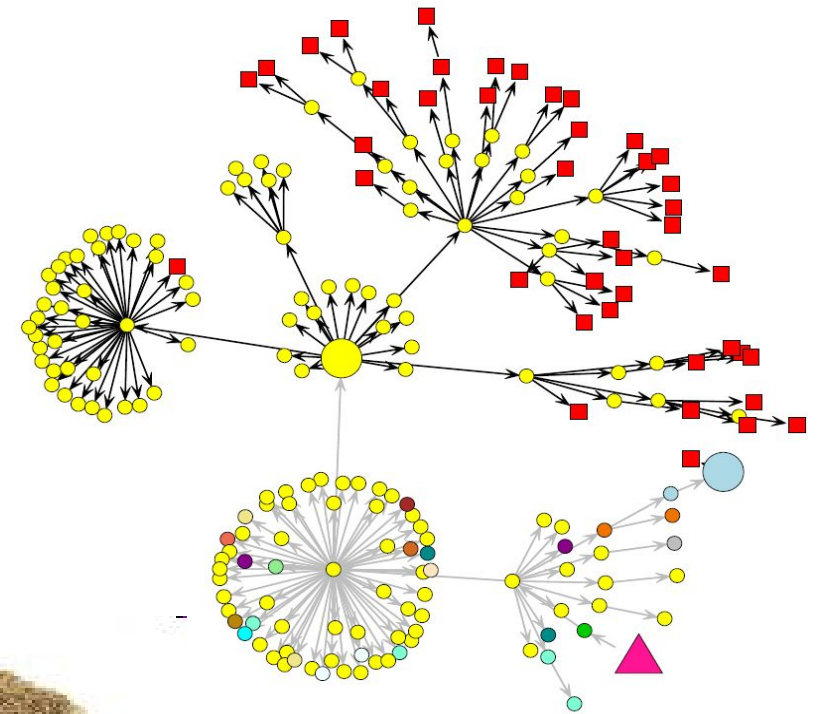


Geo-Analysis in FoodChain-Lab



**Christian Thöns, Armin Weiser, Matthias Filter,
Alexander