

A historical urban planning map of a city, likely Marseille, showing various zones and boundaries. The map is overlaid with a large blue circle containing text. The map includes a legend in the top right corner, a north arrow on the left, and a scale bar on the right. The legend defines symbols for the limit of the commune, the limit of the organization of the commune, and four types of zones: old organization, new organization, and industrial zone. The map shows a complex network of streets and zones, with some areas circled in green.

**USING GIS TO ANALYZE THE
DEVELOPMENT OF PUBLIC
URBAN GREEN SPACES IN
HAMBURG AND MARSEILLE
(1945 – 1973)**

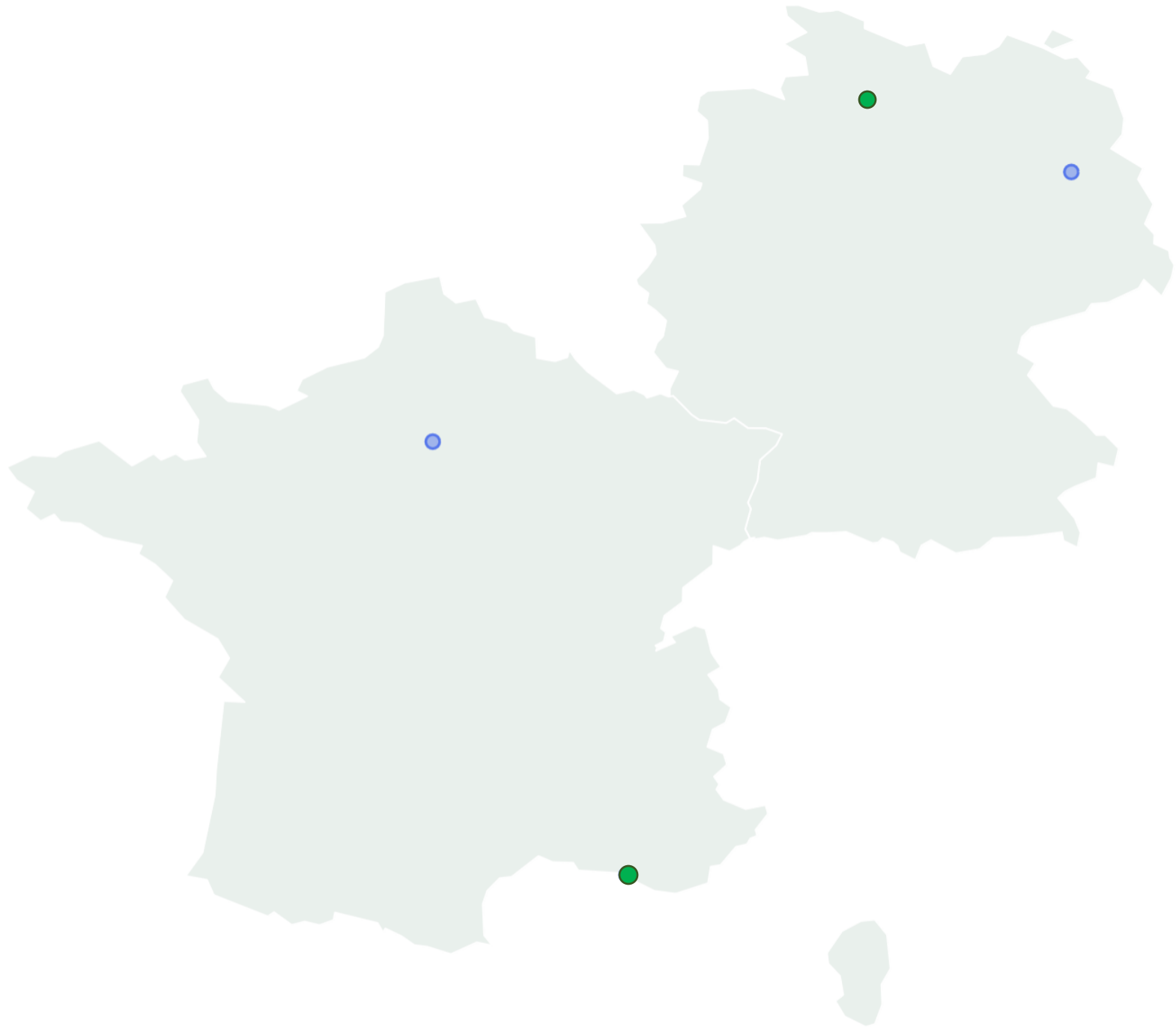
Digital History Switzerland

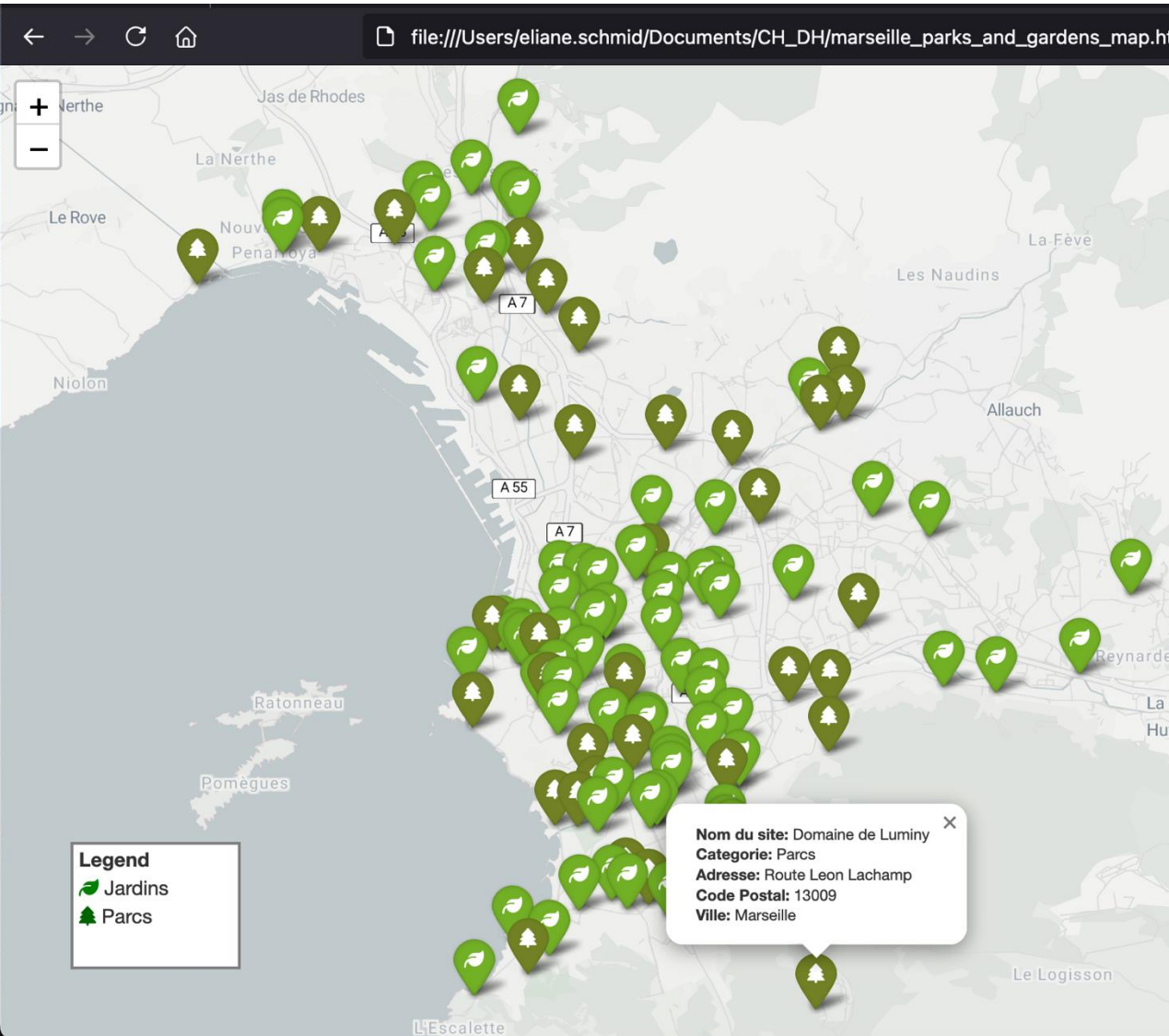
12-13.09.2024

GOAL

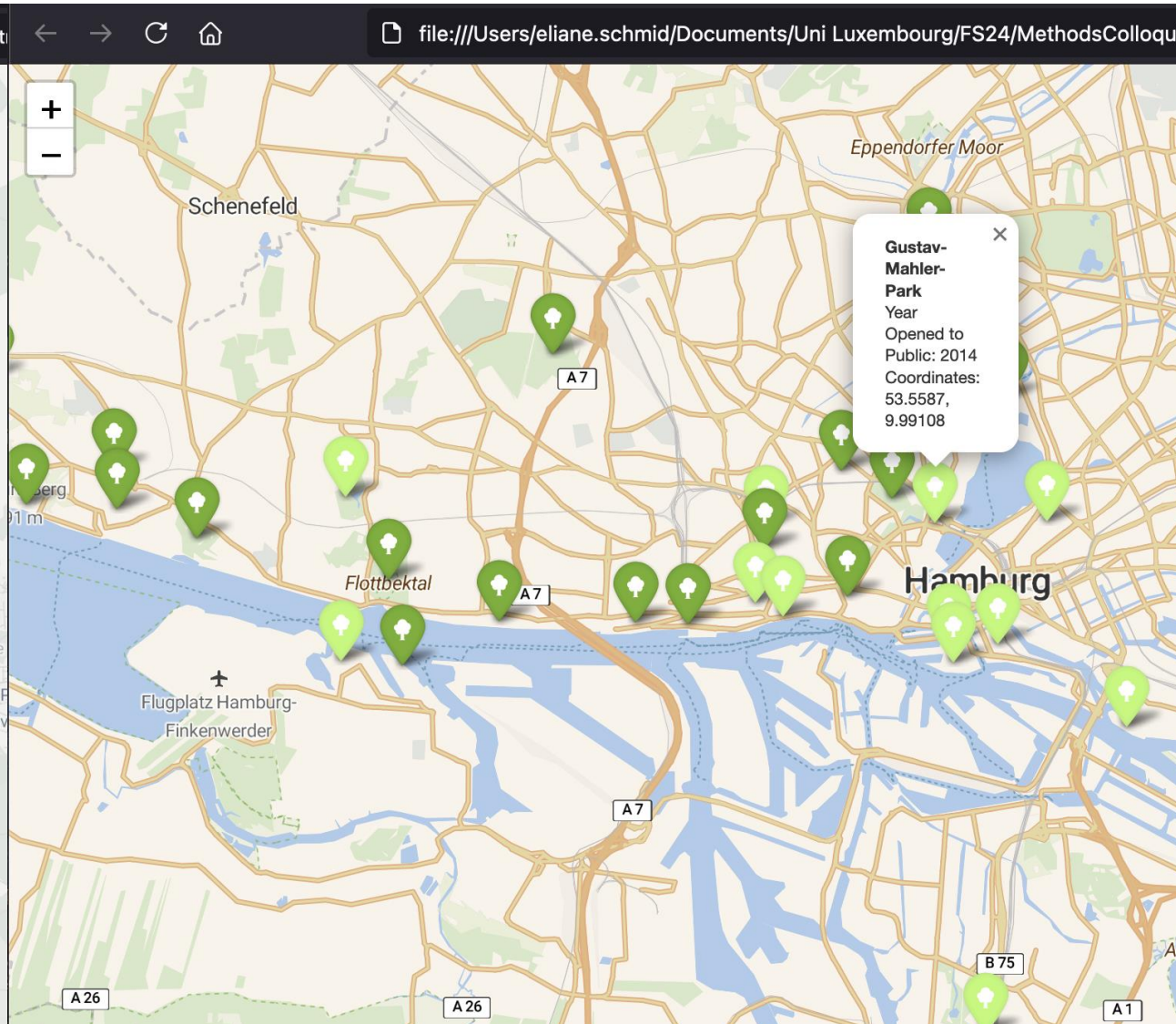
- When does the use of GIS genuinely **support research**?
- How can working with GIS aid the formulation of **hypotheses and arguments**?
- How can layering information in GIS change the way historians **approach** their **sources** and **think** about their **data**?
- What role does creating visuals with GIS have for **developing historical narratives**?

