Fraudulent Credit Card Transactions
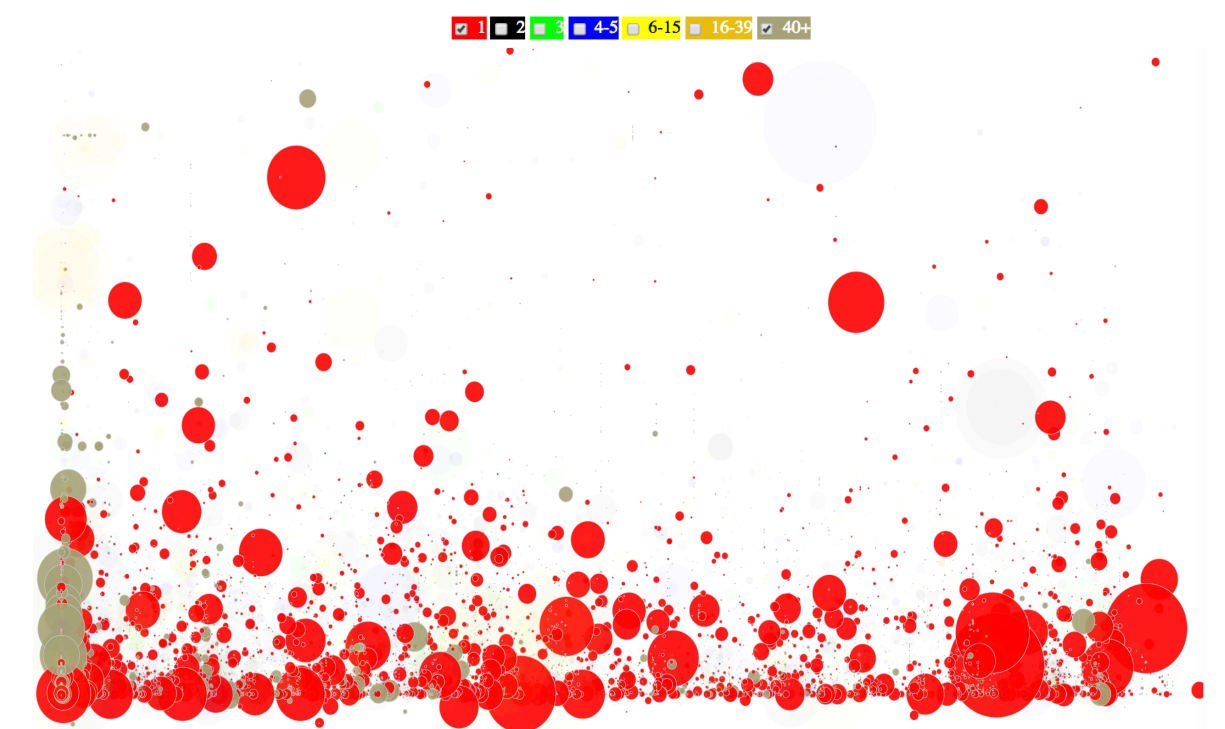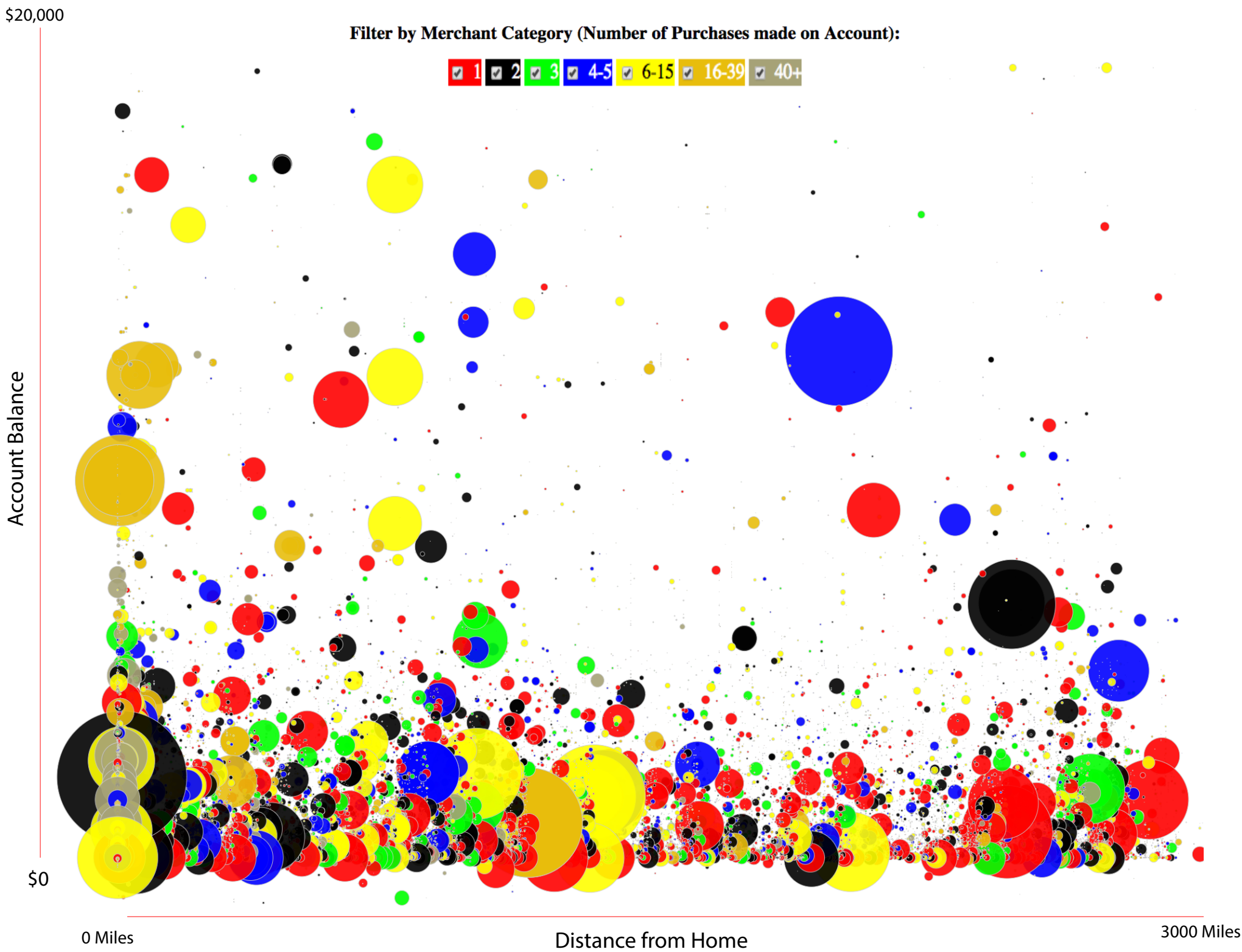
This visualization explores the nature of fraudulent transactions commited on credit cards. The data was collected by a large financial insitution over the course of 8 months in 2013. Across the x-axis we can see how far the fraudster was from the card holders home when they made the purchase. On the y-axis is the account balance for the cardholder's credit card. The color indicates how many times the account number for a given transaction has been associated with a fraudulent purchase.

