



# Using the GDL to track and monitor animal vaccination to control an ongoing rabies outbreak

Department of Livestock Development-Zanzibar

Dr Khadija Noor Omar

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# Background

- The Zanzibar archipelago is situated off the eastern coast of Africa
  - Semi-autonomous region of the United Republic of Tanzania
  - Consists of two main islands, Unguja and Pemba.
  - The largest and most populated island is Unguja / Zanzibar island

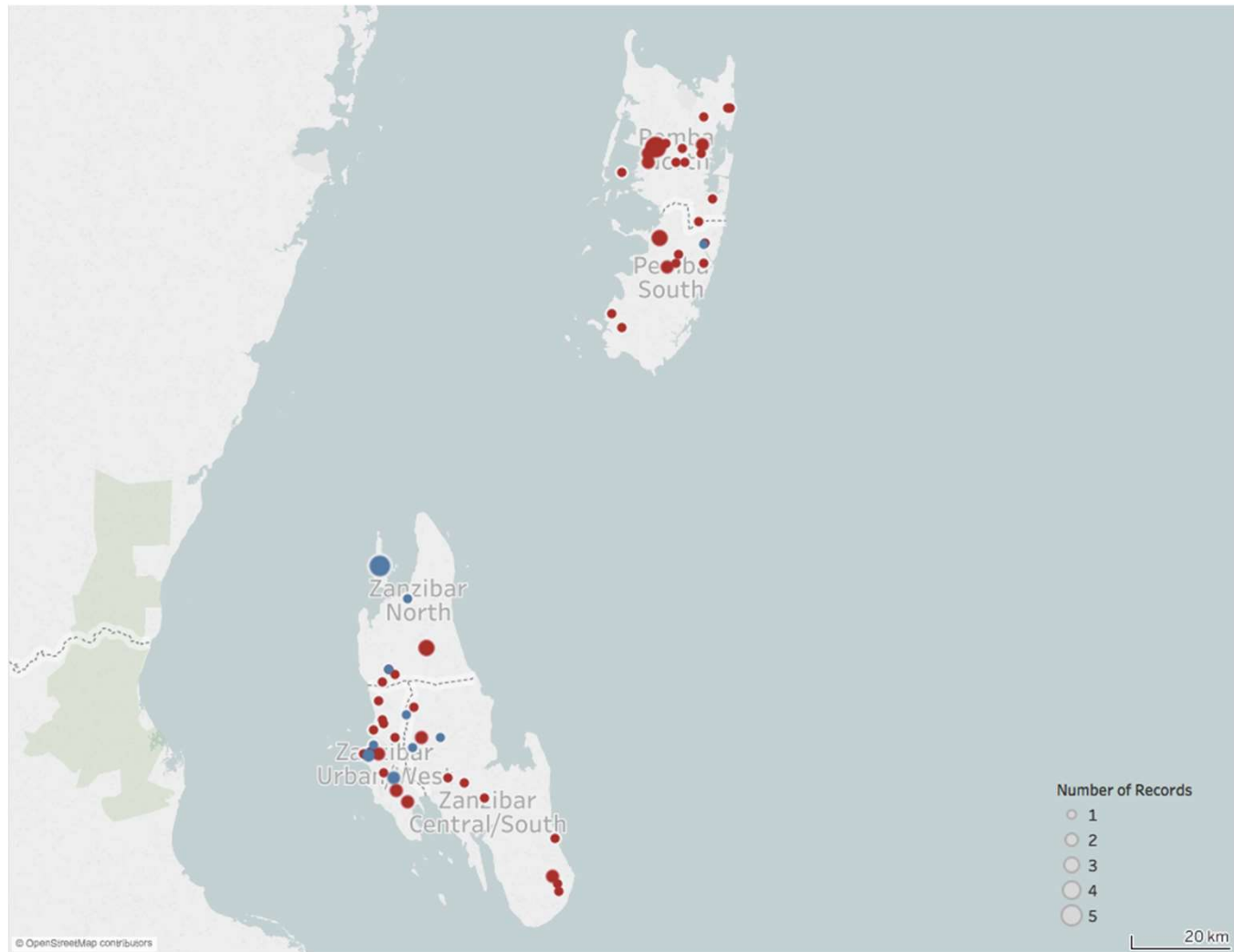




# Background

- Rabies has been endemic within the Zanzibar archipelago since the 1990's
- Diagnostic capacity (DRIT) was established in both the Unguja and Pemba islands in 2016 and 2017 respectively
- Rabies-positive cases were detected across both island

