ROC Test Summary

2023/01/20

SE2, SE4, NW3, NW4, NW5, ROC21

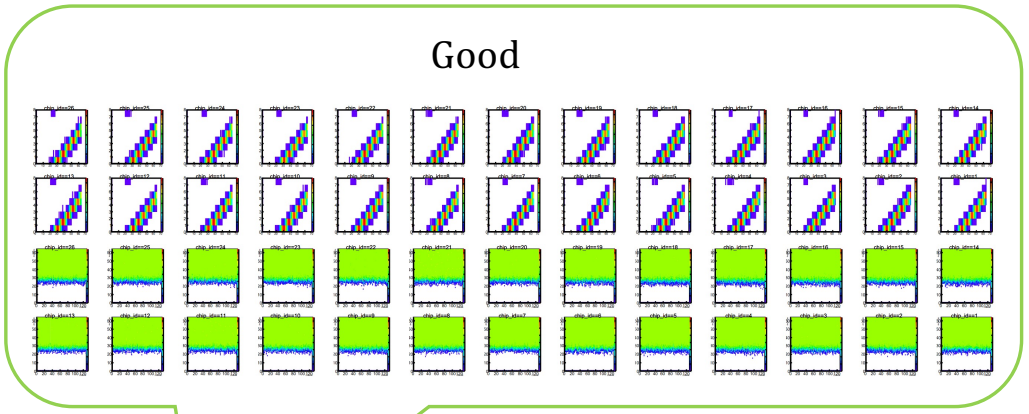
Kazuma Fujiki, Jaein Hwang

	ROC #	FVTX	Regulator Upgrade	Location	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
1	6	NW2	✓	BNL	1												
2	13	NE4	✓	BNL	1												
3	18	NE1	✓	BNL	1												
4	26	SE3	✓	BNL	1												
5	28	SE0	✓	BNL	1												
6	29	-	✓	BNL	1												
7	20	SW5	✓	BNL	1												
8	22	SE2	✓	RIKEN	2	R									F	F	
9	23	SE1	✓	BNL	1												
10	31	NW1	✓	BNL	1	R	R	R									
11	32	NE2	✓	BNL	1							R	R	R			
12	9	-	✓	BNL	1			R									
13	10	-	✓	BNL	1					R		R					
14	27	SE5	✓	BNL	1							R			R	R	R
15	19	NE5	✓	BNL	1										R		
16	24	SE4	✓	RIKEN	2		R	R							R	F	
17	16	NE3	✓	BNL	3				C	C	C						
18	15	NE0	✓	NWU	2	R									F	F	
18	2	NW4	✓	RIKEN	3							F			F	R	
19	7	-	✓	NWU	3		R	R		H	R	H			R	H	
20	21	-	✓	RIKEN	2	R			R		R		R		R		
21	17	NW3	✓	RIKEN	4												
22	3	NW5	✓	REPIC	2	R		R			F				R	R	R
24	14	NE1	✓	REPIC	3					R		H	R	R			
25	5	-	-	RIKEN	3												

Introduction

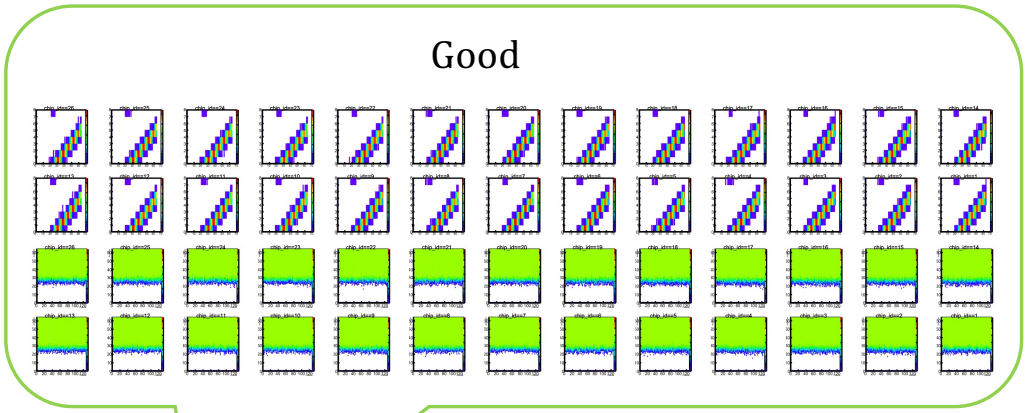
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

