Report of the 30th ISYA 2008, Istanbul, Turkey, 1-21 July 2008

Jean-Pierre De Greve, Chairman PG ISYA
29 July 2008

1. Location

The ISYA was held in the Yüzyil Isil School (YIS), a private primary and high school near Sariyer, Istanbul (some 30 km from the center of Istanbul). The student dormitories were in Kylios, Istanbul, a small village at the Black Sea shore, about 20 minutes away from the IYS by bus. The lecturers stayed in the Kelo Hotel at the other end of the village, about 10 minutes walking from the dormitories.
Each day, lecturers and students were collected and transported by bus to the YIS.

2. Students

Out of 46 candidates, 37 were selected for participation. Five of them didn't come (2 from Egypt, 1 from Nigeria, 2 from Turkey), two additional students were added later on, bringing the actual number of participants to 34, from 12 different countries. The gender distribution was 40% female, 60% male. The list of students is attached (*Annex 1*).

3. Arrivals

The students were met at the airport, and transport in groups in small buses was arranged to bring the lecturers to their hotel (Kelo Hotel in Kylios) and the students to their dormitories.

4. Opening Ceremony of the ISYA group at the YIS.

The ISYA group was met by the General Manager of the YIS, Mr. Okan Dilik, and the Principal of the high school of the YIS, Mr.Murat Dizdar. All participants received a nametag, a bag with t-shirt, mug etc. The School has a small but well equipped observatory with a 37 cm Meade reflector and a CCD for imaging.

The opening ceremony was professionally organised, among the guests were several sponsors who sponsored an important part of the local organization. There were welcoming and opening addresses by Prof. Jean-Pierre De Greve, ISYA director, Mr. Okan Dilik, Mr. Abdullah Nurkan, the Sariyer District Representative of the Ministry of Education, and Prof. Dursun Kocer (on behalf of TAD, the Turkish Astronomical Society). Prof. Jean-Pierre De Greve concluded in giving small presents on behalf of the IAU to Mr. Abdullah Nurkan and Mr. Okan Dilik.
Prof. Zeki Aslan, chair of the LOC, could not be present because he stayed in the hospital for examinations.
In the evening, buses took the group to a nice restaurant at the Bosphorus for a dinner, kindly offered by the YIS.

5. Program

5.1. The schedule of the program is attached (*Annex 2*). It was adapted to cope for Zeki Aslan's late arrival. Lectures started at 9 am and finished at 5.20 pm. Several lectures were also followed by labs to exercise the presented material. Each lecture or lab lasted 90 minutes. There were two teaching slots in the morning, and two in the afternoon, each separated by a coffee/tea break of 20 minutes. The lunch break lasted from 12.20 am till 2 pm.

5.2. The first afternoon session was on the observatories in Turkey and their programs (Dr. Sinan Yerli) and an instruction on how to write a scientific paper and getting it published (J.P. De Greve).

5.3. Lecturers and their topics:

A. Alpar (Sabanci Univ.): Endpoints of stellar evolution, structure of neutron stars, observations of neutron stars.
Z. Aslan (Istanbul Kültür Univ.): Introduction to astrometry, CCD astrometry.
J.P. De Greve (Vrije Univ. Brussel): How to write and publish a research paper, Structure and evolution of stars, Structure and evolution of Binaries.
A. Frasca (Catania Obs.): Stellar spectroscopy and data analysis with IRAF, spectroscopy of binaries.
E. Guinan (Villanova Univ.): How to give a talk, Binary stars as astrophysical labs, extrasolar planets and life, stellar dynamos and effects on hosted planets, research with small telescopes.
K.-C. Leung (Nebraska Univ.): Photometry, novae, close binary observations.
R. Williams (STSci): Hubble Space Telescope science, Hubble Deep Fields, novae.
S. K. Yerli (Middle East Technical Univ.): CCD reduction techniques using IRAF with hands-on computer training on real/archive data.

