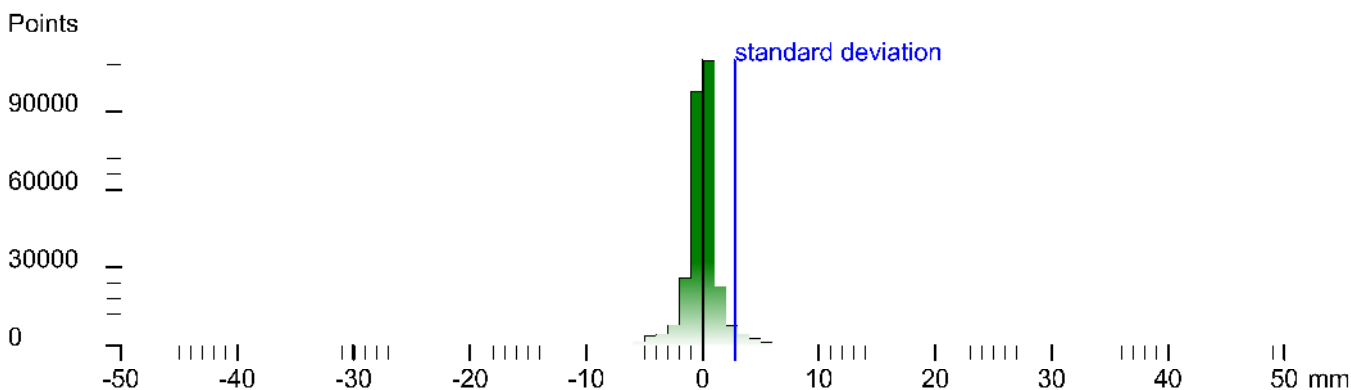
Result registration from 5. Cloud to cloud standard deviation:3.9 mm

## Deviation histogram



Result registration to 7. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram



## Scan 'Hogas Sc. 6'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:28:35 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "6" -file "Hogas Sc. 6" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "f-cam" -panoramaparams fast

Level system info: Level available.

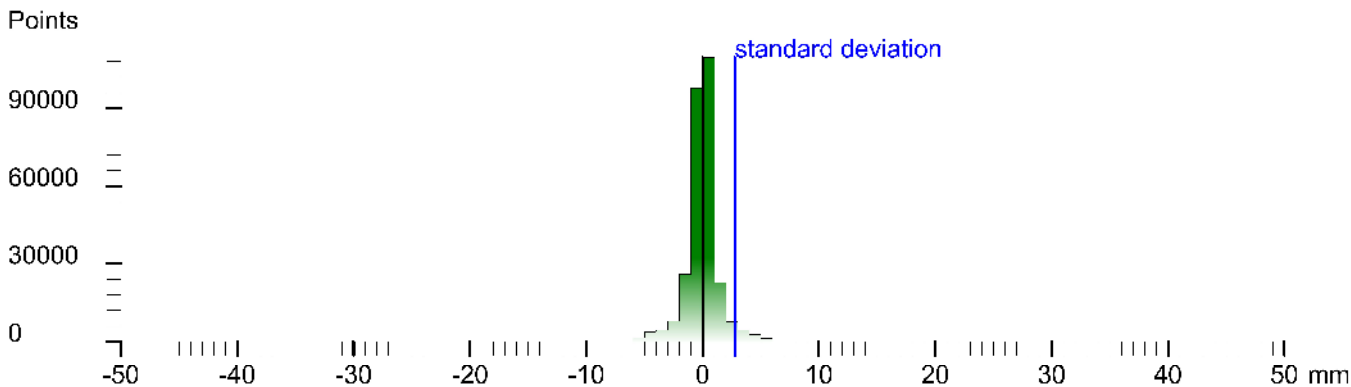
Sun position info: Altitude: 51.855° Azimuth: 160.558° Azimuth to Scan 0 = 200.562°

