Instrument System Acceptance Review

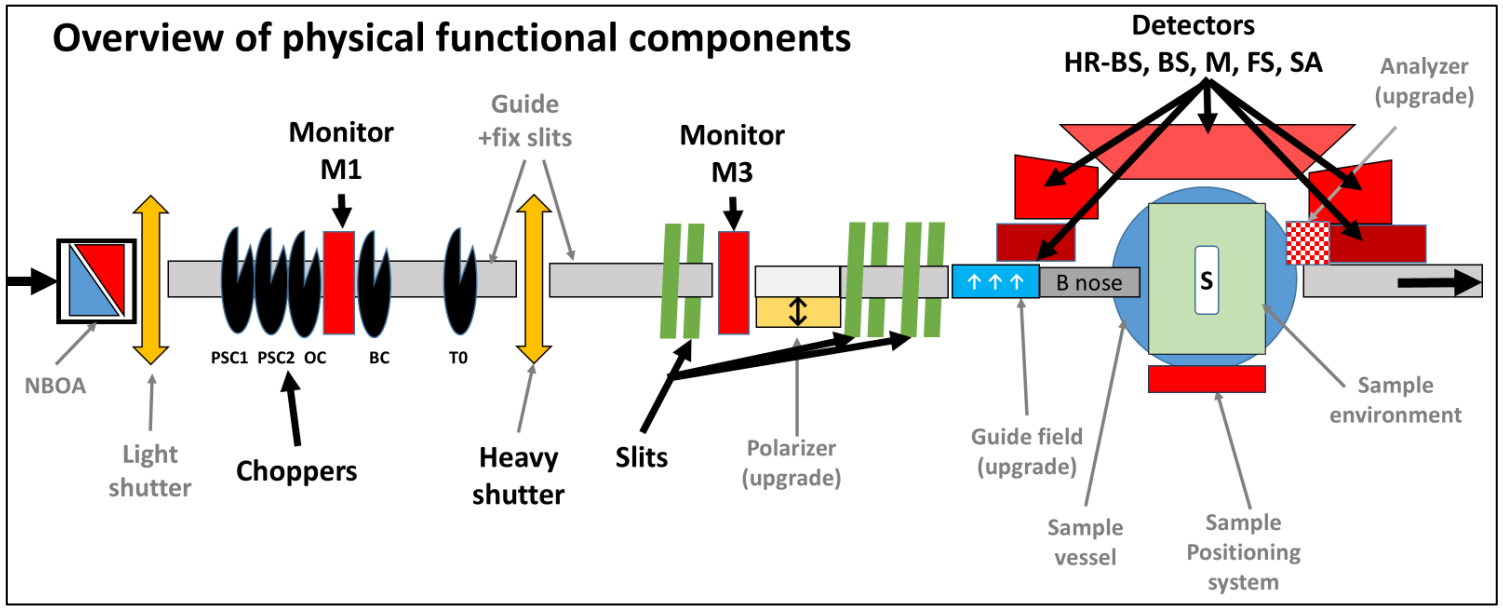
DREAM: Integrated Test Results

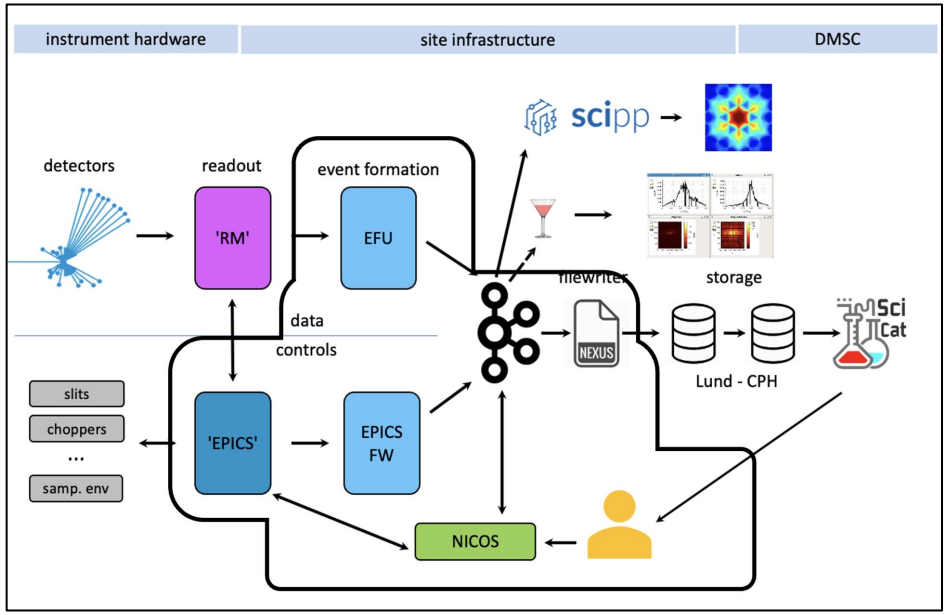
DREAM team
& Choppers, DetG, MCA, ICS, ECDC, DMSC

DREAM overview

Integrated SAT:

- After FATs and SATs of the subsystems involved.
- Multiple subsystems tested together in their final installed configuration
- Validate interfaces, data flows, controls, timing, and interlocks between systems.
- Confirms readiness for commissioning and operational use.





+ Power + Networks + Fluid + Vacuum + Gas ...

Overview of iSAT documents

DREAM Red documents

FATs		SATs		Integrated SATs reports	
All Verification report/-s (or equivalent from FAT/SAT) for sub-systems (safety systems and supporting systems) Checked TG5 if they are direct dependencies for Integrated CC tests or for safety systems. Should be available from Q Gate/IRR No quality improvements.		All Validation report/-s (or equivalent from SSAR/SAT/Local testing) for sub-systems (safety systems and supporting systems) These are the pre-requisites for integrated CC tests		Integrated System Verification Report (full instrument cold commissioned including controls)	
DREAM Beam monitors 1 & 3					
ESS-5509304 FAT DREAM IB-monitor A in bunker M1	CHESS RELEASED REV 1	ESS-5993807 Local Test Report for the DREAM Beam Monitoring Systems	CHESS PRELIM REV 1 17 Mar 2026 Released	ESS-5996678	CHESS RELEASED REV 1
ESS-5509300 FAT DREAM IB monitor B in cave M3	CHESS RELEASED REV 1	Included in above	17 Mar 2026 Released (same as above)		
Included in ESS-5509304 FAT DREAM IB-monitor A in bunker M1 listed above			17 Mar 2026 Released (same as above)		
Included in ESS-5509300 FAT DREAM IB monitor B in cave M3 listed above			17 Mar 2026 Released (same as above)		
DREAM Choppers (PSC-OC-BC) & T0					
ESS-4969447 FAT Chopper Remote Handling Supports ESS-5584698 FAT Fast Disk choppers	CHESS RELEASED REV 1 CHESS RELEASED REV 1	ESS-5767433 Dream Disc Chopper System SAT	CHESS RELEASED REV 1	ESS-5975057: Test Report for DREAM Choppers Integrated Tests	CHESS RELEASED REV 1
ESS-5635463 DREAM T0 Chopper System FAT/Mirrotron FAT	CHESS RELEASED REV 1	ESS-5856744 Dream T0 System SAT	CHESS RELEASED REV 1	Same as above	
DREAM Slit system					
ESS-5030564 FAT slits and guide field ESS-5642838 DAT Report for Piezo-driven DREAM collimation slits system	CHESS RELEASED REV 1 CHESS RELEASED REV 1	ESS-5080456 SAT Slit System	CHESS PRELIM REV 1 18 Mar 2023 Released	ESS-6013997: Integrated test report DREAM Beam Collimation System	CHESS RELEASED REV 1
DREAM Detector system					
ESS-5167269 DREAM endcap FAT report	CHESS RELEASED REV 2	ESS-5988187 Local test report (SAT1) for the DREAM detector system	CHESS RELEASED REV 1	ESS-6017703	CHESS RELEASED REV 1
ESS-5830014 DREAM Mantle Detector FAT	CHESS RELEASED REV 1				
ESS-5830016 DREAM HR and SANS Detectors FAT	CHESS RELEASED REV 1				
ESS-5167269 DREAM endcap FAT report	CHESS RELEASED REV 2				

