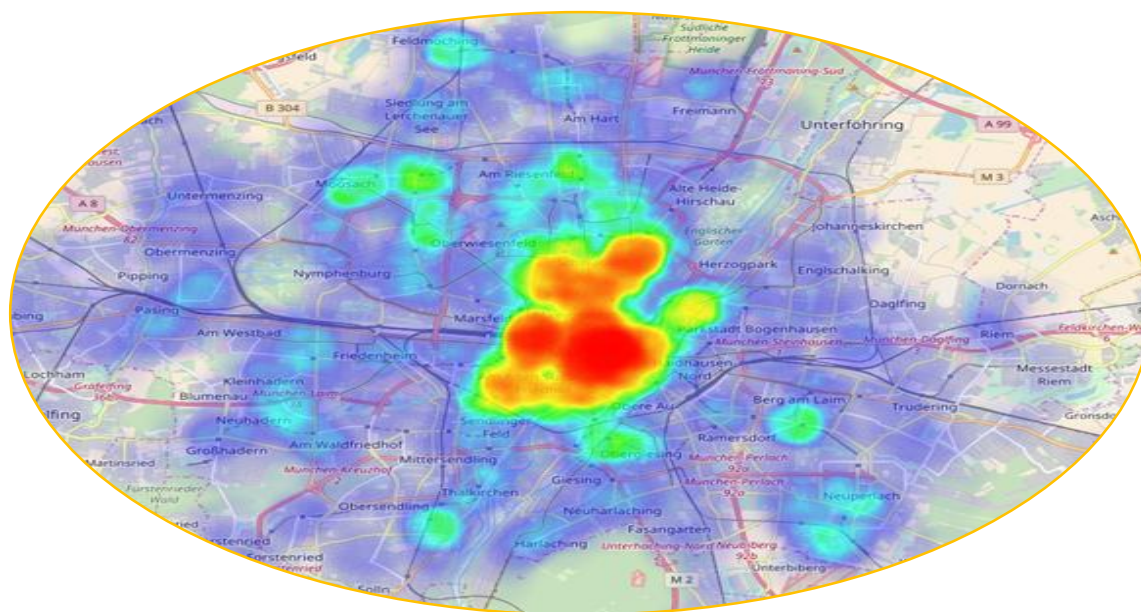


可视化服务器使用说明

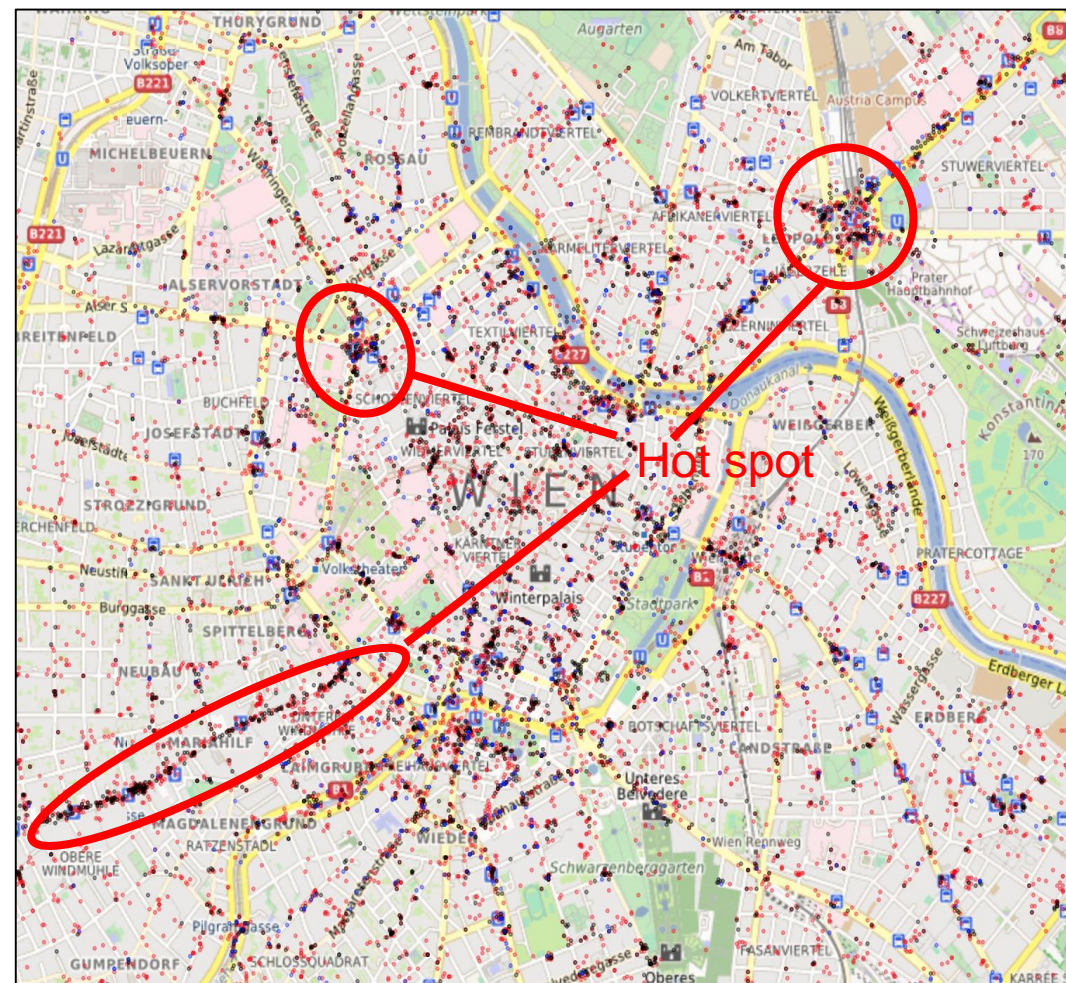
2017.11.27



- 简介
- 地理图介绍(web-service: <http://13.229.85.131:3838/>)
 - [点图-Current bike point](#)
 - [热力图-Start & End point](#)
 - [轨迹图-Track path](#)
- [使用教学](#)

