ESO/UC-71
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DRAFT

Users' Committee

29th Meeting

Garching, April 11 and 12, 2005

Draft Minutes

Present were the UC members

Chairman:	L. Kaper	(The Netherlands)
Vice-Chairman:	P. Jablonka	(France)
	M. Bremer	(United Kingdom)
	M. Cappellaro	(Italy)
	N. Cardoso Santos	(Portugal)
	S. Feltzing	(Sweden)
	U.G. Jørgensen	(Denmark)
	S. Moehler	(Germany)
	P. North	(Switzerland)
	M. Tornikoski	(Finland)
	G. Van de Steene	(Belgium)
Excused:	W. Gieren	(Chile)

On behalf of ESO: J. Alves, C. Cesarsky, F. Comerón, O. Hainaut, A. Kaufer, B. Leibundgut, G. Mathys, M. Peron, D. Silva, J. Spyromilio, M. Sterzik

Public Surveys: M. Capaccioli, J. Emerson, F. Kuijken, W. Sutherland, D. Warren

Minutes taken by: A. Jordán

Secretariat: S. Almagro García

1. OPENING OF THE MEETING AND ADOPTION OF THE AGENDA

The Chairman, Dr. Kaper, opened the 29h meeting of the Users' Committee. The Director General Dr. Cesarsky welcomed everybody to the meeting, stressing the importance for ESO to receive input from the users' community. She pointed out that this is reflected in the fact that a perusal of last year's recommendation shows that the input is taken seriously and action is taken. Finally, she emphasized the importance and timeliness of the special topic about public surveys.

Dr. Kaper proposed that the draft agenda for the meeting be modified by extending the closed session (item 5) to 14:30. Dr. Cesarsky said that due to unforeseen problems she will unfortunately be forced to miss part of the meeting after 15:00. After the suggested modifications by Dr. Kaper the draft agenda was approved.

2. APPROVAL OF THE 28th UC MEETING MINUTES

The minutes of the 28th UC meeting were approved. It was suggested by Dr. Mathys that the presentations should not be summarized as they were last year, as it potentially leads to inaccuracies. It was agreed that the presentations will not be summarized and will be included in the Annexes. The meeting was then opened by Dr. Kaper.

3. REPORT FROM LA SILLA AND PARANAL OBSERVATORY

The presentation by Dr. Mathys is attached to this document (Annex 1).

While Dr. Mathys was reporting on EFOSC-2, Dr. Kaper asked what is the reason for its improved image quality. Dr Mathys answered that it was the result of the successful M2 upgrade on the 3.6m.

While Dr. Mathys was presenting on WFI, a member of the UC committee pointed out that complaints were received about the WFI manual being outdated. The reply stated that a new manual is about to be released and it constitutes a significant improvement over the previous one.

While Dr. Mathys reported on telescope usage a member of the committee stated a user reports where she/he was scheduled to use EMMI, and got something else due to technical problems: how does this situation gets reported? Dr. Mathys explained that this would not be reported as downtime. It was asked how many reports get lost in the system, quoting the fact that a report that should have been in the problem report sheet was not there. Dr. Hainaut answered that the system sometimes fails, and when a missing report is found it is put in by hand. The receipt of a report is always acknowledged by email. Last year the system was changed a few times, perhaps some reports got lost during the changes. Dr. Mathys pointed out that sometimes people do not submit because they fail to push the submit button.

Dr. Van de Steene asked if both AMBER and MIDI will be available with the Auxiliary Telescopes (ATs) in Period 76, to which the answer was that AMBER was going to be offered only with the UTs.

Dr. Kaper inquired about the reason for the higher technical downtime of the VLTI compared to the UTs, to which it was replied that the observatory is still learning how to run the VLTI properly. It was pointed out that the possible sources of failure are significantly higher than on other telescopes and it is not expected to get down to a 1% level.

The discussion moved to pipelines and Dr. Cappellaro noted that he would not state on the web that pipelines were available for cases such as fringing in the I-band. Dr. Kaufer said that when it says "full support" then all modes are supported and the mode Dr. Cappellaro refers to is not. Full support is available for VIMOS, VISIR, and FLAMES. Dr. Cappellaro continued by noting that fringing is the hard thing and that pipelines should do them (not just easy things such as flat-fielding, etc). Dr. Kaufer said that there is info on the web for all modes, and for each one of them what the pipeline does is described.

Dr. Bremer said that for FORS2 it would be good if users got the raw data rather than just the quick look after the observations. Dr. Mathy added that the users get the raw data already. When a real good reduction is needed quickly this would be useful. Dr. Silva answered that the question was about data delivery and that in service mode it is necessary for the data to be delivered to the archive and users can get their data as soon as it gets to Garching. Dr. Bremer remarked that this takes two weeks. Dr. Silva answered that that the reason for this delay is due to bandwitdth. The data actually has to be physically transported to Garching. He added that ESO is working on a solution and that by the end of the year it is likely that a dramatic improvement will happen. Further discussion on this point was deferred to the afternoon.

