## **CIDER 08 Summer Program Evaluations**

Please provide your candid comments on the following – and any other - aspects of the program:

- 1 General organization/logistics
- 2 Location and venue, housing
- 3 Schedule
- 4 -Lecture content, level, pace, balance between lectures and tutorials
- 5- Workshop format/organization
- 6- What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
- 1 Generally great -- disbursement of information was sometimes a little less organized due to the copious bspace email announcements. Maybe a few less of those would be good perhaps restrict who is able to send out emails or have all the group messages accumulate all day and send out one large announcement at the end of each day? Just a thought.
- 2 Very nice I would love to come back.
- 3 Reasonable pace and spacing of events.
- 4 Great maybe a little more structure in the tutorials. But still definitely beneficial, but sometimes I felt it would've been better to have team leaders assigned in advance and then have 2-3 grad students work with a team lead on one computer. When each person is trying to do the same thing, more time is often spent on the computer tinkering.
- 5 Great.
- 6 Focus for next program: -role of water and/or impurities in deep Earth materials what do we know, what do we need to know.
- 1 Everything was well organized!!
- 2 Everything was fine, except the ants invasion in the bedrooms:)
- 3 Schedule

4 - The lecture gave a nice overview of todays geophysics, and were generally at the right level. A few were too technical. Maybe it would be nice to ask all speakers to spend at least 10-15 minutes just to introduce their topics and to provide a general introduction that anyone can follow.

The tutorials complements well the lectures. There was one drawback: we had to face many issues related to computer with several tutorials (sometimes we were supposed to use document that were only readable on mac but not on windows or vice-versa for instance).

- 5- Nothing to say here!
- 6- I think you should keep the same format. It works well!
- 1 The organization/logistics was fine except that some people stayed for only 3 weeks, making the research projects in the 4<sup>th</sup> week harder to continue. The required softwares that we should install before we came to CIDER were a bit confusing.
- 2 The KITP environment and housing are good and open.
- 3 The lecture in the morning followed by tutorial in the afternoon is a good arrangement. We have enough time for lunch and breakfast.
- 4 The lectures about different disciplines/aspects are generally well balanced. The topics are novel and founded on good background review for those who are not familiar with the subject. A few tutorials can be improved to show better connections with the lectures.
- 5 I hope we have more time to let participants to discuss their research with others (additional poster session).
- 6 I would suggest a 3-weeks program IF the last week of the 4-weeks program is not as productive. The tutorial materials should be available for students to download at least 1 day in advance. It might be useful to have a time slot for paper discussions on some interesting topics. The papers can be assigned to students before the program begins.

The effect of water in the mantle and crust is one of the interesting topics that I like.

- 1 Very good. Kate and Barbara did a fantastic job. Perfect.
- 2 Being hosted by UCSB was nice, it would have been nice to have more people from UCSB attending CIDER, but... The housing was fine, and the food was terrific.
- 3 The schedule was good with alternate lecture topics, made it more enjoyable. Maybe more time for posters next time as it is a great and unique opportunity for students to show their work to distinguished researcher in a stress-free environment.
- 4 Level and pace of lectures were in general well calibrated. The lecturer made a great job with the tutorials although I am not sure how useful some them were.

- 5 Good, maybe make the objectives clearer collaborative work leading to publication presentation at a conference?
- 6 I really enjoyed the way it was. One suggestion is to try to avoid isolating grad students and post-docs from faculty... this reduces interactions...
- 1 Excellent
- 2 Excellent
- 3 Good
- 4 Good
- 5 Excellent
- 6 I think the overall program is pretty good. I like it very much. However, 4 weeks might be a little bit too long. I think 2 week lecture with 1 week project is better.
- 1 Very well organized. Organization contributed to the success of the school because we didn't have to deal with annoying and time consuming bureaucracy.
- 2 Housing was very good. Even the ant problem became something to laugh about.
- 3 Spacious. I think I could have handled slightly longer days.
- 4 Lectures were mostly interesting, could have been slower in some of the cases, but I guess this is always the situation when the audience level is not homogeneous.
- 5 Although I enjoyed the school, I think it could have been shorter. Three (or three and a half) weeks for the whole school would have been more efficient for me.
- 6 I just have one remark about the tutorials format. I'm sure you are aware of the problematic of computer based tutorial were a large fraction of the time is spent on making the programs run. I can think of two ways to handle it:
- 1) Sending the source/exe files in advance to all participants and let us struggle with it (with the proper technical support) before the school.
- 2) Have the tutorial in smaller groups. I.e. in each tutorial slot divide us to two groups doing different tutorials and thus having larger instructors/students ratio. (This will of course require that each tutorial will be given twice so that everyone will get a chance to do everything).

