



Federal Agency for
Cartography and Geodesy



Wir geben Orientierung.

Standardized Quality Estimation of OSM Data

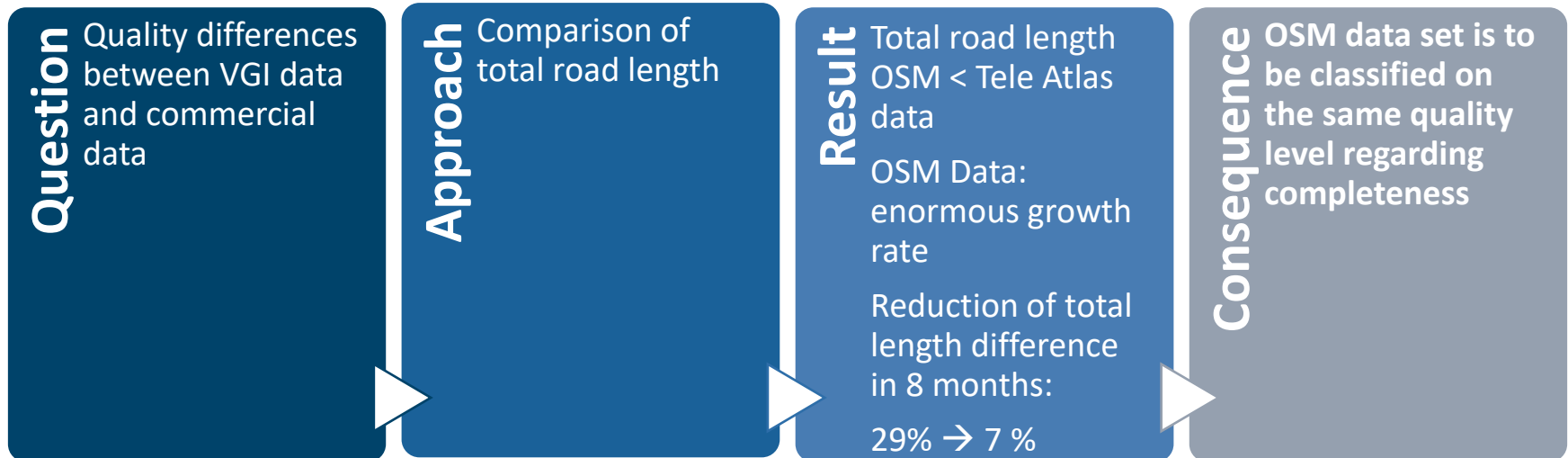
A presentation on the planned application, its examination methods and the challenges in adapting the methods

International Workshop on Spatial Data Quality
Lena Jossek

Can OSM data keep up with proprietary data?