5.4. An important aspect of the first week was the preparation of the observations to be carried out in the second week. With the support of Dr. Paul Roche, ISYA had access to the 2 meter robotic Faulkes telescope on Maoui, Hawai. Three slots of 2 hours were offered from 3.30 pm to 5.30 pm (Istanbul time) on Monday, Wednesday and Friday of the second week (through the appreciated support of Paul Roche). In the first week the students were asked to organize themselves into teams and to develop and propose a feasible observing project. In the second week slots of ten minutes were given to each team within the two-hour slots. In the lectures, the students gained insight in the IRAF software, to be able to carry out proper reductions of the data. In the third week, students could reduce their data.

5.5. In the second week the students had to give the topics for their presentations and a schedule was developed within the slots foreseen in the third week. Most of the students consulted Ed Guinan and/or Jean-Pierre De Greve for the content of their powerpoint presentation. The presentations took place on 5 slots of 1.5 hour from Tuesday till Saturday. For each student 15 minutes were foreseen for the presentation and the

discussion. The list of topics is attached (*Annex 3*). The lecturers agreed that the presentations were well prepared and of high quality.

6. Closing
At the last day, 20 July 2008, students filled in a 4-page evaluation sheet. The results of that inquiry are found in *Annex 4*. In the following closing ceremony, the lecturers received an ISYA certificate and a gift from the YIS. Then, the students received their certificate witnessing their participation in the ISYA2008.

7. Cultural program
The first weekend, the ISYA group visited the Aya Sofia and the Imperial Palace in Istanbul on Saturday. The day was concluded with a sightseeing boat trip through the Bosphorus. Sunday, a visit was made to the Sultan's Palace, the Cistern and the Blue Mosque, also in the center of Istanbul.
The second weekend a day at the grand bazaar was offered on Saturday and a visit to Istanbul's modern shopping area on Sunday.

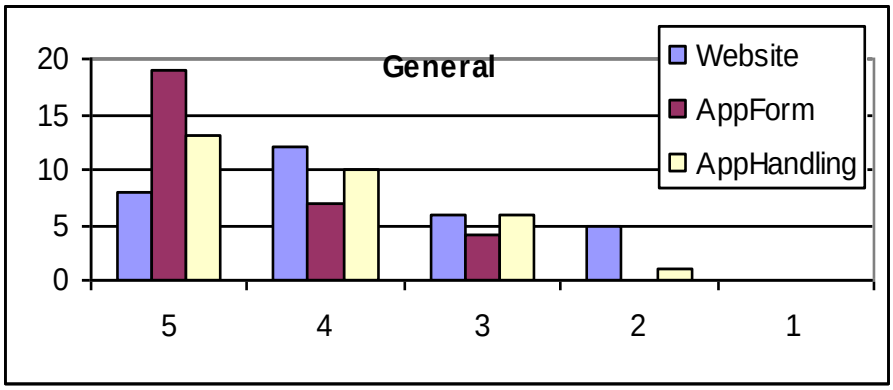
8. Financial evaluation
The support from various sponsors, obtained through Yüzyil Isil School, severely lightened the proper ISYA-budget, as a substantial part of the transport costs were covered by the sponsoring, and several of the museum entrances. Moreover, the three foreign students who couldn't come decreased the expense for student travel.
As a result, the total expense for the ISYA stays well within the foreseen budget. An overview of the costs is given in *Annex 5*. Details are available.

Evaluation ISYA 2008 – Istanbul, Turkey

1. Student evaluation ISYA2008

32 forms; statements; scale 5 (complete agreement) to 1 (complete disagreement); 12 forms had no comments at all, 20 forms contained comments.

