

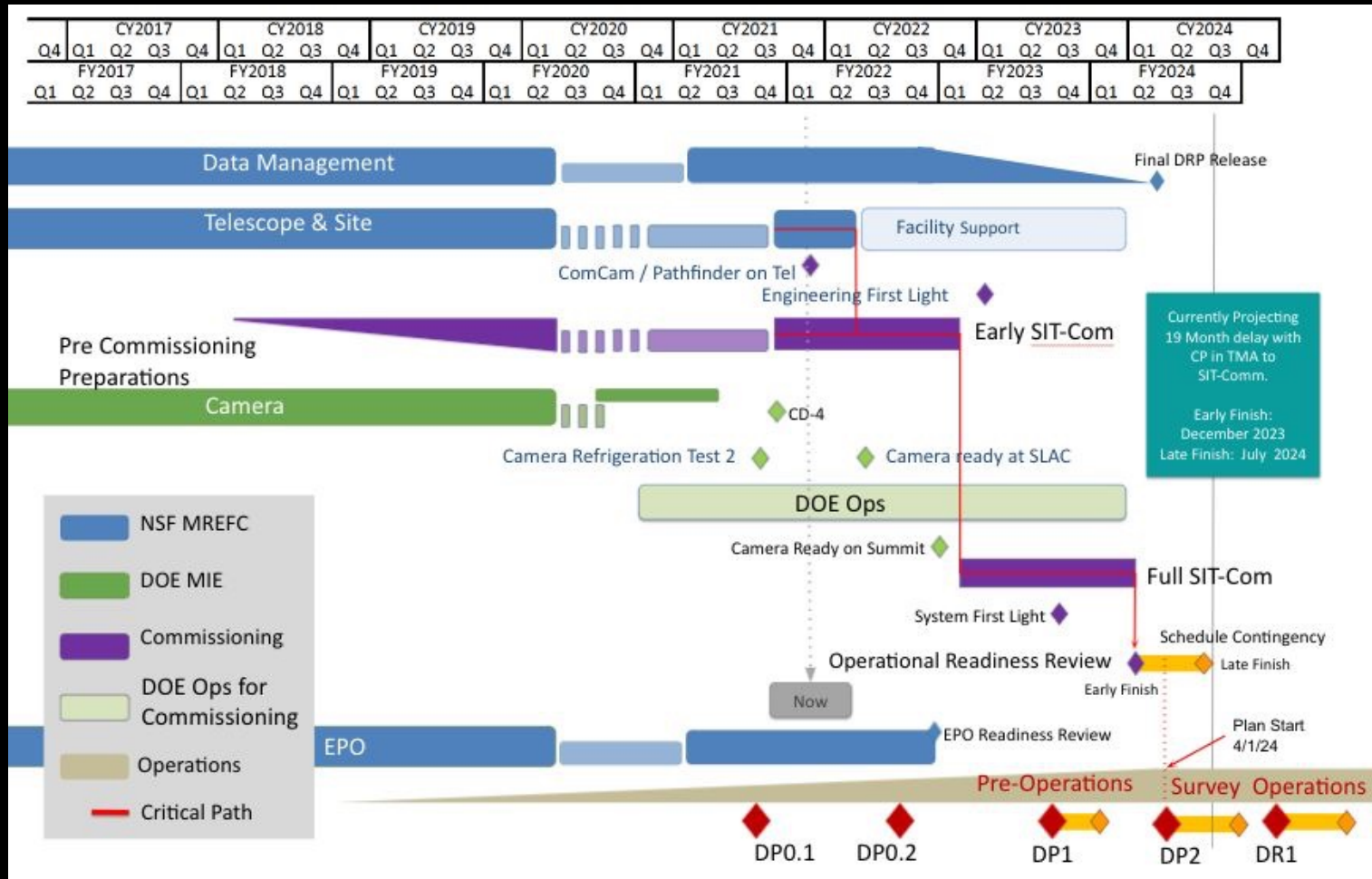
Camera and Telescope News



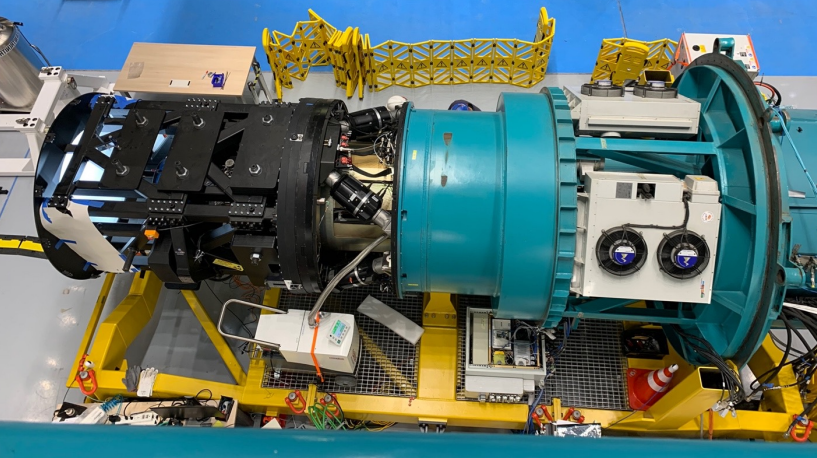
LSST France – 16 May 2022