Dr. Kaper asked if the ratio of service and visitor modes was driven by users or by manpower limitations on the mountain. The answer was that it is a reflection of the demand of the users and filtering by the OPC. There is some shifting between the two modes done to achieve some balance and an attempt is done to limit the amount of service observing in order to achieve a 60/40 ratio in the distribution of the time between service mode and visitor mode, as targeted in the VLT Science Policy document.

4. PROPOSAL SUBMISSION AND TIME ALLOCATION

The presentation by Dr. Alves entitled 'First view on P76' is attached to this document (see Annex 2).

Dr. Alves presented a new tool (Electra) to browse, search and make connections among the hundreds of proposals an OPC member receives. Dr. Kaper asked if OPC members will have access to this tool including ranks after they are assigned, to which Dr. Alves said yes although the final rank is only available after the OPC meeting, that is, after Electra is released. Dr. Kaper asked whether OPC members will still get the printed proposals. Dr. Alves answered negatively. The OPC members have to print the proposals themselves if so wished and ESO pays for the printing costs.

Dr. Moehler asked if it is possible to perform examinations across different panels to which Dr. Alves said that this is indeed the case.

ALMA STATUS REPORT

The presentation by Dr. Wilson is attached as an Annex 3. He emphasized the plans for the ALMA regional centers.

Dr. Silva pointed out that the meeting in Socorro, New Mexico, is crucial to get the sequence of activities in Chile right. Once antennas start arriving there will be frantic activity, with antennas eventually arriving at the rate of one per month.

Dr. Cesarsky pointed out that estimates for antenna costs are increasing and this increase has been determined by the global rise in commodity prices.

Given that the meeting was running late, Dr. Kaper proposed that Dr. Wilson finish the presentation after the closed session.

5. CLOSED SESSION

(continuation of Dr. Wilson's talk)

Dr. Kaper asked if there would be an ALMA regional center (ARC) in Europe and one in North America. Dr. Wilson said that this is correct, and additionally there will probably be one in Japan. He additionally pointed out that Chile expressed interest in hosting one, but they would need to find their own funding for it.

Dr. Silva pointed out that there will be a center in Santiago where data are processed and then sent to the regional ARCs. There will be lots of data (0.5 Tb/day). He stated that the people working in this center in Chile would be part of the ALMA observatory and report to the observatory director. Dr. Kaper enquired about the source of the funding for those people, to which Dr. Silva answered that this is yet to be determined.

Dr. Warren asked if the plan is for the users to never have to reduce the data. Dr. Silva said this is a controversial topic and there is significant concern on this point. It is feared that if only processed data are delivered one might end up discovering the 'glitch of the day'. The community wants to have access to u-v data. ALMA will provide the u-v data and the software to process it starting with the early science. Dr. Warren asked if it was going to be like HST. Dr. Silva said that it will be more like Chandra/Spitzer.

Dr. Kaper asked how much more involved are reductions as compared with VLA data. Dr. Silva explained that mm, higher frequency data are much more difficult to calibrate. Dr. Bremer stated that some undergraduates can obtain calibrated u-v data and this makes him concerned that perhaps outsiders see the reductions of mm data as too complex while it really is not so bad. Dr. Silva said the project was committed to delivering the software for reductions.

Dr. Kaper stated that clearly getting ALMA running is a major effort, and he asked if there is a pessimistic and an optimistic scenario regarding deadlines. Dr. Wilson replied that a realistic timeline is 18 months later than the official one (i.e., start on mid 2009). Dr. Silva pointed out that the original timeline of Oct 2007 was based on assigning a contract for the antennas in the middle of last year.

Dr. Kaper asked if there is a risk of de-scoping the project due to the increased antenna costs. Dr. Wilson said that the SAC had asked the project to determine the minimum

number of antennas scientifically acceptable. The answer is 50 antennas. Measurements have to be done in fairly short intervals due to weather. The VLA can perform with fewer antennas because it works in the centimeter, alleviating atmospheric effects.

Dr. Bremer asked how ALMA is going to interface with the virtual observatory (VO). Dr. Wilson said that the project asked for money to fund such an aspect but was rejected. Dr. Silva commented that ALMA will interact with a VO interface, if available. The fundamental question according to him is how much do new projects have to spend in solving VO issues? He believes it is up to the VO to provide solutions.

6. TOUR DE TABLE

The tour de table discussion this year was prepared by the UC member in closed session. The different topics were discussed in turn.

PIPELINE (data reduction software)
Dr. Kaper started by stating that there were two levels of the discussion. The first refers to an action item of last year: which pipelines are available, and for which modes. Some seem to be delivering, but some are not. What the users want to know is up to what level the pipelines deal with the data. The second point is the following: in an ideal world the pipelines would deliver science ready data. Some groups have developed pipelines/software which are not available to the whole community. The UC believes that there should be a way to officially share privately developed pipelines and that ESO could take this role.

