



Recipe Execution



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Recipe Execution

Host applications for launching recipes:

Esorex

Recipe execution tool
with a **command-line** user interface

Gasgano

Data File Organizer and recipe execution tool
with a **graphical** user Interface

ESO Reflex

Graphical workflow engine for data reduction



Gasgano

The screenshot shows the CPL software interface. At the top, there is a menu bar with 'File', 'Selected files', 'Tools', and 'Help'. Below the menu bar, there are icons for file operations and a 'collapse' button circled in black. A 'Find entry:' field with a 'find' button is also visible. The main area displays a file tree with several files, including '079.D-0140(B) MIDI UNKNOWN', '268615 CAL_AlphHy_vhya-0', '081.D-0198(C) MIDI UNKNOWN', '315176 CAL_AlphHy_vhya-1', '60.A-9224(A) MIDI UNKNOWN', and '200160786 CAL_0826+12-(20-Jy)'. A red arrow points from the 'collapse' button to the file tree. A blue arrow points from the file tree to the 'Raw data' label. A black arrow points from the file tree to the 'Keyword' table. The 'Keyword' table is circled in black and contains the following data:

Keyword	Value
SIMPLE	T
BITPIX	16
NAXIS	0
EXTEND	T
ORIGIN	ESO-PARANAL
TELESCOP	ESO-VLT1-A34
INSTRUME	MIDI
OBJECT	PHOTOMETRY, OBJECT, SCIPHOT
RA	09:27:35.24
DEC	-08:39:30.82
EQUINOX	2000.

Product data

Raw data



Gasgano

The screenshot shows the CPL software interface. At the top, there is a menu bar with 'File', 'Selected files', 'Tools', and 'Help'. Below the menu bar, there are icons for file operations and a search box labeled 'Find entry:'. The main area displays a list of files with columns for 'File', 'CLASSIFICATION', 'TPL.ID', 'ORI...', 'TPL...', 'TPL...', and 'IN...'. A context menu is open over the selected file, showing options like 'Display...', 'To Recipe', 'To Recipe Request Pool', 'Report...', 'Move...', 'Copy...', 'Tar...', and 'Run...'. The 'To Recipe' option is expanded, showing a list of recipes including 'Load Recipe', 'amber_BeamPos', 'amber_SciCal', 'amber_ascii_export', 'amber_detector', 'amber_divider', 'amber_p2vm', 'amber_raw_to_fitsimage', 'amber_selector', 'midi_acq', 'midi_detlin', 'midi_detron', 'midi_dsprtn', 'midi_fringe_all', 'midi_fringe_hs', 'midi_fringe_sp', 'midi_fringe_tr', 'midi_kappamatrix', 'midi_profile', 'midi_raw_to_fitsimage', 'midi_refpix', and 'midi_wavecal'. The 'midi_kappamatrix' option is highlighted. Below the file list, there is a section for 'Extension: HEADER' and a 'Find in' search box. At the bottom, there is a 'Keyword' section with a list of keywords including 'SIMPLE', 'BITPIX', 'NAXIS', 'EXTEND', 'ORIGIN', 'TELESCOP', 'INSTRUME', 'OBJECT', 'RA', 'DEC', and 'EQUINOX'. A 'Value' section is also visible.

Right mouse click
on the selected
data

Select the recipe



Gasgano

The screenshot shows the CPL software interface with the following sections:

- Parameters:** A table with columns Name, Value, Default, and Range. The entry 'midi.midi_kappamatrix.medianwindow' has a value of 9.
- Input Frames:** A table with columns Include, Filename, Classification, and buttons for Locate and Display. It lists several files with classifications like 'KAPPA_SP_MASK' and 'PHOTOM_SP_CALIB'.
- Product Naming:** A section with 'Product Root Directory' set to '/scratch/tmp/Examples/Products/' and a 'Naming Scheme' dropdown set to 'Numeric'.
- Buttons:** 'Execute' and 'Execute Selected' buttons are circled in black. 'Add to pool' and 'Request Pool' buttons are on the right.
- Output Frames:** A section with a 'Clear' button.
- Log Messages:** A section with 'Save' and 'Clear' buttons.

`midi_kappamatrix_create()`
has been executed

Recipe parameter

Raw & Calibration files

DO classification tags



Gasgano

The screenshot shows the CPL software interface with the following sections:

- Parameters:** A table with columns Name, Value, Default, and Range. The entry 'midi.midi_kappamatrix.medianwindow' has a value of 9.
- Input Frames:** A table with columns Include, Filename, Classification, Locate, and Display. It lists several input files with their classifications and actions.
- Product Naming:** A section for 'Product Root Directory' and 'Naming Scheme'.
- Output Frames:** A table with columns Filename, Classification, Locate, and Display. It lists the resulting output files.
- Log Messages:** A text area showing the execution log, including file paths and a 'SUCCESS' completion status.

midi_kappamatrix_exec()
has been executed

Output Frames
(Products)

Log Messages



Esorex

EsoRex

EsoRex is the ESO Recipe Execution Tool. It can list, configure and execute cpl-based recipes from the command line.

Synopsis: **esorex** [**esorex--options**] [**recipe** [**recipe-options**] [**sof**]]

Some very useful esorex-options:

- **esorex**
- **esorex --help**
- **esorex --recipes**
- **esorex --params**
- **esorex --man-page** [recipe](#)



Esorex

SOF file for Esorex

Environment Variable

```
agabasch@pc014519:/scratch/tmp/Examples> cat midi_kappamatrix.sof
$SOF_DATA/MIDI.2008-04-21T00:11:23.788.fits          PHOTOM_SP_CALIB
$SOF_DATA/MIDI.2008-04-21T00:12:12.810.fits          PHOTOM_SP_CALIB
$SOF_DATA/MIDI.2008-04-21T00:13:01.832.fits          PHOTOM_SP_CALIB
$SOF_DATA/MIDI.2008-04-21T00:14:03.928.fits          PHOTOM_SP_CALIB
$SOF_DATA/MIDI.2008-04-21T00:14:52.951.fits          PHOTOM_SP_CALIB
$SOF_DATA/MIDI.2008-04-21T00:15:41.973.fits          PHOTOM_SP_CALIB
$SOF_DATA/minrtsMask_FIELD_PRISM_SCI_PHOT_SLIT.fits  KAPPA_SP_MASK_PRISM
$SOF_DATA/minrtsMask_SPECTRAL_GRISM_SCI_PHOT_SLIT.fits KAPPA_SP_MASK_GRISM
agabasch@pc014519:/scratch/tmp/Examples> █
```

Raw & Calibration files

DO classification tag



Esorex

Executing a recipe with Esorex and changing the default parameters

- **esorex** `midi_kappamatrix` `midi_kappamatrix.sof`
- **esorex --suppress-prefix=TRUE** `midi_kappamatrix`
`midi_kappamatrix.sof`
- **esorex --suppress-prefix=TRUE** `midi_kappamatrix --medianwindow=5`
`midi_kappamatrix.sof`