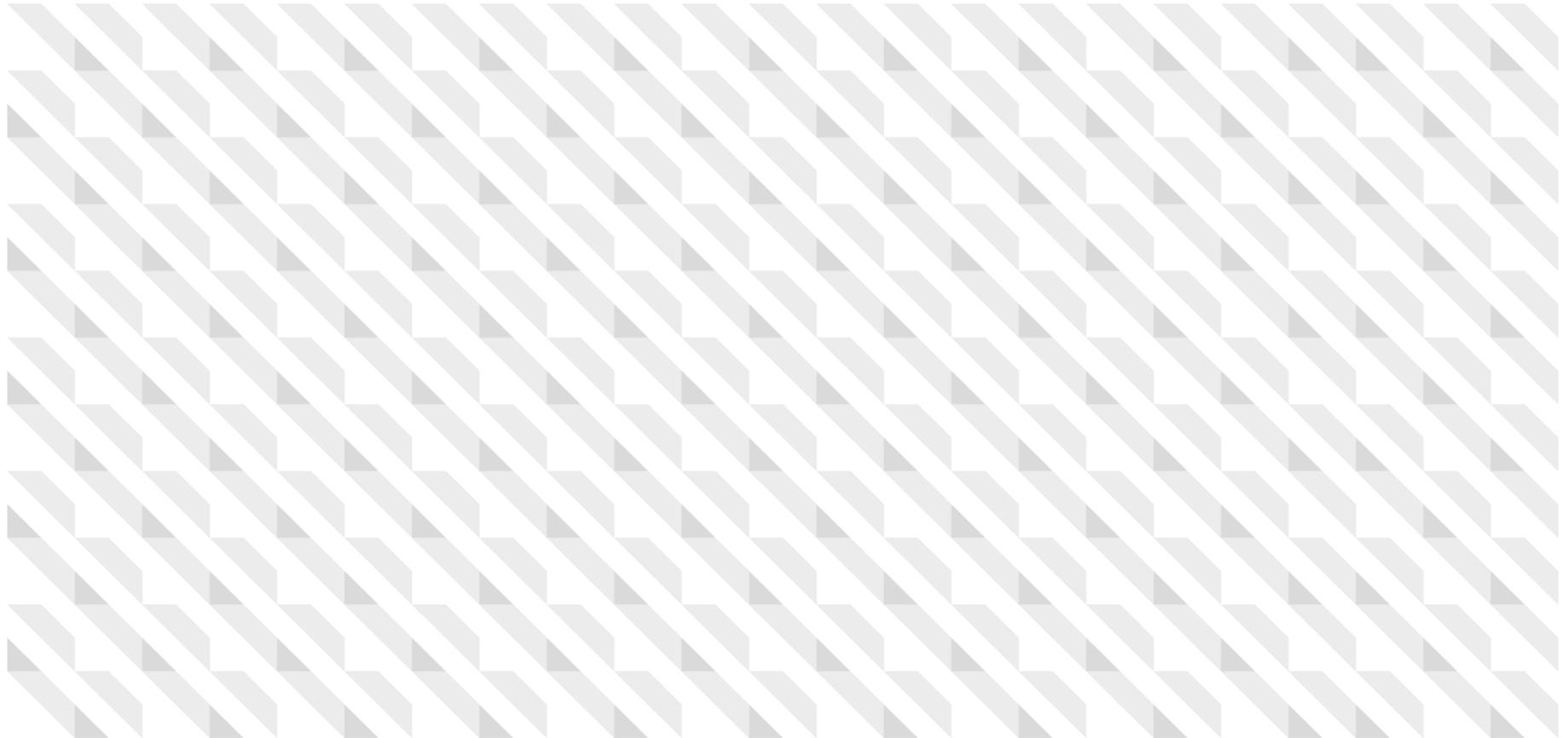




General presentation ViaTech company & products

23.09.2019

H. Farstad, MD, haavard@viatech.no



A grey diagonal bar pointing downwards and to the right.

ViaTech facts

- ViaTech is a Norwegian Company (mostly owned by the employees) with a comprehensive range of tailor-made products to measure different characteristics of the pavement surface and nearby area.
- Our products are:
 - ViaPPS (Pavement Profiling System)
 - Via3DMapper (Mobile mapping system)
 - ViaIRI+ (Texture Measuring System)
 - ViaPhoto (Photographic Systems)
 - ViaFriction (Friction Measuring Systems)
 - Software for the above
- Engineering for high tech companies
- New Products to be launched soon
- Advisors for Authority

ViaTech Product range ViaFriction®



Over 150 sold

CEN/TS 15901-14



Fixed slip 1-75%

Norway, Sweden, Denmark, Estonia, Lithuania, Germany, Mexico, Poland, Australia, Car/Truck OEM's

Friction system–split friction trailer

New system for Norway



- Combined winter and summer measurement
- Both wheel paths
- Can measure 50km on one tank of water in summer.
- Has measured more than 25 000 km since Q4-2017