Introduction



ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

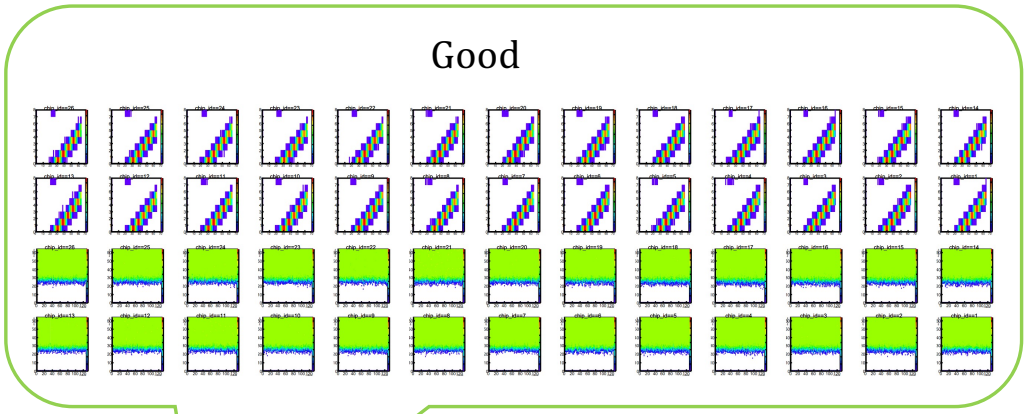
Introduction



ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

Bad

Introduction

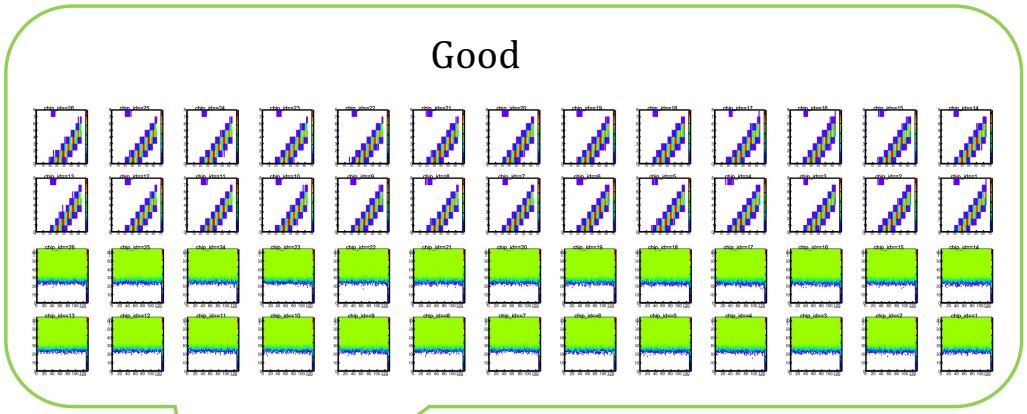


ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

No data at all

Bad

Introduction



ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

Class 1 ... 12 Good ports
Class 2 ... 10, 11 Good ports
Class 3 ... 8, 9 Good Ports
Class 4 ... Less than 7 Good ports

No data at all

Bad

TLK Replaced Ports

ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

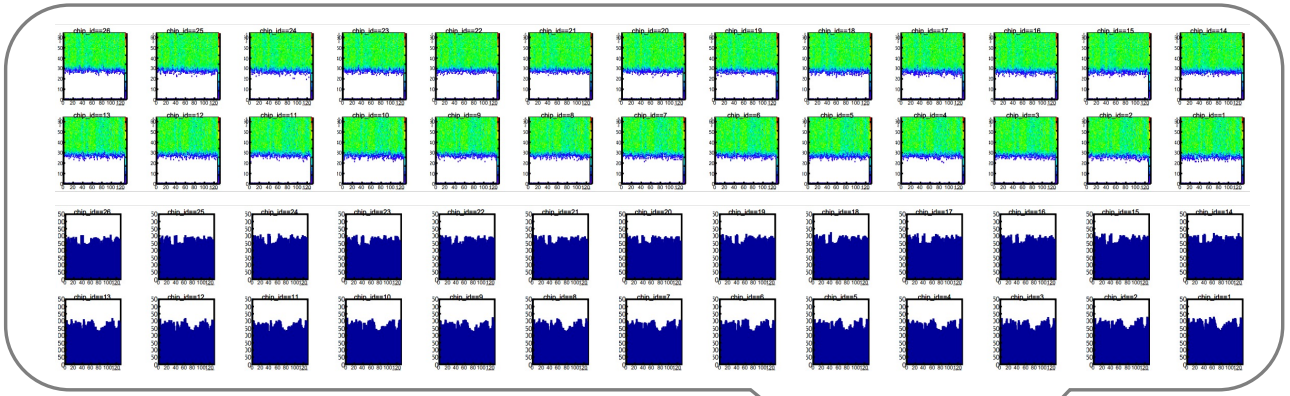
SE2

ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

SE4

ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

SE4



ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2		D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

