

## Computer exercise 3

Niklas Christoffer Petersen

2018-11-07

### 1 Part 1

#### 1.1 Question 1a

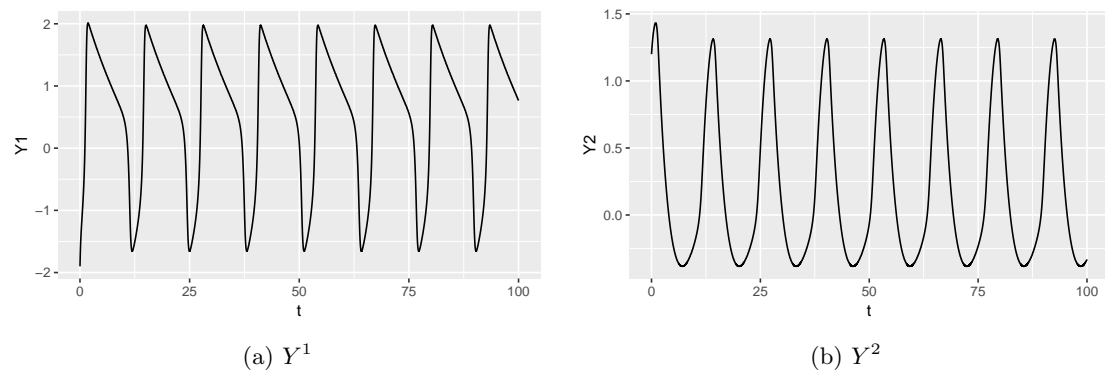


Figure 1: Realized values of  $Y^1$  and  $Y^2$  for  $\sigma = 0$



Figure 2: Phase Plot  $Y^1$  and  $Y^2$  for  $\sigma = 0$

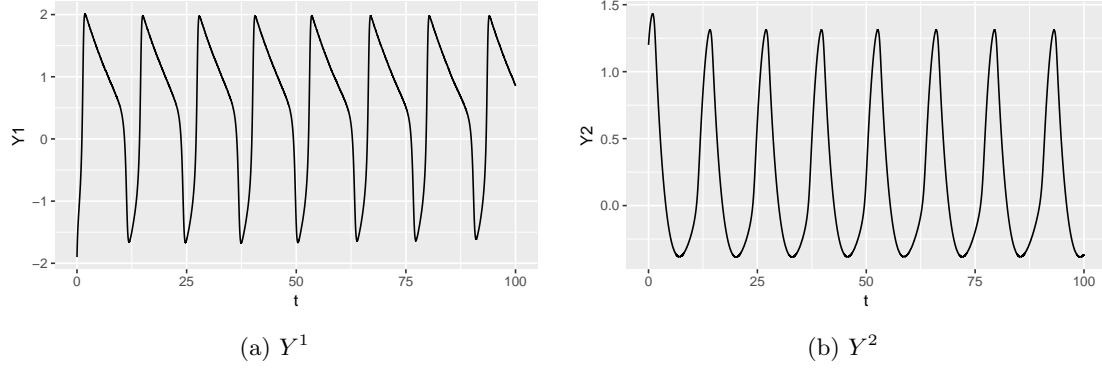


