

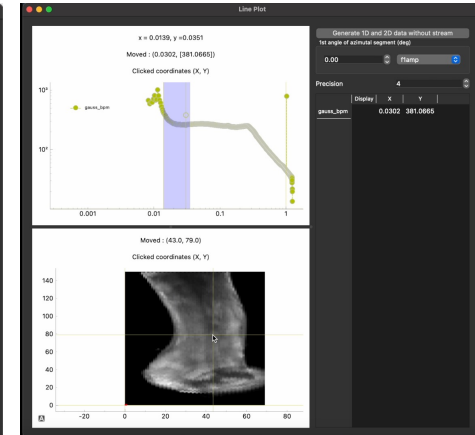
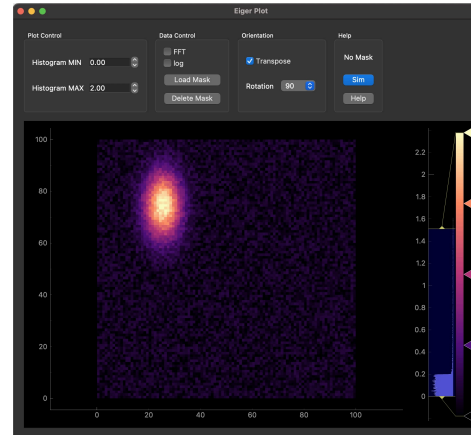
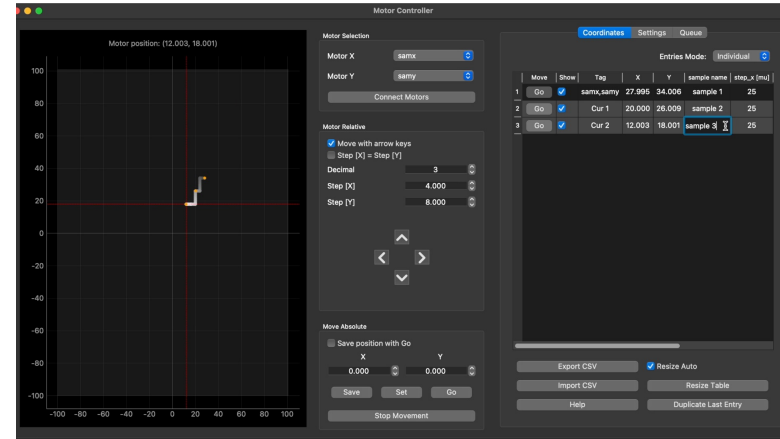
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EIDO (7901) Update

December 11, 2023

- **Core**
 - Development continues
 - Data analysis pipelines (DAPs)
- **Beamline integration**
 - HW-based fly scans via Digital Delay Generator
 - Several detectors (incl. Eiger via std-daq)
- **GUIs**
 - Continuous development
 - Close feedback loop with BLs
 - Examples:
 - Motion control / setting up scans
 - Eiger configuration / visualization
 - Interactive live feedback via DAP

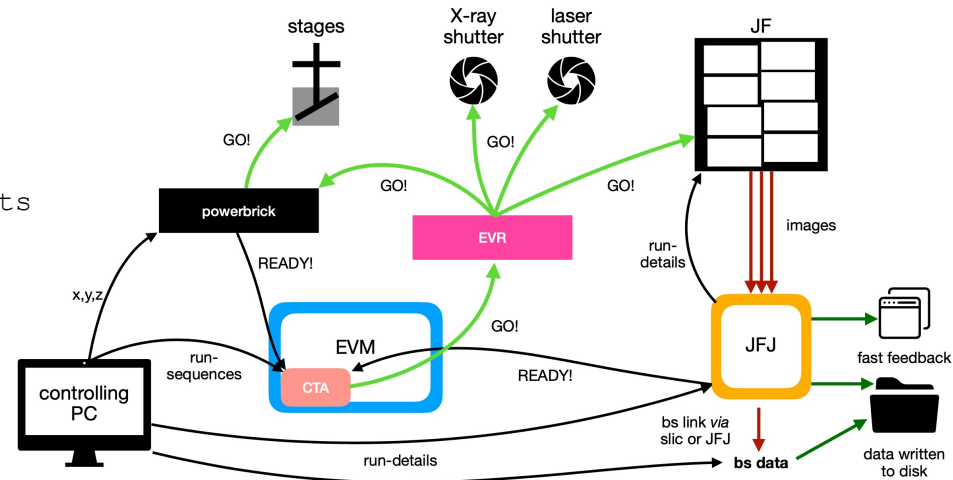


- CTA (Complex Triggering Application)
 - Allows user-defined event sequences
 - Library hasn't been updated since 2020
 - Only conda package for Python 3.6
 - Rebuild as noarch package

- **Now at Cristallina-MX: fast experiments**

Send 2D movement pattern to motor controller
 Start CTA to trigger moves in sync with events
 Read start and stop pulse IDs
 Cut full range into digestible pieces
 Continuously retrieve data for these pieces

- **A year ago at Alvra: slow experiment with specific pulses**
 repeat for N shots:
 - move 2 motors to sample cell on 2D grid
 - CTA to open/close pulse picker for one shot
 - read and collect ID for that pulse
 - retrieve data for N collected IDs



Envisioned final setup [Drawing courtesy of John Beale]

Questions?