OPPORTUNITIES





Data: DataSud



Data: Geoportal Hamburg

- Distant reading – close reading
- Producing data – understanding historical sources
- data creators – map makers
- AI technologies can aid acceleration of tedious manual work = more time to focus on design
- Working with GIS and studying GIS produced outcomes supports spatial understanding
- Elements of ‘where’ and ‘when’

Layers

- ▶ Öffentliche Parkanlagen und Spielplätze
- ▶ Jahrgang 1930-1940: Information
- ▶ Jahrgang 1930-1940
- ▶ Jahrgang 1940-1950: Information
- ▶ Jahrgang 1940-1950
- ▶ Jahrgang 1960-1970: Information
- ▶ Jahrgang 1960-1970
- ▶ Jahrgang 1950-1960: Information
- ▶ Jahrgang 1950-1960
- ▶ **ESRI Satellite (ArcGIS/World Imagery)**



Layers Browser

Type to locate (⌘K)

Coordinate 1149773 7409925 Scale 1:90743 Magnifier 100% Rotation 0,0° Render EPSG:2154

Data: Geoportal Hamburg
Screenshot: Eliane Schmid's QGIS workspace

Layers

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Layers Browser

Q Type to locate (⌘K)

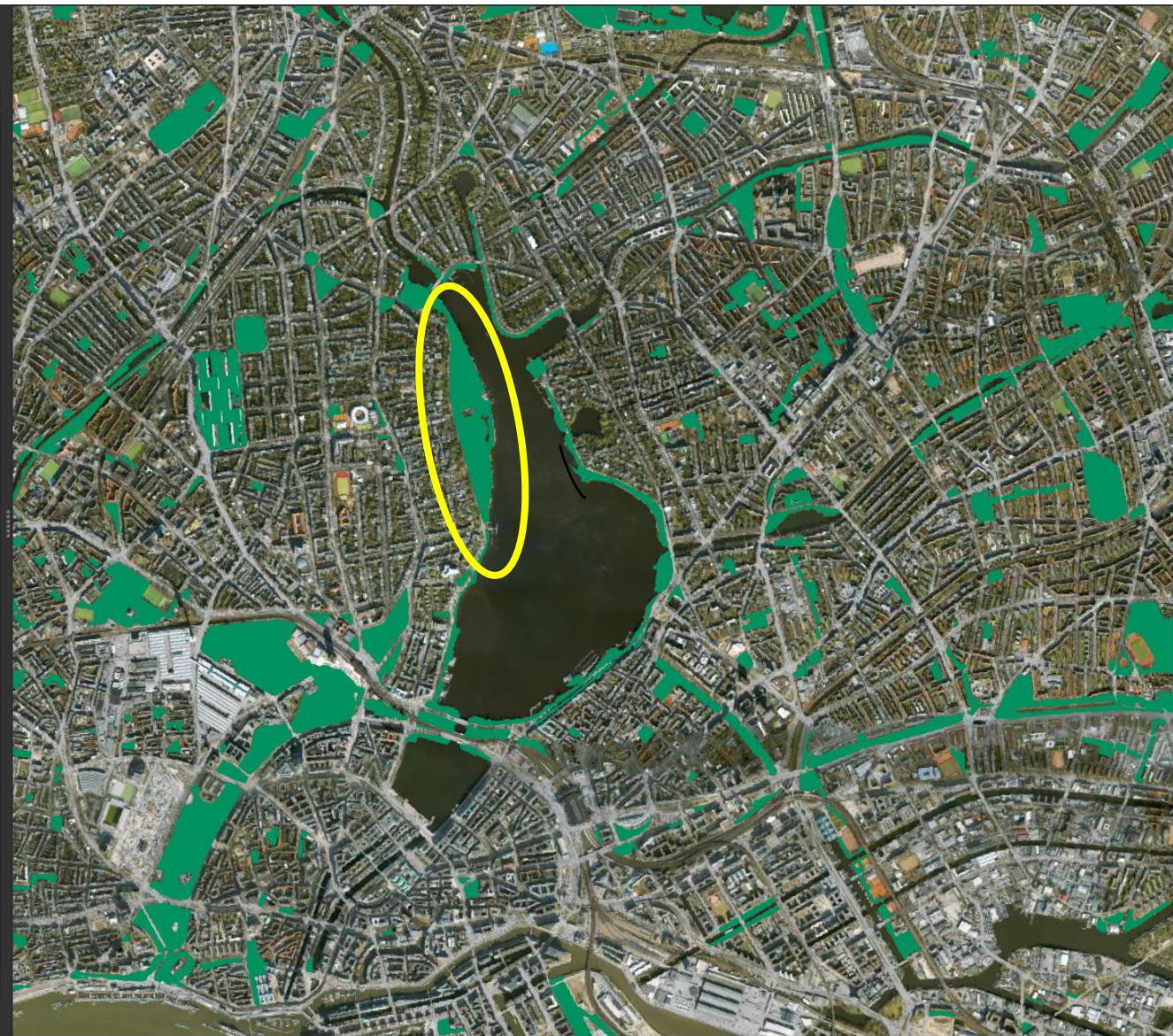


Coordinate 1150446 7411558 Scale 1:90743 Magnifier 100% Rotation 0,0° Render EPSG:2154