Figure 3: Realized values of  $Y^1$  and  $Y^2$  for  $\sigma = 0.10$

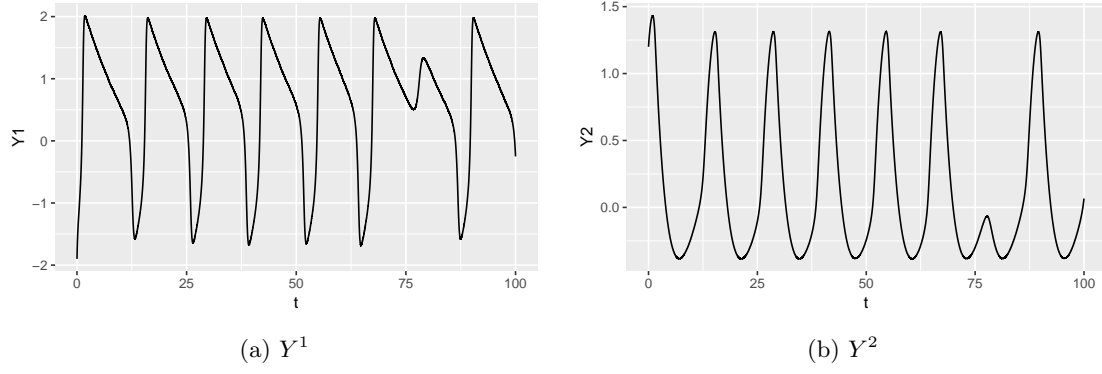


Figure 4: Realized values of  $Y^1$  and  $Y^2$  for  $\sigma = 0.20$

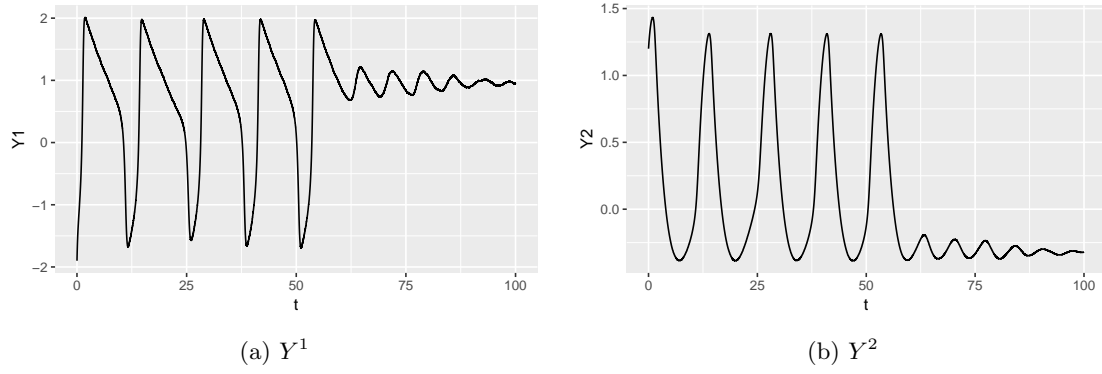


Figure 5: Realized values of  $Y^1$  and  $Y^2$  for  $\sigma = 0.30$

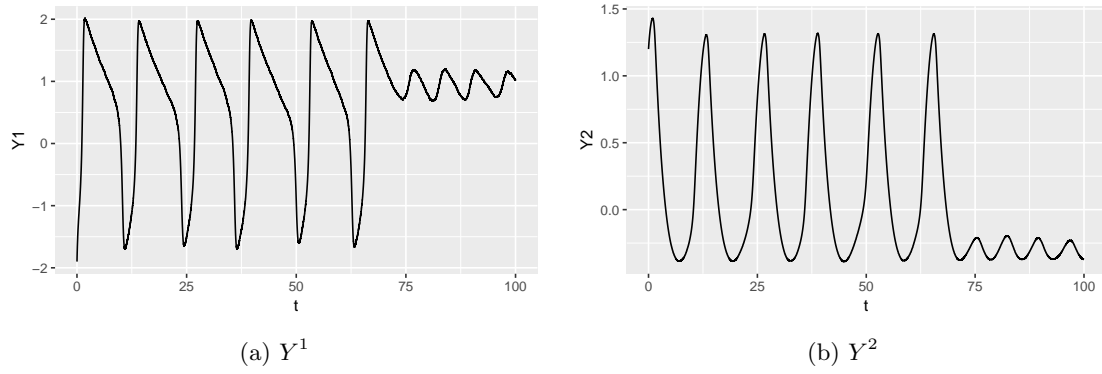


