

Searching a location for the new Italian restaurant

IBM/Coursera Applied Data Science specialization course

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Good restaurant location is necessary for a new restaurant

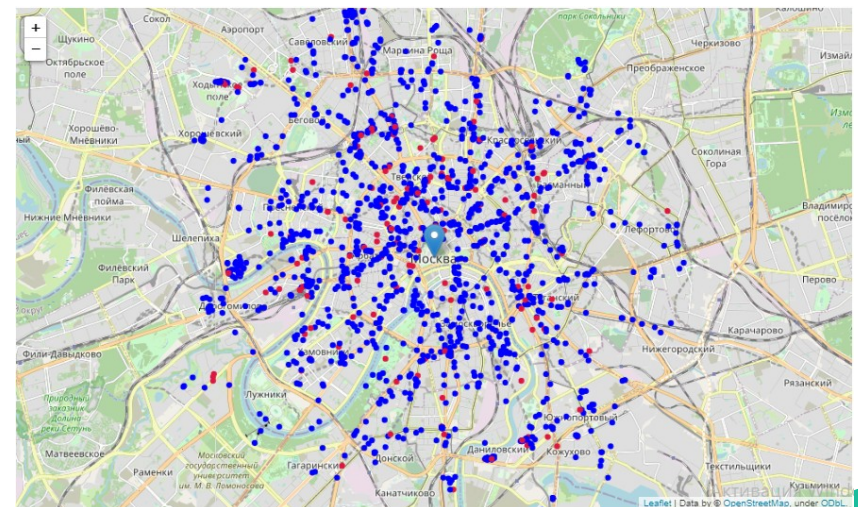
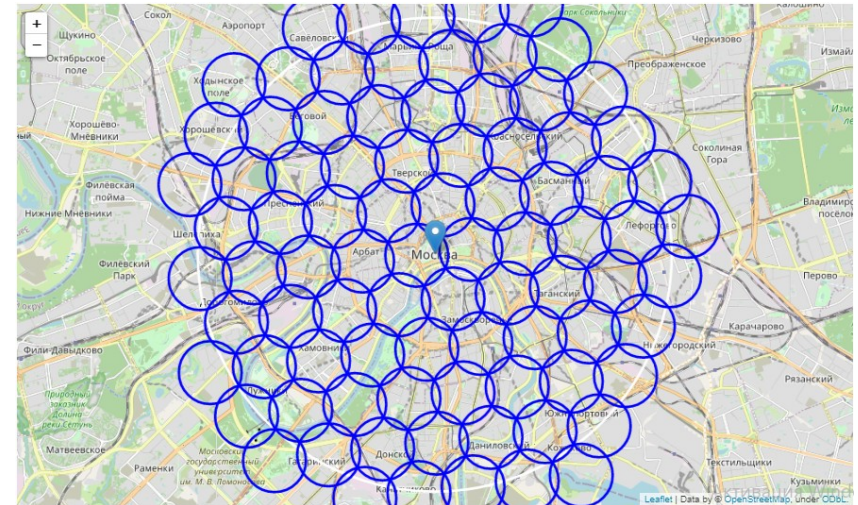
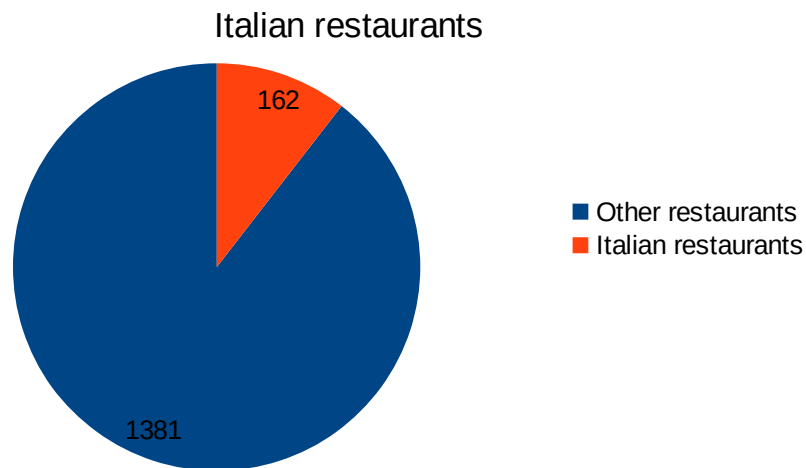
- Restaurant business is highly concurrent but good location allows to decrease concurrence intensity.
- It allows you to find you guests.
- It allows you to minimize you logistics and expenses.
- Good location is hard to find. There are many contradicting requirements.