Falenski, Bernd Appel, Annemarie Käsbohrer**

Geocoding

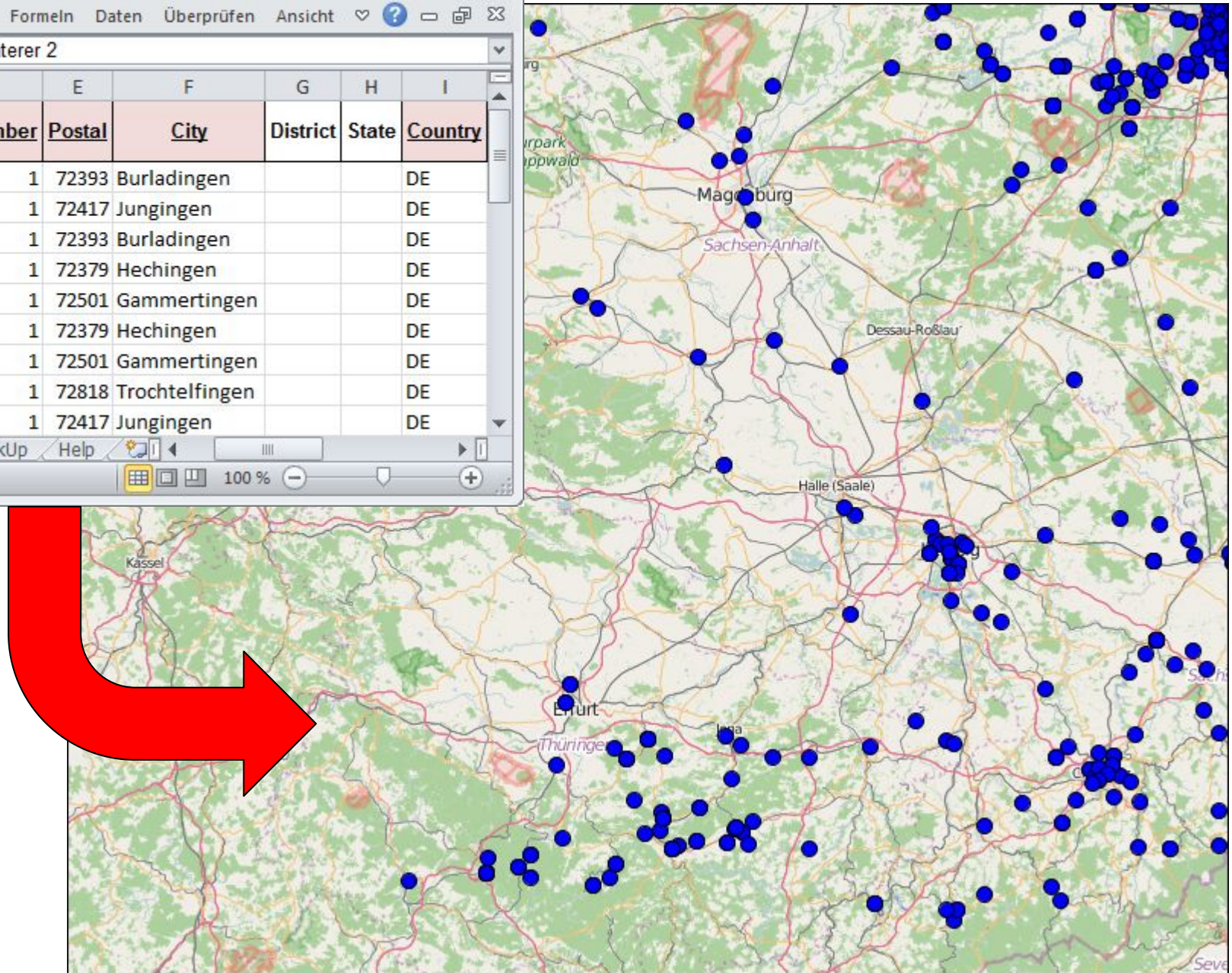
Start_Tracing_Caterers.xlsx - Microsoft Excel

