



Director General

Garching, 27 March 2008
ODG018-08/isk

Professor Dante Minniti
Pontificia Universidad Catolica de Chile
Santiago
CHILE

Dear Dante,

I am pleased to inform you that the ESO Surveys Team (EST) has successfully reviewed the revised Survey Management Plan (SMP) for your VVV project. Thus following the recommendations of the OPC and the internal ESO review boards, I am prepared to grant to you and your team the time requested to complete the VVV survey, subject to the conditions detailed below.

While current planning indicates that the six ESO public surveys with VISTA recommended by the PSP should be completed in about five years, this estimate is still quite uncertain. Therefore, in addition to the planned yearly progress reviews, a major review will be conducted after five years where the continuation of the surveys still on-going will be evaluated.

General Conditions

1. **Raw data.** The raw data shall be public worldwide immediately after passing quality control tests at ESO. Given practical limitations on the ability of the archive to distribute large volumes of data, the risks of other groups being able to scoop the science goals of the survey are rather small, but we may consider imposing further restrictions on the maximum amount of data downloadable on-line to make this even less likely.
2. **Delivery of data products to the ESO archive.**
 - a. Six months after receiving the complete (on a tile-by-tile basis) data and the associated calibrations, the corresponding data products should be delivered to the ESO archive.
 - i. Instrumentally corrected, stacked (as appropriate) frames in all the relevant bands of the survey, with photometric and astrometric calibrations in the headers.
 - ii. Confidence maps

.../2



Page 2 of ESO letter dated 27 March 2008

- iii. Aperture-matched object catalogues including multi-band photometric, astrometric, and morphological measures.
- iv. The catalogue of the variable sources, their identifications and estimated periods.

These data should be calibrated using standard night-by-night calibration procedures and therefore we impose no requirements on the global uniformity of these calibrations.

- b. Major data releases with uniform photometric and astrometric calibrations should be made at least once per year, with the first delivery expected no later than 18 months after beginning of the observations. The light curves of the variable sources detected in these data samples must also be delivered.
 - c. A final release with a global photometric and astrometric calibration, and the light curves for all the variable sources detected in the survey should be made upon its completion.
3. **The ESO Survey Team (EST)** is prepared to assist you throughout the execution of your survey, and the EST leader will be your main contact person at ESO for all matters related to the survey. Also, you should be prepared to assist the EST in the preparation of their yearly progress reports to the OPC. Please consider the EST as your partner at ESO. Their main interest is to get your survey done in the shortest possible time, and with full compliance with your technical requirements as detailed in the PSP proposal and the SMP.

The current schedule for VISTA shows delivery complete on Oct 9th, 2008 pending additional confirmation. The implications on the data taking for the VISTA public surveys are that observations will hopefully start in Period 82. You will be contacted by the EST for the Phase 2 submission in due course.

Please return one signed copy of this letter signaling your agreement with the terms and conditions detailed above.

Looking forward to a fruitful collaboration during all stages of this enterprise,

Tim de Zeeuw

Tim de Zeeuw
ESO Director General

Dante Minniti
PI VVV Survey