Data: Geoportal Hamburg
Screenshot: Eliane Schmid's QGIS workspace

Layers

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- ✓ Jahrgang 1960-1970
- ✓ Jahrgang 1950-1960: Information
- ✓ Jahrgang 1950-1960
- ✓ ESRI Satellite (ArcGIS/World_Imagery)



Identify Results

Feature	Value
Öffentlich...	0
Format	Feature
oef_park...	
benenn...	Alstervorland
nutzun...	50
nutzung	Parkanlage
stadtteil	Rotherbaum
ortsteil	312
gemark...	0
umfang...	2039,7411
flaeche...	71496,3999
(Derived)	
(click...	1166472
(click...	7408566

Layers Browser

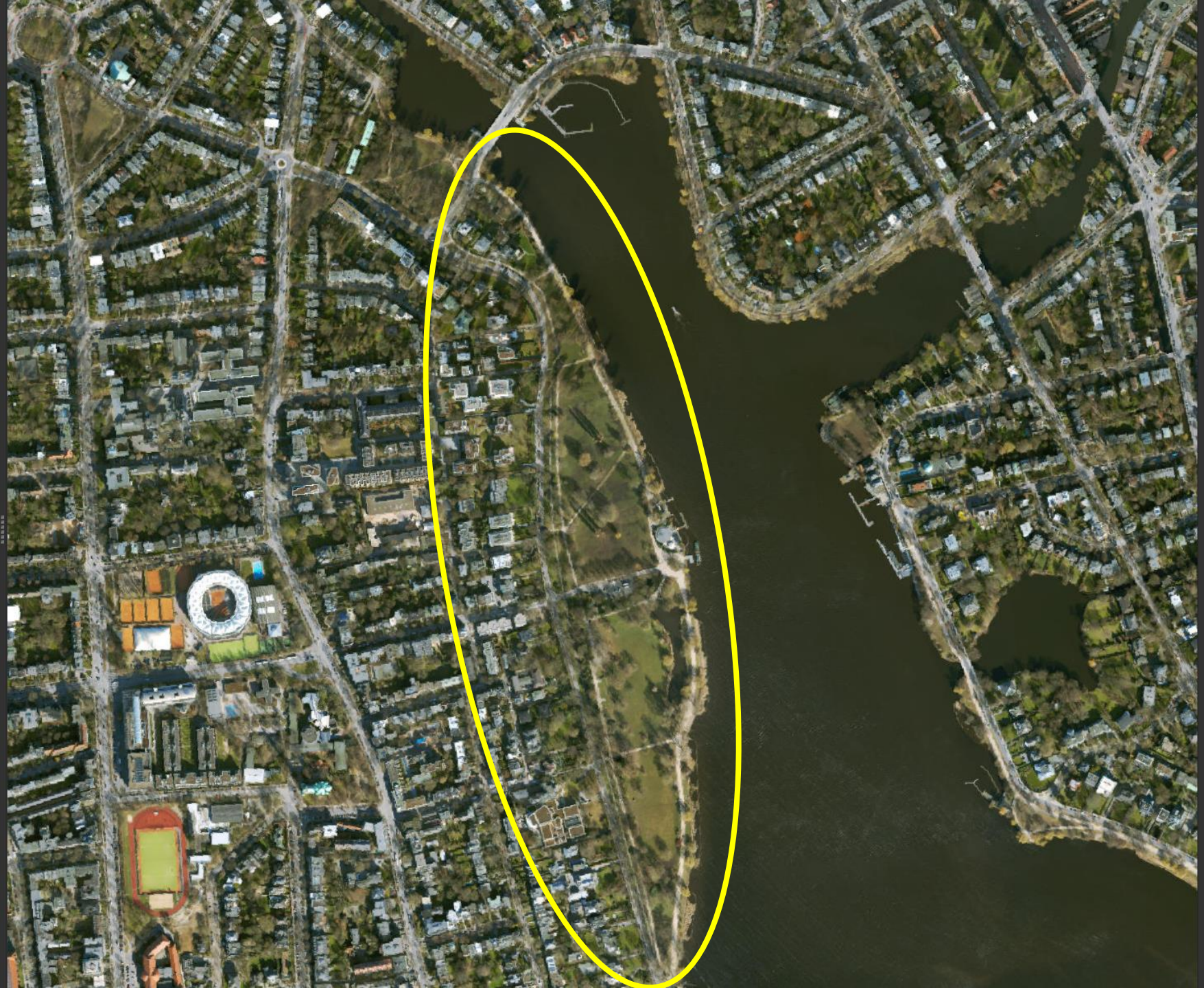
Type to locate (F5)

Coordinate 1169492 7408575 Scale 1:25781 Magnifier 100% Rotation 0,0° Render EPSG:2154

Data: Geoportal Hamburg
 Screenshot: Eliane Schmid's QGIS workspace



- Öffentliche Parkanlagen und Spielplätze**
- Jahrgang 1930-1940: Information
- Jahrgang 1930-1940
- Jahrgang 1940-1950: Information
- Jahrgang 1940-1950
- Jahrgang 1960-1970: Information
- Jahrgang 1960-1970
- Jahrgang 1950-1960: Information
- Jahrgang 1950-1960
- ESRI Satellite (ArcGIS/World_Imagery)





