Feedbacks on the course “First steps in Atmospheric Modelling” arranged in Hyytiälä, Finland 4-15 of June 2018

1. How is your overall feeling about the course - was it useful for you?

“Very useful! I really want to continue modelling in the future. It was so fascinating, when the code started working and I saw results! I learned a lot of coding, challenges, parametrization, SMEAR II, aerosols as particles into atmosphere, biochemical influence...”

“Very useful”

“It’s great and helpful for me to know and improve my ability of coding programs.”

“I feel very good about the course. Learning what good coding and good modelling is was very useful.”

“Definitely useful for a measurement guy. I’ll suggest junior students in my group attending this course in the following years.”

“Good, useful and helpful.”

“Yes, the course is very useful and helpful for new modelers.”

“All in all, the course was really high quality and comprehensive package of atmospheric modeling for beginners.”

“Overall course did a great job in accomplishing its set goals. Provided working environment made things easier. Being exposed to development side of modelling in a friendly international place where lecturers were really professional and enjoying their job was a new and pleasant experience for me.”

“I liked the course and I think it was useful. I have now more knowledge how to start building a model and courage to start. I liked the course assistant – special thanks to Pontus and Putian for competent help. Also, I am not very familiar with Fortran, so the course provided useful information about language and methods to use it.”

“It was quite intensive and interesting. The well structured lectures and practical coding exercises helped to get deeper
understanding of the wide spectrum of atmospheric processes and its representation in numerical solutions."

“Yes, although I did not have background information about Fortran but I learned so much.”

2. **What topics would need improvements?**

   “Coding of makefile. I still feel confused about writing a makefile by myself after finishing the course.”

   “I can't think of any that need improvement.”

   “Deposition.”

   “The theoretical details related to the atmospheric turbulence should be more generalised (concentrated on the existent problems/questions and common approaches to solve it). However, all supplementary equations in the annex should be kept in details. The momentum equations could be supplied with general simplified/schematic picture of forces (with its importance in different parts of atmosphere).”

   “Maybe some heterogeneous chemistry”

   “NO, It’s perfect.”

   “It will be better if teach some basic knowledge of shell language before the part of Makefile.”

   “Only once I thought why is this arranged this way: on Sunday or Monday evening when I was coding and realised that I cannot finish the part that was scheduled to be finished. I wondered why we had so much spare time during weekend if we then fall behind from the schedule. On the other hand, I could finish the aerosol part what was the aim, so I’m happy. Overall, I think the course was well arranged.”

   “I think at the end was not enough time for learning everything for person like me with no Fortran background so if it is the possibility to add two or three more days to schedules.”

   “Generally, all the topics were good, but for me was a little bit difficult to realize deposition part.”

   “A overall introduction to the main skeleton is welcomed. A more detailed explanation on how a module should be legally declared and called will help with most students. I saw some students
writing executing codes and/or using variables declared in the main program.”

“In my opinion topics are fine as they are and fit almost perfectly with the time table. I am sure there is always room for improvements but not really necessary as it is.”

“None. Enough topics for such a short time.”

“Perhaps during next year one could think about setting challenge levels for the students: The more experienced students could write their scripts with a plain version of skeletons, and they could be asked to write their scripts in a more modular, object oriented style. Also, maybe they could make a separate ini-file? Now the students with modeling background didn’t have that ambitious targets as the other students.”

3. **Was there any topics missing that you think should be included in the future?**

“Maybe something about the wet deposition.”

“more information about processes inside of soil (directly affecting the atmosphere)”

“Short summary of current problems in the area (lecture slides).”

“I think not. Or maybe just quick overview how to expand 1D model to 2D, perhaps.”

“I think that show of program should be included in the future.”

“How malte-box (or any other model related to our “shabby cottage”) works and what are the differences between a developed model and our model.”

“Would be cool to include some clouds into the model, but I think, that for the simple model it could be to complex 😞 “

“Analysis of the code written by stydents and how to improve”

“No.”

“I don’t have anything in mind.”

“If possible, a simple module with some cloud interactions would be great.”
“Course covers pretty much everything that you need for atmospheric modelling as far as fundamentals concerned. Since it is the “first step” I think the current topics are fine.”

4. **What is your overall feeling about the lectures?**

“Good. The dry deposition part is difficult to understand yet I understand it is because of the empirical formulas. Perhaps the aerosol part can be better illustrated just like the meteorology part.”

“They were to the point and as detailed as they can in the given time frame. Presentations had a lot of figures and visuals, not boring walls of text which is a huge plus. Lectures were interesting thanks to lecturer’s being very knowledgeable in their respective fields so it wasn’t just a text book reading session.”

“A little bit too long without breaks but the information was good.”

“I suggest that the lectures would be arranged in the morning and coding session in the afternoon. Otherwise it is difficult to keep clear-headed when having lectures in the afternoon.”

“I found them useful and interesting.”

“They were useful and helpful”

“Fantastic”

“Good.”

“It’s great and I can get the knowledge clearly.”

“Lectures were good. I really like break after 50 minutes in the morning, because I always have difficulties to wake up and absorb information for a long time.”

“Good. I knew already nearly all of the subjects in the level where they were teached, but I think it’s ok to rehearse every now and then. And of course, not everyone knew those things beforehand.”

“Since the audience is non-uniform with its background, I think it was good.”

