

Status at 1008

Yuko Sekiguchi

RIKEN

[illegible]

INTT manpower for commissioning

Joseph	~4/11
Genki	4/2~
Ryotaro	4/7~
Takahiro	4/7~
Itaru	4/7~
Yasuyuki	4/13~
Takashi	4/15~
Mahiro	4/15~
Jaein	4/16~

To Do List During Commissioning

<https://docs.google.com/spreadsheets/d/1htkcbVkOhdixkYYMlCYj4p6LrX5Tlg92cV-UOyIDumI/edit?gid=0#gid=0>

Step	Collider Requirement	sPHENIX Requirement	Task	Events/Time Needed	Notes	Subsystem
1	Physics Collisions	Nothing	Check Signal+Background in Outer Donuts	60 minutes		Donuts
2	Single Yellow Beam	Nothing	Check background Outer Donuts	30 minutes		Donuts
3	Physics Collisions	Nothing	Inner Analog - 4 ch picoscope (or CAEN) to measure pulse-height of signal and background	60 minutes		Donuts
3	Single Yellow Beam	Nothing	Inner Measure background	60 minutes		Donuts
4	Physics Collisions	Nothing	Threshold scan to find where the rate drops to zero, leave thresholds above - probably after analog	60 minutes		Donuts
5	Single Yellow Beam	Nothing	Set threshold between background and signal if there is a break between the two	60 minutes		Donuts
6	Single Blue Beam	Nothing	Check the variation in the donuts			Donuts
7	Physics Collisions	Nothing	Veto experimentation (if necessary and signals are good)			Donuts
8	1 bunch Yellow	MBD	Check extended mode		Can be done in parallel to 1 - 7	MVTX
9	1 bunch Blue	MBD	Check extended mode		Can be done in parallel to 1 - 7	MVTX
10	Low rate, physics (12x)	Nothing (needs GTM signal)	MVTX streamed in baseline		Can be done in parallel to 1 - 7	MVTX
12	Low rate, physics (12x)	MBD	MVTX in "extended" mode		Can be done in parallel to 1 - 7	MVTX
13	Low rate, physics (12x)	MBD	MVTX in "triggered" mode		Can be done in parallel to 1 - 7	MVTX
14	Single Yellow, Single B	Beam parameter changes	MVTX in "streaming" mode			MVTX
15	Single Yellow, Single B	Beam parameter changes, MBD	MVTX in ?? (likely triggered mode)		Can be done in parallel to 1 - 7	MVTX
16	Single Yellow, Single B	Nothing	MVTX Clock trigger		Can be done in parallel to 1 - 7	MVTX
17	12x12, 56x56, 111x111	MBD, Donuts	MVXT vs Donut scaling			MVTX
	High rate trigger (>5kHz)	MBD, INTT	Carried over hit study (Trigger mode)	2 hours	Crucial	INTT
	111x111 bunches	MBD, INTT	Carried over hit study (Streaming mode)	2 hours	Crucial	INTT
	Any condition	MBD, INTT	Chip saturation study	2 hours		INTT
	Fewer bunches (e.g. less than 111)	MBD, INTT	INTT Timing Scan	60 minutes		INTT
	Single beam	MBD, INTT	Beam background study	30 minutes	Can run with MVTX	INTT
	Any condition	MBD, INTT	Digital control test	30 minutes		INTT
	Any stable condition	MBD	sEPD Gain scan	4 runs, can be parasitized	Any other detectors are fine	sEPD

Status in 1008

Summary of this & next week's activities

- **Magnet operation**
 - Monday March 24
 - Final magnetic sweep, close pole tip doors.
 - Magnet cooldown to ~4.5 K
 - Tuesday March 25
 - Interlock verification
 - The cold hipot for the sPHENIX Magnet was successfully performed at 10 AM on March 25, with no issues.
 - Magnet power supply test/ramp
- RHIC Status
 - Tuesday March 25 RHIC cold hipot (by Carl, Kin et. Al.) – (performed by the RHIC Power Supply group) encountered a problem.
 - Sweeps for beam in sPHENIX (TBD).
- **Next maintenance days are Apr. 9, Apr. 23**

First beam collisions are likely to occur early next week.

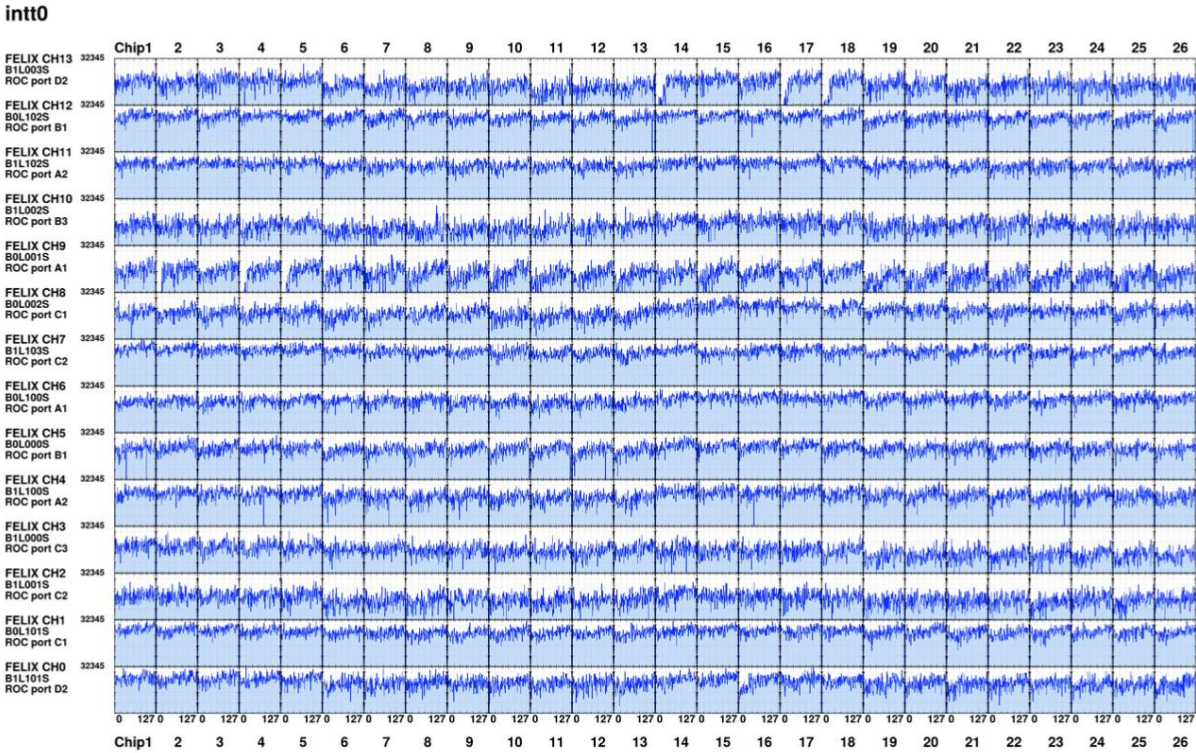
INTT Status

- The INTT is mostly in the big partition for cosmic data acquisition with the magnet on.
- The pedestal data is taken with the magnet on.
- The digital control test with pedestal is also conducted