- ▶ **Öffentliche Parkanlagen und Spielplätze**
- ▶ **Jahrgang 1930-1940: Information**
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- ▶ **Jahrgang 1940-1950: Information**
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- Jahrgang 1950-1960: Information
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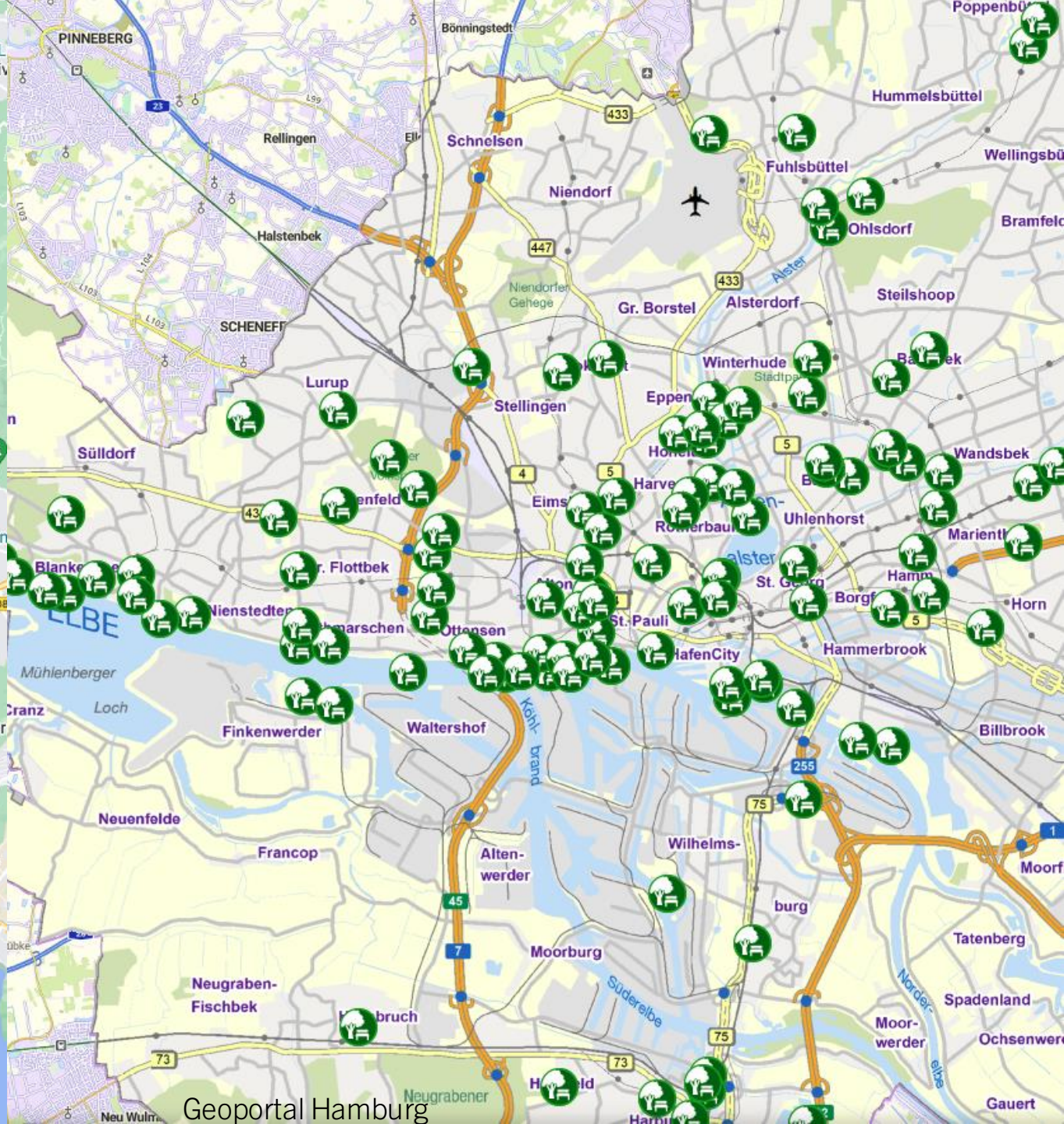
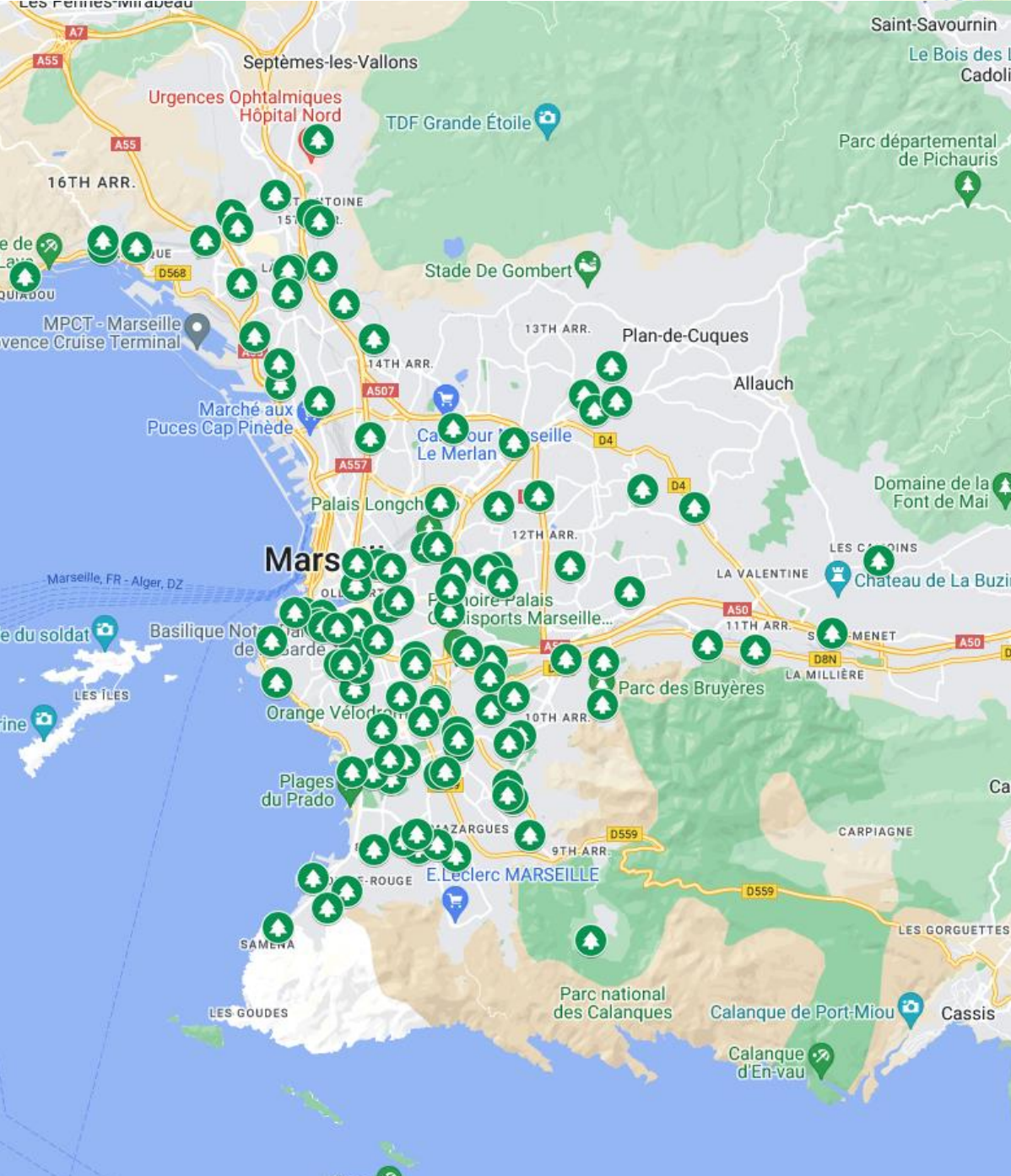




- ▶ Öffentliche Parkanlagen und Spielplätze
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- ▶ Jahrgang 1940-1950
- ▶ Jahrgang 1960-1970: Information
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- ▶ **Jahrgang 1950-1960: Information**
- ▶ **Jahrgang 1950-1960**
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- GIS models can spark interest and curiosity to dig deeper



“La city de Marseille et les cities de taille équivalente en Europe”



(Insee, Eurostat, 2022)

Marseille

241 km²

873 076 - 3628 / km² (INSEE, 2021)

+ 700 ha "espaces verts" (Marseille.fr, 2024)

Hamburg

755 km²

1,96 mio - 2603 / km² (Statistik Nord, 2023)

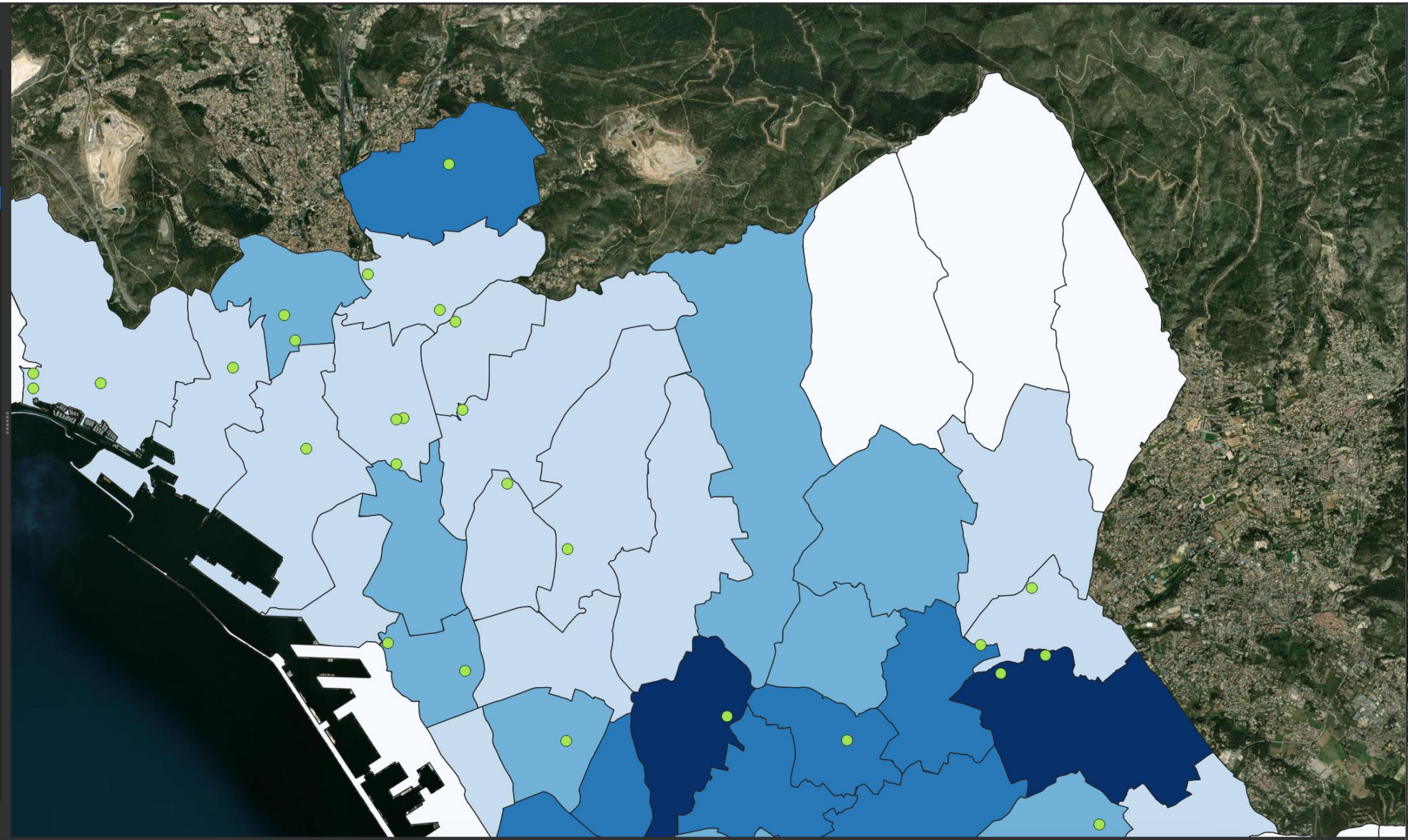
3.242 ha "Grünflächen" (Hamburg.de, 2022)