Dr. Silva asked the UC members if any of them had read the article published in 'The Messenger' by him and Dr. Peron. There were no positive responses. Dr. Silva remarked that this is a problem, as ESO made an effort to discuss the pipelines in that article and it would be difficult to discuss pipelines without this background information. In the article they explicitly asked the community for feedback.

Dr. Kaper responded by saying that actually the effectiveness of The Messenger to communicate with the community was one of the topics to be discussed. Dr. Silva offered to provide the URL where the article can be downloaded. Dr. Bremer stated that if he remembered correctly the article described the modes for which pipelines exist, but what the UC members would like to know is what the shortcomings are. Dr Silva replied that this was described in detail. He mentioned that on the data flow webpage a wealth of information on the details on how the data are processed is provided, and a lot of effort has been put in to improving the level of details. Dr. Cappellaro claimed that the information is hard to find, to which Dr. Silva observed that they had not received feedback. The data flow group works with the users, but the amount of questions is small. Dr. Cappellaro said that perhaps most users do not feel they can ask, to which Dr. Moehler said users can always write to USD. Dr. Silva agreed, saying that Dr. Comerón forwards emails that deal with data reductions to his group.

Dr. Bremer expressed concern that he had read the Messenger article and not remembered, saying that perhaps it should not be in the Messenger but on the website. Dr Silva said that

it is available on the website. Dr. Peron added that the issue of the webpage was discussed by the UC the previous year. The SINFONI pipeline is already there, and a description of what is not being done. She said they would love to add more information if they received feedback. Dr. Moehler suggested that it would be good to add a link in the instrument description; however this is already the case.

It was suggested to check out the web page right now. Dr. Leibundgut said that USD will direct any requester to the right webpage. Dr. Silva added that the information had been available for a long time, albeit not always in a transparent way and mentioned that the clarity has improved.

Dr. Kaper said that UC members had polled their committees a poll a month ago, and users always return with this request, so it is apparent that the information has to be communicated more effectively.

Dr. Peron explained that for GIRAFFE there wasn't a pipeline initially but for VISIR and SINFONI they are planning to do so. She remarked that pipelines have to be tested with data on Paranal, and the aim is to release the pipelines before the end of the period. Dr. Silva said that this time they have pipelines running as the new instruments are beginning to operate, and that they will release the software to users to use if the wish so. Dr. Peron added that simultaneously with developing new pipelines they are trying to improve existing ones.

Dr. Silva asked rhetorically the following set of questions: Is ESO doing an optimal job? – No. Are we better than before? – Yes. Do we need to communicate effectively and get more feedback? – Yes. He stressed that the initial mandate was only to provide data quality control.

Dr. North asked if one could specify what are ESO's goals regarding the pipelines, and specifically to what level will the data be science ready. Dr. Silva responded that this was a hard question and that he believed each individual project had its specific needs. Imaging, which is simple, is working science ready. Spectroscopy is more difficult and the answer depends on what you want to do. The VIMOS pipeline can give a redshift easily. However, not all needs can be catered and the foal has to be to provide the user with the appropriate tools.

The UC added that the question of what can be expected from ESO is a very common one and that it is good that the users can expect generically science ready data. Dr. Leibundgut remarked that it is the users who sign the publications and it is the astronomers' responsibility to make sure data are scientifically sound. ESO provides pipelines because it is believed to give Europe an edge, while ESO recognizes the importance of pipelines the resources are limited and as much as can be done is indeed done. Dr. Silva added that for example VIMOS had been given priority over FORS MXU. Also, already having the calibration data ready is a step forward in getting close to science ready products.

Dr. Jablonka asked if it would be possible for ESO to provide links to instrument consortia who have developed a pipeline.

Dr. Silva stated that if ESO provides a link then it had to take responsibility. Dr. Leibundgut further explained that people that have pipelines often do not want to post them because they do not want to support users.

Dr. Warren enquired about the pipeline policy when an instrument is commissioned. Dr. Spyromilio said that the VLT began with the policy for pipelines to be only for calibration, not for final reductions. Pipelines do exist at time of commissioning. The attempt is to do more sophisticated things as experience is gained. Dr. Warren said that HST & Spitzer provide science ready pipelines, but ESO does not do one thing or another. Dr. Silva said that the software has always been released to the public, previously as MIDAS packages. Now the pipelines are being released in CPL. Dr. Warren said he appreciates ESO's efforts, but that it is dangerous when a policy is lacking. Dr. Silva replied that the policy is that pipelines are for calibration.

Dr. Van de Steene said that before ESO used MIDAS and now the actual pipelines are the way ESO can provide the reduction software to the users. Dr. Silva remarked that MIDAS is frozen to which Dr. Van de Steene said that that is precisely the reason why delivering the pipelines is important.

Dr. Kaper finished by noting that life is a matter of priorities and that independent of the actual official policy, providing science ready pipelines comes closer to what the users want.