INTT0

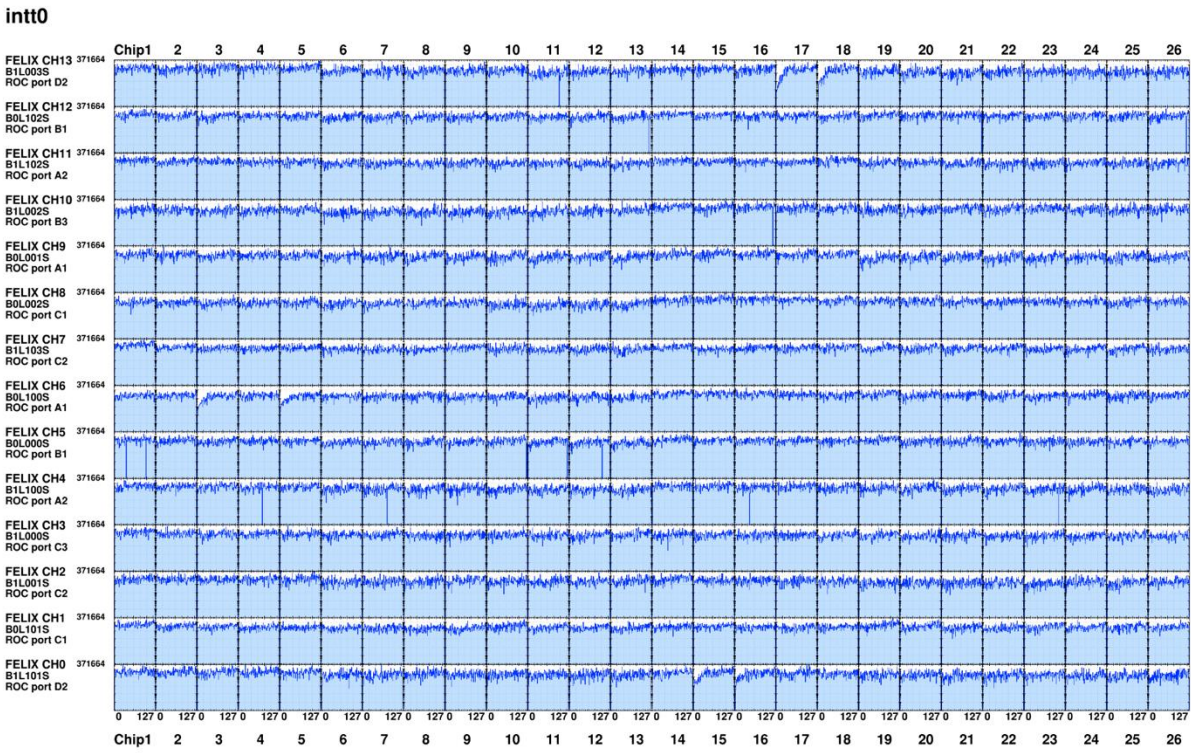
3/18 after donut installation

Run 58450



Mid Feb

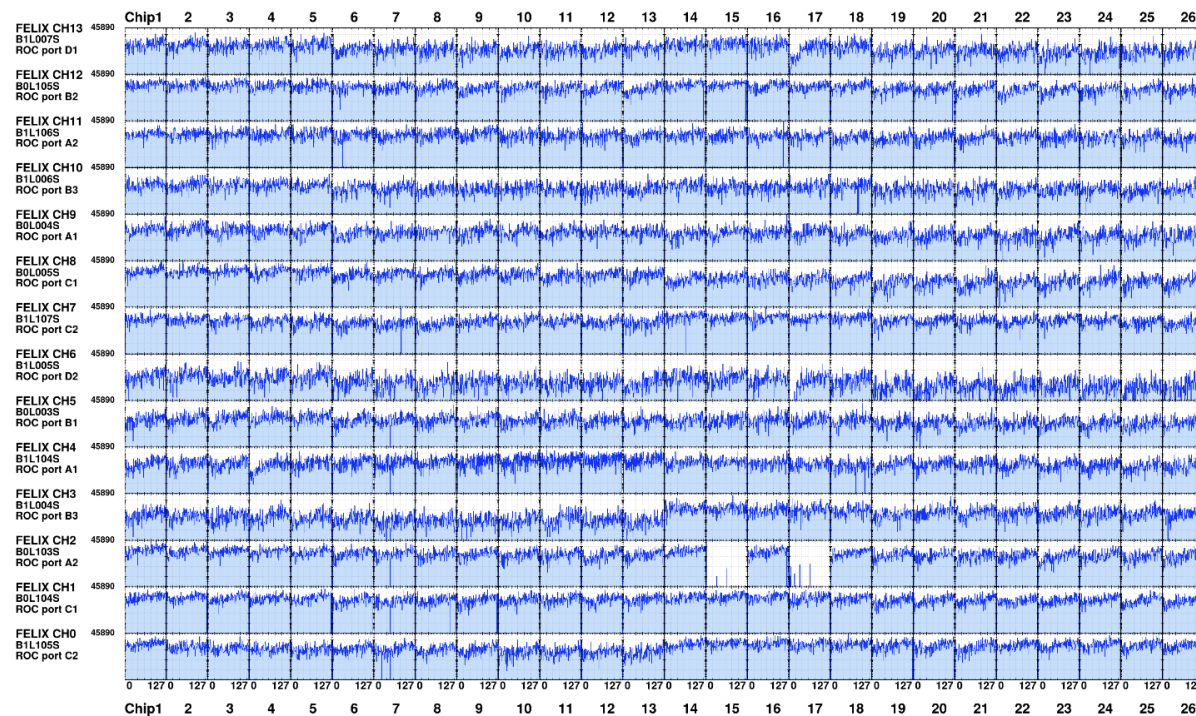
Run 56523



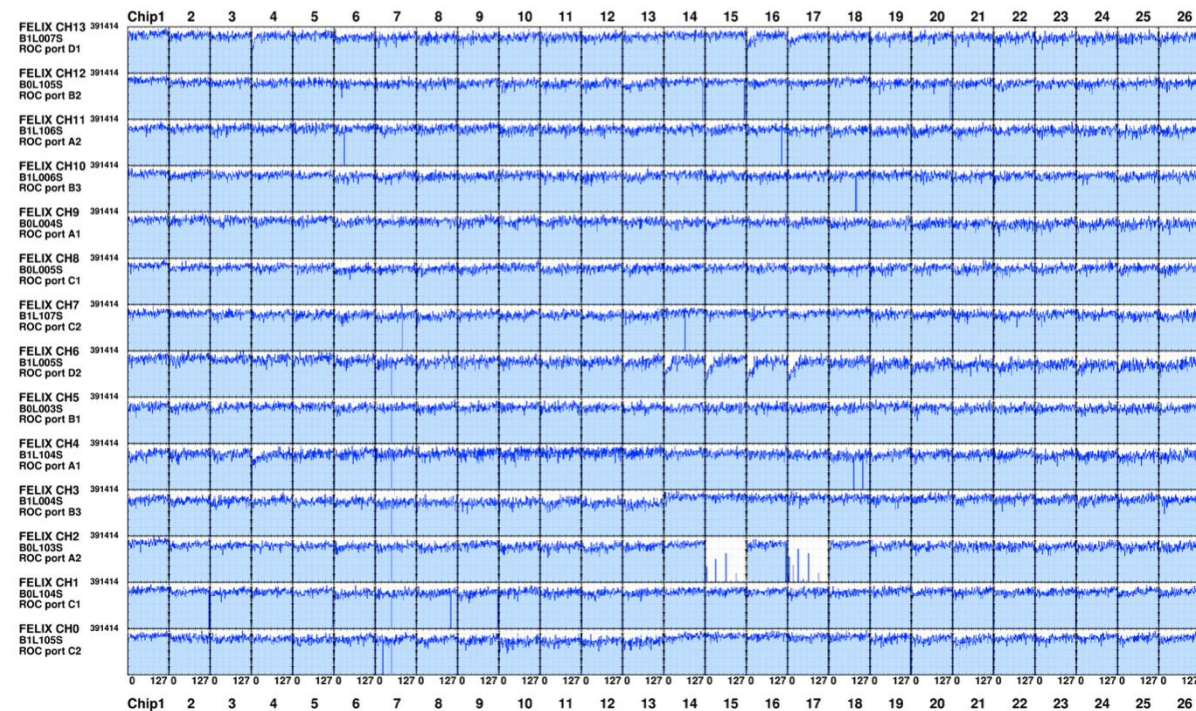
✖ The magnet is off in both runs.