- Visual representation of power structures and imbalances

Layers

- Planned Parks Nov 1970
- Planned Parks Dec 1970
- Planned Parks Jan 1971
- Planned Parks Feb 1971
- ✓ Built Parks 2018
- ▶ ✓ **Population 2012**
- ▶ Immigrants 2012
- ▶ Ouvriers 2012
- Quartiers Marseille 2021
- ESRI Gray (dark)
- POP_quartier_2012
- ✓ ESRI Satellite (ArcGIS/World_Imagery)

Layers Browser

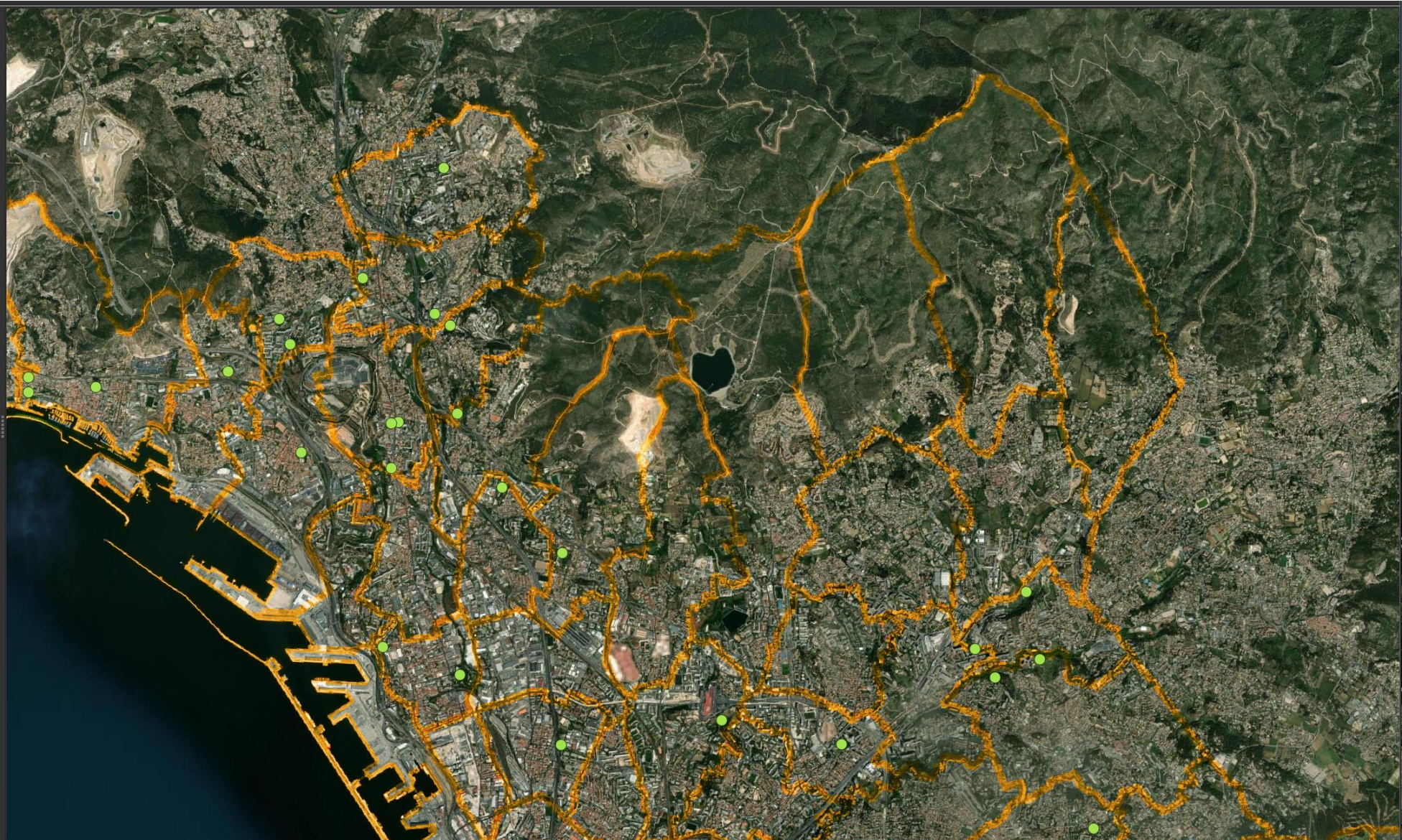


Data: INSEE
Screenshot: Eliane Schmid's QGIS workspace

Layers

- Planned Parks Nov 1970
- Planned Parks Dec 1970
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Layers Browser