NW3

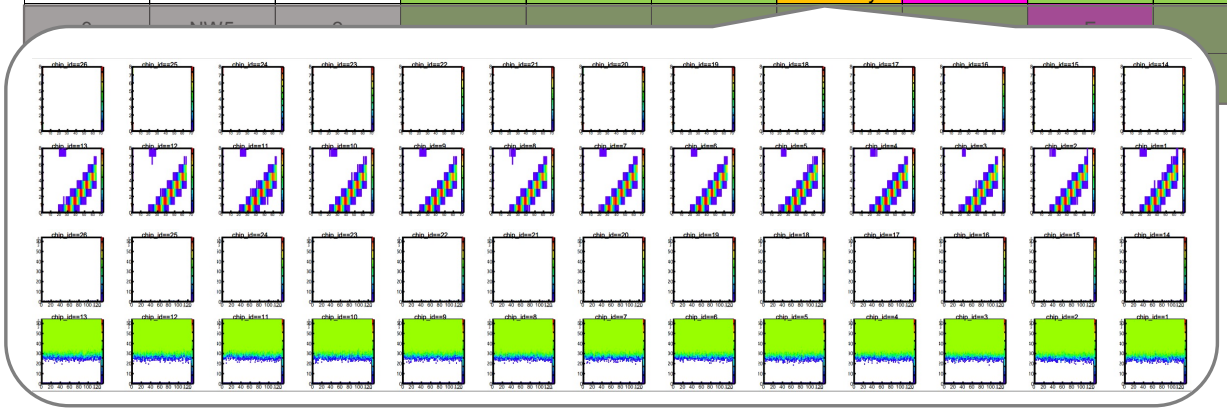
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

NW4

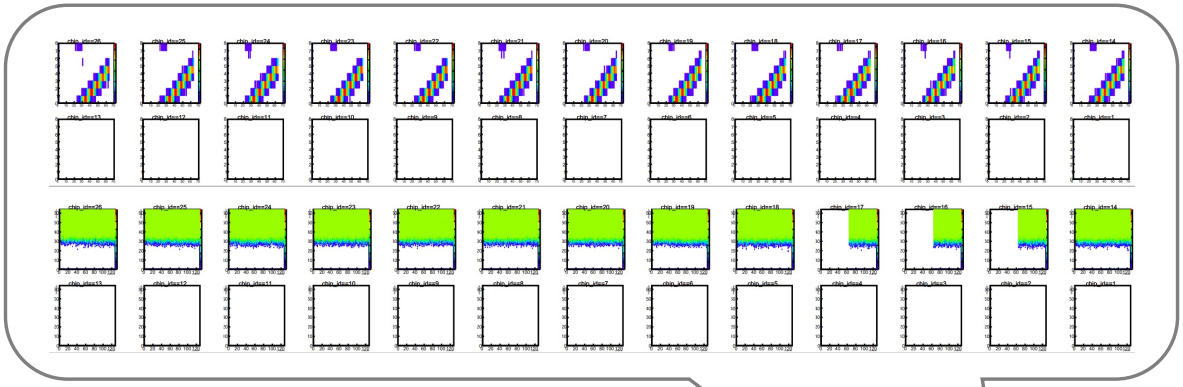
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