DATA DELIVERY
The issue with physically transporting the data has already been discussed.

POLL
Dr. Cappellaro presented a web site with a questionnaire for users to give feedback. Roughly 300 answers were collected and were subsequently summarized.

In general the users seem to be expecting more from the general services provided by ESO but for other things the rankings were positive, especially regarding instrumentation.

Regarding ESO facilities La Silla is still very much sought and there are good expectations for ALMA. Approximately 50% of the users think that the VLTI will never become important for their scientific needs.

Regarding public surveys: the experience with previous surveys was not too bad. The users are concerned that most of the time on small telescopes will be used for surveys. The exception was the UK, where users want approximately 75% of the time for surveys. Few users think public surveys should be in the business of publishing, they want them to deliver well calibrated data along with data mining tools. Dr. Bremer emphasized that people want to mine data. Dr. Silva noted that this is an example of a mismatch between people's expectations and ESO's commitment, as people want something in line with 2MASS or Sloan.

Dr. Cappellaro continued saying that most users want improvement of pipelines for public surveys.

Users complained that service observing is not flexible, but are happy with the current setting. They are in particular unhappy with the restriction of 1 hour length observations. They would like more possibilities to change observations after the first ones are performed. People think that the UC is useful.

Dr. Comerón remarked regarding the rules for observing that actually waivers are frequently granted. He stressed that the USD wants to make sure that people understand what the consequences of relaxing the rules are and it is expensive to do so: fewer programs would be completed. Dr. Cappellaro said that for VIMOS one often needs longer observations than 1 hour but that at the need people accept these constraints. Dr. Moehler said it would be nice if P2PP could check overheads already in phase I. Dr. Comerón answered that that would be hard because many instrument packages are needed to run in parallel and as instrument packages get updated the risk for making a mistake is increased.

Dr. Kaper rounded up the topic by saying that it is very useful to have the website for user feedback and that getting this feedback is the responsibility of the UC.

COMMUNICATION WITH PUBLIC

Dr. Kaper said that every time he asks about communicating with the community, a comparison is made between ESO and HST. He asked if it would be possible to communicate with ESO users via email to reach them more effectively. For that purpose obtaining an email list of ESO users would be necessary. Dr. Alves replied that this was touched upon and it was decided that the UC should do this. Dr. Kaper said that this would be nice and Dr. Alves suggested that this be put as a recommendation.

Referring to the risk of emails being seen as spam, Dr. Warren remarked that users are tolerant to informative emails and that using the Messenger to communicate with the astronomical community is not enough. The UC feels ESO should push information to the users more regularly. Dr. Alves reiterated that this was discussed last year and it was not recommended in the end. Dr. Warren said that one aspect not realized by ESO is that people tend to use it as a black box and do not think of interacting. Dr. Leibundgut rounded up by saying that this issue needs to be dealt with by ESO's management.

VLTI

Dr. Kaper recalled that during the last UC meeting the VLTI was the special topic. Users seem to indicate that the VLTI is not their highest priority. He asked if there is anything to report on this point.

Dr. Leibundgut said that there was a VLTI workshop in Garching and that it had a good attendance. He added there certainly exists a community that uses VLTI but that perhaps it is not well represented in the polls.

There was no more discussion as it was not brought up by the users.

SCHEDULING/semester start

Due to TATOO scheduling might take less time than before. It was suggested by the UC that perhaps ESO could start the observing semester a month earlier that the proposal

deadlines, in order to alleviate the issue of proposing deadlines simultaneously with respect to the scheduling periods. The latter is because by being simultaneous there is no time for users to see their data and assess potential follow-ups. Can this be changed?

Dr. Leibundgut said that it would be hard but it can certainly be considered. Dr. Spyromilio said this issue had come up before. He suggested that TATOO should be run a couple of periods and then ESO should return to this issue once the reliability has been well tested.

POLARIMETRY

The UC inquired whether polarimetry continued to be offered. Dr. Spyromilio said that when FORS1 is retired, its polarimetric module will be moved to FORS2, since given the interest on polarimetry by the community the intention is to keep offering it. Dr. Kaufer added that it will be a long time until X-shooter comes on line.

HARPS

The UC pointed out that no Iodine cells are offered anymore and asked if they will be installed again as many users wanted them. It was answered that all cells are broken. The process to get new cells which do not burn and thus do not risk the instrument has just started. Dr. Bremer said that many users are anxious as they do not trust any other method. Dr. Kaufer pointed out that UVES has Iodine cells and is thus a useful alternative. Dr. Spyromilio remarked that HARPS is a special instrument and that the zero base specification of the instrument is without Iodine cells. Dr. Warren asked why the cells burn in HARPS and not in UVES to which the answer is that they are produced by different manufacturers and that their physical installation in the instrument is different.
Dr. Bremer said that the user's view is that HARPS is a private instrument.