Claire Juramy

(Slipping) planning

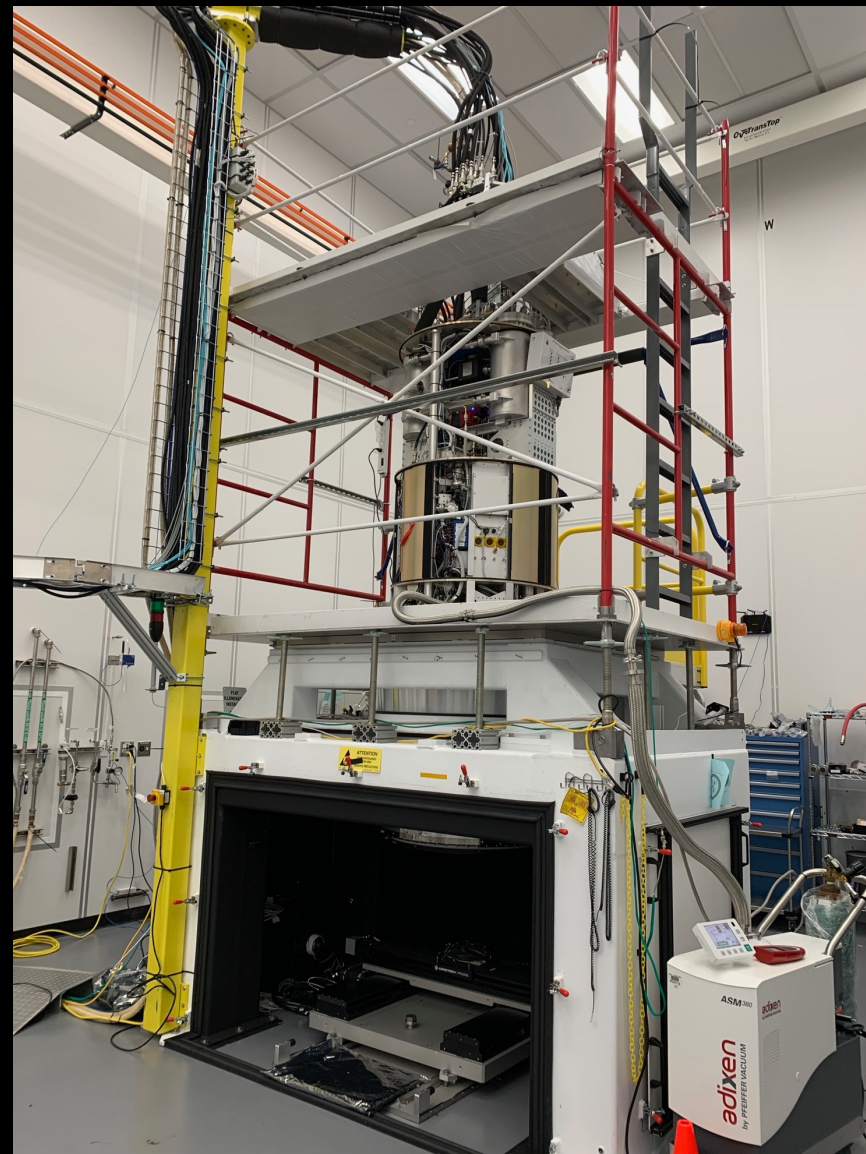


Telescope and Summit



Camera Integration

- Previously:

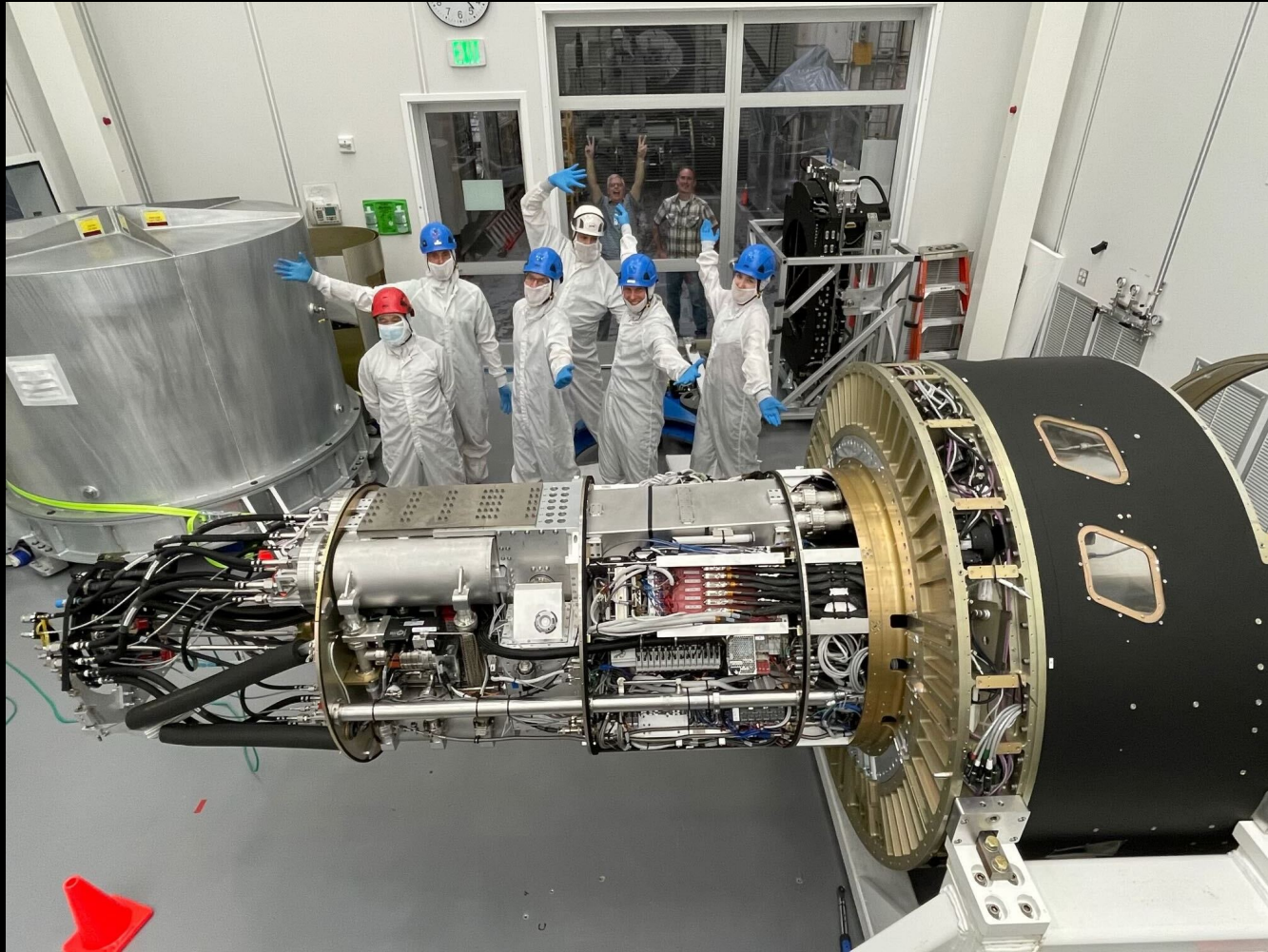


Camera Integration

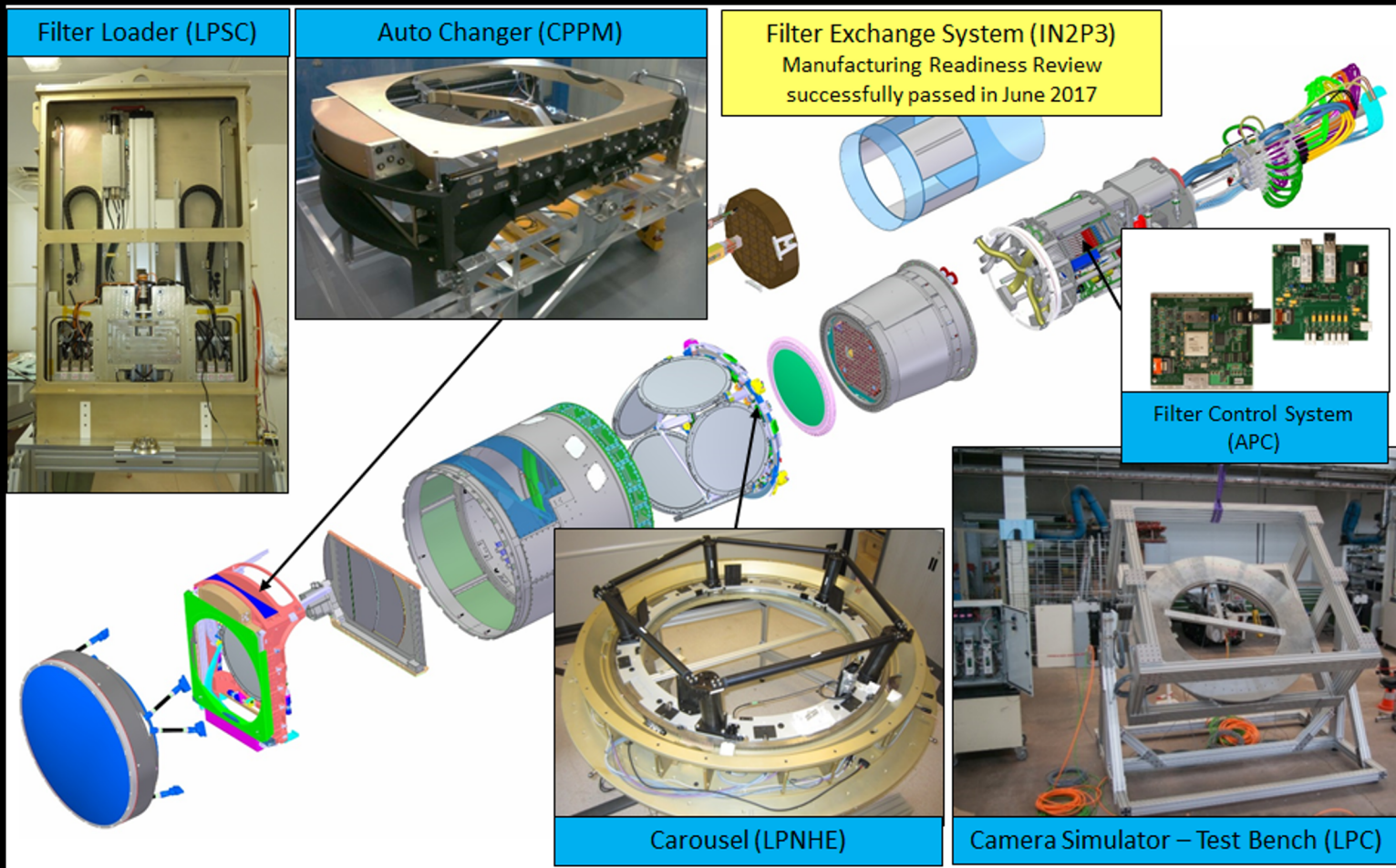
- L3 lens
- Move to horizontal stand



Camera Integration

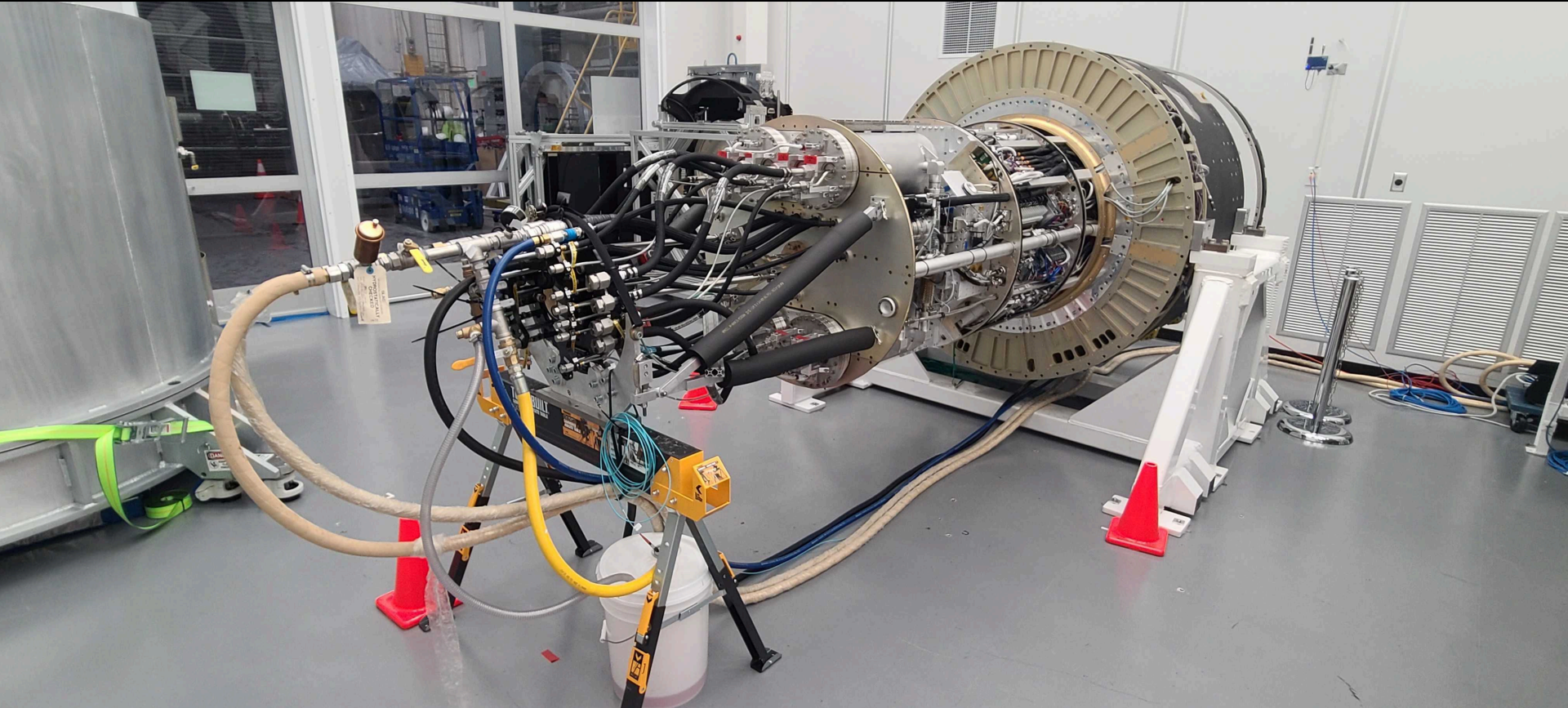


Filter Exchange System



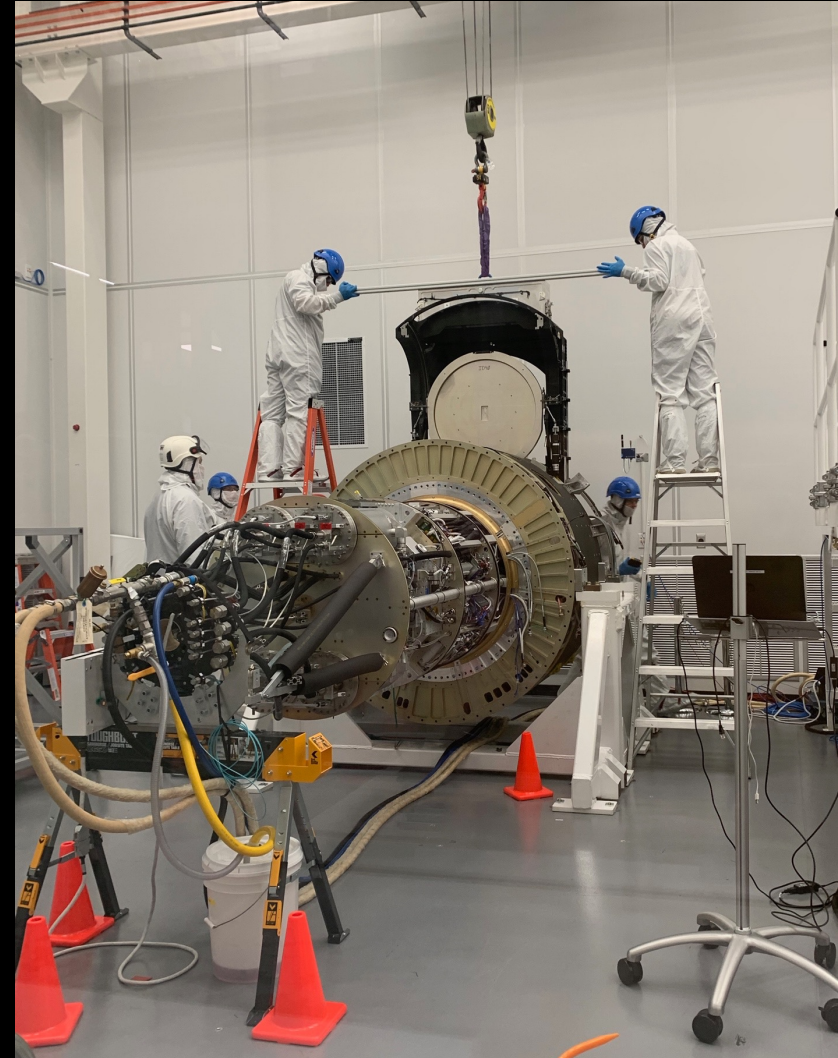