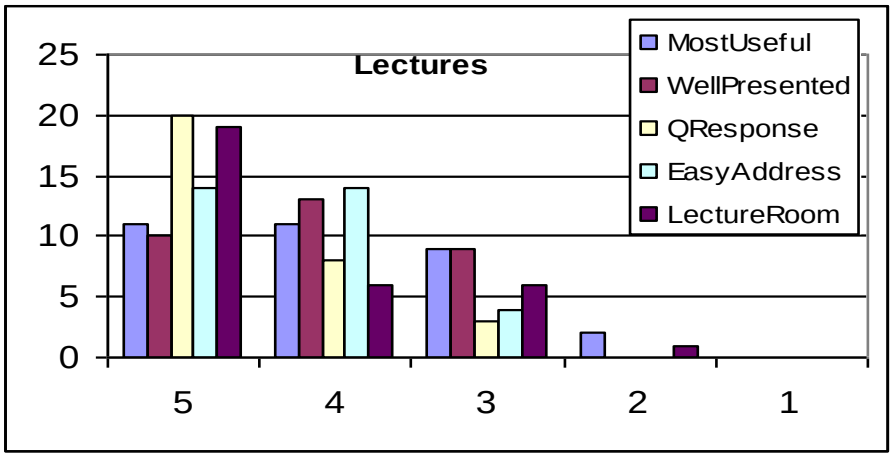
Each graph is followed by a general appreciation by J.P. De Greve, and supplemented with written comments ('Comments') by the students. In these comments references to specific lecturers have been removed.



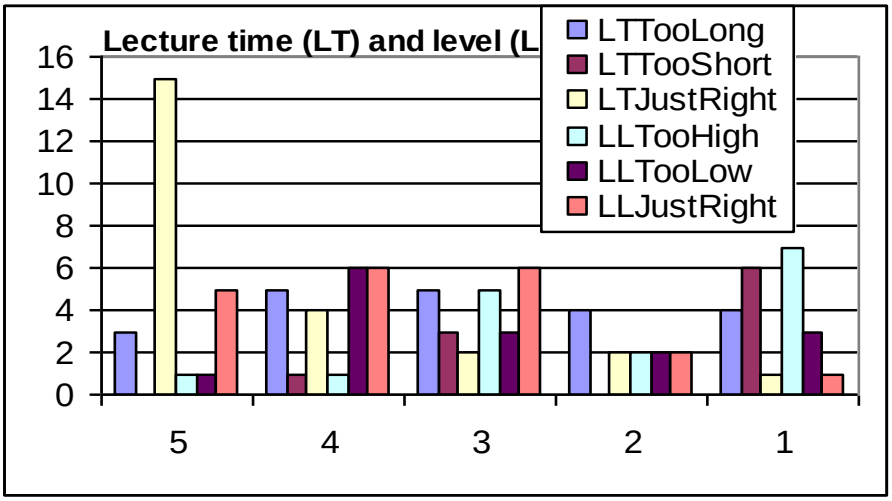
The website was on average OK, but considered too slow.

Comments:

- The website was full of flash, which made it take long time to load.
- Application form: putting 'attach' recommendation letter was confusing, who should send the ref., me, or the referee?
- Because high graphics in the homepage, I usually had a problem to open the website homepage.
- Webpage navigation was confusing and the information wasn't enough. The application form was useless, because I needed to copy it to text file and send it via email (as Dr. Zeki Aslan instructed me).
- I would like to have more information from the website about things I had to carry with me, the accommodation place and the lecturers.
- The problem with the website was that it takes long to download for computers with a modem. Because of that I couldn't visit site frequently. The information was not complete. For example, the transportation issue (we didn't know until last day).
- A lot of graphics, hard to load for slow connection.
- The initial website was good. But it didn't provide enough information before the school (pre-departure comments, etc.)



The lectures were useful, but some of the PowerPoints could be improved (text too small). The lecturers were very responsive and could easily be addressed. The airco was considered as a negative point.