Data acquisition and cleaning

- Moscow coordinates and all geolocation data through **openstreetmap.org** services.
- Actual venues and categories data provided by **Foursquare** services.
- 86 local areas generated with 7 features in each.
- 1543 venues with 10 features received.

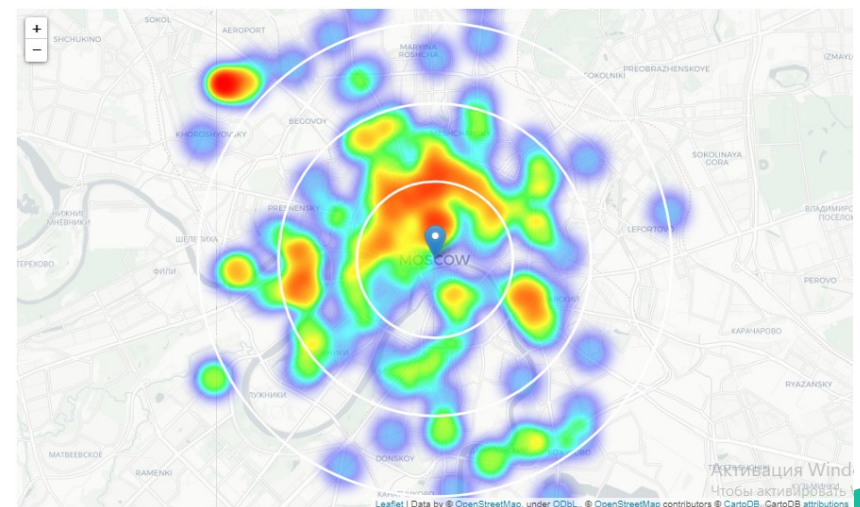
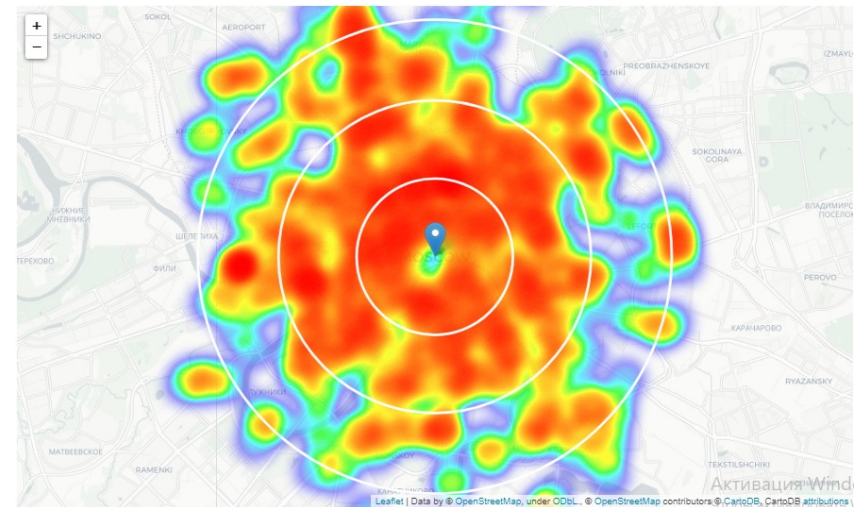
Data visualization

- Restaurants align with main roads
- Italian restaurants locations mostly scattered

