



Intelligent Road Asset Management Platform

# PointPix pavement inspection system

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16.01.2025 | Madrid



# Cost-efficient mobile scanner

**Democratise fast and cost-efficient road inspection scanner**

- Drives down inspection costs by many folds
- *One person can mount & start inspection within minutes*

**1st functional prototype tested**

*1 mapping software, multiple use cases*

**Impact:**

- **50%** less inspection cost
- **30%** faster inspections





# Demo day 1 – Puliana, Florence

OMI  RON



Route length 0.7km

Mounting time 1min

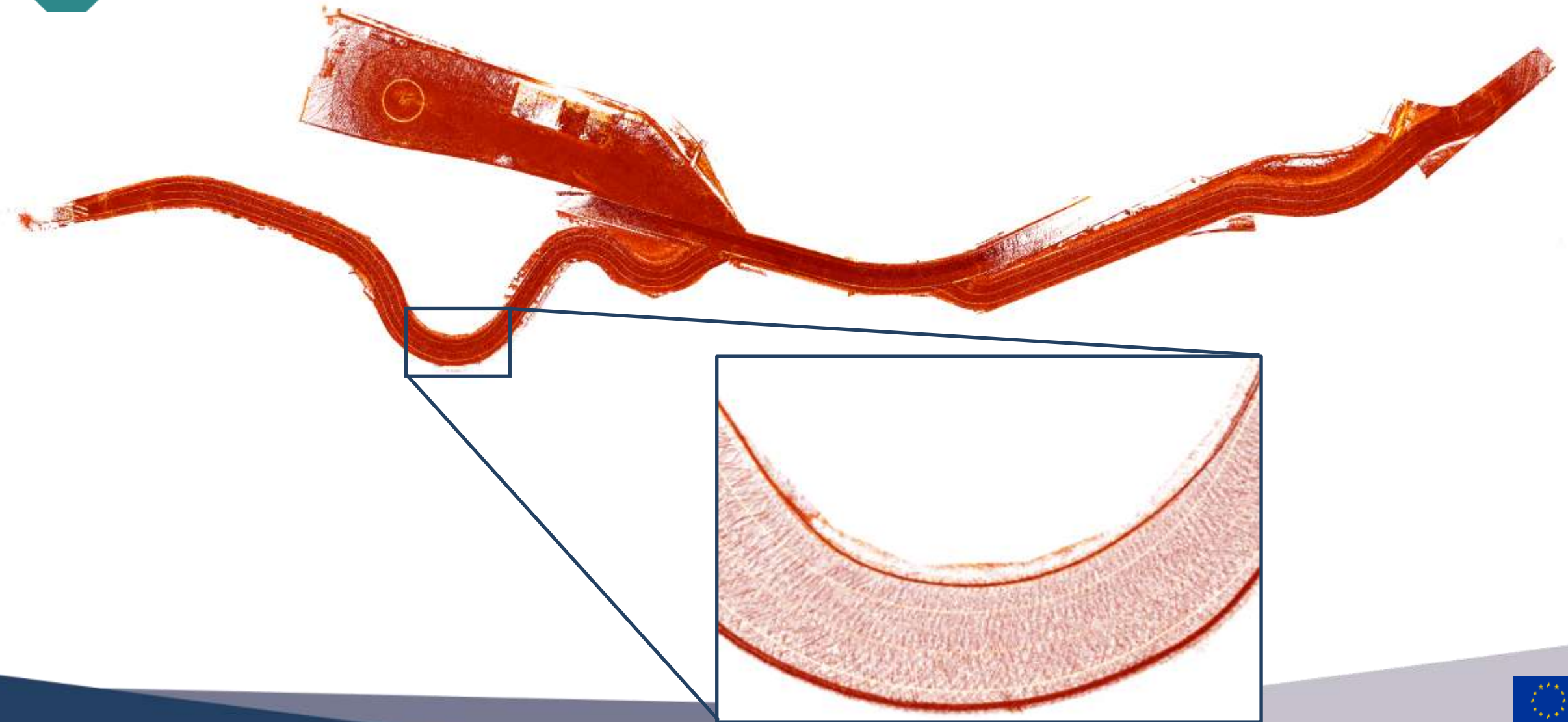
Survey time < 1min





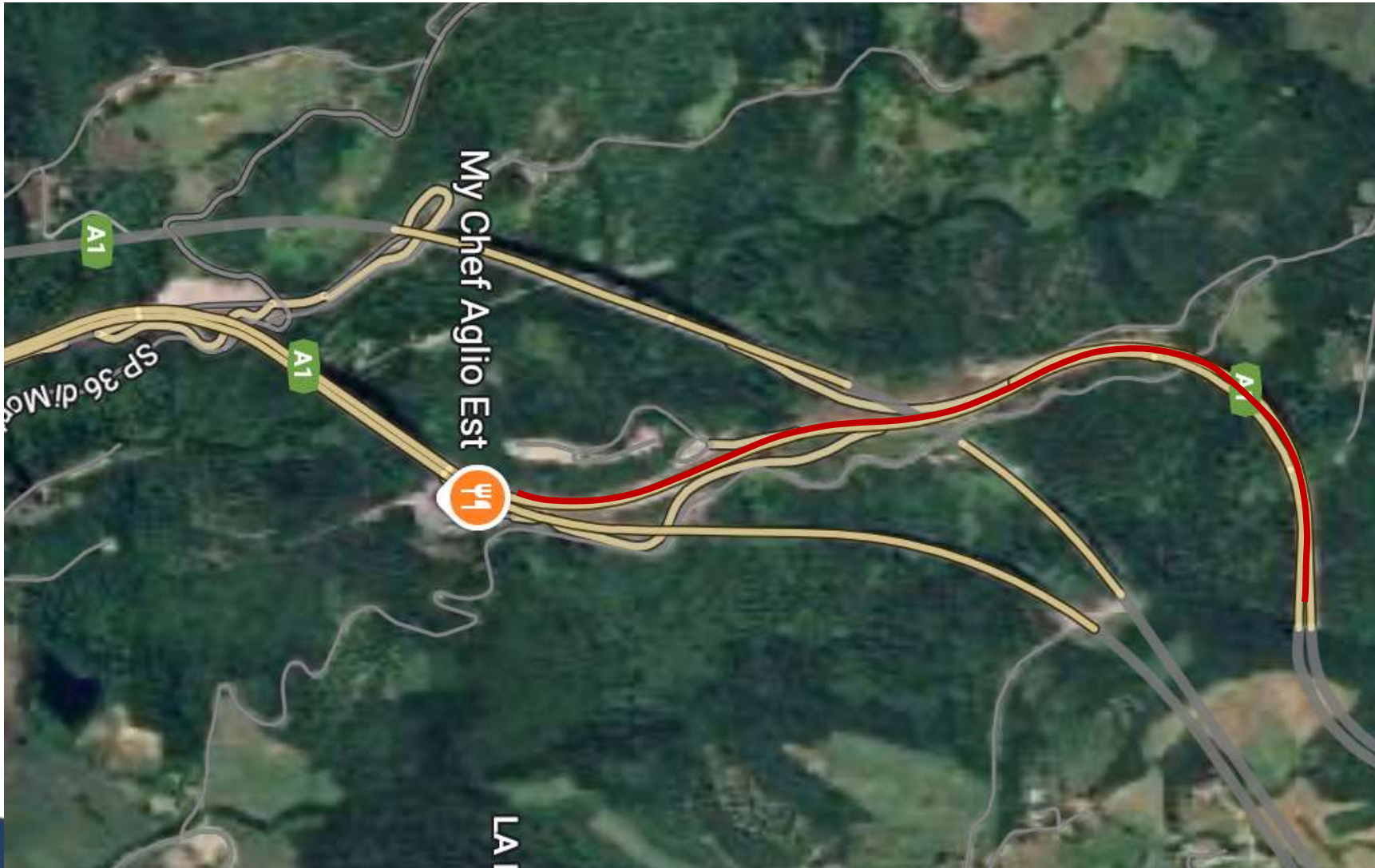
# Demo day 1 – Puliana, Florence

OMI((RON





# Demo day 2 – Settefonti, Florence



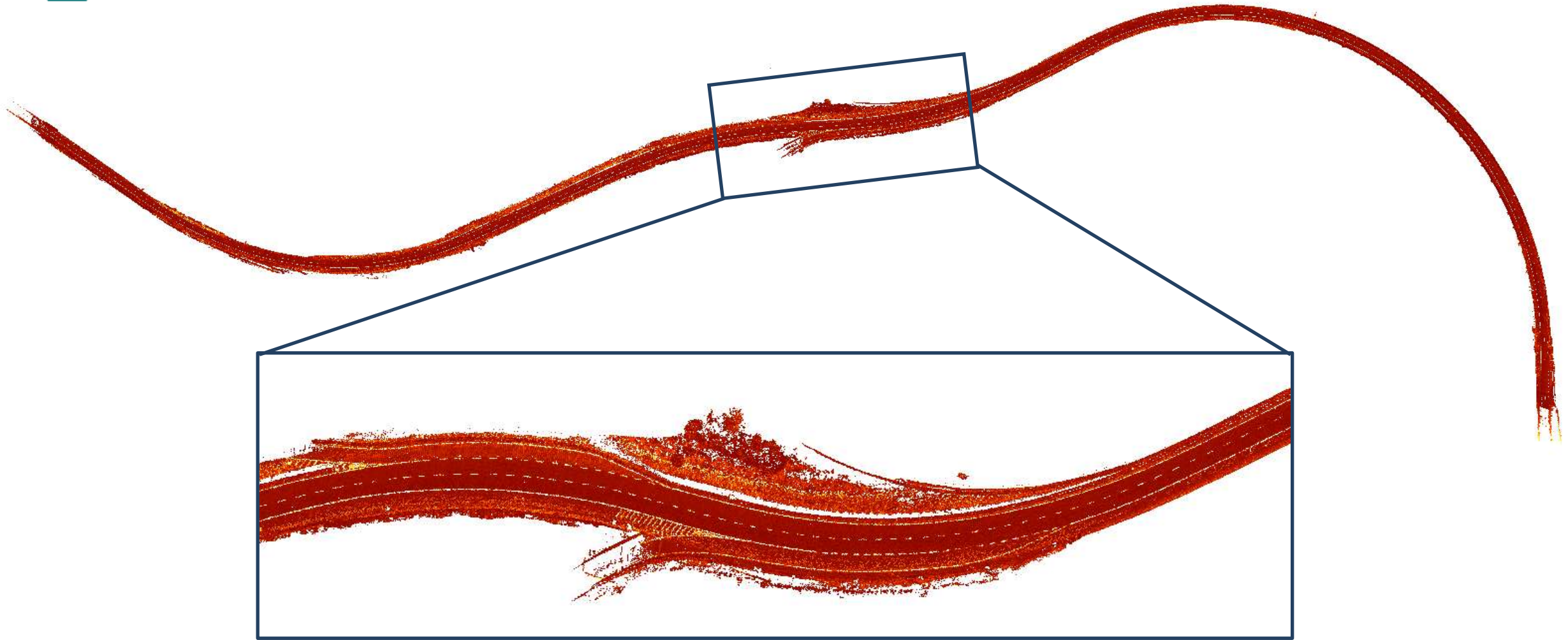
Route length 2km

Mounting time 1min

Survey time < 1min



