



AAS Long Beach, CA 7 Jan 2009

Herschel Observer Support Overview

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NASA Herschel Science Center:

The US Community's Herschel Support Center



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*NASA Herschel
Science Center*



Objective and Scope of the NASA Herschel Science Center

The NHSC has been established at the Infrared Processing and Analysis Center (IPAC) at the California Institute of Technology under support from NASA.

NHSC began operations in 2001 and will continue to operate throughout the lifetime of the Herschel Mission, including the post-cryogen archival phase.

The primary mission of the NHSC is to support the US-based astronomical community in exploiting the Herschel science opportunity.



NHSC Charter

- Ensure the necessary resources and tools are available to the US scientific community to take advantage of the scientific capabilities of the observatory in a timely manner.
- Ensure availability of Herschel science data for US archival research on timescales equivalent to ESA.
- Act as an interface between the ESA Herschel Project and the US-based scientific user community.
- Advocate US community needs with the HSC and ESA Project.
- Provide the US astronomical community with technical support throughout all phases of the Herschel mission, from pre-launch through to the transition to archival phase.
- Manage the US data analysis funding for the US user community.

In Summary: Provide the US-based astronomical community with support in its use of Herschel equivalent to that provided by the Herschel Science Centre in their support of the European Community.

NHSC and the Herschel Project

To fulfill its charter, the NHSC has established strong working ties with the ESA Herschel Science Centre and the Instrument Control Centres.

The NHSC is participating in many activities to enhance our US community support, including:

- Providing critical support for HSpot.
- Participate directly in ICC activities.
- Participate in DP system development.

NHSC Organization

The NHSC is organized around the three Herschel Instruments, Observer Support, and development. Each team is composed of highly experienced staff with long histories of accomplishment in space astronomy missions.

PACS – Babar Ali, lead

HIFI – Patrick Morris, lead

SPIRE – Bernhard Schulz, lead

Observer Support – Phillip Appleton, lead

MAXIMIZING US COMMUNITY SUPPORT

Working with the ICCs and HSC – Improve our ability to provide knowledge to US-based observers.

Acquire an intimate knowledge of calibration and data processing.
Provide tools and support for observers that will maximize return from the observatory.