- 1 The program was well organized and planned out. It seemed as though a lot of thought and effort had been put into scheduling the lecture series, which made a strong impression on a lot of the students.
- 2 Santa Barbara is obviously a wonderfully summertime location in terms of the climate and scenery, and I hope future CIDER programs will be held there. The proximity to the beach and consistently nice weather I think encouraged the participants to interact more outside of the lectures/workshops, which of course is what everyone hopes will happen.

Personally, I though the housing was great. The rooms were spacious, well kept and for the most part had all the amenities we needed (internet access, etc).

- 3 The schedule itself was laid out well, although I would preferred to have had a more rigorous first week in order to get to the group projects sooner. All in all, my only wish was that we had more time to work on projects. It seems that some students couldn't stay the full four weeks, while in my opinion the most interesting and useful part of CIDER was the group research conducted in the last week.
- 4 Overall, I thought the lectures were excellent. I found the seismology lectures a bit hard to follow, but other than this the lectures were outstanding. I think in the future the student participants should be required to do more extensive background research so that we come fully prepared to listed to advanced lectures outside our disciplines. For instance, I wish I had been instructed to do much more extensive reading regarding theoretical seismology before coming to CIDER.

In general, I thought the tutorials were quite good and provided a nice overview on different methods used in each of the four covered disciplines. I especially liked that the instructors would pass the tutorial codes onto us so we could freely use them in the future. The only problem with the tutorials was that when everyone would try to use the codes, often times a good deal of time would end up being spent making sure the code could work/compile properly on different operating systems/platforms. Perhaps in the future people could break down into small groups and certain designated people would have the tutorial programs installed on their computers in advance. I think this would help make the tutorial time more productive and if students so desire they can obtain the codes after the tutorial for their personal use.

I thought the balance of time between the tutorials and lectures was just about right, although in the first week I would have liked to continue with more lectures in the evening in order to get to the projects sooner. Perhaps 2-4 lectures could be cut out in order to compact the lecture/tutorial part of the workshop down into one week.

5 - Following on my comments above, the only thing I would change about the organization/format is the length of the tutorial/lecture section. I think this should be compacted down into one week, which could be achieved by holding lectures in the evening, decreasing the number of lectures by 2-4 and not having half of Saturday and Sunday off the first week.

Other than these suggested changes, I thought the program was extremely well organized and well run in terms of scheduling a large number of lectures, tutorials and social events.

6 - The primary thing I would change for future workshops would be the length of the overall program and the length of the tutorial/lecture section. Although it would be rigorous, I think compacting the tutorial/lecture section down to 1 week would be ideal, so that 2 weeks could be spent on the group projects. It seemed many students could only stay 3 weeks and I personally benefited the most from the group project section, so in the future I would like to see things arranged so that all participants get to spend 2 full weeks working on the projects. Under this format, everyone would spend 3 weeks at the workshop, which I think is a more suitable time than 4 weeks.

Other than this suggested format/length change, I think the program is in excellent shape as myself and other grad students all agreed that we learned a great deal and were able to make valuable contacts for future collaborations.

In terms of the focus, I think a general topic is the best choice, as this year's theme of boundary layers was able to spark interest for pretty much all participants. Perhaps a theme of compositional controls on mantle processes would be a good way to follow up on a lot of the questions/ideas that arose during this workshop.

- 1 Everything went smoothly for me. I think Barbara Romanowicz and Kate Conner and everyone else involved in the planning did a great job.
- 2 KITP was a great venue for CIDER. The housing in Manzanita Village was clean and comfortable, except for those pesky ants.
- 3 The schedule was good. It was nice to never have to sit for longer than an hour and a half.
- 4 Most of the lectures were great. Some were a little hard to follow because I didn't have too much background in a particular area, but I still got a lot out of them.