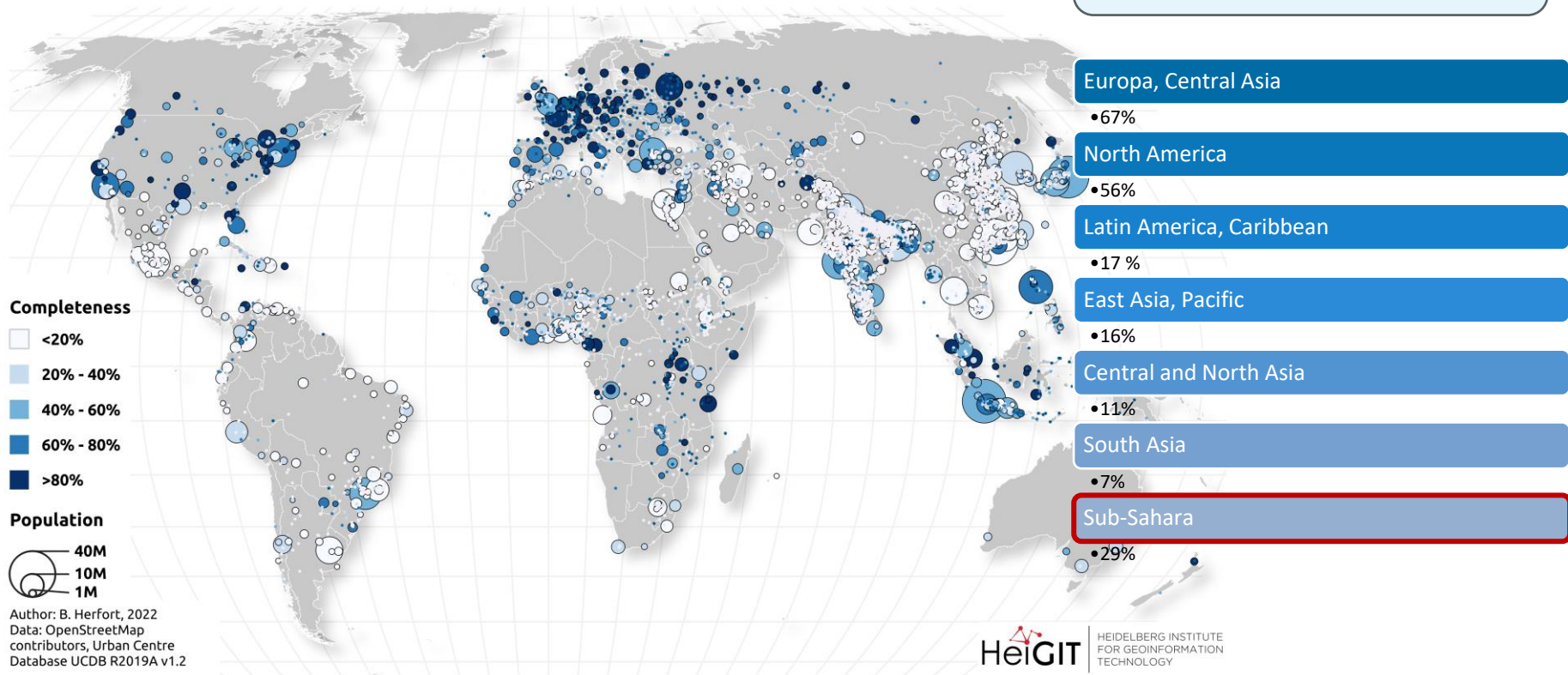
Zielstra & Zipf, 2010:

„A Comparative Study of Proprietary Geodata and Volunteered Geographic Information for Germany“

