FIG WORKING WEEK 2019

22–26 April, Hanoi, Vietnam

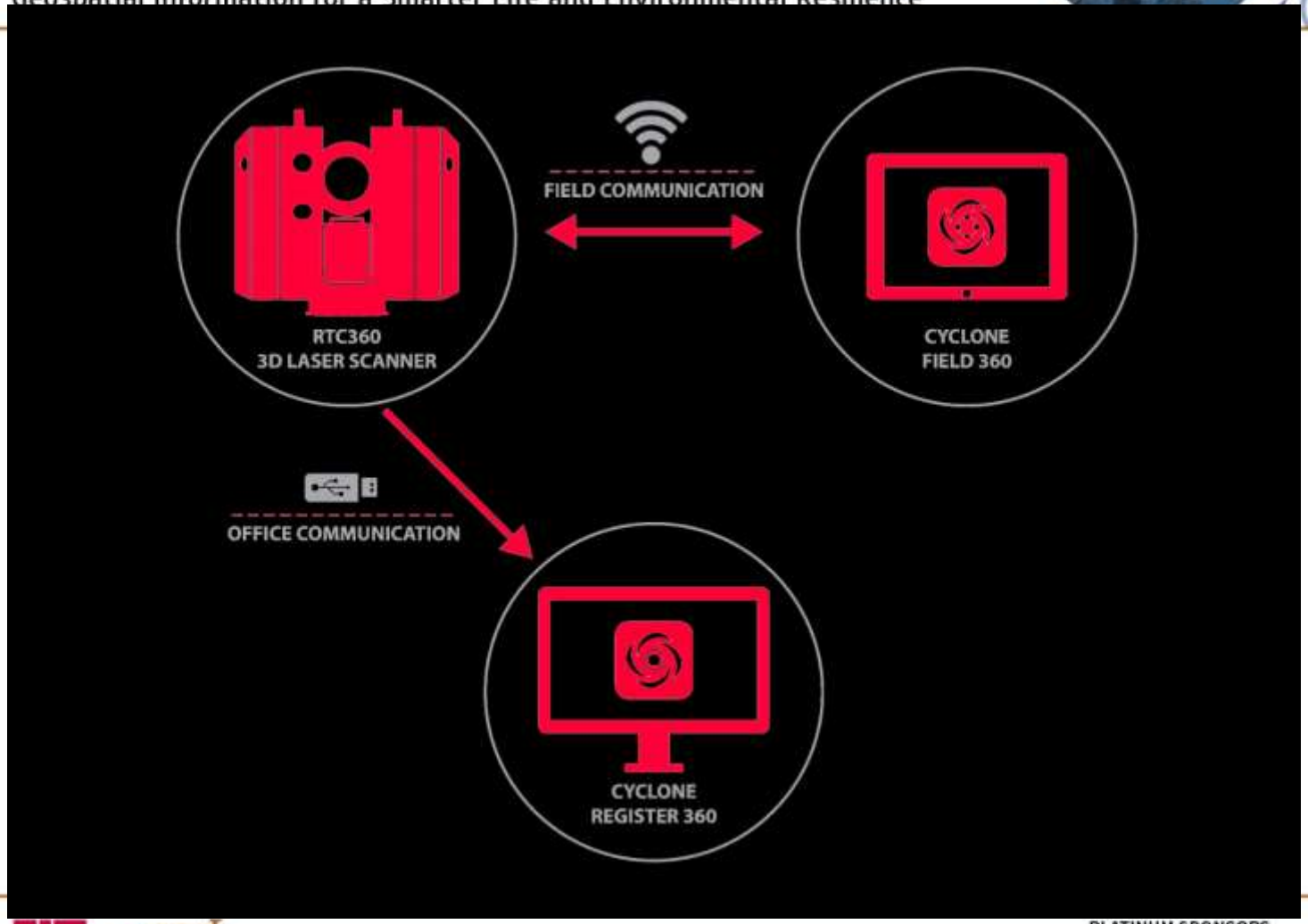
Presented at the FIG Working Week 2019,
April 22-26, 2019 in Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"