ViaFriction® Extended-split friction



Take-over session 2016

The Master-Oscar



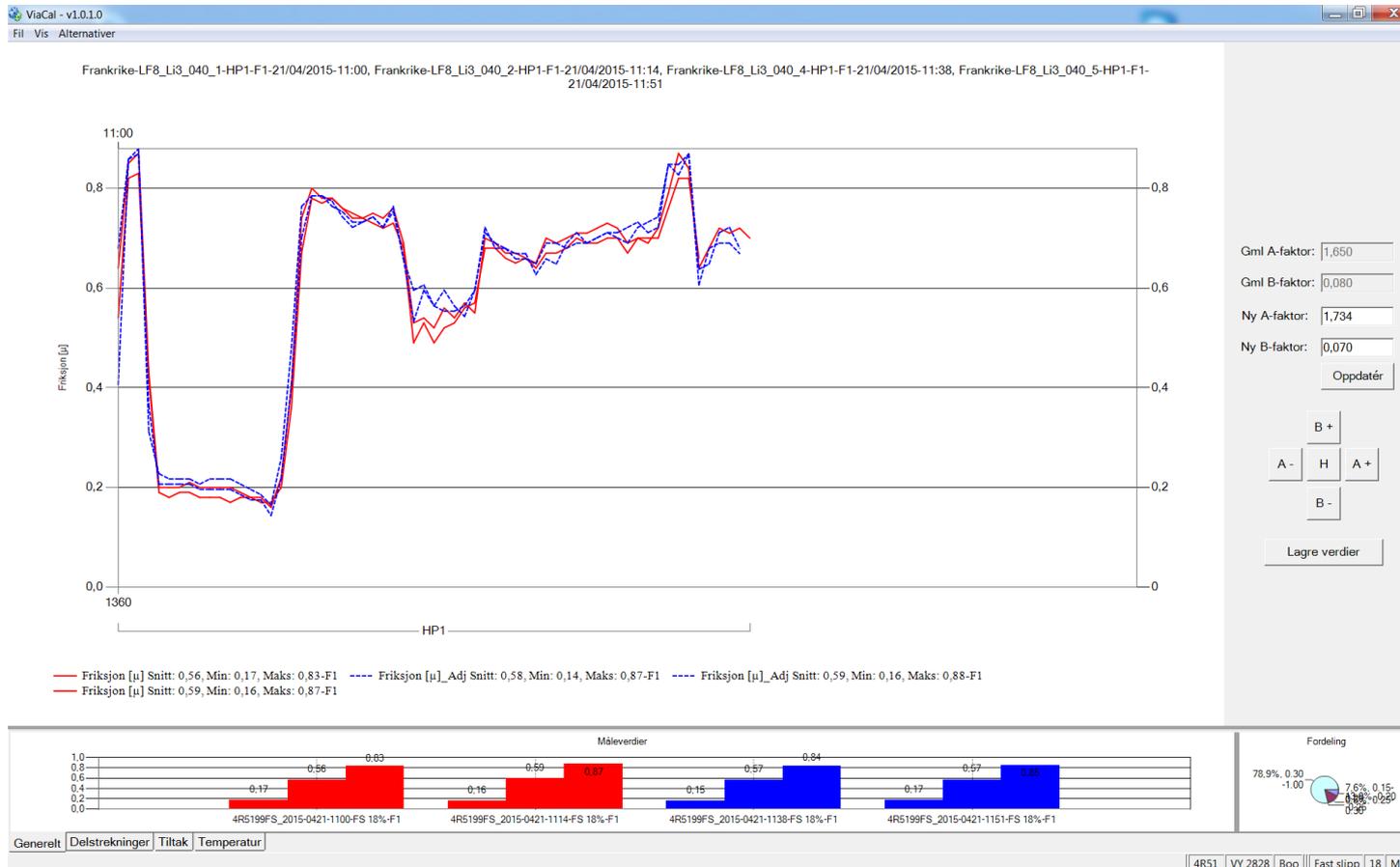
- «OSCAR» owned by the Norwegian road authority is the master for the events (Summer and Winter)
- ViaTech has a frame agreement for maintenance, support and development of Oscar

Bjorli 2019 friction harmonization event



9 ViaFriction and 1 Oscar

ViaCal (SW used for harmonisation)



Calibration of A and B factors vs. a master device

ViaFriction Winter

Used by Contractors
and Road Authority

24/7

Finds black ice



ViaFriction-Split friction winter trailer



Pavement Profile Scanner (ViaPPS)

New Generation ViaPPS with LiDAR (as from 2015):



Range 119 meters
Eye-safe due to laser class 1

POS LV from Applanix

Delivery to the Norwegian Road Authority–May 2015

Pavement Profile Scanner (ViaPPS)