(NON) SCHEDULING OF HIGHLY RANKED PROPOSAL

Dr. Jablonka said that users should be able to trace back why an accepted proposal could not be scheduled. Dr. Alves answered that the OPC receives a list of recommended proposals which could not be scheduled and the reason why.

ARCHIVE

A user tried to use the archive for FORS data. He complained that there were no observation logs and no finding charts. He asked ESO and he received as a reply that he couldn't have those products. Dr. Silva said that it was dangerous to extrapolate from one user. He added that it is not completely clear what is appropriate to pass on from the proposing phase to archive users because of proprietary information. Before finding charts were not ingested, this has changed now. An attempt is being made to capture more data to pass on to the archive user.

SAMPO

Dr. Kaper asked if ESO wanted to comment on SAMPO, of which he had heard of privately. Dr. Peron answered that SAMPO is an environment for data reduction. The motivation is that users are not happy with jumping from one package to another to do their work. An attempt is being made now to set the requirements and deliver prototypes for a general and flexible reduction environment. She remarked that more should be heard on this at the next UC meeting as the project just started in January. She stressed that the

community will be kept informed and the SAMPO project will present their results in ADASS.

7. OLD ACTION ITEMS AND RECOMMENDATIONS

Old Action Items

The old action items c, d, e, f, g, h, i, j were closed.

a. It should be made known to the user for which observing modes, pipeline procedures are available, what the pipeline does and, if applied, what calibration accuracy can be achieved (from last UC). *This item was discussed previously. There is information available about the pipelines and ESO will continue to provide it*.

Sided mark for action item (a) – the UK values the Messenger article. This was not noticed by the UC and this fact is addressed by a new recommendation (c).

b. The FIMS tool should become more user-friendly to define a large number of masks. The frequent users' solution (cf. the UC fact sheets of The Netherlands of 2003) should be evaluated (from last UC). *This action stays on the list for next year.*

d. The external internet connection from La Silla and Paranal should be considerably improved, both with respect to speed and stability. *Dr. Alves remarked on this point that ESO's IT manager (G. Filippi) was contacted and the problem is now solved. Dr. Spyromilio said that there are now upgraded links of 2 and 4 Mbit/s and redundant connections. The cost of 8 and 4 Mbit/s land lines instead of satellite links is being looked into. This item was acted upon.*

e. The possibility for a visitor instrument focus on the VLT should be removed from the CfPs, as long as there is a lack of manpower to accommodate such an instrument. *There were visitor instruments coming to UT3 in Period 75. More visitor instrument runs are expected to be accepted in forthcoming periods.*

f. ESO should notify the PI's of accepted proposals in SM if an unexpected problem with the telescope and/or the instrument appears, and they need to stop the observing queue for the given instrument and/or telescope. *Dr. Comerón remarked that there were no more similar situations as the one that created the comment, but at comparable ones the PIs had been contacted.*

j ESO should better clarify on the web the whole procedure from Phase I deadline, over the OPC procedure up to the final scheduling. Items that many users are unaware of, are the selection of the OPC panel members, the final recommendation of the OPC and the final scheduling of the proposal. *This information is available since P75 on the ESO web as a PDF file (in http://www.eso.org/observing/p75-accepted.pdf and http://www.eso.org/observing/p75-statistics.pdf)*

Old Recommendations

Recommendations b, c, d, e, h and j are closed.

a. It should be made known to the user for which observing modes, pipeline procedures are available, what the pipeline does and, if applied, what calibration accuracy can be achieved. *Discussed in previous sessions. Will be included in the new ones.*

f. ESO should notify the PI's of accepted proposals in SM when an unexpected problem with the telescope and/or the instrument appears, and they need to stop the observing queue for the given instrument and/or telescope. *This item will be included in combination with the email issue.*

g. It should be made sure that there is a data reduction package available at the telescope for each instrument that allows checking the data quality on site. It doesn't matter whether or not the package satisfies yet the ESO standards (e.g. 2003 the FLAMES package was available but only on the Geneva site, and not implemented at the telescope, making extremely hard to get an idea of the S/N ratios obtained). *J. Spyromilio is looking into this.*

i. Details of the OPC statistics and the telescope time availability/usage should be published clearly on the web at the same time as the web letters are sent out. A link to the statistics page should be included in the web letter. *Statistics are now available since P75 but they are published on the web immediately before the beginning of a Period and not immediately after the release of the schedule (because changes occur after the release of the schedule).*

The UC thanked the ESO staff for implementing most of the recommendations. Right hereafter the closed session begun.

8. SPECIAL TOPIC - LARGE PUBLIC SURVEYS

After a late arrival due to problems with the taxis, Dr Kaper apologizes for the delay and opened the day.

Dr. Warren presentation

Dr. Warren gave a presentation on the UKIDSS Infrared Deep Sky Survey (UKIDSS). His presentation is attached (Annex 4).