作为一个数据驱动的公司，我们收集了非常多样化的资料，比如说每次骑行的经纬度，那如何将经纬度转换成有用的信息呢？

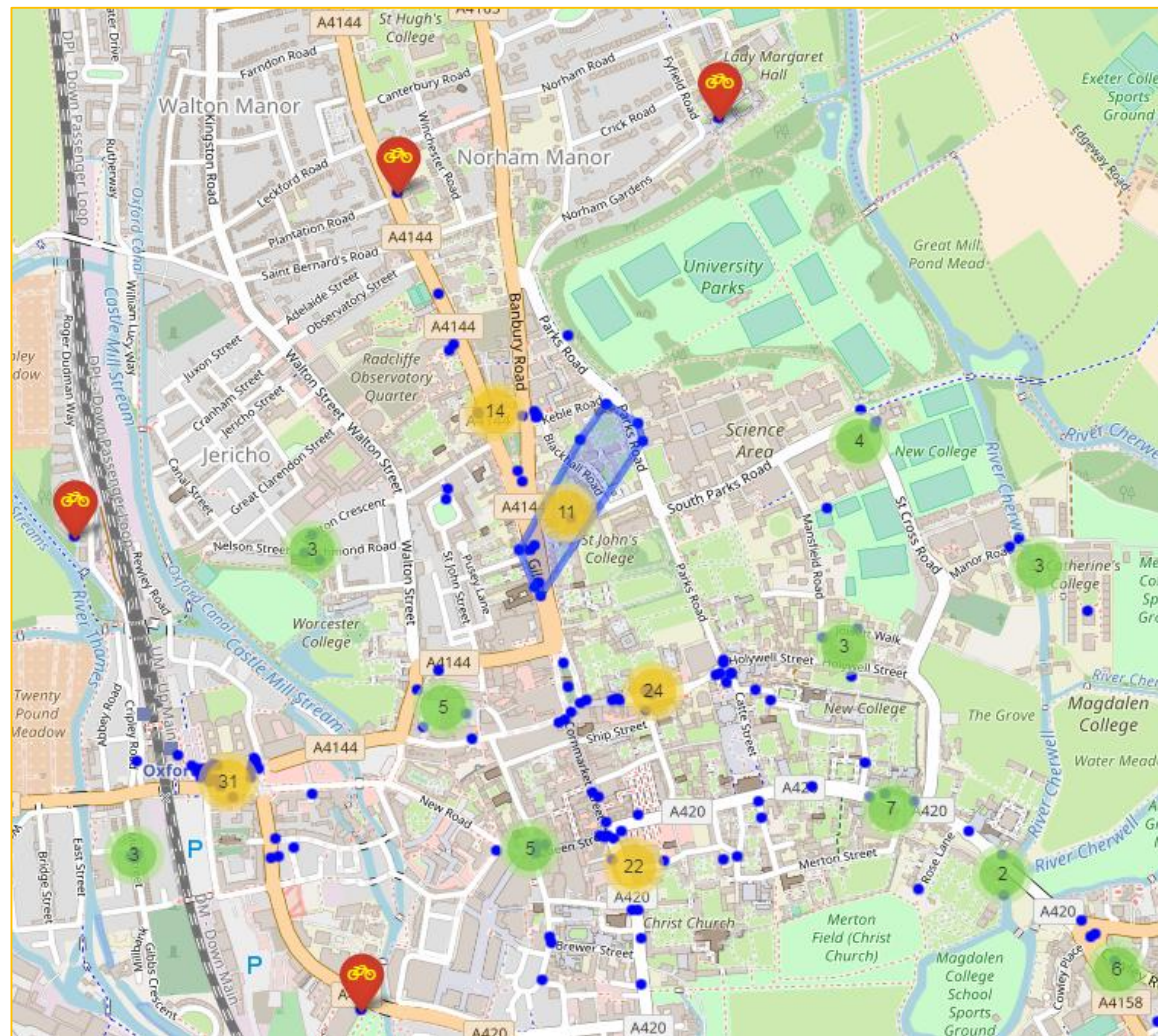
我们需要将其可视化，因此，数据团队开发了此服务器。透过点图、热力图、轨迹图呈现的方式，不但可以了解使用者的骑行状况，也能做为运营调度的参考信息。