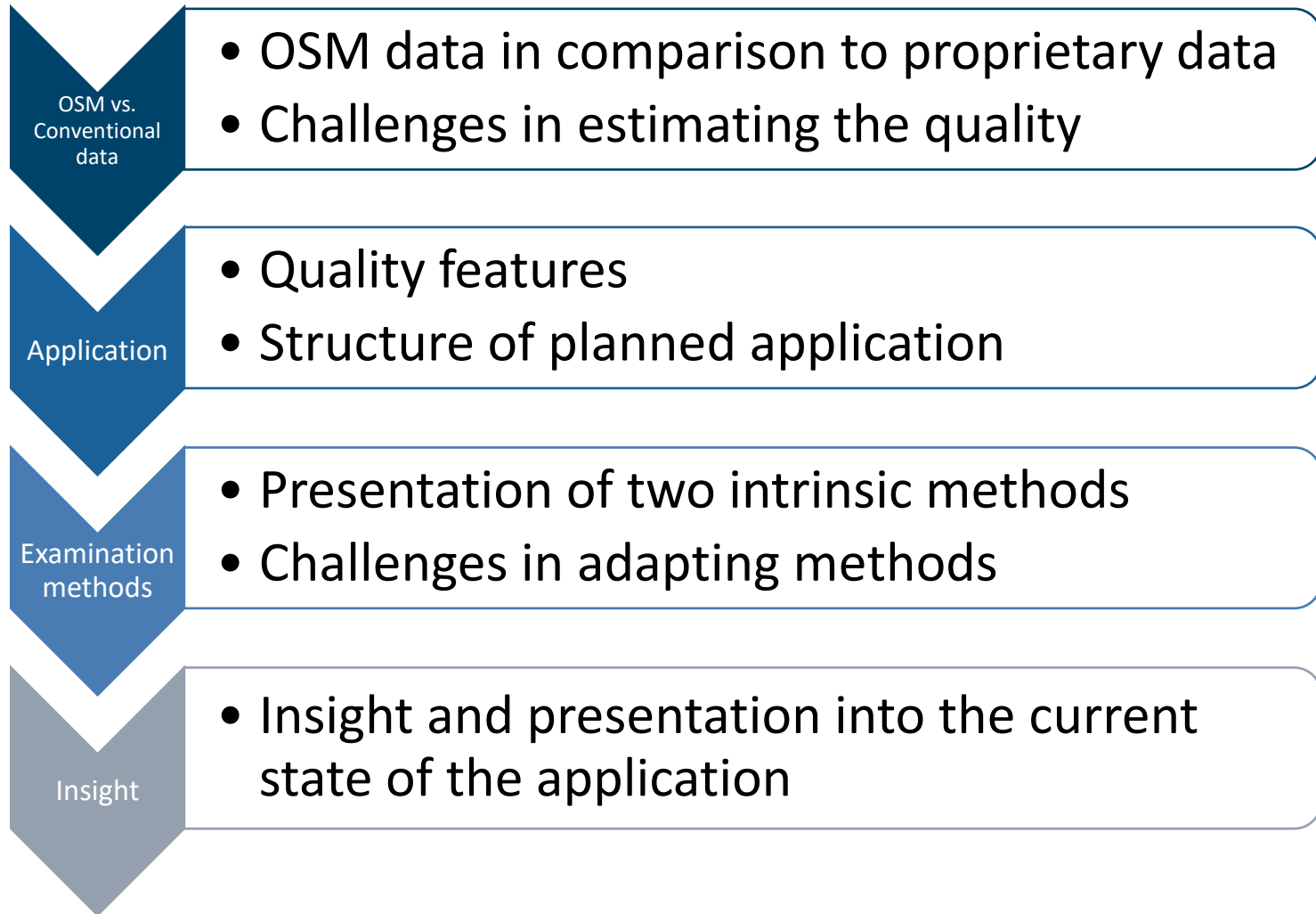


Example: global inspection of the completeness of the building stock

OpenStreetMap Building Completeness in Urban Centers



