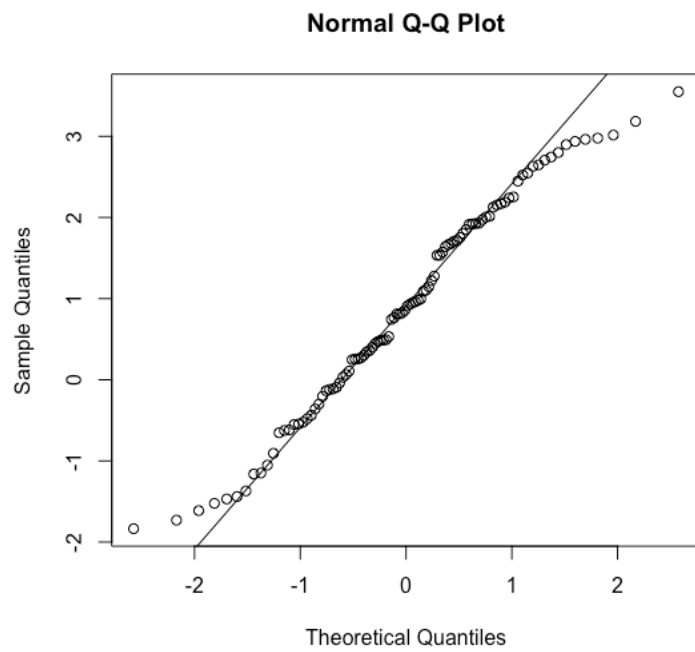
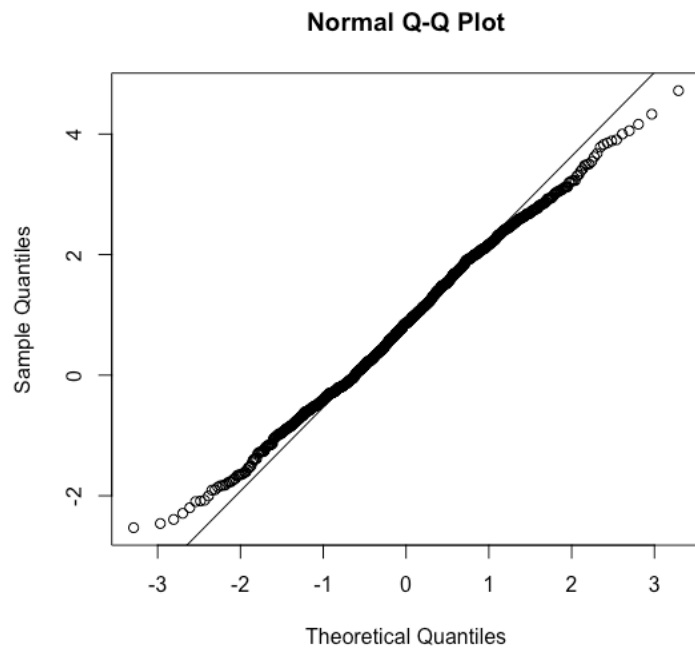


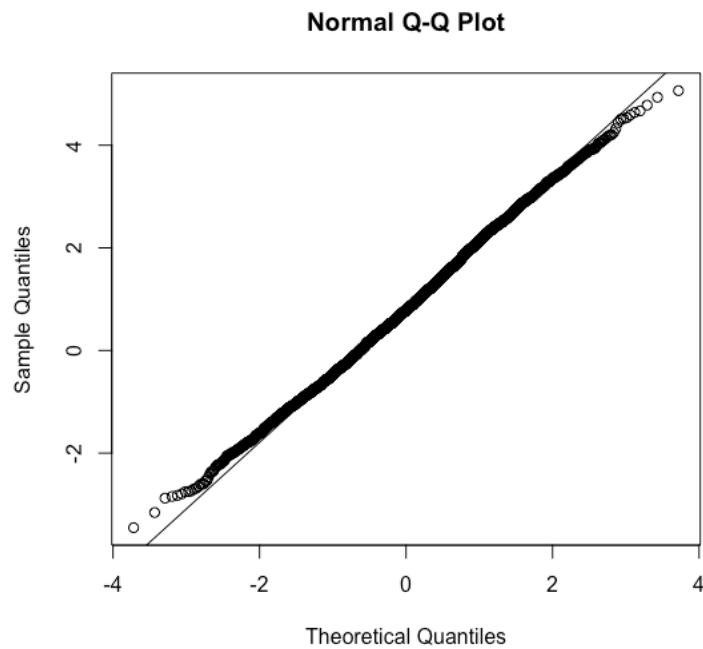
Q-Q plot with $n=10$, Shapiro Wilk p -value = 0.9119



Q-Q plot with $n=100$, Shapiro Wilk p -value = 0.09479



Q-Q plot with $n = 1000$, Shapiro Wilk p -value = 0.02461 => significant !



Q-Q plot with $n = 5000$, Shapiro Wilk p -value = 0.0007863 => significant !

In this context and with respect to our data we still think that the assumption of normality holds for the analyzed data in the present manuscript.

R code:

```
#### Generate 100 replicates of random data with almost normal distribution for artificial data sets
of varying size (n=10, 100, 1000, 5000)

x <- replicate(100, { # generates 100 different tests on each distribution
  c(shapiro.test(rnorm(10)+c(1,0,2,0,1))$p.value, # $
    shapiro.test(rnorm(100)+c(1,0,2,0,1))$p.value, # $
    shapiro.test(rnorm(1000)+c(1,0,2,0,1))$p.value, # $
    shapiro.test(rnorm(5000)+c(1,0,2,0,1))$p.value) # $
} # rnorm gives a random draw from the normal distribution
)

#### provide rownames for the results of Shapiro Wilk replications
rownames(x) <- c("n10", "n100", "n1000", "n5000")

#### provide the proportion of significant deviations according to Shapiro Wilk
rowMeans(x<0.05)
x

#### generate 4 examples for each size of dataset
x1 <- rnorm(10)+c(1,0,2,0,1)
x2 <- rnorm(100)+c(1,0,2,0,1)
x3 <- rnorm(1000)+c(1,0,2,0,1)
x4 <- rnorm(5000)+c(1,0,2,0,1)

#### generate four qqplots for the four different artificial datasets
qqx1 <- qqnorm(x1); qqline(x1)
qqx2 <- qqnorm(x2); qqline(x2)
qqx3 <- qqnorm(x3); qqline(x3)
qqx4 <- qqnorm(x4); qqline(x4)

#### provide the individual Shapiro Wilk results for the specific four datasets
shapiro.test(x1)
shapiro.test(x2)
shapiro.test(x3)
shapiro.test(x4)
```