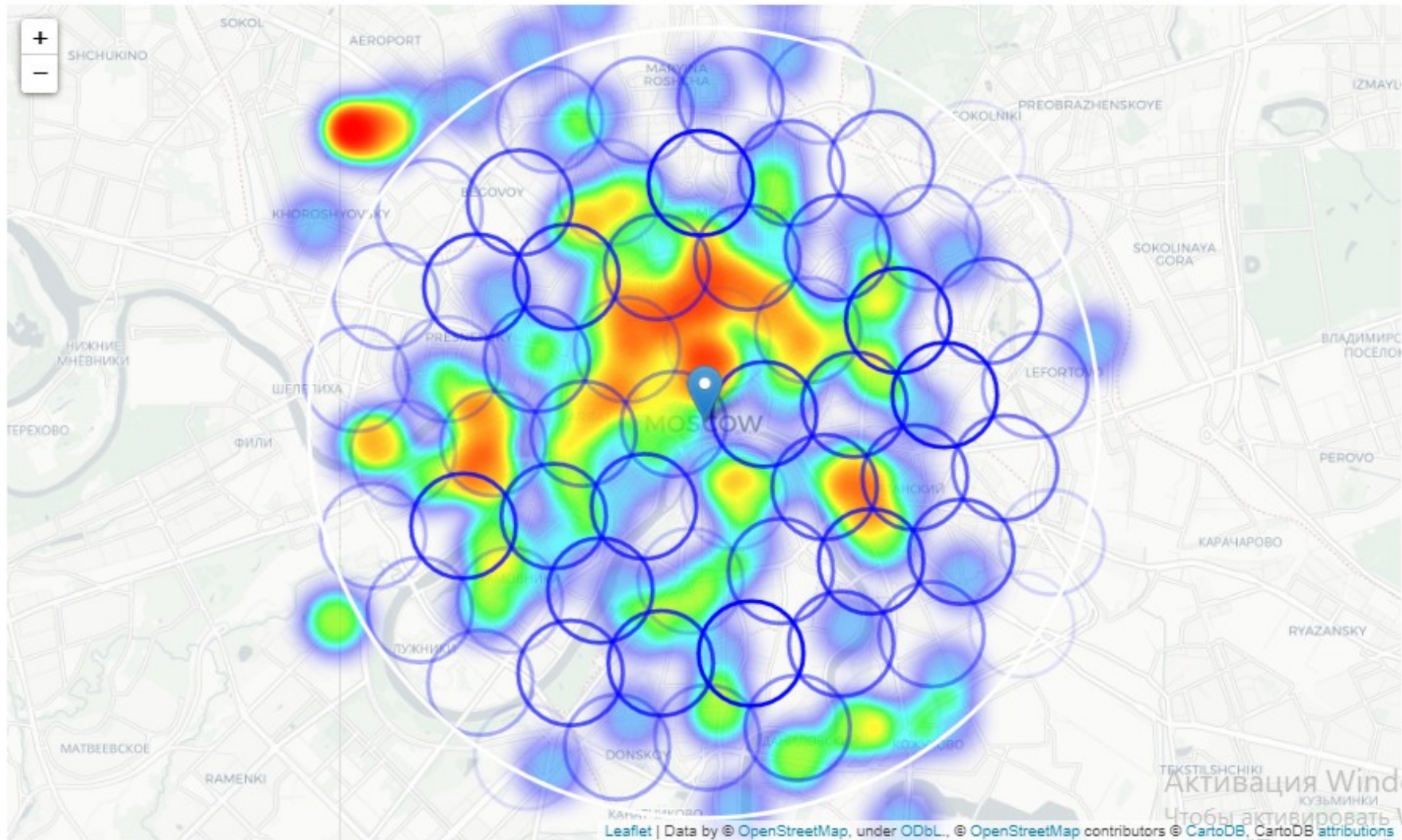


Restaurants heat map

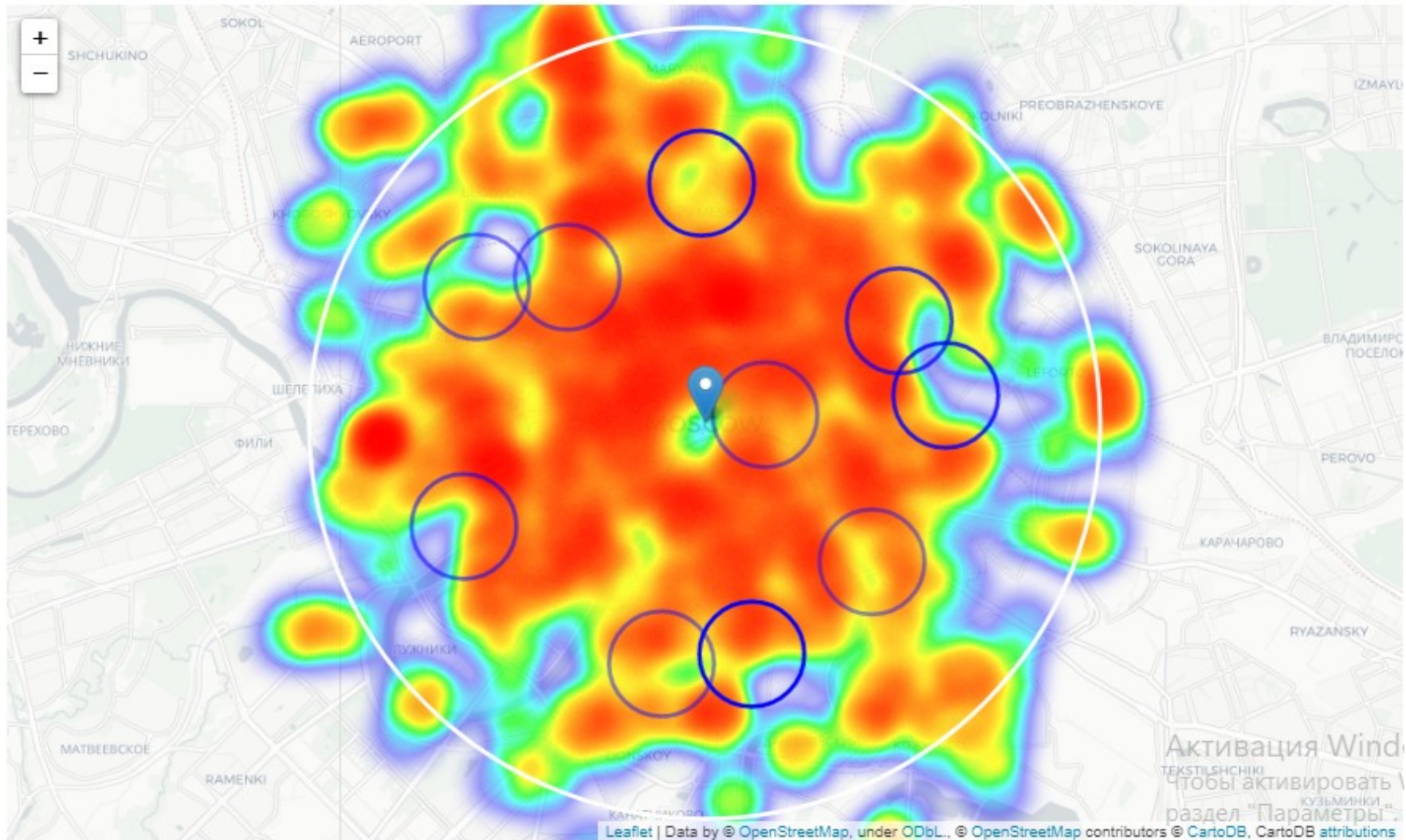
- High density especially on the northern direction
- Most of the restaurants in radius of 4000 meters from center
- Have some spots to fit restaurant into