I enjoyed the tutorials, though with some there was more time spent getting the programs to run than doing the actual tutorial. In the future, it would be very helpful, if at all possible, for the tutorial presenters to upload the program or a very pared down version to bspace with explicit instructions on how it should work. Even if the files we work with on the day of the tutorial are different, we should have all the software ready to go on our computers.

- 5 Perhaps this is because I opted only to stay 3 weeks instead of 4, but I would have liked to have more time with the group projects. Having to check out on Friday morning meant that I only really had 4 days to work in the groups. I'm guessing this had to do with booking housing in Manzanita, but it would have been nice to be able to stay until Sunday.
- 6 I thought CIDER was wonderful. I've never been to an intensive workshop like this in which everyone is invested in the same overall goal for an extended period of time. It was great to meet people working on similar things and also to get perspectives from other

disciplines. I also liked how we could attack broad problems without having to collect a single bit of data. I would highly recommend the program to other grad students and postdocs.

I think it might be good next time to take one lecture day and replace it with another student/postdoc poster/talk day.

A suggestion for the next program: How about "Surface Expressions of Deep Earth Processes." You might be able to get a few more disciplines to participate in the program. You could have paleomagnetists working dynamo researchers (Dynamicists?), tectonicists and maybe even thermochronologists and climate people working with mantle dynamicists and seismologists on things like dynamic topography, and again geochemists and mineral physicists looking at the composition and rheology of the deep earth from magma chemistry and experimental studies.

CIDER'08 summer program is great. General organization is so good that it is very smooth for me to move in and begin the program. The campus of UCSB is pretty beautiful. Weather is very nice. House is clean and quiet. Foods are nutrition and diversification. KITP, which has good facilities, is great place to host the program.

Program is well organized. Every speaker is the well-known expert in his field. Lectures include both basic knowledge, which help us understand the content without too much background, and latest development, which bring us to the research front of the corresponding field. The tutorials help us to understand more concretely how the research is done in other field. These knowledge are very critical to fruitful multi-disciplinary collaboration. It is also very important to successful collaboration for participant to know about the research works each other. This is done in poster session in this program, which works well. But one poster session seems not enough. I also hope that this session can begin as early as possible.

The CIDER program is great. Now I have more clear idea about what are main achievements and challenges in other fields and how these can be related with my field? I learn a lot and meet some great people. A very valuable experience.

- 1 The organization was generally quite good.
- 2 The location and venue were very good. It would have been useful for the internet (both wireless and Ethernet) to have been more consistent, especially during the latter half of the program. Housing was good except that it was a bit far from KITP and had an ant problem.
- 3 I would have preferred starting the projects earlier, perhaps something more like a 1 week lecture, 3 week project split rather than the 2 week/2 week split because by the end of the lectures I was more than ready to start working on something and the 1-2 weeks remaining didn't give a great deal of time to work. Perhaps the lecture and project parts could overlap a little (1 week lecture, 1 week alternating lecture/project, 2 weeks project).
- 4 Most lectures were reasonably well paced. But I think lectures would have been more

effective if they had been more interactive. As they were, they relied very much on each person's individual interest. In general, the level of the tutorials were good, but many tutorials suffered from lack of preparation by the presenting faculty such that it was impossible or extremely difficult to get the software running, even given the pre-installed software we came with. In the future, I would recommend making sure ALL necessary tutorial software be ready and packaged for installation PRIOR to the start of the workshop and that it be tested (by the instructor) in the most popular operating systems (Windows, MacOS, Linux).