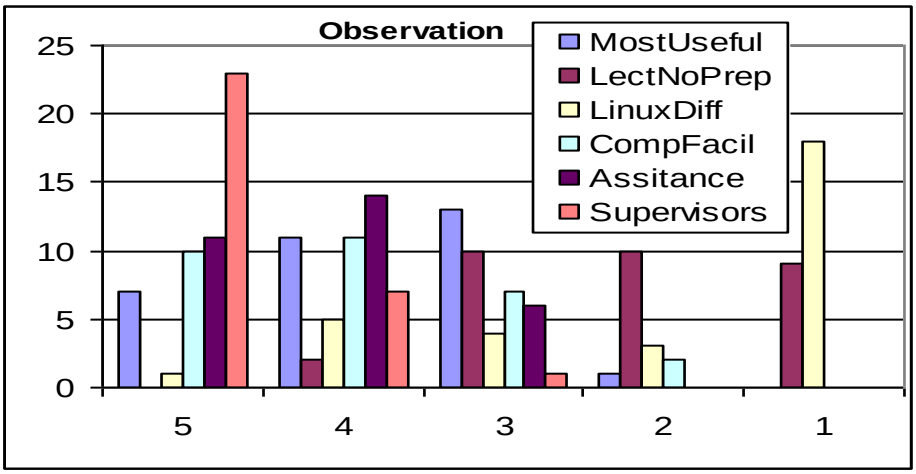


On average, the time spent on the lectures was OK. Some found the level too high, some too low. A preliminary test could be performed to find the average level of understanding per subject.
Note: The questionnaire must be improved for the questions with choices ("or" questions). Many students did neglect the remark to chose only one option and answered all the options, and not always consistently. A question per subject could be introduced instead.

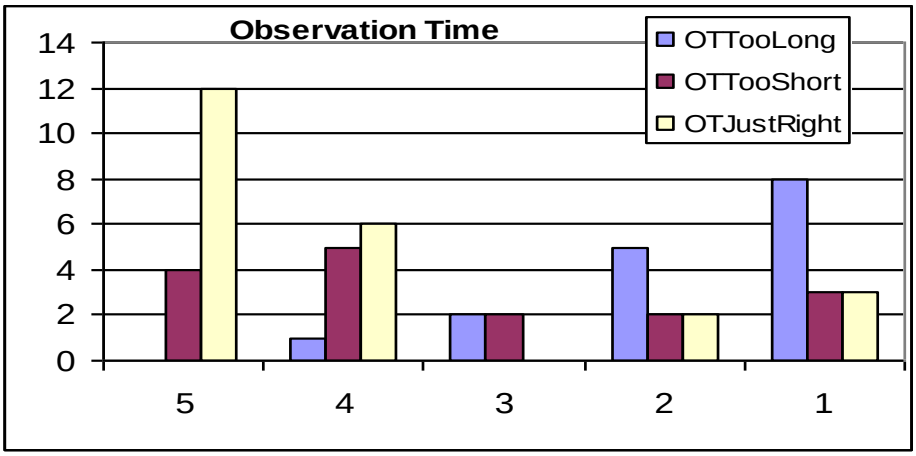
Comments:

- I think some lectures were at a very low level.
- A few presentations were full given with words projected on screen instead of graphics. A few lectures were helpful but there were some lectures nearly similar to each other.
- Maybe the IRAF lab was a little bit too much for a beginner (me). I would suggest more IRAF labs, with small amount of information instead of less IRAF labs with too much information. This does not mean the lecturer was bad, he was very great.
- The lecture room was comfortable, but the air conditioning system has made this comfort a little colder. So, some people got ill.
- The lectures' level should be a little higher.
- It's good to attend lectures from a diverse field of interest but I think that important papers on astronomy and astrophysics should be discussed.
- Attendants should be introduced to scientific literature.
- The total time spent for the lectures was fine, but the duration of each lecture, 1.5 hours, was a bit long and I could hardly follow the second halves.
- The air-conditioner prevented to breathe fresh air, but the room was comfortable.
- For me, the most useful part of ISYA was the presentation exercise, then observations and lectures. This comment applies to the next sections ☺

- The lectures times were too long because it is too hard to interact to the lecture for 90 minutes. But the lectures level was just right for Master and PhD students.
- Not all lectures were well presented.
- I enjoyed the lectures more than anything else (but there was almost no cosmology).
- The lectures of ISYA 2008, I had them at the university before, but they helped me to remember some useful elements.
- Some lectures were at too high level, but some lectures were at too low a level. Sometimes there was no balance.
- Some of the lectures were very good, but it was hard to follow some others.
- Providing printed instructions for the labs would be very helpful.
- Some of the presentations were not so well visible, as they were with very small font.
- It was not so healthful with the airconditioner.