*目前经纬度数据来自于客户端行动装置，难免出现偏移现象

Bike Mapping

- 单车最后的骑行终点或投放经纬度(未经骑行)
- 可显示区域单车数量(游标到数字上面可显示区域范围)
- 附近无邻近单车则显示红黄色单车icon

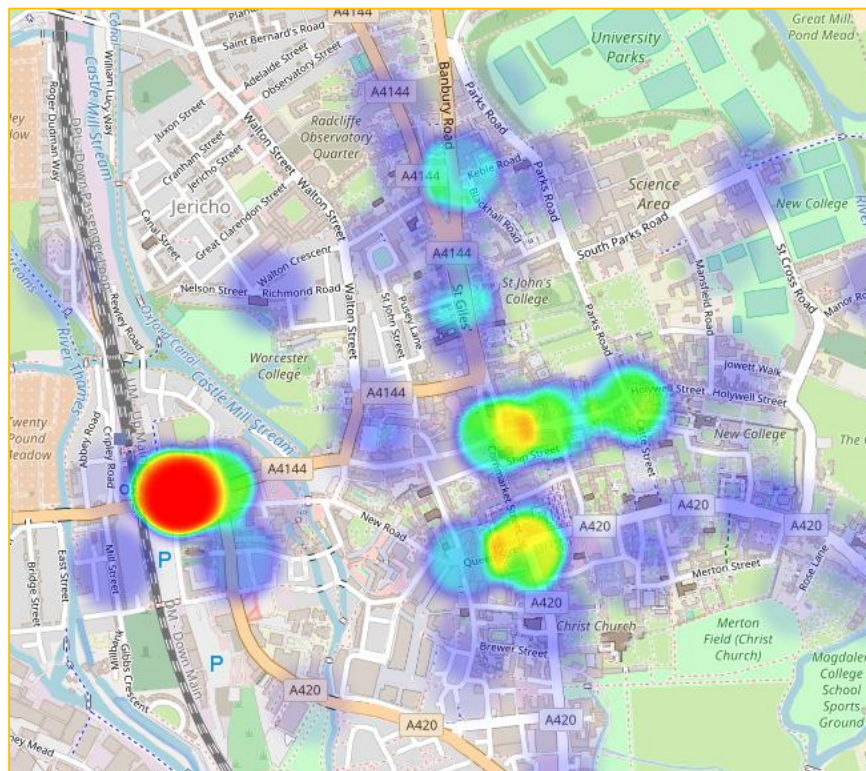
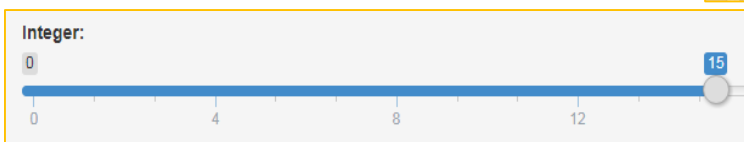


Current bike point(last trip end point)

*目前经纬度数据来自于客户端行动装置, 难免出现偏移现象

Heatmap

- 显示起点与终点分布状况 (越红显示密度越大)
- 可对比起点与终点热力图观察区域骑行状况
- 在放大缩小时, 可透过 slider 调整每个热点的半径 (数值纯属大小关系, 无特定单位)