# Demo day 2 – Settefonti, Florence





# Compare different speeds

OMI((RON

30kmph

40kmph

50kmph

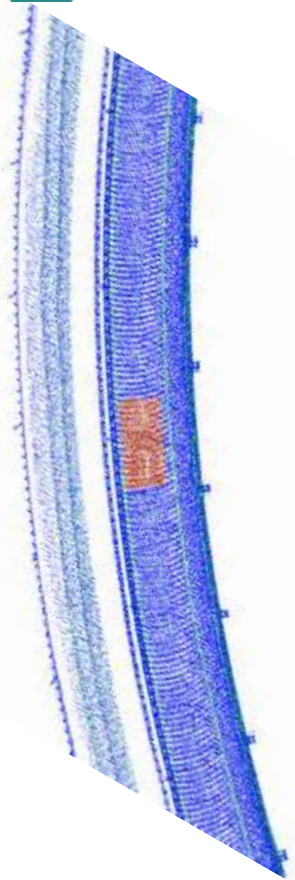
60kmph

80kmph

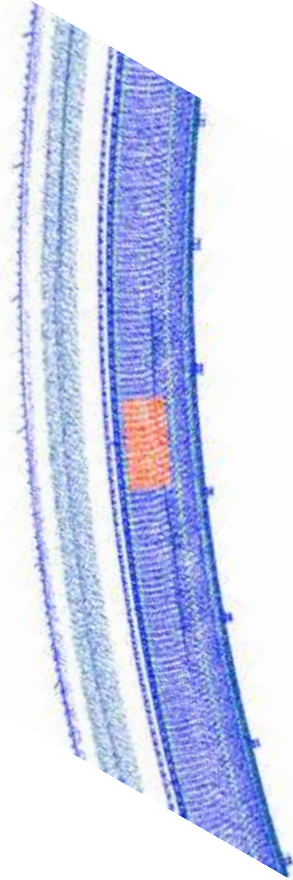




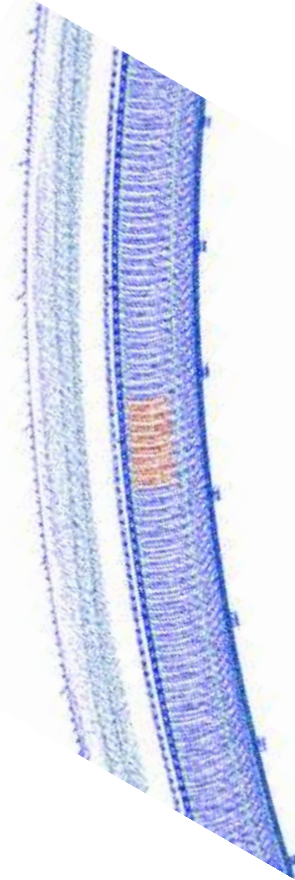
# Compare different speeds



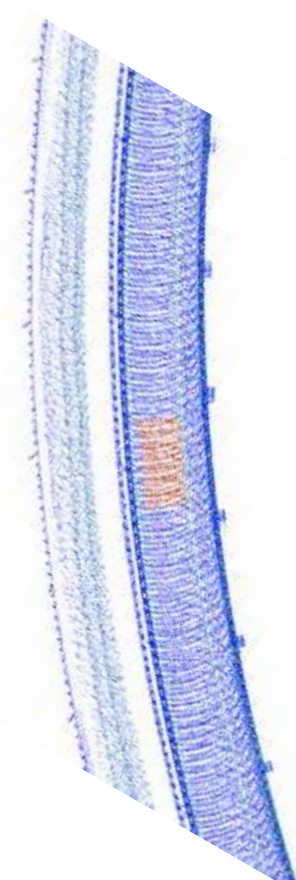
30kmph **7568**



