

Exercise 1.

1. load the file Data\Analysis\precip_bohemia.txt
2. View - 3 types of the display
3. Plot the graph
4. change the limit of the iqr coefficient – set number 2
5. display only period 1916-1956
6. display again whole period
7. switch to the season mode
8. change average to the sum
9. define your own season = vegetation season (apríl-september) and plot again the graph
10. change plot graph to the histogram
11. display the black/white histogram and thickness of the column = 1

Exercise 2

1. calculate statistical characteristic for all months and transfer to the excel
2. display histogram for normal distribution of the annual sum.
3. plot the graph with linear trend

Exercise 3

1. load the file c_Casl_3.txt (Data\Homog_c_Casl_3.txt)
2. calculate absolute homogeneity test SNHT
3. load reference series c_casl_O_3_REF.TXT
4. plot the both series
5. plot the differences
6. calculate the relative homogeneity test

Exercise 4

1. load the file precip_bohemia.txt
2. Analyse 1 and 2
3. plot the 10 years low and high pass filter

ProClimDB

Exercise 1 – show dbf

1. load the file with daily data (Tutorial_hom2\data_new_t.dbf) and save as....
2. how many stations are in the file?
3. which meteorological element and years are in the file?
4. find the station „B2BTUR01“
5. replace B2BTUR01 to B2BTUR02 and back
6. filter the station B2BTUR01 and open in the EXCEL
7. by command line delete all the station expect B2BTUR01
8. insert new column with name BEGIN and with type date
9. fill up the column begin with date 1.1.1961

Exercise 2

1. create info file and import geography
2. load the file correl.dbf and calculate average, max a min distance

Exercise 3

1. load the monthly data and import to the txt

2. export the same txt to the dbf
3. load the daily data and calculate the monthly data
4. for the monthly data calculate the vegetation period
5. load the file with daily data with temperature and add 1 to each value
6. replace all value, which are -999 with -9999
7. create new file only with stations, which ID start with B1
8. restructure the daily data, put the month to the columns
9. join the geography to the daily file

Exercise 4

1. for the monthly value of the station B2BTUR01 calculate differences from the mean 1961-2000
2. calculate 5 and 10 years low pass filter for the monthly date B2BTUR01 and try to plot graph of this filter and normal data in the Excel
3. for the points, where are locate stations B2BZAB01, B1VIZO01 calculate new technical series for the period 1961-2008 (neighbours divide by 10 years)

Exercise 5

1. for the few stations calculate monthly statistics
2. for the station B2BTUR01 calculate daily normal of the period 1961-2000 and try to plot the graph in the Excel (must use cross table)
3. calculate the correlation coefficient between few stations
4. find the outliers and extremes for the daily data of the few stations

Exercise 6.

1. calculate number of the days with temperature lower and equal than 0°C for the B2BTUR01
2. calculate active sum of the temperature higher than 10°C for the B2BTUR01