



OpenStreetMap
The Free Wiki World Map



PROJECT:

MANNEIMER MAPATHONS

PROMOTING INTEGRATION – PROVIDING HUMANITARIAN AID

<https://mamapa.org>

Unterstützung: und Hilfe von:



CartONG

Chambéry, FR

BASF

Ludwigshafen am Rhein



Disastermappers
Heidelberg



MANNHEIM²
Integrationsforum

Ludwigshafen
Stadt am Rhein



vhs Volkshochschule Heidelberg e.V.

hochschule mannheim



PROJECT:

MANNHEIMER MAPATHONS

PROMOTING INTEGRATION – PROVIDING HUMANITARIAN AID

Activity: organizing a series of mapathons (every 4-5 weeks) in which recent arrivals in Germany (immigrants, refugees or others) and local residents, work together -- in tandem -- on selected HOT / Missing Maps tasks





PROJEKT:

MANNHEIMER MAPATHONS

PROMOTING INTEGRATION – PROVIDING HUMANITARIAN AIDE

100% volunteer organization and participation

- **Begin:** January, 2018
- **Summer 2018:** formally registered as non-profit association ("e.V.")
- **To date:** 18 Mapathons organized – Mannheim, Ludwigshafen, Heidelberg
- **Mapathon attendance:** 25-35 persons (50/50 new arrivers/local residents)

IT infrastructure/usage provided free of charge by support organisations

Supporters :

- **Language and “integration” schools** for migrants, refugees, “new arrivers” (Goethe Institute, Int.Bund, Volkshochschulen, etc.)
- **Local authorities** charged with communal integration tasks
- **Mannheim Technical University** – Faculty for Social Work
- **Geographic Institute** – Uni Heidelberg
- **CartONG France**
- **BASF** (financial)
- **Acquaintances, friends and family**



MANNHEIMER MAPATHONS

Promoting integration of new arrivals

- Mapping in tandem with current residents:
 - Social contact
 - Language practice
- Getting to know their new environment:
 - Moving beyond daily « routines » of school, home, compatriots, family
 - Expanding their daily « geographic horizons »
 - Better understand the new cultural situation in which they find themselves



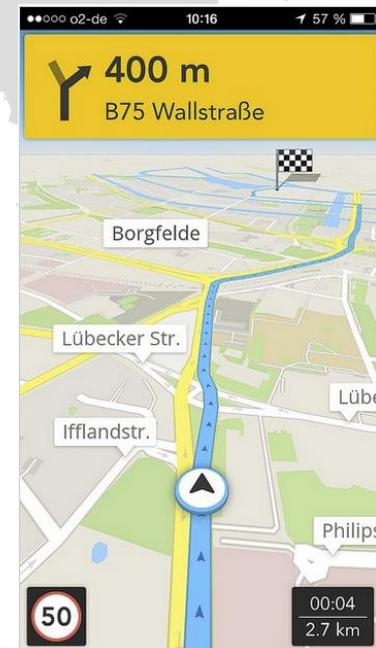
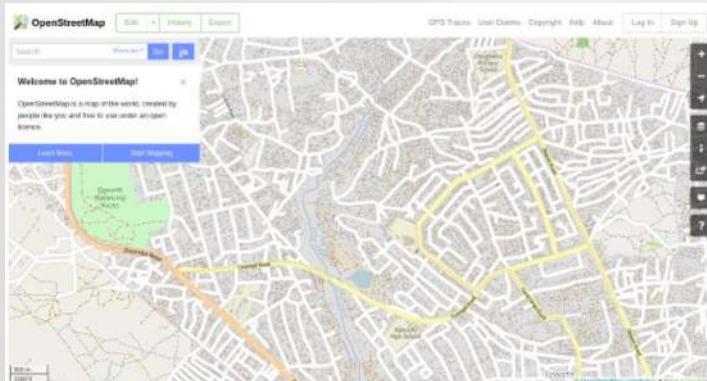
For all participants: new arrivals and long-time residents:
Deconstruct stereotypes, combat prejudicial thinking



MANNHEIMER MAPATHONS

Acquisition of new knowledge and skills

- Raising geographic awareness in general
- First encounter with (digital) cartography
- Increased IT skills
- Awareness of career possibilities related to location-based services





MANNHEIMER MAPATHONS

Making a concrete humanitarian contribution

- Supporting others in need worldwide
- Being part of a worldwide community of humanitarian activity.
- Being able to help others despite one's own difficulties.



PUERTO RICO MAPATHON

October 4, 2017 | 11:00 A.M. – 1:45 P.M. | Criss Library Rm. 112

Contribute your time to open source mapping to aid relief efforts in Puerto Rico.

Following Hurricane Maria, people globally are using OpenStreetMap to provide the Red Cross with data needed for disaster response. The Red Cross has identified tasks we can help with that aid their relief efforts. UNO Libraries is hosting a mapathon to help students, staff, and faculty contribute. During the mapathon, we will work together to help provide data that the Red Cross needs.

No mapping experience or knowledge of the local geography is required. You are free to come and go as you need—this is intended to be a drop-in event. If you want to help but only have a few moments, please feel free to stop by.

Please RSVP on MoveSync. Feel free to bring your laptop, but computers will also be available for use in the lab. No software installation is required.

Dr. Jason A. Heppner
Digital Engagement Librarian
jheppner@unomaha.edu

LIBRARY.UNOMAHA.EDU
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UNIVERSITY OF NEBRASKA
Omaha