Data: INSEE
Screenshot: Eliane Schmid's QGIS workspace

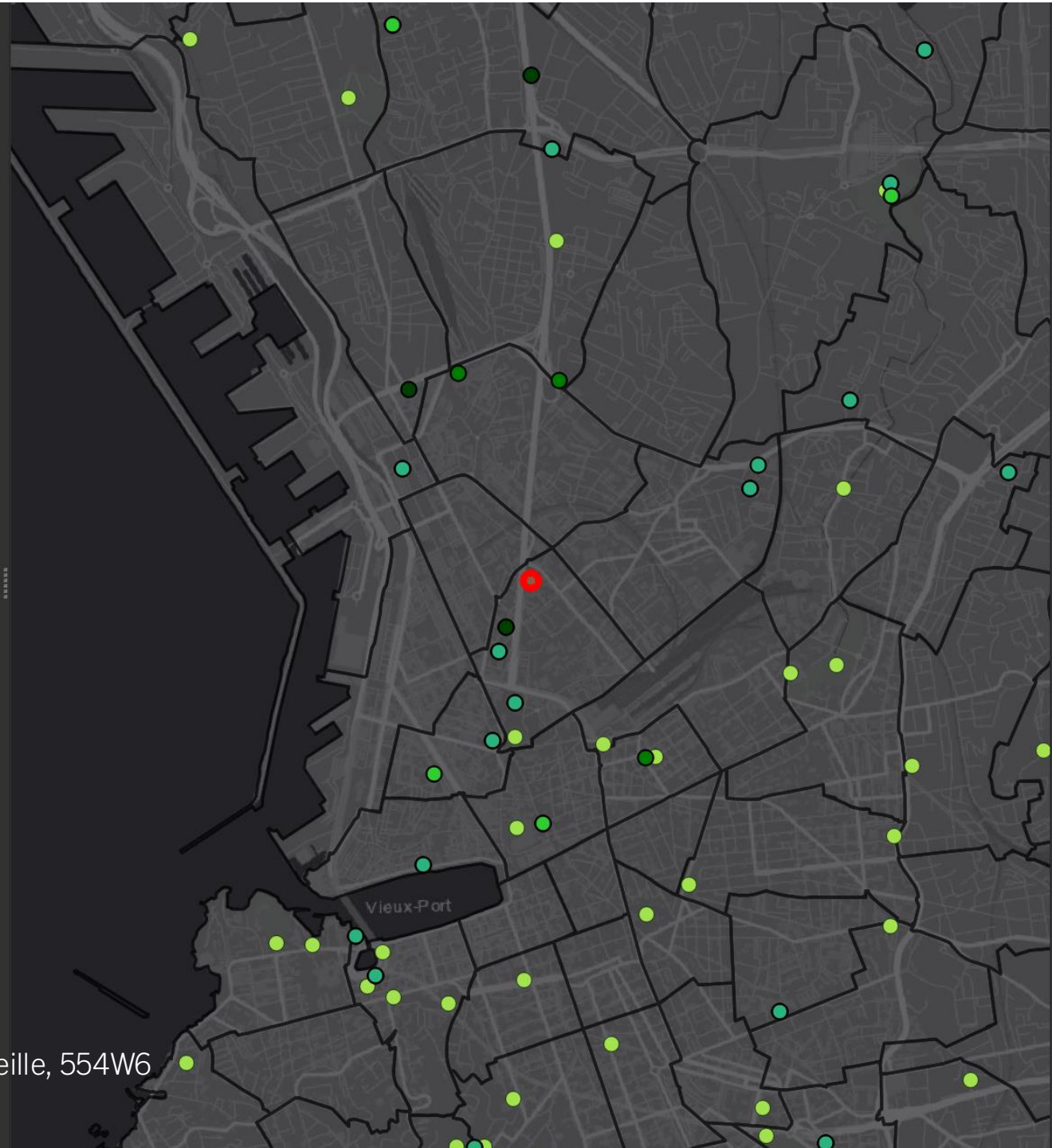
CAVEATS

- Mismatch between GIS requirements and imperfection of historical sources
- GIS does not allow for gaps or ambiguities
- Difficulty of capturing time
- GIS work is labor-intensive and time consuming
- Discrepancies between mapped data and on-the-ground reality

Layers



- ✓ ● Planned Parks Nov 1970
- ✓ ● Planned Parks Dec 1970
- ✓ ● Planned Parks Jan 1971
- ✓ ● Planned Parks Feb 1971
- ✓ ● Built Parks 2018
- ▶ ● Population 2012
- ▶ ● Immigrants 2012
- ▶ ● Ouvriers 2012
- ✓ Quartiers Marseille 2021
- ▶ ● ESRI Gray (dark)
- POP_quartier_2012



Identify Results



Feature	Value
Planned Parks Dec 1970	
nom du li...	Stilatti
▶ (Derived)	
▶ (Actions)	
nom du...	Stilatti
Latitude	43,30970678
Longitu...	5,376491033
Notes	exists today
field_5	NULL

Data: DataSud, Archives Municipales de Marseille, 554W6
 Screenshot: Eliane Schmid's QGIS workspace

Layers Browser

Mode Current Layer

View Tree



Rue Mathieu Stilatti



74 Rue Kléber Prolongée

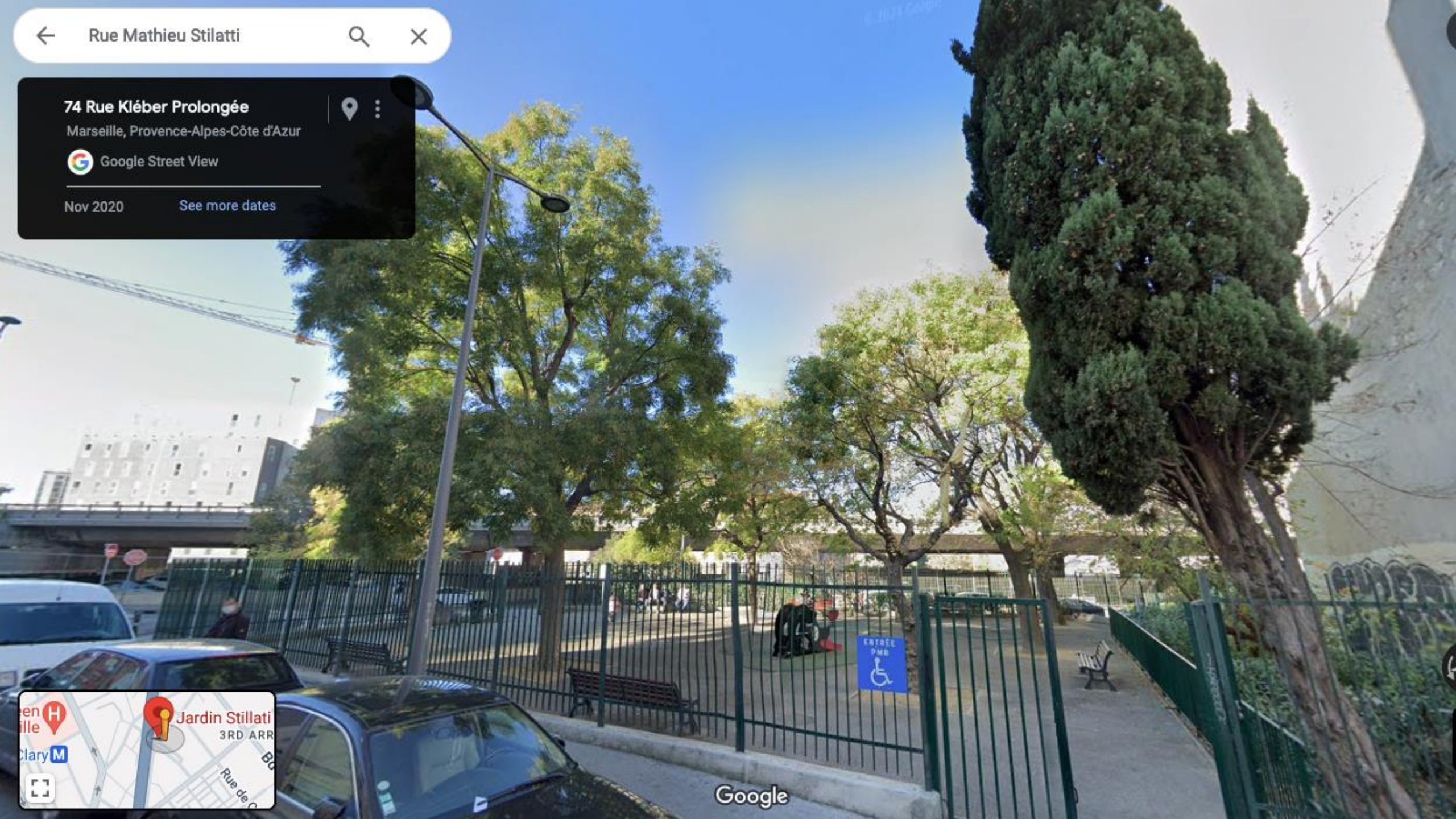
Marseille, Provence-Alpes-Côte d'Azur



Google Street View

Nov 2020

See more dates



Google



Parcs et jardins



Le patrimoine des espaces verts de la ville de Marseille recouvre plus de 640 hectares : parcs, jardins, espaces verts de voirie, cimetières, 128,912 views
 Published on January 25

