

Latest improvements in HIPE

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SDP DP Workshop Dec 09 B. Merín

HERSCHEL OBSERVATORY

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Outline



- The Herschel Data Processing software HIPE
 - Characteristics (modular, jython, open source, GUI-script)
 - All-in-one (HSA access, view, (re)-process & analyze data)
 - Current beta version: 2.0.0 Release Candidate 3
 - Some analysis tools are currently available already
- How to set up and work with HIPE HANDS-ON
 - Change the HIPE memory
 - Perspectives and views
 - Variables and tasks (routines)
 - Loading and saving data
 - Running pipelines and scripts in HIPE



HERSCHEL OBSERVATORY

What do you do with HIPE



- Herschel performs an observation following a user AOR 1.
- 2. The spacecraft telemetry arrives at Mission Operations Control (MOC) centre packed in timelines and is sent to HSC



- The data is run automatically through the HSC data pipelines 3. to remove all instrumental effects to produce level-2 products
- Raw and processed data is placed in the HSA for the users 4.
- Astronomers will use HIPE to download, reprocess the data 5. and analyze it within just one single environment



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Functionality in HIPE





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Be patient, it takes some time to get started



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Using HIPE



- Session start / set-up / close :

- Session memory: HIPE Preferences (0.5 GB less than RAM)
- Font Size: (Ctrl/Cmd)- +/-
- Perspectives and views: how to open/close/modify them
- Log/History: how to access and modify it to create a new script
- Saving variables/scripts/perspectives on closing

Script and pipeline running

- Execution of scripts and pipelines (step by step and run-all modes)
- Task and variables association
- Viewing, plotting and inspecting level 0/1/2 products
- Input/Output of FITS files

- Scripting

- Arithmetic's, loops and 'if' statements -> IDL-HIPE table (v1.0 please)
- Task source code editing/customizing



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