ORGANISED BY FIG

PLATINUM SPONSORS esri THE SCIENCE OF WHERE Trimble

DEMO

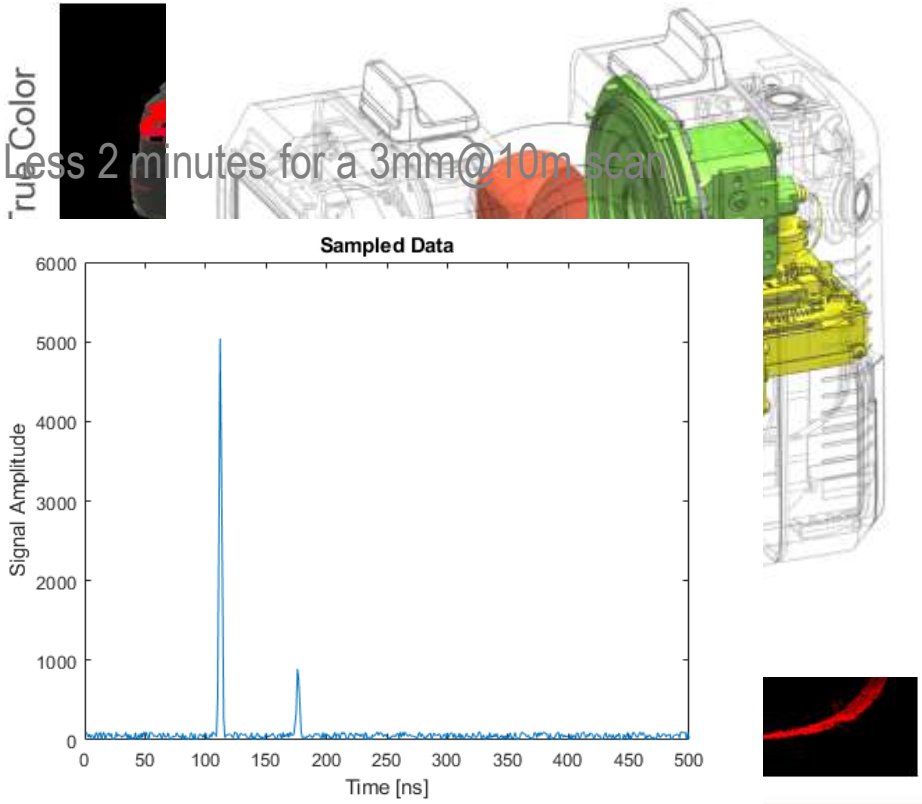

FIELD COMMUNICATION
RTC360
3D LASER SCANNER
CYCLONE
FIELD 360
OFFICE COMMUNICATION
CYCLONE
REGISTER 360

TruRTC Technology
Inside RTC360

3D laser scanning

Fast: up to 2 Mio points per second EDM.

High dynamic: more measured points on critical surfaces.