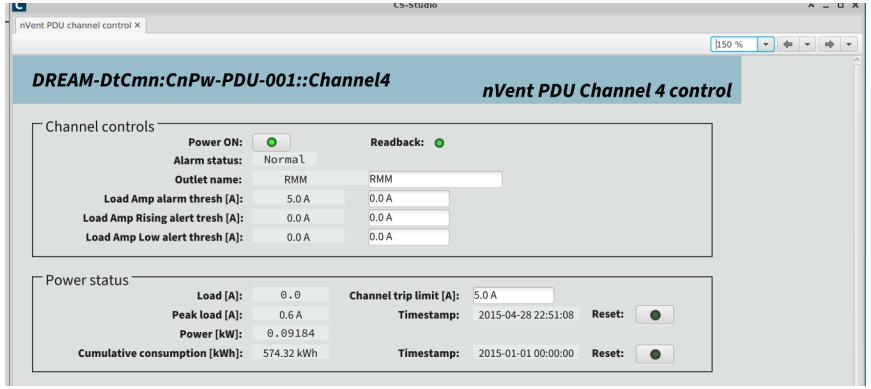
Subsystems

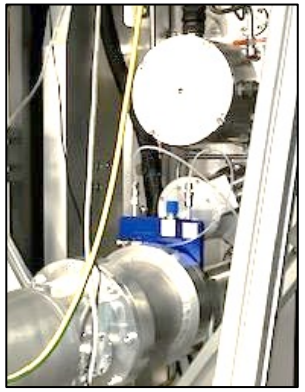
INTEGRATED TEST REPORT FOR THE DREAM BEAM MONITOR SYSTEM

	Name	Role/Title
Owner	Anna Fornell	DREAM Instrument Operations Engineer
Authors	Werner Schweika	Instrument Scientist - Diffraction
	Florence Porcher	DREAM Lead Instrument Scientist
Reviewers	Ioannis Katsioulas	Beam monitors WP manager (Detector Group)
	Torbjörn Grahm	FPGA Team Leader and Detector Readout Group Leader
	Tibor Bukovics	ECDC EFU engineer
	George Kontogiorgos	Data Acquisition Software Engineer – ECDC
	Jonas Petersson	Data Acquisition Software Engineer – ECDC
	Douglas Araujo	Control System Integrator
	Céline Durniak	DREAM Instrument Data Scientist
Approver	Mikhail Feygenson	Head of Diffraction & Imaging Division

DREAM Beam monitors

TEST CASE(S) TO BE PERFORMED	SUMMARY FINDINGS				
	Pass	Fail	NA	Signature	Date
2. EPICS, RMM and Slow control	☒	☐	☐	Ioannis Katsioulas Céline Durniak Florence Porcher Anna Fornell	2nd March 2026 25th February 2026 25th February 2026 25th February 2026
Comments:					
3. Event Formation Unit	☒	☐	☐	Céline Durniak Tibor Bukovics Florence Porcher Anna Fornell	25th February 2026 25th February 2026 25th February 2026 25th February 2026
Comments:					





TEST CASE 2. EPICS, RMM and slow control

2.1 Check that all relevant firmware registries can be set and read out via EPICS for each of the 2 monitors

☐N/A ☒Pass ☐Fail ☐Remark:

2.2 Check that we can bring up one ring (or several) rings containing all 2 data streams:

Node ID 0 – IBR - I-BM CDT (In-Bunker Rack)

Node ID 1 – CP – I-BM CDT (Cave/Detector Rack)

☐N/A ☒Pass ☐Fail ☐Remark:

2.3 Check that the IP addresses for the EFU servers can be read and written to the RMM via EPICS:

☐N/A ☒Pass ☐Fail ☐Remark:

2.4 Check that HV can be set and read for all 2 monitors via EPICS

☐N/A ☒Pass ☐Fail ☐Remark:

2.5 Check that the RMM can be power cycled remotely, via the connection to the PDU

☐N/A ☒Pass ☐Fail ☒Remark: Power cycling available through Phoebus.

TEST CASE 3. Event Formation Unit

3.1 Test that the monitor EFU receives data from the RMM when all monitors are turned on and communication has been established
☐N/A ☒Pass ☐Fail ☐Remark:

3.2 Test/verify that the data format is as expected and stated in the monitors ICDs
☐N/A ☒Pass ☐Fail ☐Remark:

3.3 Test that the data for all monitors is broadcasted via Kafka
☐N/A ☒Pass ☐Fail ☐Remark:

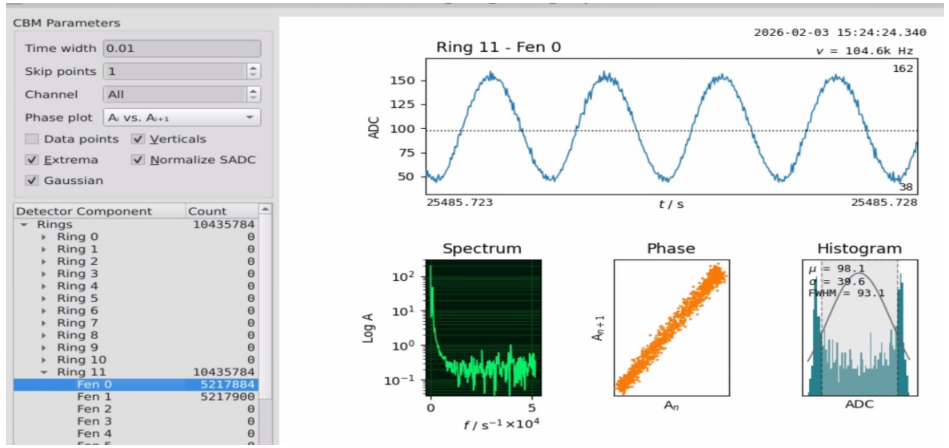
3.4 Test that the time stamping of the data for the 2 monitors is consistent
☐N/A ☒Pass ☐Fail ☒Remark: The system could not be tested with ESS global timing, refer to TECHFORCE-123.

https://jira.ess.eu/browse/NIP-299

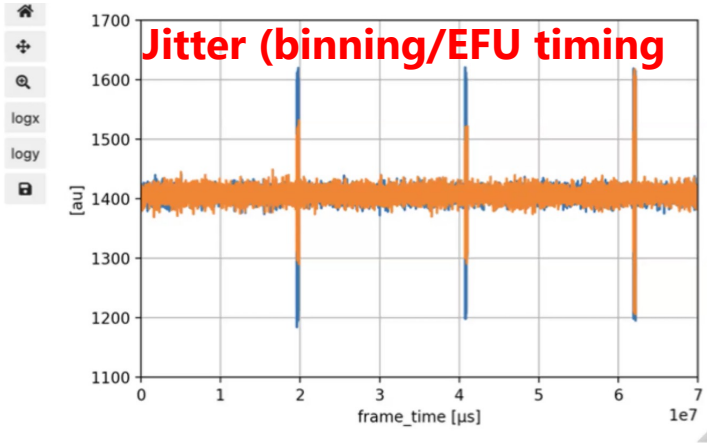
DREAM Beam monitors

TEST CASE(S) TO BE PERFORMED	SUMMARY FINDINGS				
	Pass	Fail	NA	Signature	Date
4. NICOS & Post-EFU processing	☒	☐	☐	George Kontogiorgos Céline Durniak Florence Porcher Anna Fornell	3rd March 2026 25th February 2026 25th February 2026 25th February 2026
Comments:					

Plots using AR51 – 1kHz sound at BM3



Plots using the NeXus file and Scipp



Plot from Nicos

TEST CASE 4. NICOS & Post-EFU processing

4.1 Check and validate that the ADC thresholds can be set for the monitors

☐N/A ☒Pass ☐Fail ☒Remark: It is not available, but after discussions we decided it is not absolutely needed.