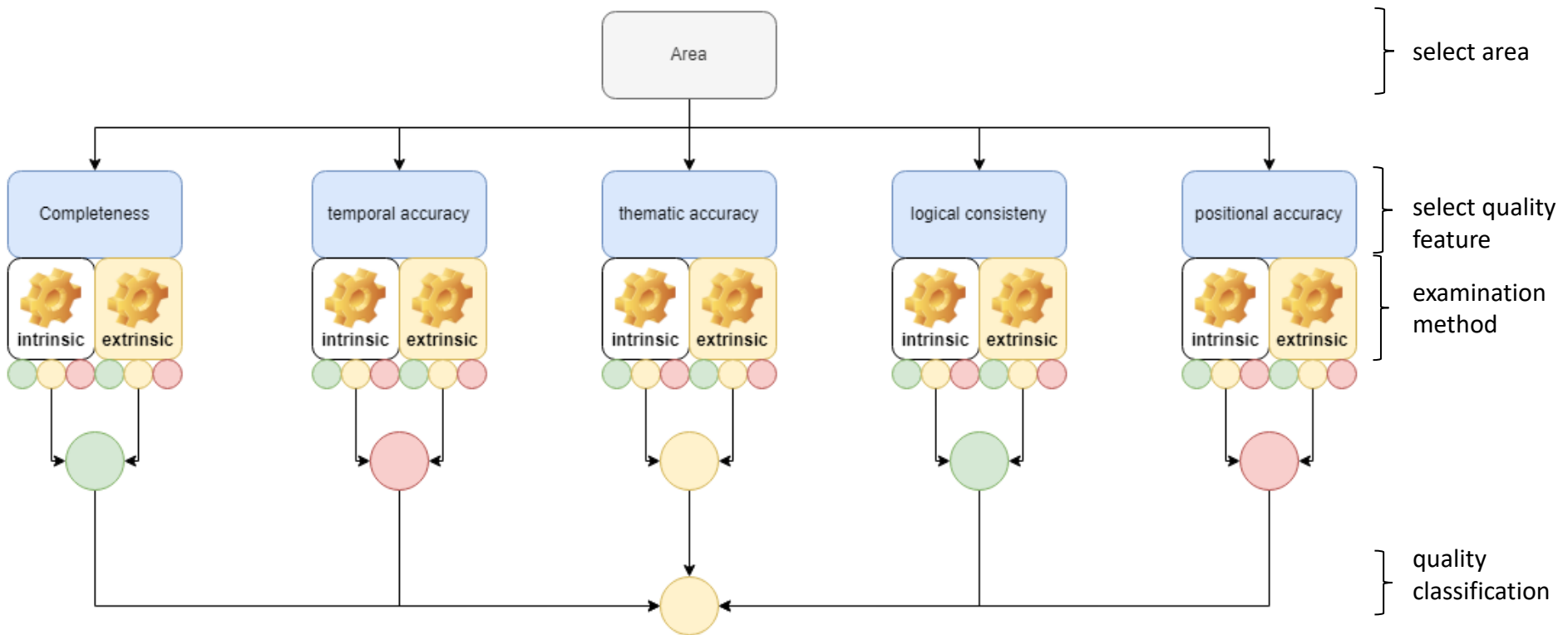
Overview



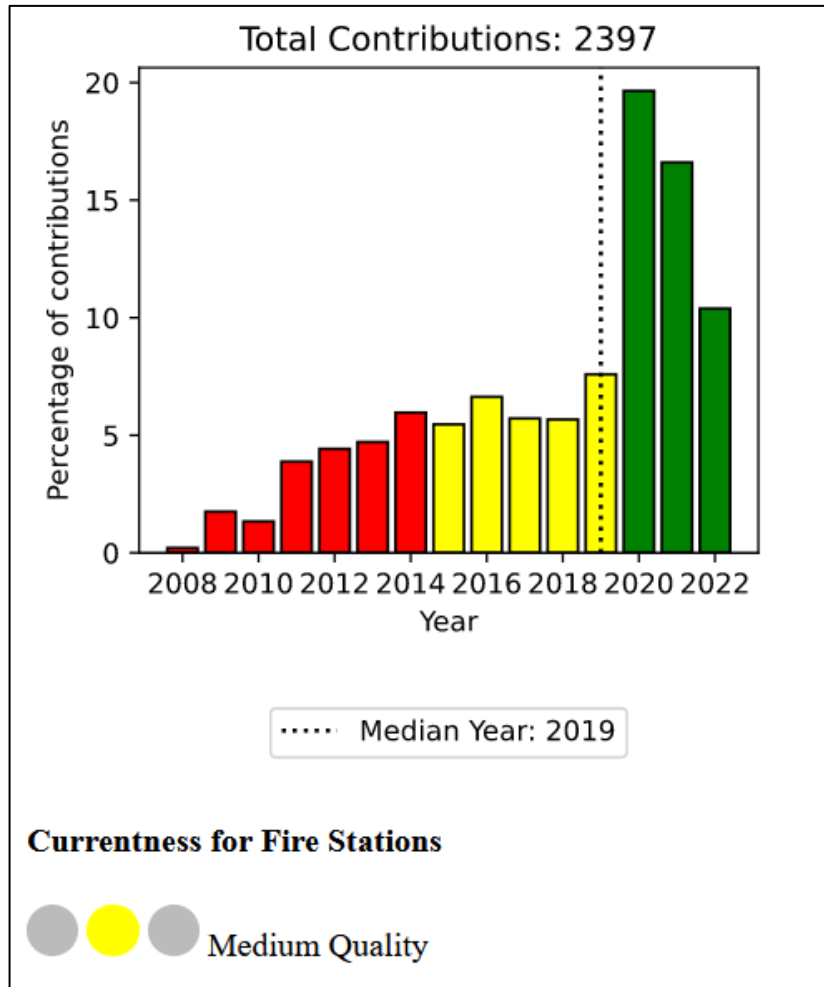
Standardized quality features



Overview workflow of planned application