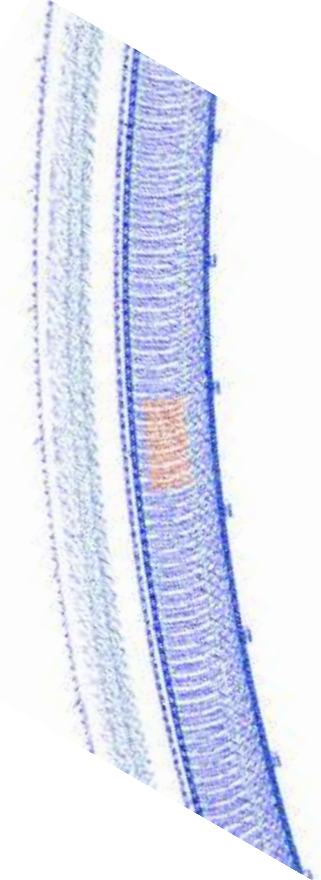
40kmph **6786**



50kmph **4230**



60kmph **3847**



80kmph **3205**

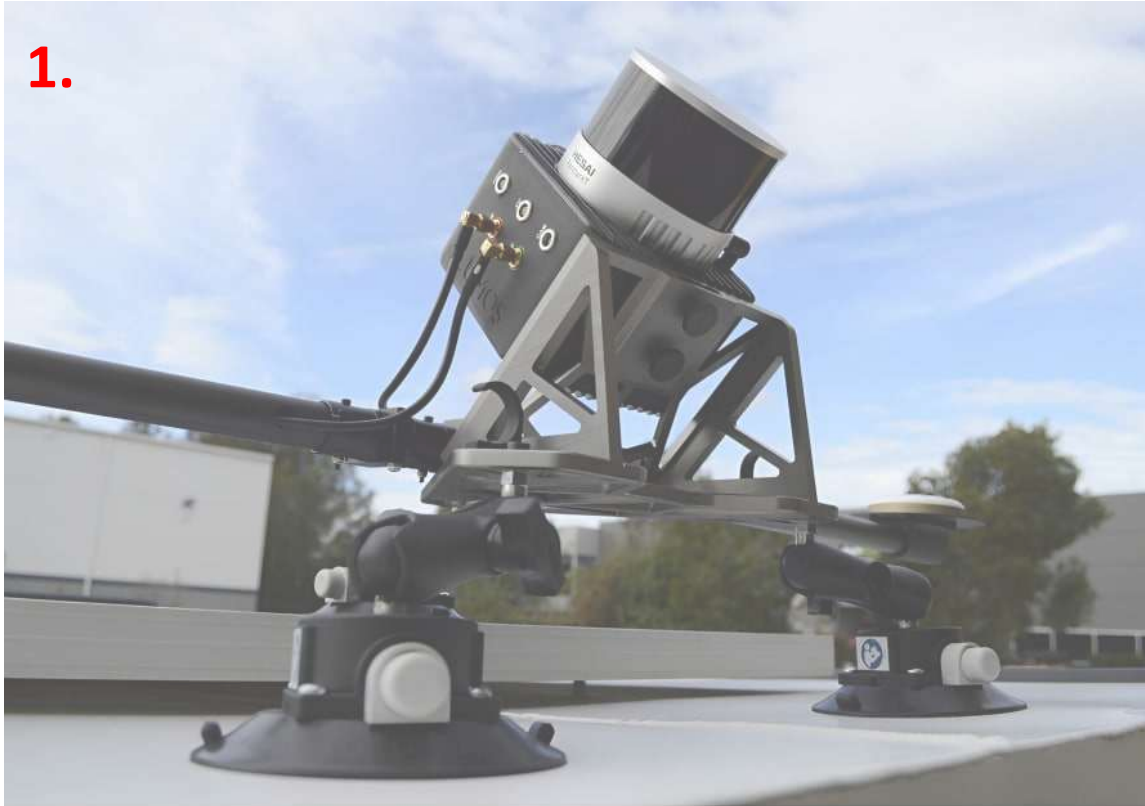






# What's next?

1.



**Cheap coarse inspection**

2.



**Affordable fine inspection**





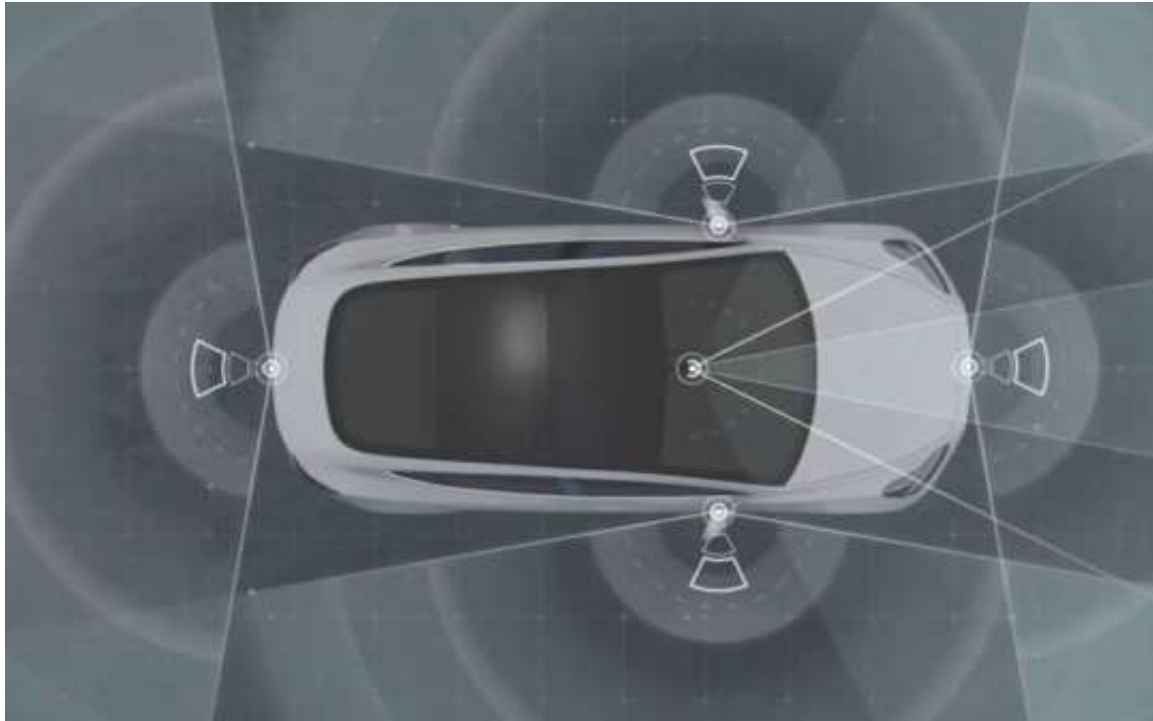
# What's next?