4.2 Verify that the monitors' ADC data can be histogrammed and aggregated with the ADC binning

☐N/A ☒Pass ☐Fail ☐Remark:

4.3 Verify that the monitors' ADC data can be histogrammed and aggregated with the desired time binning with a timing synchronized with ESS global timing system and aligned with DREAM's choppers

☐N/A ☒Pass ☐Fail ☒Remark: Artifacts observed during histogramming that have to do with the EFU binning and ESS global timing, see 3.4.

4.4 Verify that all aggregated spectra, including a 14 Hz integrated ADC value, is broadcasted over Kafka and saved in a Nexus file

☐N/A ☒Pass ☐Fail ☐Remark:

4.5 Verify the NICOS plots the aggregated spectra for 2 monitors

☐N/A ☒Pass ☐Fail ☐Remark:

4.6 Verify that externally induced monitor signal is propagated and visualized through the ESS data chain

☐N/A ☒Pass ☐Fail ☐Remark:

CONCLUSION:

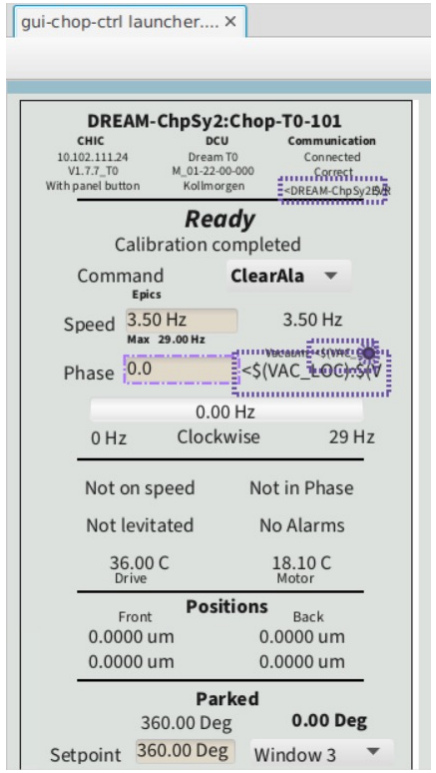
- **OK but tests performed with local timing only**
- **Few negative TOF events**
- **TECHFORCE-123 / NIP-299**

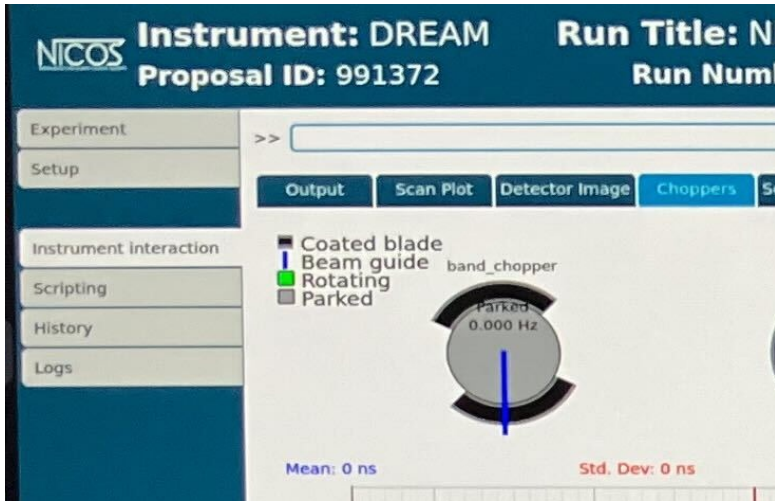
TEST REPORT FOR DREAM CHOPPERS INTEGRATED TESTS

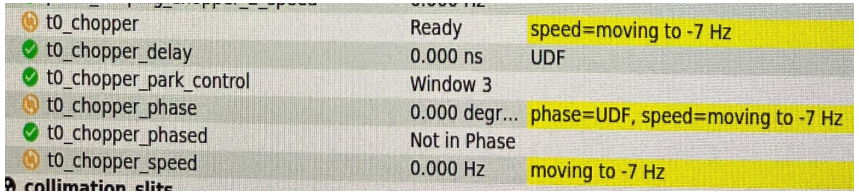
	Name	Role/Title
Owner	Anna Fornell	DREAM Instrument Operations Engineer
Reviewer	Nikolaos Tsapatsaris Markus Olsson Céline Durniak George Kontogiorgos Florence Porcher Paulo Brant Carvalho	Neutron Chopper Group Leader Lead Control Systems Engineer for Neutron Choppers Instrument Data Scientist for Diffraction Data Acquisition Software Engineer DREAM Lead Instrument Scientist DREAM Commissioning Scientist
Approver	Mikhail Feygenson	Head of the Diffraction & Imaging Division

DREAM Choppers (individual tests)

TEST CASE(S) TO BE PERFORMED	SUMMARY FINDINGS				
	Pass	Fail	NA	Signature	Date
1. PSC1-PSC2-OC chopper assembly	☒	☐	☐	Florence Porcher	14/01/2026
Comments:					
2. BC chopper	☒	☐	☐	Florence Porcher	14/01/2026
Comments:					
3. T0 chopper	☒	☐	☐	Florence Porcher	14/01/2026
Comments:					







Part A: Parking open or close of individual discs

1.1 The PSC1 disc can be parked open (321.5°) and close (12°) in NICOS with an accuracy better than 0.2°, confirmed by the read-out from the SKF controller

Part B: Checking the phasing to the reference pulse at 14 Hz

Note: These tests will use (1) the TDC pulse which is generated every complete rotation of the chopper disc, and (2) the reference pulse at 14 Hz. These two pulses should line up together to the limit of accumulated errors that will affect the control loop. During the tests these errors will be evaluated through NICOS and compared to the readout from the SKF controllers and the values measured during the choppers FATs performed by chopper group.

Part C: Disc rotation phase shift with respect to the reference pulse – "real" phasing – at 14 Hz

Note: Here we will put a time delay to the reference pulse to represent a phase shift at 14 Hz.

Part D: Speed test with finite phasing with respect to reference pulse (clockwise or counterclockwise rotation of individual discs) up to the maximum operational speed of the discs.

Note: The DREAM PSC chopper system operate in multiples of 14 Hz, up to 308 Hz for the PSC1 and PSC2 discs respectively. The 14 Hz overlap chopper (OC) eliminates higher harmonics from PSC1-PSC2 discs. Multiple configurations of choppers speeds and phases will be used during instrument operations. The phase of PSC, OC (and BC) are shifted simultaneously to change the wavelength range selected. 17 configurations were tested during local SAT (see Table 1), including the 2 "High resolution modes" which operate at the high chopper speeds (Configurations 15 & 17 of Table 1).

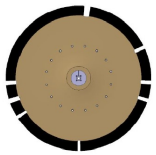
Note: Here we will put a time delay to the reference pulse to represent a phase shift at 14 Hz.

Part E: Relative phase test with finite phasing with respect to reference pulse – up to the maximum operational speeds of the discs. Checking the "sweeping" of phases functionality.

Note: Here we will put a time delay to the reference pulse to represent a phase shift at 14 Hz.