MANNHEIMER MAPATHONS

« Live » - 10.04.2018

<https://mamapa.org>

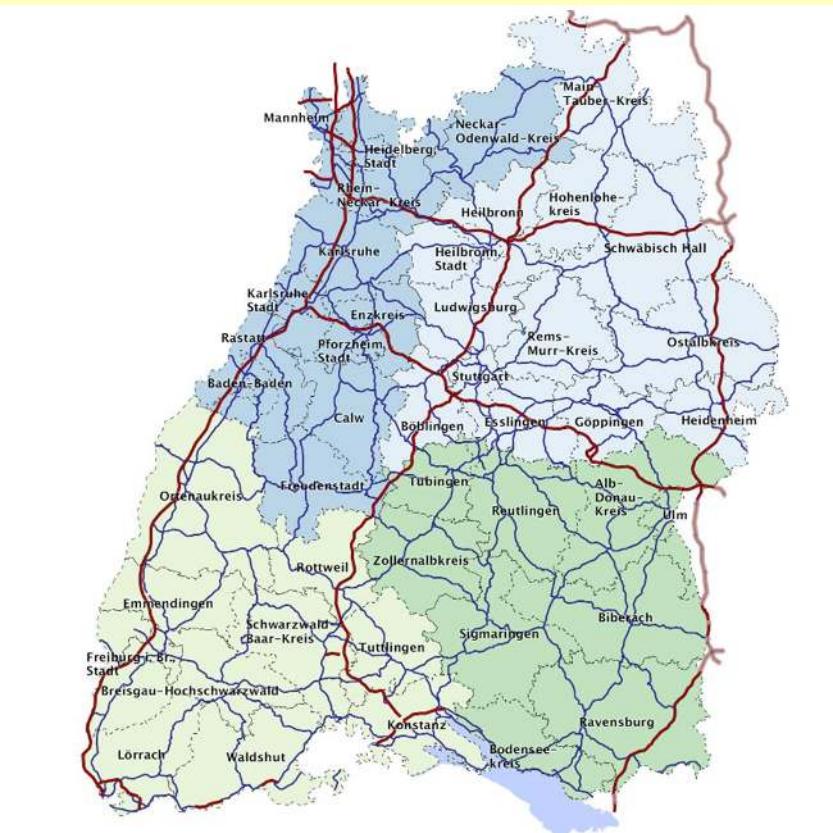
<https://mamapa.org>



Road Works Management System BW – BIS2.0
Alexander Dreidt (LST)

Road works & constructions in Baden-Württemberg

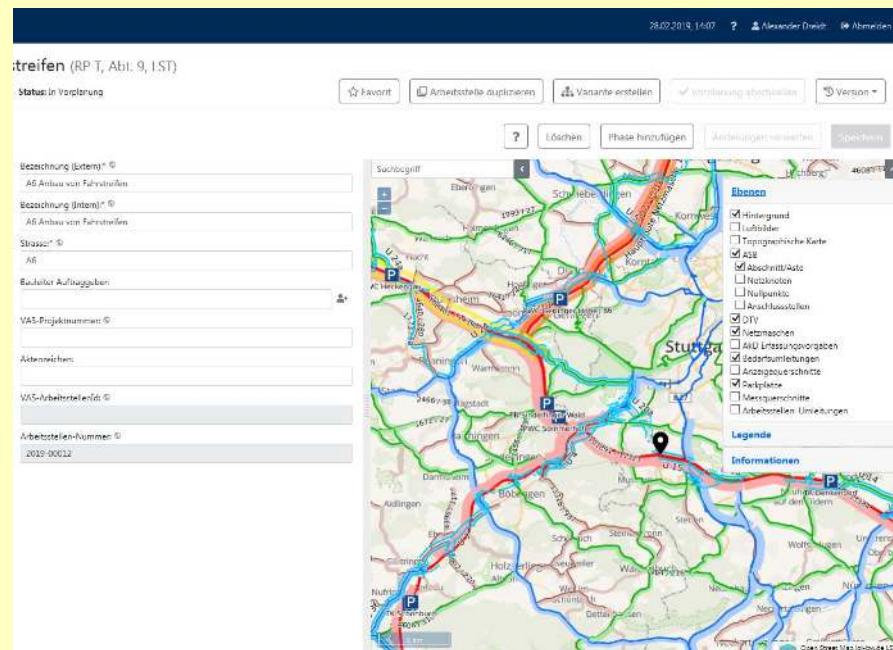
- > 400 major road construction sites each year on highways and primary roads
- Hundreds of maintenance works each day



Improve planning and coordination

BIS2.0 supports planning and coordination of road works

- Capture all information relevant for public and third parties
- Finding optimal time slots
- Estimating (and reducing) road work's traffic impact
- Support request, hearing and approval of road works



streifen (RP T, Abt. 9, LST)

Status: In Vorplanung

 Favorit Arbeitsstelle duplizieren Variante erstellen Vorplanung abschließen Version ▾ ? Löschen Phase hinzufügen Änderungen verwerfen SpeichernBezeichnung (Extern):^{*}

