

Dear Dr Sutherland,

Following the evaluation by the VISTA Public Surveys Panel, the Observing Programmes Committee has recommended to ESO the selection of your Public Survey proposal:

"The VISTA Kilo-degree Infrared Galaxy survey (VIKING)"

However, please note that the final decision about allocation of time to this proposal is subject to review and approval of the associated Survey Management Plan (SMP) whose objective is to define the information necessary to carry out the Public Surveys in Service Mode. The SMP must define the observing strategy, the survey data calibration needs, the data reduction process, the manpower and hardware capabilities provided by the PI and the survey team, the data quality assessment process, and the data product delivery to the Virtual Observatory (VO).

The guidelines for the preparation of the survey management plan – VISTA and the latex template are now available at:

<http://www.eso.org/observing/webone.html>

The submission, review process, iterations and final approval of the SMP will follow and proceed according to the following timeline:

- The deadline for submission of the SMP by the PIs of the ESO Public Surveys is noon CET on the 16.02.07. SMP is to be sent to the team leader of EST (marnabol@eso.org).
- The EST review ends on the 07.03.07, with feedbacks sent to PIs so that synergies and optimization between surveys can be implemented and the SMP revised.
- Submission of revised SMP by noon CET on the 02.04.07.
- End of SMP review and approval by ESO DG by the end of May 2007.

When preparing your SMP, you must take into account the recommendation of the VISTA public survey panel, which are detailed below. Please note the priority of implementation of your proposal as formulated by the VISTA PSP.

Please do not hesitate to contact me, should you need any additional information,

With Best Regards

Dr M. Arnaboldi,

ESO – USD

Report by the VISTA PSP

This survey aims to cover 1500 sq. degrees in ZYJHK in the same area as VST-KIDS. The proposed depth is 1 to 1.5 mags deeper than VHS with imaging resolution < 1 arcsec.

Complementary to the KIDS optical survey, with similar science goals as DES/VHS, VIKING requires better seeing (so that PSF matches the optical counterpart) and plans to go 1 mag deeper than VHS to do morphology of galaxies. The deeper magnitude of VIKING with respect to VHS opens the study of ULIRG out to redshift 1.3, while VHS is limited to $z < 0.9$. Also the added value for galaxy evolution with respect to VHS is clear.

Observing Strategy

The PSP had some doubts about whether to carry out both surveys (VHS, VIKING) at the same time, as they are described in the current version of the proposals. Perhaps not so clear the advantage of the VIKING + KIDS with respect to VHS + DES for the determination of the cosmological parameters. The PSP wonders whether the targeted magnitude limit is deep enough to support the KIDS survey and the photometric redshift determination in the problematic z ranges. The suggestion by VISTA PSP is to ask the team to revise their observing strategy: i) reduce the area coverage ($\sim 500 \text{ deg}^2$) and ii) go 1 mag deeper. The team should revise their observing strategy considering that VISTA can observe 10 hrs per night on average.

Management

This proposal has a rather generic description of the data handling aspects of the programme. This must be addressed in greater detail in the SMP.

VISTA PSP ranking

VISTA PSP recommends this program with rank 5/6. We ask to carry out this program for 5 years, and the VISTA PSP will follow the yearly review and may request to modify strategy to optimize survey goal. Ranking will be reviewed periodically which could depend on the progress of VST-KIDS relative to DES and US-ESO collaboration on VHS-DES.