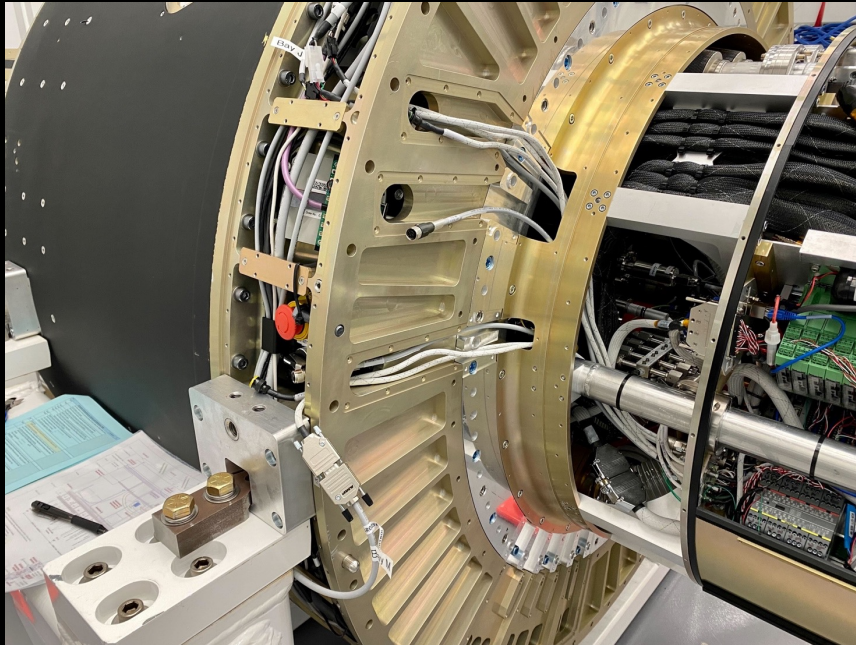
Filter Exchange System

- Integration with UT power supplies and electronics



Filter Exchange System

- Integration with UT: cabling
- Prepared in February, done in April
- Rotation, clearance of AC
- Full exchange, safety check



Filter Exchange System: next

- GUI
- Check loader with integrated system
- Real filters
- Loader 2
- Autochanger 2

The screenshot displays the CCS Console interface for the 'antilog' system. The main window shows the 'FCS' (Filter Control System) status and configuration. The top status bar indicates the following states: PhaseState: OPERATIONAL, OperationalState: ENGINEERING_OK, CommandState: READY, and AlertState: WARNING. Below this, the 'FCS State' is ONLINE_NONE and the 'Hardware State' is READY. A 'filterID_0' indicator is visible on the right side of the console.

