

# ProfileMonitor OO-Design

## GUI

Live Image Viewer (see also Image Analyzer)

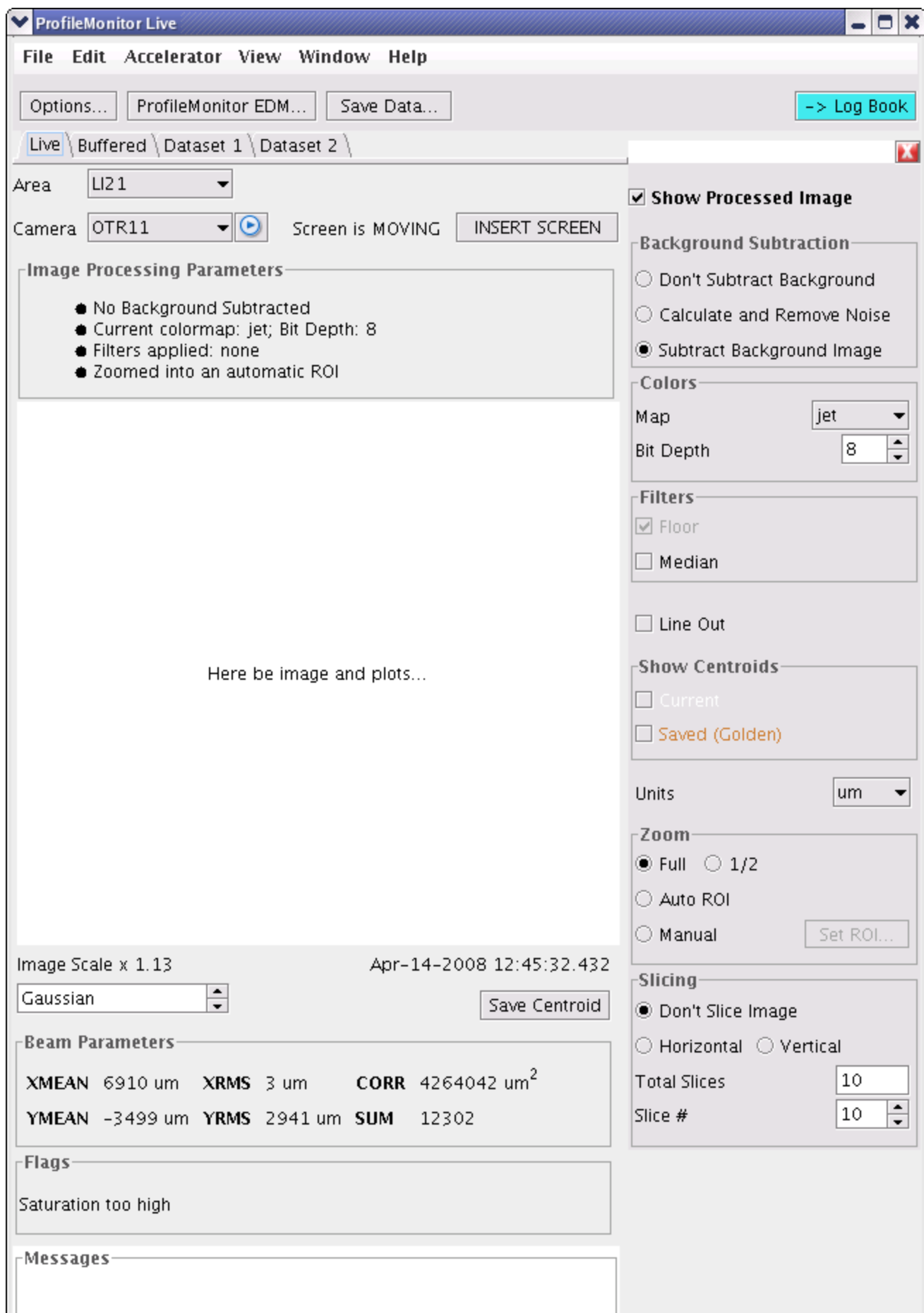


Image Acquisition

File Edit Accelerator View Window Help

Options... ProfileMonitor EDM... Save Data... -> Log Book

Live Buffered Dataset 1 \*Dataset 2

Load Dataset(s)...

New Dataset

Dataset Name Dataset #2 (OTR11) 04-14-2008 13:00:23

Area LI21 Camera OTR11 Screen is MOVING INSERT SCREEN

Number Beam Images 4 ☒ Get New Background Image Save Setup

Run Stop

Retrieving Image #9 out of 20... (est. time left 10 s)

45%

Here be image and plots...