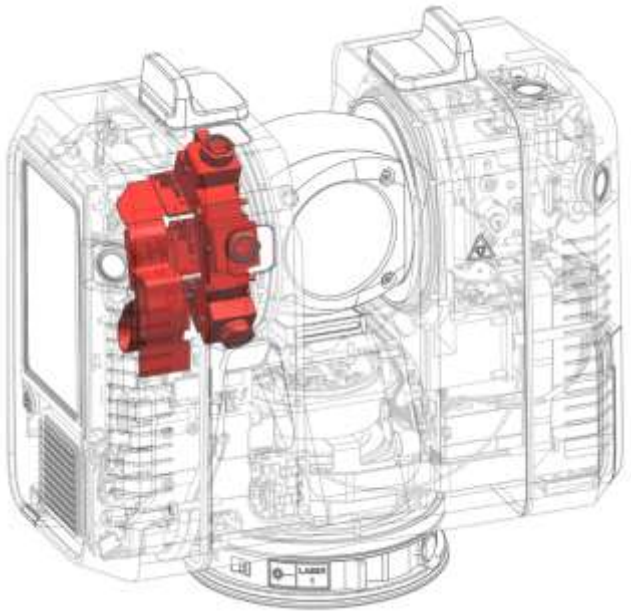


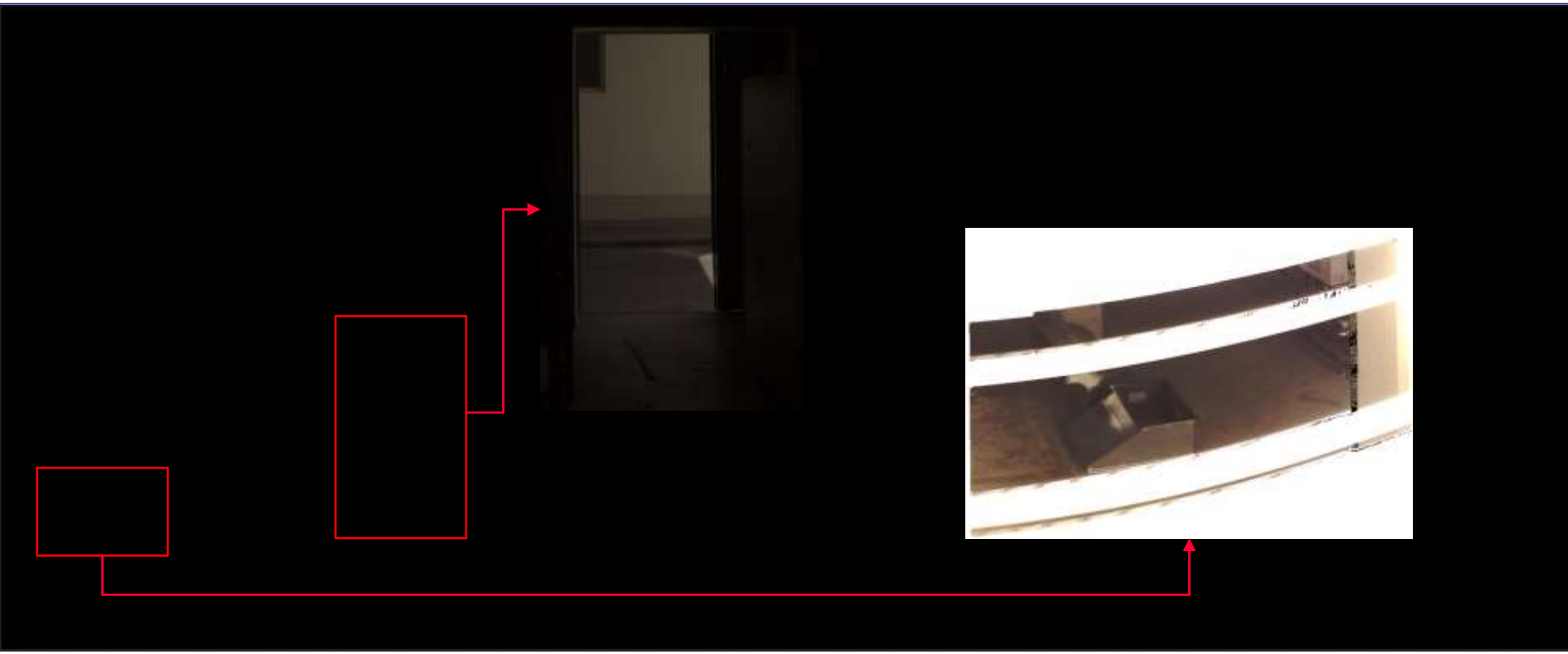
HDR spherical images

Fast: less then 1 minute to collect HDR full dome, independent from light conditions.

High dynamic: from bright sunlight to darkness, without user settings.

Colour fidelity: the colours are represented as they are.