- 5 As stated in (3), I would have preferred to start projects earlier. I thought the workshop was very well organized in terms of getting the right people to speak for the right amount of time, but sometimes I think more guidance could have been given to the speakers/lecturers to make a more coherent and understandable overarching theme.
- 6 Overall, CIDER was extremely successful. For the most part, I would not change things. One suggestion I have for the project part is that the faculty really get involved in the details, instead of just showing up at the discussion parts of it. I understand this may not always be possible given faculty constraints, but it would have been more productive to have faculty members joining in the actual research than just providing their opinion and presenting previous work. Maybe the next program could focus on paradoxes, i.e. a discussion of contradictory data/models/observations.
- 1 Very well organized. Clear instructions and Kate was incredibly helpful setting up flights and passing on information about the logistics.
- 2 FANTASTIC!!!!!!!!!! KITP was excellent. The facilities and people were great. The food was very, very good. The location of the dorms was great and the accommodations were nice. Santa Barbara was a wonderful place to host the workshop.
- 3 -The first two weeks were exhausted because of the amount of material that was covered, but the second two weeks were great.
- 4 There was a good balance of lectures from the various subdisciplines. I would have preferred more tutorials because I learn best from hands on examples.
- 5 Again, I would like more tutorials because I found those extremely useful. The informal division into research groups went very smoothly and a lot was accomplished.
- 6 I think the program was fantastic as is. A new reference earth model? Anomalies in the deep earth? There are a ton of great topics that could be covered.
- 1 Pretty good.
- 2 The dorm is very nice and close to the ocean, although there are some ants.
- 3 It is just all right.

- 4 I think we had a good balance between different disciplines. But I would suggest that every speaker should give some REALLY basic knowledge in each subject, e.g. in geochemistry, seismology. Since we have quite a few students not belong to one particular discipline, some people got totally lost in certain talks.
- 5 Overall it is really good. Maybe we can think about how to make tutorials better to implement. Some tutorials need installation on your own computer, which always take the most time of that tutorial.
- 6 We should keep the intensive lectures and friendship build-up BBQ. The tutorials could be informed before class or workshop, which can help students learn more.
- 1 Good.
- 2 I like it. Beautiful campus.
- 3 Good.
- 4 The tutorials can be improved. For example the tutorial from Tromp, if they can make severe folders for us instead of unzipping file together.
- 5 It is good.
- 6 May be LAB?
- 1 The CIDER program has participants from different disciplines and different levels in academic careers. That is beneficial for graduate students in this program. The two weeks tutorials help me understand better the main topics in the program the boundary layers in the interior of the Earth.
- 2 UCSB is a very beautiful place. The weather here is pretty nice and very good for outdoor activities. The dorms are very nice. By living together in a building, students can interact with each other very well.
- 3 Mid-July to Early August is a good time for such a long program. It is the best time for me.
- 4 Some of the lecture content may be a bit advanced if I am not in that field. The tutorials are pretty good. It would be much nicer to have some dedicated computers for tutorials. There seems to be some problems with installation of software needed for the tutorials.
- 5 Overall, the workshop is well organized. It would be nicer to have an introduction of what has been done in the previous CIDER programs.
- 6 I think we can work on the same topic "Boundary layers in the Earth's interior".

- 1 This workshop was extremely well-organized, from the application process to the final presentations. The organizational staff took care of everything efficiently and diligently I was impressed with how smoothly this program was run for all 4 weeks.
- 2 UCSB provided an ideal location for the CIDER 2008 workshop. The downtown area is a short bus ride away, and the favorable weather was enjoyable during the entire conference. The dormitories were very spacious and clean (although several people, not including myself, suffered from ant problems). The KITP building provided comfortable meeting quarters. The ethernet worked very well in both the dorms and KITP, but the wireless connections left something to be desired. Overall, I was very satisfied with the venue of this workshop.
- 3 The lecture schedule was tiring due to the multidisciplinary approach of this workshop, but this cannot be avoided; an introduction to each discipline is a necessary way to jumpstart such a diverse program. Following the lectures, the schedule was left up to the different project groups, and this structure allowed a more versatile way to take advantage of this program.
- 4 I thought the lectures were very well-organized, developed, and delivered. Although some of the material was too advanced for me to follow (due to my inexperience in the discipline), others were able to take advantage of the more intimate specifics. The tutorials were useful, and I am grateful that I got to experience them and keep the codes to play with in the future.
- 5 I enjoyed the format of the program 2 weeks of lectures/tutorials followed by 2 weeks of project work. Although a 4-week program is difficult to fit into one's schedule, the advantages far outweigh the cons.
- 6 I believe this program was an extreme success and I would not make any significant changes to the lineup. I have heard suggestions that perhaps a 3-week program would be easier to attend maybe a week of full lectures, followed by a week of morning lectures and afternoon project sessions, and a third week devoted solely to project work. I enjoyed the 4 weeks I had here, but I would also be okay with shortening the program if others would prefer this format. Overall, I was very pleased and impressed with CIDER 2008, and I hope this program continues to be funded in the future.
- 1 Well organized.
- 2 A very good choice of venue. Housing was excellent.
- 3 Overall good schedule.
- 4 Lectures were very organized and well-delivered. The contents were suitable for participants with diverse background. However, I feel that the tutorials could have been organized in a better way. Some of the software used in the tutorials were platform specific and were difficult to run by everyone. Some of the tutorials required to log on remotely to other machines and that slowed down the process tremendously. I think in the morning