Start point

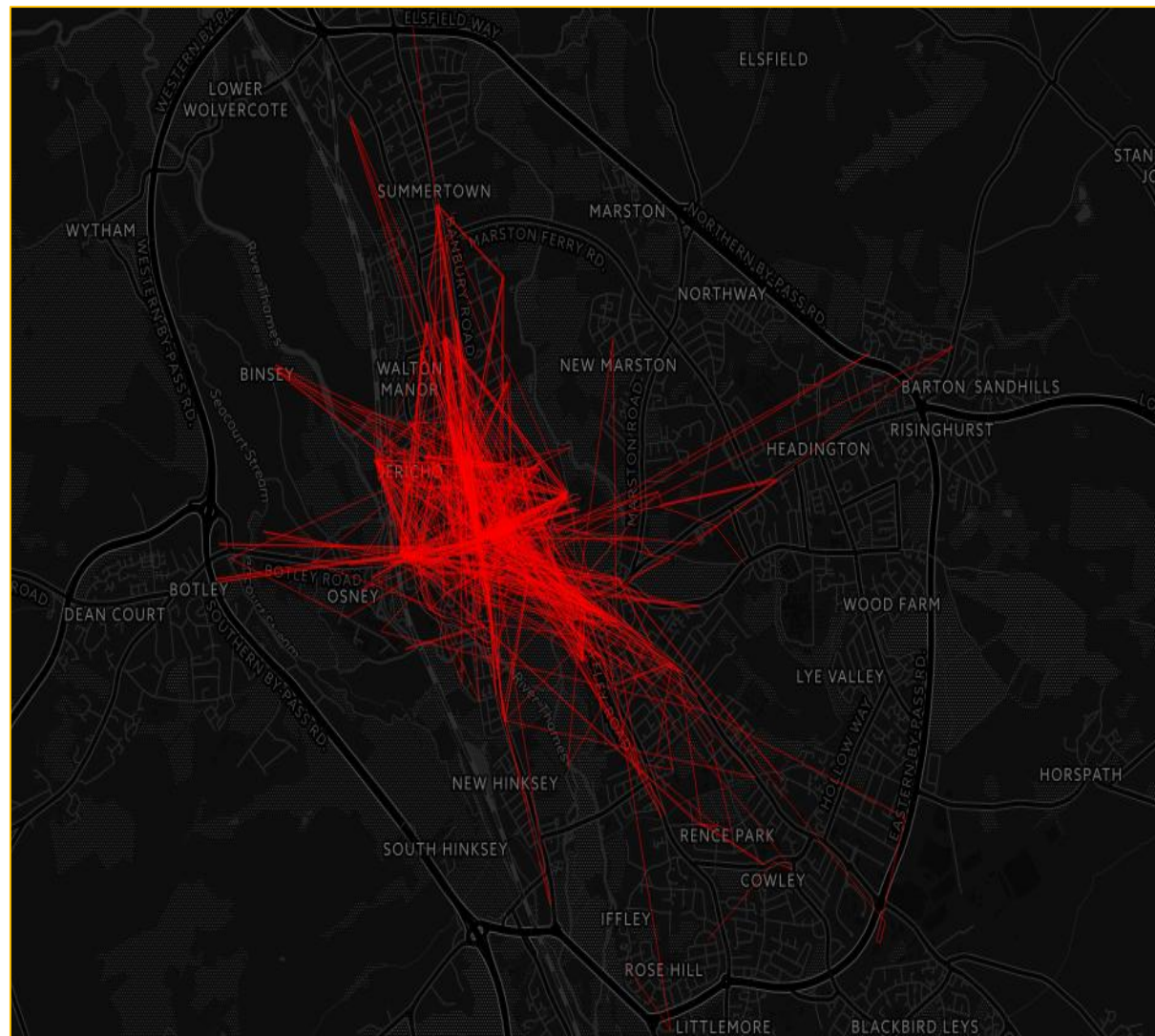


End point

*目前经纬度数据来自于客户端行动装置, 难免出现偏移现象

Track path

- 每次骑行的过程中，除了起点和终点，中间每隔一小段时间app还会传回对应的经纬度，因此，可以将整个骑行的每个经纬度连起来了解用户骑行路段。
- 注意!! 每段骑行可能包含多个经纬度位置，数据量会很大，因此，**建议上传数据不大于 3MB**(可拆成各城市去看)



Trip track

*目前经纬度数据来自于客户端行动装置，难免出现偏移现象

How to do maps?

流程图

Export the Map data on
BDP dashboard

oBike-{Country Name}
→ Map_data({Country Name})

Options:

1. BikeMapping
2. Heatmap
3. Trackpath



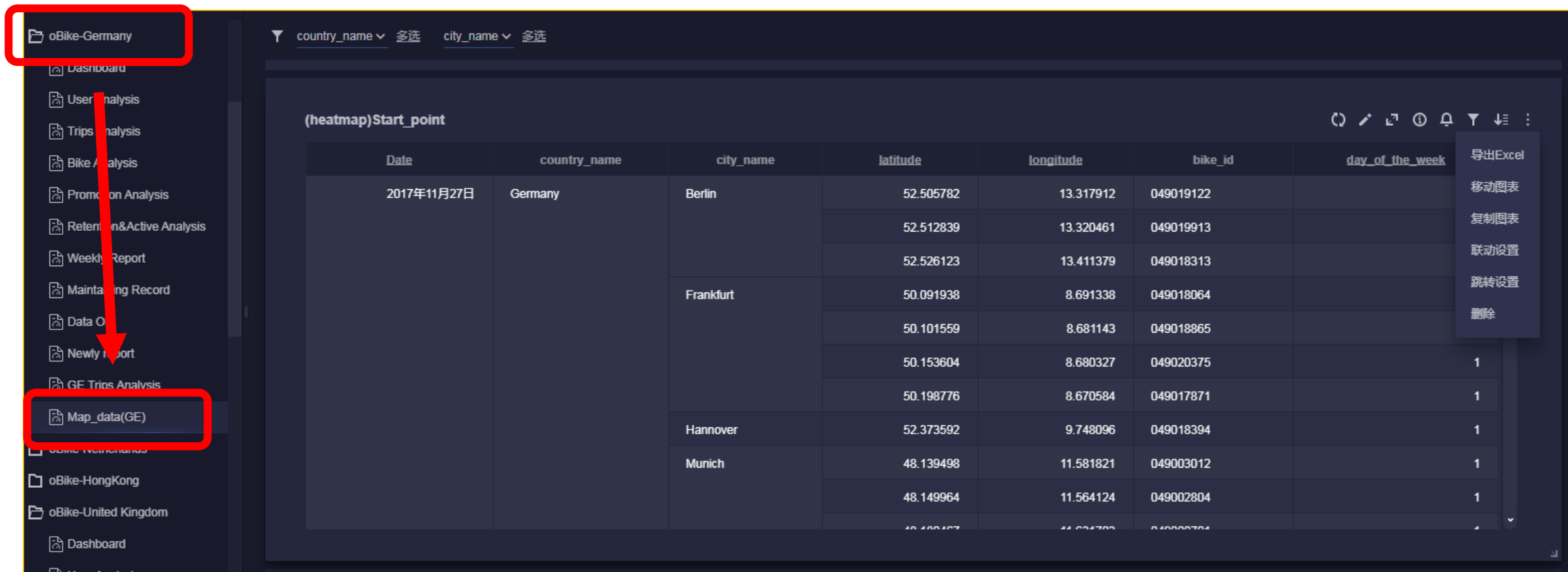
Upload to the web-
service(<http://13.229.85.131:3838>)

Note:

- Please **filter** the data in excel before upload them(especially Track path)
- Format: must be **xlsx.file**
- Cannot contain **missing value**