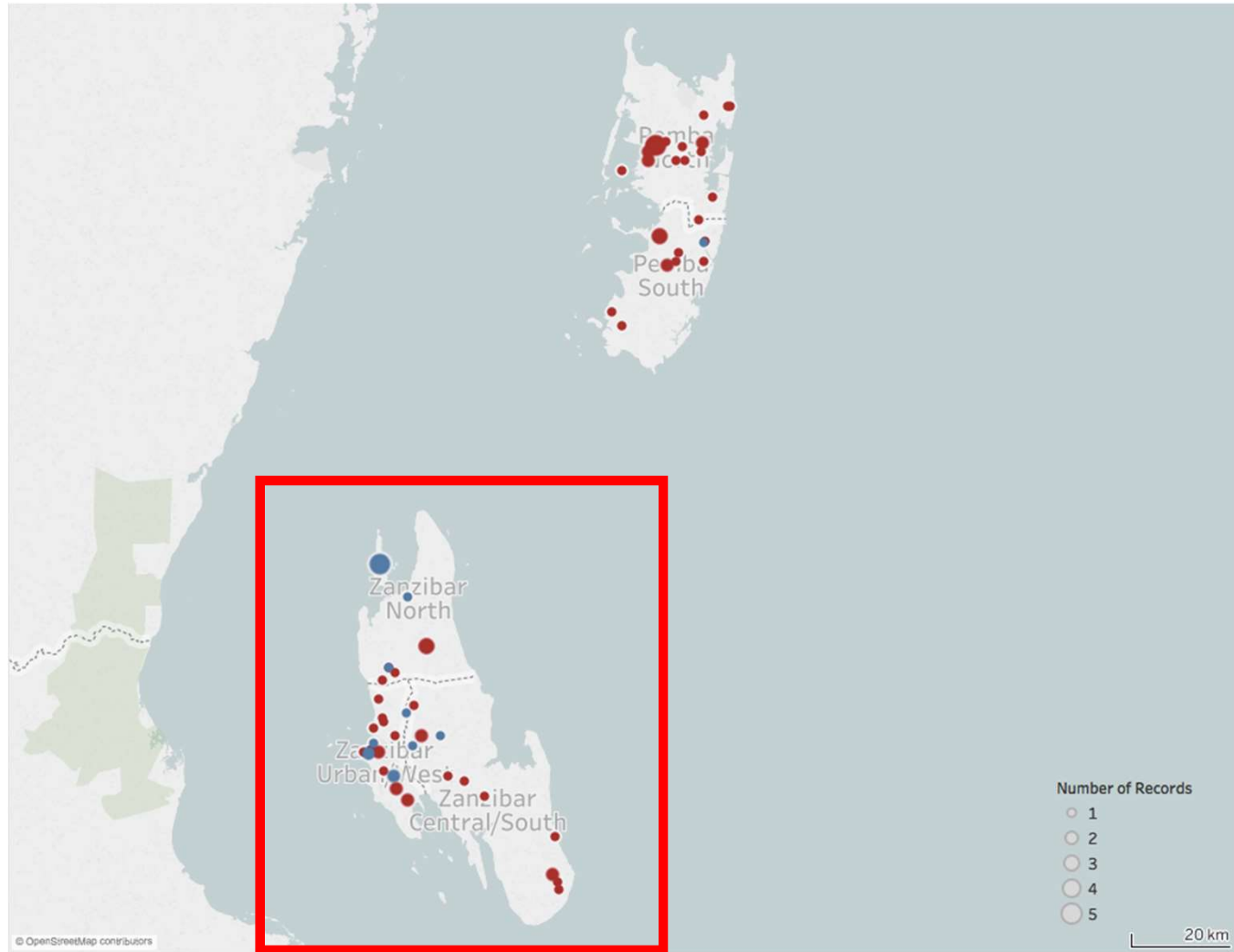
## Routine rabies surveillance, Unguja and Pemba island (July 2016 – August 2019)





# Strategic mass dog vaccination across Unguja island

## Routine rabies surveillance, Unguja and Pemba island (July 2016 – August 2019)



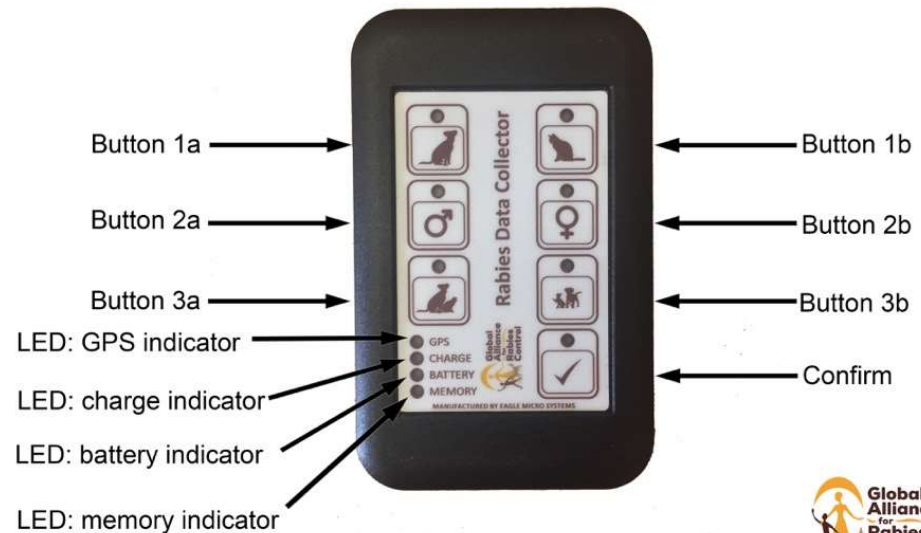
# Unguja island

- Unguja island was chosen as the location for strategic intervention
  - Relatively small dog population ( $\pm 10\ 000$  dogs)
  - Strong network of animal health technicians
  - History of mass dog vaccinations being implemented



# GARC Data Logger

- Automatically collects:
  - Time
  - Date
  - GPS coordinates
- Captures inputted data via 3 questions each with 2 options
  - Example output: Adult, Male, Dog, GPS, Time, Date





# GARC Data Logger

## Advantage of GDL

- User friendly tool
- Capacity to store  $\pm$  500 data
- Data can be exported to excel sheet for analysis
- Visualize the vaccination coverage
- Provides the insight of the vaccine usage