Temporal accuracy: intrinsic examination method

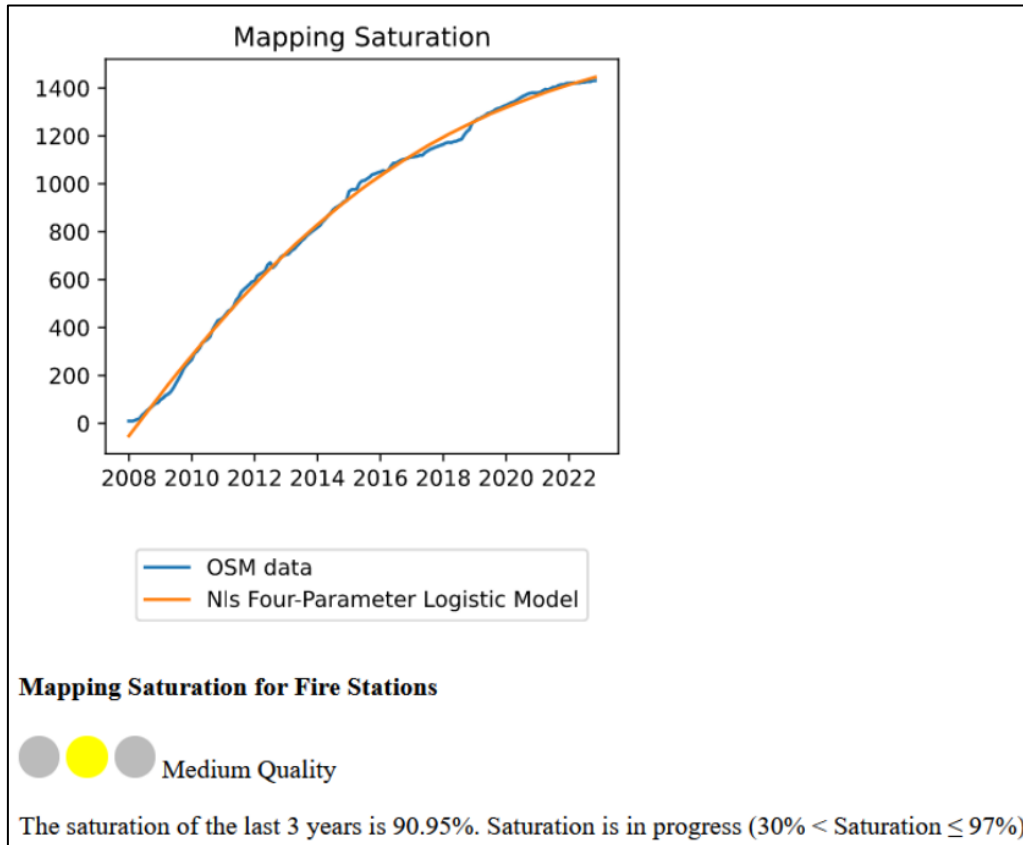


Area: State of
Brandenburg,
Germany

Quality feature:
Temporal
Accuracy

Examination
