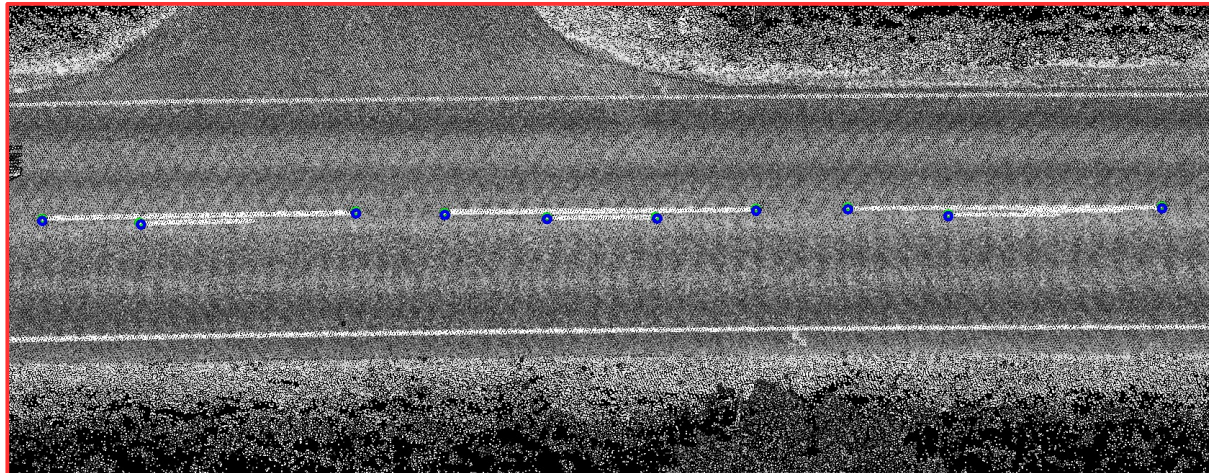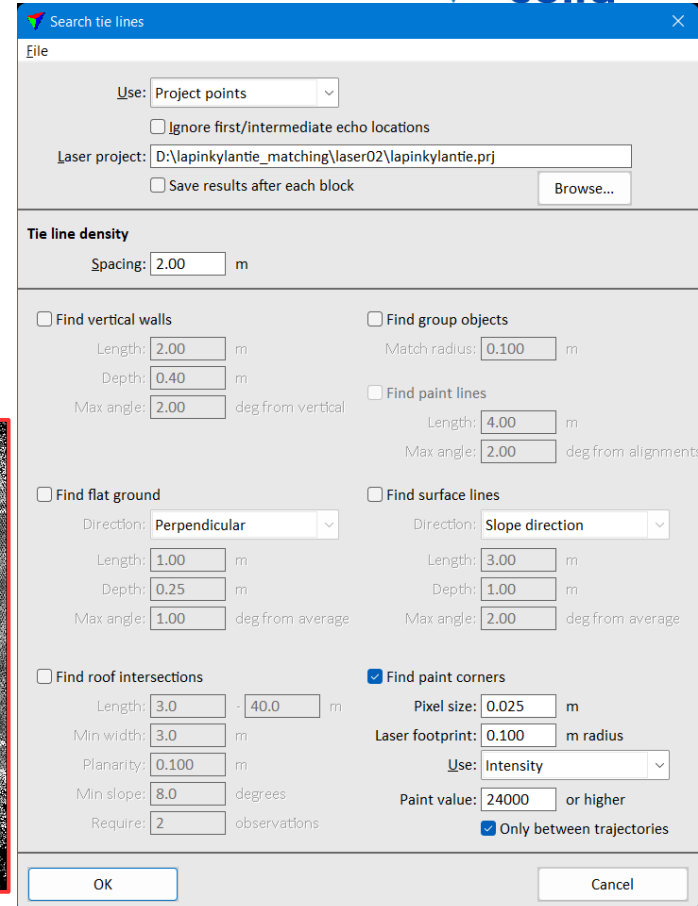TerraMatch
New Features

