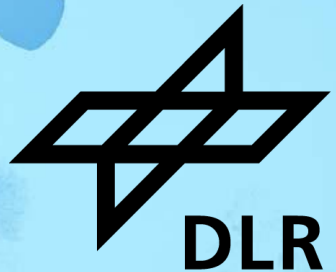# NEW LANE-DETAILED OPENDRIVE DATASETS (HD MAPS) FROM GERMANY OPENLY AVAILABLE

FOSS4G, 2023-06-30, Prizren

Michael.Scholz@dlr.de
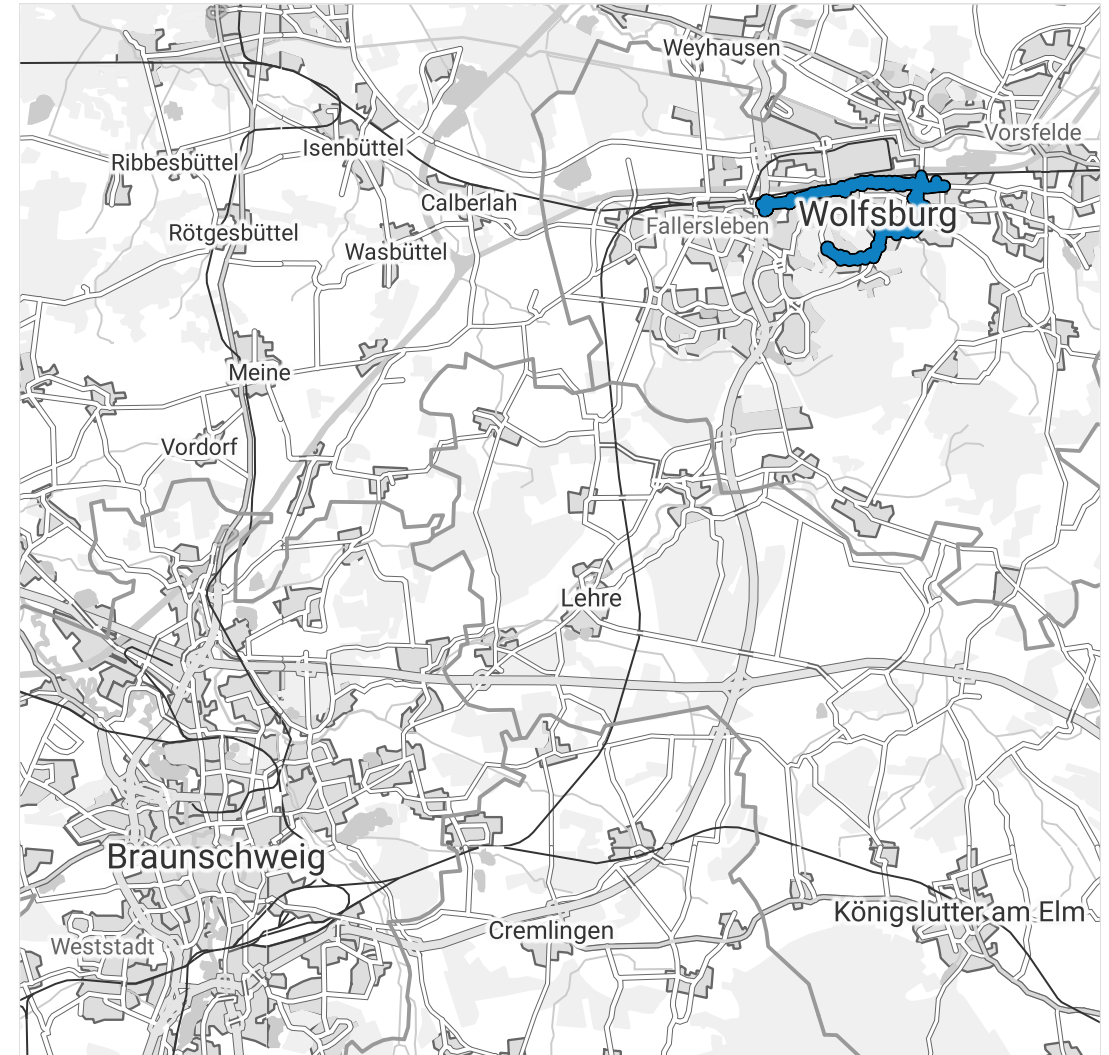
DLR

Publicly funded for research
"Value" > 100,000 EUR

Inner-city sections in Wolfsburg

- DOI 10.5281/zenodo.7072631

- [Metadata](#) on GeoNetwork

- 35 km

- Surveyed for project [5G Living Lab](#)

