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007 - Data Visualization - Problemset 1 - 22.02.2016 Felix Gutmann

Exercise 1

The following figure depicts both the level of stable carbon and nitrogen isotopes for five different krill species. For both isotopes it seems that values for each species are not too far away from each other. However, the figure might imply wrong conclusions given the rather small sample size, especially for the last to species.

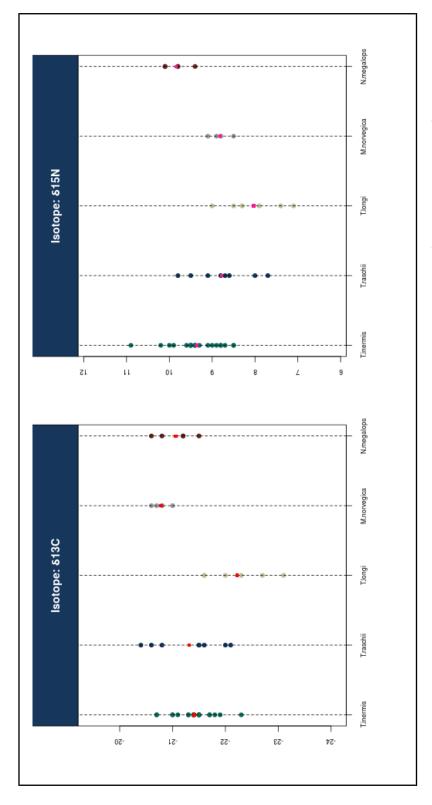


Figure 1: Level of stable carbon and nitrogen isotopes concentration by species (Mean marked in pink)

Exercise 2

The following figure shows the development of yearly averag temparature data between 1920 and 2016 gathered on Bears Island Bjørnøya. The black line depicts the linear trend arising from the data. The red part of the line indicates the years where the average temparature exceeds the trend, while the blue one shows those years below the trend.

The figure emphasizes a slightly positive trend in the average temparature. However, it's not obvious from the plot, if the reason for the increase in average temparature arises from more extrem seasons or a smooth overall inner year temparature increase.

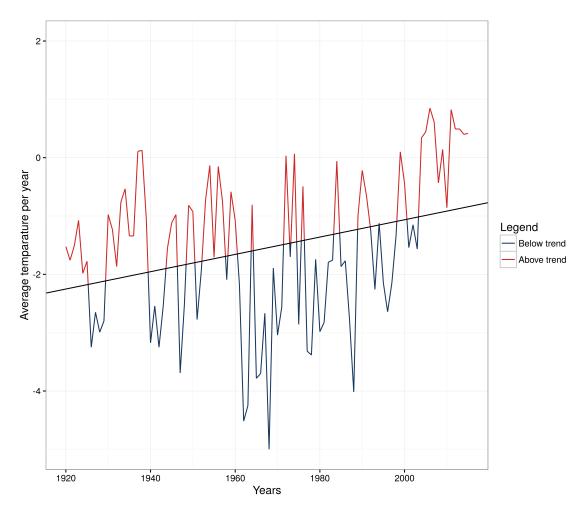


Figure 2: Yearly average temparature including linear trend estimation (1920 - 2016, in °C)