How to do maps? -Demo

Step1: Find the Map data on BDP

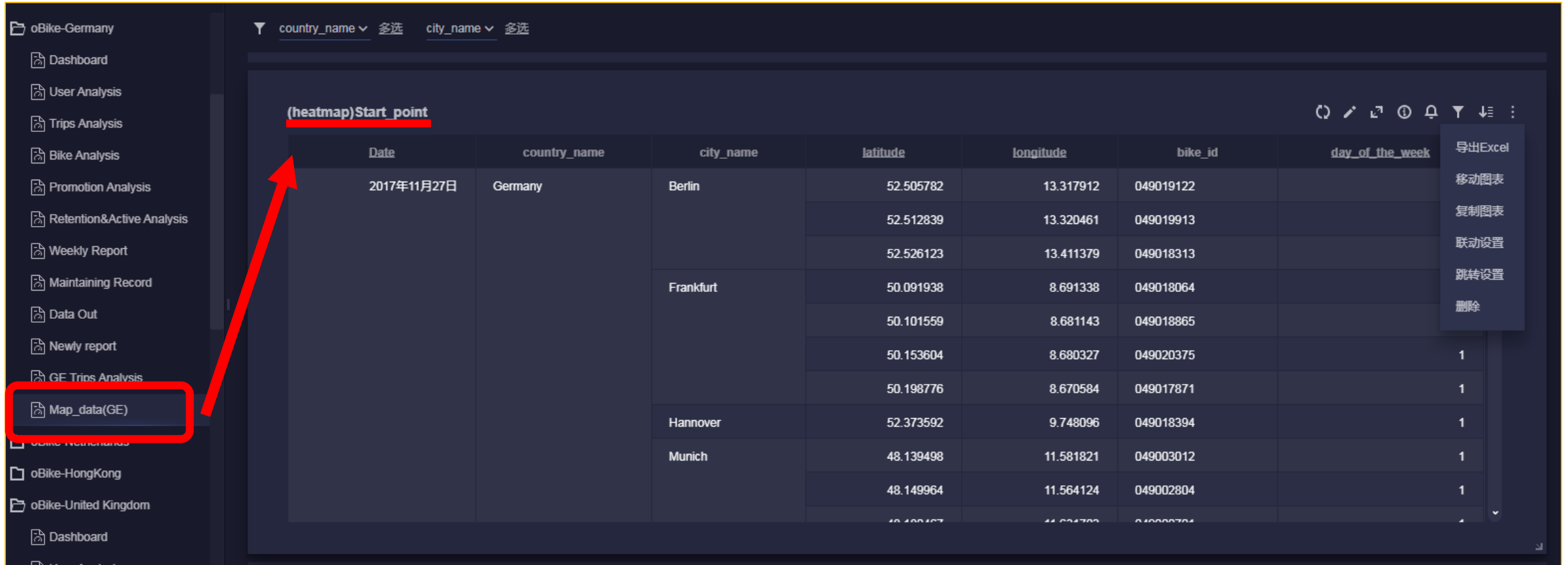


The screenshot shows the oBIKE dashboard interface. On the left sidebar, the 'Map_data(GE)' menu item is highlighted with a red box. A red arrow points from this menu item to the main content area. The main content area displays a heatmap titled '(heatmap)Start_point' and a table of bike data. The table has columns: Date, country_name, city_name, latitude, longitude, bike_id, and day_of_the_week. The data is filtered for '2017年11月27日' and 'Germany'. The cities listed are Berlin, Frankfurt, Hannover, and Munich. A context menu is open on the right side of the table, showing options like '导出Excel', '移动图表', '复制图表', '联动设置', '跳转设置', and '删除'.

Date	country_name	city_name	latitude	longitude	bike_id	day_of_the_week
2017年11月27日	Germany	Berlin	52.505782	13.317912	049019122	
			52.512839	13.320461	049019913	
			52.526123	13.411379	049018313	
		Frankfurt	50.091938	8.691338	049018064	
			50.101559	8.681143	049018865	
			50.153604	8.680327	049020375	1
		Hannover	50.198776	8.670584	049017871	1
			52.373592	9.748096	049018394	1
			Munich	48.139498	11.581821	049003012
		48.149964		11.564124	049002804	1
		48.139498		11.581821	049003012	1

How to do maps? -Demo

Step2: Choose the sheet you want(bikemapping, heatmap or trackpath)



The screenshot displays the oBIKE data management interface. On the left sidebar, the 'Map_data(GE)' option is highlighted with a red box. A red arrow points from this option to the main data table. The table is titled '(heatmap)Start_point' and contains the following data:

Date	country_name	city_name	latitude	longitude	bike_id	day_of_the_week
2017年11月27日	Germany	Berlin	52.505782	13.317912	049019122	
			52.512839	13.320461	049019913	
			52.526123	13.411379	049018313	
		Frankfurt	50.091938	8.691338	049018064	
			50.101559	8.681143	049018865	
			50.153604	8.680327	049020375	1
		Hannover	50.198776	8.670584	049017871	1
			52.373592	9.748096	049018394	1
			Munich	48.139498	11.581821	049003012
		48.149964		11.564124	049002804	1

A dropdown menu is open on the right side of the table, showing the following options: 导出Excel, 移动图表, 复制图表, 联动设置, 跳转设置, and 删除.