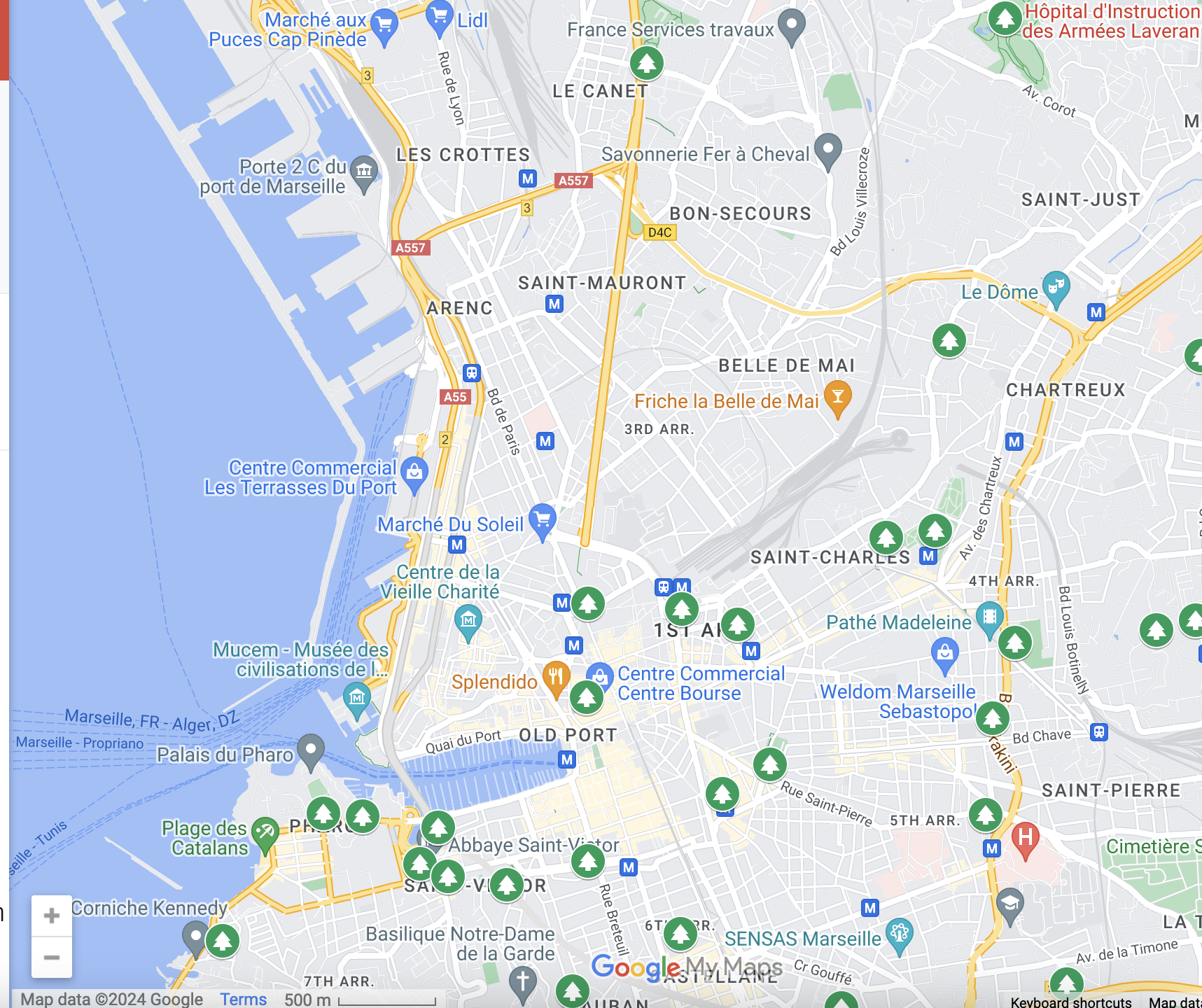
SHARE



Parcs & Jardins



All items



<https://www.marseille.fr/environnement/presentation>



Terms

Made with Google My Maps



Map data ©2024 Google Terms 500 m

Google My Maps

Keyboard shortcuts Map data

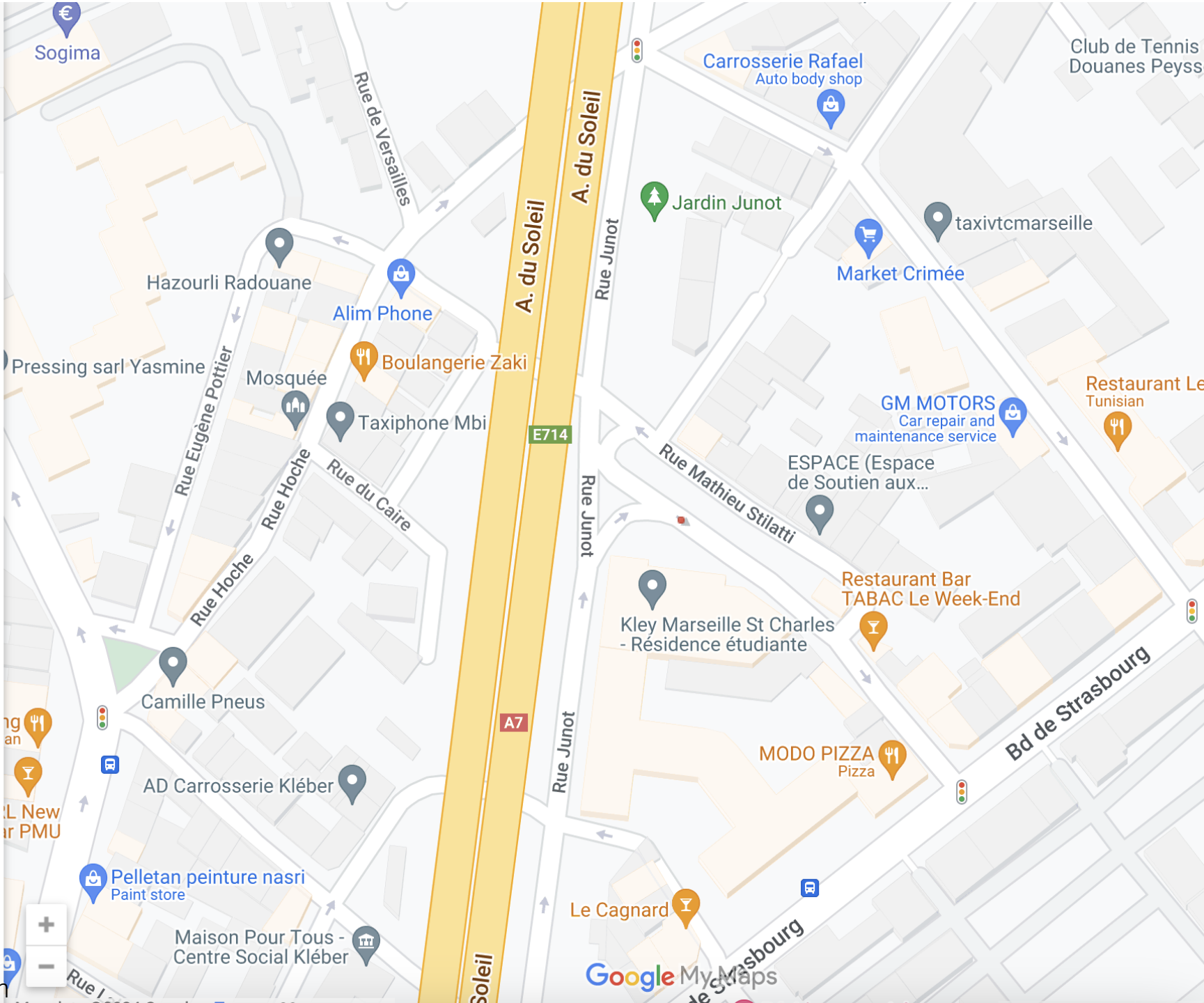
← Rue Mathieu Stilatti ×

Move map to
[Rue Mathieu Stilatti, 13003 Marseille, France](#)

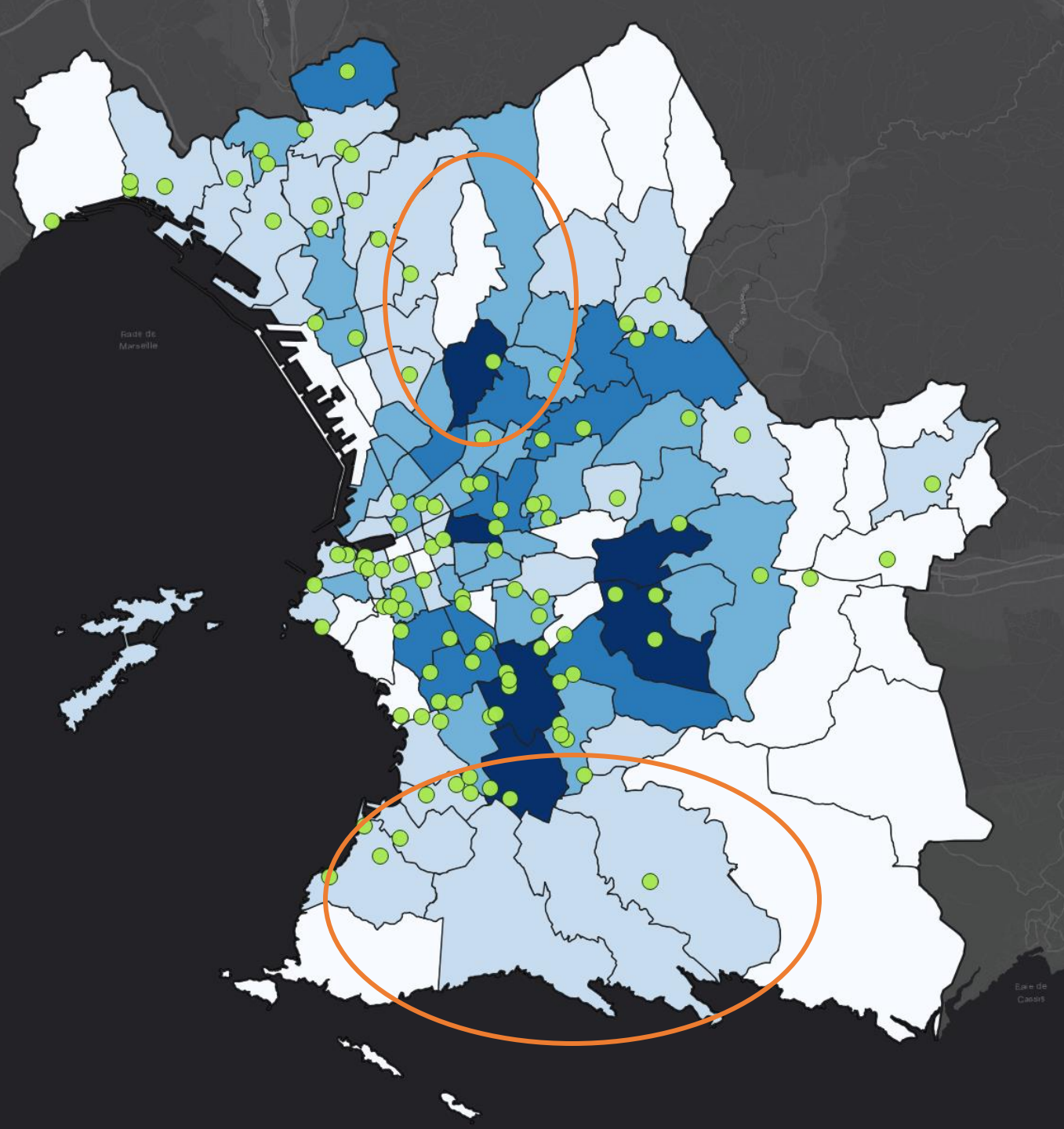
From Google [show all on map](#)