✖ The left figure uses about 10% of the statistics used on the right.

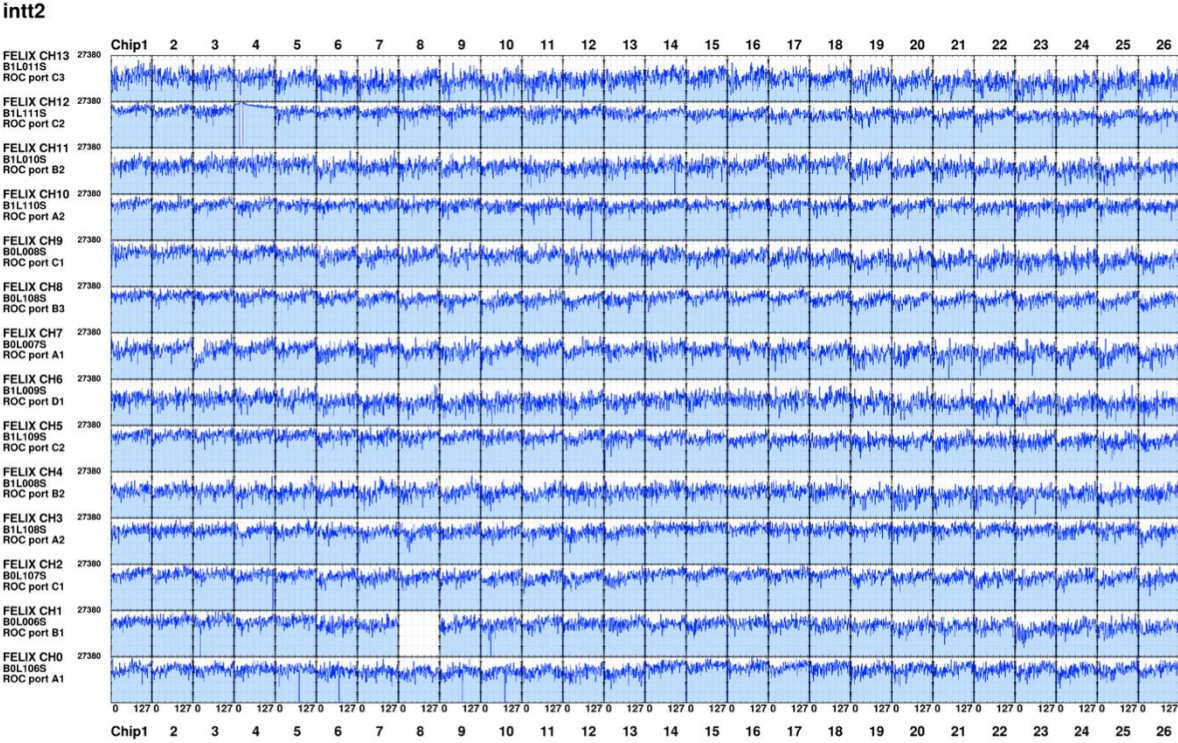
Run 58450

intt1

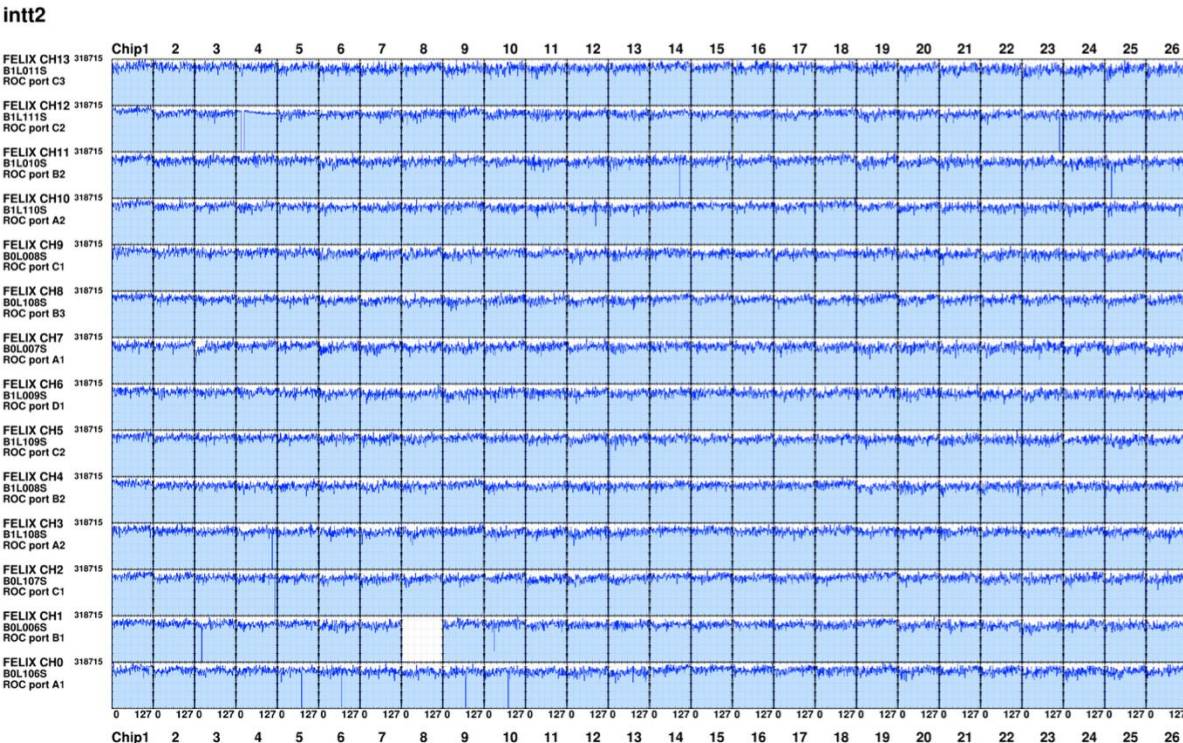