- **CHIC to reference pulse timing system**
- **CHIC – EPICS – NICOS**
- **CHIC – EPICS – Kafka – NeXus**

DREAM Choppers (Experimental configurations)

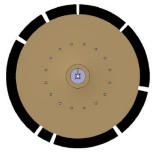


PSC choppers

14, 28,… 308 Hz

+

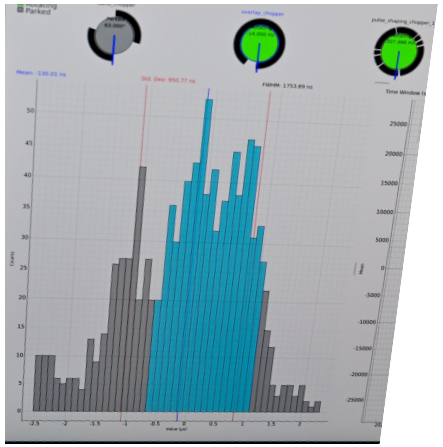
Fine slits

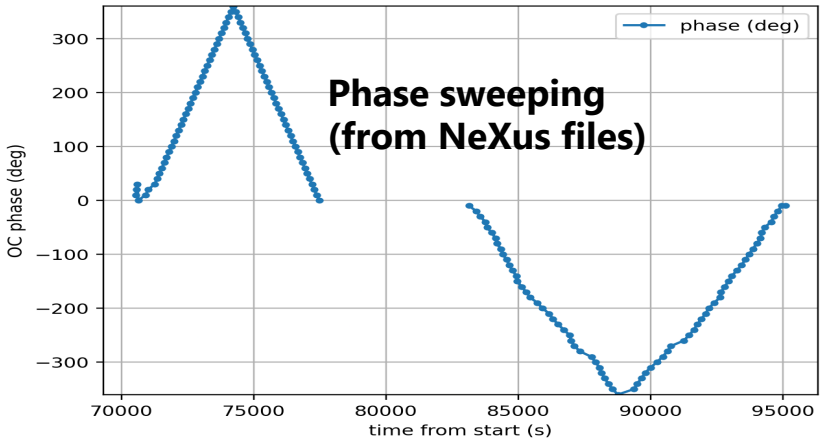


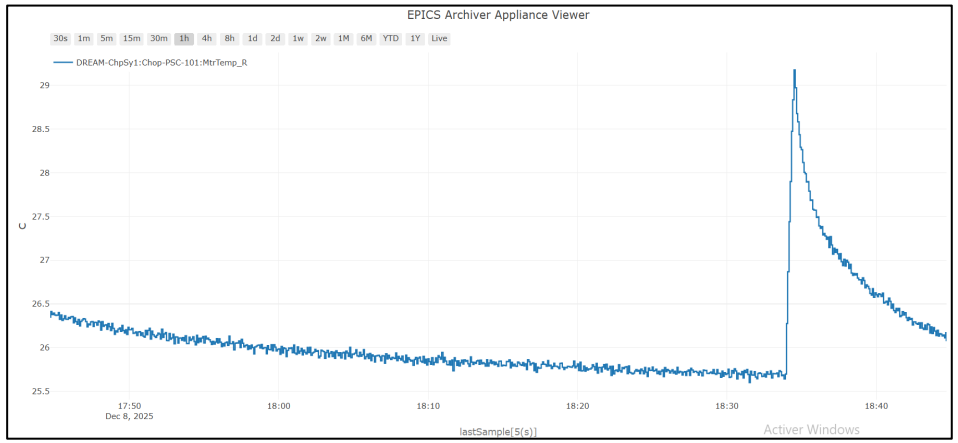
High accuracy for phasing

+

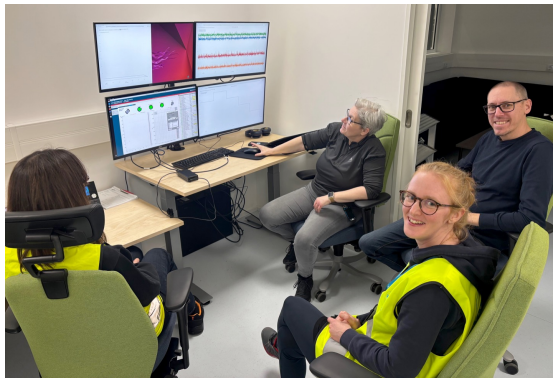
Sweeping option







TEST CASE(S) TO BE PERFORMED	SUMMARY FINDINGS				
	Pass	Fail	NA	Signature	Date
4. Experimental configuration	☒	☐	☐	Florence Porcher	14/01/2026
Comments:					
5. Data control & acquisition	☒	☐	☐	Florence Porcher	14/01/2026



Conclusion: (very few) bugs solved on the spot

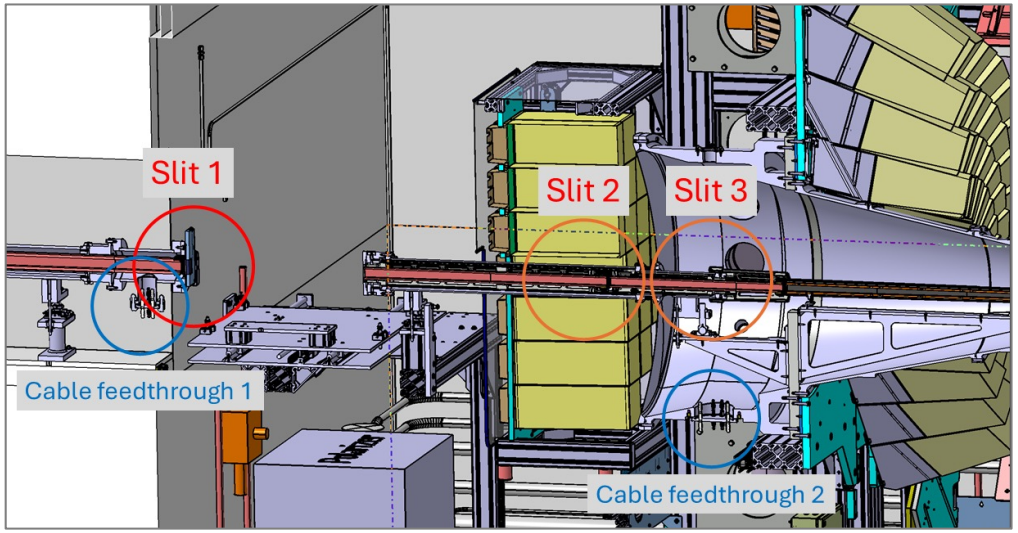
NICOS:

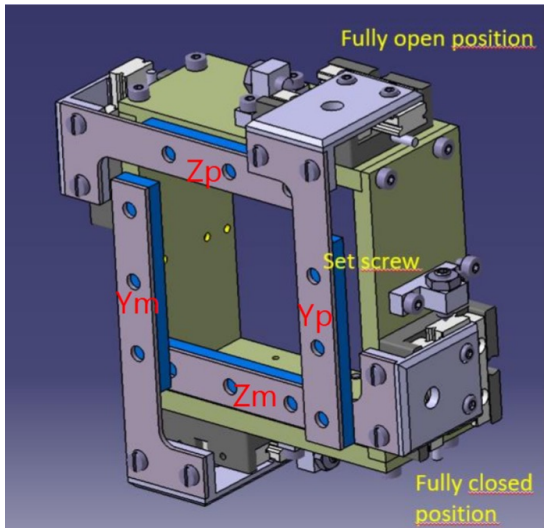
- **Predefined speeds for choppers ⇔ Configurations**
- **Normal/Expert mode**
- **New option “regret” command**
- **Scripting validated (Phase sweeping)**
- **New ideas of scripts for Hot Commissioning (Configurations)**

