DEMETRA changelog

[5.1.0.0] - 2020 01 28

<u>Added:</u>

 - Spectrum chart creation.

   - Can generate file: format png / pdf / svg

       - Copy to clipboard option added to every spectrum display

 - New automatic calibration line detection method. (old is accessible from configuration menu (absolute threshold (old)/ relative threshold (new))

 - Process log: added Observation context information (observer, site, instrument)

<u>Debugged:</u>

 - Calibration method selection was not effective (changing from manual to automatic was doing nothing)

[5.0.0.0] - 2019 12 30

<u>Added:</u>

 - «LISA» process

<u>Changed:</u>

 - New Alpy and LISA automatic calibration user interface

 - Reviewed process log.

 - Process step intermediate files are now stored in an observation specific subfolder. (new observation only)

<u>Fixed :</u>
 - Echelle processes instrumental response builder tool fixed

[4.2.6.0] - 2019 11 29

<u>Fixed :</u>

       • Alpy calibration parameters edition

[4.2.5.0] - 2019 11 27

<u>Fixed :</u>

- Process step files were always saved even the save step files checkbox was not checked.
- Added Observation archive configuration files added (note: still missing log files)
- eShel step instrumental response was not operant when specifying a response curve

<u>Changed :</u>

- Reduced observation file size
- Removed echelle process blaze function values
- Removed calibration step detected lines lambda.
- Removed hot pixel values
- Process definition from Observation

[4.2.4.0] - 2019 11 22 - Added observation subfolder

<u>Added :</u>
- Process step files storage moved to an observation dedicated subfolder. (Old observation keeps theses files under the session folder)

<u>Changed :</u>

- Archive configuration files moved to configuration subfolder

<u>Fixed :</u>

- Whoppshel and eShel observation archive (export).
- Process log file correctly added to observation archive.
- Calibration tool now display blaze result spectrum instead of stack result spectrum.

[4.2.3.0] - 2019 11 19 - Whoppshel

<u>Fixed :</u>

- Spectrum live display on a Whoppshel observation : order selection tool displayed

[4.2.2.0] - 2019 11 17 - Alpy / eShel / Whoppshel

<u>Changed :</u>

- eShel Setup demonstration observations replaced
- eShel calibration lines replaced

<u>Fixed :</u>

- Alpy: Old observation import failed to load calibration parameters

[4.2.1.6] - 2019 11 14 - eShel

<u>Fixed :</u>

- Changing order reference (graphical purpose) no longer reset observation process
- Running full eShel process display final file at the end of the process
- Order detection tool «Display» button colors changed to be more visible

[4.2.1.5] - 2019 11 13 - eShel

<u>Added :</u>

- eShel observation output tab:
- Display an overview of all order spectrum in a single U.I. panel
- Allow zip archive export of observation spectrums (BESS compatible FITS format or DAT format)
- New eShel process step: «Calibration detection». This step allow an easy calibration tuning with minimal human interaction.

- Calibration lines editor (accessible in eShel calibration steps wizard U.I., advance tab)
- Calibration step display calibration lines
- eShel calibration device
- Added 1 second delay after sending commands to the device in order to start the acquisition after that the device is physically ready.
- Shut down Lamp at the end of acquisition (set light source to «object»)
- New process for Whoppshel device: same that eShel process with different order range defaults values and orders lambda values.

<u>Removed :</u>

- eShel :

    - order detection parameters no longer contains calibration
    - calibration manual mode
    - Target type choice. (Not applicable for eShel spectrum)

- Observation preview expander when creating a new observation.