Base map © basemap.de / BKG

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Rebenring to airport in Braunschweig

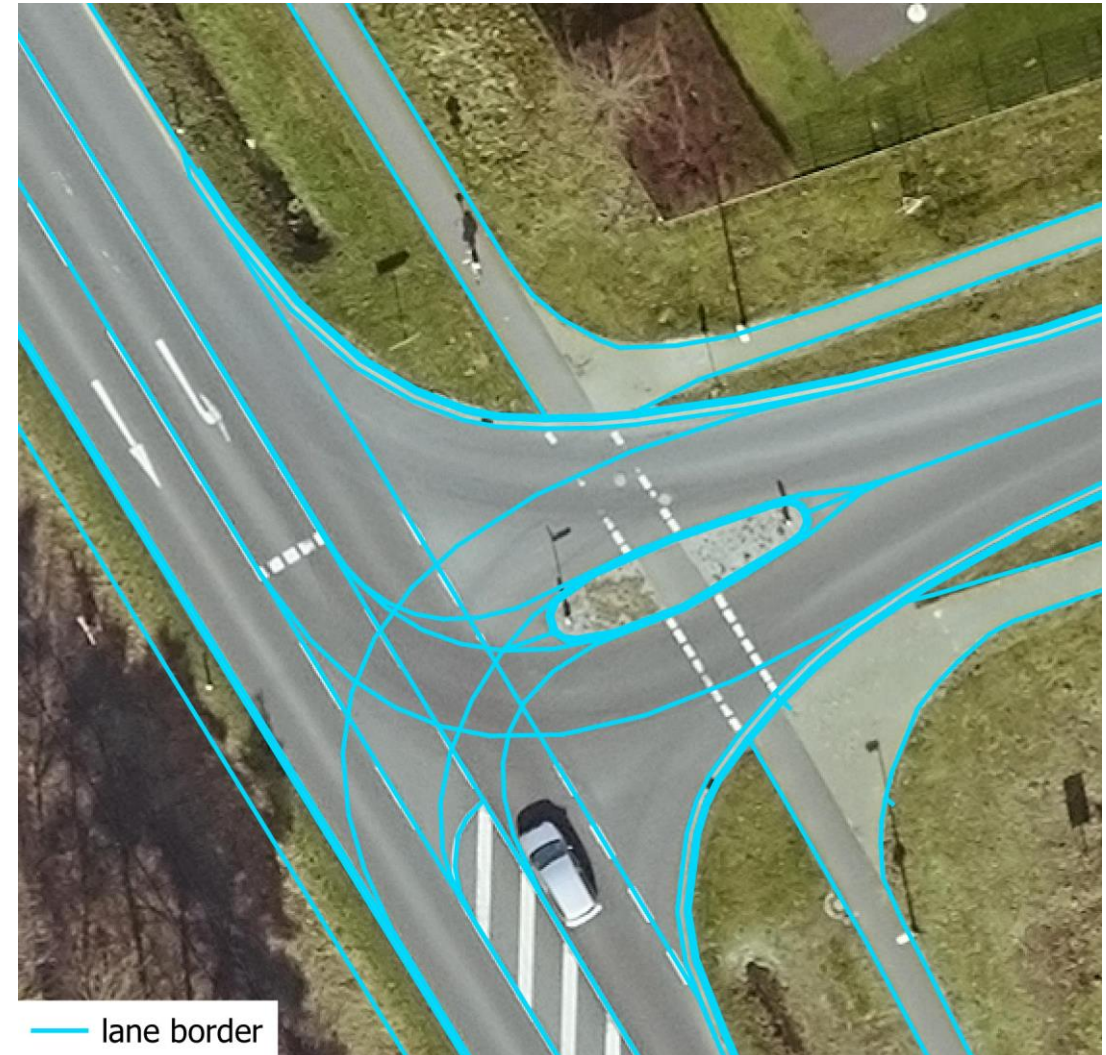- DOI 10.5281/zenodo.7071846