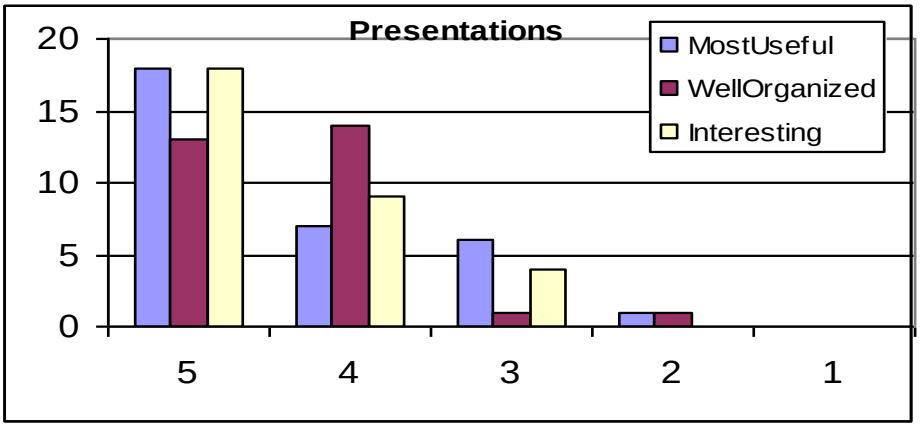
Appreciated, but not considered as most useful. Very little connection with the lectures. Linux did not pose a major difficulty. Supervision was OK.



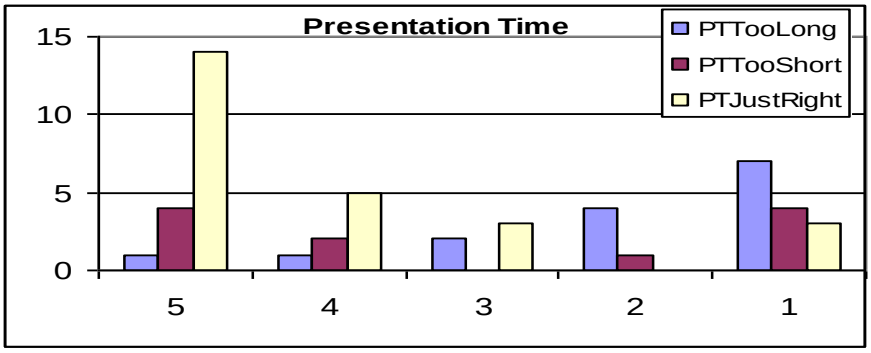
The observation time (3 times 10 minutes) seemed to be OK.

Comments:

- We didn't get enough information about the telescope. And we've just found out (the readout time = 60 sec) new information just before the observation. Finally, it was still a good experience.
- I highly suggest that project teams must be chosen according to experience, there were teams were none of the team members had any experience with IRAF, so they found it difficult. I was lucky to be in team with a good knowledge of IRAF, so the team with IRAF knowledge, were very helpful all together.
- The duration for the observation projects must be at least half an hour. A whole night with a smaller telescope would be much better than 2 hours with a large telescope.
- The observation times given to a student were too short. Maybe, we could do one observation all together and observe one common object with standard stars. Because there were three nights in these days, we could do a scientific observation.
- Observations: I felt like it was expected from us that we had done observations before, but I REALLY hadn't done it! So, the lecturer didn't take enough time to explain what we needed to do to we get something in which we can show our maximum as an observer.
- I wonder when I am going to have another chance to use a 2m telescope.
- It was useful for me.
- I don't feel to observe something. The robotic telescope is very useful. But I would like to see and close to the telescope.



On the three items, students expressed a great satisfaction (useful, well organized, and interesting).

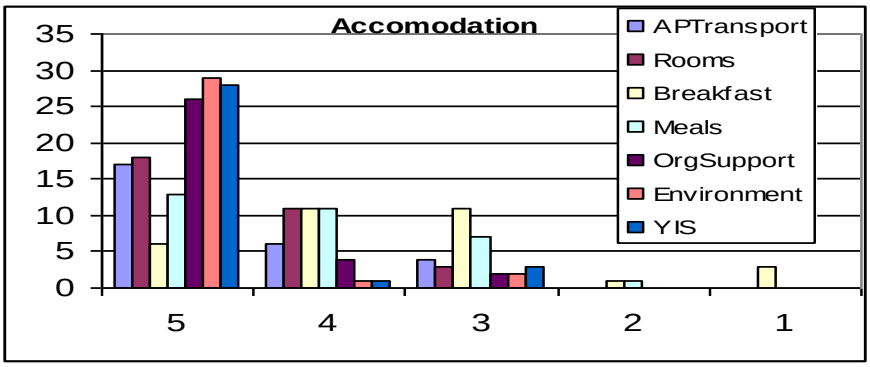


OK, some found it too long.
Note: the statement must be clear on which time is meant, time per presentation or total time spent on presentations.