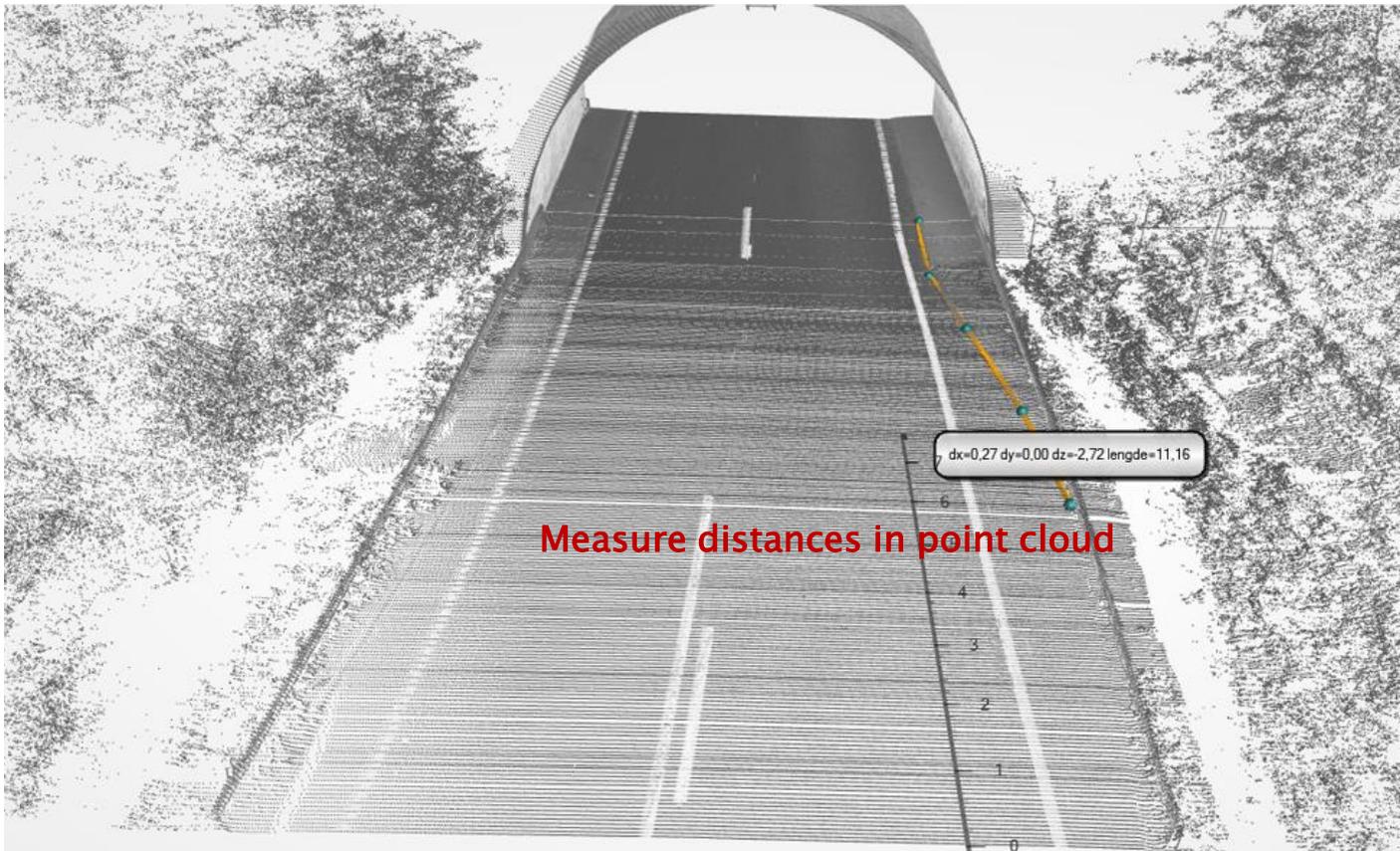
ViaPPS do/calculates the following parameters:

- Longitudinal and transversal profile
 - Rut depth, rut area and rut area volume
 - Crossfall & Crossfall vs. Requirement
 - Curve radius
 - Longitudinal deflection/Bumps
 - *IRI*
 - *MPD*
 - Width of the lane (input to calculations also)
 - Bad joints of the asphalt
 - Crack parameters
 - Accident investigation
 - Tunnel/Bridge profile incl. height
 - 3D data to external standard format such as xyzi, las/laz
 - WEB interface
 - 360 Photo integration
 - Orbit GT SW integration
-
- Side area (Objects etc.)
 - ++New parameters (like Sightlines, Asphalt mass estimation, Homogeneity, etc.)
 - AI
 - New sensors



→ All in the same run and with automatic reporting!