session a short time should be kept to give an overview of the afternoon tutorial so that less time is wasted during the actual tutorial just to figure out things.

- 5 Well organized.
- 6 I think it is a very useful workshop and is of great benefit to students and postdocs. While the present workshop mostly dealt with the deep Earth and specifically topics in mineral physics and geochemistry, I would like the focus of the next program to be on the lithosphere/upper mantle problems.
- 1 The organization and logistics are great. Everything is smooth to me. I got all the information I need before I reach Santa Barbara.
- 2 The location is awesome. I really like the weather in Santa Barbara. The dorm is neat and clean. The distance between the dorm and KITP is a little bit long. But it is also a nice walking exercise.
- 3 The schedule is nice and tight.
- 4 The lecture content is good. Although it is hard for me to fully digest all the content in other disciplines, I learned a lot of things from geochemistry, seismology, mineral-physics besides geodynamics. At the end of the lectures, I start to have a full multi-disciplinary picture of our current progress towards understanding the deep earth.
- 5 The format of lecture+tutorial+project is good.
- 6 The same should be fine for next generation of grad students/post-docs. The focus could be stratification (phase and density) of the earth and the forces/mechanism that break through the stratification.
- 1 Very good.
- 2 This part is wonderful.
- 3 Pretty nice.
- 4 The content combined the basic knowledge and new development in each research field. The level is very nice for graduate students and Post Doctors. The pace is good for people to concentrate and think about the content.

The balance between lectures and tutorials is nearly perfect.

- **5** Good.
- 6 My suggestions are:
  - (1) As a seismology student, I feel like the logic of mineral physics and geodynamics parts are relatively easier to follow and understand than geochemistry. I will prefer

- next CIDER can offer a pre-reading list for all of the students and post-docs who are not really in the major.
- (2) The tutorial part sometimes will get problems because of different computer systems (like PC and Mac), or something else. It might be good for CIDER to have a person work like a GSI, or say, student instructor. The tutorials can be operated in this way --- before CIDER starts, the professors can release the installation or compilation instructions on the programs. People do not need to understand what is really going on in the program by then, but they can first try to make it work. If some problems happen, then the GSI can help to fix the problem. Ideally, this GSI is more preferred to be the one who is very familiar with Linux system, PC and Mac incompatibility. In this way, a lot of time will be saved during the tutorial as most people have already made the programs work, so the only thing to do is to play with it, think about some questions, or understand the whole process.
- 1 Organization under Prof. ROMANOWICZ was very active and effective.
- 2 An excellent location
- 3 Pretty thoughtful
- 4 Graduate and expert level, content was well balance
- 5 Excellent
- 6 I need to thank the organizer of CIDER2008, Prof. ROMANOWICZ for her excellent work to bring a large member of multi-discipline researchers to CIDER and form such a convenient and comfortable environment for students to discuss and learn from each other and to learn from experts in and outside their research area. As a non-geology major, attending 3 weeks of CIDER tutorial has helped critically in my understanding of the rich area of geophysics. Before I came to CIDER I knew nothing about seismology or geodynamics and I have never learned about it during my past 6 years of graduate school. It is very surprising to learn other people were and are doing such exciting and interesting work based on such fundamental physics even without quantum mechanics or field theory. I believe the knowledge I learned from CIDER has largely bridge the gap between my microscopic computational mineral physics major to real understanding of Earth. This has opened my narrow mind to notice and think about questions in other areas, which will benefit one's future career.