# Scan position '7'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 6: 2.9 mm

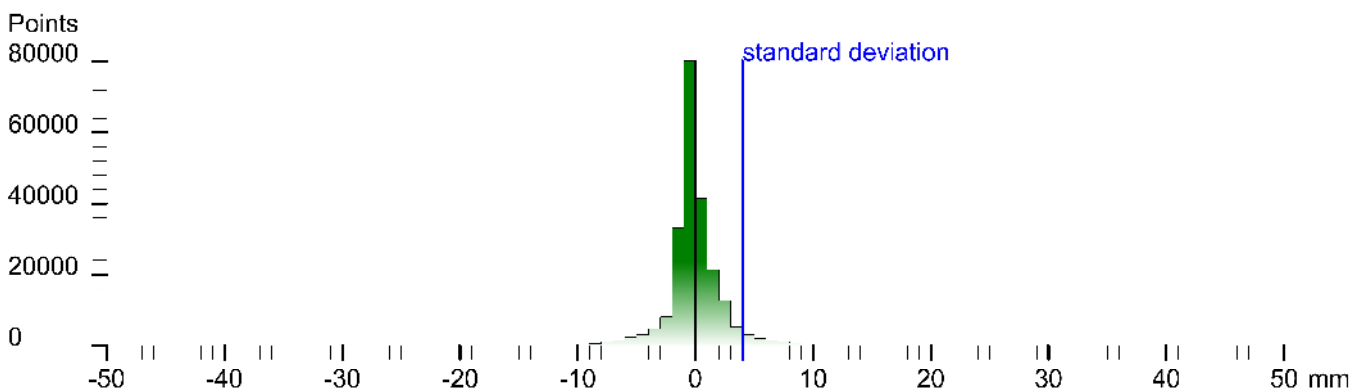
Result registration from 6. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram



Result registration to 8. Cloud to cloud standard deviation:4.0 mm

## Deviation histogram



## Scan 'Hogas Sc. 7'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:35:24 26.08.2024

Metadata	Value
comment	
operator	

Outside temperature: 20.5 deg

Scan command: -clrf "LRCServer 10.0.1" -memorize 1 -scanpos "7" -file "Hogas Sc. 7" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "f-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 52.224° Azimuth: 163.293° Azimuth to Scan 0 = 275.713°

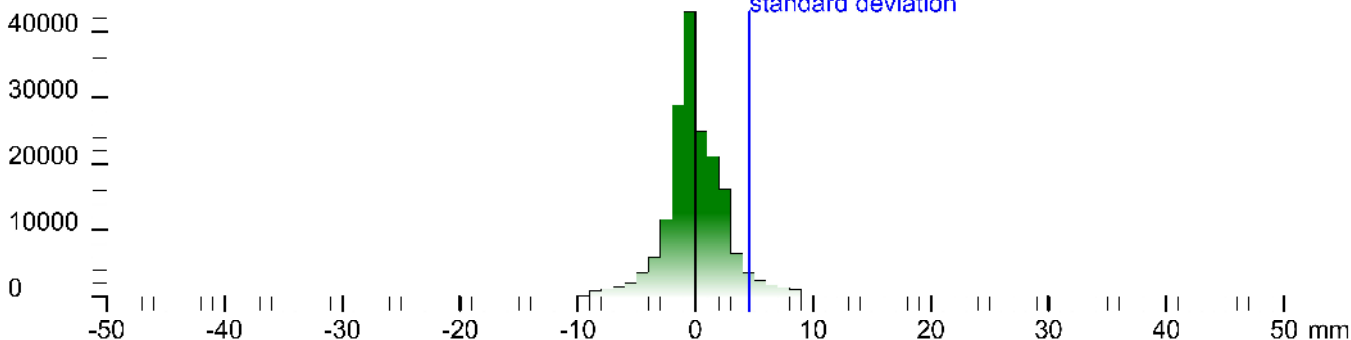
# Scan position '8'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 27: 4.3 mm  
from 7: 4.2 mm