method:
Currentness

Completeness: intrinsic examination method

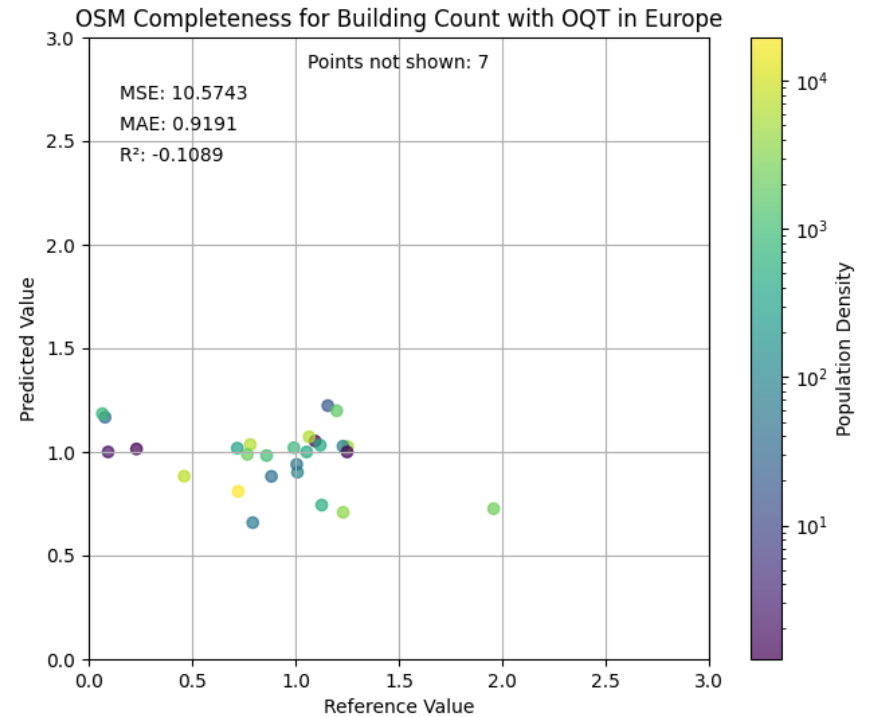
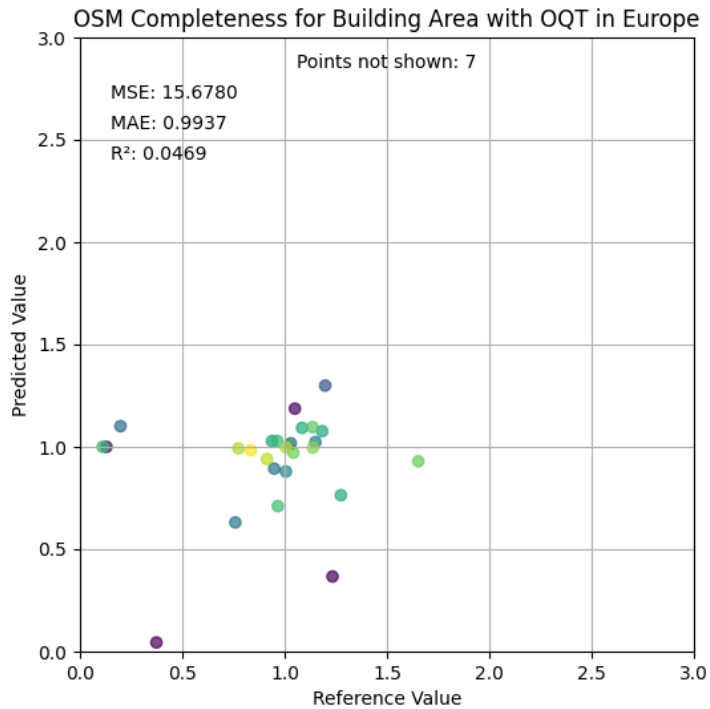


Area: State of
Brandenburg,