A6 Anbau von Fahrstreifen

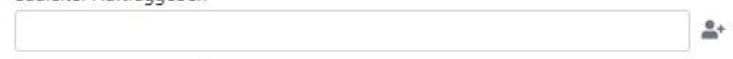
Bezeichnung (Intern):^{*}

A6 Anbau von Fahrstreifen

Strasse:^{*}

A6

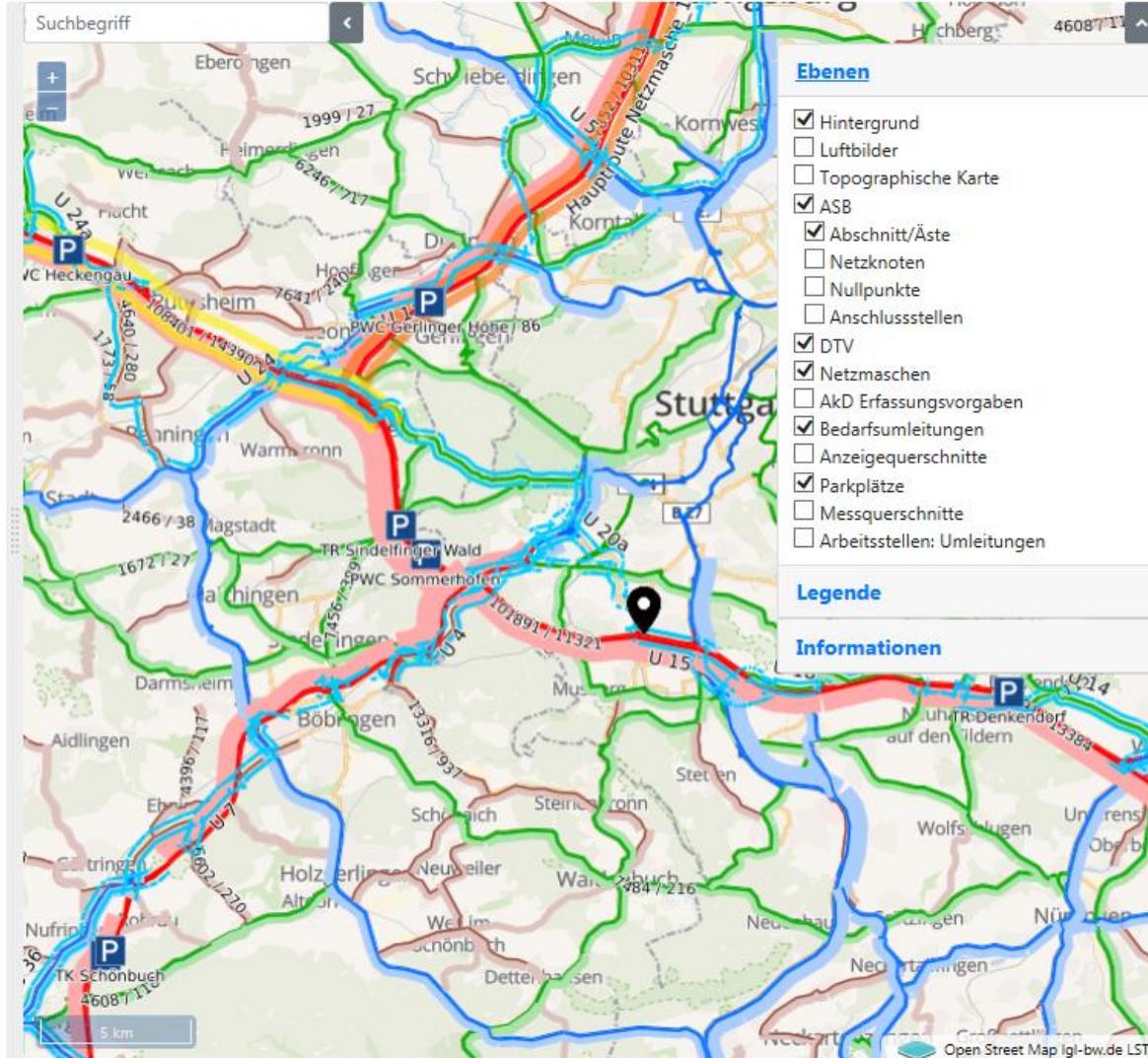
Bauleiter Auftraggeber:

VAS-Projektnummer: 

Aktenzeichen:

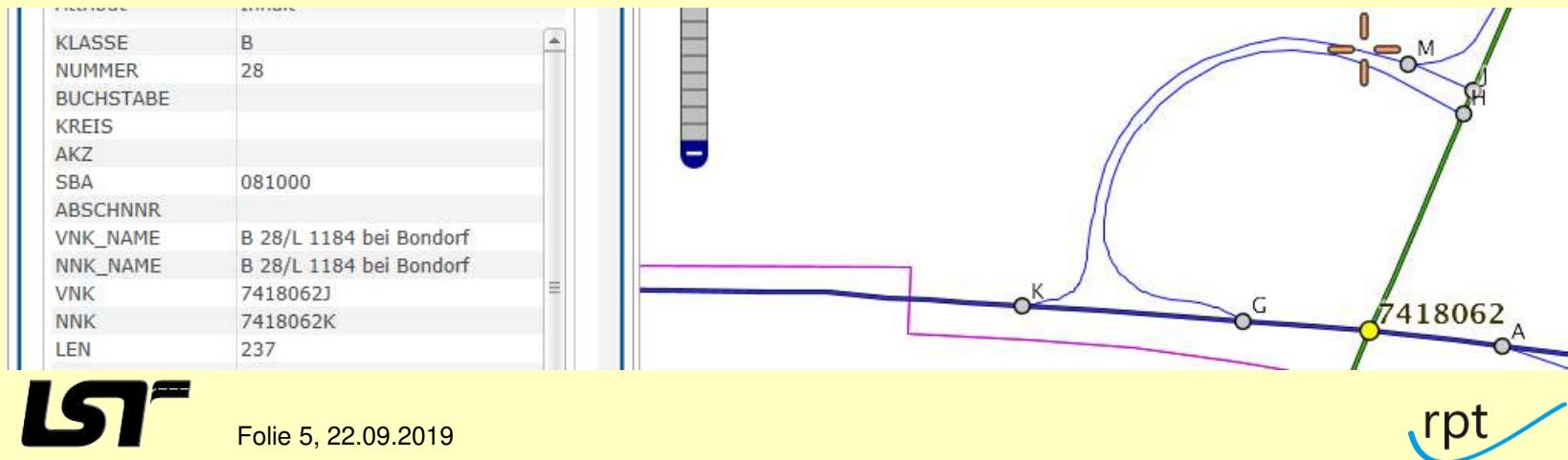
VAS-ArbeitsstellenId: Arbeitsstellen-Nummer:

2019-00012



Map Matching OSM / Official classified roads network

- All road works are matched to routable OSM network
- Purpose: detect conflicts between road works of different parties
- Preliminary map matching of classified highlighted data issues (mainly in official data)



Diversion planning via OSM



- Diversions will be published via DATEX2 as OpenData
- OSM detour routes still to be improved
- LST publishes official route description as open data

- BIS2.0 uses OSM network to easily capture planned diversion
- Advantage: routable, unclassified roads



OpenData: Detour routes



Straßenverkehrszentrale Baden-Württemberg



English Français

STRASSENVERKEHRSZENTRALE BW	
Verkehrslage	
Verkehrsbeeinflussungsanlagen	
Verkehrszählung	
Die Straßenverkehrszentrale	
Veröffentlichungen	
Bedarfsumleitungen	
Parken und Mitfahren-Plätze	
Kontakt und Anfahrt	
App	

Sie sind hier: Straßenverkehrszentrale BW > Die Straßenverkehrszentrale > Veröffentlichungen > Bedarfsumleitungen

Bedarfsumleitungen

Bedarfsumleitungen sind dauerhaft mit blauen U-Schildern ausgeschilderte Umleitungsstrecken, die einen Autobahnabschnitt zwischen zwei Anschlussstellen umfahren.



Die Landesstelle für Straßentechnik veröffentlicht eine Beschreibung des Verlaufs der Bedarfsumleitungsstrecken in Form einer Excel-Liste unter der Datenlizenz Deutschland - Zero - Version 2.0 (dl-de/zero-2-0).

[Bedarfsumleitungen Baden-Württemberg, Stand 30.10.2018](#)

Rückfragen und eventuelle Hinweise richten Sie bitte mit dem Betreff „Bedarfsumleitungen“ an abteilung9@rpt.bwl.de.