Result registration from 27. Cloud to cloud standard deviation:4.6 mm

## Deviation histogram

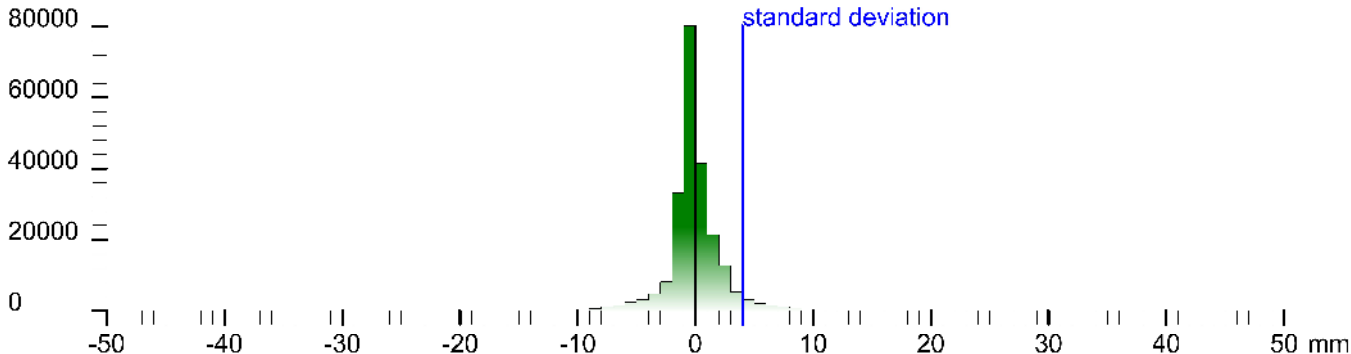
Points



Result registration from 7. Cloud to cloud standard deviation:4.0 mm

## Deviation histogram

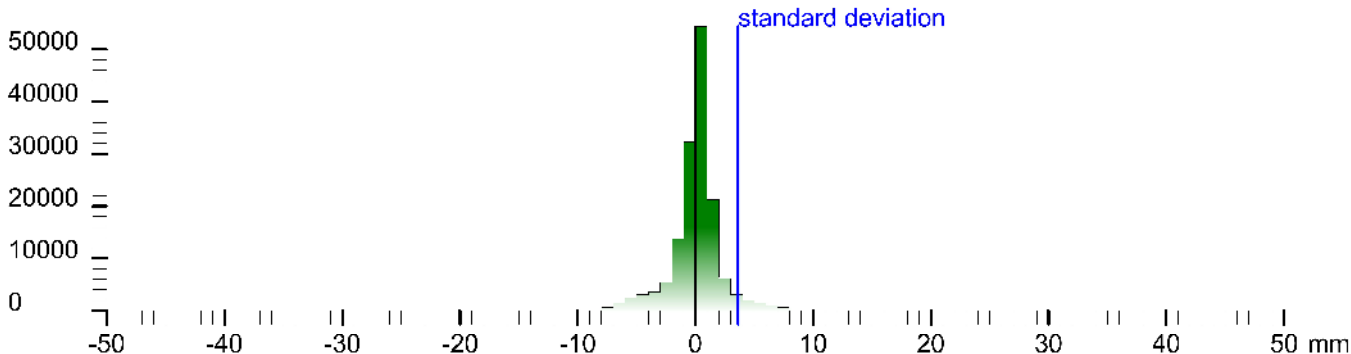
Points



Result registration to 9. Cloud to cloud standard deviation:3.6 mm

## Deviation histogram

Points



## Scan 'Hogas Sc. 8'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:42:06 26.08.2024  
[Metadata](#) [Value](#)  
comment

## operator

Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "8" -file "Hogas Sc. 8" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -ffrom "0" -lto "181" -hfrom1 "20" -hto1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