The left sidebar shows a tree view of the system components, including 'CCS Alerts', 'aliveness-fb', 'aliveness-ih', 'bot-bench', 'ccs-doorman', 'cluster-monitor', 'eatonodus', 'fcs', 'tcpProxy', 'tempSensorsDevice2', 'ir2-mm', 'ivthon-server', 'localdb', 'refrio', 'rest-server', 'ts7-1', 'ts7-reboower', 'ts8-bench', 'ts8-dag-monitor', 'ts8-fb', and 'ts8-ih'. The 'Loader' component is currently selected.

The main display area is divided into several sections:

- General Informations:** Homina: DONE, Name: sockets5, Actual position: 849942, Carousel position at STANDBY: 707070, Delta position: 142872, NOT AT STANDBY position, Slave Status: IS_READY_NOT_IN_POSITION.
- Clamp Xminus5:** UNCLAMPED AND EMPTY, Controller status: disable, Actual current: 0. Parameters: minLimit: 200, offset1: 2390, offset2: 6163, offset3: 0, minNoFilter: 9200, maxValue: 12000.
- Clamp Xplus5:** FILTER UNLOCKABLE, Controller status: disable, Actual current: 0. Parameters: minLimit: 200, offset1: 2108, offset2: 3227, offset3: 0, minNoFilter: 9200, maxValue: 12000.

The bottom right corner of the console shows the IP address 345/9/98/0/MS.