SUCHE

Suchbegriff

Erweiterte Suche Inhaltsübersicht

Baustellen Baustellen-Informationssystem Baden-Württemberg

Detour routes are published as OpenData
(de-dl/zero-2-0):

<https://www.svz-bw.de/bedarfsumleitungen.html>

Further datasets: Park&Pool parkings, more to come...



Folie 7, 22.09.2019



Thank you!

For your interest, your attention, and before all: all your efforts in creating and maintaining OpenStreetMap.

We are looking forward to working with you!

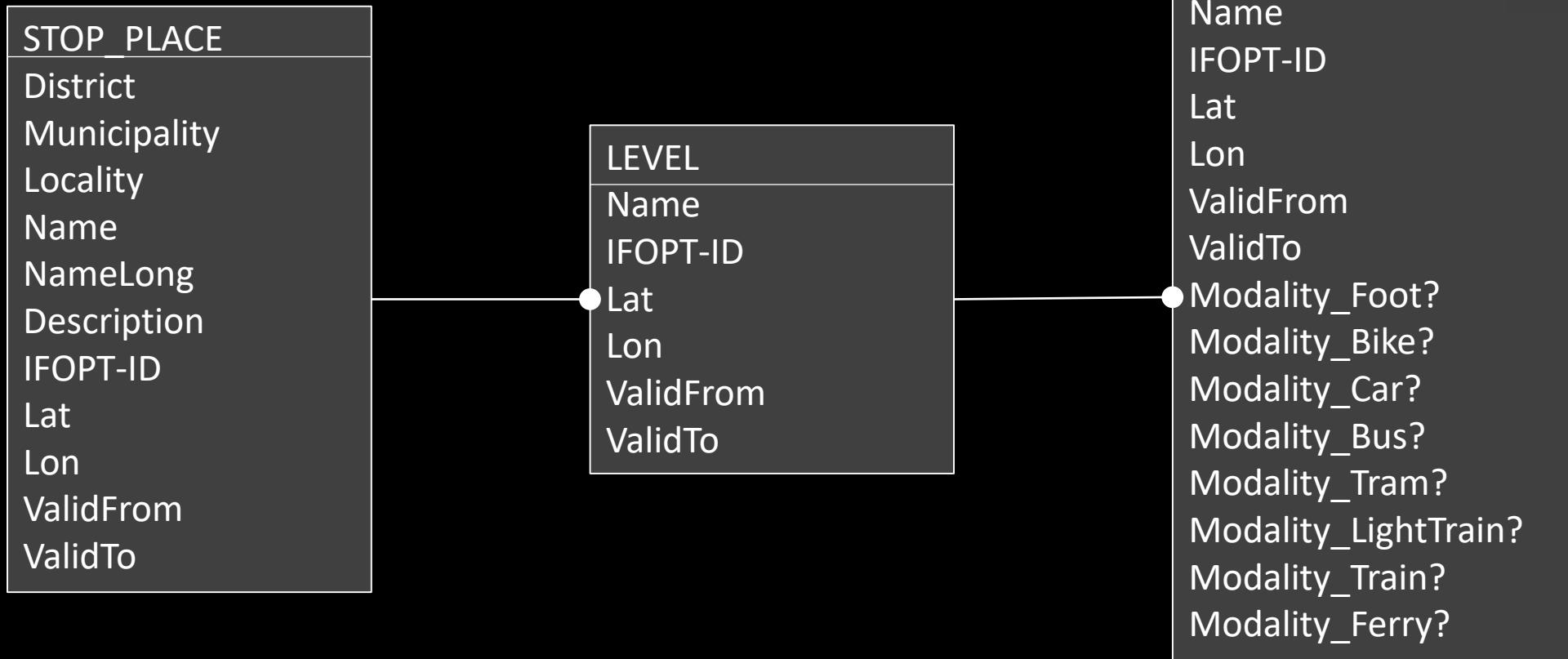
Public transport stops

Official (BW) data vs OSM

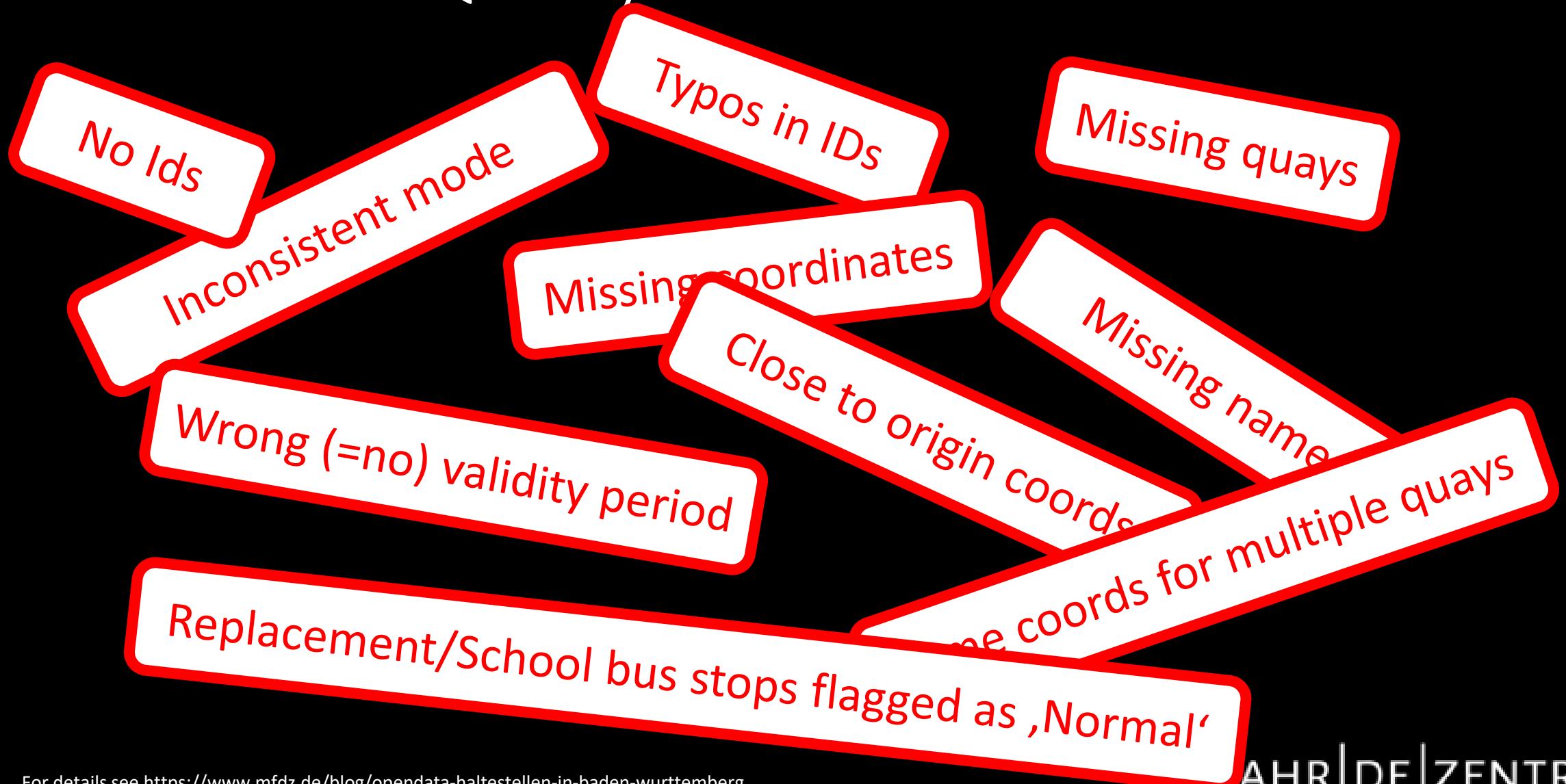
Holger Bruch, 21.09.2019

NVBW Haltestellen (Stops)

Open Data
since June 2019



How about Quality?



OpenStreetMap: PTv1 vs PTv2

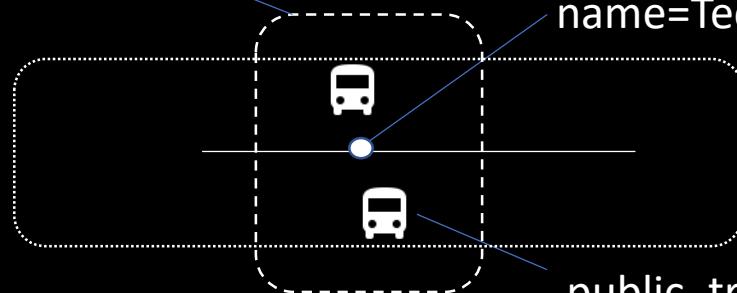
PTv1



highway=bus_stop
name=Technologiepark
route_ref=31
towards=Bunsengymnasium

PTv2

type=public_transport
public_transport=stop_area
Name=Technologiepark



public_transport=stop_position
bus=yes
name=Technologiepark

type=route
route=bus
ref=29

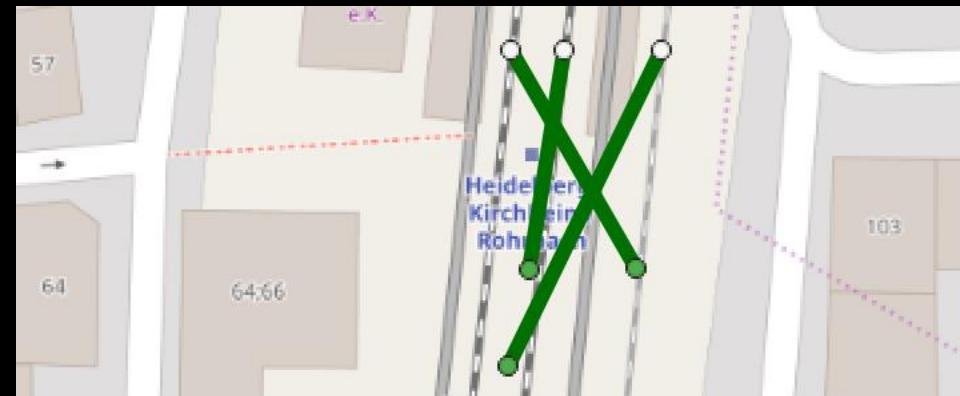