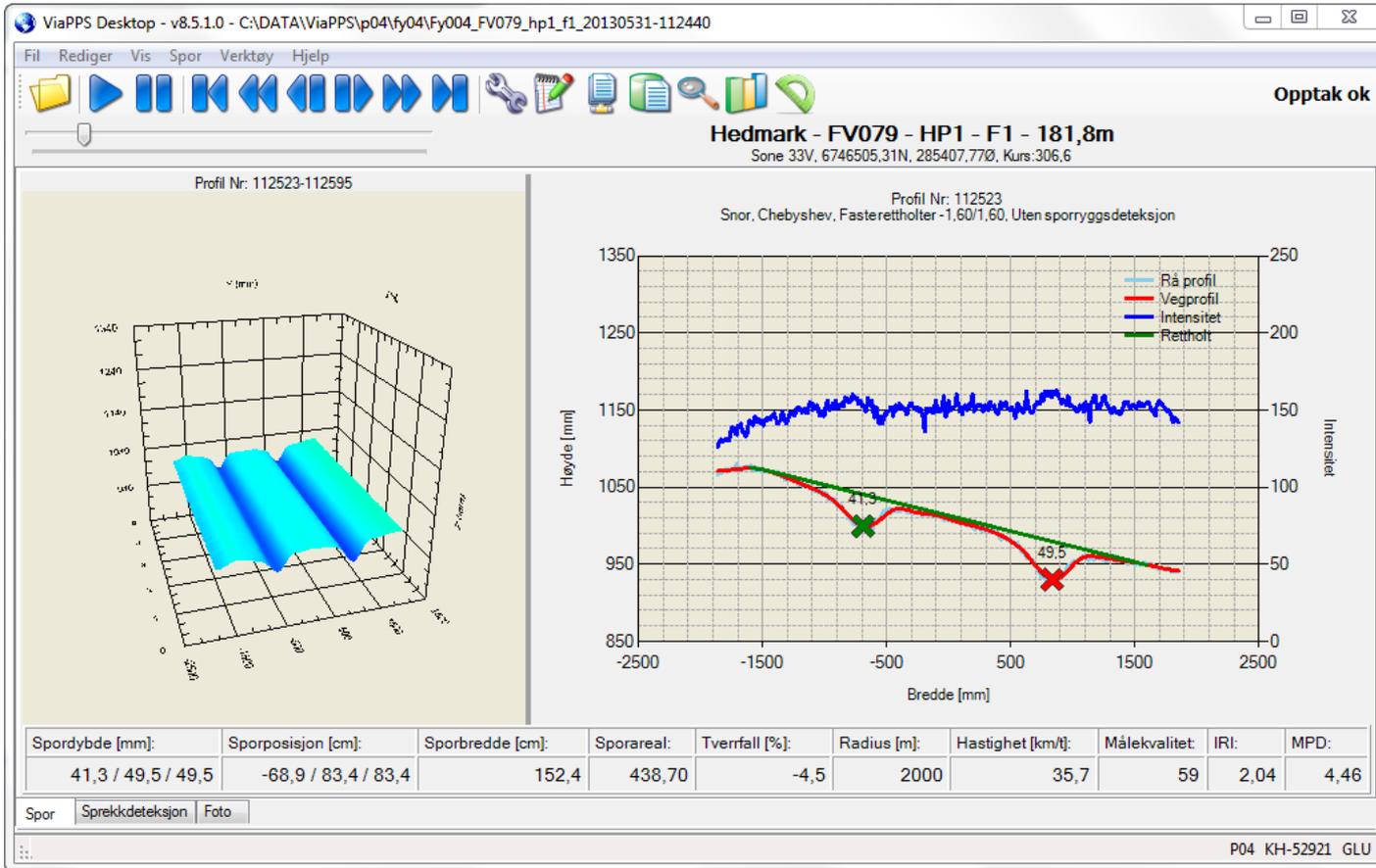
ViaPPS – 3D point cloud



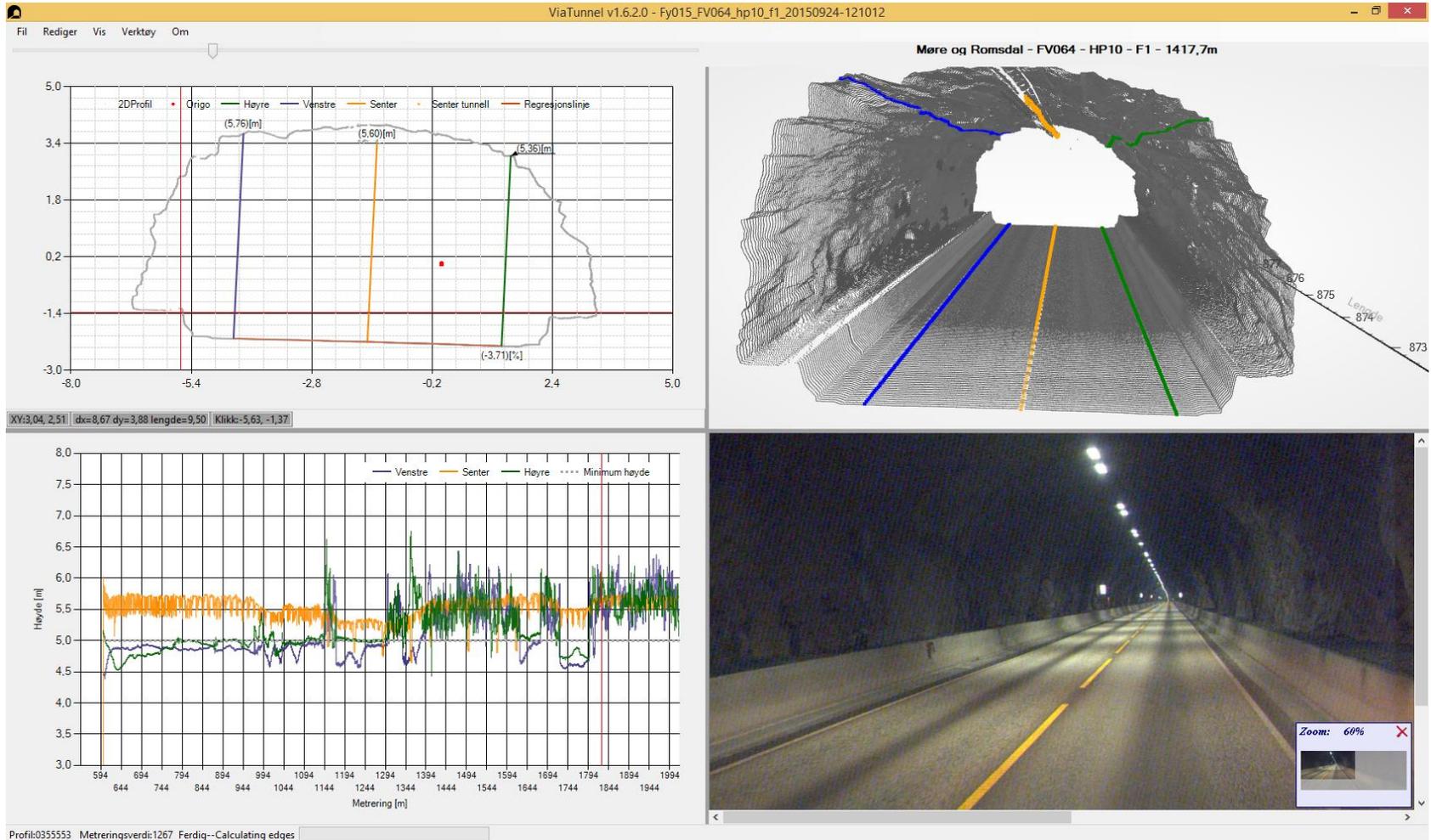
ViaPPS - Rut depth



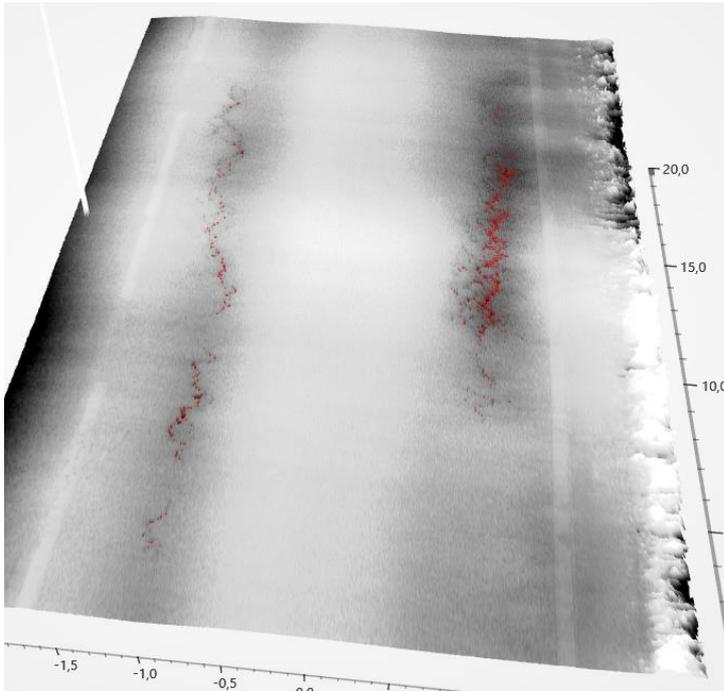
ViaPPS – Rut depth



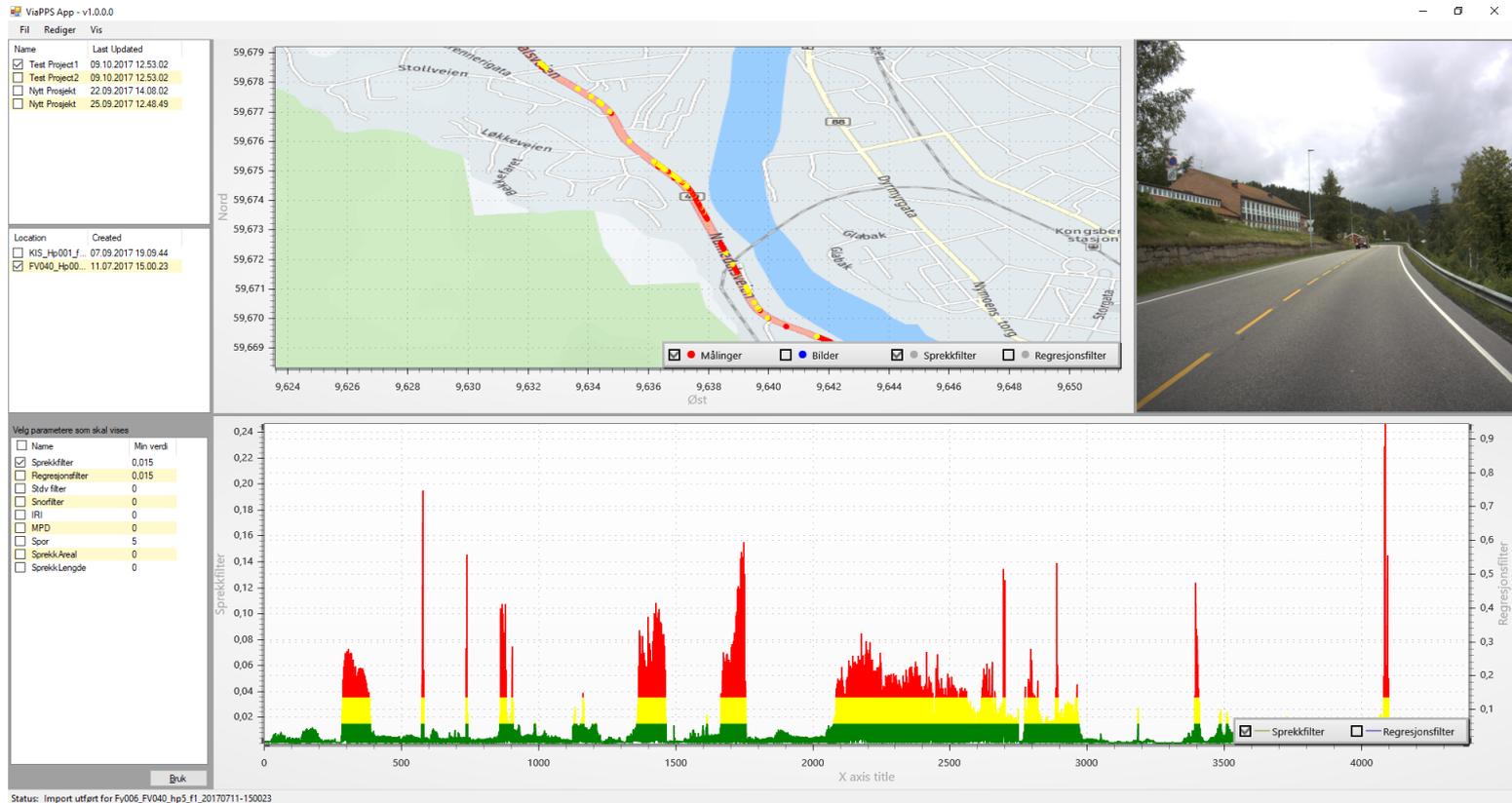
ViaTunnel – Main Window



