

Class summary/homework 3 –Due Monday February 17th, 2014 9:00am

- 1) Use the powerpoint slides class07.ppt (PDF version available, too) and practice in R-Studio working with vectors
(see also PDF book the Art of R Programming Section 2.1-2.4
<http://www.atmos.albany.edu/facstaff/timm/ATM315spring14/R/>)
- 2) Change the program alban_y_climatology.R : Make a copy and make this copy work with a new station data set (USW00094728, NYC Central Park, data are online
http://www.atmos.albany.edu/facstaff/timm/ATM315spring14/R/data/USW00094728_tavg_mon_mean.asc)

Repeat the monthly mean (daily mean) temperature analysis for this station. Describe the results in comparison with the Albany seasonal climatological cycle. Briefly describe what changes to the program were needed to obtain the new seasonal climatological cycle for the new station. Then, change the climatological period range from 1981-2010 to 1951-1980 and to 1901-1930. Compare the three climatological seasonal cycles.

- 3) Look at the illustration in class07.ppt how to calculate monthly mean anomalies after the script alban_y_climatology.R was run. Try to find a way to calculate for each year 1981-2010 the anomalies (in total 30x12 values). Outline your method, how you approached the problem and what solution was found, or where mathematical/ technical difficulties prevented you from reaching your goal.
(Note1: Explain in your own words, what you think goes wrong, or what R-programming knowledge you miss to solve the problem)
(Note 2: work with tavg, the monthly mean temperatures)
- 4) Any general suggestions or feedback that could help to increase your learning progress?

Enjoy the winter weather! Be safe!