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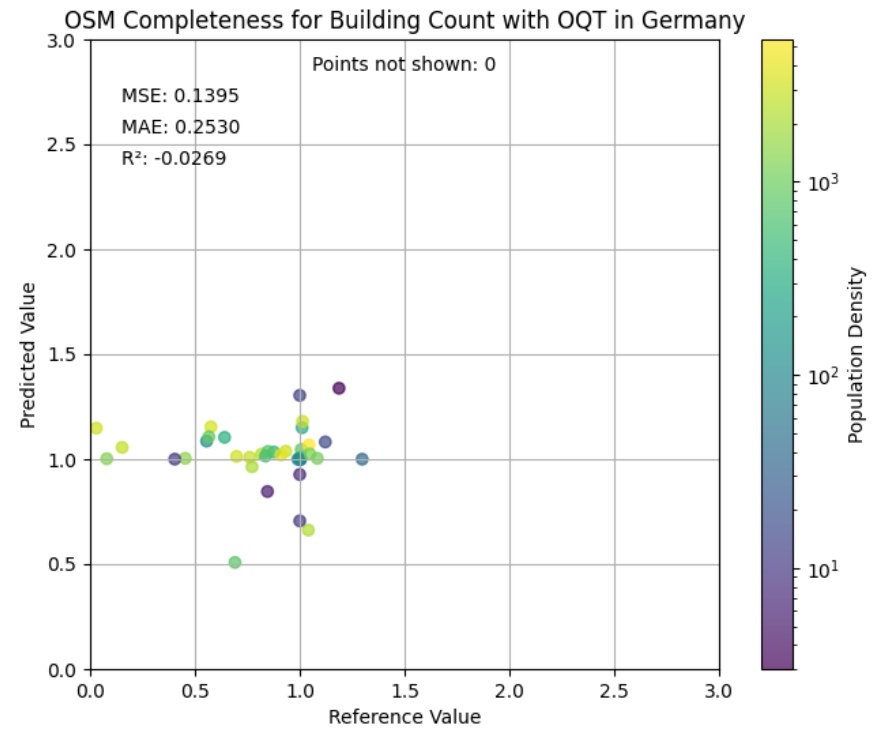
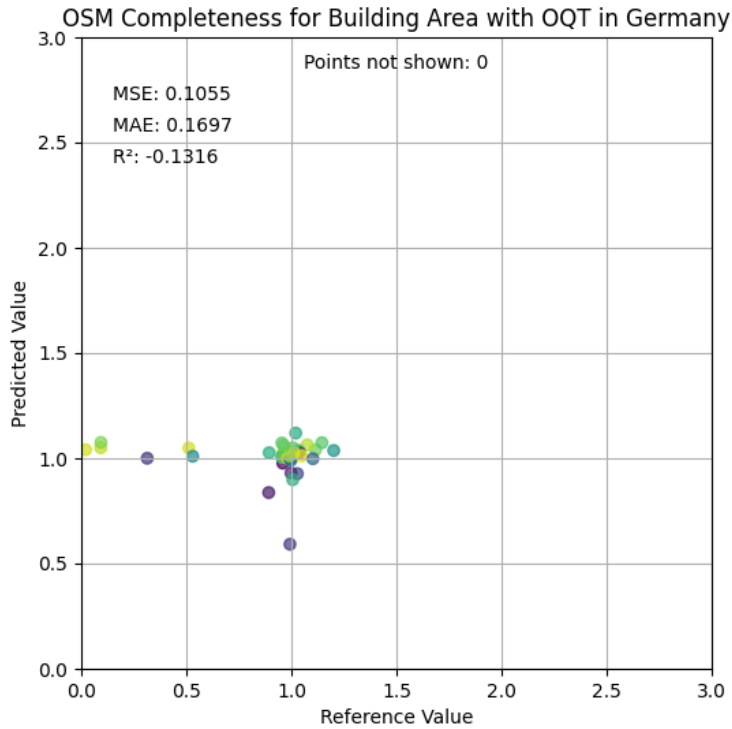
Quality feature:
Completeness