- [Metadata](#) on GeoNetwork
- 13 km
- Surveyed for project [ViVre](#)
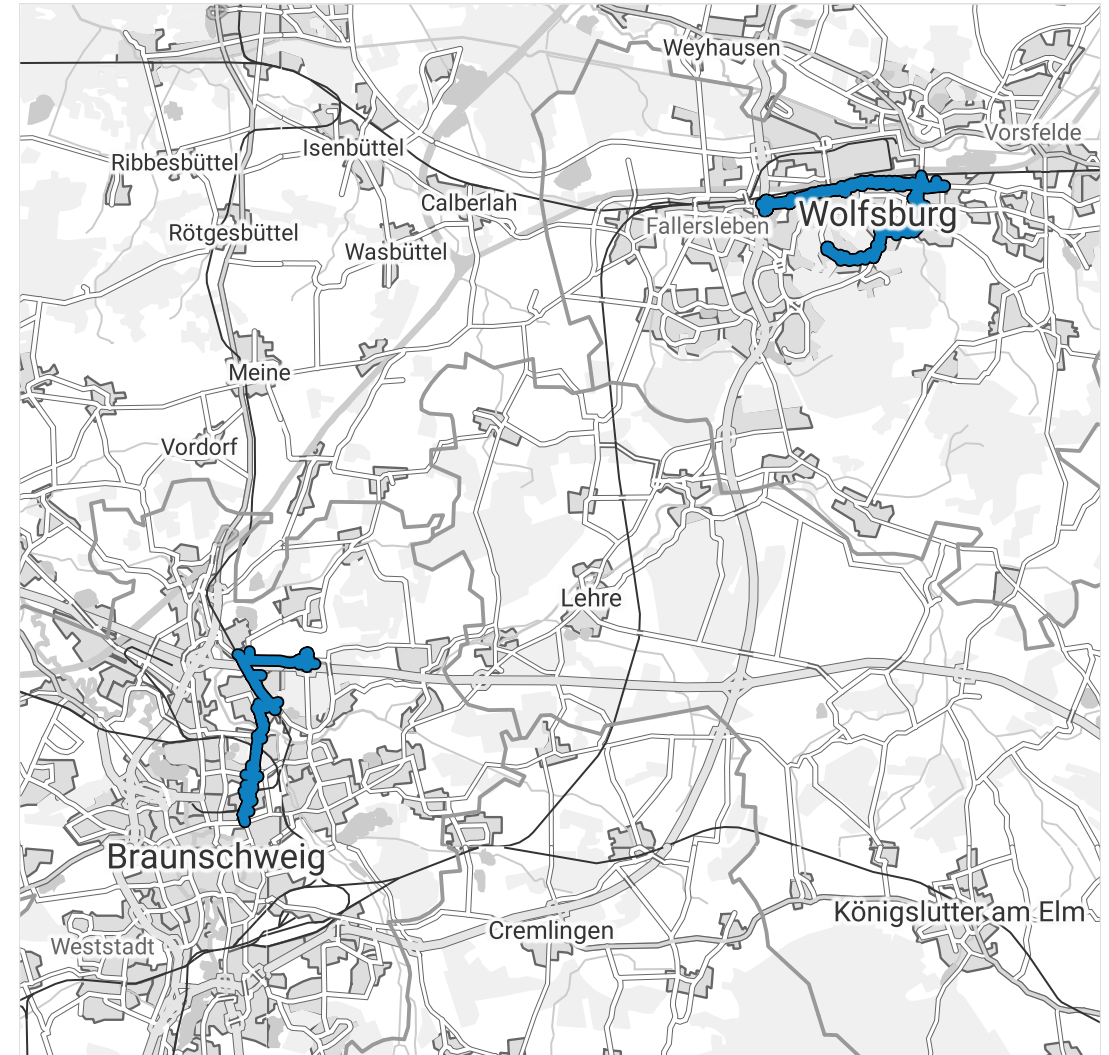
Base map © basemap.de / BKG

What does "HD" mean?