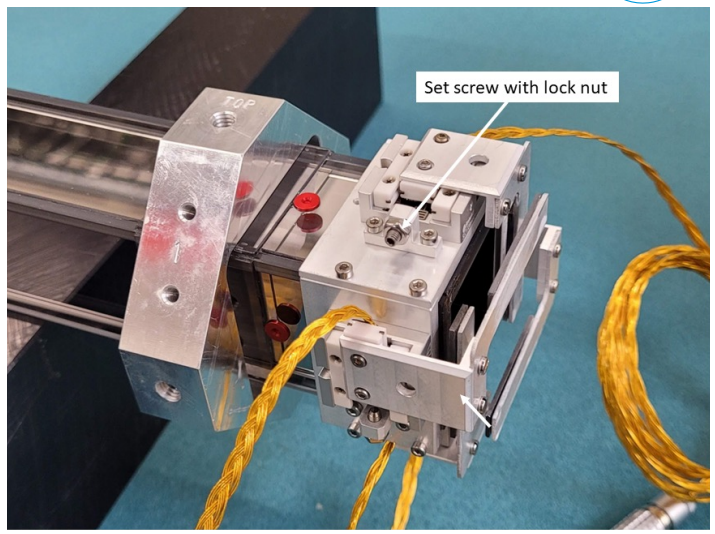
INTEGRATED TEST REPORT DREAM BEAM COLLIMATION SYSTEM

	Name	Role/Title
Owner	Anna Fornell	DREAM Instrument Operations Engineer
Author	Florence Porcher	DREAM Instrument Scientist
Reviewer	George Kontogiorgos Hussein Al-Sallami Jonas Petterson Céline Durniak Andre de Oliveira Favoto	ECDC Data Acquisition Software Engineer MCA Motion Control Engineer ECDC Motion Control Engineer DREAM Instrument Data Scientist ICS Control System Integrator
Approver	Mikhail Feygenson	Head of Diffraction & Imaging Division

DREAM Slits system







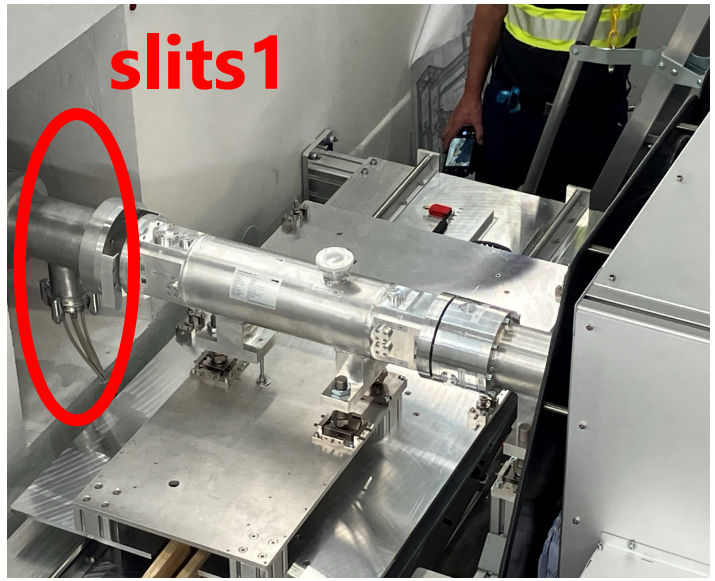
DREAM SLITS SYSTEM

3 slits assemblies:

- **4 slit blades $AlMg_3$ coated with $^{10}B_4C$ (1mm) + Cd (1mm)**
- **4 piezo actuators, type SmarAct SLC1720**
- **4 integrated position encoders (Radiation hard?)**
- **Hard limits (screws)**

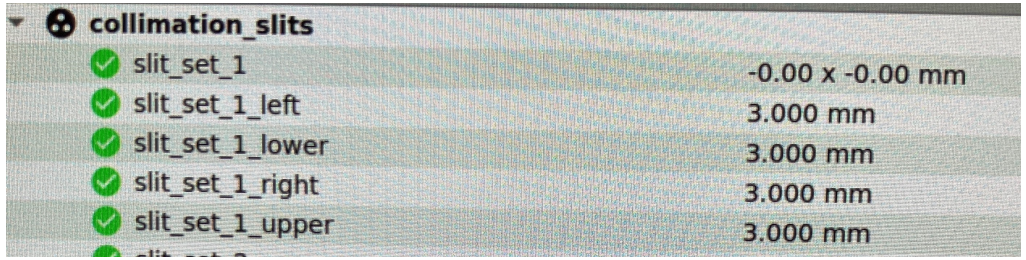
Inside vacuum

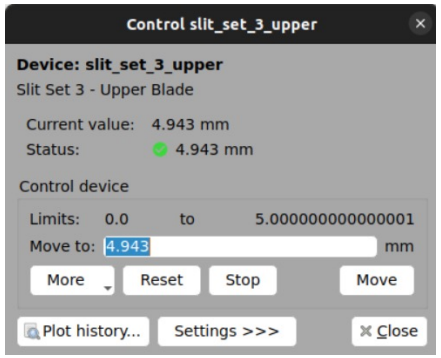
Only 2 positions needed – "fully OPEN" and "partially CLOSED"

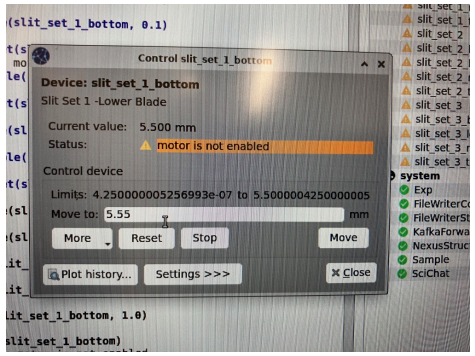


DREAM Slits system

TEST CASE(S) TO BE PERFORMED	SUMMARY FINDINGS				
	Pass	Fail	NA	Signature	Date
1. Components visual inspection	☒	☐	☐	Florence Porcher	24th February 2026
Comments:					
2. NICOS (closed loop)	☐	☒	☐	Florence Porcher	24th February 2026
Comments:					
3. Performance evaluation	☒	☐	☐	Florence Porcher	24th February 2026
Comments:					
4. NICOS (open loop)	☐	☒	☐	Florence Porcher	24th February 2026
Comments:					
5. Documentation	☒	☐	☐	Florence Porcher	24th February 2026
Comments:					







TEST CASE 2. NICOS Control in closed loop mode (positioning with feedback from encoders)

The motion of the slits is set in closed loop mode (normal mode). The setpoint is set in mm and the positioning is ensured by the feedback from the encoders.

The motor names used in the following correspond to the ESS EPICS PV names in the following way:

Collimation Slit Set 1 / Axis 1 / ColSl1:MC-SlYp-01 ... (and all other axes)

2.6 Verify that the Collimation Slit Set 1 opening parameter (in mm) can be set from NICOS, and that the individual slit set and readback values are set accordingly

☐N/A ☐Pass ☒Fail ☒Remark: The definition of y- and z-axis (left/right and top/bottom slits) is not consistent with MCA/ESS frame definition. The horizontal and vertical offsets in EPICS must be redefined. This will be done during the correction of NIT-668.

TEST CASE 3. Performance evaluation

3.1 Verify that the travel speed for all slits of Collimation Slit Set 1 is 1 mm/s +- 0.1

General remark: Time measurement was done manually and checked against NEXUS file. Average value of 5.3 s for 5 mm course with uncertainty coming from reaction time.

TEST CASE 4. NICOS Control in open loop mode (positioning without feedback from encoders)

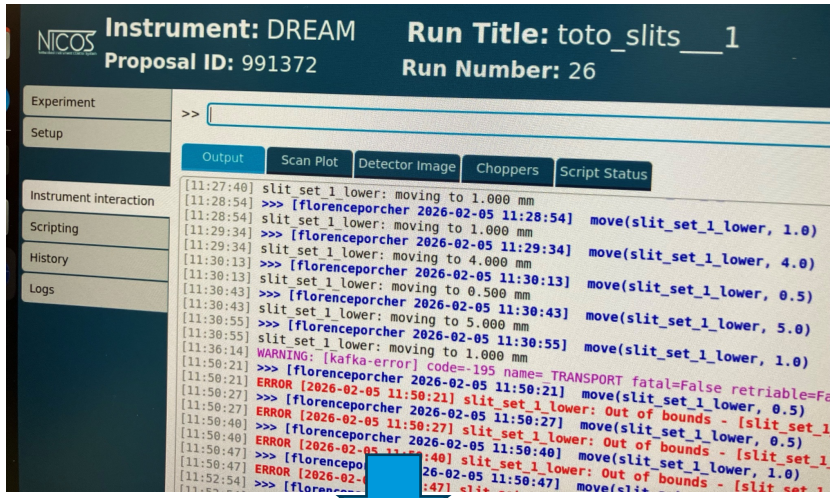
The motion of the slits is set in open loop mode. The setpoint is set in step units (pulses sent to the actuators) converted in mm equivalent. The position achieved is monitored against the value reported by the encoders without feedback correction.