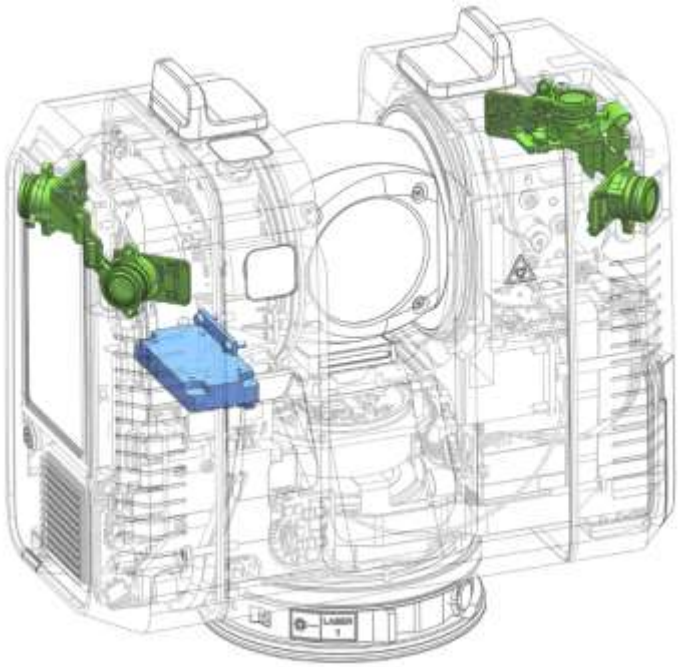
Visual Inertial System

VIS delivers the delta pose between two consecutive setups, in real time

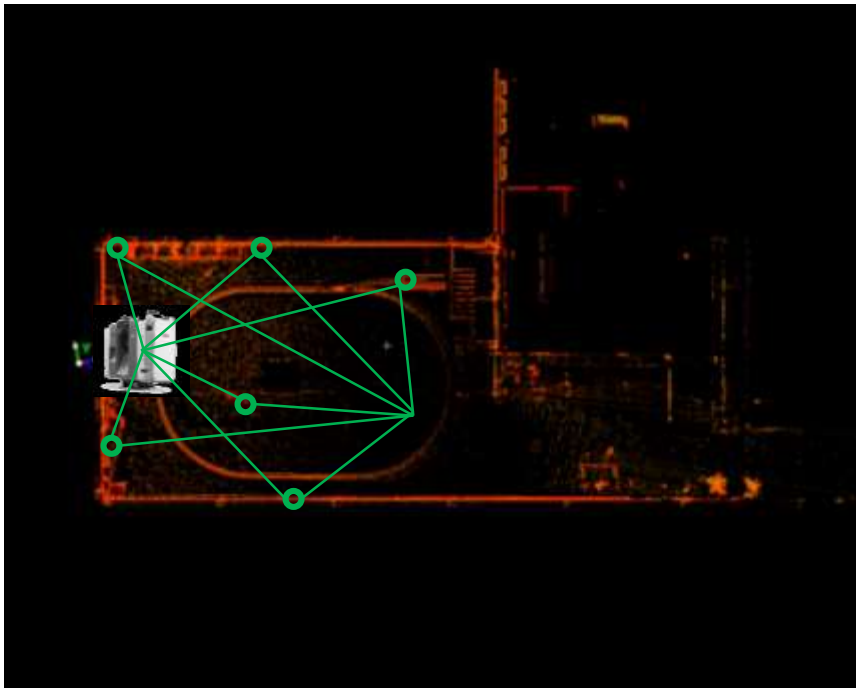
VIS is based on 5 cameras and one IMU

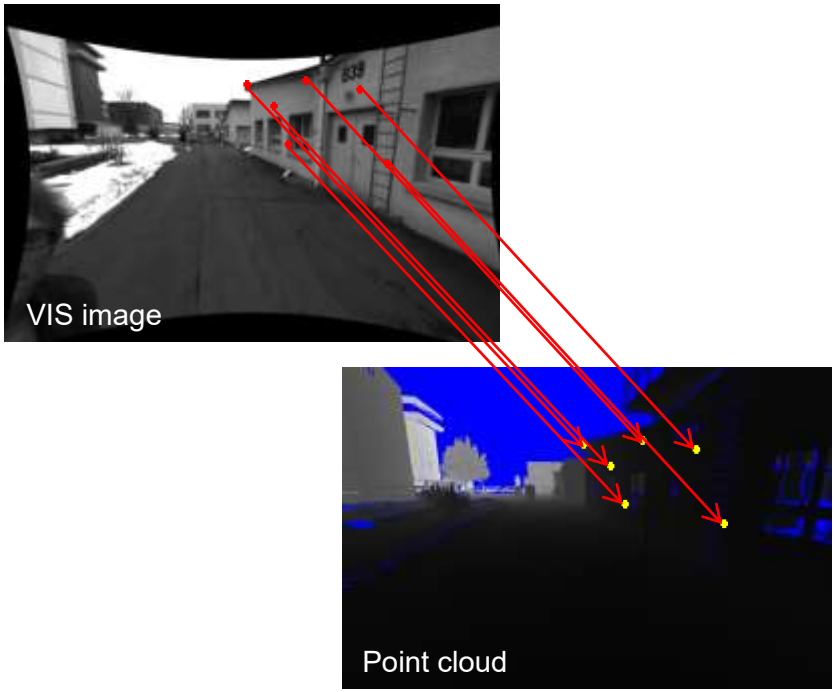
No user interaction is needed, auto start&stop

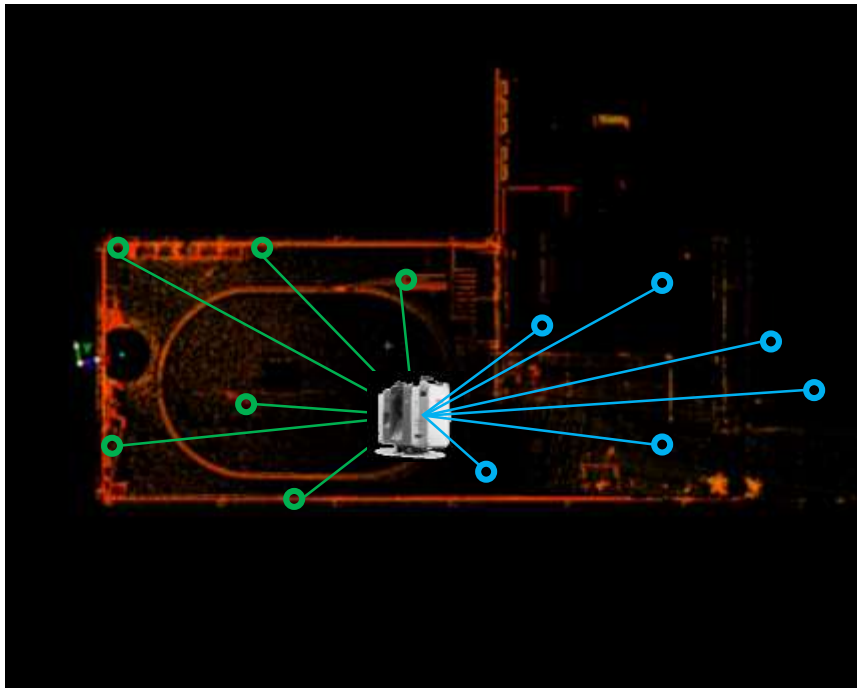
VIS is robust to most of the handling and environmental conditions