ViaPPS – Surface Defects



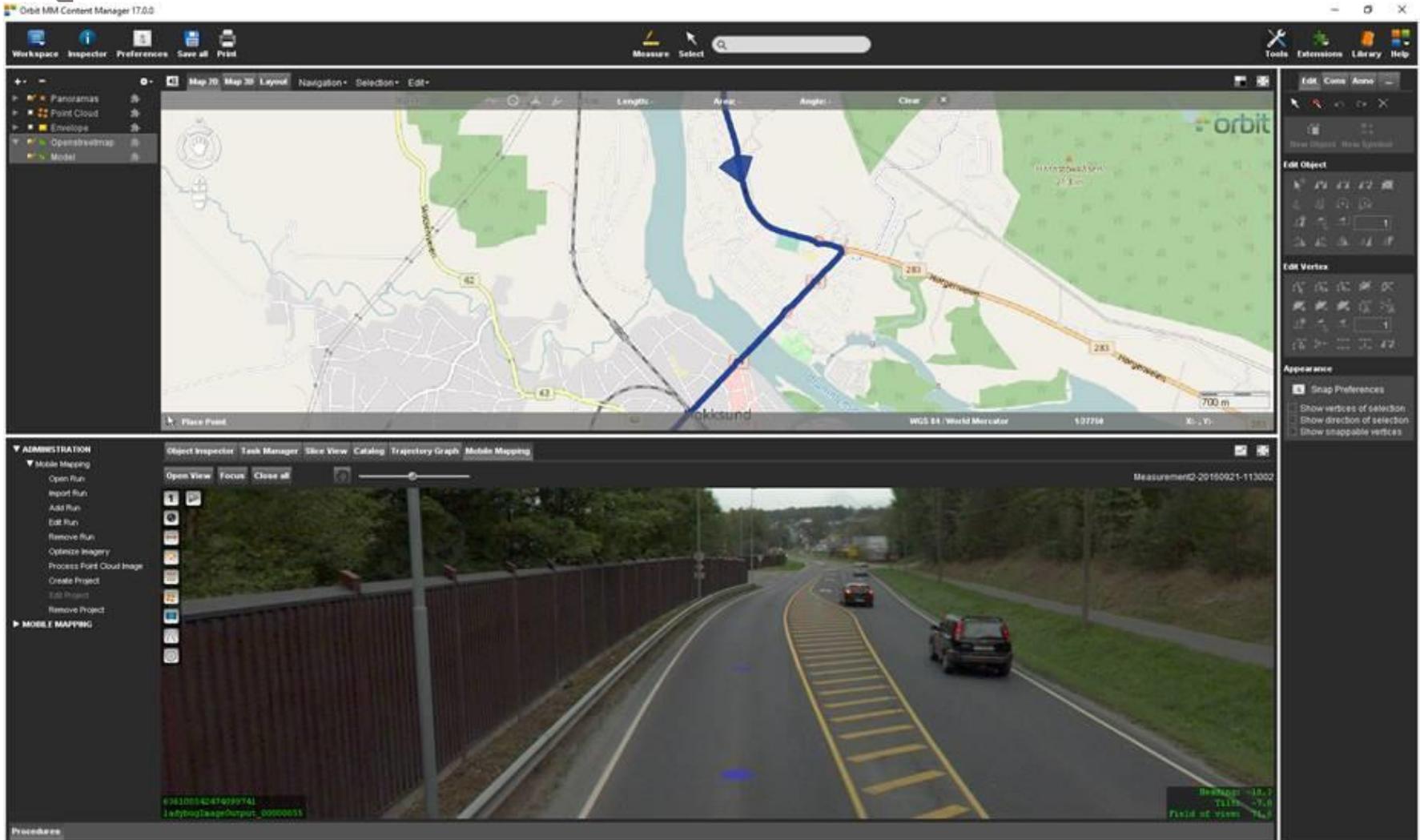
ViaPPS – Color coding defects on map



360 Photosystem on a ViaPPS

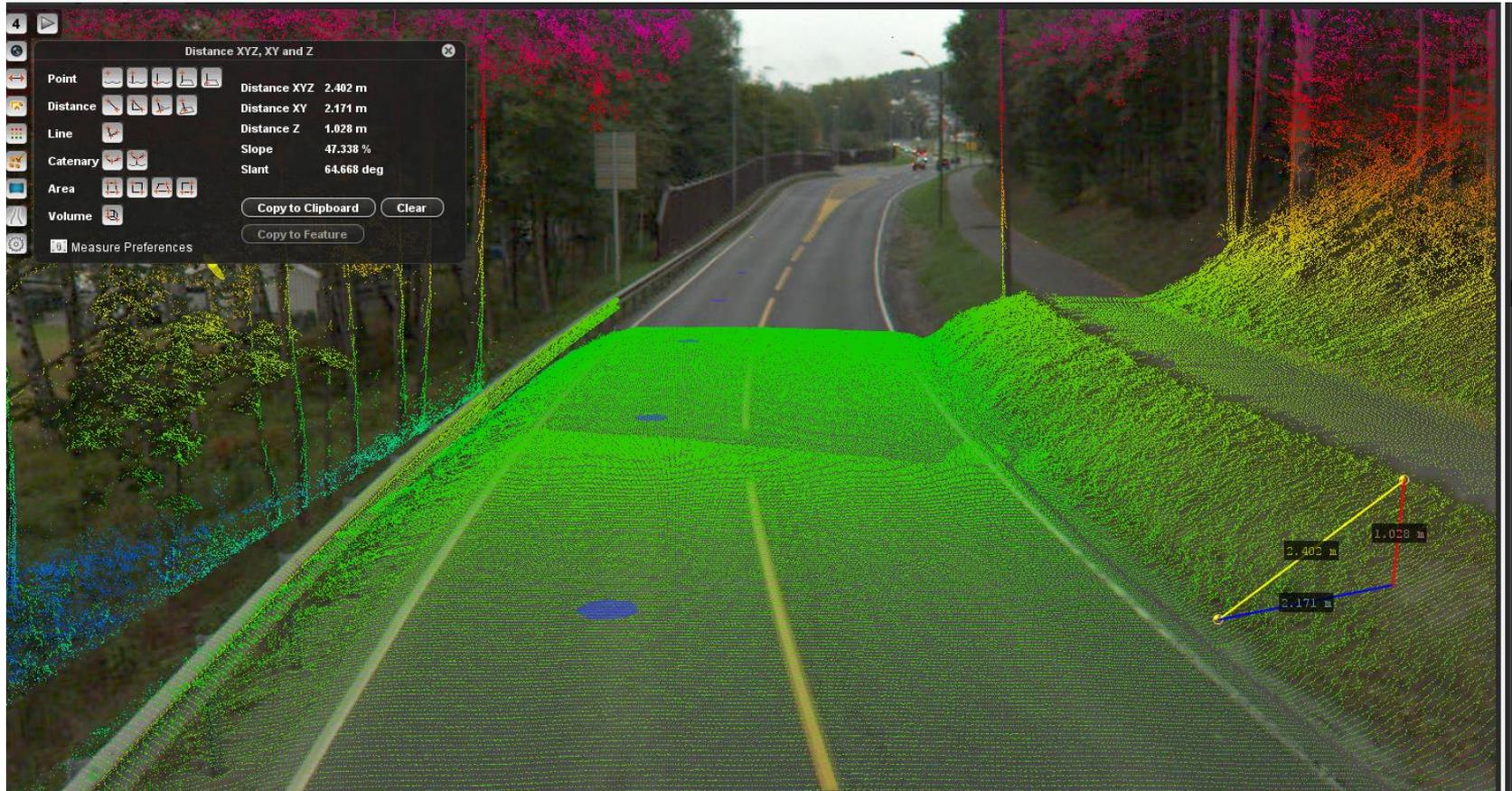


Orbit GT integration



The example show use of ViaPhoto360