I really wish CIDER program can continue and benefit the coming grad/post-docs, because personally I believe that had I not attended CIDER, I cannot imagine how painful it would be for me to pick up and understand other's work in seismology or geodynamics. That would be a big obstacle in my future work. In this sense CIDER is the best program I have ever attended in the past 4 years.

Best wishes to CIDER and thank you Barbara and thank you Kate!

1 - Great
2 - Great, except there are some ants
3 - Good.
4 - Good.
5- Great.
6-
1 - Excellent
2 - Excellent
3 - Good
4 - Good
5 - Good
6 - I think the cider is really good in terms of organizing the grads/postdocs together and

- 1 Good. The wireless network in both grad dorms and KITP is not working sometimes, and when it is working, its speed and stability cannot be guaranteed. Wired network is always working.
- 2 UCSB campus is a great place to be in the summer there is no doubt about that. It won't get too hot even in the summer, and where we live is just 2-minute walk away from the ocean, which is very nice. There have been ant problems in many rooms at least one of the grad dorm buildings (Madulce Hall), which is quite annoying. It would also be much better if we have had constant supply of bottled water in the grad dorms.
- 3 Pretty good, except that the meal hours are a bit short. If the meal hours are all 2 hours instead of one, it would be more flexible for participants.
- 4 Quite good. Interdisciplinary lectures are in nature hard to do, since usually grad students don't have enough background in the areas that are not closely related to their research direction. However, more exposure to other disciplines will certainly broaden our horizon, and enable us to look at things at different angles.

- 5 The two-week workshop experience of working with student/faculty members both from the same and different disciplines is very exciting. We have learned from each other a lot from working together and group discussions. It is a pity that only so much could be done in just two weeks, but making it longer probably won't be a good idea, since people often have their own research to worry about and don't want to be away from their institute/university for too long.
- 6 KITP is nice, but it is really a bit too far from the DLG dining hall (10 min walk) and the grad dorms (20 min walk). If there is some place nearer to the place where we are living or the dining hall, that would be much better.
- 1 This was a very well organized summer program, nearly perfect I would say. Minor glitches were promptly patched, so I felt everything ran as smooth as possible.
- 2 KITP proved to be a great location for this program, its infrastructure matched well my needs. Housing in Manzanita Village was clean and comfortable, dining hall food fine and diverse enough for three weeks.
- 3 Two lectures + one tutorial per day were a good combination not too crowded, not too loose. Grouping similar topics a day would be useful though.
- 4 I expected little more focus on the main topic of the meeting, i.e. boundary layers. Nevertheless, most lecture contents matched my expectations. The level varied considerably from one presentation to another. Whereas some instructors clearly designed their presentations for the broad CIDER audience and put much effort into maintaining their message digestible and useful to everyone, others rather appeared to ignore the diversity of the audience and spend much time on technical details, which may be of interest to those working in that particular field, but irrelevant for others. There was in general a good balance between lectures and tutorials. However, the time allocated for most tutorials seemed too short, mostly because fiddling with technical difficulties (computer-program compatibility issues) was too time-expensive.
- 5 I really appreciated the two-part format (2 wks of lectures + tutorials, and 2 wks of brainstorming in working groups).
- 6 I think the workshop format was excellent this year and should be perpetuated in the forthcoming programs. Sharing in advance papers relevant to the presentations and tutorials was useful. Scheduling similar topics per day could help staying tuned and avoid disorientation caused by quickly shifting gears. The poster session was also a good idea, perhaps more time should be allocated to it. The tutorials should be little better organized technically and perhaps longer, making sure that enough time remains for actual scientific discussion and result evaluation.

1 - Good

2 - Very good conditions.