Dr Moehler asked about the data products from the survey. Dr. Warren explained that the data products will be catalogs with 80 measured parameters for each objects and images. It will be similar to the Sloan Digital Sky Survey. To find out about the access procedure he invited Dr. Moehler to look into his Messenger article. The raw data goes into the ESO archive immediately.

Dr Cesarsky asked which surveys had been started. Dr. Warren replied that all of them, and that they are concentrating on a 2 year plan which is advertised on the web. There is an emphasis on equatorial fields to allow VLT follow up, so the survey is being started "at the bottom". Dr. Cesarsky asked if in August it was planned to release a portion of every survey. Dr. Warren said that they plan to release everything observed in the period April-June. The survey will start rather shallow in order to build area quickly.

Dr. Leibundgut remarked that the Y filter is not the same as in other projects. Dr. Warren asked which projects and if he is aware of other Y filters being used. He said that the hope is that people will follow UKIDSS. Dr. Leibundgut said that CTIO has a different Y and that he foresees confusion due to this. Dr. Warren said that they optimized their Y for the science objectives. Dr. Leibundgut asked if the survey would have enough depth to find z=7 quasars. Dr. Warren said that numbers are easy to compute accurately, expect 1.4 in 1000 degree squared up to Y=19 mag. Numbers double every 0.5 mag you goes deeper.

Dr. Sutherland presentation

The presentation by Dr. Sutherland, project scientist of VISTA, is included in the Annex 5.

Dr. Cappellaro remarked that VST and VISTA will be very useful for studying variability, but he thinks that variability is not dealt well with by large surveys. He said many science cases need real time processing and asked whether this will be possible. The reply was that several variability projects have been proposed, but mostly in the visible. It was said that the question of real time processing was raised and it is possible for the users to come to Paranal and reduce their data in real time. In short, if the user wants to do it they are enabled, but it won't be provided by the project.

Dr. Warren emphasized the importance of having a Z filter and asked if Dr. Sutherland could estimate how much faster VISTA would be than VST, to which the answer was probably a factor of a few, 4 to 5.

Dr. Bremer said that in any given night observing conditions can vary significantly and asked if any monitoring of the sky is planned. He added that the decision of which band to observe at any given point could be decided based in this information. Dr. Warren said that WFCAM monitors in J.

Dr. Capaccioli presentation

The presentation by Dr. Capaccioli, project scientist of VST, is included in the Annex 6.

Dr. Moehler was confused by the timelime, as it was stated that mirrors would be ready by late August but acceptance was before that. Dr. Capaccioli said that the mirrors are not necessary for acceptance. It will be done with a dummy mirror.

Dr. Kuijken presentation

The presentation by Dr. Kuijken is included in the Annex 7. He presented on the plans for OmegaCam GTO Time.

Dr. Spyromilio asked if when doing the sensitivity calculations a distribution of "seeing" is assumed or just the median is taken. Dr. Kuijken said that some of the programs are specifically geared for bad seeing.

Dr. Moehler asked if the consortium planned to make the data reduction software publicly available to which Dr. Kuijken said that this is indeed the case.

Presentation by Dr. Renzini

The presentation by Dr. Renzini is included in the Annex 7. Dr Renzini presented on 'ESO Public Surveys'. Procedures for public surveys can be found on the ESO website http://www.eso.org/observing/ESOPublicSurvey.pdf

Dr. Kaper asked for the link between the OPC and the PSP (Public Survey Panel). Dr. Renzini said that there is no link, the PSP optimizes the proposals and then they go to the OPC.

Dr. Jablonka asked for the difference between a Public Survey and a Large Programme. Dr. Renzini answered that a large program is just accepted or rejected by the OPC as it is. Being submitted to the OPC, there is no chance to coordinate or optimize different programs. In particular, the issue of the RA distribution of program targets has become important in this respect. The two step procedure has been designed to avoid these problems.

Dr. Kuijken remarked that large programs come with a commitment to deliver reduced data. Dr. Silva added that large programs should also provide data products. Dr. Cesarsky said that there are differences between large programs and public surveys. For the former, they are requested to deliver data products but they still have a proprietary period. For public surveys there is a clearly defined timeline. Dr. Renzini added that also for public surveys the raw data become publicly available immediately. Additionally, the nature of the data products is agreed in advance.

Dr. Emerson asked what precisely is meant by public (i.e., ESO member states, worldwide?). Dr. Renzini said that the ESO archive is available worldwide. The policy for public surveys has not yet been decided, especially for the products (catalogs). He added that in principle one could think that the products should stay within ESO member states, but it is probably not practical as users would get around this restriction.

Dr. Warren stated that 'products' as defined at the moment are catalogs and images but noted that the useful thing is to have them query-able. He suggested that perhaps the products could be ingested by the Edinburgh archive. Dr. Renzini replied that there is a VO group at ESO and that the ingestion of data products for Public Surveys is a primary goal of that group.