public_transport=platform
bus=yes
name=Technologiepark
ref:IFOPT=de:08221:1226:2:RiS
highway=bus_stop
route_ref=31
towards=Bunsengymnasium

Some stop mapping „varieties“



Matching OSM and official stops: What?

- For buses the waiting area
 - highway=bus_stop (or, if no bus_stop:
public_transport=platform,
bus=yes)
- For rail/tram/light_rail:
 - Public_transport=stop_position
(or, if not available: halt or station)



Matching OSM and official stops: How?

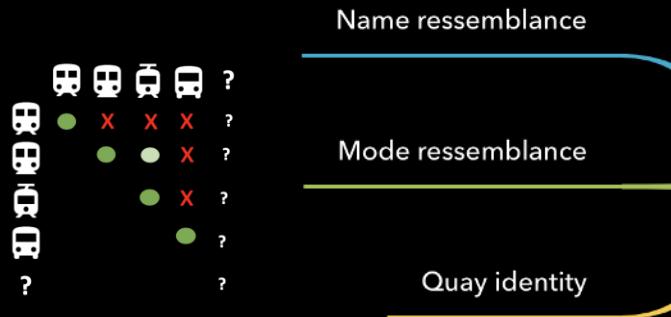


Matching OSM and official stops: How?

Stop name resemblance

(using Bigrams as metric):

$\text{NGRAM}(\langle \text{Name}_{\text{NVBW}} \rangle; \langle \text{Name}_{\text{OSM}} \rangle)$



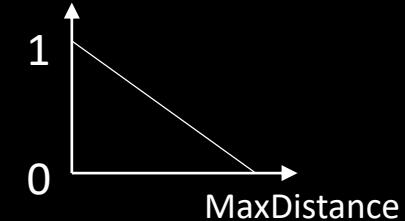
Mode resemblance

Quay identity

Match Rating

Distance

Directions resemblance



Matching quay:

$\langle \text{Quay}_{\text{NVBW}} \rangle = \langle \text{Quay}_{\text{OSM}} \rangle$

Quay_{OSM} is extracted from local_ref (or name) and
 $\text{Quay}_{\text{NVBW}}$ is extracted from IFOPT:
country_code:admin_area:stop_place:level:quay