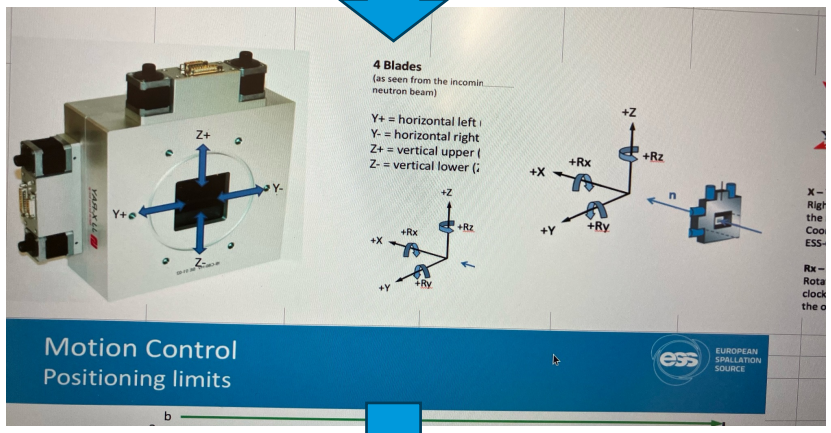
The transition from normal mode (closed loop) to open loop requires administration rights in NICOS. A NIT is created (NIT-669).

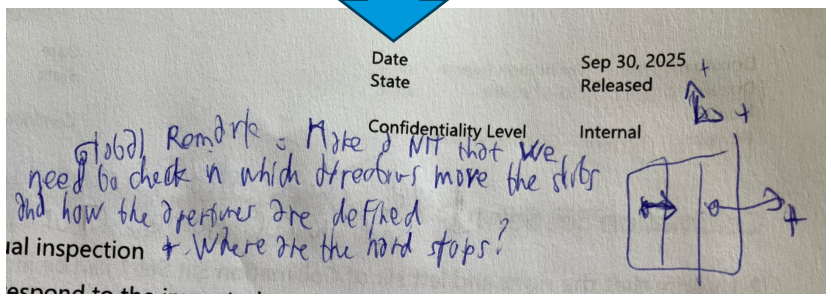
4.6 Verify that the Collimation Slit Set 1 opening parameter (in mm) can be set from NICOS, and that the individual slit set and readback values are set accordingly

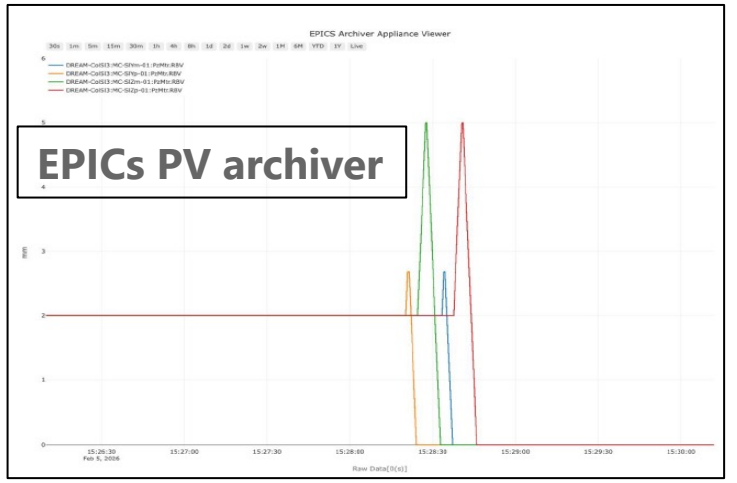
☐N/A ☐Pass ☒Fail ☒Remark: See 2.6

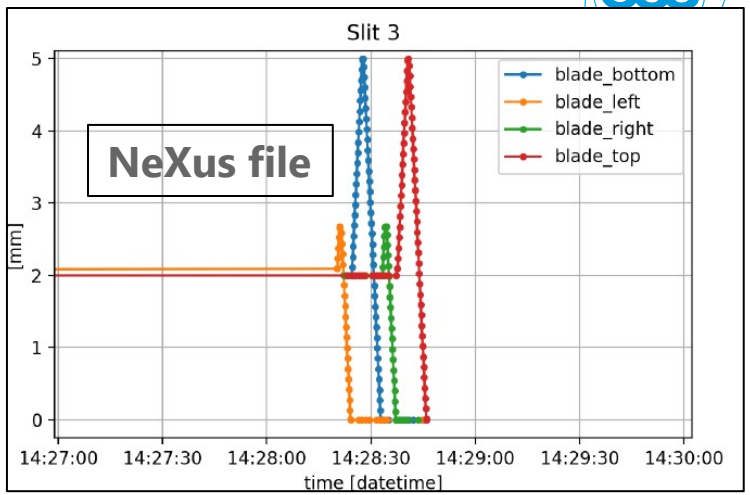
DREAM Slits system











Non-conformities need to be registered in the Enterprise Asset Management (EAM) system.

ITEM	DESCRIPTION	CATEGORY	RESPONSIBLE	COMPLETION DATE
1	DREAM visual inspection of slits NIT-668	e	MCA/ICS/DREAM	31st December 2026
2	DREAM close-loop to open-loop control of slits NIT-669	e	ECDC/DREAM	28th February 2027
3	DREAM: Slits limits are displayed with incorrect accuracy NIT-678	e	ECDC	1st December 2026

ECDC Data Management / ECDC-5509

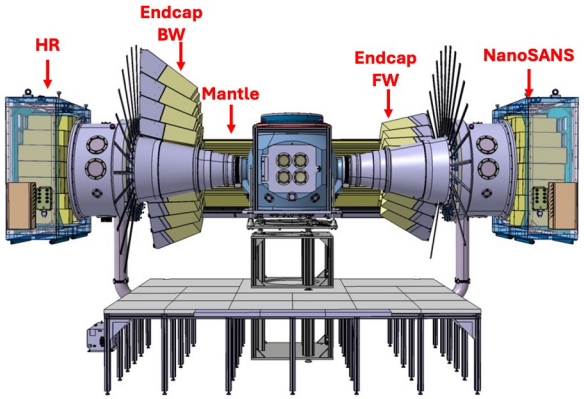
epics_motor: add tests and improve limit/offset/miss handling

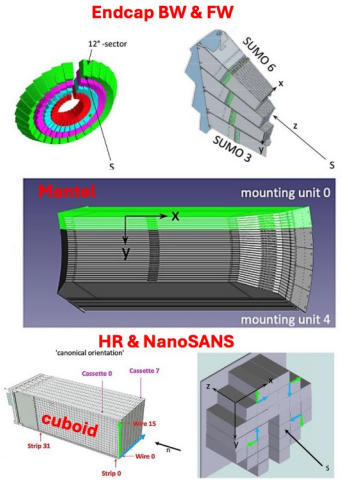
TEST REPORT FOR THE INTEGRATED TESTS OF DREAM NEUTRON DETECTOR SYSTEM

	Name	Role/Title
Owner	Anna Fornell	DREAM Instrument Operations Engineer
Author	Florence Porcher	DREAM Lead Instrument Scientist
Reviewer	Irina Stefanescu Paulo Brant Carvalho Céline Durniak George Kontogiorgos Simon Heybrock Mads Ipsen	Detector Scientist DREAM Instrument Scientist Instrument Data Scientist for DREAM Data Acquisition Software Engineer Software Scientist Scientific Software Engineer
Approver	Mikhail Feygenson	Head of Diffraction and Imaging Division