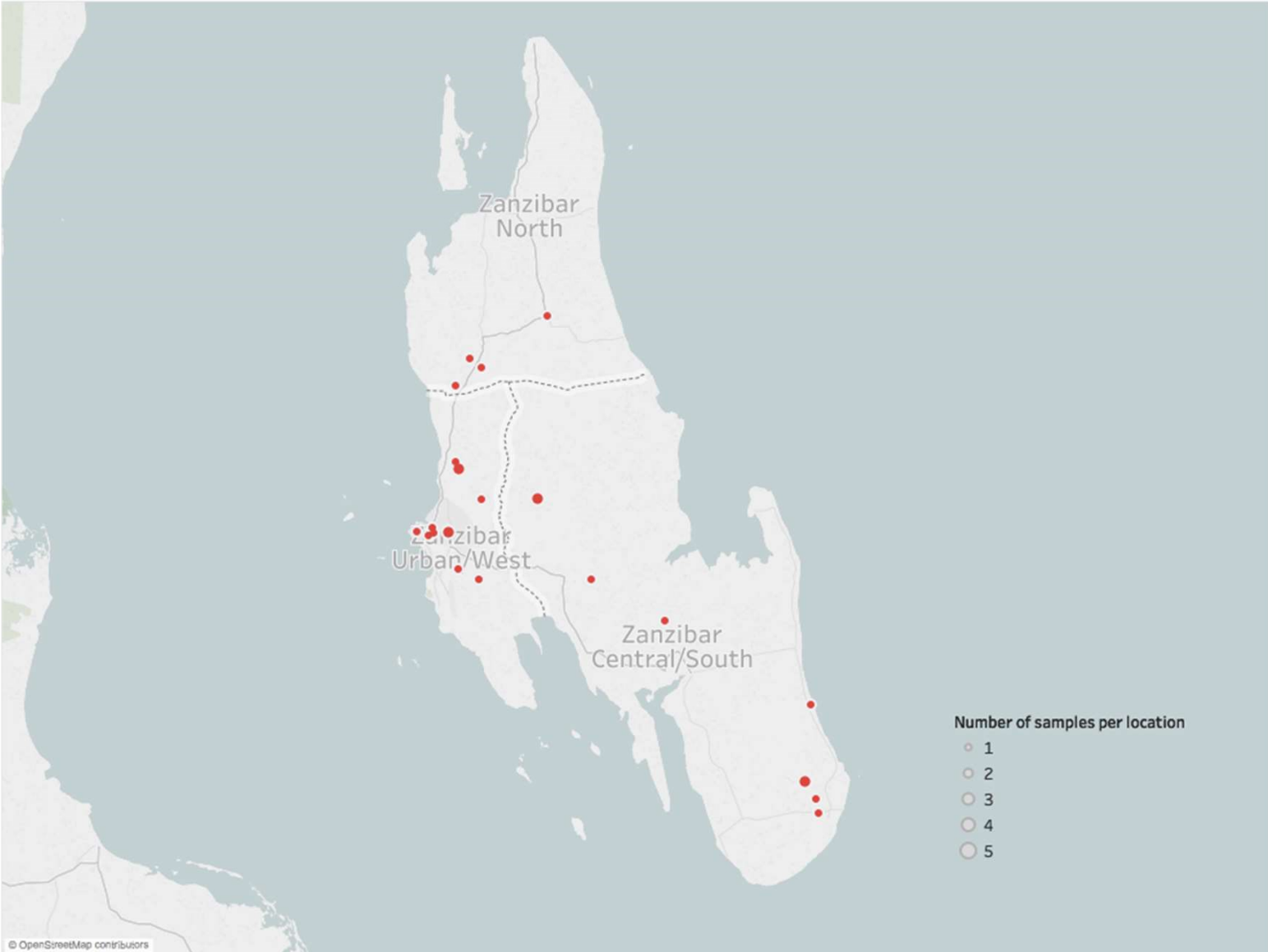


# Using the GARC Data Logger

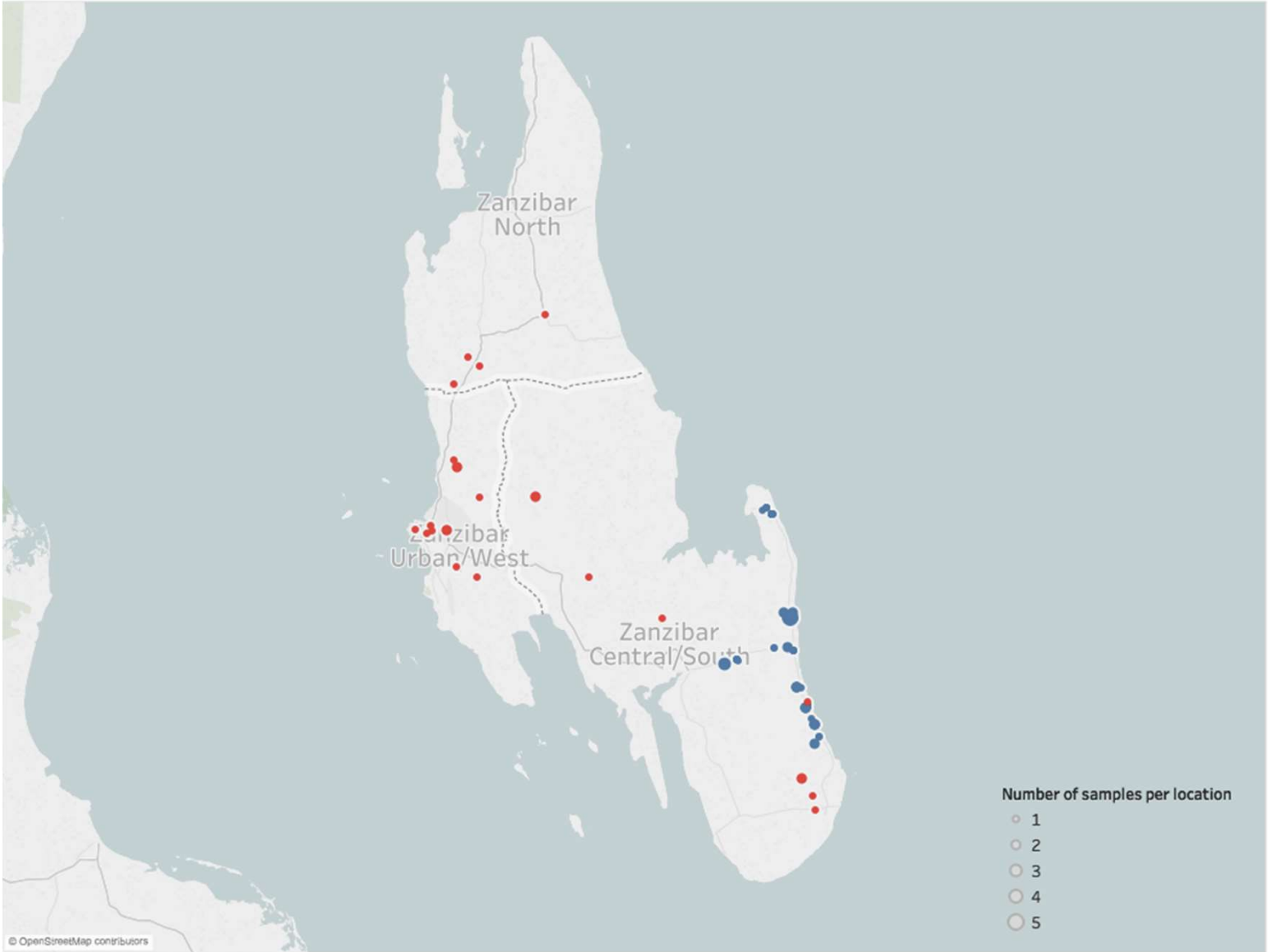
- The GARC Data Logger was used for:
  - Monitoring the vaccine usage
  - Directs the mass dog vaccination campaign
  - Monitoring the the progress of the campaign