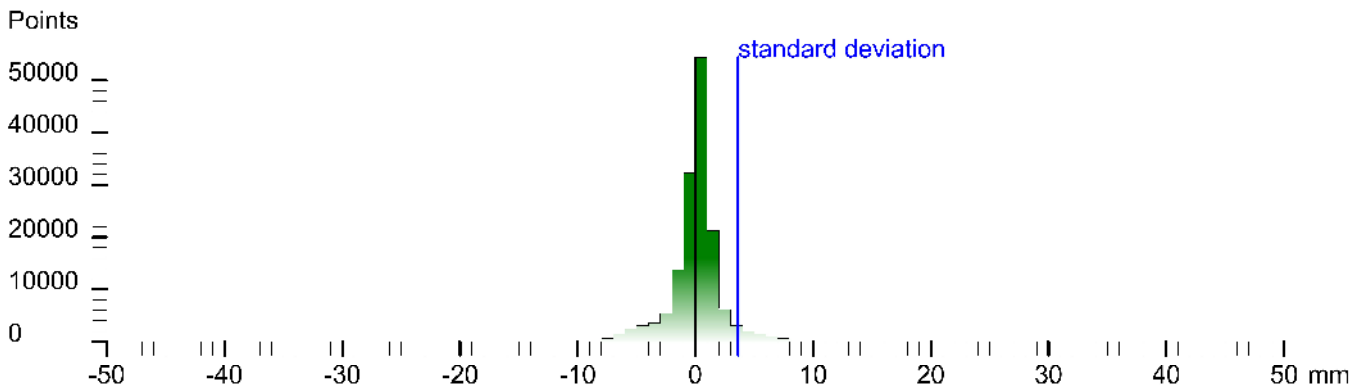
Sun position info: Altitude: 52.538° Azimuth: 166.068° Azimuth to Scan 0 = 278.616°

# Scan position '9'

Scan position is member of group(s):  
Status registration 'registered with bundleadjustment with cloud to cloud'  
Optimized  
Connection standard deviation  
from 8: 4.1 mm

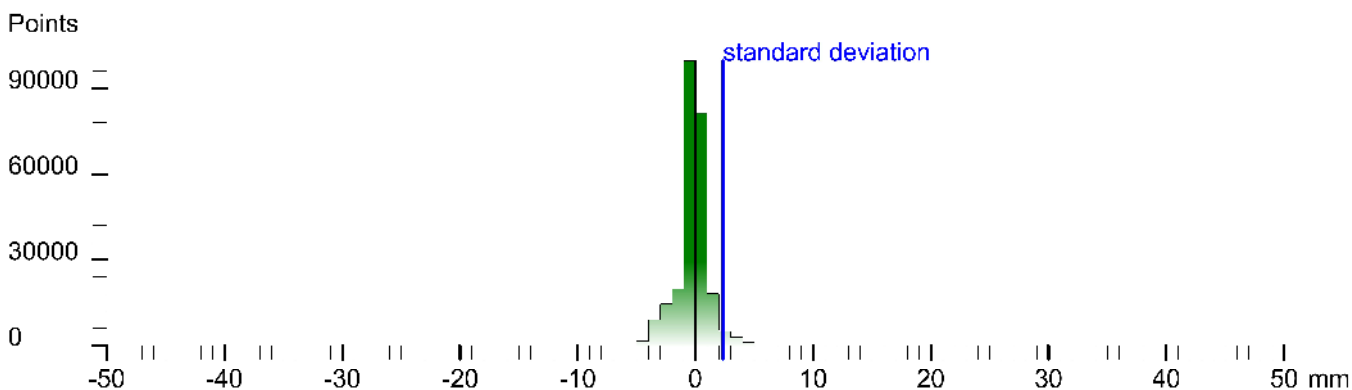
Result registration from 8. Cloud to cloud standard deviation:3.6 mm