Modelling of road space on lane level

- Driving lanes
- Cycle ways
- Pedestrian "lanes"

— lane border

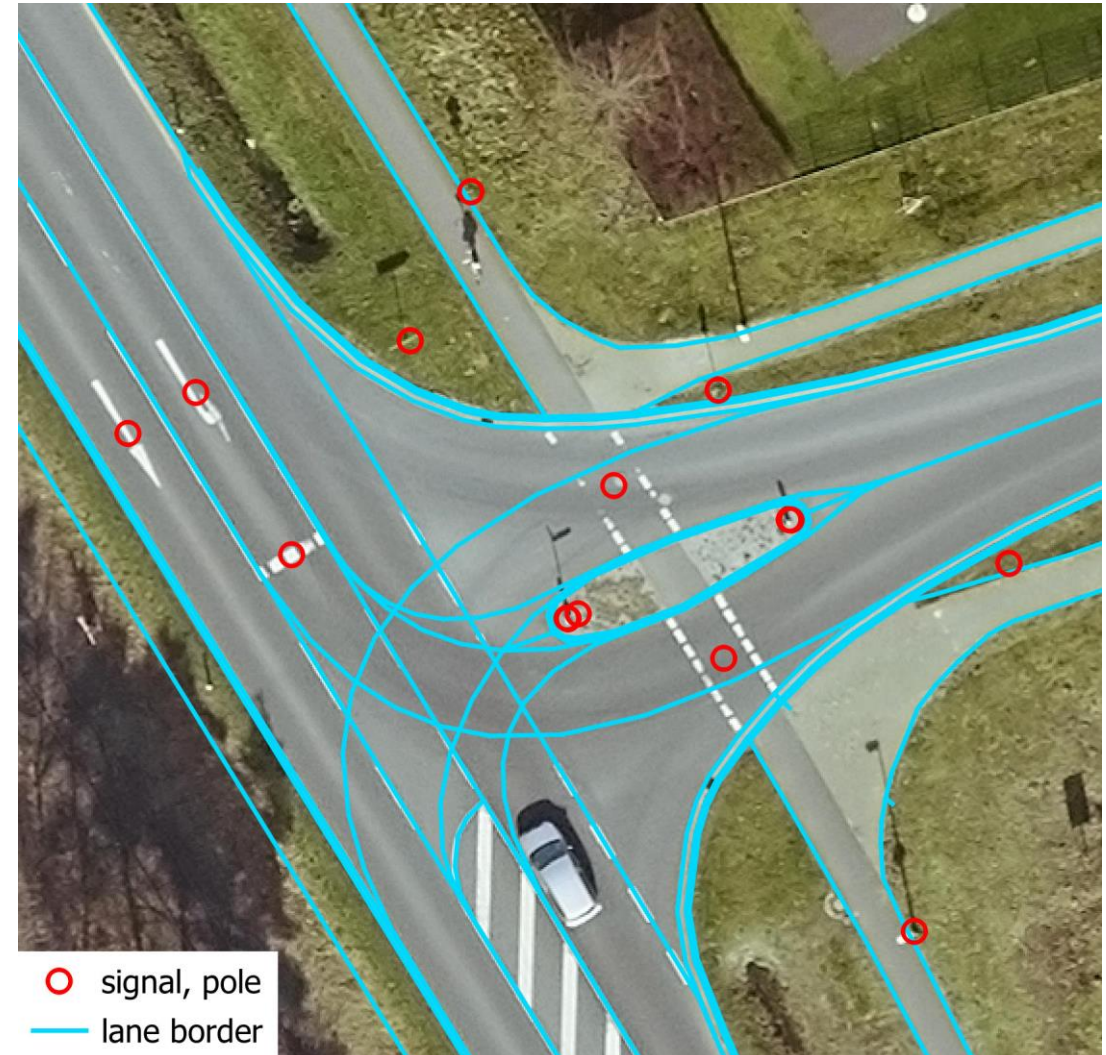Orthophoto © City of Braunschweig, 2020

What does "HD" mean?