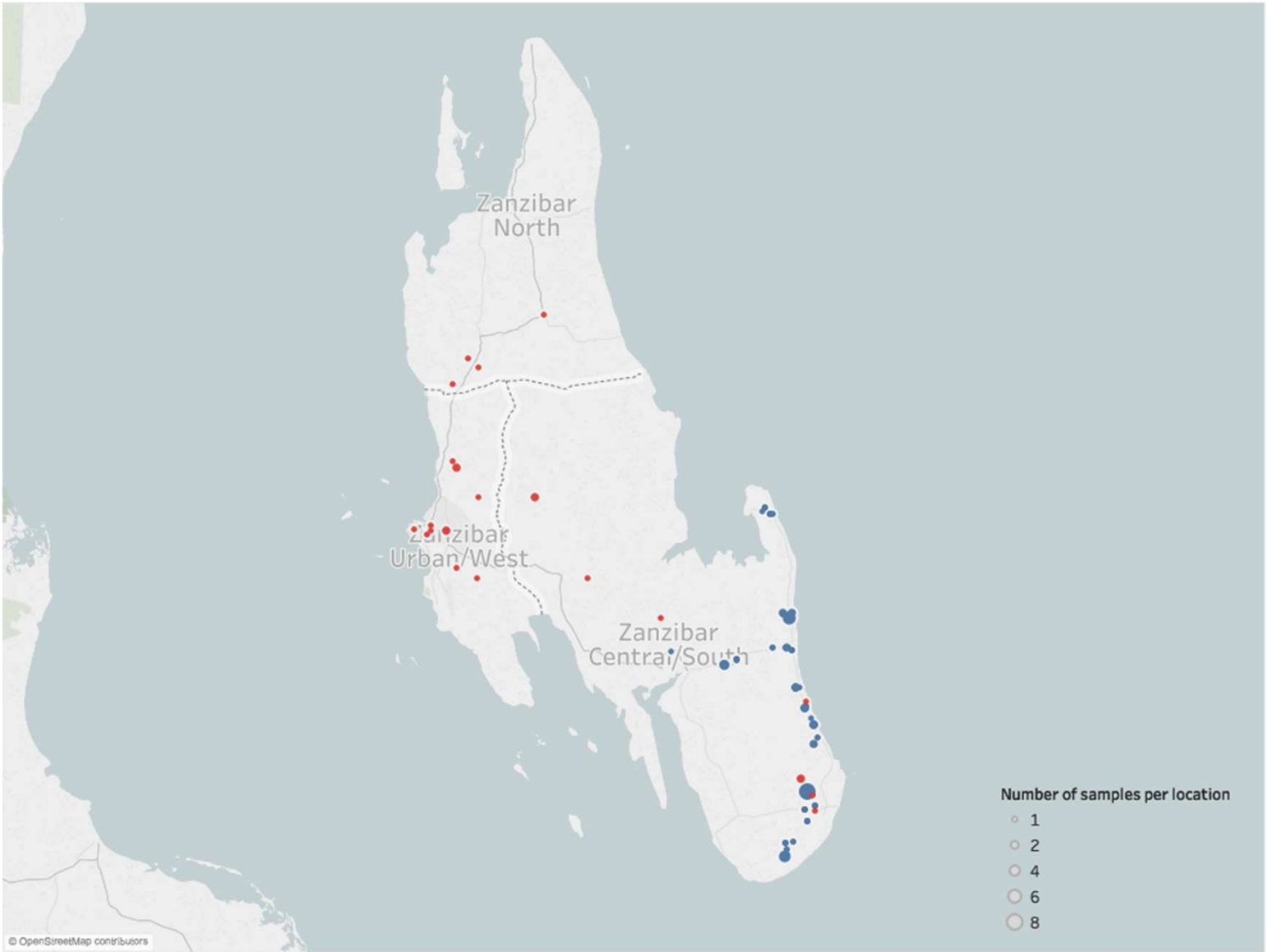


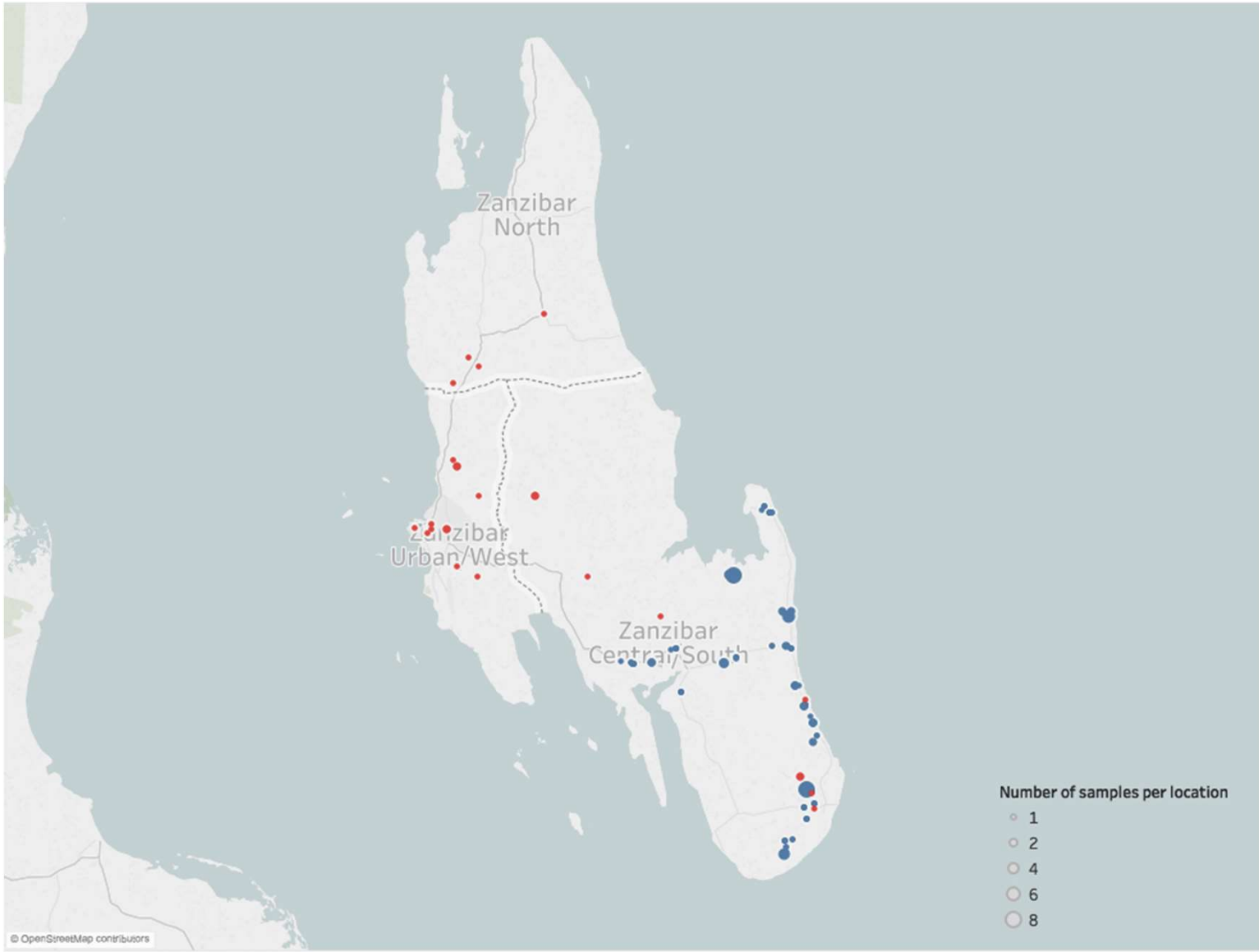
Example of GDL usage on Unguja