<u>Changed :</u>

- Editable primary and secondary calibration order
- eShel geometry parameters: slant correction disabled by default

<u>Fixed :</u>

- eShel:

    - Horizontal axis display range automatic computation on calibrated spectrum

- Parameters edition correctly update observation
- Process status U.I. (Green/Orange/Red) correctly update according to process steps run status

[4.2.0.0] - 2019 09 10

Added :

- Observation can be copied from session observation list context menu
- Alpy calibration: Display hydrogen or calibration lines lines on result spectrum
- Image display: Mouse right button double-click will auto-threshold the display on 2D FITS display.
- Fits viewer: Added a hide/show fits header button
- Instrument name (process) displayed on main window

Changed

- Pixel intensity display (ADU) will no longer switch to spectrum intensity display when moving mouse on the spectrum display.
- Process Alpy: Geometry tools parameters U.I. harmonized with other tools.
- Focus tool can run using contrast or FWHM (horizontal or vertical)
- Spectrum display area over image : Grip size increased
- New Demetra logo

Fixed :

- Process Alpy and eShel: Process status properly updated after removing images from baskets
- Process Alpy:
    – Properly update status while computing entire process
    – Geometry computation tilt/smile parameters U.I. (wrong image name used, wrong image index. . .)
    – Response builder tool scale spectrum algorithm (scale coefficient)
- Moving the spectrum display separator to the top will no logger drop bottom toolbar
- Process Alpy and eShel (#650): FITS file loading error message during process (stack file).
- Real number parsing error while Visual Spec is running.
- Spectrum curve display over image for eShel order

[4.1.5.0] - 2019 06 27

Added :

- eShel calibration wizard advanced mode display found/associated lines and detection boundaries

Fixed

- Copying an observation without the process parameters now use default process parameters.
- Calibration wizard U.I.: Rights parameters used and saved
- Process time performance enhancement by 10%

[4.1.4.0] - 2019 06 20

Added :

- eShel calibration X wizard – Visual vertical bar representing the central lambda value margin. – Advanced parameters and results edition.

Changed :

• eShel X calibration horizontal orders offset computation

Fixed :

    • Automatic threshold for eShel order extracted image visualization

[4.1.3.0] - 2019 05 20

Fixed :

    • U.I. freeze while process is running.
    • eShel process obsolete file deletion (extraction step)

[4.1.2.0] - 2019 03 26

Added :

    • Reference order view for eShel image display.
    • eShel instrumental response builder tools: order management
    • eShel automatic order detection
    • eShel automatic lambda calibration

Changed :

    • Reworked order detection result display.

[4.0.3.0]

Fixed :

    • Observation compatibility: 'scale' is now properly imported from old 'normalization' name.
    • FITS : Comment restriction to ASCII format. (other specials characters are replaced with a '?')
    • Acquisition duration : debugged manual edition.

[4.0.2.0] - 2018 07 06 - Official OHP 2018 version.

Fixed :

    • FITS : corrected a bug that prevent file to open.
    • Spectroscopy areas (spectrum / backgrounds) : keep them displayed or hidden according to the checked state 'show' checkbox
    • Process status link to the source observation when duplicating an observation
    • FITS header: First letter comment string display

Added :

    • Acquisition: added histogram tool
    • I.R. builder tool:
    • Added curve filter buttons (showing only I.R. curve (raw/smooth) | showing only source curve (raw/corrected))
    • default preselection of balmer and atmospheric lines removal.
    • Alpy process extended object management (nebulae. . .)

Changed :

    • Acquisition : saturation warning is now computed only on the spectrum area.

- Observation : Added Point-like or Diffuse observation type.
- ASCOM Camera: removed camera serial number displayed in camera name box.
- Acquisition :
    - number of image edition is disabled when preview mode is selected
    - saturation warning is now computed on spectrum area. (currently only refreshed on new imageacquisition).
    - U.I. checkbox display/hide is now still functional after new acquired image
    - added sensor temperature in FITS key 'CCD-TEMP' to recorded FITS image
- Process :
    - added RMS value in the process log when computing the calibration coefficients.
    - forbid dark extrapolation when compute required thermal map. process will stop.
- I.R. builder tool : added new curve live display to help to find the continuum coefficient.
- archive : The already exist file warning now has button to ignore or cancel the warning.
- FITS viewer : fixed a bug that was preventing FITS file to open.
- Added eShel pre alpha process (not usable)
- FITS standart HDU extension format type BINTABLE management.

[Older]