Orbit GT integration Picture and point cloud together



ViaTech is reseller of Orbit GT software

Texture Scanner (Via IRI+)



Glimpse of PMS2010 – NVDB – Dataflow

Measure
100 000
km/year



• Measurement files-raw data

ROSITA

• Measurement files
- 20m interval

ViaPPS

Road centre
line

• Road data

National road
data bank

NVDB

PMS-Parsell
NVDB

• Plans
• Quotations doc./req.
• Quotations
• Road data

• New road data

• Road ID
• Traffic volume
• Road Width
• Type of pavement
• Rutting
• IRI/MPD
• Crossfall,Friction, FWD.

PMS2010

PMS

PMS = pavement management
system,
a part of the asset management



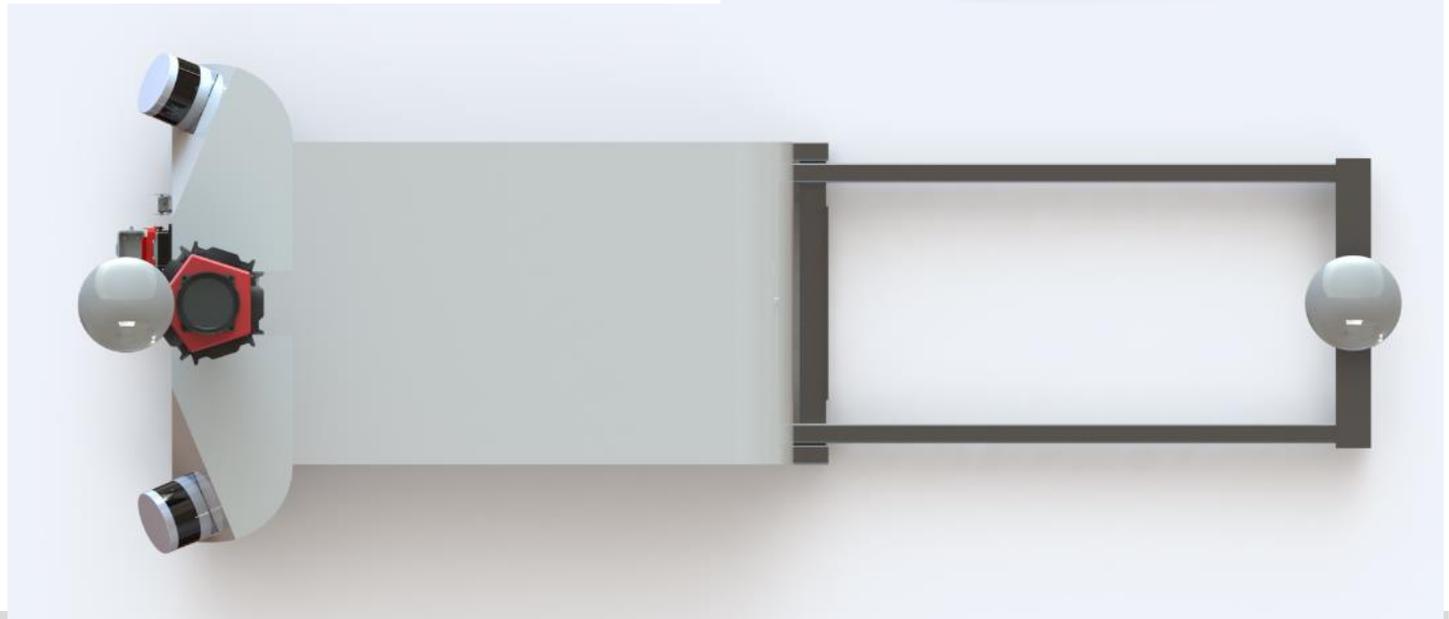
Via3DMapper®

360 Photosystem with Ladybug 5+

2 LiDAR sensors–Velodyne

Trimble–Applanix GNSS

DMI



Via3DMapper®



Thank You!



Standard set up in Norway