## Deviation histogram



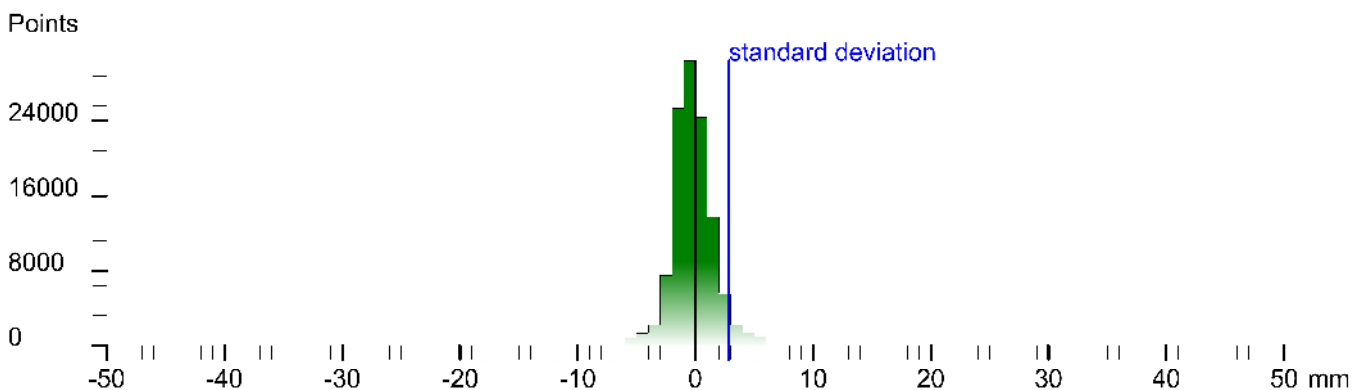
Result registration to 10. Cloud to cloud standard deviation:2.3 mm

## Deviation histogram



Result registration to 13. Cloud to cloud standard deviation:2.8 mm

## Deviation histogram



## Scan 'Hogas Sc. 9'

Scanner 'Z+F IMAGER 5016' serial number '5016-0100'  
Laser class of scanner: 1  
Scan resolution:'High' Quality:'Balanced' Pixel distance:6.3mm @ 10m Data rate:273438pts/s  
Scan taken at 11:49:12 26.08.2024

Metadata Value  
comment  
operator



Outside temperature: 20.5 deg

Scan command: -ctrl "LRCServer 10.0.1" -memorize 1 -scanpos "9" -file "Hogas Sc. 9" -path "Cal. Hogas" -project "Cal. Hogas" -projectTemplate "" -activegroup "empty" -compensator -nav -temperature "20.5" -resolution h -quality n -lfrom "0" -lto "181" -hfrom1 "20" -hlo1 "340" -camera "i-cam" -panoramaparams fast

Level system info: Level available.

Sun position info: Altitude: 52.796° Azimuth: 168.876° Azimuth to Scan 0 = 286.647°

# Targets

## All targets

No targets used.

# Links

Color folder <file:///J:/59. Muzeul Calistrat Hogas/Color>

# Project Plan

---

Scan positions



# Summary

Number of scans: **47** used in **47** scan positions

Point clouds: **0**

Scans with color: **0** mapped **0**

Scans with thermal data: **0** mapped **0**

Scans with errors:**0** warnings:**0** messages:**0**

Missed or corrupted scan files: **0**

Scanners used in the project: **5016-0100**

**0** known targets used

**0** targets used in **0** of **47** scan positions

First scan taken at: **26.8.2024 10:54:57** last scan at: **26.8.2024 15:56:41**

Duration: **5h 1min 44sec**

Unit used for visualisation: **Meter**

Unit used for import: **Meter**

Unit used for export: **Meter**

Point cloud data formats in project:

**zfs**

Other file formats in project folder:

**inf, jpg, lock, log, pdf, png, pos, sta5, topcut, undo, xml, zfi, zfpj**