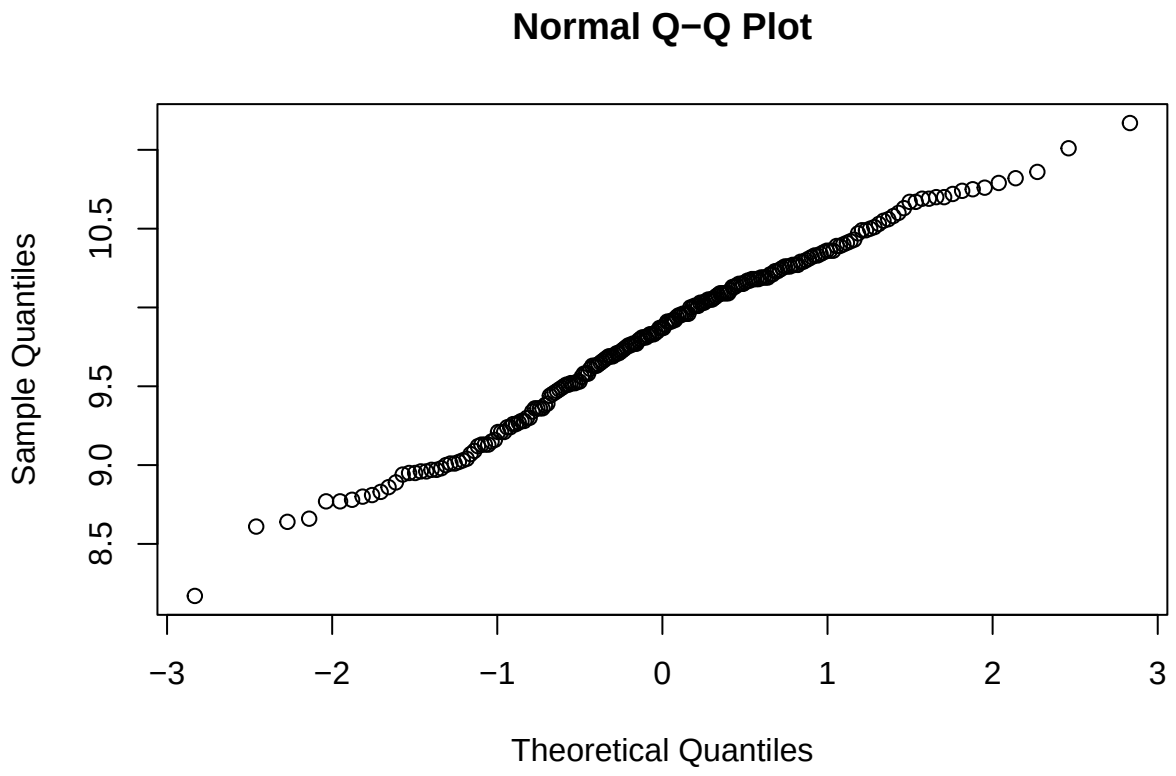
statistika-testy

2023-03-07

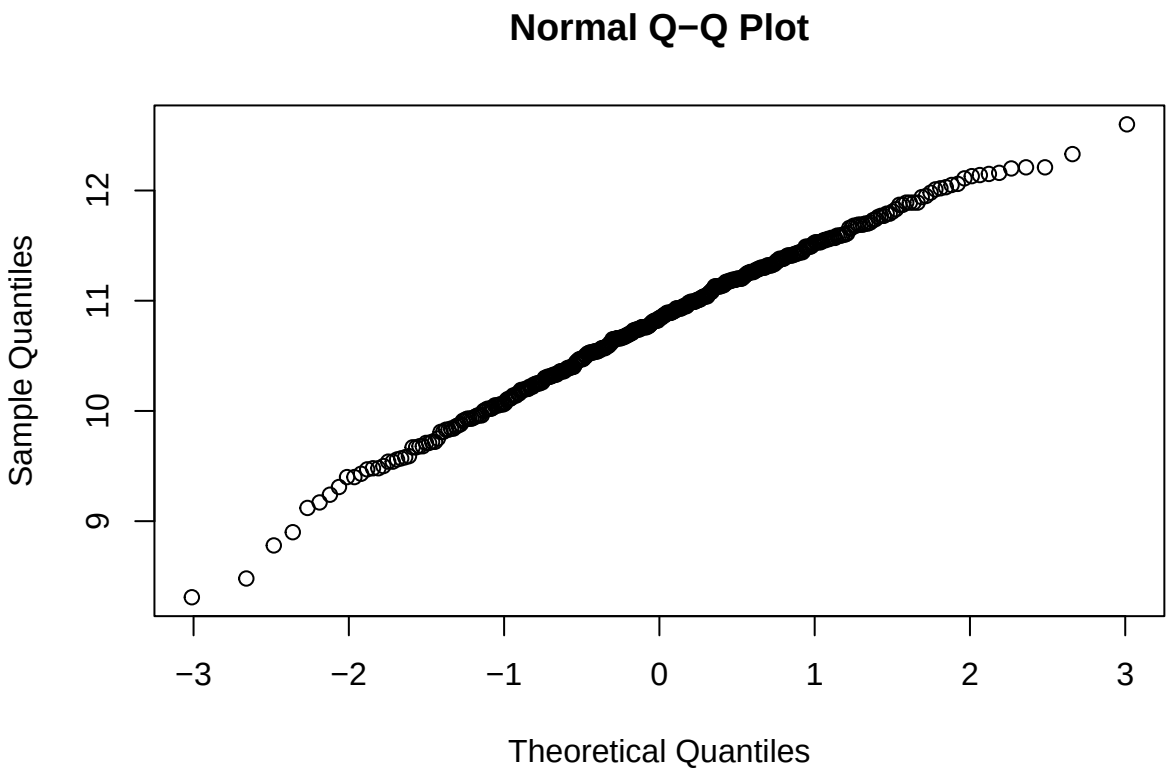
```
shapiro.test(women_a$F2_B)
```

```
##
##  Shapiro-Wilk normality test
##
## data:  women_a$F2_B
## W = 0.99244, p-value = 0.04903
```

```
qqnorm(men_a$F2_B)
```




```
qqnorm(women_a$F2_B)
```




```
x <- mean(women_a$F2_B)
y <- mean(men_a$F2_B)

t.test(women_a$F2_B, men_a$F2_B, paired = FALSE, conf.level = 0.95)
```

```
##
##  Welch Two Sample t-test
##
## data:  women_a$F2_B and men_a$F2_B
## t = 18.747, df = 533.94, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  0.8775731 1.0830171
## sample estimates:
## mean of x mean of y
## 10.802656  9.822361
```

```
p <- min(1, 2*pbinom(5, 40, 0.5))
p
```

```
## [1] 1.382612e-06
```

```
r2013 <- c(5, 15, 16)
r2014 <- c(7, 7, 10)
```

```r
tabulka <- rbind(r2013, r2014)
cnames <- c("intonace", "hlasky", "IPA")
colnames(tabulka) <- cnames
tabulka
```

```
##       intonace hlasky IPA
## r2013        5     15  16
## r2014        7      7  10
```

```r
chisq.test(tabulka)
```

```
## Warning in chisq.test(tabulka): Chi-squared approximation may be incorrect
```

```
##
##  Pearson's Chi-squared test
##
## data:  tabulka
## X-squared = 2.3198, df = 2, p-value = 0.3135
```

```r
fisher.test(tabulka)
```

```
##
##  Fisher's Exact Test for Count Data
##
## data:  tabulka
## p-value = 0.318
## alternative hypothesis: two.sided
```

```r
# skupina 1: 88
# skupina 2: 95
# skupina 3: 118
# velikost souboru 240

binom.test(88, 240)$conf.int
```

```
## [1] 0.3056046 0.4310672
## attr(,"conf.level")
## [1] 0.95
```

```r
binom.test(95, 240)$conf.int
```

```
## [1] 0.3335122 0.4607611
## attr(,"conf.level")
## [1] 0.95
```

```r
binom.test(118, 240)$conf.int
```

```
## [1] 0.4267816 0.5567601
## attr(,"conf.level")
## [1] 0.95
```