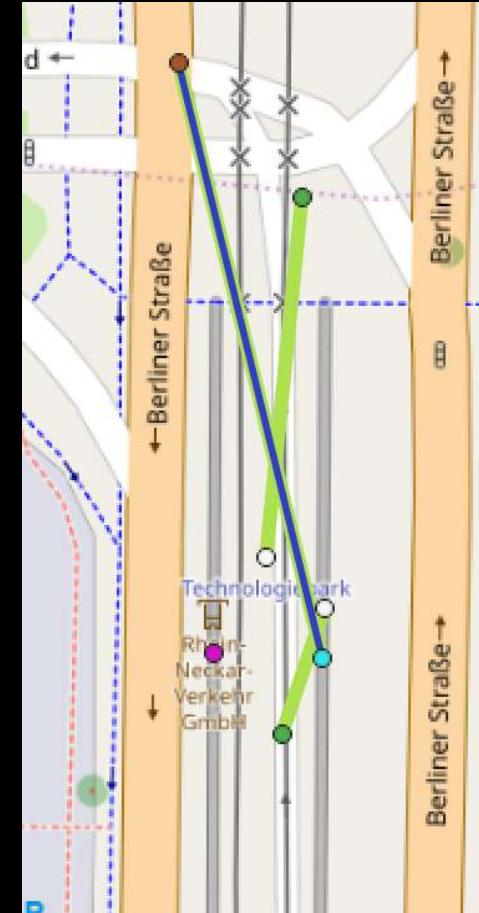
Does direction match?

$\langle \text{Name}_{\text{NextStopNVBW}} \rangle \sim \langle \text{Name}_{\text{NextStopOSM}} \rangle$

$\langle \text{Name}_{\text{NextStopNVBW}} \rangle \sim \text{!} \sim \langle \text{Name}_{\text{NextStopOSM}} \rangle$