Comments:

- It was good to do a workshop like this but almost all the presentations were based on similar subjects. This affects the audience. We should have avoided this similarity.
- Comment for homework, not presentation:
- There were only one or two lectures that included homework. I need to do exercises but we had not enough time to do so because of the number of lectures per day and the amount of things to understand.

- It was really good experience for me to present my work and ask for ideas.
- The presentation must be at the beginning of the course because everyone then knows each other and find out if they work together in some area.
- The presentation helped me to feel myself a scientist.
- The time spent on presentations was enough to explain our research because it is the ideal time for congress.
- If the point was to present main points in short time, that was a good preparation. But on the other hand, some precious info about students' work had to be skipped.

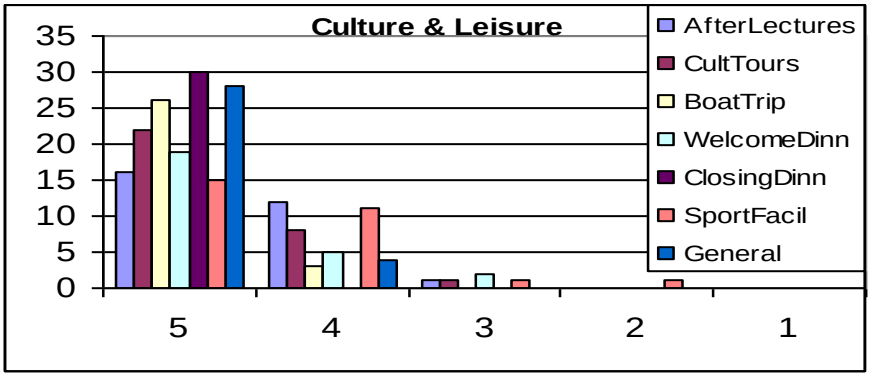


All items received a positive appreciation, apart from the breakfast.

Note: At some mornings, there was no breakfast served, and students were taken out to a restaurant for their breakfast. Later, this was replaced by a self-improvised breakfast (small breads and fruit juice).

Comments:

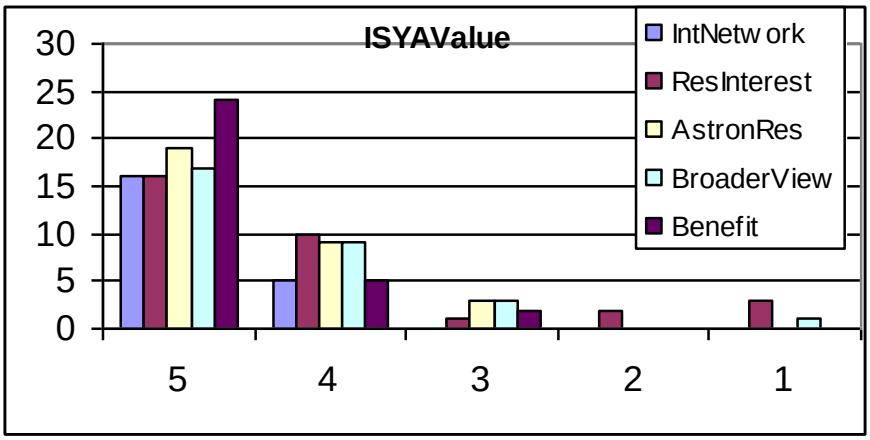
- Except few events, the breakfast and meals were good. But the predictable dinner was a little bit disappointing.
- VERY nice accommodation place and school.
- 1 room key for 3 persons is not enough. Sometimes there were problems to find the key.
- The transportation system was well organized.
- Thanks to Yzyil Isil Schools….
- You could find a better place (for movers!)
- Can't complain! It was great.