Run 56523

intt1

Run 58450

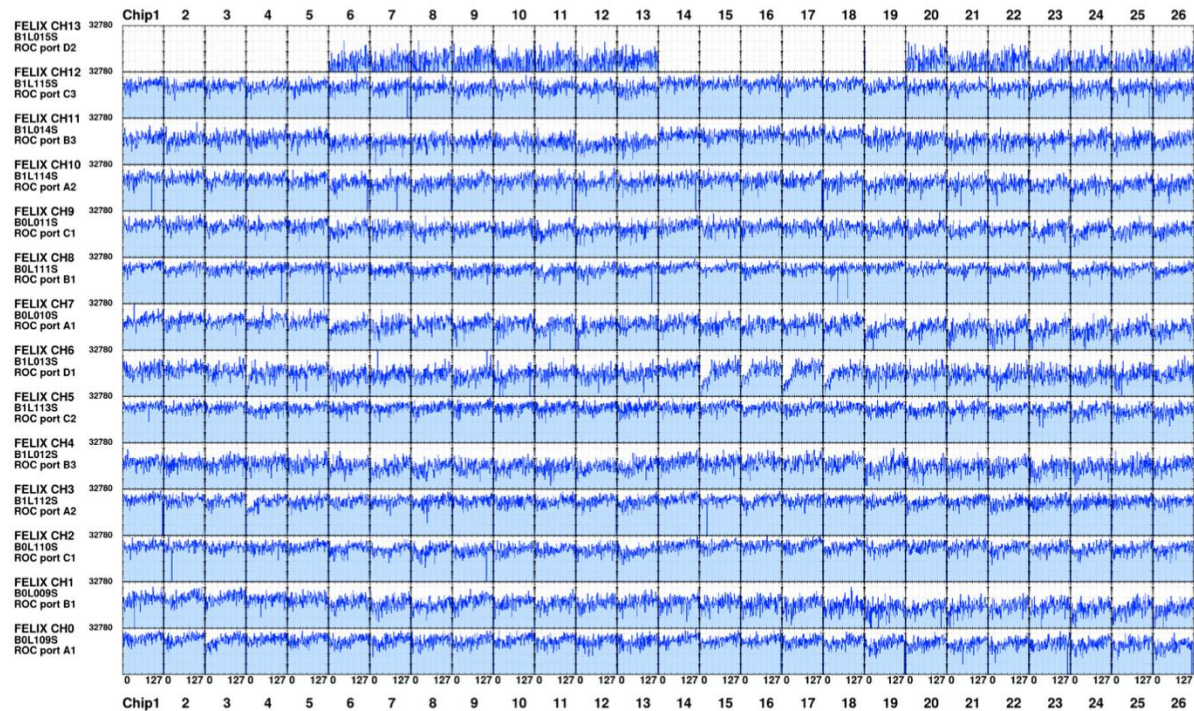


Run 56523

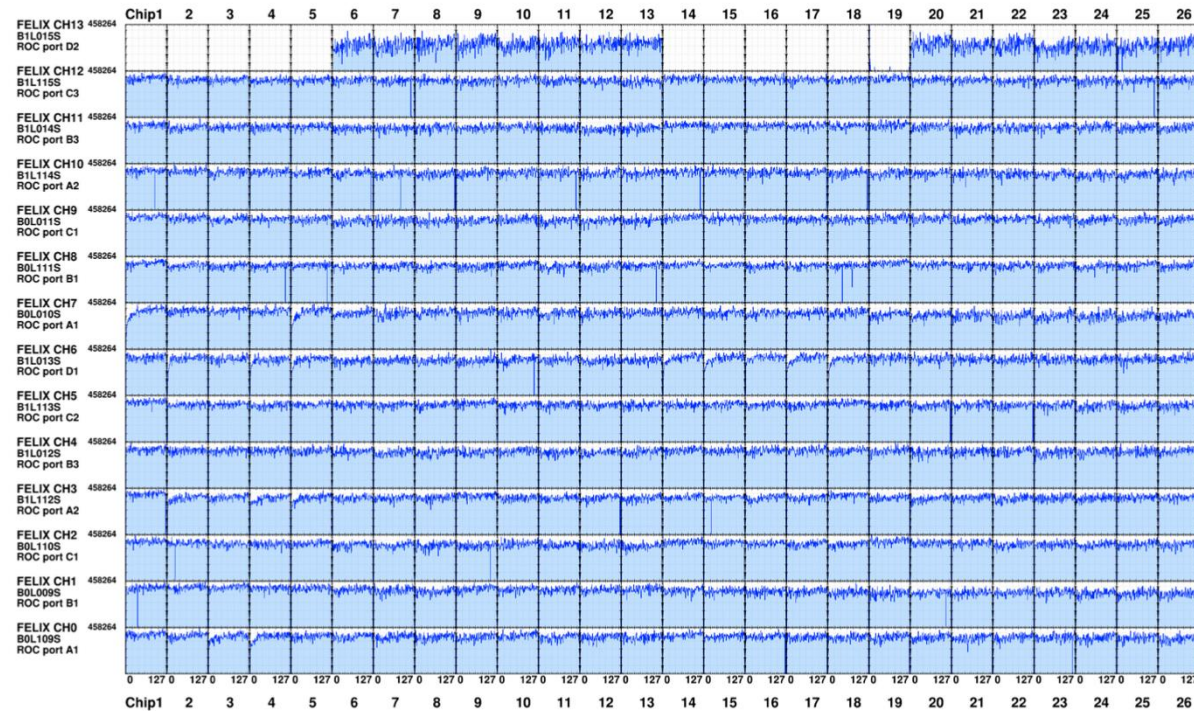


INTT3

Run 58450

intt3

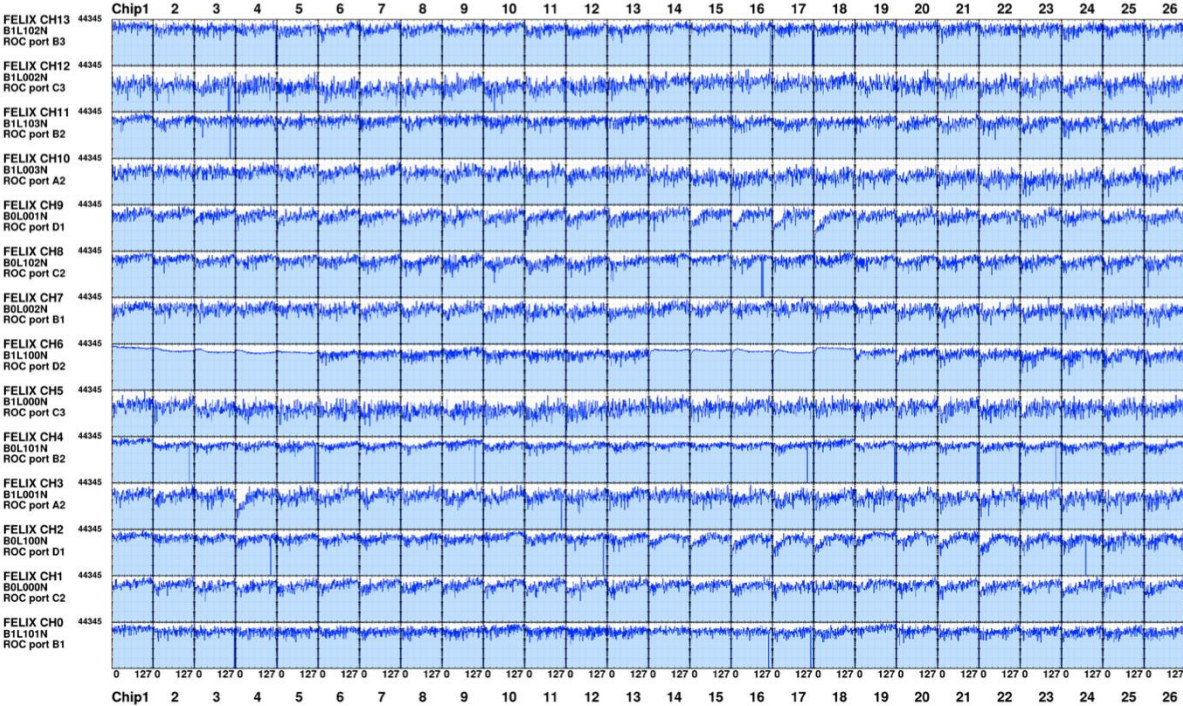
