Introduction to R for Ecologists

Final presentation

When

The last two classes, with deadlines for uploading presentations and R codes the Monday before at 12:00 (lunchtime), with no delay possible!

Suggested topics

You are free to choose whatever topic you want to present, considering that it fits the all following criteria:

1. the topic is related to your interest/study/life/hobby,
2. you solved it in R,
3. it is reasonably simple that everyone in the class can have at least a rough idea of what is going on.

Be creative, and don't be afraid of anything. The idea could be simple yet elegant, or complicated yet well explained and simply analysed.

How will we do it (summary, details below)

- Last two classes will be focused on these presentations and discussions. Half of the students will present the first and half the second class.
- Each presentation is very brief (3 minutes) with **exactly four slides** (saved in pdf); let's call it “lightning talk”.
- After the section with lightning talks, we will start a personal discussion. At that moment, you will be either *presenter* (presenting in this class) or *reviewer* (presenting in the other class). Each presenter will be evaluated by teachers and/or one of the TAs and by several other reviewers.
- Each presenter will sit with her/his computer at the table with an empty chair beside it, and reviewers will come for discussion. Each reviewer will have assigned presenters she/he has to visit, plus can visit some others. We will change the classroom for this purpose, to have more space for moving and discussing.
- As a presenter, you need to present your project and then be available for discussion.
- As a reviewer, you need to be present at the class for lightning talks and for personal review.

It may sound complicated, but I think it will be more fun than having to sit and listen to many presentations in a row. In this “lightning talk + personal discussion” style, we have more options to interact and ask what we really want to know. Lightning talks are a standard part of big conferences, where a large number of participants cannot have standard (10-15 min long) talk; instead, they prepare posters, and they have one or two minutes for the advertisement of their work in front of everybody (during so-called “lightning talk session”). Since there are many talks and not enough time, the time for each presenter is limited and carefully guarded.

Rules for presentation

- Prepare a presentation with exactly four slides:
    1. Slide 1: Opening slide with the title of your presentation, your name (both Chinese and English), your major[1)] and the year of the study.
    2. Slide 2: Brief introductory slide - what's going on, what kind of data and what kind of problem/method.

3. Slide 3: Results - what came out? (figures, numbers, or something else).
4. Slide 4: the highlights of the R script used for the presentation. The highlights may include important libraries and functions used in the script or important sections of the R code. Do not copy the whole R code! (the whole R code, possibly commented, needs to be uploaded into NTU COOL before the deadline.)

- Presentation slides, presentations and R code annotation should be in English.
- The presentation should take 3 minutes, no longer (practice at home if you can fit this time frame, and if not, try hard to make it shorter). After 3 minutes, you still have max. 10 seconds to conclude; after that, the next presenter gets on stage. If you present over the threshold of "3 minutes + 10 seconds", it will negatively influence your evaluation.
- All presenters will present in the fast sequence at the beginning of the class (~ 15 presentations each class, 3 minutes for presentation, 30 seconds to change the speaker -> ca 50 minutes total). This means that we have to assemble all your presentations into a single long sequence of slides, and this is why we need your slides one day before the presentation itself, saved as a pdf file!
- The day before your presentation (i.e. Monday) before 12:00 (lunchtime), upload two things to NTU COOL:
    1. **the presentation** (saved as *.pdf) into the slot **Final presentation MM/DD - SLIDES**. Exactly four slides are saved as pdf. Read the instructions above to know how to prepare them. Note that the pdf file cannot support any animation or video (if you have one, you need to put the video on some internet website and include the link in the presentation). Please check the pdf file before you upload it to whether it displays correctly. We need to assemble all the presentations into one large string of slides which will be presented in the class in order of presenters; please, make sure you upload your slides and R code before the deadline!
    2. **commented R code** (saved as *.r or *.rmd) into the slot **Final presentation MM/DD - R CODE**. If you upload an R Markdown file (*.rmd), please also include its pdf or Word version (in case it cannot be knitted). R code should be fully reproducible at least on your computer (see the suggestions how to write reproducible code), but it should be as tidy as possible. If you have more than one file, please zip all files together and upload the zip archive. The same deadline as for the presentation applies!
- Note that all presentations and all R codes will be made available to all students within the class!
- If you cannot upload the slides and R script into NTU COOL on time, please send them personally as soon as possible to David (zeleny@ntu.edu.tw).

Rules for evaluation

Since the evaluation of the final presentation is a very subjective issue, we would like to hear more opinions about everybody's work. **Each of you will get the list of five presenters you should evaluate in the class in which you are not presenting by yourself**. As a result, the evaluation will consist of two equal parts: evaluation by students (classmates) and evaluation by me (your teacher) and TAs. Before the start of the presentations, you will see in NTU COOL the list of five classmates you should evaluate. For them, you need to evaluate four criteria (presentation, idea, whether they understand their R code, and whether the R code is correct, tidy and clean, see below). For making the evaluation, you will get 1/5 of the final evaluation (i.e. 6% of the total evaluation).

Rules for evaluation (max 30% of overall class score):

Presentation	Whether the presenter managed, in a short time, to say all relevant things clearly, and whether she/he managed to attract the attention of others to the topic. If you have not seen the presentation, leave blank.	6%
Idea	How interesting/impressive/inspiring/useful is the idea, in your opinion?	6%
Understanding R code	Ask the presenter about the R code to see whether she/he knows how the R code works: ask about individual libraries and what they do, randomly choose some functions and ask for an explanation of what they do, etc.	6%

R code correct, tidy & clean?	The technical quality of the script: can the script run, and is it reproducible? Is it free of mistakes? How tidy and clean the script is: tidy = simple, i.e. not containing not necessary commands, and clean = pretty (easy to understand, read, with clean syntax etc.).	6%
Reviewing the work of others	Doing and returning the review of 5 presenters assigned to you as reviewers	6%
Total		**30%**

To evaluate the presentation, you need to be present at the beginning of the class, when all the presentations will be happening. To evaluate the idea and the R code, you need to sit with the presenter for a while and discuss details of her/his work in person. The presentation and the script can also be seen in NTU COOL; feel free to download them when you listen to the presentation so as you prepare questions you may ask during the discussion part.

1)

major = which department you study.