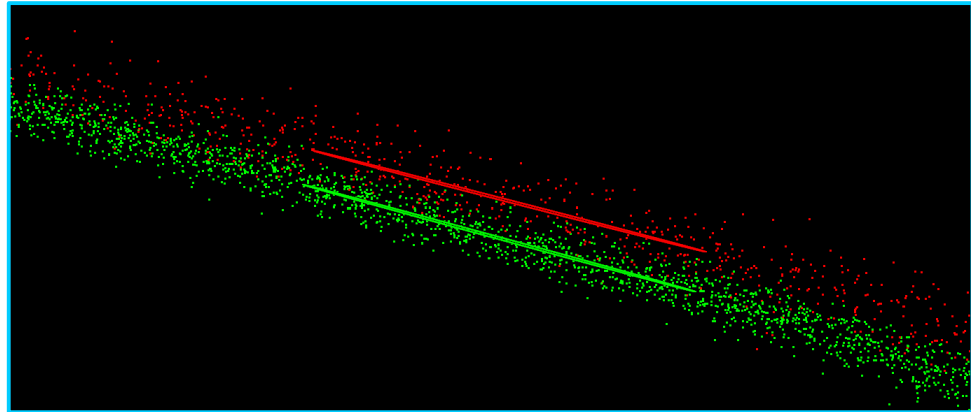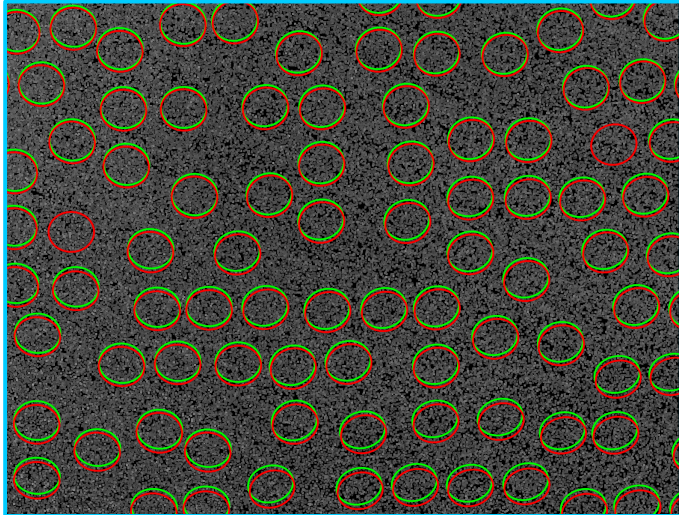Arttu Soininen 13.09.2023

Paint Corner Search

- **Search tie lines** has option for searching paint corners
- Gives automatic observations for matching drive passes to each other in xyz
- Requires dashed paint lines (preferably between drive passes)
- Requires good intensity values

Search tie lines

File

Use: Project points

☐ Ignore first/intermediate echo locations

Laser project: D:\lapinkylantie_matching\laser02\lapinkylantie.prj

☐ Save results after each block   Browse...

Tie line density

Spacing: 2.00 m

☐ Find vertical walls
Length: 2.00 m
Depth: 0.40 m
Max angle: 2.00 deg from vertical

☐ Find group objects
Match radius: 0.100 m

☐ Find paint lines
Length: 4.00 m
Max angle: 2.00 deg from alignment

☐ Find flat ground
Direction: Perpendicular
Length: 1.00 m
Depth: 0.25 m
Max angle: 1.00 deg from average

☐ Find surface lines
Direction: Slope direction
Length: 3.00 m
Depth: 1.00 m
Max angle: 2.00 deg from average

☐ Find roof intersections
Length: 3.0 - 40.0 m
Min width: 3.0 m
Planarity: 0.100 m
Min slope: 8.0 degrees
Require: 2 observations

☑ Find paint corners
Pixel size: 0.025 m
Laser footprint: 0.100 m radius
Use: Intensity
Paint value: 24000 or higher
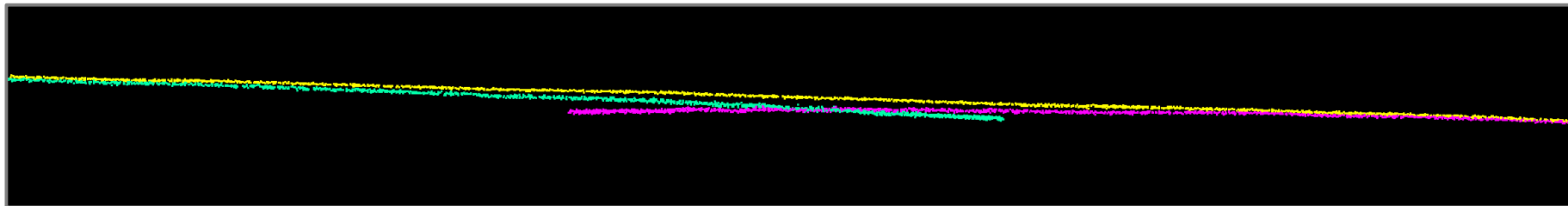☑ Only between trajectories

OK   Cancel

Plane Equation Tie Line Type

- New tie line type:
  - Plane fitted to circular area of points from one flight pass
  - Choose circle radius based on point density – 0.2m to 2.0m

Find Mirror Angle Correction

- Solves correction curve for mirror angle (left-right angle being off)
- Mirror angle flaw can be seen as a smiling face or as a sad face effect
- Correction curve can fix for non-symmetrical mirror angle flaw

Find Mirror Angle Correction

Use classes: 2 - Ground   >>

Observe every: 23   th point

Angle limit: 5.00   deg (pulse_plane normal)

Ignore limit: 1.00   m or larger shifts

Correction for: Skip central part

Skip from: -20   To: 20   deg

Trajectory dir: D:\dowdy\trajectory\   Browse...

OK   Cancel

Mirror Angle Result

File

Scanner: Scanner 0   Smoothing: 1   rounds

-37   38   +0.100

0.000

-0.100