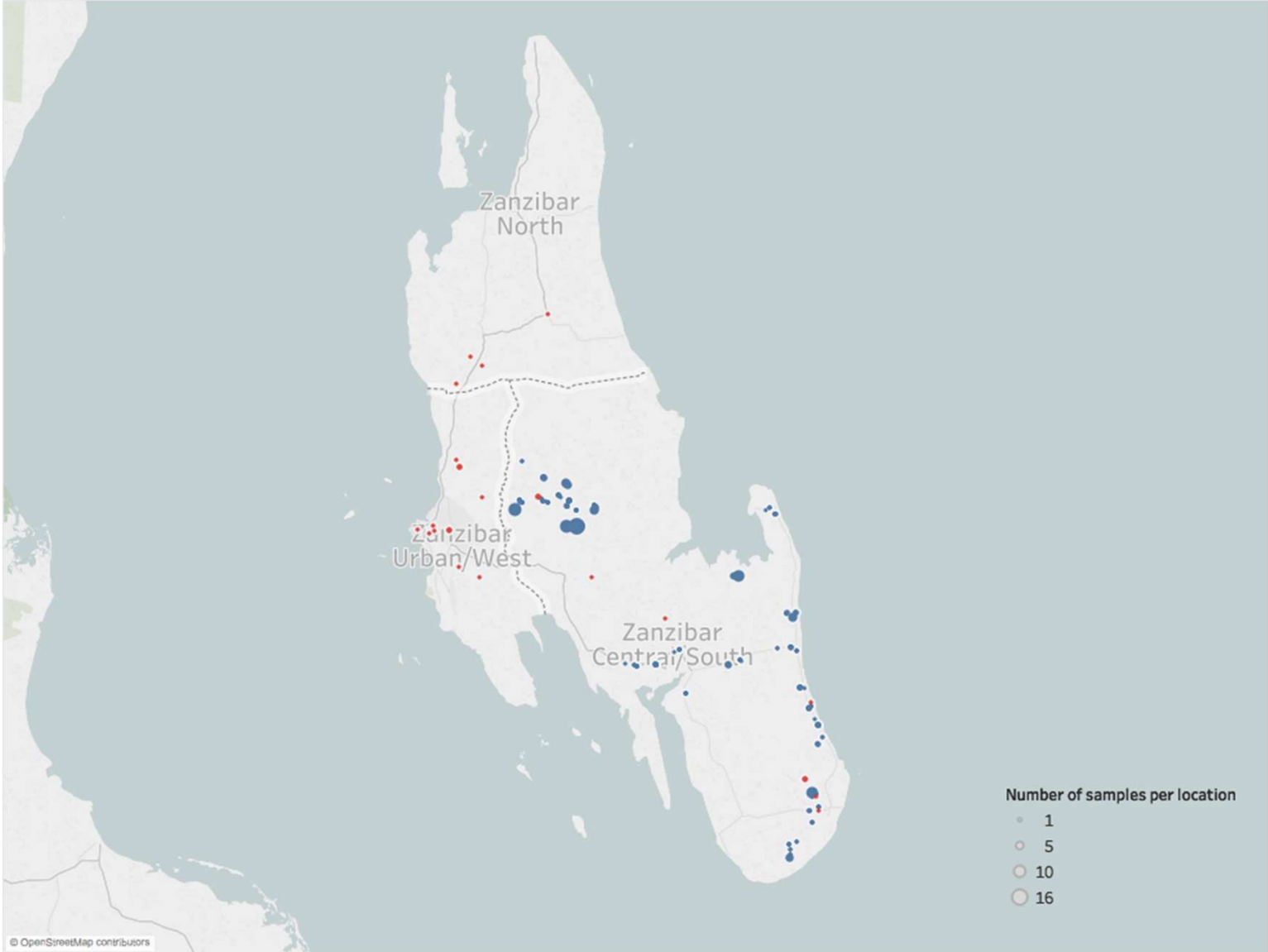


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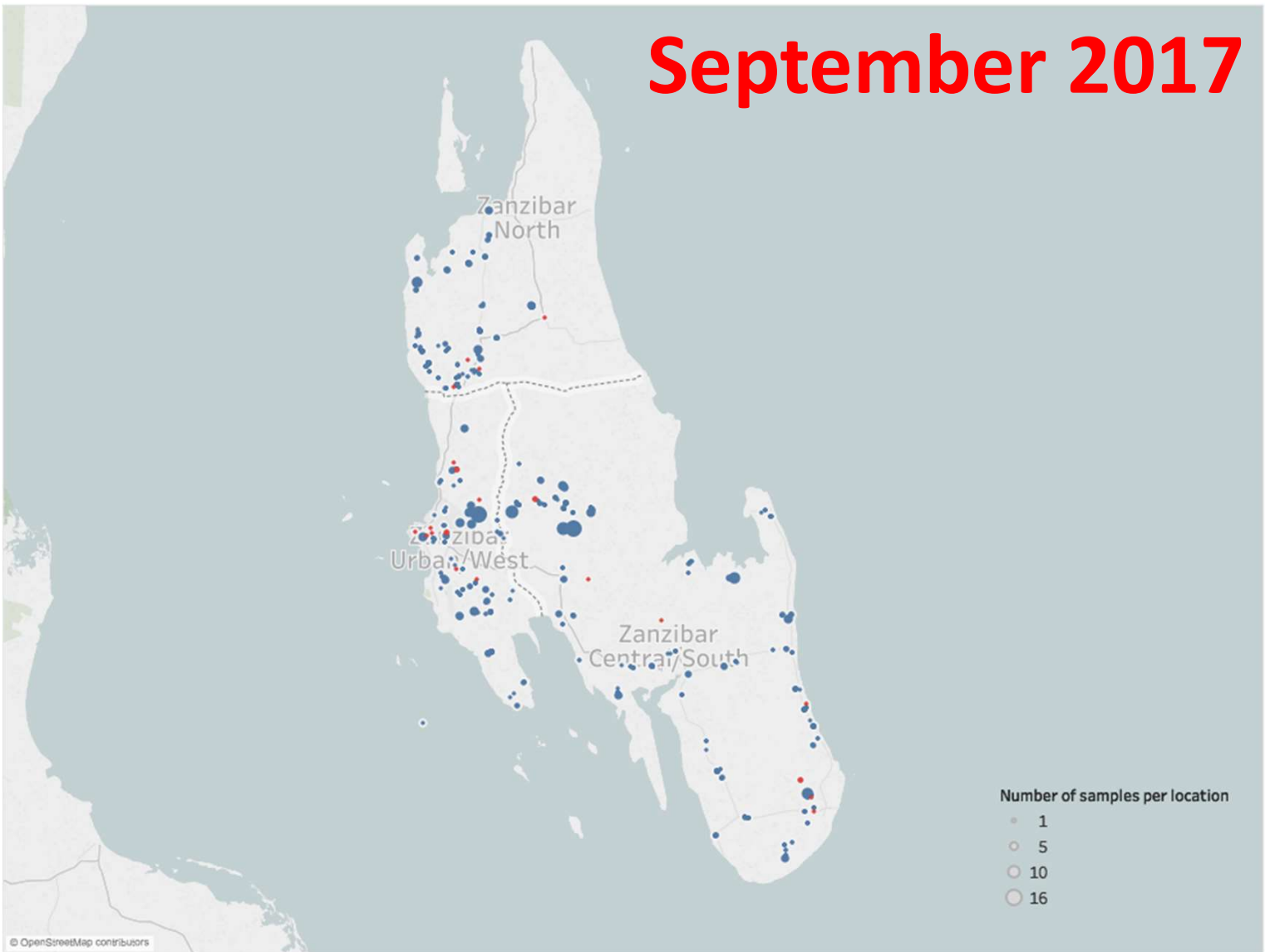