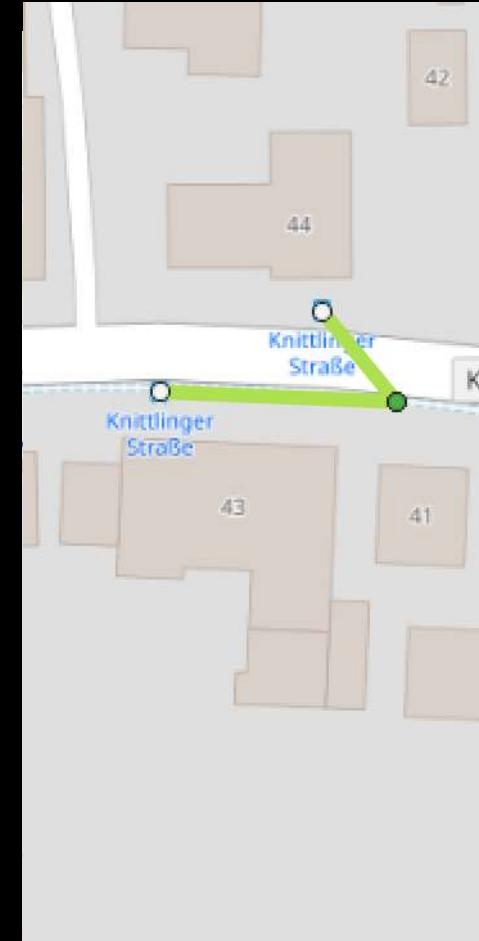
Matching issues

- Matching is sensitive to incomplete tagging

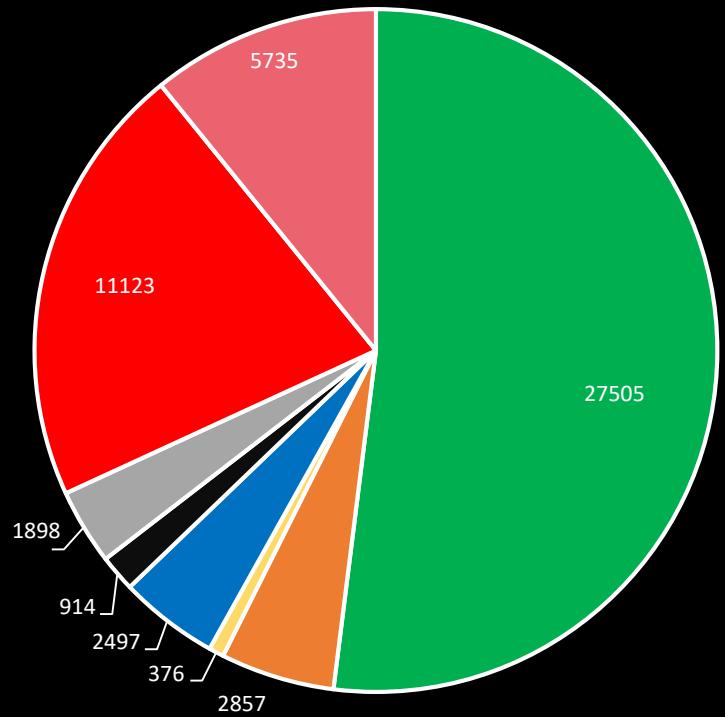


Matching issues

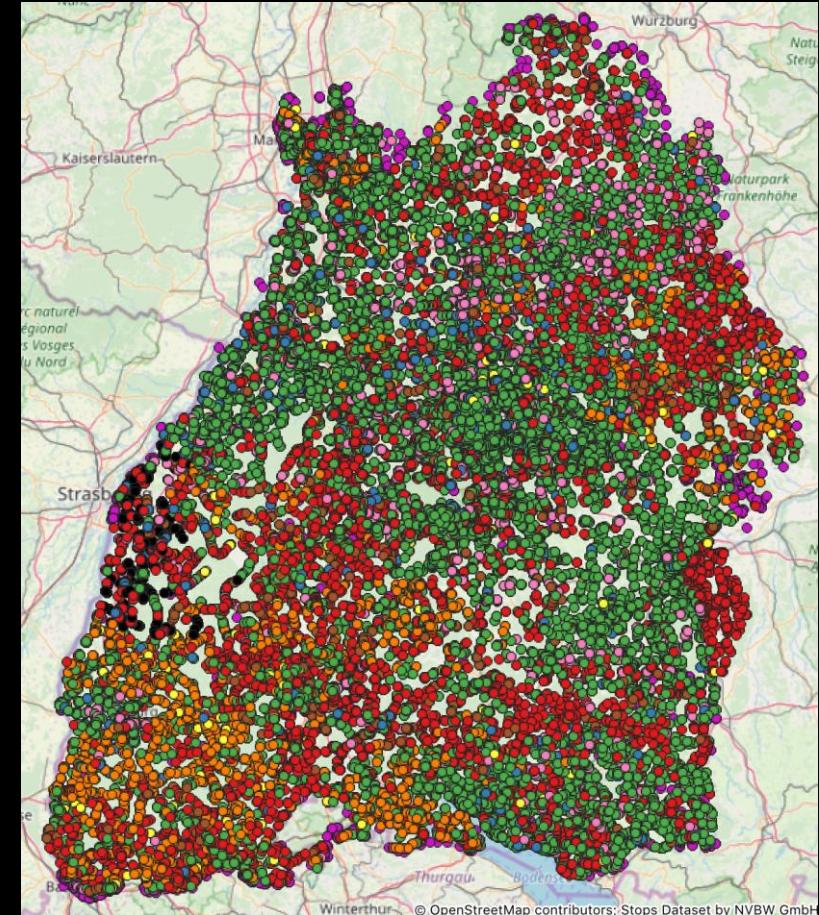
- Matching is sensitive to incomplete tagging
- Matching correct side of street oftens depend (often unavailable) stop sequences



Overall Results

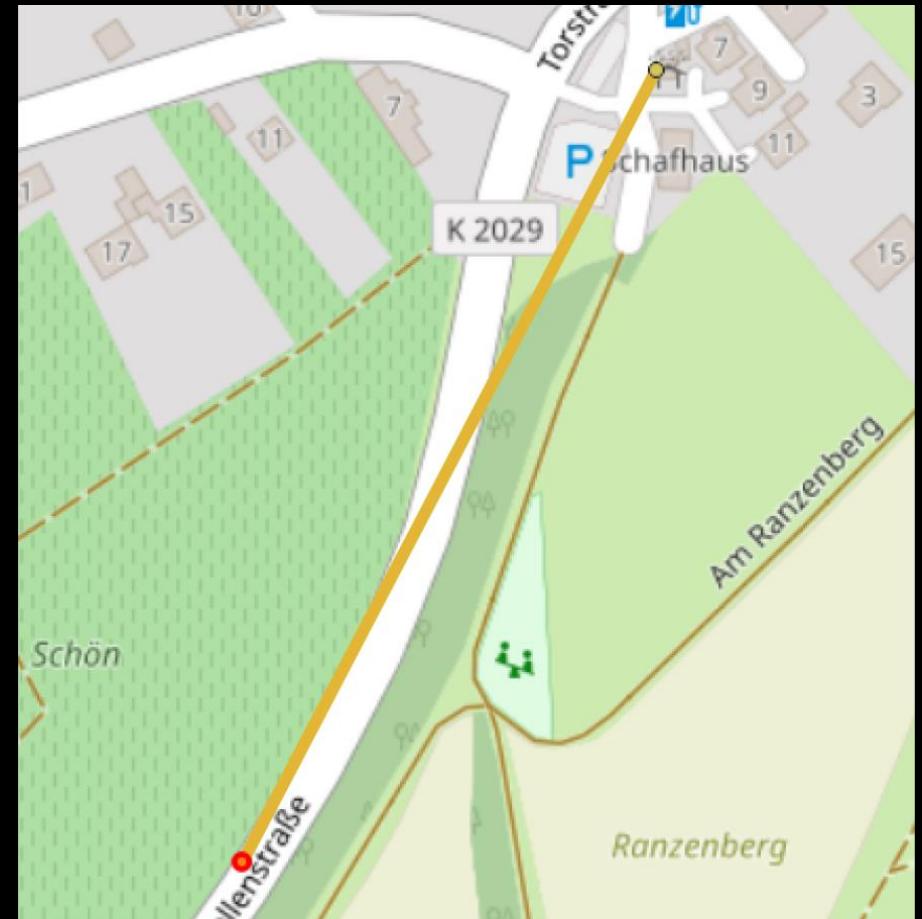


- Matched
- Matched quais to stop_area
- Matched though distant
- Matched though name differences
- Matched though no official name
- Matched though no osm name
- Not matched (no single quay)
- Not matched (but other quay)