Apr-14-2008 12:45:32.432

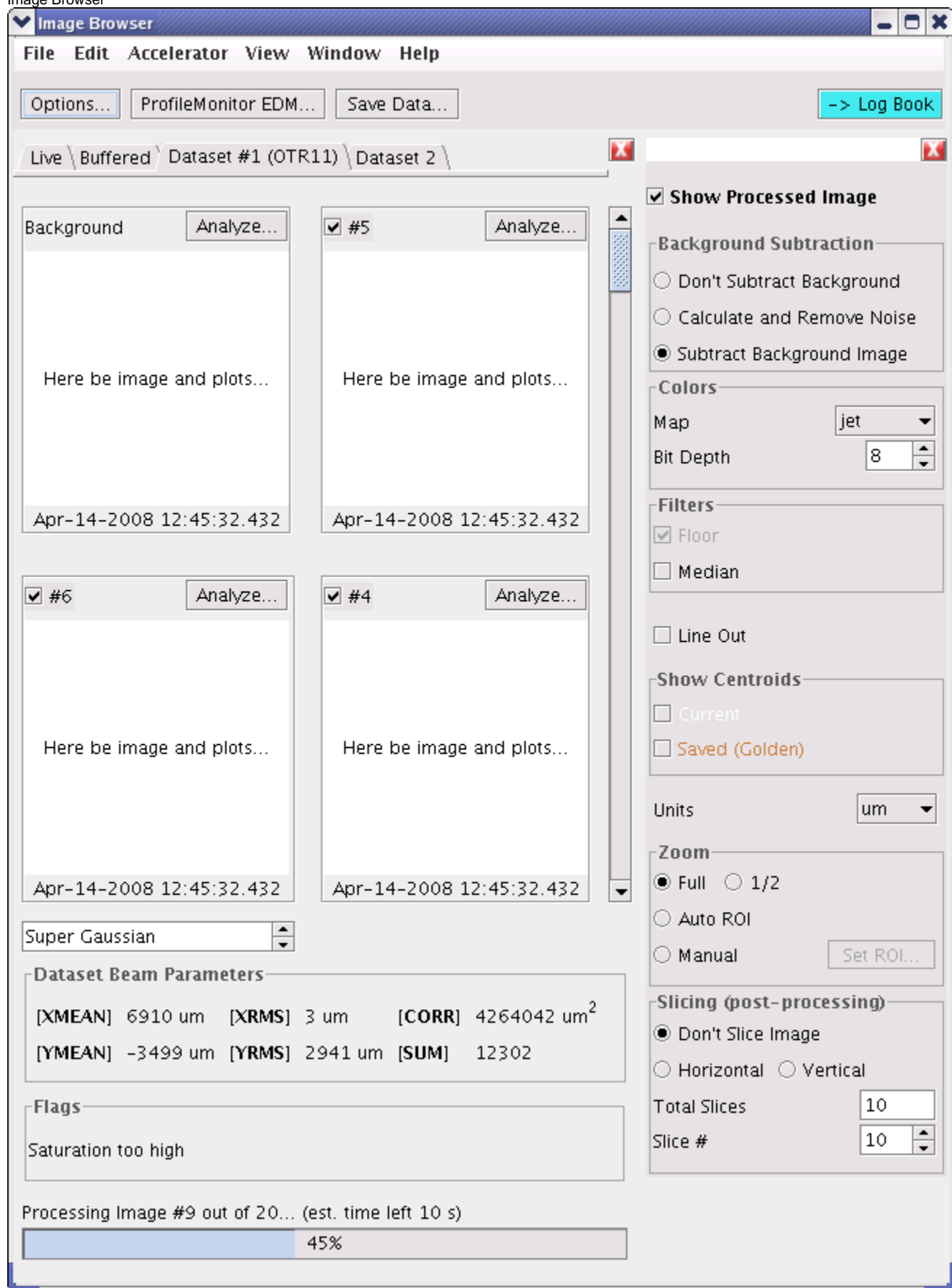
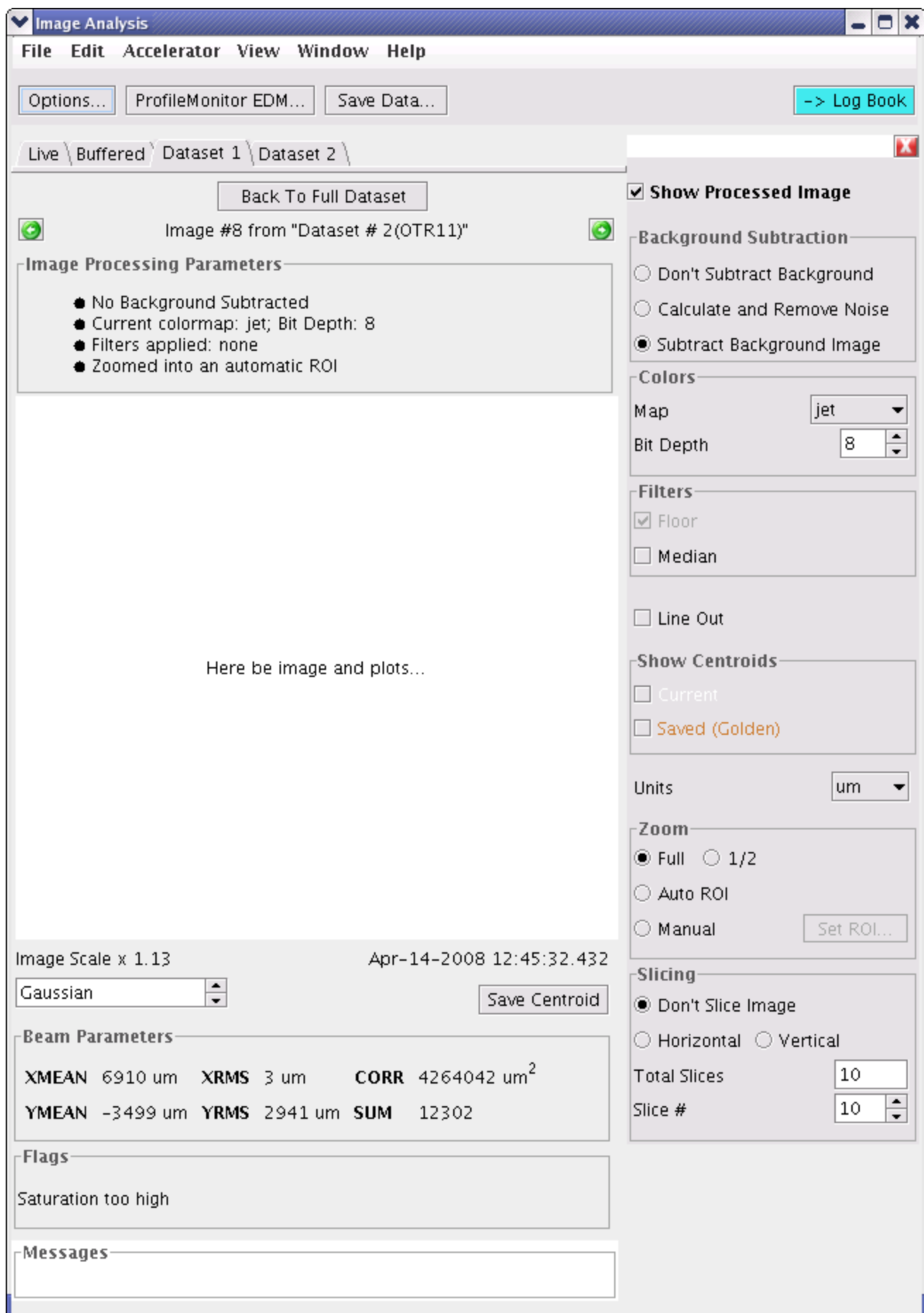


Image Analyzer (see also Live Image Viewer)



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## Notes

- Change start icon to stop icon
- Screen state: IN = green, OUT = red, Moving = red
- Grey out XRMS for horizontal slicing, YRMS for vertical slicing (no meaning)
- Show all slices plus numbers on the plot; show active slice
- Fit Plot Value Axes increase towards the image
- When doing buffered acquisition and the screen is out, insert it and then remove it
- Canceled dataset should still be created (truncated)
- When acquisition finishes, display message that it's finished.
- Keep image aspect ratio
- Screen-related widgets are optional
- <XMEAN> instead of <XMEAN>
- tooltips for icons!
- log book snapshot only the essential area
- browser shows beam image only, add button: "Analyze background image"...
- Remove the "Show processed image" check box, because it might be too confusing

## Implementation Notes

- Clear up: image origin vs. image offset
- only if camera is active, monitor relevant PVs
- processed image: volatile or buffered?
- short dataset name = first 8 letters of dataset name + ...
- subtraction of background images of/with different size/origin
- pipeline pattern for image processing (raw byte matrix => Java image that user sees)
- beam parameters per algorithm, n algorithms