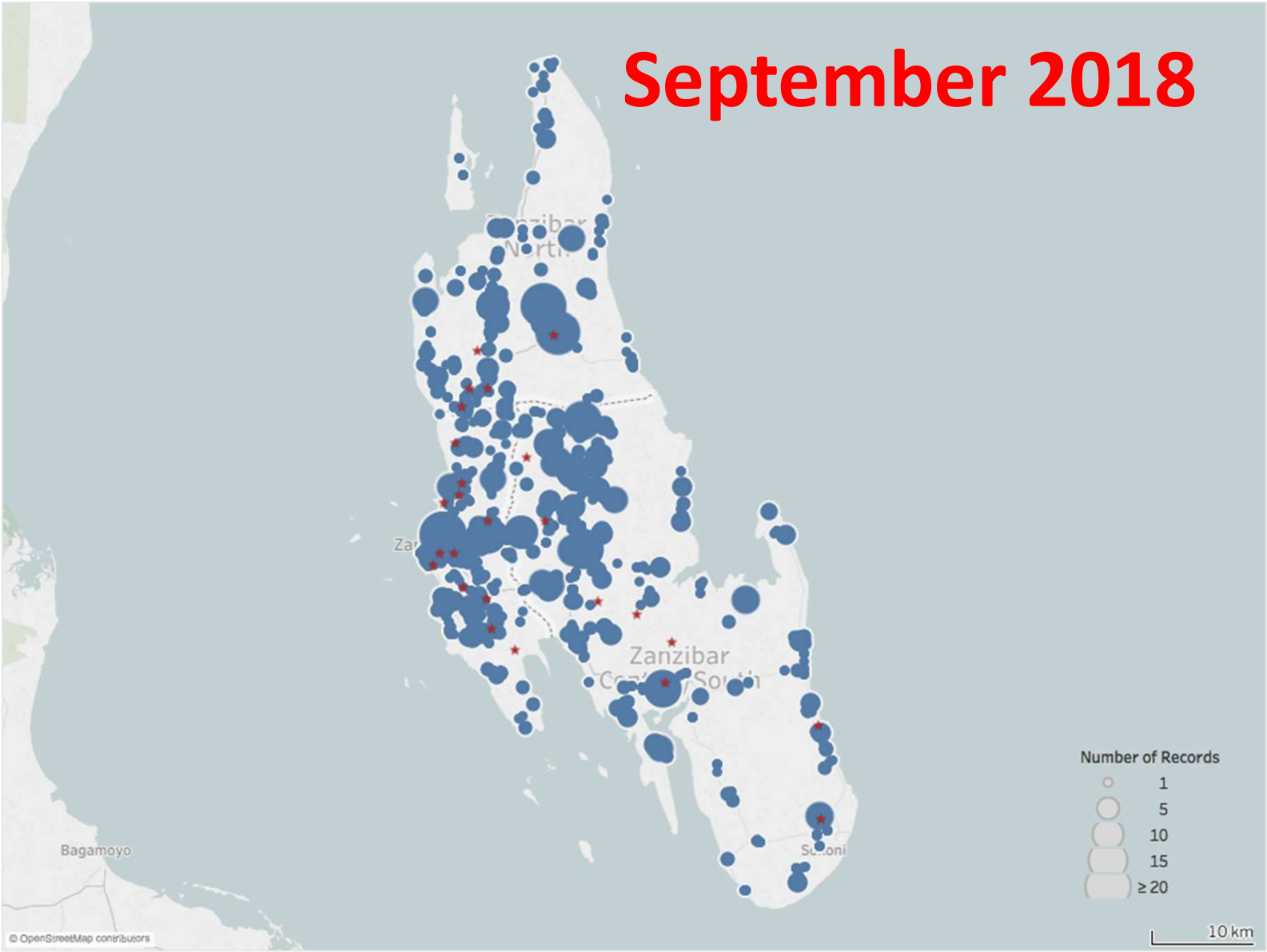
# September 2017



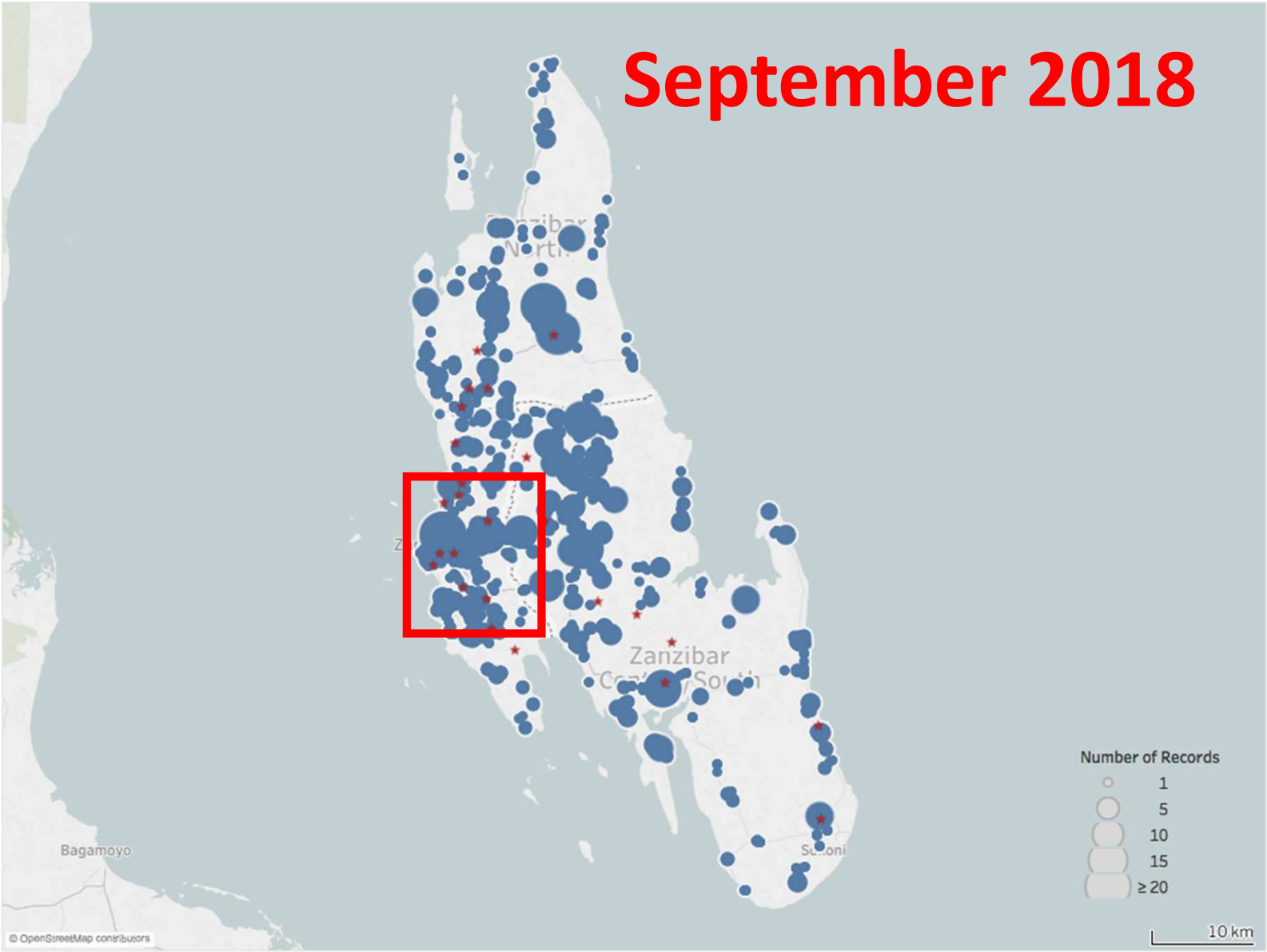
Mass dog vaccination

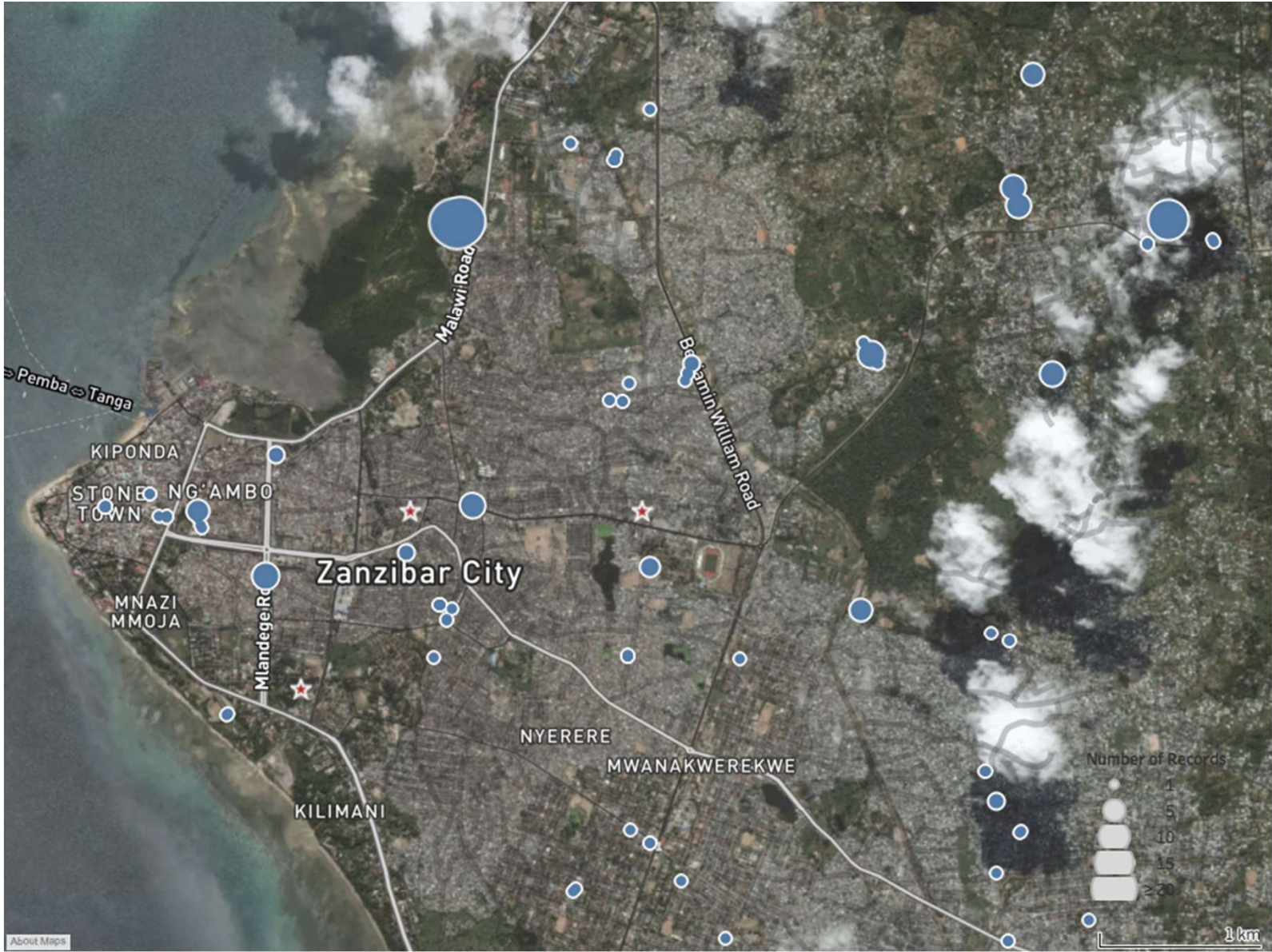
Progress report

# September 2018



# September 2018



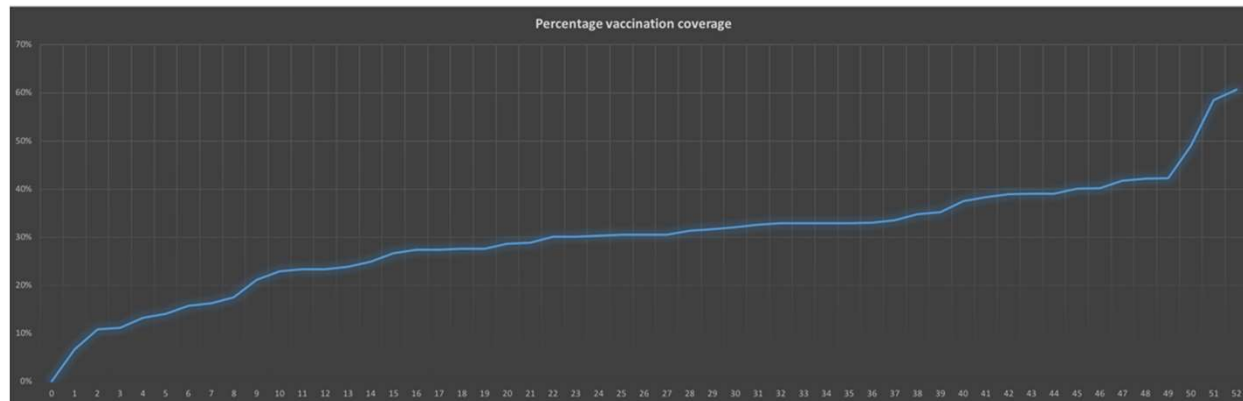
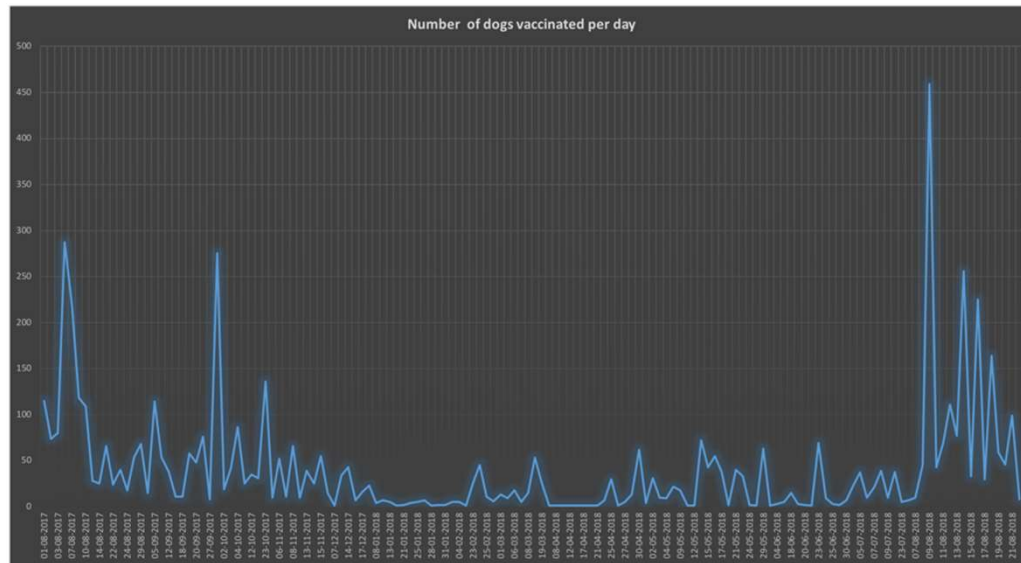


# Summary of the MDV campaign

- To date, 5300 dogs have been vaccinated (13 staff members)
- Estimated vaccination coverage of 61%
- Only five rabies-positive animals this year



# Summary of the MDV campaign



# Conclusion

- Zanzibar is on track to be the first region in Africa to be declared free from canine-mediated rabies by mass dog vaccination
- **Next steps**
  - Vaccination is ongoing
  - Animal Health professionals will be trained on using catch nets and control poles for problem dogs in the communities
  - Bite prevention and dog ownership education to start amongst school children



# “Zanzibar Free from Rabies is Possible”



*This work is made possible by the generous support of World Animal Protection. The contents, however, is the responsibility of the Global Alliance for Rabies Control and the Ministry of Agriculture, Natural Resources, Livestock and Fisheries (Zanzibar) and do not necessarily reflect the views of World Animal Protection.*