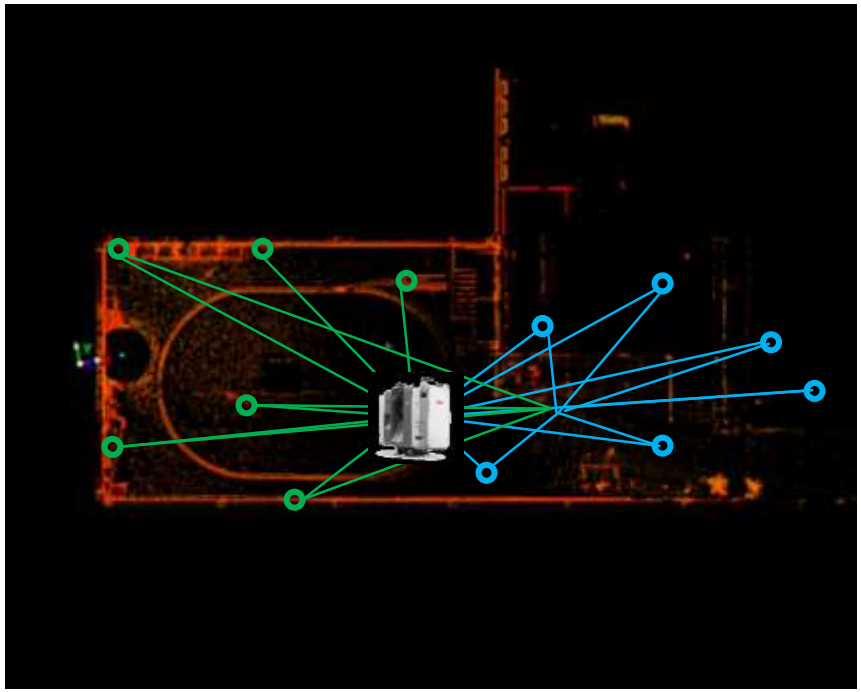
Leica




VIS image
Point cloud



- "original" 3D points derived from pointcloud
- "new" 3D points created by forward intersection from multiple scanner positions