Run 56523

intt3

INTT4

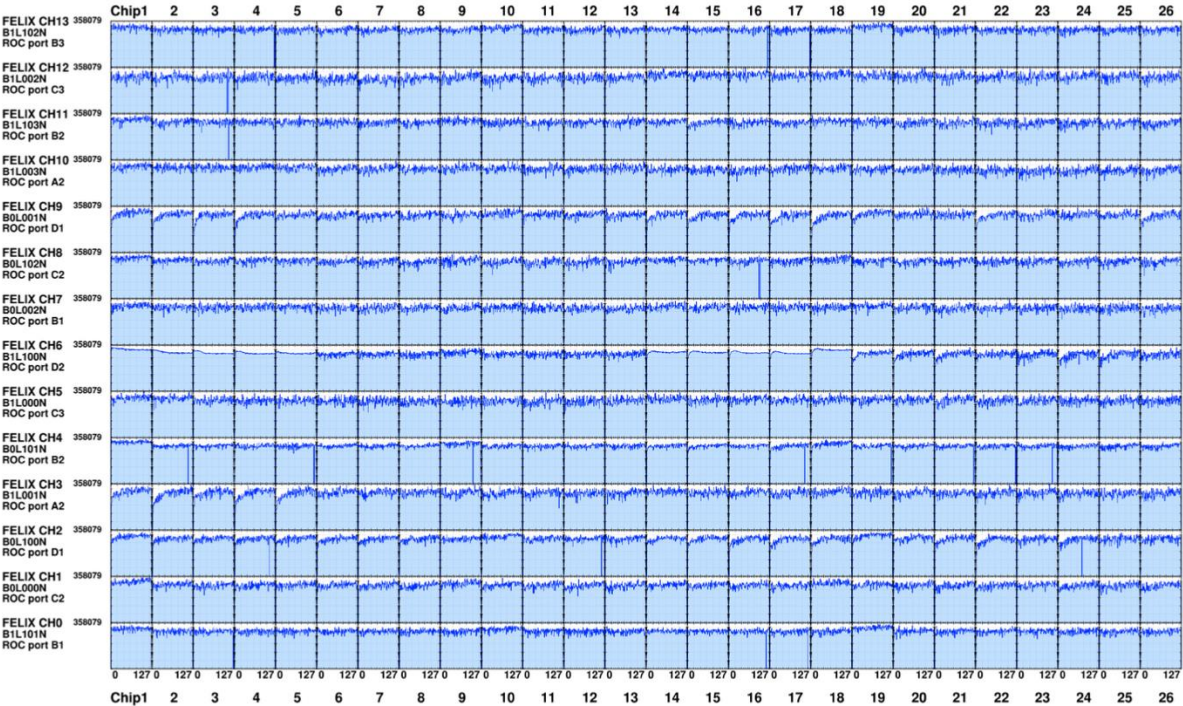
Run 58450

intt4

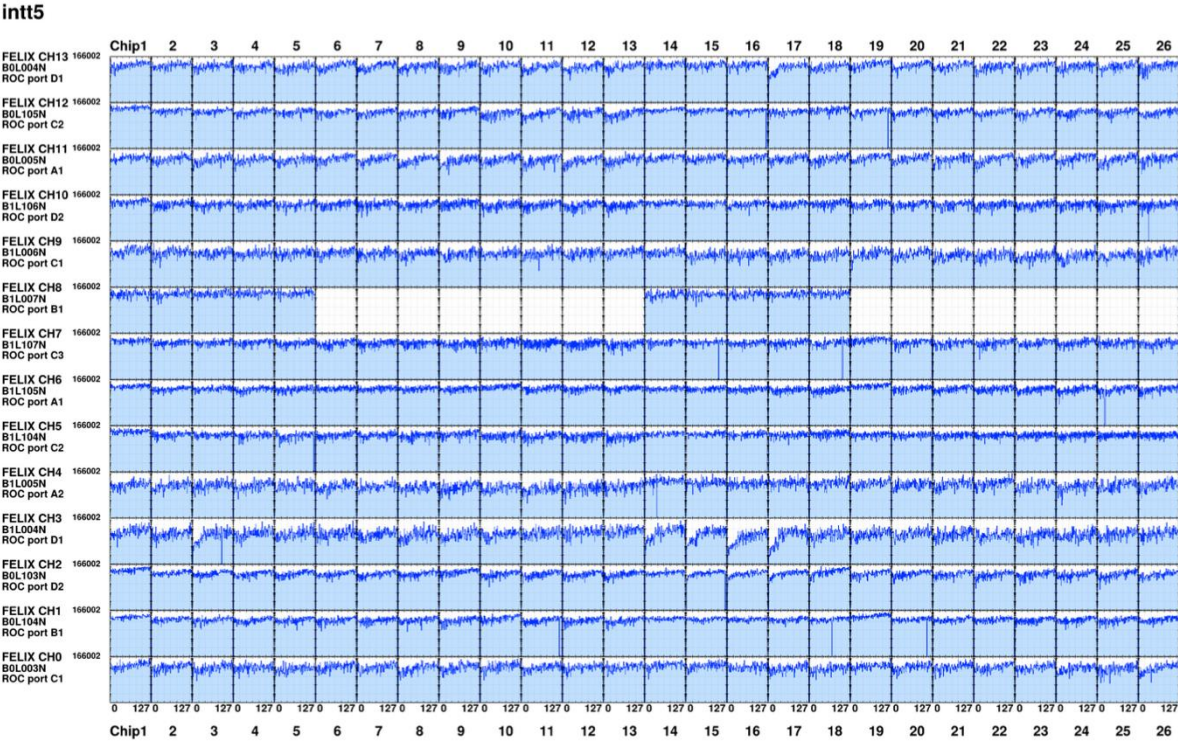


Run 56523