Both the cultural tours and the leisure facilities were appreciated.

Comments:

- I had great time ….
- MORE than fine.
- This part was really good.
- I would like 2 or 3 afternoons to go again to the city instead of going back to the accommodation place.
- Sport facilities: in school I didn't use it so I would say that I don't know if they were good. In accommodation place the sport facilities were OK.
- GOOD.



The students developed an international network and strengthened their interest in astronomy research. Some students report that the ISYA did not alter their research interest in any way.
Note: these items need to be reviewed, so that they express the possible added value more explicitly.

Comments:

- Before coming here I was dreaming of hard lectures, tough exercise and more details on the subjects. I found the lectures (most) in low level. However, several lectures, especially those that were in charge of, were great but I still don't mean the levels were high…
- This ISYA 2008 let me open my eyes wide and see beyond. I found myself and I really know what I will study in the future. Thank you ISYA.
- I got now very good connections with people in my field, professors, students … I have clearer vision about my career.
- THANK YOU ISYA, organizers, chairman, professors, students, everyone.
- Thank you, thank you thank you thank you thank you … for all you have done for me.
- Thank you for this fantastic School of Astronomy!
- ISYA was really efficient; it was a really good experience.
- This school helped me to develop my possibilities in programming and presentation.
- I need to answer 1 to the second question because my research interest was well defined before ISYA.
- Just continue doing what you are doing!
- Excellent, I can confidently say I am a different man!
- There was no lecture about stellar atmospheres. My research area is stellar atmospheres but there were generally lectures about binary stars.
- Last three weeks I had very good time. I had good experience in here.

Other, additional comments:

- The laboratory exercises, learning the reduction processes and how to ‘play’ with astronomical data is quite useful and time spent for it should be increased.
- I just want to appreciate the effort of ISYA organizers and thanks to lecturers for their lectures. The only thing I would like to mention is that, it could be great if there were some free time between lectures to have more time for study and reviewing the lectures.
- ISYA has accepted students who have different knowledge in astronomy, so I think it must be more selective to be a more efficient summer school.
- WELL DONE.

2. Comments from the lecturers ISYA2008

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It would be helpful for student preparations to be done in the first week, with a prepared draft on arrival and but also some organized way for feedback- teaching how to. A pre-assessment of where the students are on each of the topics of the programme would also be useful to the lecturers.

Ali Alpar

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As a LOC: Million thanks for all your efforts... As a Lecturer: cheers to everyone, cheers to ISYA! Sinan.
Operational matters:
- Lecture sessions were too long: It has been proven that whatever we do after several minutes of student attention, they are distracted one way or another during lecturing; lecturing goes on between losing- and regaining- the attention of the students. I propose a schedule similar to what we experienced but I think the following would be more relaxing: One 90min session = (40+10+40) mins = (lecture+break+lecture) So after "1 session" there will be a long break (20min) which could be used as /free discussion/ NOT as "e-mail reading". Note that the lecturer of both 40min lectures should be the same.
- Presentations/Student Talks - STs: I fully agree with Rob and Zeki that STs have to perform at the very beginning. STs must even be submitted at the registration day to overcome further troubles. However, I am not sure about slots for STs. Thinking loudly there exists some constraints: - Students must arrive and the opening has to be done. :) [Day: 0-1] - Introductory lectures have to be given [Day: 2] - 2 afternoon slots x 90min / 15 min → 12 STs/day (we really should not mix STs with lectures).
a) Opening on Mon (arrivals on Sunday); Intro on Tue; STs are on Wed-Fri afternoons: 3 days → 36 students
b) Opening on Fri (arrivals on Thursday); Intro on Mon; STs are on Tue-Fri afternoons: 4 days → 48 students
- Limiting the internet access. As Rob pointed out, students were either reading e-mail or working on their presentations OR working on completely different topics. However, I must also say that some of them (not many) were either using internet for "dictionary" or