“The lecturers did great job with explaining the topics and phenomena in a way that most of us could follow.”
5. Was the course book useful and should it be continued as a hardcopy?

“Yes.”

“Useful but maybe too heavy”

“I found it very useful to have a printed copy, where I could make some notes, in front of me.”

“Definitely. Without the hardcopy, I cannot work.”

“Yes, definitely useful and nice to have.”

“It was super! Definitely you should continue giving it.”

“I found it was quite handy to have the printed version - easier to follow the lectures (& making some notes) and useful during the coding sessions. At some moments, when I was involved in the personal communications with explanations, I was really missing the extra blank pages in the book for writing some “arguments“.”

“Yes. It was useful for marking important concept and writing notes. The book helped me to focus on the lesson.”

“Yes, it is useful.”

“Course book was handy and useful. Hardcopy needs to be continued because it helped almost everyone during coding phase since you need to compare your results with the lecturer’s. Quality of the hardcopy was also good, even after a long travel in a packed bag it didn’t tear or wear down.”

“The book was useful during the course, but too heavy to carry away.”

6. What is your overall feeling about the coding sessions?

“The coding sessions are well organized.”

“The coding sessions were good but the class should have been bigger”

“I like coding although seems frustrating but getting help from teachers and assistance made it easier.”

“The sessions was good.”
“I thought they were good”

“It was exciting! The teacher assistance was one of most important and extremely useful part of the coding sessions.”

“Perhaps there can be more difficulties and challenges for some lucky students and more help and instructions for unfortunate students.”

“The coding sessions were very engrossing and challenging and sometimes was very difficult to keep away and return to lectures.”

“It is inevitable to have differences in level of coding in a group of more than 15 grad students. Lecturer’s tried their best to keep the coding session as fluid as possible. If you were experienced and wanted to progress further before others they would let you to do it while they help others to not fall behind. Overall it was a decent experience since everyone tried to help each other and lecturers were taking their time making sure you understand what you were doing while progressing.”

“Good and well-designed. More time should be left when putting the box model into 1D model.”

“I think they were ok. It was good that assistants came and asked whether I had a problem or not – sometimes I would have continued longer debugging without asking help.”

“Good”

7. **What do you think about the workload during the course? (Too little to do, too much to do or just about the right amount of work?)**

“Just about the right amount”

“The general amount of work is fine, but afterward report writing requires some extra time, that overlays with necessity to manage the accumulated/postponed tasks during those two weeks”

“Too little to do if I used the provided skeleton. Actually, just the right amount for me because I rewrite the skeleton and rename the variables.”

“Right amount”

“Right amount of work”

“Just about the right amount of work.”
“I think it was just about the right amount.”

“Just the right amount.”

“This one is a bit tricky because course duration is less than two weeks so it is hard to balance theory, coding, and social activities. It almost feels like right amount of work even for a lazy person who might have lagged behind during coding. However, I think the second part (second week) of the course might be tweaked a bit. It is not that it was more difficult but change of pace and amount things you get exposed changes rather suddenly.”

“The workload was okay for this short period.”

“It was perfect. I had enough time for compiling my code so long as I need to find all mistakes before we went to the next topic. And I wasn’t sitting only in front of my computer.”

“A little bit much for me to catch the progress, because I have little knowledge about modelling.”

8. How you enjoyed the social activities?

“So for your information there are different social activities including, volleyball, table tennis, BBQ, football, and of course sauna! I am excluding the final dinner and mid-course weekend dinner. Hyytiälä is basically a forest, where social interaction might have been lacking due to its distance to the nearest city but that wasn’t the case. Just like classes, coding sessions, and everything, lecturers are super involved and friendly with social activities. It was so much fun to hang out with them. They go out of their way to provide anything that is reasonable and within their power.”

“They were nice”

“The sport activity should be prescribed in schedule as obligatory part of the summer school.”

“Fantastic”

“5 starts out of 5”

“Very much, especially Finnish Sauna.”

“I enjoyed sauna, boating and Finland food.”
“Yes, they were very nice and fun.”

“Perfect. I came here to enjoy my short vacation and I enjoyed it. The only pity is that if I knew the restaurant was a German-style one, I would order pork.”

“Ice cream in Tampere was great as well as football and table tennis. I really needed that time to go out and stop thinking about my code. And it helped me to get over my shyness.”

“Yes. These activities help me relax myself. The sports are fun. During the barbecue I knew my classmates better. The sauna is amazing and comfortable.”

“They were nice, we had nice people on the course and it was fun to do social activities together.”

“Yes I loved the area and social activities.”

9. Any other comments?

“The size of the room was the only issue I can think of. Bigger desks with more space would have been better for everyone.”

“I had some expectations before joining the course but I am pleasantly surprised to see this course exceeded every expectations by far. Great environment, both serious and friendly. Many people from different nationalities blend in with together in a nice way where they shared two weeks together. Made a lot of new and great friends while getting a chance to improve what I was lacking academically.”

“I really appreciate the manner and patience of our teachers and assistance.”

“Thanks for the course, I have already recommended it for my friends :)”

“Thanks a lot to all Teachers and Lecturers! You are doing great job! Just keep going!

p.s. Dear Michael, please, think twice before inviting the Turkish students next time ;)... we love you, Metin :)

...and please, warn the people in advance about “Hungry Finnish Mosquitoes” :|

“The organizers did great job throughout the course, and they managed to keep the atmosphere relaxed and cozy all the time.”