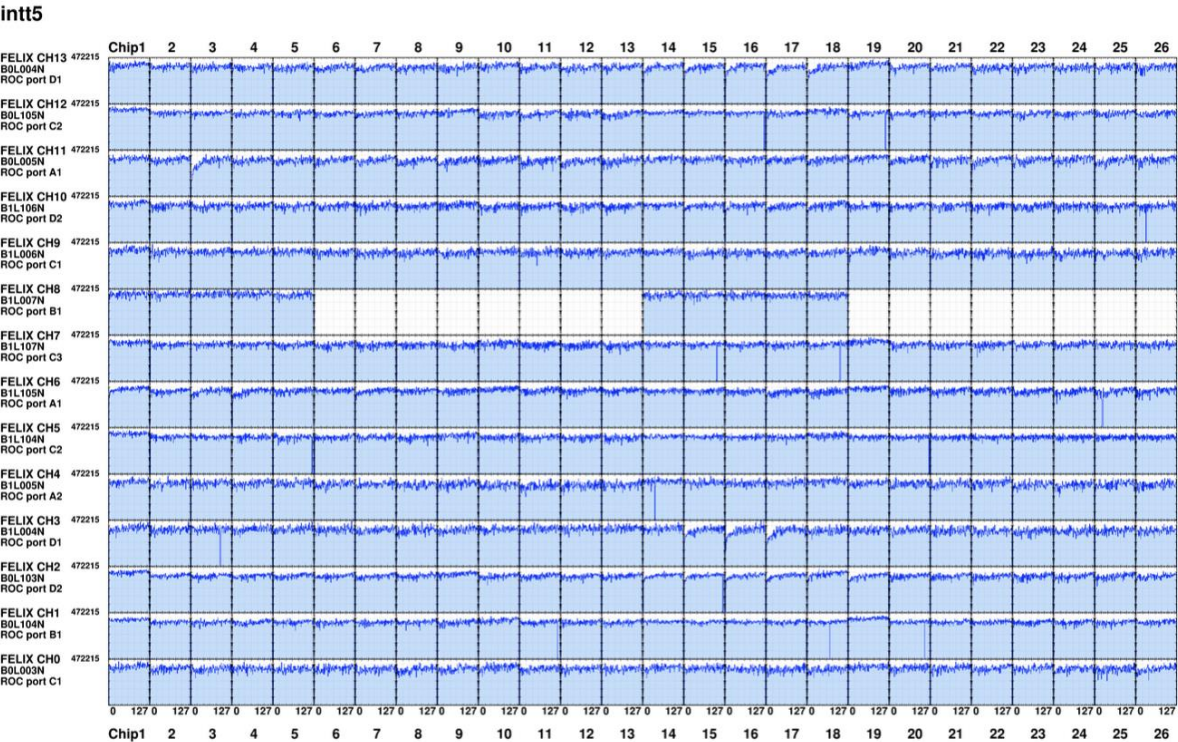
intt4



Run 58450

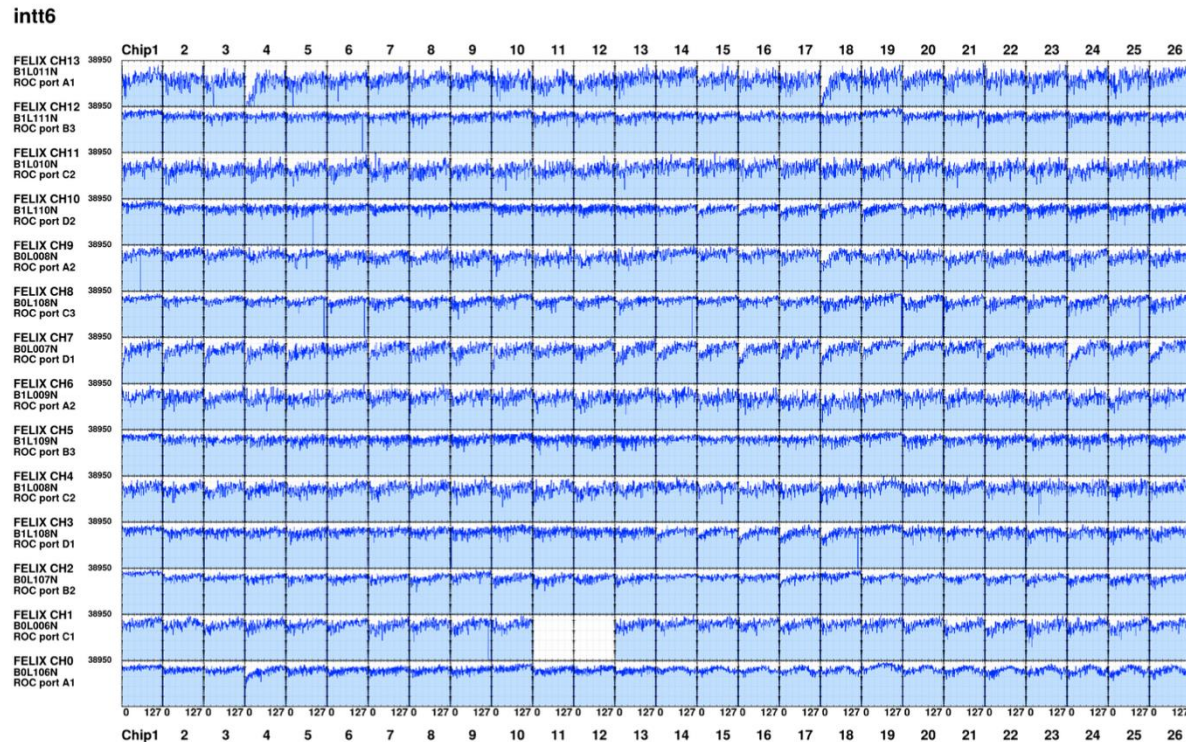


Run 56523

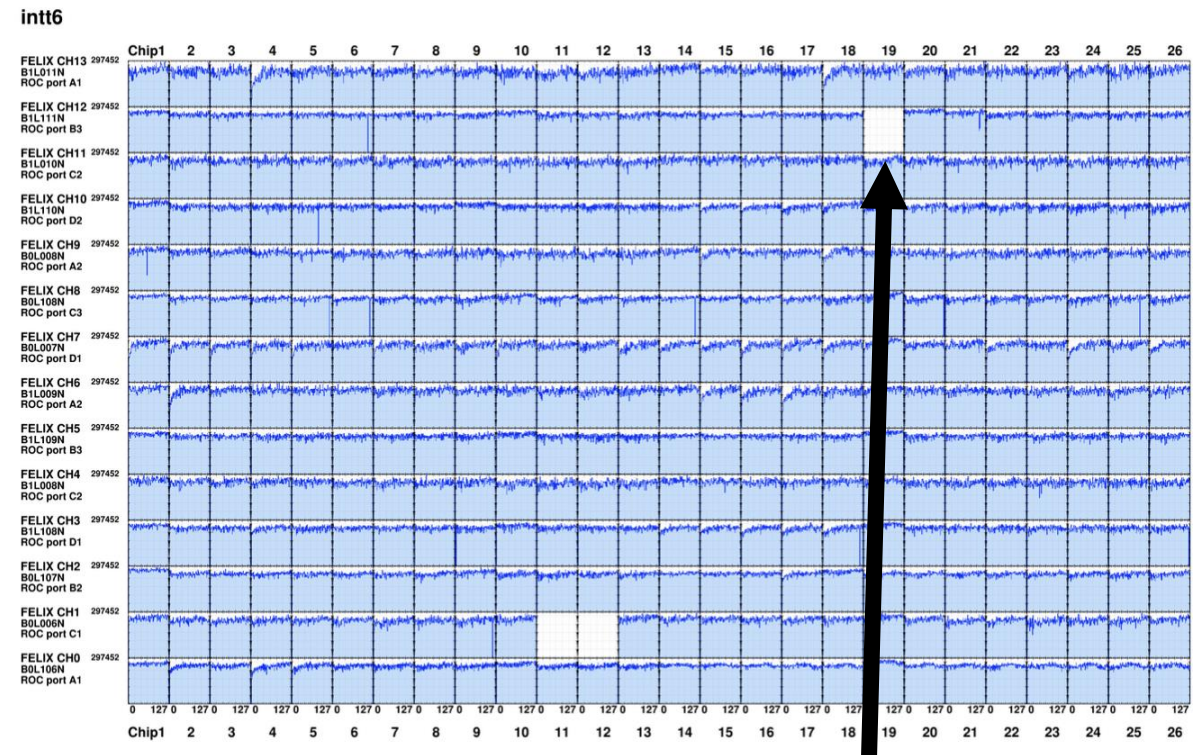


INTT6

Run 58450