Rue Mathieu Stilatti

https://www.marseille.fr/environnement/presentation



- GIS models are shaped by and reflect personal convictions and biases
- GIS models are easy to manipulate



Layer Properties - Population 2012 — Symbology

Value: 123 POP_quartier_2012_Population en 2012 (princ)

Symbol: [Color Ramp]

Legend format: %1 - %2

Color ramp: [Color Ramp]

Classes Histogram

Symbol	Values	Legend
✓ [Lightest Blue]	410,00 - 3212,00	410 - 3212
✓ [Light Blue]	3212,00 - 7080,00	3212 - 7080
✓ [Medium Light Blue]	7080,00 - 10454,00	7080 - 10454
✓ [Medium Blue]	10454,00 - 14417,00	10454 - 14417
✓ [Darkest Blue]	14417,00 - 19997,00	14417 - 19997

Equal Count (Quantile)
 Equal Interval
 Fixed Interval
 Logarithmic Scale
 Natural Breaks (Jenks)
 Pretty Breaks
 Standard Deviation

Mode: [Dropdown] Classes: 5 Advanced

Layer Rendering

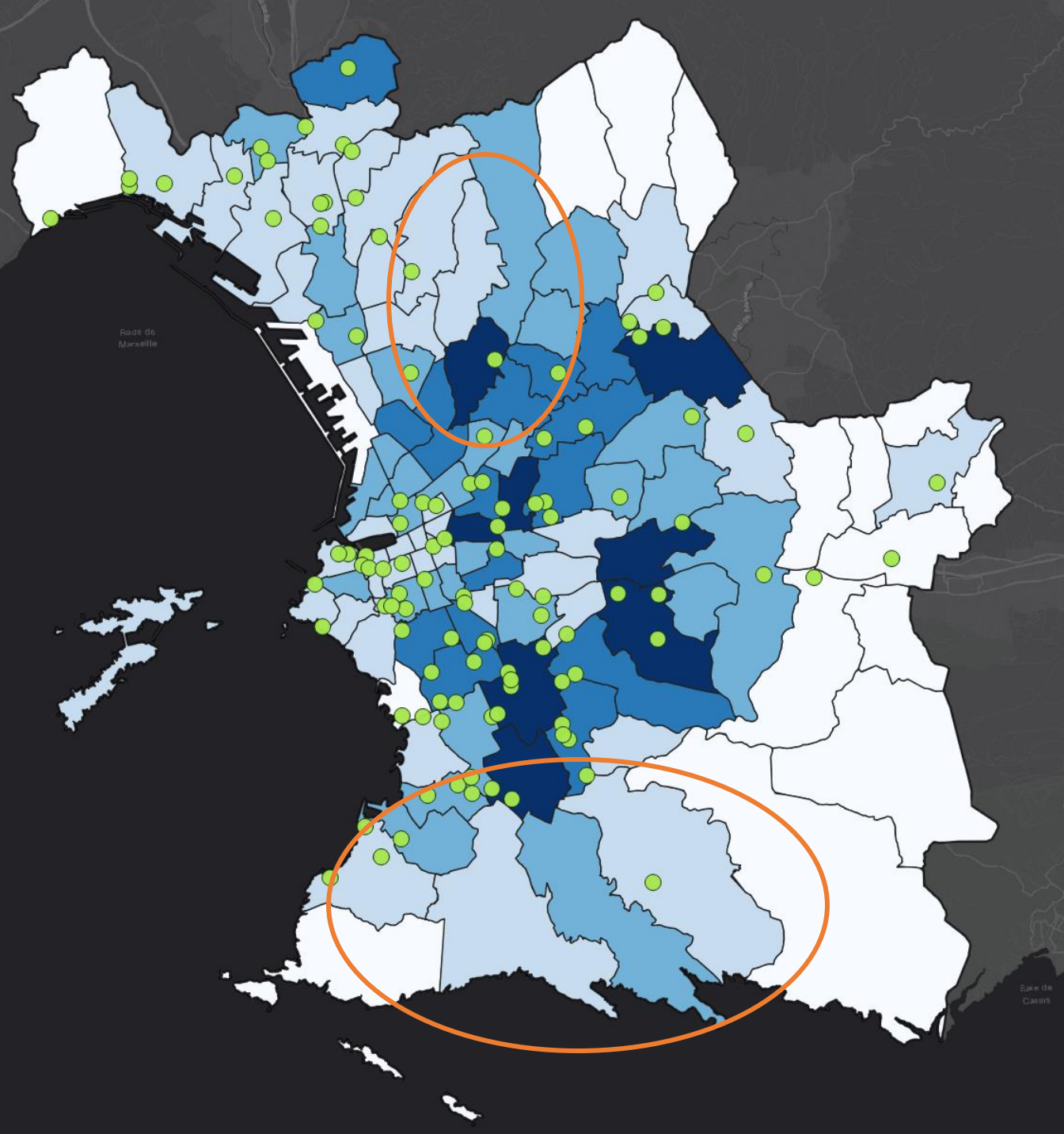
Opacity: 100,0 %

Blending mode: Layer: Normal Feature: Normal

Draw effects
 Control feature rendering order

Buttons: Help Style Apply Cancel OK

Natural Breaks



Layer Properties - Population 2012 - Symbology

Value: 123 POP_quartier_2012_Population en 2012 (princ)

Symbol: [Color Ramp]

Legend format: %1 - %2

Color ramp: [Color Ramp]

Classes Histogram

Symbol	Values	Legend
✓ [White]	410,00 - 4327,40	410 - 4327
✓ [Light Blue]	4327,40 - 8244,80	4327 - 8245
✓ [Medium Blue]	8244,80 - 12162,20	8245 - 12162
✓ [Dark Blue]	12162,20 - 16079,60	12162 - 16080
✓ [Darkest Blue]	16079,60 - 19997,00	16080 - 19997

Mode: Equal Interval

Equal Interval

Classes: 5

Symmetric Classification

Classify + - Delete All

Link class boundaries:

Layer Rendering

Opacity: 100,0 %

Blending mode: Layer: Normal, Feature: Normal

Draw effects:

Control feature rendering order:

Help Style Apply Cancel OK

Data: DataSud, INSEE
Screenshot: Eliane Schmid's QGIS workspace

- A map is a series of decisions – it reflects the biographies of creator, observer, user
- “80% of GIS is about transforming, manipulating and managing spatial data”
(Jones and Schiel, 2022)

CONCLUSION

- Craft of the historian
- Power of storytelling
(cf. Roth, 2020)
- Critical and conscious consumption

- GIS models as support systems for spatial understanding
- GIS can (and should) be used for historical reflections to enhance our conception of socio-temporal, - political, -demographic dynamics in historical contexts.



THANK YOU!