$20,000

Filter by Merchant Category (Number of Purchases made on Account):

☑ 1 ☑ 2 ☑ 3 ☑ 4-5 ☑ 6-15 ☑ 16-39 ☑ 40+

Account Balance

$0

0 Miles

Distance from Home

3000 Miles

This is a selection of the total data where red indicates transactions that have 1 fraudulent transaction associated with the account. The darker color represents transactions where the associated account has had 40 or more fraudulent transactions. We can see there is a much wider variance in the red transactions than tan. Accounts that are frequently compromised or have a long list of fraudulent purchases have higher authorization amounts on average and seem to occur further away from home.

☑ 1 ☑ 2 ☑ 3 ☑ 4-5 ☑ 6-15 ☑ 16-39 ☑ 40+
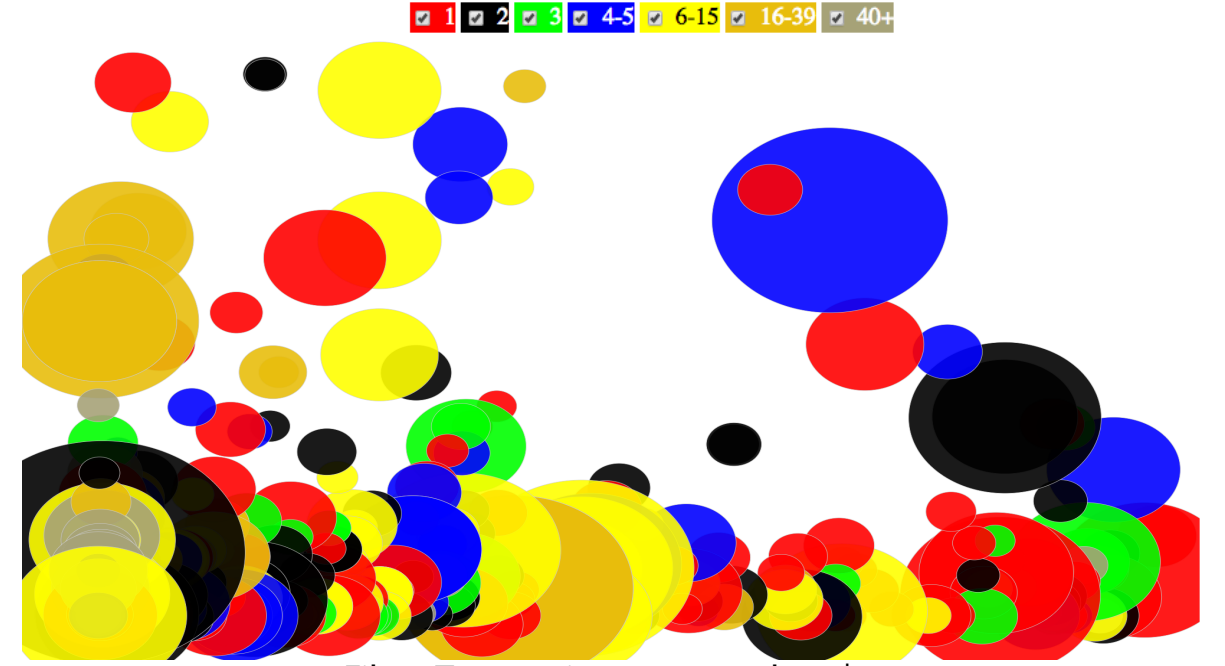
Filter: Transactions greater than $1000

This is a selection of the total data that represents only the transactions that were greater than $1000. The color seems to be evenly distributed across the distance from home except for those transactions where the associated account has 40 or more fraudulent transactions. This inidcates that these accounts fall subject to local attacks and do not adequately protect their card. It could also mean that some fraudsters open fraudulent accounts and make a lot of purchases under someone else's name until that person realizes their information has been stolen.