Modelling of road space on lane level

- Driving lanes
- Cycle ways
- Pedestrian "lanes"

Including traffic infrastructure

- Road markings
- Signals and signs
- Poles, bollards

○ signal, pole
— lane border

What does "HD" mean?
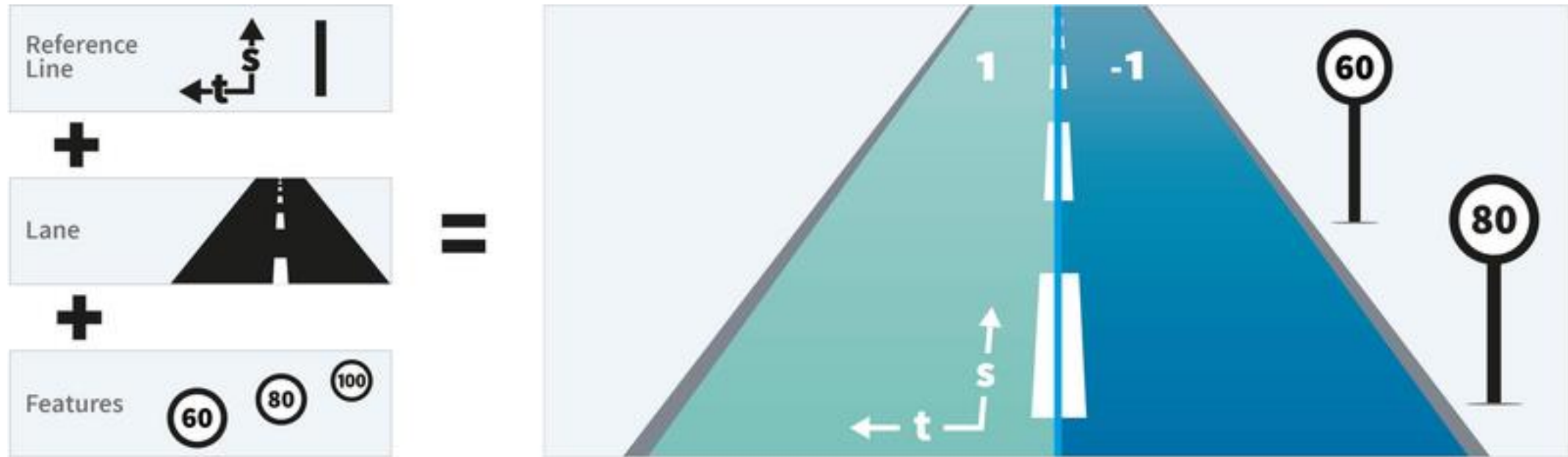
Mapping accuracy

- Absolute GNSS coordinate error < 20 cm ("trueness")

- Relative coordinate error < 5 cm ("precision")

Non-GIS raw data in OpenDRIVE format
Originating in automotive engineering domain

© ASAM e. V.

OpenDRIVE – yet another road description format

Driving simulation

Michael Scholz, 2023-06-30

OpenDRIVE – yet another road description format

Driving simulation

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OpenDRIVE – yet another road description format

Autonomous driving

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OpenDRIVE – yet another road description format

Microscopic traffic simulation → [SUMO](#)