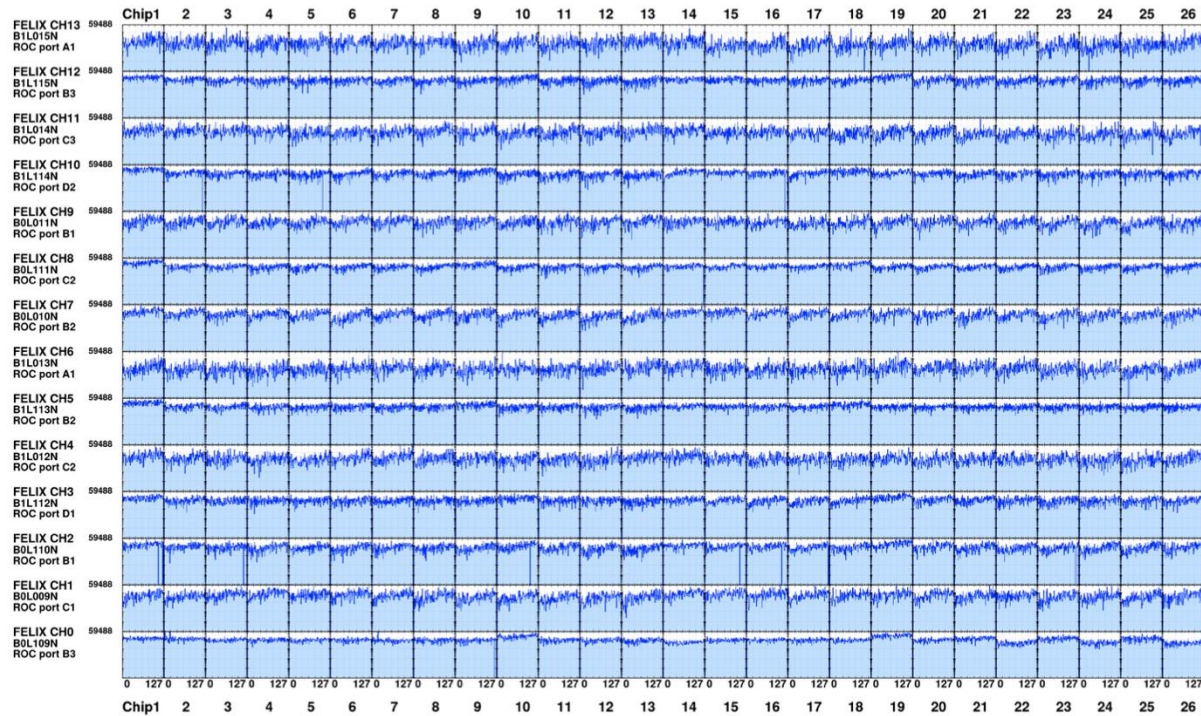


Run 56523

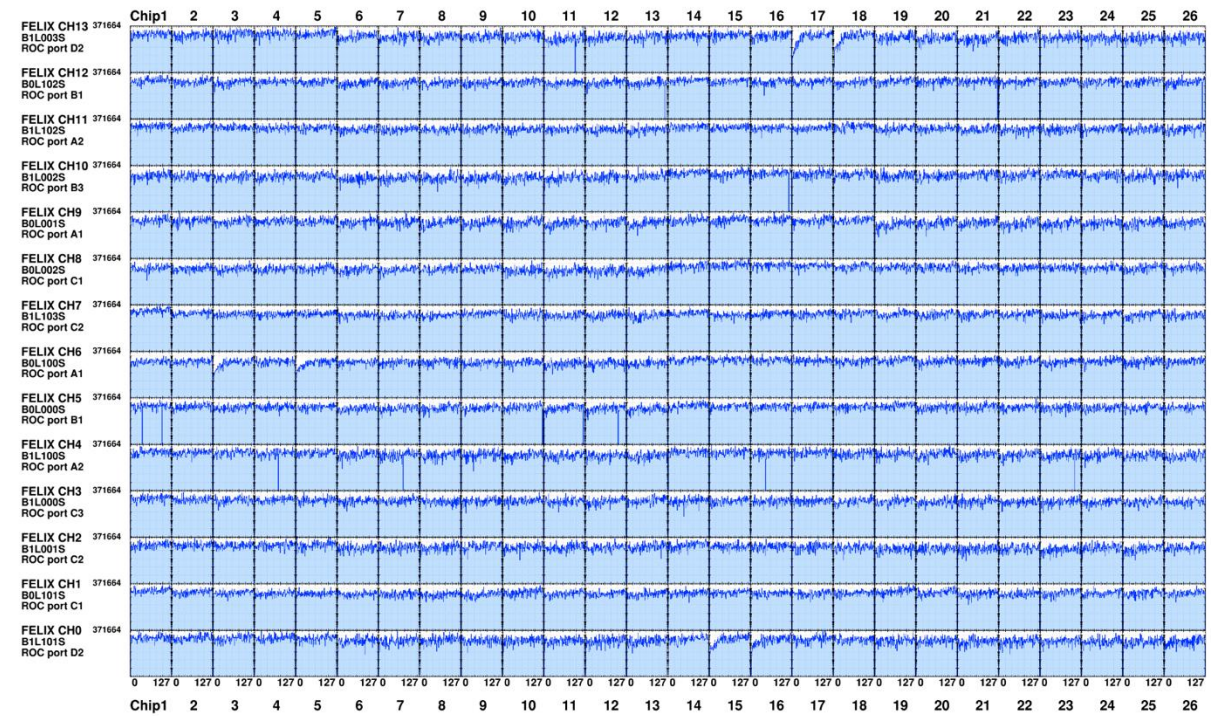


masked in Felix during
run-24 (because one (two)
hot channel(s)) to ensure
stability of rcdaq