DREAM Detector system

LIST OF EQUIPMENT TO BE TESTED	
SIGNATURE: Florence Porcher	
DATE: 2nd March 2026	
1. ESS.NSS.H01.DREAM.B01.B01.B01 - Neutron Detector Array 1 (HR backward)	
2. ESS.NSS.H01.DREAM.B01.B01.B02 - Neutron Detector Array 2 (BW end cap)	
3. ESS.NSS.H01.DREAM.B01.B01.B03 - Neutron Detector Array 3 (Mantle)	
4. ESS.NSS.H01.DREAM.B01.B01.B04 - Neutron Detector Array 4 (FW end cap)	
~~5.~~ ESS.NSS.H01.DREAM.B01.C01.C01 - Detector DAQ System 1	
6. ESS.NSS.H01.DREAM.B01.C01.C02 - Detector DAQ System 2	
7. ESS.NSS.H01.DREAM.B01.C01.C03 - Detector DAQ System 3	
8. ESS.NSS.H01.DREAM.A05.Q01 – Gas mixing system	
9. ESS.NSS.H01.DREAM.K02.K01 – Experiment Control	
10. ESS.NSS.H01.DREAM.K02.K02 – Data curation	
11. ESS.NSS.H01.DREAM.K02.K03 – Data Reduction	



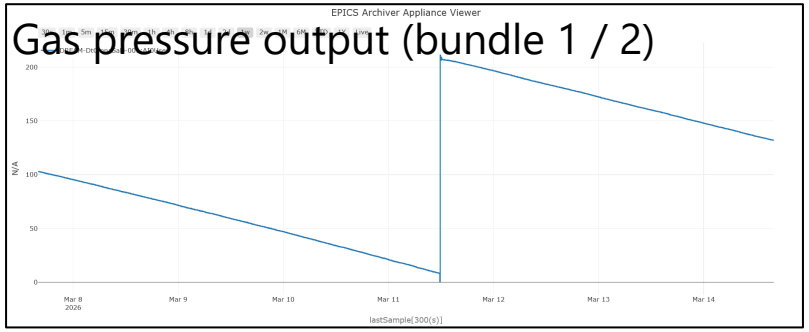


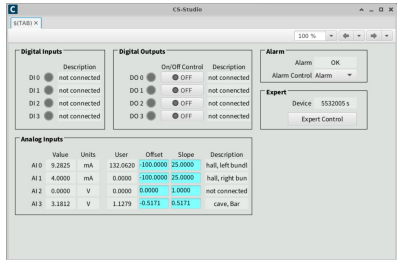
ISEG HV crate x 9

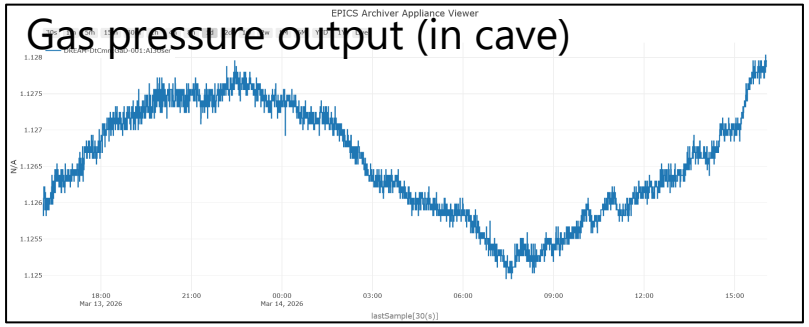
MOXA controller

DREAM Detector system

TEST CASE(S) TO BE PERFORMED	SUMMARY FINDINGS				
	Pass	Fail	NA	Signature	Date
1. Interface for Control and monitoring	☐	☒	☐	Florence Porcher	2nd March 2026
Comments:					
2. Interface for Data acquisition	☐	☒	☐	Florence Porcher	2nd March 2026
Comments:					







Ar-CO_2 pressure
- **EPICs only (~~NICOS~~)**
- **No alarm**

No control of ISEG crates

No safety shutdown (low Ar-CO_2 pressure)

TEST CASE 1. Interface for Control and monitoring

1.1 Workstation inside the DREAM hutch is connected to NIN.
☐N/A ☒Pass ☐Fail ☐Remark:

1.2 High-voltage value can be set on HR, Endcap BW, Mantle, Endcap FW detectors through ISEG crate and monitored from DREAM hutch.
☐N/A ☐Pass ☒Fail ☒Remark: Slow control for HV not implemented yet, a NIT has been created (NIT-626)

1.3 The value of the current drained by the readout of HR, Endcap BW, Mantle, Endcap FW detectors through the TDK 48V crate can be monitored from DREAM hutch.
☐N/A ☒Pass ☐Fail ☒Remark: Available in EPICS Archiver with a retention period of infinity.

1.4 Ar-CO2 pressure injected to the detector from the gas system can be monitored from DREAM hutch.
☐N/A ☒Pass ☐Fail ☒Remark: Pressure at the 2 bottles (left & right) + inside cave are visible on the EPICS archiver. A NIT has been created (NIT-672) to have a readout in NICOS and an alarm.

1.5 Ar-CO2 low pressure alarm indicating emptying of bundles can be monitored from DREAM hutch.
☐N/A ☐Pass ☒Fail ☒Remark: Not available yet. A NIT has been created (NIT-672).

TEST CASE 2. Interface for Data acquisition

2.1 Operators can send Start/Stop for data acquisition via "Start" and "Stop" buttons.
☐N/A ☒Pass ☐Fail ☒Remark: Start/Stop of data acquisition is performed via command line.

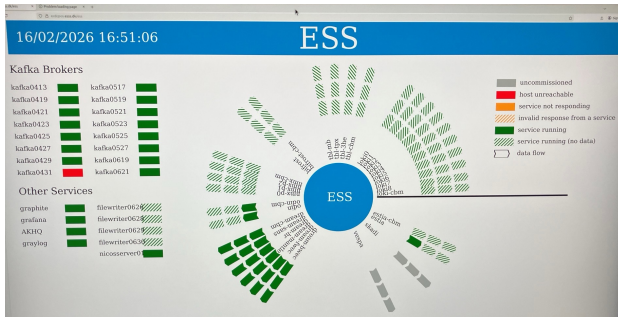
2.2 Operators can start a data acquisition, via "Count" macro button with a preset measurement time.
☐N/A ☒Pass ☐Fail ☒Remark: Start/Stop of data acquisition is performed via command line.

2.3 Operators can start a data acquisition, via "Count" macro button with a preset threshold value of integrated proton current/intensity.
☐N/A ☐Pass ☒Fail ☒Remark: Not available. No access to proton current or intensity is available.

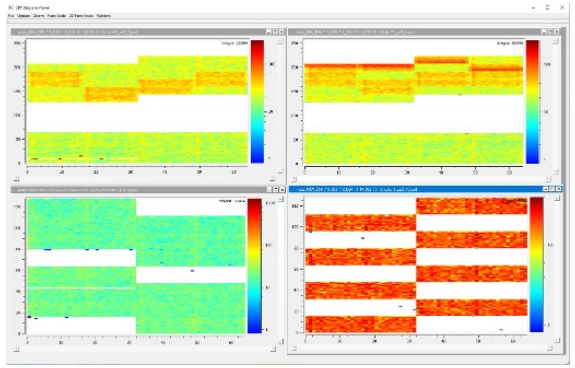
2.4 Operators can send Start/Stop for data acquisition, based on a user set value of accumulated neutron counts on monitor M3. The neutron counts from the monitor will be generated using a neutron source of or simulated
☐N/A ☒Pass ☐Fail ☒Remark: Start/Stop of data acquisition is performed via command line.