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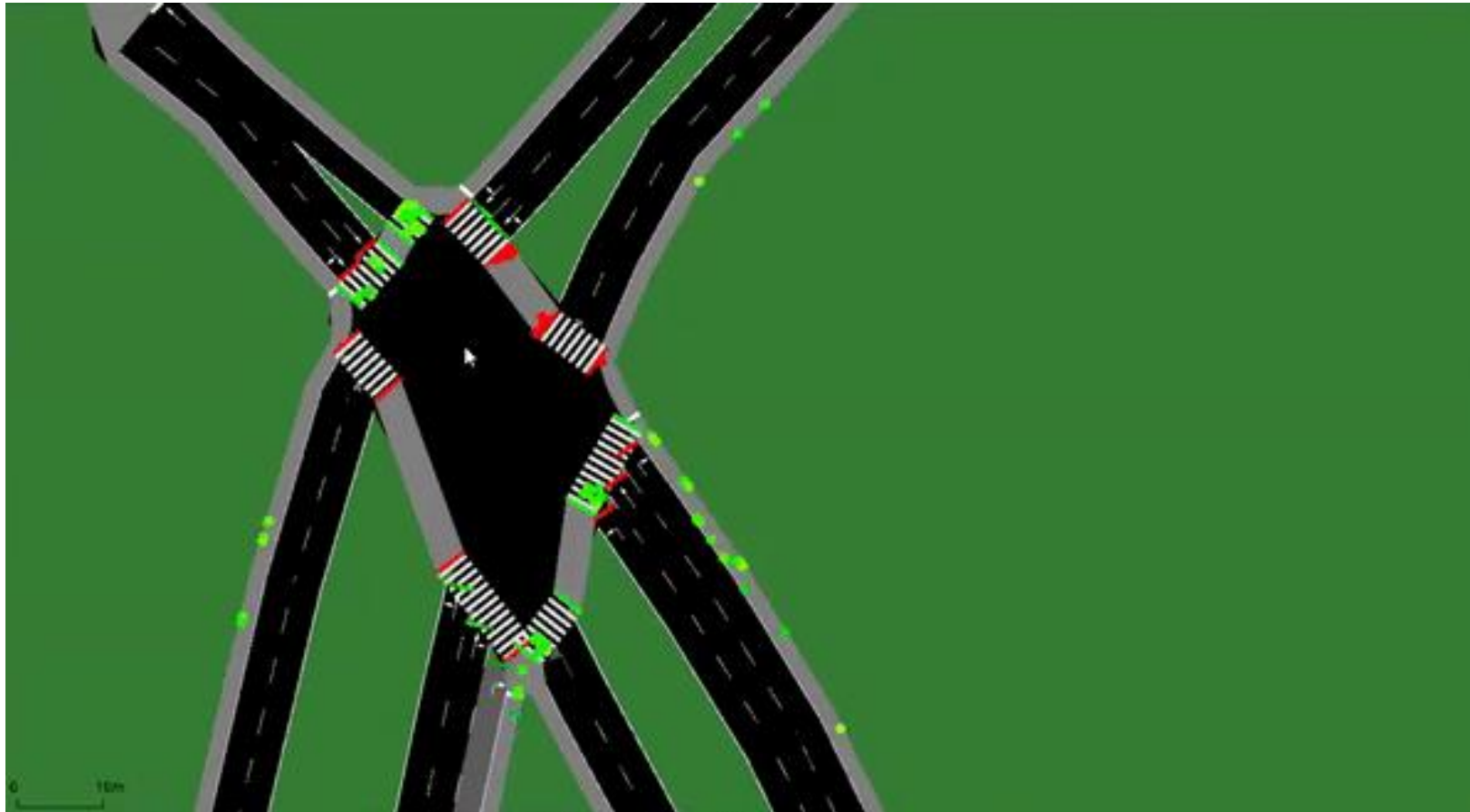
OpenDRIVE – yet another road description format

- Open industry standard as part of „OpenX", maintained by [ASAM e. V.](#)

- Growing developer community: [Awesome OpenX](#)

- Future GIS integration in [GDAL](#) and as [ADE in OGC CityGML 3.0](#)

Imprint

Topic: **New lane-detailed OpenDRIVE datasets (HD maps) from Germany openly available**

Date: 2023-06-30

Author: Michael Scholz

Institute: Institute of Transportation Systems

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