How to do maps? -Demo



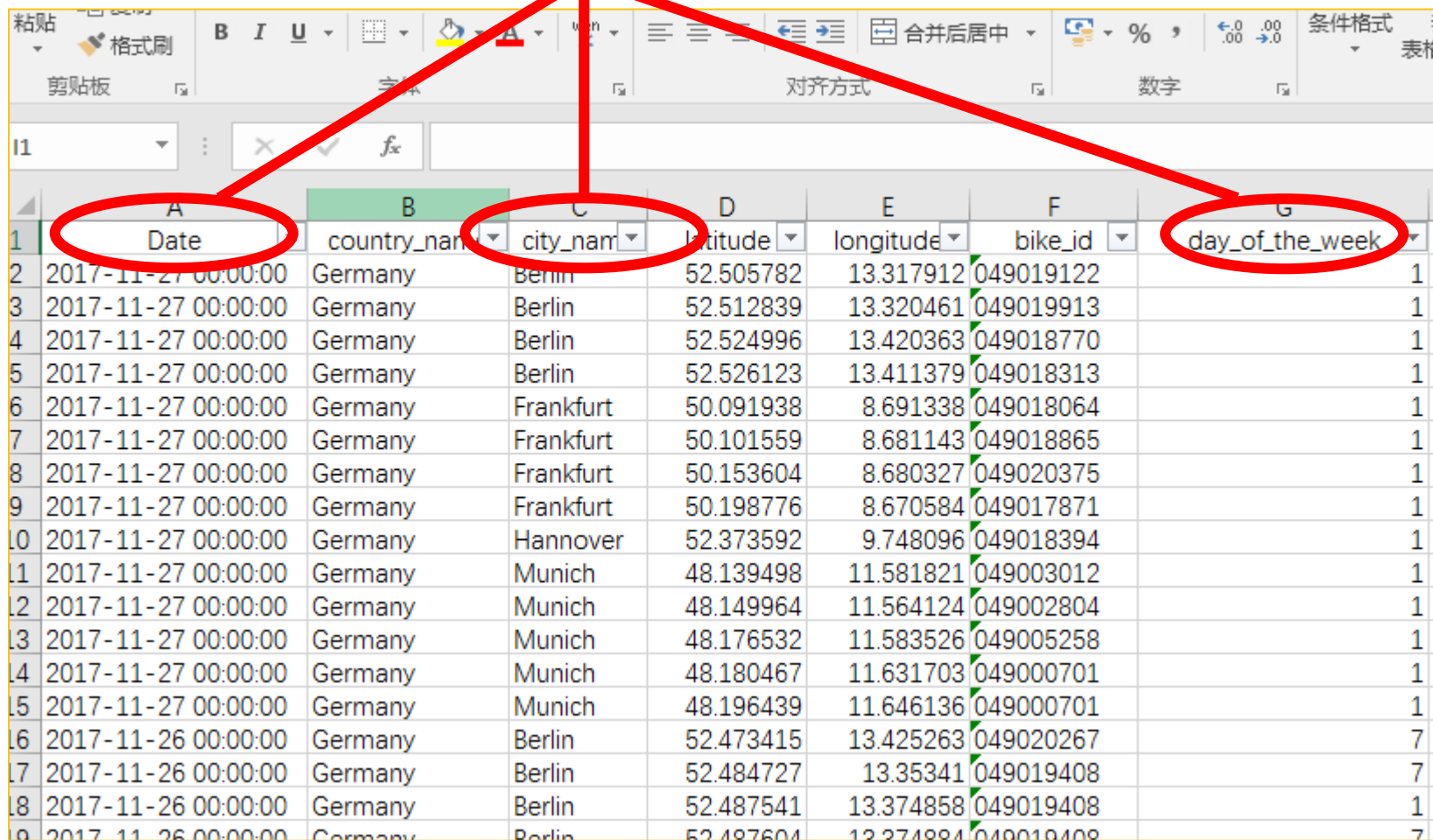
Step3: Export the file(xlsx)

The screenshot shows the oBIKE web application interface. On the left is a sidebar with navigation items: oBike-Germany, Dashboard, User Analysis, Trips Analysis, Bike Analysis, Promotion Analysis, Retention&Active Analysis, Weekly Report, Maintaining Record, Data Out, Newly report, GE Trips Analysis, Map_data(GE), oBike-Netherlands, oBike-HongKong, oBike-United Kingdom, and Map Analysis. The main area displays a heatmap titled "(heatmap)Start_point" and a table below it. The table has columns: Date, country_name, city_name, latitude, longitude, bike_id, and day_of_the_week. A red arrow points from the heatmap title to the "导出Excel" (Export Excel) button in the table's action menu. The table data is as follows:

Date	country_name	city_name	latitude	longitude	bike_id	day_of_the_week
2017年11月27日	Germany	Berlin	52.505782	13.317912	049019122	
			52.512839	13.320461	049019913	
			52.526123	13.411379	049018313	
		Frankfurt	50.091938	8.691338	049018064	
			50.101559	8.681143	049018865	
			50.153604	8.680327	049020375	1
			50.198776	8.670584	049017871	1
		Hannover	52.373592	9.748096	049018394	1
		Munich	48.139498	11.581821	049003012	1
			48.149964	11.564124	049002804	1

How to do maps? -Demo

Step4: Filter the data(e.g. city_name : Berlin, Date = 2017.11.01-2011.11.10)