B20 fx Caterer 2

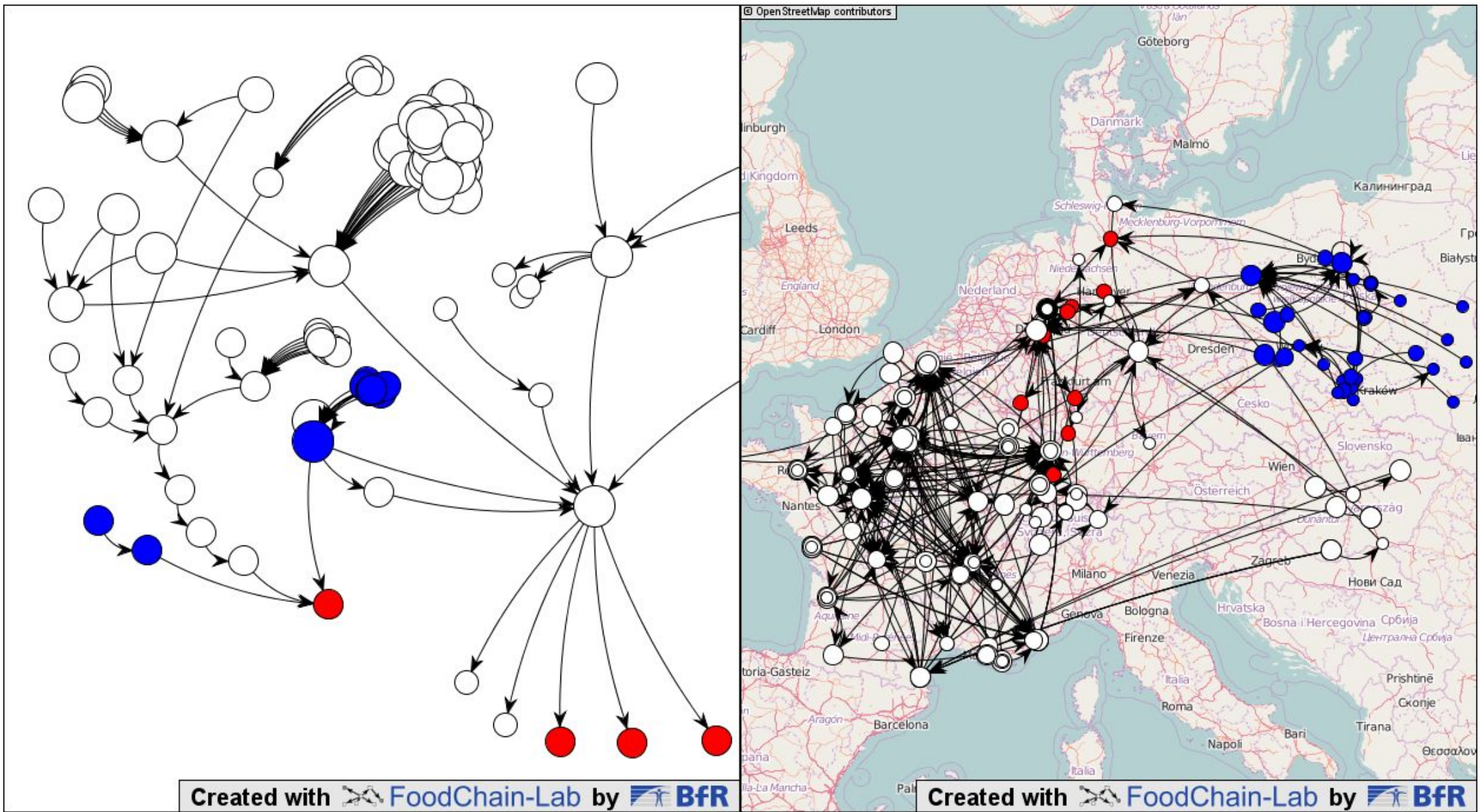
	C	D	E	F	G	H	I
1	Street	Street Number	Postal	City	District	State	Country
2	Kantstraße		1 72393	Burladingen			DE
3	Heuweg		1 72417	Jungingen			DE
4	Lichtensteinweg		1 72393	Burladingen			DE
5	Stillfriedstraße		1 72379	Hechingen			DE
6	Steinbeisstraße		1 72501	Gammertingen			DE
7	Gammertinger Straße		1 72379	Hechingen			DE
8	Hechinger Straße		1 72501	Gammertingen			DE
9	Schillerstraße		1 72818	Trochtelfingen			DE
10	Brunnenstraße		1 72417	Jungingen			DE

Stations Deliveries LookUp Help

Bereit 100 %



Geo-Visualization



Geo-Clustering

What do we mean by Geo-Clustering?

- Stations are not viewed as separate entities anymore
- Regional „Clusters“ of stations are created
- → New Questions possible: What if goods / resources from a certain region are contaminated?