Dr. Cappellaro asked what the expected time was remaining for normal programs. Dr. Renzini replied that VST has been conceived to carry out surveys. He specified that 40% of the time goes to GTO, 10% to Chile. For the remaining 50% a balance has to be found and it is a role of the OPC to find this balance.

9. GENERAL DISCUSSION ON THE SPECIAL TOPIC

Dr. Kaper started with a short statement on EIS. Even though the purpose of this meeting is too look into the future rather than into the past, the UC wonders if ESO performed an evaluation of EIS. Dr. Cesarsky answered that a review had taken place but the report is not ready yet. She added that one of the things ESO has learned from EIS is that ESO can't take responsibility for creating data products.

Dr. Kaper put the issue of at which level will the data be disseminated to the public under discussion. He offered the example of UKIDSS that provides query-able databases with measured parameters: do we want this for all Public Surveys?

It was also suggested that surveys should be publicized more aggressively than just on the ESO website and the Messenger.

Dr. Cesarsky suggested that it would be possible to prepare talks and give them as invited colloquia as was done for ISO. Dr. Moehler said that another possibility is to inform through emails and announce which Public Surveys are underway. The issue of the danger of too many emails was raised again, but extra informative emails at the level of one per month seem to be appropriate.

Dr. Kaper brought the discussion back to the Public Surveys and asked if it would be possible to query all Public Surveys. Dr. Quinn said that as of STC recommendation all large projects are obliged to return data products. These will the best resources for the VO in the future. He added that ESO is trying to give clear guidelines on how to prepare data and distribute that through the ESO archive. There will be a query-able form and the plan is to deliver a consistent and uniform level of products.

Dr. Warren asked under the supposition that the VST surveys are already done: what is the timescale on which these data can be queried in a way similar to SDSS? Dr. Quinn said that the timescale for the data with all the connectivity to be up would be months, not years. Dr. Warren remarked that posting a list of objects in one band is not enough (e.g., you want non detections (dropouts), upper limits, etc). Dr. Quinn said that ESO will not do anything to the data products returned by the groups. The data would be query-able and match-able through the VO tools. Dr. Warren said that users view data products as images and catalogs. Dr. Quinn said that they want from the groups the final scientific results in the papers.

Dr. Renzini said that for the example Dr. Warren made (dropouts), if the survey had the identification of dropouts as a science objective then they will be in the data products.

Dr. Warren asked the PIs of Public Surveys what they understood they have to provide. Dr. Kuijken said that their plan is first to provide catalogs in every band and as a second level they will provide multi-band catalogs. Dr. Renzini said that if the UC makes a recommendation regarding the nature of data products it can be implemented.

Dr. Emerson asked to what extent ESO members get access to intermediate products.
Dr. Quinn replied that ESO has to decide with the teams and decide which elements are usable by the community.

Dr. Bremer noted that perhaps he would like to use VST to select a photometric sample in a different way than specified initially. He added that there needs to be uniformity on all data products that come from the same camera. Dr. Quinn agreed, and added that they are working on guidelines to this effect.

Dr. Bremer went back to the dropout examples, noting that he will clearly not be interested in doing that with the catalogs. Dr. Renzini noted that the dropouts in this case would be additional products over other catalogs.

Dr. Kaper interrupted the discussion and enquired about the possibility of putting the data in Edinburgh. Dr. Warren said that the discussion has clarified this issue: if indeed the timescales are of order of months, then this is satisfactory. He noted that in any case not much effort is needed to ingest data at Edinburgh.

Dr. Emerson said that there were several proposals for VST that proposed to develop their own archives. He remarked that there could always be potential science in the intermediate products, not everything is in the final products, and that this is addressed by the Edinburgh archive. Dr. Quinn said that this issue needs to be addressed survey by survey.
Dr. Renzini added that one can't wait for the data to be perfect for it to be released as this implies too large a delay. On a survey per survey basis one could identify intermediate products that could be released for prompt exploitation.

Dr. Kaper stated it is important to know the details of the surveys in order to extract science. Dr. Renzini replied that the approved proposals will have the survey parameters precisely defined and posted. The data collection strategy will also be posted to some extent (e.g., sampling for variability). Dr. Kaper added that it would be convenient to be able to submit normal proposals that expand Public Surveys, for example if the data are too shallow for a particular application, and for that the information has to be public.

Dr. Bremer said that the UK understands what survey astronomy is about and that he believes that a large fraction of the ESO community is not up to speed on this point. He stressed that this is a fundamentally new way of doing astronomy. He thought that it is a good idea to have traveling colloquia, but that just as important is the task of pushing the survey information on the web, as it is absolutely key that the community exploits the surveys effectively.

Dr. Cappellaro added that at the moment the community sees these surveys as large programs rather than Public Surveys and thus they need to be convinced they will be

useful. Dr. Bremer added that for this purpose the fashion in which the information on the web is managed is crucial.