Filters



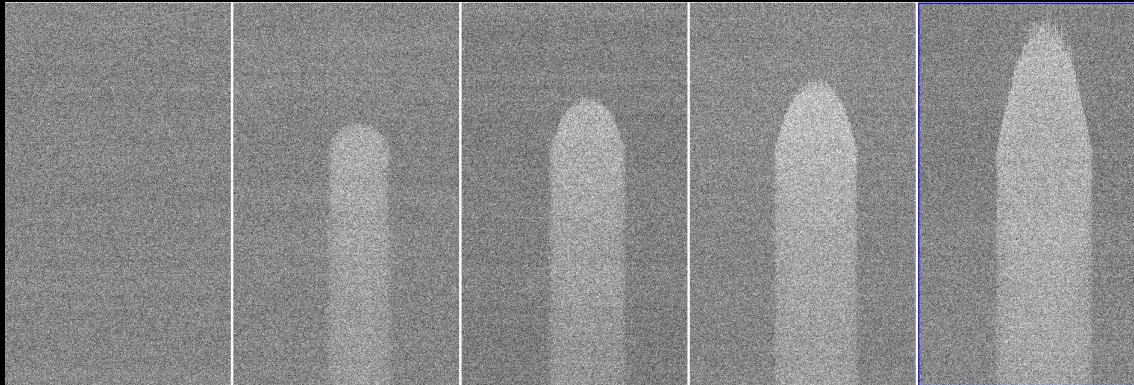
Camera Integration

- Next moves: back on rotator, L1 + L2
- Refrigeration: change of fluid



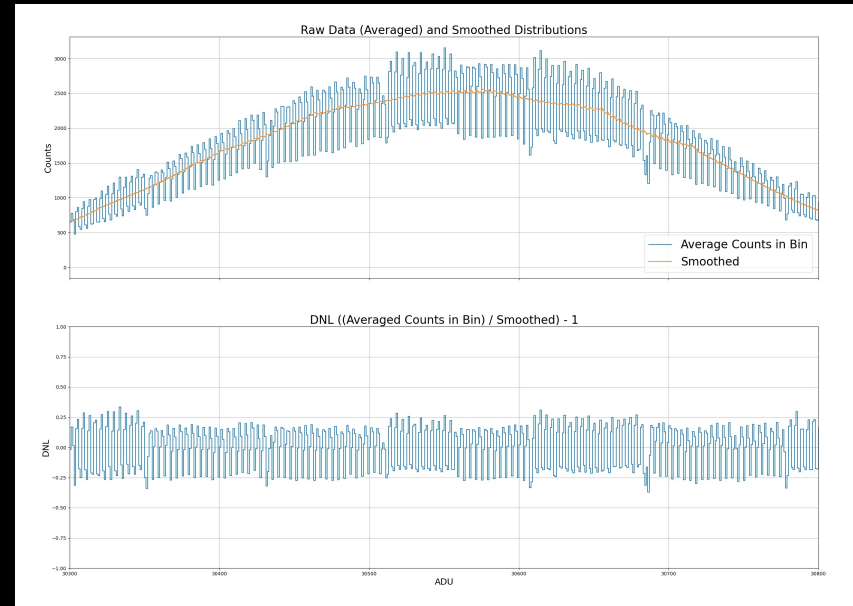
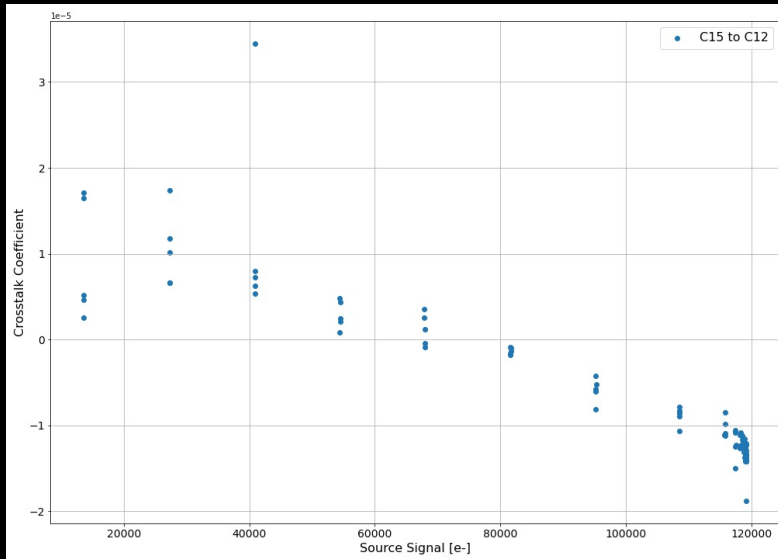
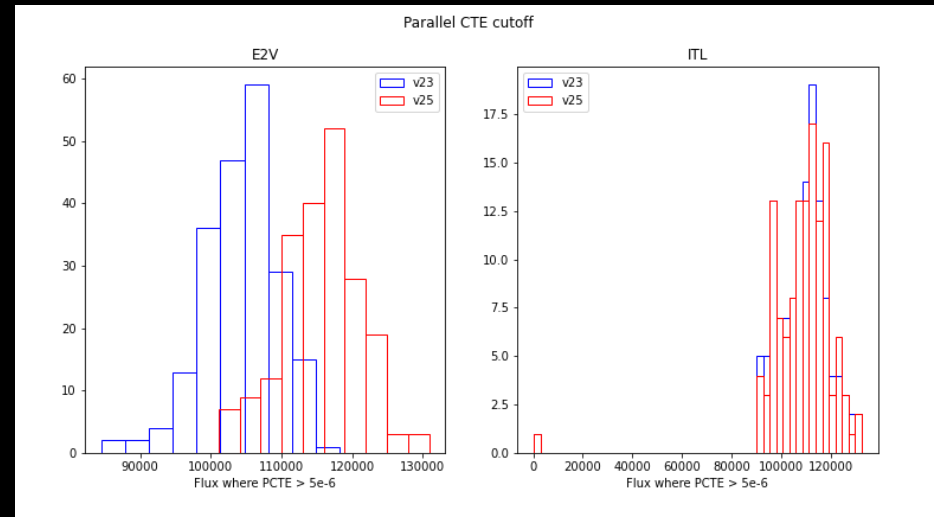
Focal Plane

- Run 5 tests: from November 2021 to February 2022, with UT power supplies and refrigeration
- Multiple failures of refrigeration system: blockage in the lines, issues with data corruption (solved)
- Optimization of readout sequences: parallel transfer times, (slightly) longer readout times
- Crosstalk, spot projector (several wavelengths): persistence effect
- CCOB: incomplete run



Focal Plane Studies

- Full Well (parallel-transfer limited)
- Gain stability (HV, temperature)
- Bias stability
- Crosstalk non-linearity
- ADC 'bit width'



Focal Plane Upcoming Tests

- Last run at SLAC, with full optics: lenses and filters
- CCOB Wide Beam (with bonus pinhole filter)
- CCOB Narrow Beam: series with positions on lens x angles x 15 wavelengths x 6 filters