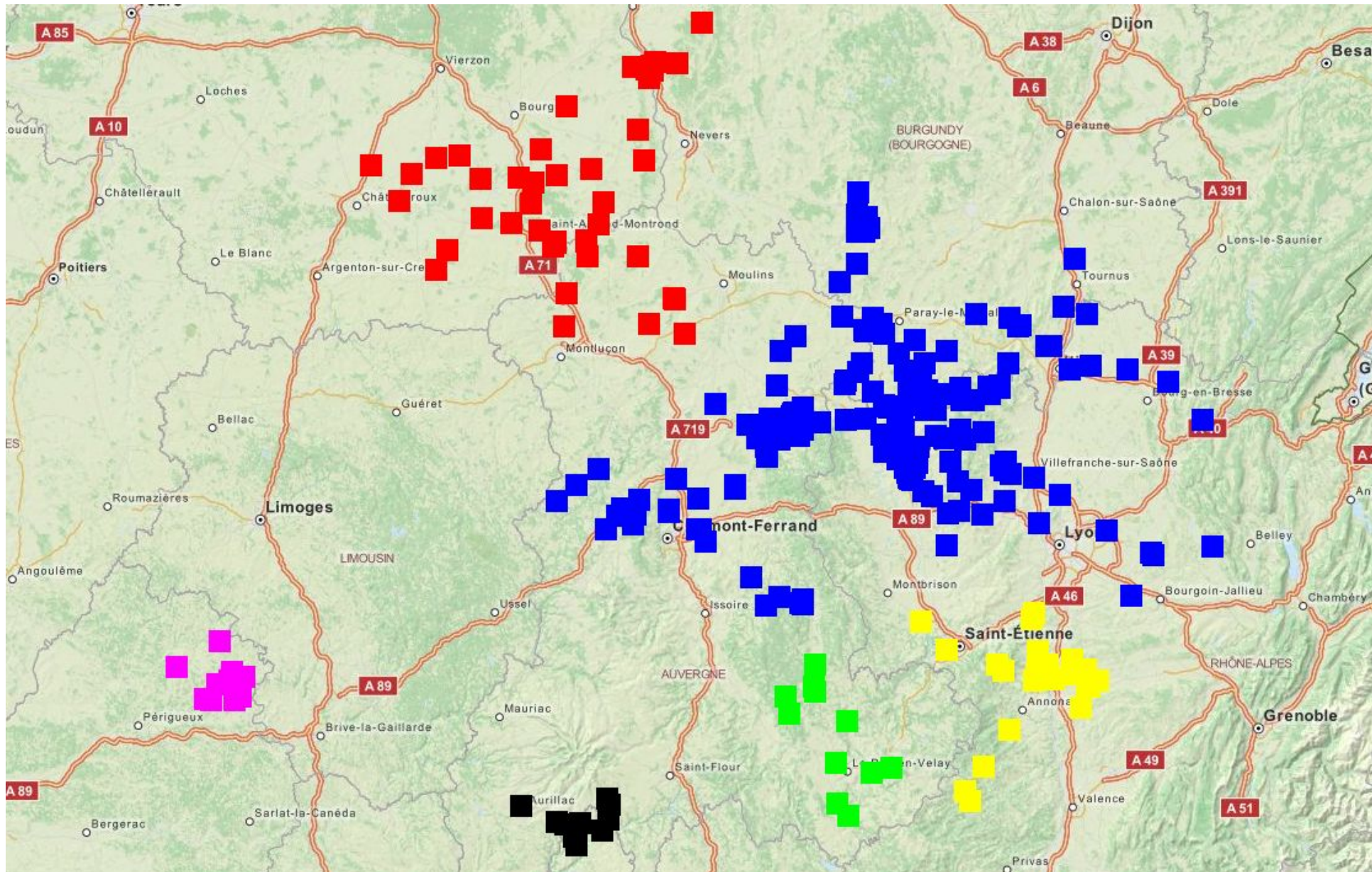
Why do we do that?

- Regional Contamination: water source, ...
- Regional Workforce is infectious

Geo-Clustering in FoodChain-Lab

1. Manually select stations for cluster (e.g. with Geo-View)
2. Clustering based on addresses (e.g. all stations with same zip code)
3. Cluster-Algorithm based on geographical coordinates (latitude / longitude)

DBSCAN - Algorithm





Thank you for your attention

Christian Thöns

<http://foodrisklabs.bfr.bund.de>

Federal Institute for Risk Assessment

Max-Dohrn-Str. 8-10 • 10589 Berlin, GERMANY

Tel. +49 30 - 184 12 - 0 • Fax +49 30 - 184 12 - 47 41

christian.thoens@bfr.bund.de • www.bfr.bund.de