	A	B	C	D	E	F	G
	Date	country_name	city_name	latitude	longitude	bike_id	day_of_the_week
1	2017-11-27 00:00:00	Germany	Berlin	52.505782	13.317912	049019122	1
2	2017-11-27 00:00:00	Germany	Berlin	52.512839	13.320461	049019913	1
3	2017-11-27 00:00:00	Germany	Berlin	52.524996	13.420363	049018770	1
4	2017-11-27 00:00:00	Germany	Berlin	52.526123	13.411379	049018313	1
5	2017-11-27 00:00:00	Germany	Frankfurt	50.091938	8.691338	049018064	1
6	2017-11-27 00:00:00	Germany	Frankfurt	50.101559	8.681143	049018865	1
7	2017-11-27 00:00:00	Germany	Frankfurt	50.153604	8.680327	049020375	1
8	2017-11-27 00:00:00	Germany	Frankfurt	50.198776	8.670584	049017871	1
9	2017-11-27 00:00:00	Germany	Hannover	52.373592	9.748096	049018394	1
10	2017-11-27 00:00:00	Germany	Munich	48.139498	11.581821	049003012	1
11	2017-11-27 00:00:00	Germany	Munich	48.149964	11.564124	049002804	1
12	2017-11-27 00:00:00	Germany	Munich	48.176532	11.583526	049005258	1
13	2017-11-27 00:00:00	Germany	Munich	48.180467	11.631703	049000701	1
14	2017-11-27 00:00:00	Germany	Munich	48.196439	11.646136	049000701	1
15	2017-11-26 00:00:00	Germany	Berlin	52.473415	13.425263	049020267	7
16	2017-11-26 00:00:00	Germany	Berlin	52.484727	13.35341	049019408	7
17	2017-11-26 00:00:00	Germany	Berlin	52.487541	13.374858	049019408	1
18	2017-11-26 00:00:00	Germany	Berlin	52.487604	13.374858	049019408	7

How to do maps? -Demo

Step5:Upload data to the web-service to get the result!(<http://13.229.85.131:3838>)

Uploading Files

Choose xlsx file

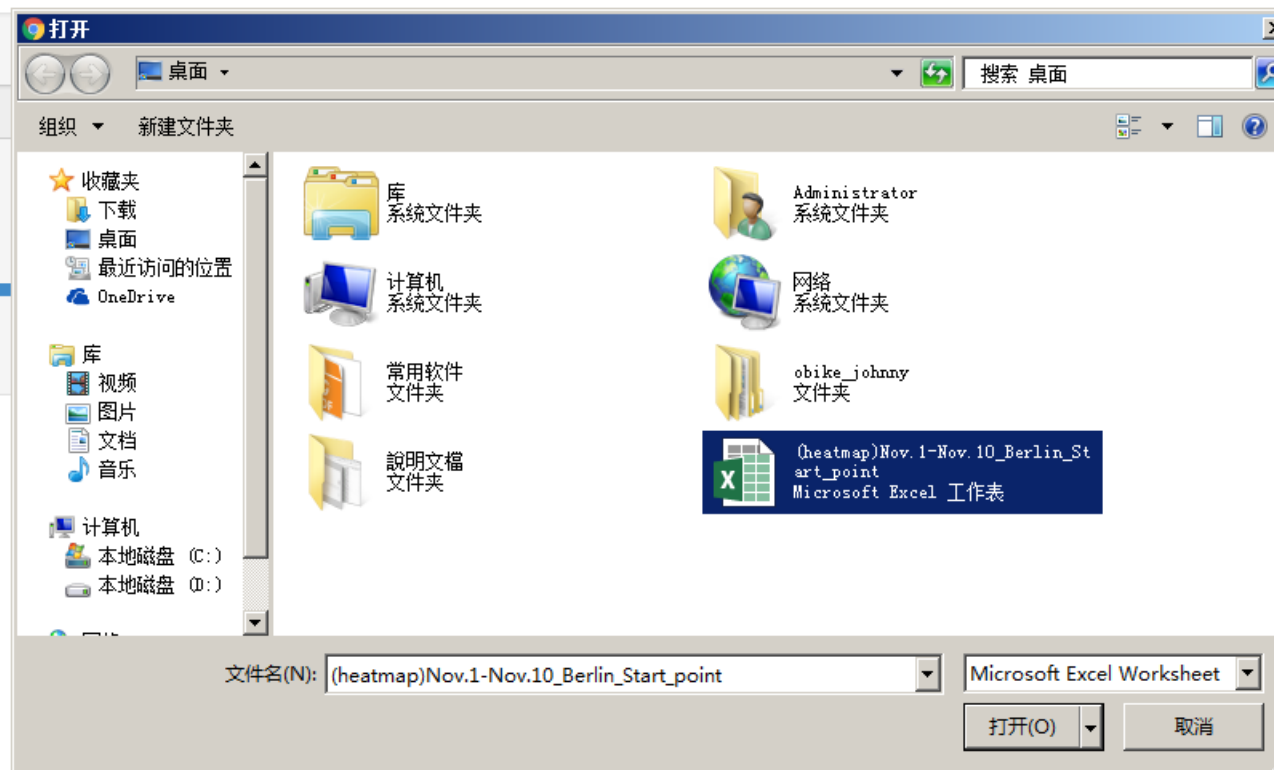
Browse...

No file selected

Integer:

0

0 4 8



How to do maps? -Demo



Step6:Upload data to the web-service to get the result! (<http://13.229.85.131:3838>)

