

A NEW START FOR PUBLIC SURVEYS

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With VST and OmegaCam nearing completion it became urgent to define new procedures for the most efficient exploitation of these survey facilities, also in view of the VISTA infrared survey telescope expected to join the Paranal Observatory in 2007. Moreover, even before VISTA, the UKIDSS project (Warren 2002) will provide the ESO community with major infrared surveys that may be in need of an extensive optical counterpart.

The issue was extensively discussed at the dedicated ESO Workshop on "Large Programmes and Public Surveys" that was held in Garching in May, 2003 (see Wagner & Leibundgut 2004, for a summary of the Workshop). A set of guidelines emerged from the discussion which are worth summarizing here again.

Public Imaging Surveys ought to be conducted with the widest direct involvement of the community and should comply with the following guidelines:

- Ensure scientific excellence, enabling competitive research by ESO community on frontier scientific areas;
- Provide a continuous supply of scientific targets for the instrument complement of the VLT/VLTI;
- Ensure that the set of implemented surveys covers the main scientific areas being actively investigated by the ESO community;
- Ensure the optimization of each survey for both primary and other possible scientific exploitations of the same data set;
- Ensure a balanced distribution of survey targets over right ascension, so as to avoid scheduling congestion at the survey telescopes and at the VLT/VLTI;
- Ensure optical/near-IR coverage of sky areas covered by complementary ground and/or space facilities at other wavelengths and which data are publicly accessible to the ESO community;
- Ensure coordination between optical and near-infrared surveys.

To properly match UKIDSS and VISTA surveys it is anticipated that VST will have to dedicate to large surveys a fraction of its total time comparable to that dedicated by VISTA (75%, according to the ESO/UK Agreement).

On the basis of previous experience, it was expected that several surveys will have to be implemented in parallel, so as to explore a variety of depth, area, multi-band, and galactic latitude combinations, while avoiding excessive concentrations at specific right ascensions.

It was soon recognized that the normal procedure for ESO proposals (with teams in the community directly submitting proposals for OPC evaluation) could not ensure the scientific and scheduling coordination that is indispensable for a most efficient utilization of the telescopes. An intermediate step was then envisaged in order to ensure that any given survey could serve the broadest possible range of scientific applications, that a proper balance is maintained among the various scientific areas, and that the resulting set of surveys is distributed as uniformly as possible in right ascension.

Following these guidelines ESO submitted to the STC a document describing the new "Procedures for Public Surveys". The document was then discussed in depth by a Working Group jointly appointed by STC and OPC. The final document was approved by the STC in April 2004, and is reproduced fully below.

It was also recognized that the completion of a survey and the timely delivery of its science grade products (co-added, mosaiced and photometrically and astrometrically calibrated images, catalogs, etc.) is a major undertaking, especially in terms of human resources. It appeared that a team would be more likely to embark in such an

effort for the benefit of the community, if there was a clear perspective of scientific follow up at the VLT/VLTI. As a result, the new procedures foresee that a team proposing itself for carrying out a survey can also submit to OPC a proposal for the scientific follow-up at the VLT/VLTI, which will be evaluated jointly with the survey proposal. Such a procedure will both help motivating the team, and ensuring that the survey products comply with their scientific specifications.

Before proceeding to appoint the Public Survey Panel (PSP), ESO issued on September 15 a call for "Letters of Intent" for public survey proposals. Teams intending to submit such proposals will be asked to provide a succinct description of the survey, including its scientific objectives and a brief description of the observations. With this information in hand ESO will then proceed to appoint the PSP members, making sure that the PSP scientific expertise will match the whole range of astronomical applications of the surveys to be proposed.

REFERENCES

- Wagner, S., & Leibundgut, B. 2004, ESO Messenger, 115, 41
Warren, S. 2002, ESO Messenger, 108, 31

PROCEDURES FOR ESO PUBLIC SURVEYS

A Public Survey is understood to be an observing programme in which the investigators commit to produce and make publicly available, within a defined time, a fully reduced and scientifically usable data set that is likely to be of general use to a broader community of astronomers. The practical implementation of Public Imaging Surveys will proceed as follows.

1. ESO will periodically issue a "Call for Public Imaging Survey Proposals", for groups in the community to propose Public Imaging Surveys. Proposals shall include a scientific rationale, observing strategy, estimated observing time, and its distribution over observing Periods, as well as a detailed description of the responsibilities the team would be ready to take in case of approval of the proposed survey.

2. ESO will ask INAF (for the VST Consortium) and the OmegaCam Consortium to provide detailed descriptions for the observing programmes they intend to conduct in their guaranteed time (GTO) at the VST over the first 4 semesters. A similar procedure will be repeated every two years until the completion of the GTO time.

3. ESO will establish a *Public Survey Panel* (PSP) including scientists expert in a broad range of current astronomical research, with particular emphasis on those areas that can profit from Public Surveys. The PSP prime mandate will be to review the Public Survey Proposals and, taking into account the GTO programmes, elaborate a scientifically and observationally well coordinated set of Public Surveys. This process may well imply merging different proposals, or expanding their aims beyond the original ones e.g., in the filter set, depth, area, coordinates, etc. In order to achieve these goals the PSP will involve representatives from both the GTO teams and selected teams having submitted Survey Proposals. On the basis of the achieved coordination the selected survey teams will modify the survey proposals, describing the scientific rationale, observational strategy, and data product specifications (e.g. photometric and astrometric accuracy, images, catalogs, delivery time, etc.) as agreed in the course of these activities.