DREAM Detector system

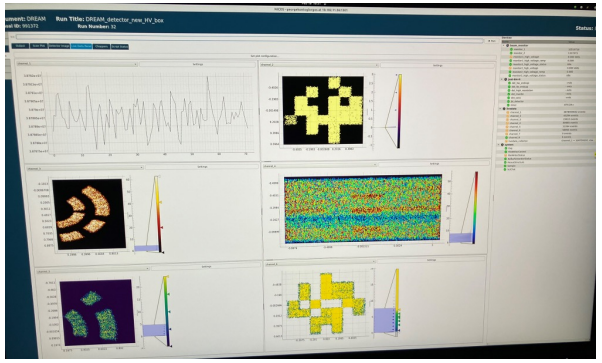
TEST CASE(S) TO BE PERFORMED	SUMMARY FINDINGS				
	Pass	Fail	NA	Signature	Date
3. Data streaming and storage	☒	☐	☐	Florence Porcher	2nd March 2026
Comments:					
4. Live display and basic data reduction	☐	☒	☐	Florence Porcher	2nd March 2026
Comments:					



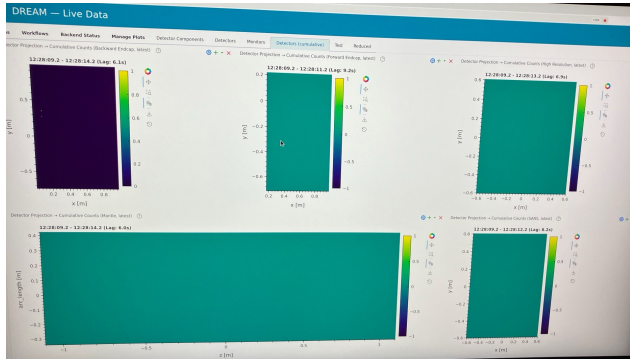
Grafana: 11 rings up



Ar51 (logical coordinates)



jbi (geometrical coordinates)



LiveData (logical coordinates)

TEST CASE 4. Live display and basic data reduction

DREAM detector has a complex geometry and comprises 3 types of detector banks: cuboids-based (HR, nanoSANS), SUMO-based (EndCap BW and FW) and Mantle. They are characterised by a 3-dimensional detection through a set of cassettes comprising anode wires and cathode strips. The logical geometry identifying each detection voxel is based on these detection units and described in ESS-5462547. However, these logical coordinates are improper for the future analysis of the diffraction data to be collected on DREAM and a basic data reduction is necessary to convert them in more appropriate geometrical coordinates (2theta, phi, z-depth) as described in ESS-5493097. These coordinates make it easier to identify at first glance the location of detector elements in the assembly.

4.1 Views of counts in each logical component of DREAM for the different detector banks can be displayed in ESS live data
☐N/A ☐Pass ☒Fail ☒Remark: 1) Plots are available for endcap backward and forward, and mantle detector banks. It doesn't work for the cuboid-based (HR+SANS). A NIT has been created (NIT-673). 2) We would like to have the display of DREAM individual detector elements (SUMO modules, mantle mounting units, cuboids) using logical coordinates with the same representation as in Ar-51. A NIT has been created (NIT-674).

4.5 Counts rate over detector banks accumulated since start of counting can be displayed live.
☐N/A ☐Pass ☒Fail ☒Remark: Not available yet, a NIT has been created (NIT-679)

4.6 User can define a 2D ROI (Region Of Interest) on the detector display using logical coordinates (see Test 4.1) and specify the number of elements to sum over in the other direction.
The resulting plots are
a) a "spectrum" of intensities along the "depth" dimension that the logical view has integrated over

b) a plot of ToF spectrum for each selected "depth" coordinate

☐N/A ☐Pass ☒Fail ☒Remark: To be discussed further, if implementation in ESS Live Data is needed, see NIT-674.

General remark:

1) The live display of the detector data on DREAM is available independently through justbinit (jbi) from EFU level or ESS Live Data from Kafka.

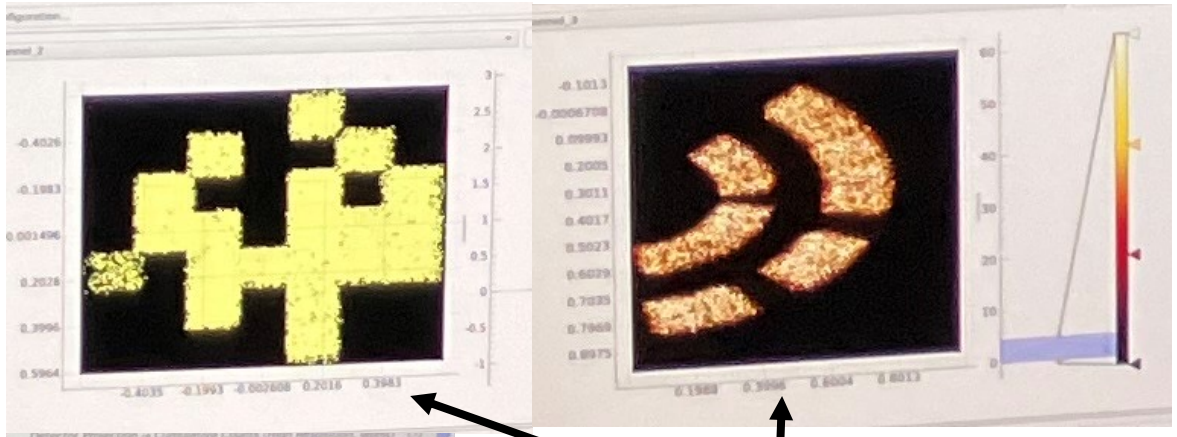
2) ESS Live Data utility shows super long lag (hundreds of seconds for updating the ESS Live Data webpage) which makes it not user-friendly. We need to agree on the labels used on the various plots (what is the meaning of "current", "now", "Ampere", "total counts", "cumulative counts" etc.)

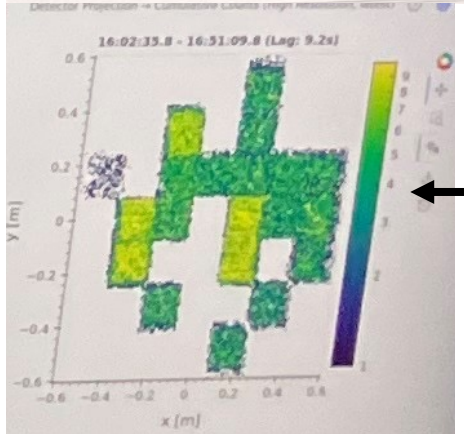
3) A user manual is required for the ESS Live Data in order to understand how to create the plots and what they represent.

DREAM Detector system

Additional problems:

- **Data format not according to ICD (RMM ➔ EFU0 ➔ Missing SUMO3&5 , overlapping of cuboids**
- **Frame systems (ECDC-DMSC)**
- **Newly discovered: negative TOF for 100% of events**





JustBinIt (jbi)

LiveData

CONCLUSION

Non-conformities need to be registered in the Enterprise Asset Management (EAM) system.

ITEM	DESCRIPTION	CATEGORY	RESPONSIBLE	COMPLETION DATE
1	NIT-626 EPICS integration of the Iseg HV power supply	e	DetG, ICS	
2	NIT-672 DREAM Ar-C02 gas pressure at detector is not available in NICOS	e	ICS	
3	NIT-673 DREAM Live data display of HR and SANS detectors using logical coordinates	e	DMSC	
4	NIT-674 DREAM Live data display of detectors using logical coordinates	e	DMSC	
5	NIT-629 DREAM: detector data format is not according to the ICD	e	ECDC	
6	NIT-679 DREAM Live data: Accumulated Detector counts rate	e	DMSC	

NITIS-DetG-ECDC integration projects / NIP-339

DREAM - Negative ToF for 100% of samples

THANK YOU

to all the ESS colleagues who helped for the tests…