Figure 6: Realized values of  $Y^1$  and  $Y^2$  for  $\sigma = 0.40$

## 1.2 Question 1b

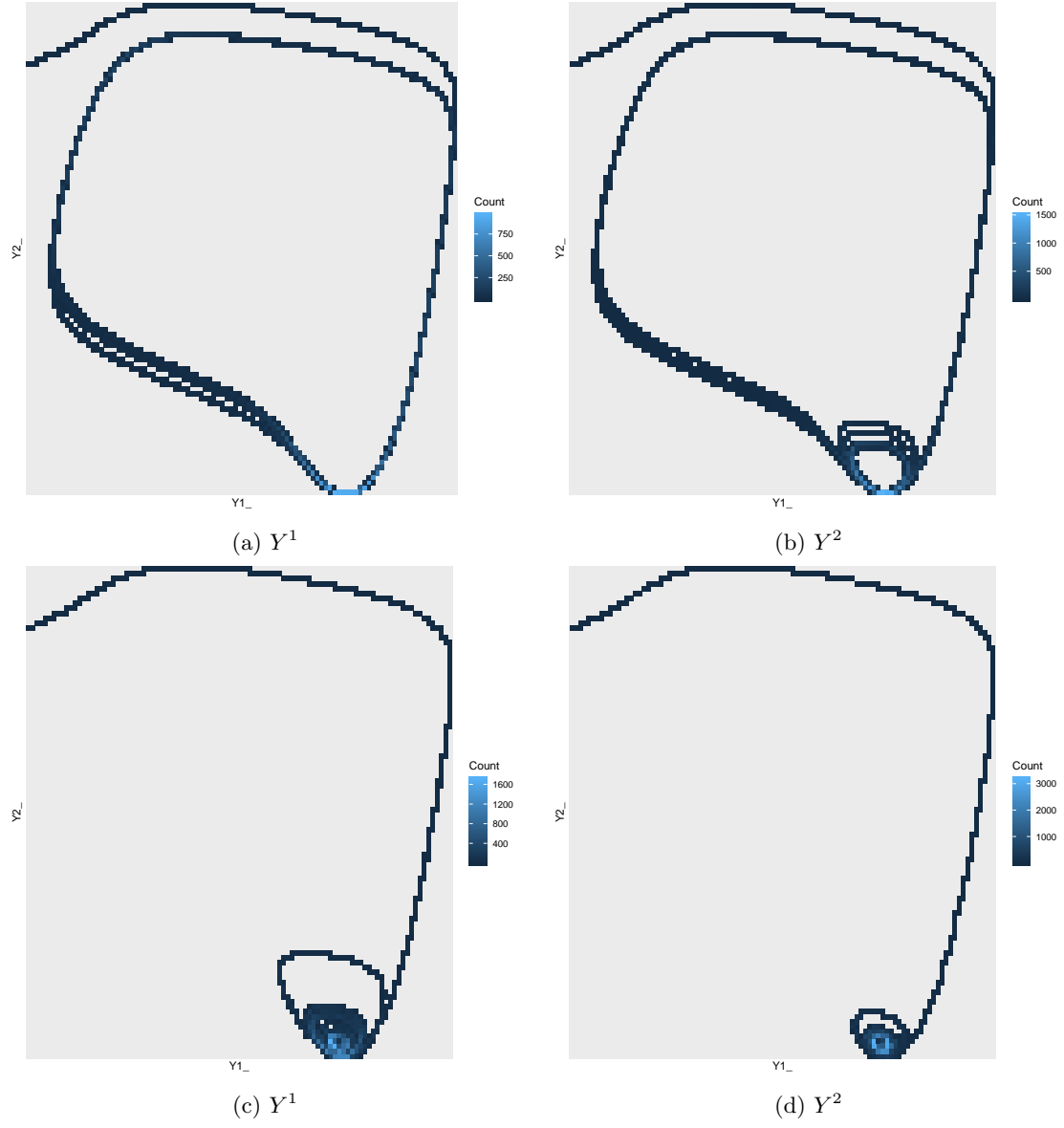


Figure 7: Realized values of  $Y^1$  and  $Y^2$  for  $\sigma = 0.20$

## 2 Part 2

We start our analysis with a exploration and some descriptive statistics of the source data.