

# Generalized\_9

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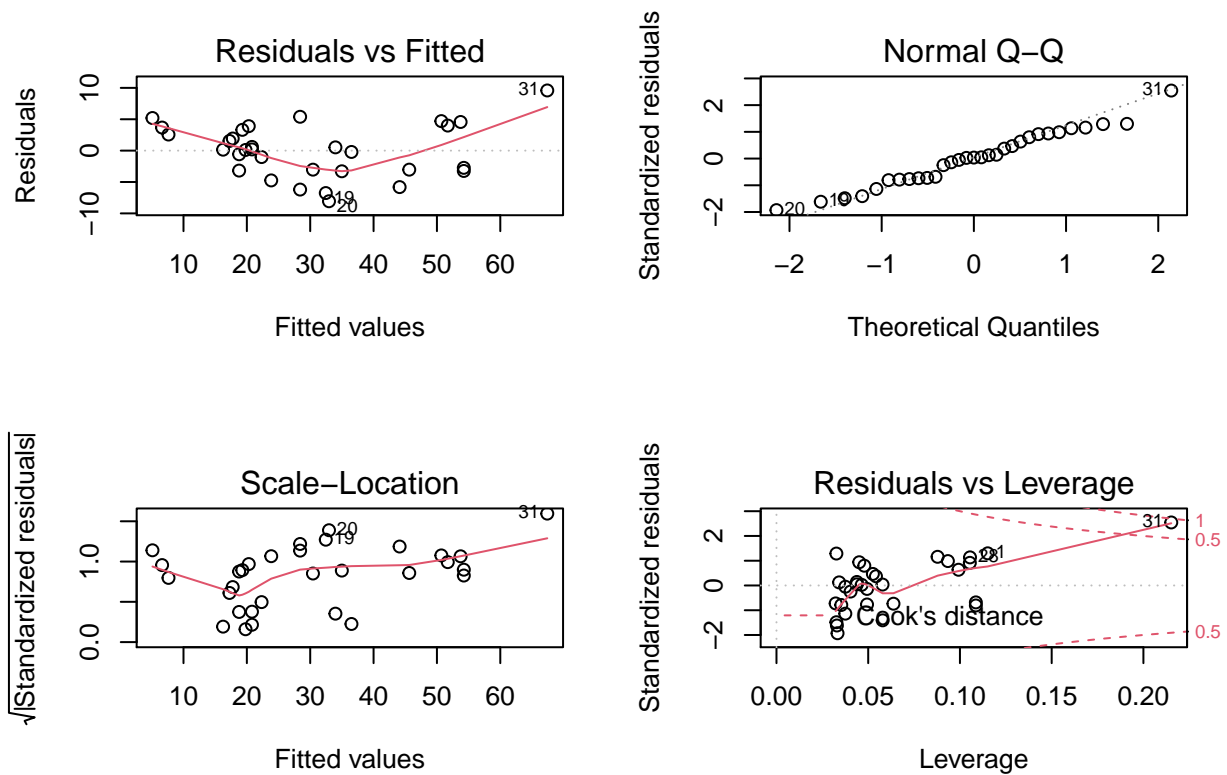
11/12/2020

## Generalized Regression 9

```
cherry <- read.csv("~/OneDrive - uzh.ch/UZH/HS20/STA 406 Generalized Regression/week 9/cherry.csv", sep=";
```

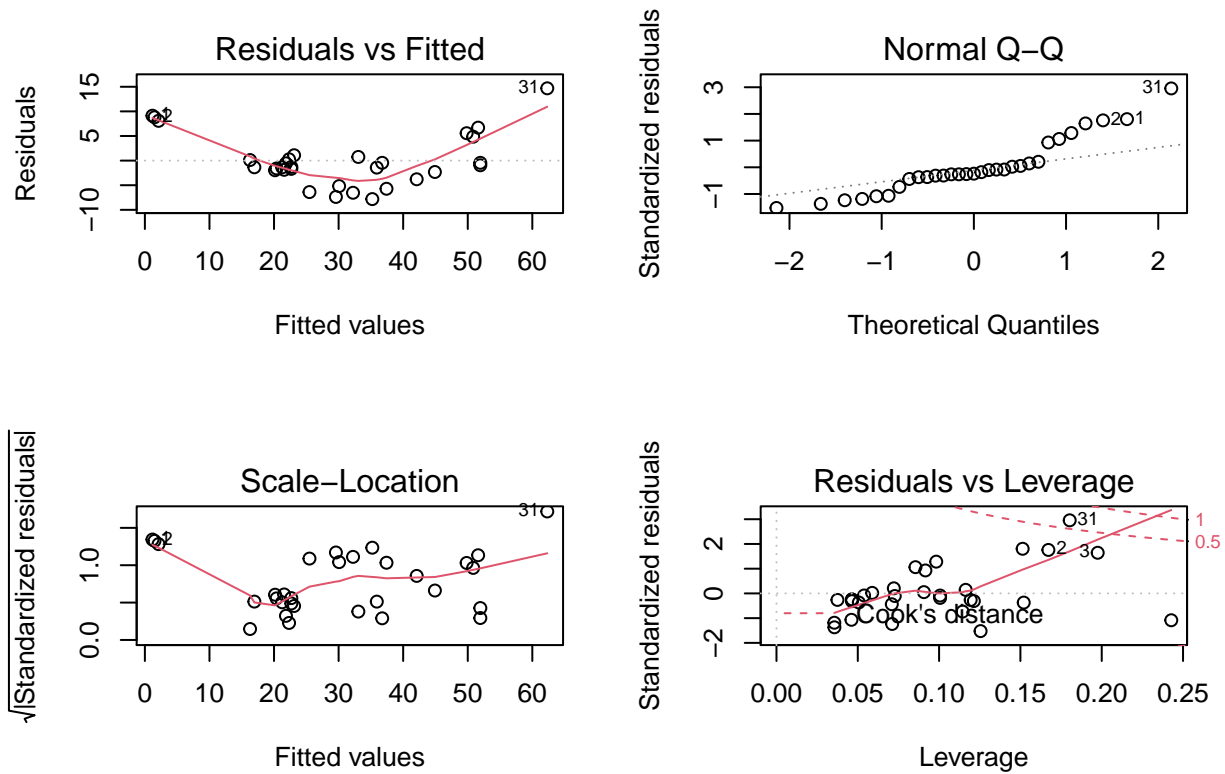
a,b)

```
par(mfrow=c(2,2))  
plot(lm(Volume ~ Girth, data = cherry))
```



a,b)

```
par(mfrow=c(2,2))
plot(lm(Volume ~ log(Girth) + log(Height), data = cherry))
```



I would use the first model, because the Q-Q plot looks more “normal”.

## Exercise 2

- Change of activity for every day, given all the variables constant.
- $\text{activity} = 3\text{treated} + 4\text{observed} + \text{dosage1} = -7.4245 + 3(-7.5673) + 4 \cdot 17.8840 +$

## Exercise 3

```
set.seed(123)
my_factor <- sample(factor(rep(c(0, 1), each = 5), levels = c(0, 1), labels = c("placebo", "paracetamol")),
matrix <- cbind(c(0,0,0,0,0,0,1,1,1,1,1),c(1,1,1,1,1,0,0,0,0,0))
```

- The german, because it is the biggest group?