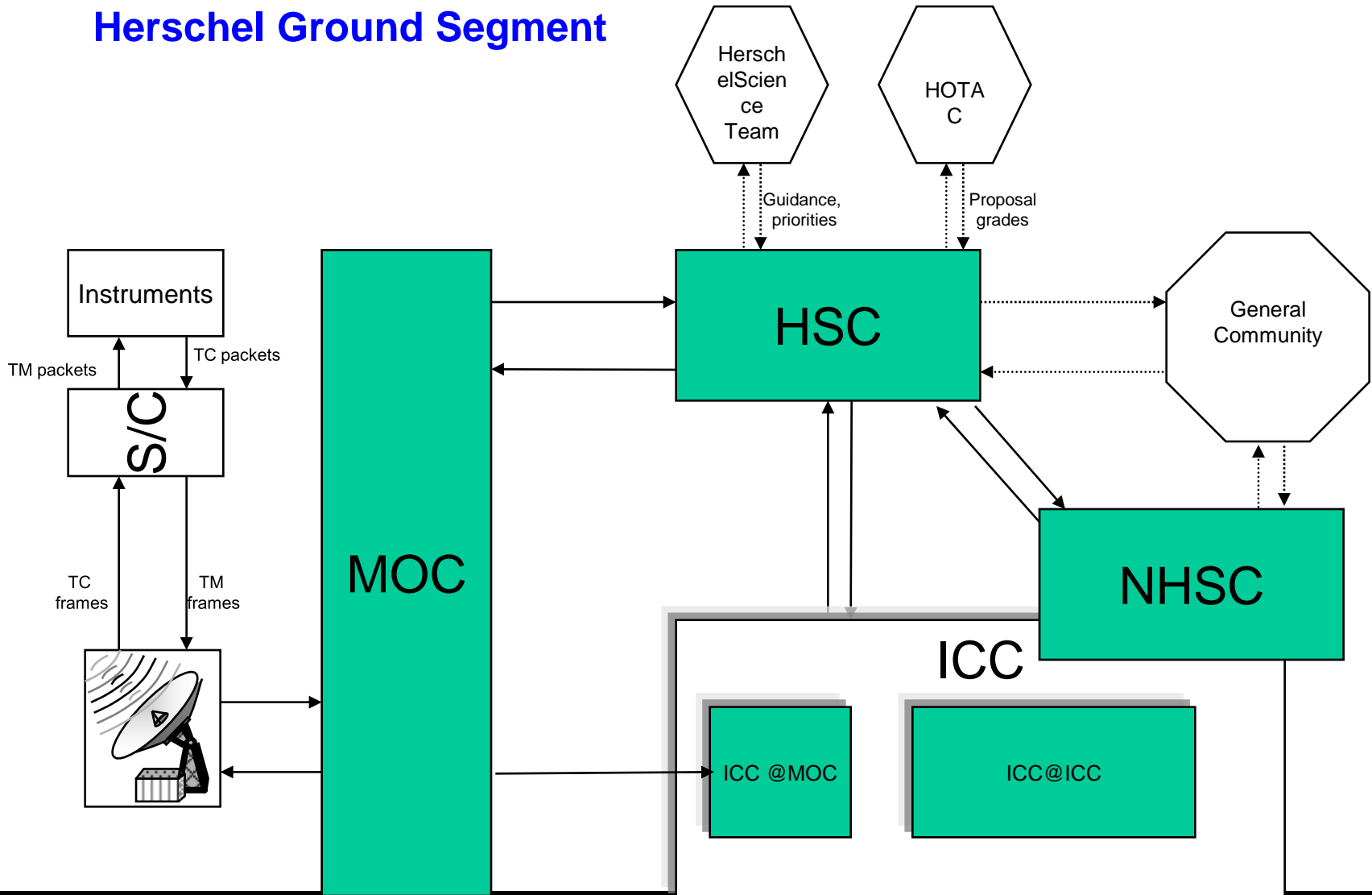
NHSC has knowledge in all areas of Herschel science operations and data processing.

Co-location

The NHSC will post resident liaisons to the three ICCs during initial checkout to the start of routine operations. Constant contact maintained throughout mission.

The NHSC is posting a resident liaison to the HSC at ESAC for the duration of the cryogenic mission.

Herschel Ground Segment



The Herschel Space Observatory: Observer Support

ESA HERSCHEL OBSERVER SUPPORT

The **ESA Herschel Science Centre (HSC)** manages the Herschel Science Mission

- ✓ Proposals will be submitted to the HSC with the Herschel Proposal Submission Tools.
- ✓ Official Herschel Documentation is provided by the HSC.
- ✓ All proposals will be evaluated by the Herschel Observatory Time Allocation Committee (HOTAC).
- ✓ Scheduling and execution of all observations will be done via the HSC.
- ✓ Initial data processing and data archiving will be done by the HSC and observer data will be released by the Herschel Archive administered by the HSC.

HSC webpages - www.rssd.esa.int/herschel

NHSC OBSERVER SUPPORT

US-based Proposers/Observers will be supported by the NASA Herschel Science Center (NHSC).

NHSC services include:

- NASA Herschel Science Center Help Desk for inquiries of all types.
- WWW information: www.ipac.caltech.edu/Herschel/
- Administration of data analysis grants for US-based observers.
- Preparation and support of Herschel-specific data reduction software.
- Technical support for US-based astronomers include:
 - Observation planning support, including AOR revisions
 - Support in the submission of observing proposals
 - Program tracking and data retrieval
 - Support in the use of Herschel-specific software
 - Observation preparation and data processing workshops

PROPOSAL/OBSERVATION PREPARATION

HSpot is the Herschel Observation Planning Tool.

- It is the primary way proposers and observers interact with the Herschel Space Observatory
- It has the “Look and Feel” of the now well-known Spitzer Tool with many features identical or improved.