- 3 Very intense, so it's good for learning.
- 4 Most of the lectures are at a proper level. Some tutorials are a little advanced and may need more interpretation from the instructors.
- 5 Good, and exciting.
- 6 The location and organization are very good, and the instructors are very knowledgeable. The eating place is a little bit far, and the lecture room may need more light (to keep people awake).
- 1 Very well organized. Thanks Kate and Barbara!
- 2 Location was great (it's hard to beat UCSB right on the cliffs) and housing was adequate except of the ant problems in the dorm rooms. I appreciated the privacy from single room occupancy. One housing drawback is that you have to walk 10-15min to the dining commons and then another 10-15min to KITP. This wastes a lot of valuable time, which is especially valuable during the tutorial weeks.
- 3 I would have liked more time in the first two weeks for informal discussions with some senior participants, especially as many lecturers left abruptly. Also, a second poster session would have been good.

Saturday mornings should have been off to give people some time to relax and enjoy the area.

## 4 - Lectures:

Each lecture had a 90 minute time slot, and many speakers used all (or more) of that time to talk. I would have found it more useful to limit talks to 30 minutes and allow 30 minutes for questions, discussions, and clarifications. The discussion time would also allow for lengthy explanations. A 30-minute speaking time limit forces speakers to focus, rather than to address unimportant details.

I did enjoy and appreciate talks that reviewed their field or introduced fundamentals in their disciplines in contrast to talks that narrowly reviewed the speakers publication list. Overall the lectures were well prepared and allowed me to learn a lot.

## **Tutorials:**

First, all tutorials had technical trouble on one level or another, and a lot of time was wasted on file transfers and operating system incompatibilities. I also do not understand how serious scientists can use Excel spreadsheets, and openly advertise this to students. A more fundamental problem, in my opinion, lies with short (2 hour) tutorials in general. In my experience they either repeat what you already know (if it's your field of research), or introduce techniques that you will not able to master to produce research-quality work. More useful to me would be a time slot that introduces topics which allow us to critically evaluate research in different fields – please tell us what papers and talks don't address.

5 - My suggestion for the tutorial part is to allow more time for informal discussion, or maybe formalized small-group discussions (one or two senior scientists and about 5-10

students/postdocs). I would have also liked to see more short (20min) talks from other senior grad students/postdocs, which could have been held in the second part of the program, maybe twice a week before plenary meetings.

The joint dinners at Goleta beach and on campus provided a good atmosphere for discussion and getting to know each other.

- 6 I would strongly support another program. KITP seemed well equipped and very suitable for this program. The number of participants was good during the tutorial week and the one immediately following. The last week was a little short on people, and some projects suffered more than others from this.
- 3 or 4 weeks are a long time to be away from your family, and I would strongly recommend to provide housing support (eg. a Santa Ynez apartment) for students/postdocs that would like to bring their family.
- 1 I was quite happy with the logistics as they worked with me on special arrangements. Overall the organization of the workshop was good. There were plenty of talks and tutorials that were focused on the boundary layer topic. Setting up bSpace as a group file exchange was also extremely helpful for us all and was handled quite well. I thought the breaking up into groups for the research segment was done wisely and I enjoyed the occasional (but not too frequent) plenary meetings.
- 2 Location is awesome. Beach and ocean to one side, mountains to the other. The weather and temperature were very consistent almost too consistent. The dorms are nice. Having individual rooms was great as it allowed other people to bring family too. Main problems with the dorms were the pissants that were everywhere (but not in overwhelming numbers), the total lack of drinking fountain (drinking water is scarce on the whole campus and it tastes off), and the laundry system is a little rough (cards are \$2 and you can only add money in \$10 increments). Bringing a nalgene bottle is basically required to stay hydrated.
- 3 Schedule was overall done effectively. It would be good to have more time for the tutorials as it seems most of the time goes invariably to just installation. The poster session should have been broken into two separate sessions as it was a rush to see all the posters and also present your own. Maybe have a mandatory stretch for those long lectures (100 minutes is a marathon lecture-wise).
- 4 I thought the lectures were presented at a good level. Some were obviously more introductory and others were more advanced and while I definitely could not keep up with it all, I think it works. I really enjoyed the switching off of lecturers that the mineral physicists and geodynamicists did as it gives a break in the middle to discuss, summarize and stretch.
- 5- See answer to 1 above. Whoops.

6 - See suggestions above. Really I think the current theme (boundary layers) is good since it is broad enough to allow for a wide variety of topics and interdisciplinary work and it definitely highlights the areas that need attention.