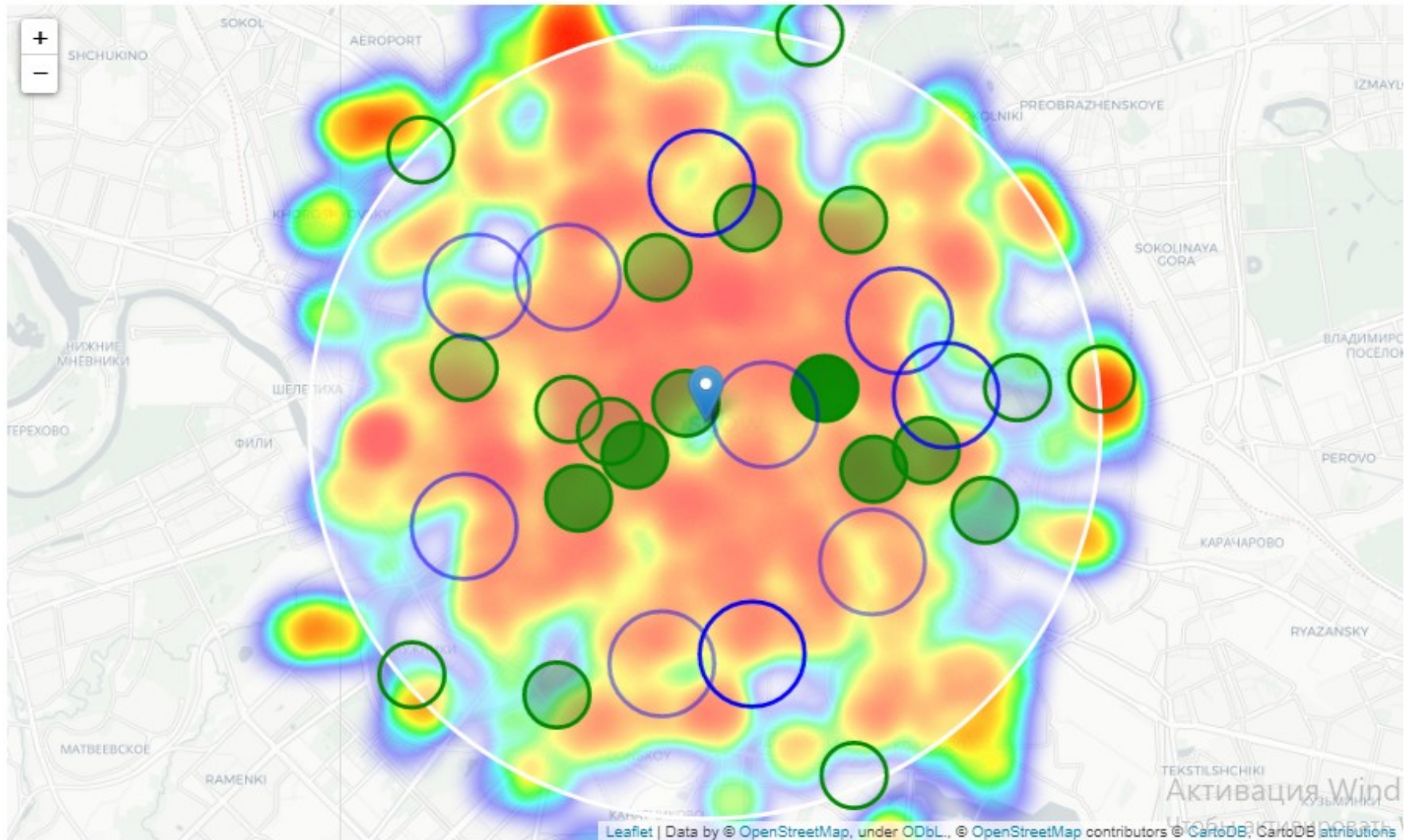
Locations quality map



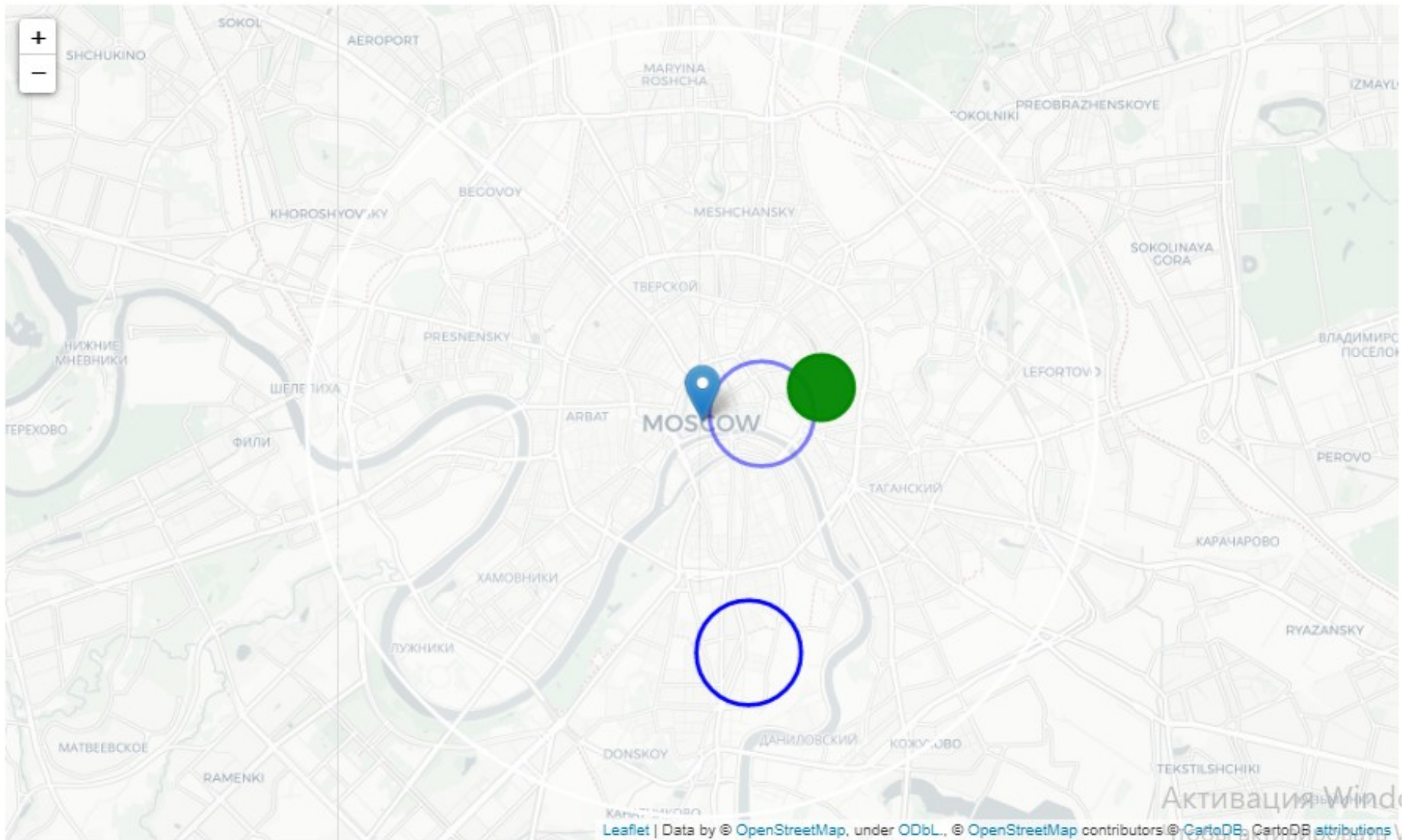
Top ten best locations



Quality clustering centers



Best locations for further investigation



Conclusion and future directions

- Decrease the size of the grid for more precise allocation
- Remove industrial zones and ecology problematic zones, also rivers and other type of terrain without buildings
- Add traffic intensity maps into the quality metric account
- Add area welfare and notoriety into location quality metric calculations