

EUROPEAN SPACE AGENCY
ASTRONOMY WORKING GROUP

**Recommendations on the implementation of the Herschel Mission and the
adoption of the revised Herschel Science Management Plan**

At its 122nd meeting held on 21-22 April 2005 at ESTEC, Noordwijk (NL), the Astronomy Working Group (AWG) was briefed by the Herschel Project Scientist and the Herschel instrument PIs about the current status of the mission. The AWG commends all those involved for the substantial progress that has been made towards building the flight hardware and ground segment for Herschel. The AWG reaffirms that the scientific programme of Herschel is of outstanding quality and expects that the mission will have a tremendous impact on many important topics in different fields of astronomy.

1. The AWG is very concerned about the delayed delivery of key hardware components, especially the instrument control computers. This appears to be caused to a large extent by contractual rather than technical difficulties and the AWG urges that the parties concerned resolve these issues as soon as possible.
2. The AWG is also very concerned that schedule pressure from (1), or other sources, will reduce the thoroughness of testing and calibration of the Herschel flight hardware in the critical period prior to instrument delivery. While the AWG is keenly aware of the adverse effects that any further delay of the Herschel/Planck launch would have on the overall ESA Science Programme, the AWG emphasizes that pressure to maintain the launch schedule must not lead to enhanced risk of loss of scientific capability.
3. The AWG also discussed the possibility that pressure to maintain the launch schedule may not allow satisfactory solution of technical difficulties that may emerge in the future, leading to decisions that result in a significant degrading of Herschel's overall scientific capabilities (examples being deletion of an instrument mode or arm, under-population of focal plane arrays, use of components that are not fully flight-qualified, etc.). The AWG emphasizes that decisions that result in major changes of Herschel's scientific capabilities should be taken only after appropriate scientific review, including an evaluation by the AWG itself.

4. The AWG notes with satisfaction that its previous recommendations (ASTRO(2004)4) on the implementation of Key Programmes and on the policies regarding guaranteed time, have been followed in revisions to the Herschel Science Management Plan. The AWG endorses the inclusion of additional data reduction tasks, most importantly the generation and archiving of higher-level data products, in this Plan. **The AWG therefore unanimously recommends approval of the revised Science Management Plan for the Herschel mission.**

5. The AWG recommends that the Announcements of Opportunity for Herschel observations should clearly articulate the policies regarding potential duplications of targets and/or science areas and that these policies should be based on the general principles laid out in the Science Management Plan.