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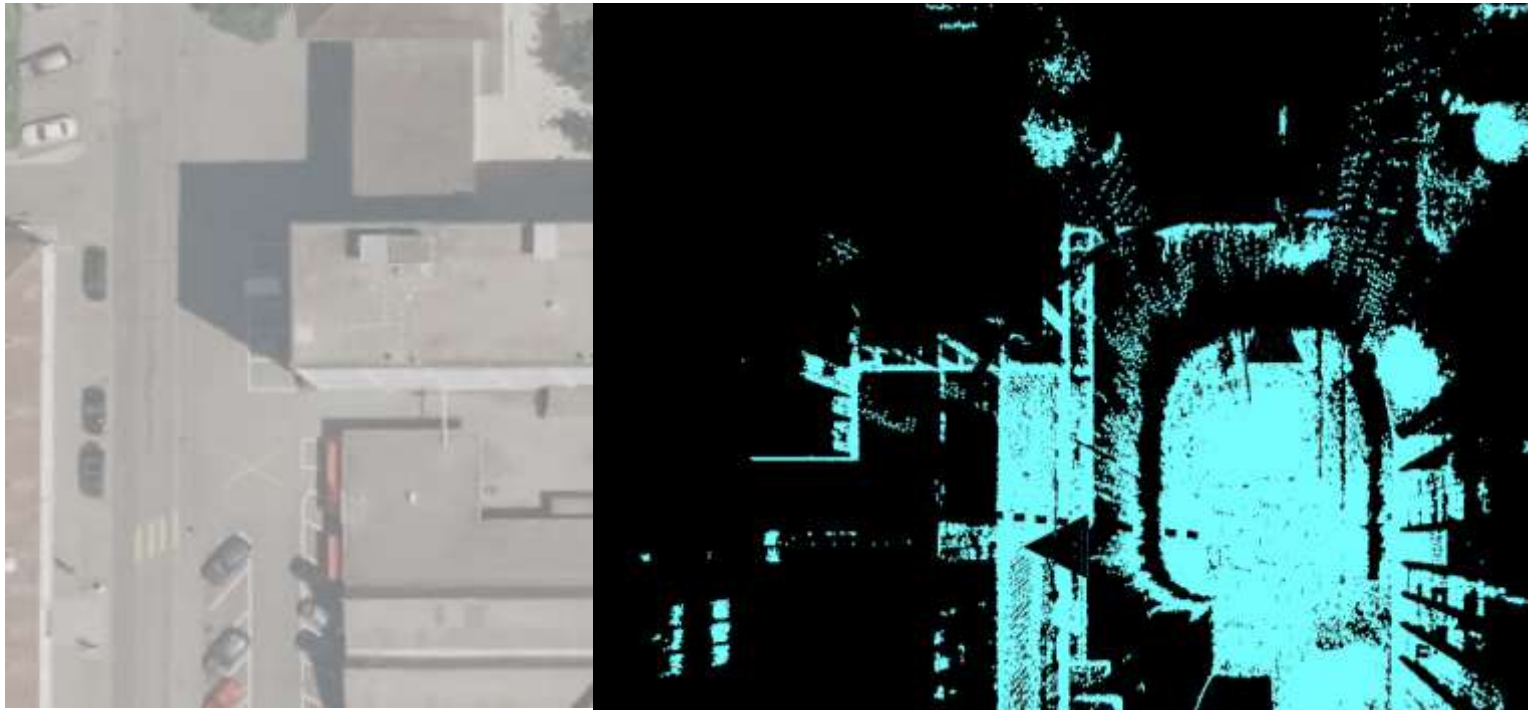
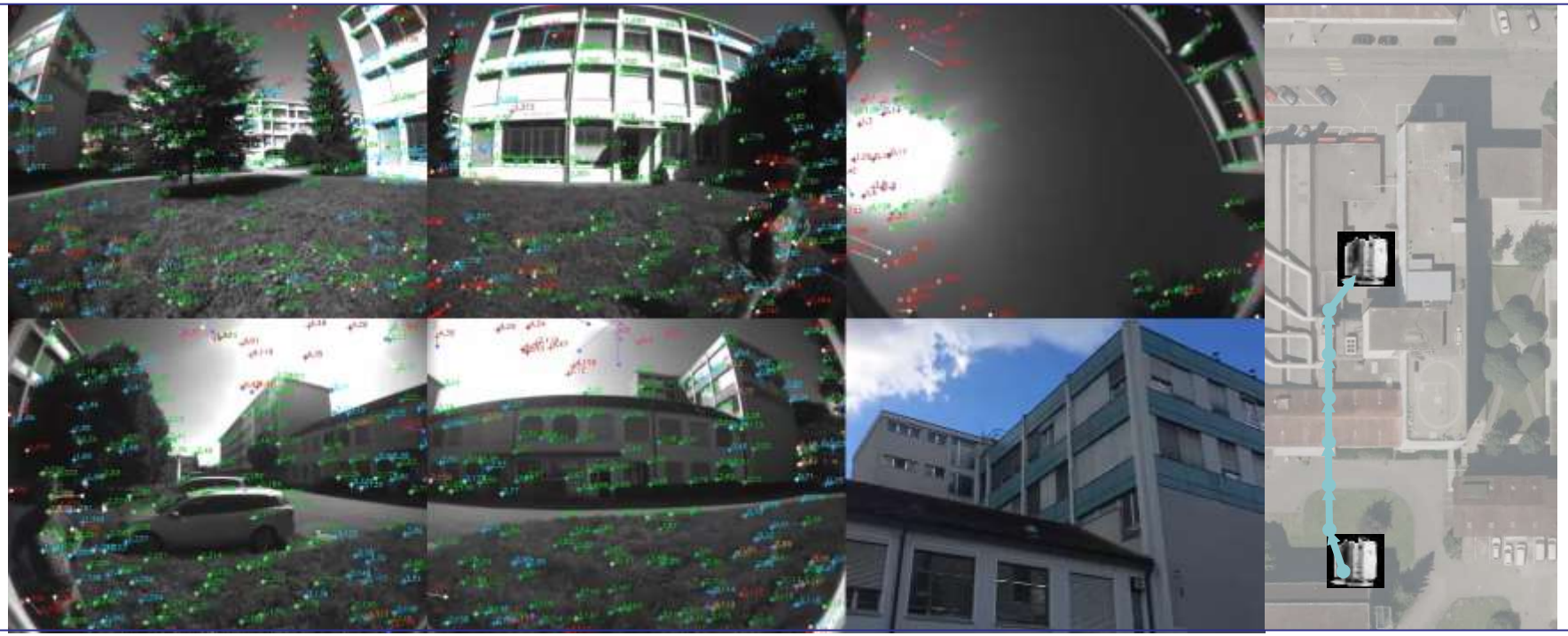
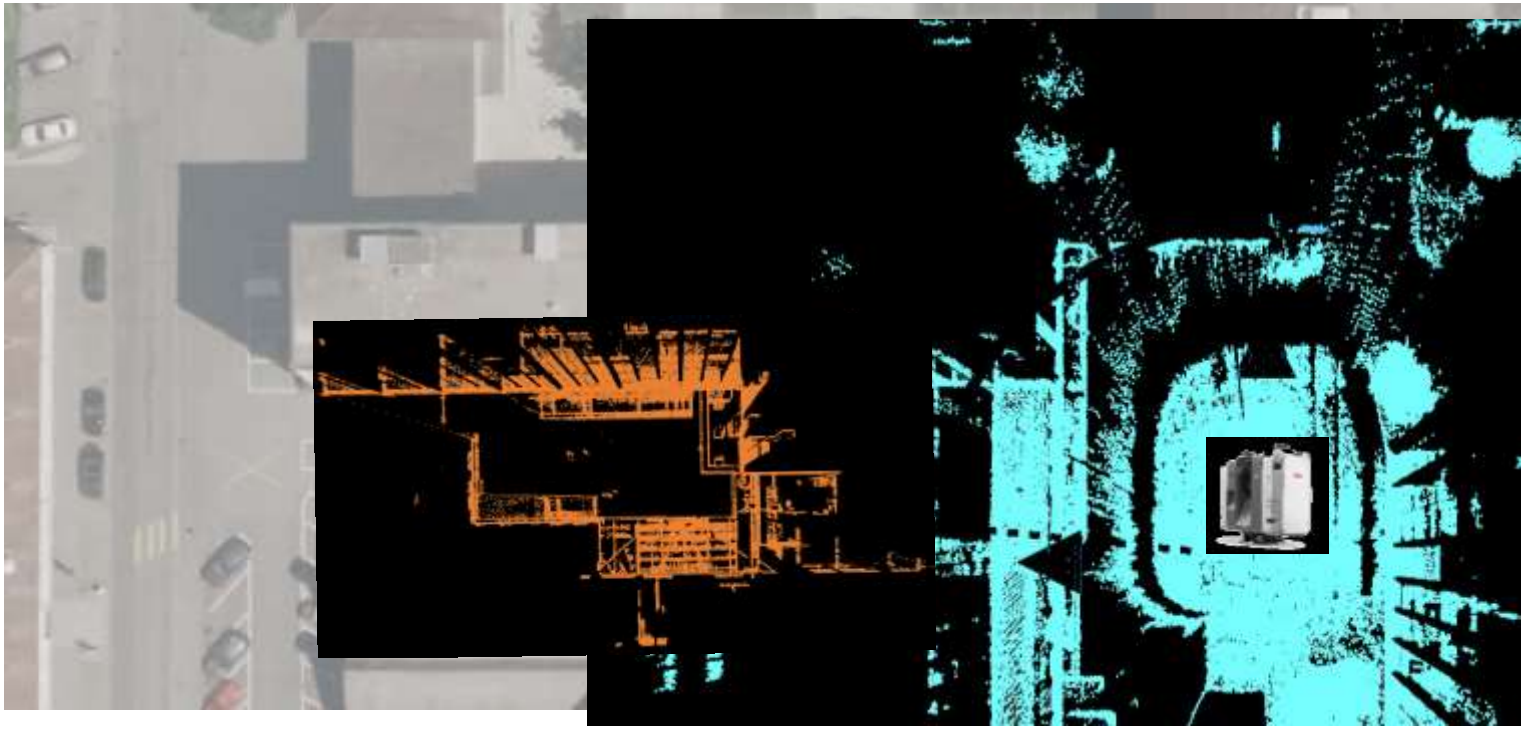