Dr. Warren said that it is desirable to start the VISTA process as soon as possible and Dr. Emerson asked what sort of timescale ESO had in mind for the VISTA process. Dr. Renzini answered that the assumption is that the telescope would start in October 2006 so if the commissioning is before mid 2006 there is formally a 6 month head start. Dr. Emerson asked if there will be an Announcement of Opportunity. Dr. Renzini said that they need to have the process on Public Surveys ready at least 6 months before the starting date and that they have to advertise the Public Surveys in the Call for Proposals. Dr. Warren noted that an even earlier head start would be desirable.

Dr. Bremer asked what are the guidelines to the OPC regarding the VST. He thought VST would be better used as a survey telescope and that it is likely that the OPC has a preference for shorter runs. He asked how this likely mismatch will be dealt with. Dr. Cesarsky said she expects that there will be many short proposals as there is a demand in the community for this (e.g., WFI). Dr. Renzini noted that the experience with WFI in this respect is negative. He said that they have had ~600 proposals and only ~30 papers have come out. This situation should be avoided with VST. He stressed that this is a new way of doing astronomy and that it is a great opportunity for the whole community.

Dr. Cesarsky noted that the demand for small programs in WFI decreased dramatically in the last year and the UC wanted to know the reason. Dr. Renzini said that probably they got saturated with unreduced data. Dr. Moehler asked if bigger programs produced more with WFI. Dr Renzini said that there was to his mind one really successful program with WFI: COMBO 17, which was done with GTO time, and one could argue for perhaps 10 more programs. Part of the EIS has been useful (especially pre-FLAMES). Overall, he would say that indeed it is true that bigger programs published more. Dr. Moehler asked if it is possible that small programs could not deliver because they did not have the appropriate tools (software). Dr. Renzini said yes.

Dr. Kaper closed this session, and pointed out that it has been a very well timed topic.
Before going to this year's recommendations and action items, he said that it had been rewarding to be chairman of the UC and that seeing the action list from last year he sees that the UC recommendations are taken seriously.

10. ACTION ITEMS AND RECOMMENDATIONS

Action Items:

a) The FIMS tool should become more users friendly to define a large number of masks. The frequent users' solution (cf. the UC fact sheets of The Netherlands of 2003) should be evaluated (from previous UC meeting).

b) An ALMA progress report should be included in the agenda of the UC meeting, under item "Report from the Observatories".

c) To contact effectively the users' community, the UC wants email addresses of their national PIs of the last four semesters in advance of their meeting.

d) UC presentations delivered at the UC meeting should be made available to the community through the ESO UC web pages.

e) Recognizing the efforts by ESO to provide science ready data for all instruments and modes, we recommend that this should be called ESO policy, not just a goal.

Dr. Renzini commented that it would help ESO if instead of saying "all modes" the UC could provide a prioritized list of modes. Dr. Leibundgut remarked that he finds the point hard to understand as he does not know how to qualify the statement: there will always be a user who can't be catered to. Dr. Jablonka said that if consortia have pipelines they should be made available and Dr. Moehler added that what the UC means is for ESO to provide packages, not necessarily pipelines. Dr. Quinn ended this discussion by noting that ESO is working in that direction.

Recommendations:

a) To simplify browsing through the ESO web pages, the UC recommends to delete old and redundant pages and links from the web (from last UC).

b) The UC recommends that ESO acts as a central coordinator of all initiatives in the member states, to make interferometry a general user technique. The UC recommends the integration of dedicated web pages to disseminate scientific results of the VLTI and interferometry in general. The UC recommends also that ESO plays a coordinating role in the organization of dedicated schools on VLTI in general and on specific VLTI data reduction in particular (from last UC).

c) ESO should provide dedicate software to reduce ESO data from the various instruments.

d) Email notification of new information available at the ESO web pages (Call for Proposals, availability pipeline instrument mode) will contribute to a better communication between ESO and its users' community.

e) The email addresses of Co-Investigators should be entered in the ESO proposal form.

f) ESO should investigate the possibility of shifting the proposal submission deadline with respect to the start of the new semester, such that a potential applicant has time to examine fresh data and can decide whether to apply again or not.

11. ANY OTHER BUSINESS

Dr. Kaper announced the new Chairwoman, Dr. Jablonka, and the new Vice-chair, Dr. Feltzing. He pointed out that given the overall low number of female astronomers, it is great to see both UC chairs to be female. He thanked other members of the UC, in particular Dr. Cappellaro and Dr. North, emphasizing that it was a pleasure working with them.

12. FINAL REMARKS BY THE DIRECTOR GENERAL

Dr. Cesarsky said that the meeting this morning on Public Surveys was important and that the special topic at the UC meeting is becoming a key aspect of it. She thought that to raise awareness of the surveys is crucial, and that it would be great if the UC members can transmit this back to their countries. She thanked Dr. Cappellaro, Dr. North and Dr. Kaper. She finished saying that ESO will try its best.

After this, Dr. Kaper closed the meeting.

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