for "further search on the lecture", especially when Ed switched from one satellite to another. Some of them even they have started to download the articles... So it won't be an easy answer... My 2 cents on this problem: if we redesign the lecture hours from "1x90" to "40+10+40", the tendency to use the internet would be reduced (but will not be ceased) - [another 2 cents comes in "Lecturing"]. If ISYA wants "full control of the internet" that is also possible with a good network infrastructure (e.g Yahoo Messenger was blocked in Yuzyil Isil).
- Student levels. As I have already told during the school, I have prepared myself to teach "scripting in IRAF"... On the first day I understood that this was just a dream... /by just applying a quick questionnaire/. So we really should come up with a good questionnaire (however it has to be done on the opening not before); revealing all sorts of distributions between them. We might also relate this early questionnaire with the last one, as well. Things in my mind: Observation experience; Data reduction experience; Observed/Reduced wavelengths; Computing Experience; Fields of Study; Publication experience; Proposal and/or Project Experience; Tendency in Astronomy /Astrophysics/ Space Science/etc. * Lecturing
- One of our (as a member of LOC) mistakes was that we weren't that organized in supplying the lecture notes to the students beforehand (I know the reason for my lectures; I have rewritten almost all lectures by lowering down the IRAF/reduction teaching level). We should really distribute the lecture notes (i.e PPTs) so that they can at least follow them on their laptops. This also helps them to concentrate on the lecture not on their e-mail.
- Lecturing facilities: I know, this is minor but it effected the lecturing a lot: A dedicated "presentation computer/server" should be available in the class so that none of us has to worry about technical details of the presentation.
- During lecturing: Not allowing drinks to the class was not good idea (even though it was because of the regulation of the class for this ISYA); especially water should always be available during the lectures (both to lecturers and to students). Another "minor" organization problem (which we discovered right at the end) was music. (Soft) Music should be available during the breaks.
- Schedule: As I have stated in "Student Talks", schedule of the lectures has to be organized logically. Instead of asking the lecturers "how long do you want to lecture", all lecturing subjects have to studied and then ISYA should offer the lecturer "you have X slots to lecture on Y". This way:
* Hot topics of the ISYA year can be fit in to the schedule before the school.
* Depending on the ISYA country, some extra topics can be added to the schedule.
* Organizational matters - ISYA really needs a web site (MAIN) - And each "ISYA Local" needs a different web site too. (LOCAL). The MAIN site should serve all the "application" matters: rules, grants, previous schools, future schools, AND application forms (i.e ISYA application should be standard for all schools). The LOCAL site must deal with venue organizations, cultural activities, arrivals, departures, accommodation, and local information before-during-after the school, etc... i.e. LOC should be able to organize the school through the LOCAL web site (depending on the facilities of the LOC).

- Students needs more "free time": Besides the cultural activities, students should have "really" free times to relax, have fun and think about their future in astronomy. This can be done on Sundays: Free Whole Day (may be not on 1st Sunday).
- Lecturers vs Students. On this ISYA lecturers and students stayed in different places. We just couldn't make it! However, on future ISYAs, all possibilities should have to be tried before separating lecturers and students.

Sinan Kaan Yerli (SKY)

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I also noticed from sitting in the back that the students were so concerned and nervous about their talks that they spent much of the time not paying attention to the lectures, but rather working on their presentations. My suggestion to J-P was also to think of informing the students before the ISYA that they should develop a 10-min presentation on some subject before they come to the ISYA, and the student talks should be given late in the first week. This would allow a few days for each student to receive input from the lecturers about their presentation, and the students would then be free to concentrate on the lectures during the remainder of the school. The student talks are a good idea but they dominated the thinking of the students for the entire 3 weeks.

Robert Williams

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As a hosting country, it would not be easy for us to admit failures! Nevertheless, I believe ISYA-2008 was reasonably successful. The only point I may make is that many students worked on their presentations during lectures and read mails. In future ISYA programs, the accepted participants may be asked to prepare their presentations before the school, and time for e-mails and using internet can be scheduled into the school program. This may not be easily implemented but it may be useful to try!

Zeki

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Burnout is always the problem, we know that all along. Therefore, I added a photo session on the last day, I thought it would be a break for them.
In Chiang Mai, only some of the student presented talks.

Kam-Ching