Cyclone FIELD 360

View: Display point cloud data in full HDR colour, rainbow intensity or grey scale

Check: Verify pre-registered point clouds for quality and completeness control

Add: Store tags and pre-registration information back to the RTC 360

Cyclone FIELD 360. Check.

On-site control for improved overall productivity:

- Quality
- Completeness
- Overlap and pre-registration results

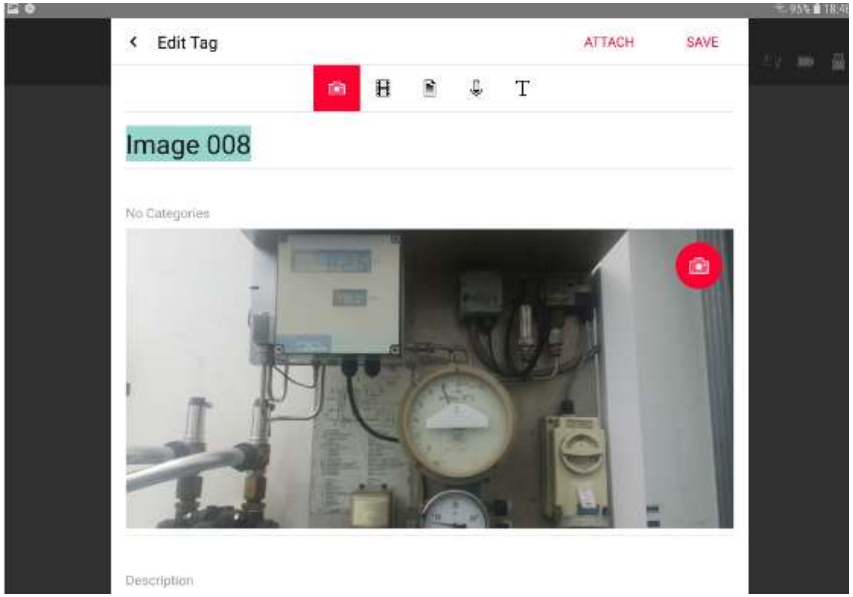
Cyclone FIELD 360. Add.