Uploading Files

Choose xlsx file

Browse... (heatmap)Nov.1-Nov.10_Berlin_Start_point.xlsx

Upload complete

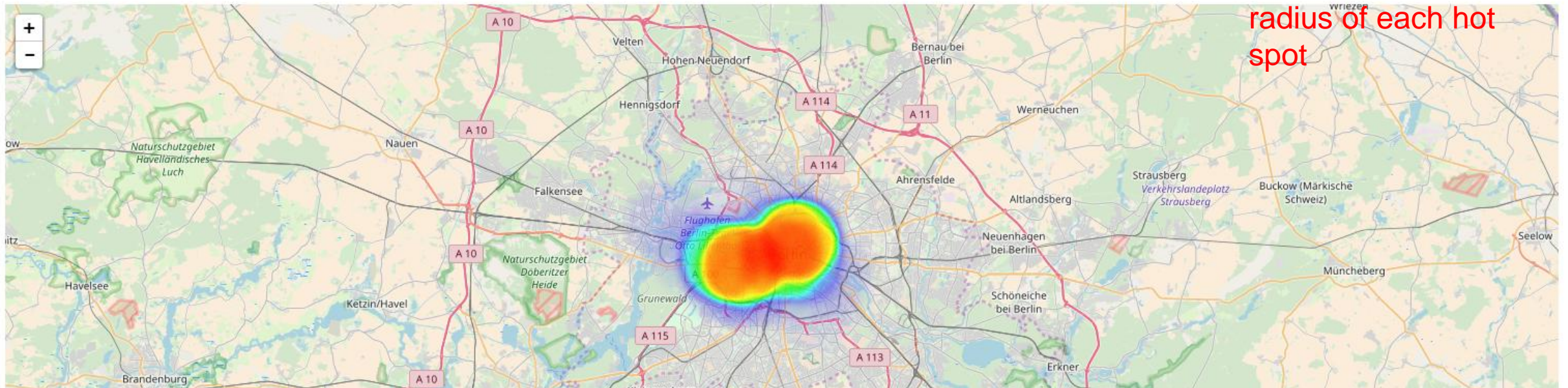
Integer:

0

0 4 8 12 16 20 24 28 32 36 40

40

Customize the
radius of each hot
spot



Q1. 为什么在dashboard不能找到全部的历史数据?

Ans :

目前根据市场需求及服务器负荷程度, 暂时先开放各国市场:

(Heatmap) Start_point: 过去30天(包含今天)

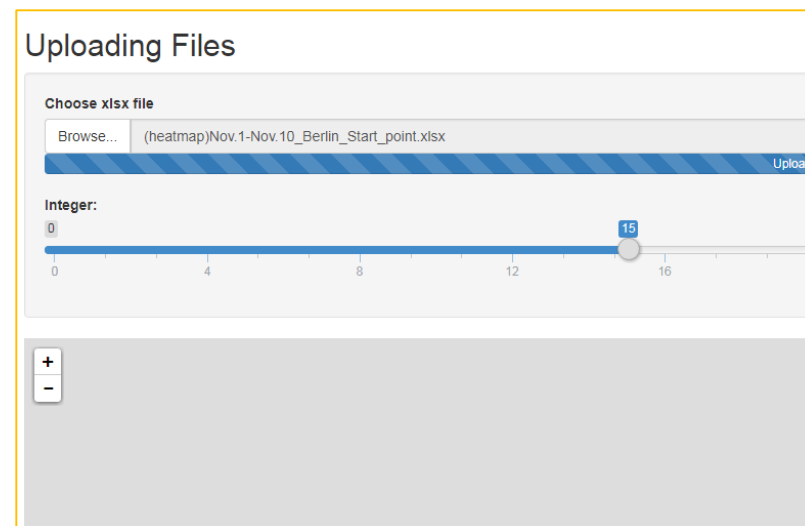
(Heatmap) End_point: 过去30天(包含今天)

(Trackpath) Tracking_trips: 过去7天(包含今天)

Q2. 为什么upload过后, 出现这种报错(呈现灰底色图)?

Ans :

经纬度数据含有缺失值, 请删除缺失值再重新upload数据。

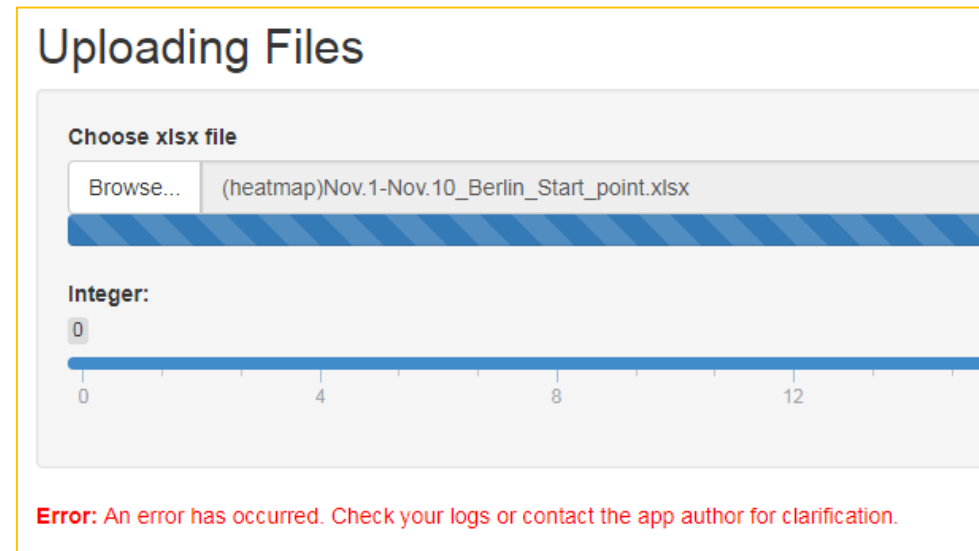


Q3. 为什么upload过后，出现这种报错信息？

Ans:

确认数据是否包含以下字段 (大小写完全一样):

- BikeMapping : bike_id, latitude, longitude
- Heatmap : latitude, longitude
- Trackpath : track_id, latitude, longitude



Q4. 为什么已经upload complete一段时间了，图都还没跑出来？

Ans: 导入的数据量太大了(尤其track path中，每笔骑行包含多个经纬度纪录)，以下建议导入数据量:

BikeMapping & Heatmap : 不超过5MB

Trackpath : 不超过3MB

Thank you