Insights

- Authoritative locations are often inaccurate



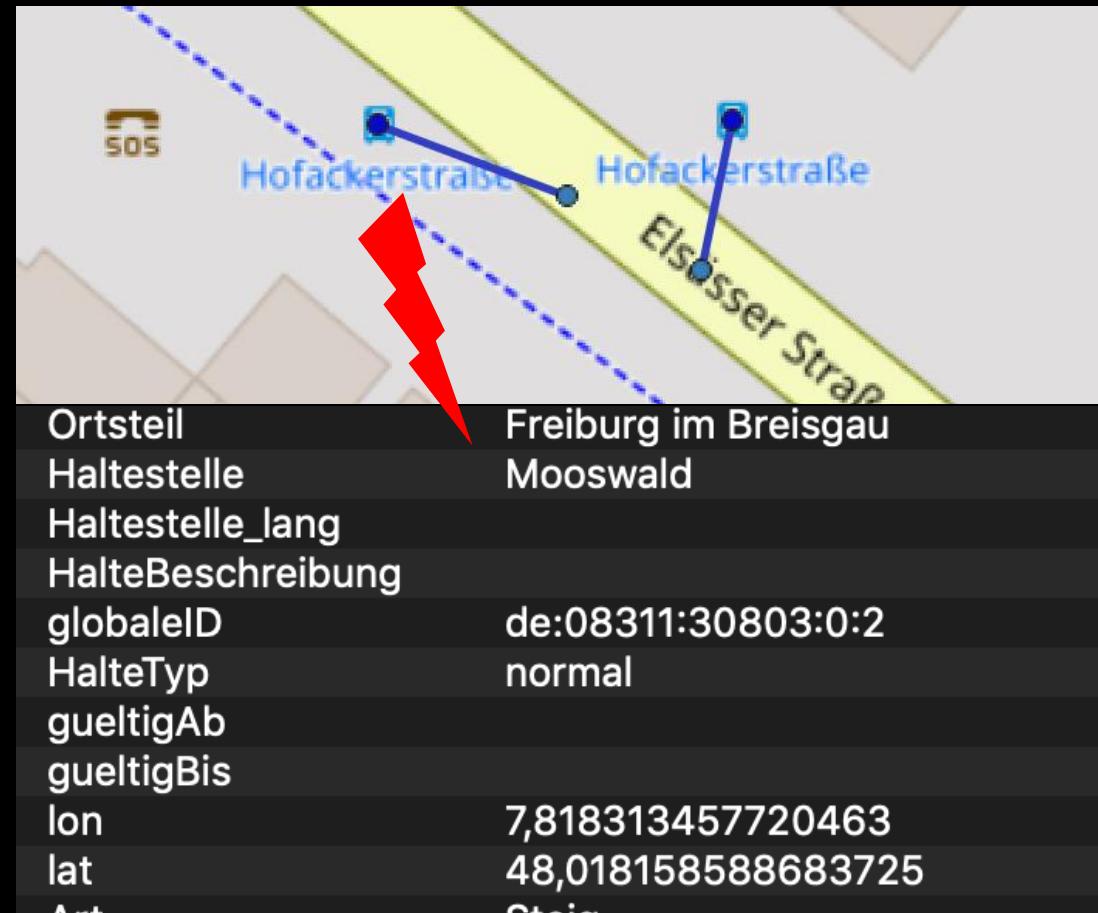
Insights

- Authoritative locations are often inaccurate
- Authoritative data might have inaccurate validity information



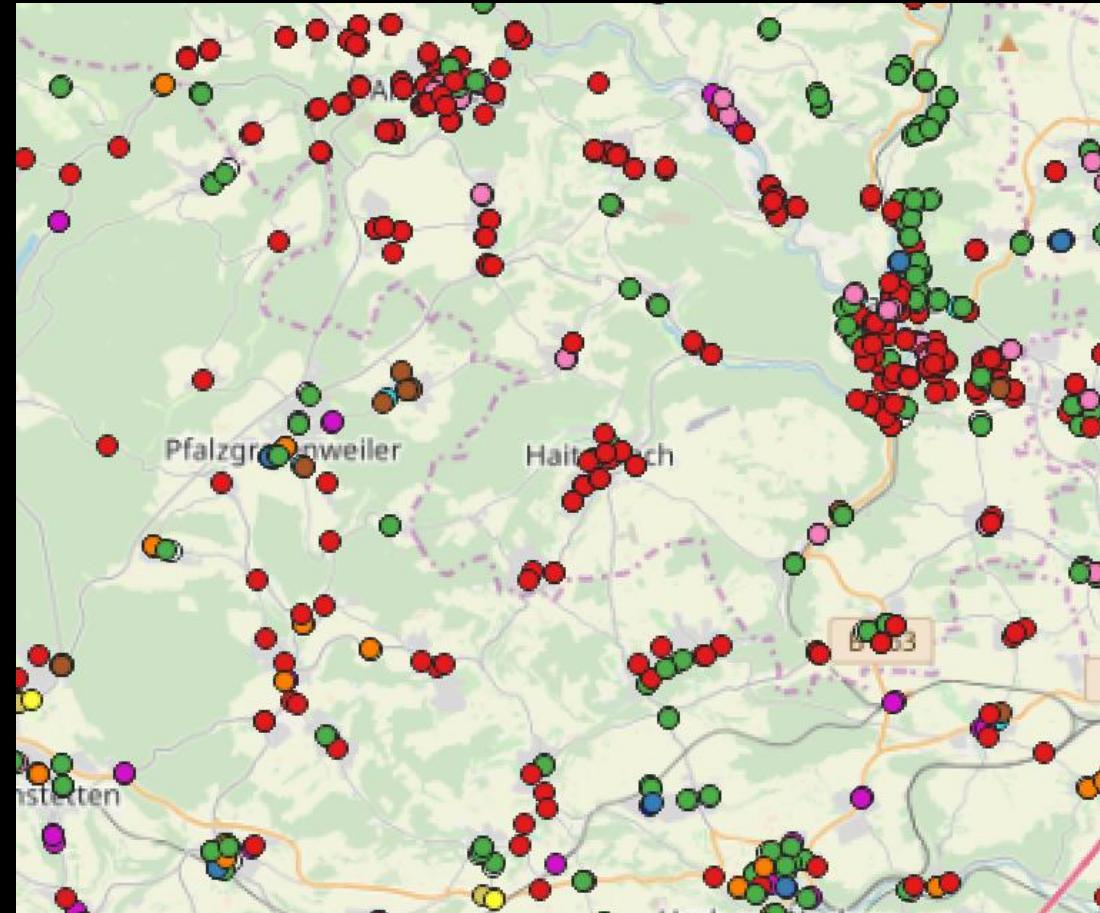
Insights

- Authoritative locations are often inaccurate
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- Authoritative stop names may be outdated



Insights

- Authoritative locations are often inaccurate
- Authoritative data might have inaccurate validity information
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- Some areas of BW not yet well covered in OSM



Insights

- Authoritative locations are often inaccurate
- Authoritative data might have inaccurate validity information
- Authoritative stop names may be outdated
- Some areas of BW not yet well covered in OSM
- OSM-Tagging for stops is heterogenous



Ideas for next steps...

- Publish match results as map
- Integrate GTFS as stops source
- Publish issues (Osmoscope? Maproulette?)
- Provide additional MapCSS/Osmose rules
- Request German Stop Database (DELFI) as OpenData and repeat...
- Code: <https://github.com/mfdz/nvbw-osm-stop-comparison>

OpenTrailView 360

Nick Whitelegg
School of Media Arts and Technology
Solent University

OpenTrailView 360

- “StreetView for paths and trails”
 - <https://opentrailview.org>
- 100% Free and open source
 - <https://gitlab.com/nickw1/opentrailview/>
- Panoramas **auto-connected using underlying OpenStreetMap data**
- Uses:
 - GeoJSON Path Finder <https://github.com/perliedman/geojson-path-finder>
 - Pannellum <https://pannellum.org>

Contribute

- Photo Spheres (Google Camera)
 - c.40 shots needed, autostitched to 360 pano so time consuming
 - High-resolution, some stitching errors but big improvement compared to c.5 years ago
- 360 cameras (e.g. Ricoh Theta)
 - Quick
 - Quality can be poorer, photo shooter appears in panorama

Thanks!

- Questions?
- Contact:
 - nickw4426@gmail.com, @hikar_AR