4. The PSP will review these modified proposals and forward them to the OPC along with a document illustrating the criteria adopted for the optimization and coordination of the recommended

set of surveys, and the motivations for having rejected others.

5. These resulting proposals for Public Survey may include proposals for subsequent proprietary observations with other ESO facilities which are designed to exploit the results of the survey in question. The OPC will then provide simultaneous recommendations on the time to allocate both to the survey and to its followup. A Management Plan for each survey will also be attached to the proposal for ESO review.

6. For each approved Public Survey ESO will negotiate with the PI the extent of ESO support that could be given, and the timeline of product delivery. The allocation of observing time for the scientific follow up of the survey will be subject to the timely delivery of the survey products and their compliance to the specifications.

7. The PSP Document, the final proposals for Public Surveys and the description of the GTO programmes will be made available on the web prior to the regular *Call for Proposals* for the VST.

8. Proposals for *Proprietary Surveys* can be submitted as usual following the regular *Calls for Proposals*, thus ensuring that the OPC evaluates all survey proposals (public and proprietary).

9. The ESO/ST-ECF *Science Archive Facility* (SAF) will be the collection point for the survey products and the primary point of publication/availability of these products to the ESO community. ESO will assist the survey teams to define and package their data products in a manner consistent with SAF and *Virtual Observatory* standards and will integrate the products into the SAF.

10. Survey programs that directly complement other public surveys should themselves be carried out as Public Surveys. In case of GTO programs in this category, ESO will encourage the GTO Teams making their survey products public and to submit proposals for the scientific follow up at other ESO telescopes, following the same procedures outlined in item 5 above. In all cases the allocation of the OPC recommended observing time for the scientific follow up will be subject to the timely delivery of the survey products and their compliance to the specifications.

11. The PSP will periodically review the progress of the surveys and will assess the compliance to the specification of the survey products. The PSP will then forward to ESO Directorate its recommendations concerning the continuation of each survey and the allocation of the associated follow-up time at other facilities.

PERSONNEL MOVEMENTS

(1 June 2004 - 31 August 2004)

ARRIVALS

EUROPE

| | |
|---------------------------|----------------------|
| BIANCHINI, Andrea (I) | Student |
| KHRISTOFOROVA, Maria (RU) | Student |
| KORNWEIBEL, Nicholas (UK) | Software Engineer |
| MARTEAU, Stephane (F) | Oper.support Scient. |
| MARTINEZ, Pascal (F) | Paid Associate |
| MÜLLER, Michael (D) | Mechanical Engineer |
| PATT, Ferdinand (D) | Engineer |
| POPESSO, Paola (I) | Paid Associate |
| RETZLAFF, Jörg (D) | Paid Associate |
| SOENKE, Christian (D) | Software Engineer |
| TAIT, Donald (UK) | Project Planner |
| VERNET, Joel (F) | Fellow |

CHILE

| | |
|---------------------|---------------------|
| DUMKE, Michael (D) | Paid Associate |
| HUNTER, Ian (UK) | Student |
| MASON, Elena (I) | Op.staff Astronomer |
| PANTIN, Eric (F) | Paid Associate |
| RAGAINI, Silvia (I) | Student |
| STEFANON, Mauro (I) | Paid Associate |

DEPARTURES

EUROPE

| | |
|-------------------------|----------------------|
| AHMADIA, Aron (US) | Student |
| ANTONIUCCI, Simone (I) | Student |
| BERTA, Stefano (I) | Student |
| DIETL, Ottomar (D) | Maint. Technician |
| DI FOLCO, Emmanuel (F) | Student |
| GRILLO, Claudio (D) | Student |
| HAU, George (UK) | Fellow |
| KURZ, Richard (US) | Chief Engineer |
| SNEL, Ralph (NL) | Paid Associate |
| SURDEJ, Isabelle (B) | Student |
| VUCHOT, Luc (F) | Student |
| WEGERER, Stefan (D) | Mechanics Technician |
| WEIDINGER, Michael (DK) | Student |

CHILE

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|--------------------------|--------------------------|
| CARVAJAL, Alfredo (CL) | Procurement Officer |
| CLARKE, Fraser (UK) | Fellow |
| DELVA, Pacome (F) | Student |
| DISSEAU, Ludovic (F) | Student |
| GERMANY, Lisa (AUS) | Fellow |
| GIUFFRIDA, Giuliano (I) | Student |
| HAUBOIS, Xavier (F) | Student |
| ILLANES, Esteban (CL) | Public Relations Officer |
| MEDVES, Giuseppe (I) | Paid Associate |
| MILLOT, Nadia (F) | Student |
| NOTERDAEME, Pasquier (B) | Student |
| PEREZ, Juan Pablo (CL) | Electronic Engineer |
| VAISANEN, Petri (FI) | Fellow |