Dashboard to monitor spatial data quality compliance of OpenStreetMap for humanitarian action

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Introduction

- Quality assessment of OpenStreetMap is an endless research
- Extrinsic and intrinsic
- Context & data driven





Standardize it or visualize it?

- Standardization of quality of OSM is challenging
- Visualization of quality of OSM is also not easy
- Contextualize it according to disaster response/preparedness.

DASHBOARD

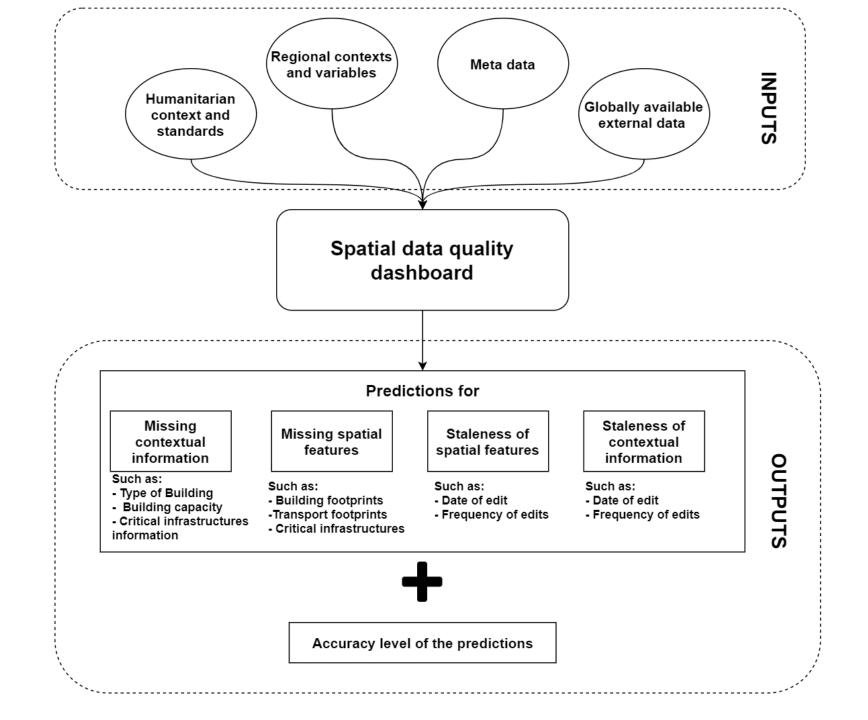
Visualize OSM quality

Prioritize mapping areas in OSM

Monitor OSM quality





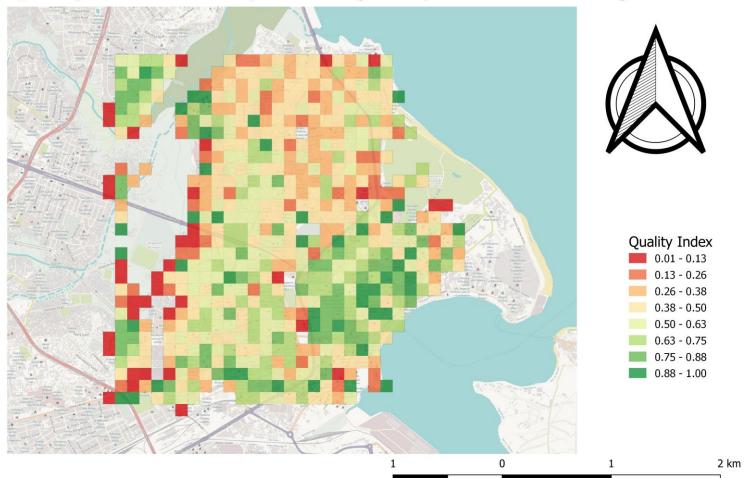






Example output

Quality index with respect to tag completeness: building:material







This research will include

- 1. Taxonomy of spatial and non-spatial information
- 2. Temporal requirements of spatial and non-spatial information
- 3. Internal and external quality measures.
- 4. Development methods to monitor and visualize the quality of OpenStreetMap
- 5. Spatial invariance
- 6. Geo-spatial dashboard style, layout pattern and design features for user-centric design-support tool.
- 7. Methods to reduce the semantic noise.





Thank you!! Let's collaborate



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