Tag types: Photo, video, audio, text, document.

Attach to: Job, Setup, 3D coordinates.

Measurements: Point-to-point distance

Automatic syncronisation to RTC 360



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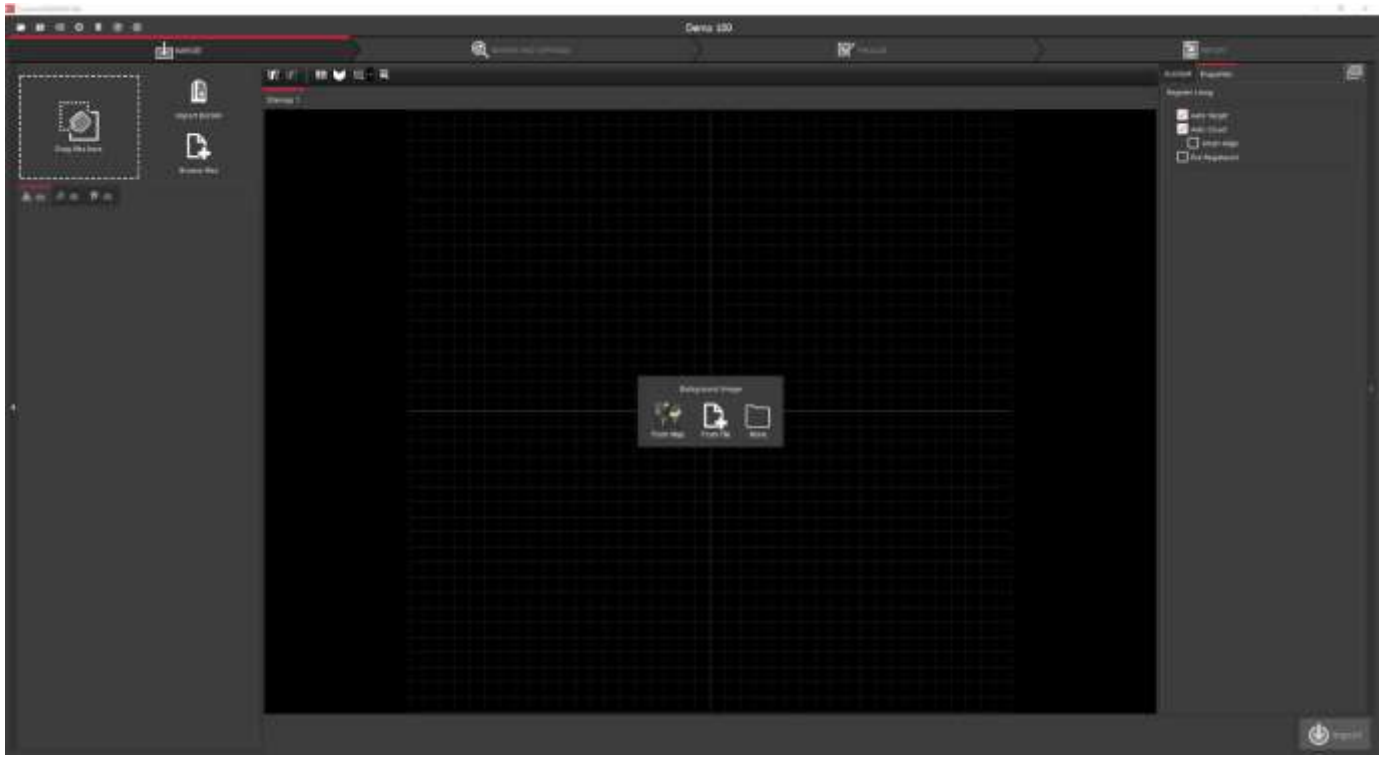
Cyclone Register 360

Cyclone REGISTER 360

- DRAG
- DROP
- DONE

Cyclone REGISTER 360 – Import & Register



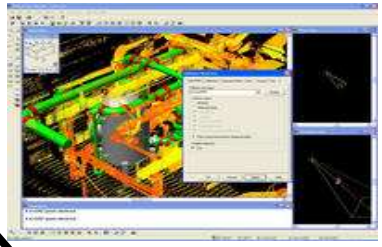
RTC360 Workflow

Cyclone FIELD 360 → RTC360 → Cyclone REGISTER 360

Leica TruView

Leica IMS Map360

CloudWorx for Smartplant 3D



CloudWorx for AutoCAD

3D Reshaper

Cyclone Model & Survey