Examination
method: Mapping
Saturation

Accuracy of examination method „Mapping Saturation“

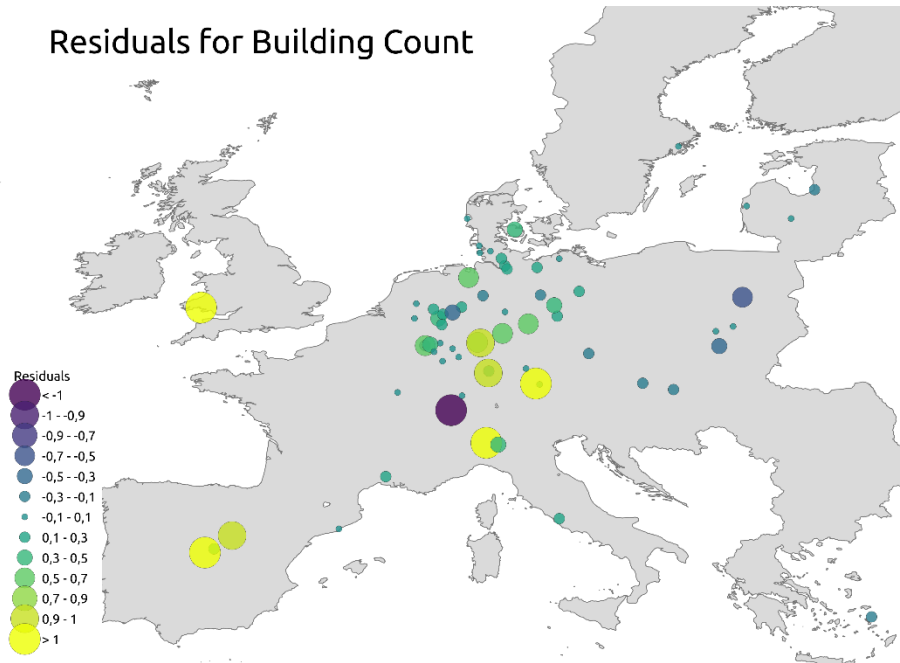


Accuracy of examination method „Mapping Saturation“

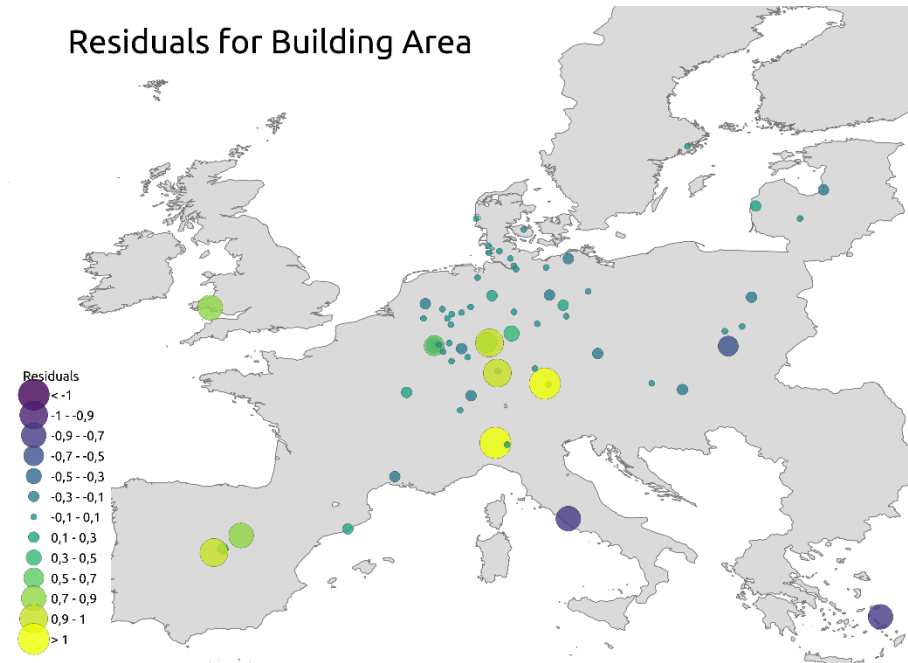


Accuracy of examination method „Mapping Saturation“

Residuals for Building Count



Residuals for Building Area



Insights into current status of the application

ohsome DASHBOARD OSM History Analyzer Easy access to OSM History and Quality Analyses **HeiGIT**

OSM History Stats **OSM Quality Analyses**

Topic

Building Count

All buildings as defined by all objects tagged with "building=":

ohsome filter definition of the topic:

```
building=* and building!=no and geometry:polygon
```

Quality Indicators

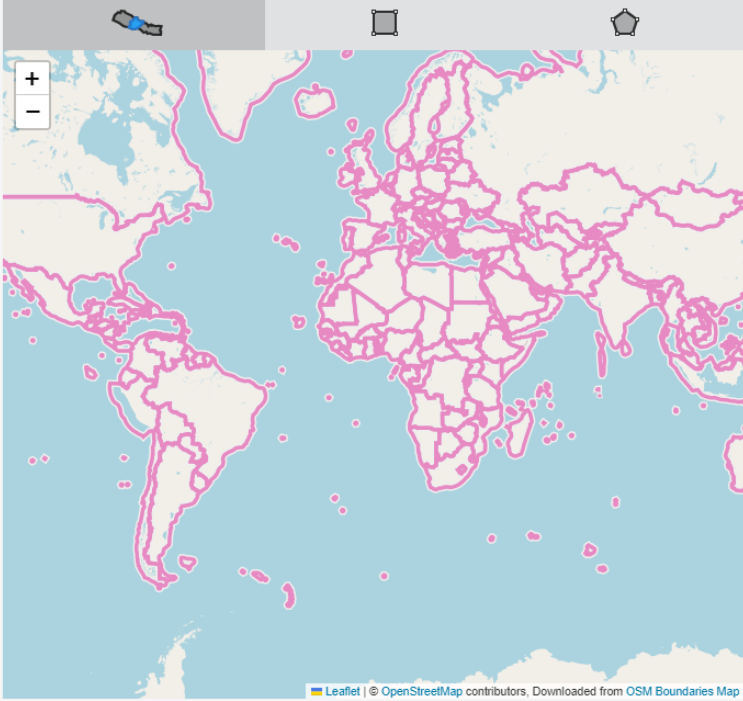
Completeness

Mapping Saturation
Calculate if mapping has saturated. High saturation has been reached if the growth of the fitted curve is minimal.

Currentness

Currentness
Estimate currentness of features by classifying contributions based on topic specific temporal thresholds into three groups: up-to-date, in-between and out-of-date.

Area of interest



Selected areas

Leaflet | © OpenStreetMap contributors, Downloaded from OSM Boundaries Map

Run Query



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Thank you for your kind attention!

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