Run 58450

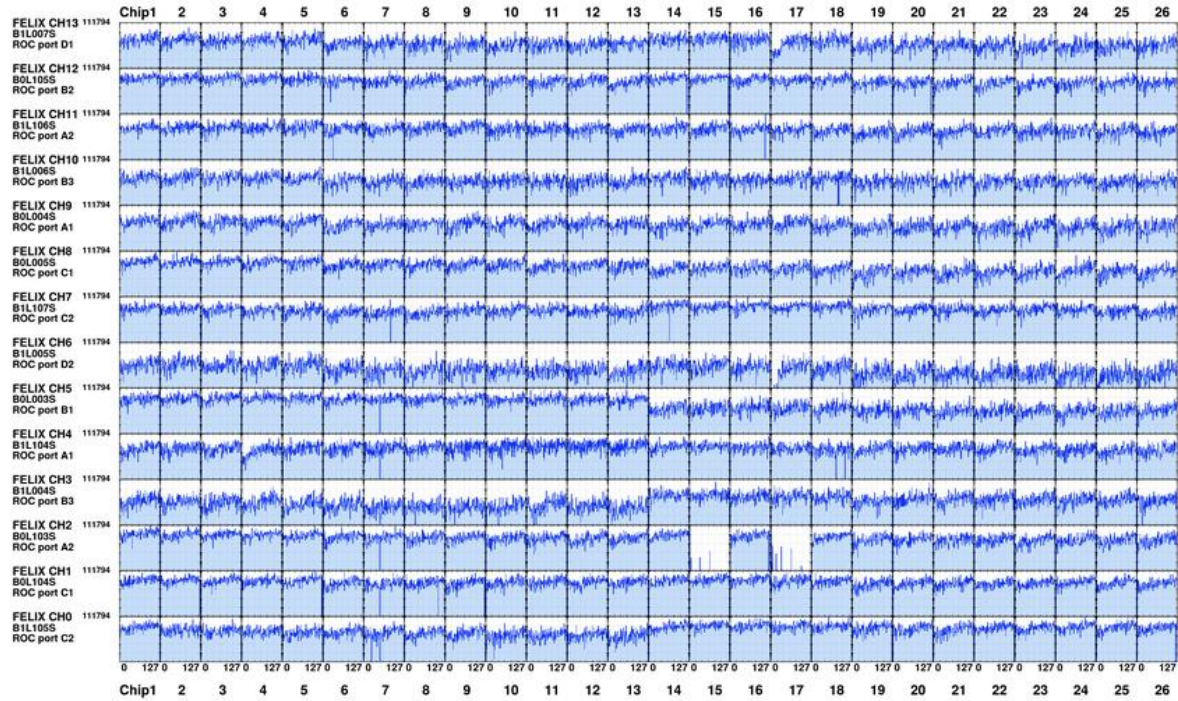
intt7

Run 56523

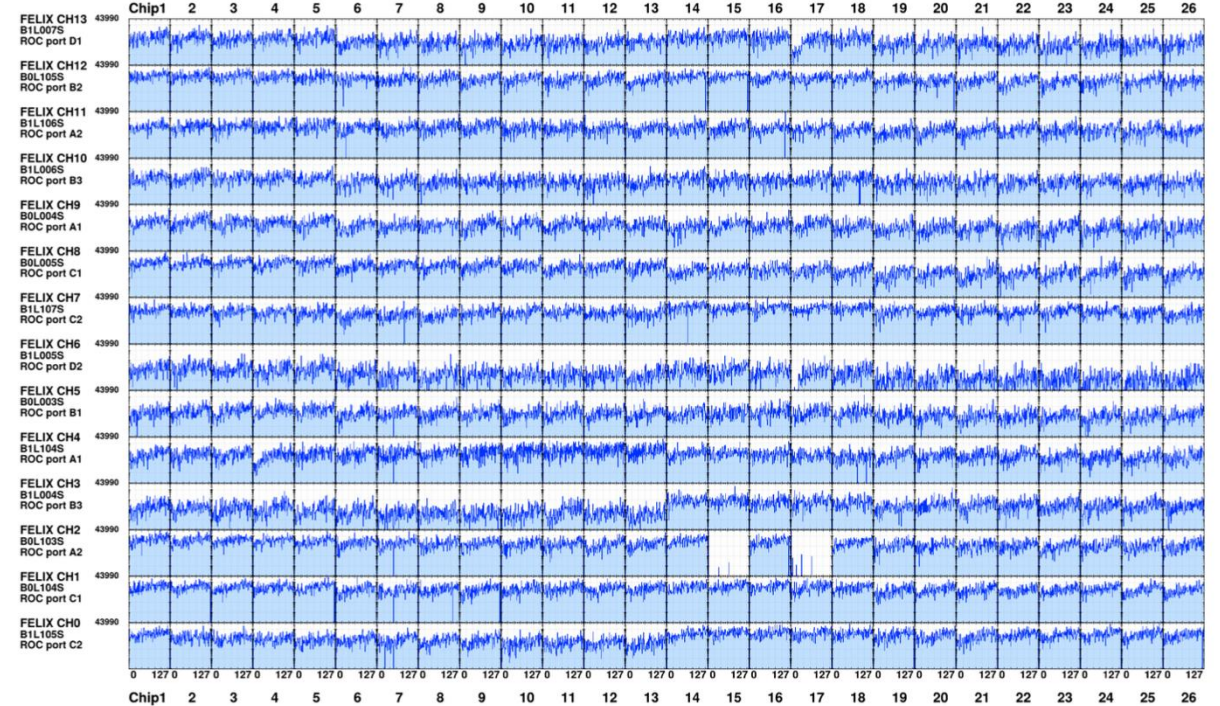
intt0

Digital control test

Run 59263 w/ DC

intt1

Run 59265 w/o DC

intt1

Backup

INTT Expert Duty

- INTT expert is someone who is signed up below.
- The INTT expert should grasp the situation in 1008. The shift starts on Tuesday and runs until Monday.
 - Primary/secondary contact should receive calls from shifters and respond to INTT issues.
- The INTT expert should report INTT status at SCM and also report 1008 status at weekly INTT meeting.

MBD	Calorimeters	Calorimeters Trainee	TPOT	TPC	INTT	MVTX	sEPD
Mickey Chiu			(see current expert list instead)		Rachid Nouicer (631-652-5042)	(see expert call list instead)	(see current expert list instead)
Rivek Raj Tamang - Security Researcher Do not click on https://www.evil.com https://www.linkedin.com/in/rivektamang/							
Mickey Chiu	Skaydi Grossberndt (914-282-7346)			Charles Hughes (850-257-6313) & Tom Hemmick (516)982-1403	Rachid Nouicer (631-652-5042)	Ming Liu (505-412-7396)	NA
Mickey Chiu	Anthony Hodges (901-230-0597)			Charles Hughes (850-257-6313) & Tom Hemmick (516)982-1403	Rachid Nouicer (631-652-5042)	Ming Liu (505-412-7396)	NA
Mickey Chiu	Emma McLaughlin (5169871557)	Nikhil Kumar(3476864924)		Charles Hughes (850-257-6313) & Tom Hemmick (516)982-1403	Akitomo Enokizono (934-226-7791)	Yasser C(786-774-1546), Ming Liu (505-412-7396) Hao-Ren Jheng (at BNL, 617-949-6516)	
Mickey Chiu	Skaydi Grossberndt (914-282-7346)	Nikhil Kumar(3476864924)		Charles Hughes (850-257-6313) & Tom Hemmick (516)982-1403	Akitomo Enokizono (934-226-7791)	Yasser C(786-774-1546), Hao-Ren Jheng (at BNL, 617-949-6516)	
Mickey Chiu	Skaydi Grossberndt (914-282-7346)	Nikhil Kumar(3476864924)		Tom Hemmick (516-982-1403) + Takao Sakaguchi (516-380-0912)	Yuko Sekiguchi (631-578-2029)	Hao-Ren Jheng (at BNL, 617-949-6516)	
Mickey Chiu	Anthony Hodges (901-230-0597)			Charles Hughes (850-257-6313) & Tom Hemmick (516)982-1403	Joseph Bertaux (317-385-3985)	Ming Liu (505-412-7396)	
Mickey Chiu	Anthony Hodges (901-230-0597)			Charles Hughes (850-257-6313) & Tom Hemmick (516)982-1403	Joseph Bertaux (317-385-3985)	Cameron Dean (505-309-1097)	
Lameck Mwibanda				Charles Hughes (850-257-6313) & Tom Hemmick (516)982-1403	Genki Nukazuka (631-816-3268)	Cameron Dean (505-309-1097)	

Team Phone for INTT expert

Matters that require attention:

Only for INTT expert shift use

Please do not allow others to use the phone just because no expert is currently using it.

- You cannot use this number for personal accounts such as banking or What's Up
- Not permitted for travel, even for one-day trips (e.g. New York City)
- Return the phone to Ito-san/RIKEN staff when you leave BNL
- If you have any problems/questions with this phone, please contact Yuko.
- **No exceptions will be allowed. If a violation is discovered, the usage permission will be terminated immediately.**