- HD cameras
- Mid-range LiDAR
- Accurate GNSS
  
- Fast initial inspection for defects from images

- Multi-LiDAR
- Multi-camera
- Highly accurate GNSS
  
- Fine inspection for defects, not evident from images



# What's next?



- Multi-LiDAR
- Multi-camera
- Highly accurate GNSS
- Fine inspection for defects, not evident from images





# What's next?

- Reuse HD cameras on cars
- High quality built
- Cheaper upfront cost
- Fast initial inspection for defects from images

- Multi-LiDAR
- Multi-camera
- Highly accurate GNSS
- Fine inspection for defects, not evident from images

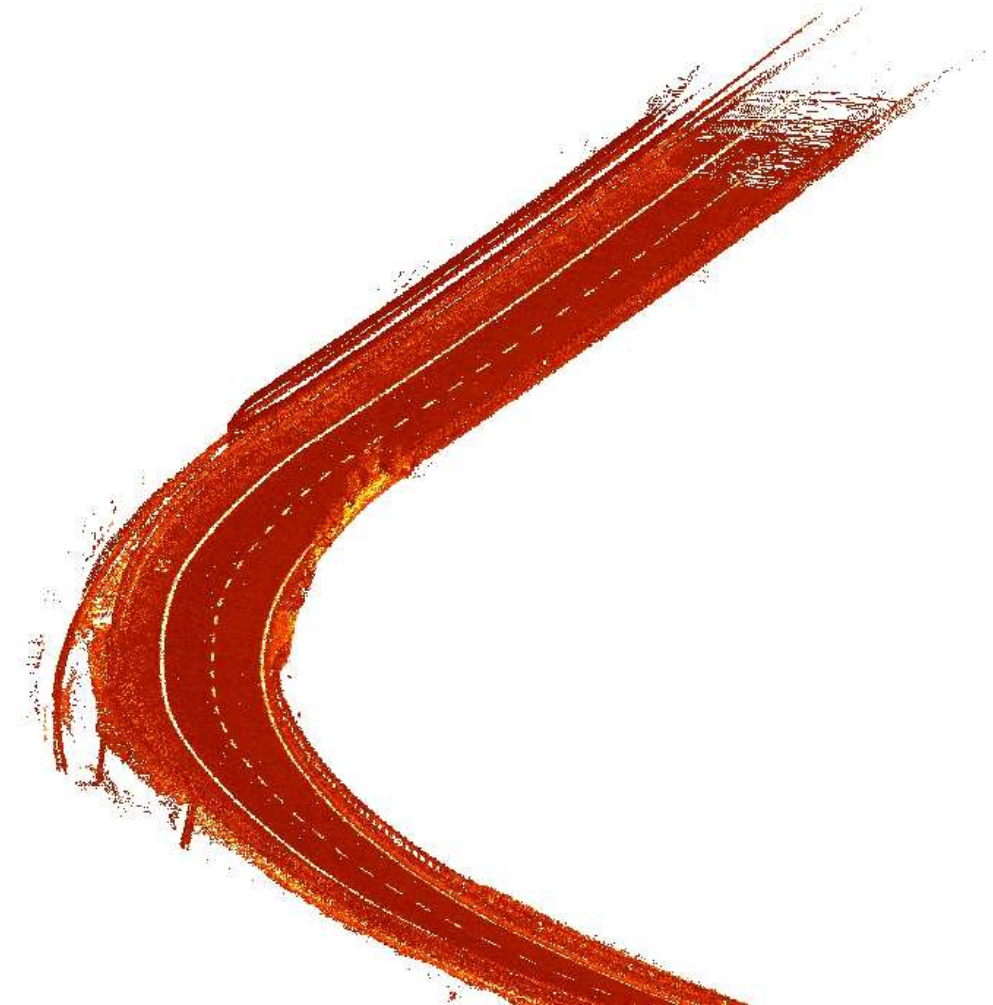
# OMICRON solution: Cost-efficient road inspection

## *Product development*

Adapting the scanner to particular use cases

- *Image first scanning for coarse*
- *Lidar first scanning for fine*

Versatile mapping software





Intelligent Road Asset Management Platform

# Thank you

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