NW4

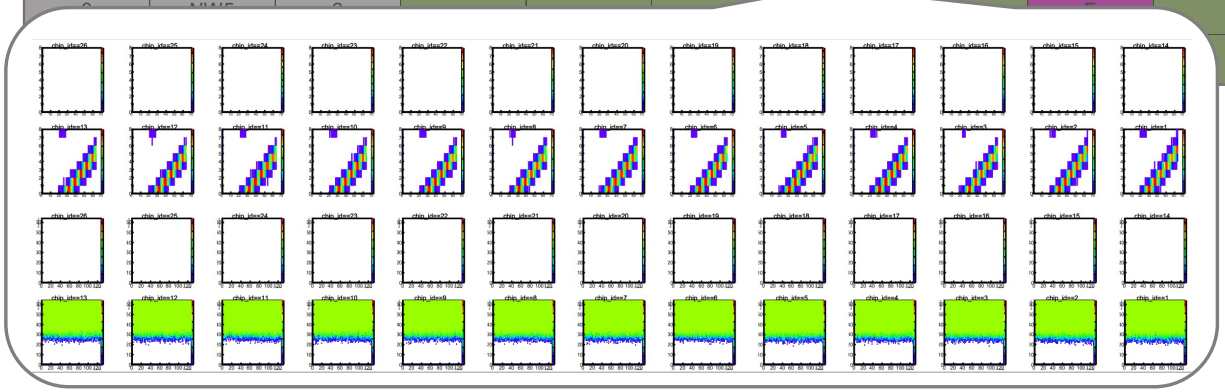
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
											Chip 1~13 Noisy			Chicken Issue



NW4



ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D		D3
22	SE2	2										F		
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
											Chip 1~13 Noisy			Chicken Issue



NW5

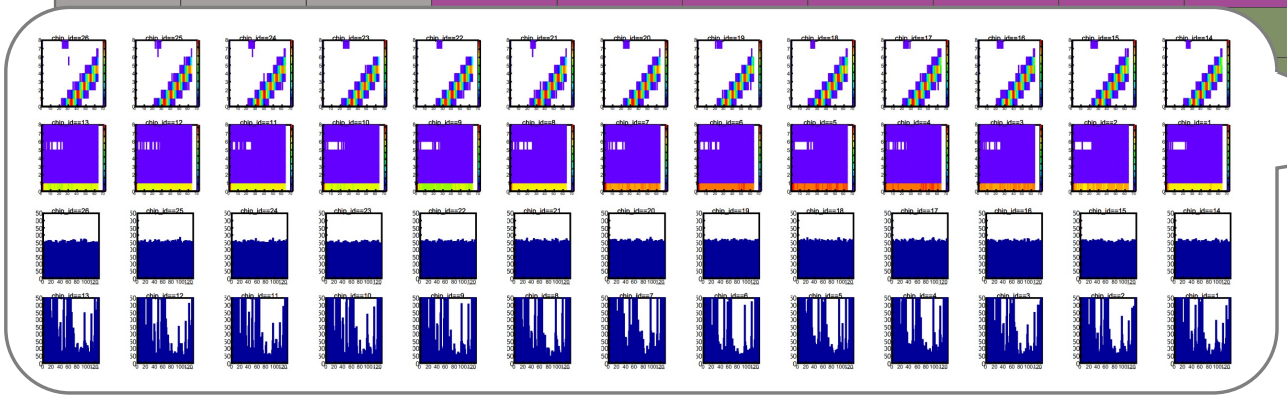
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

ROC 21

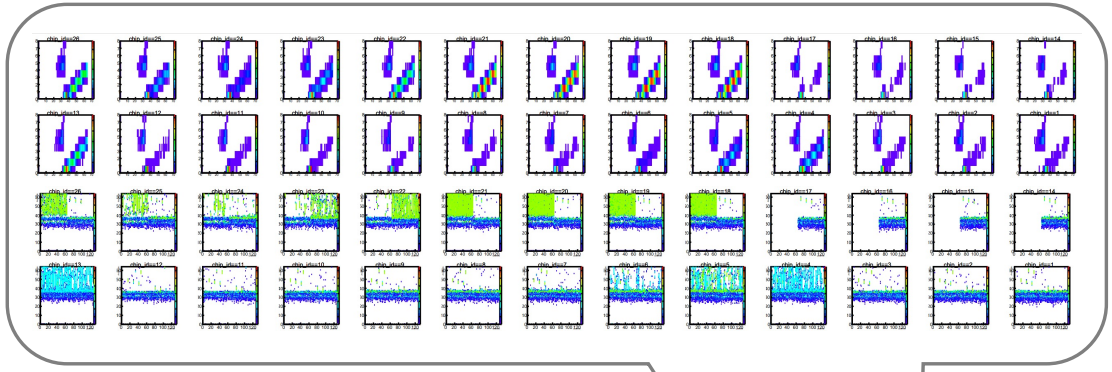
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	4												
2	NW4	3				Chip 14~26 No Entry	Doesn't stick to DF18		F					Chip 1~13 No Entry
3	NW5	2						F						
21	-	2									Chip 1~13 Noisy			Chicken Issue

ROC 21

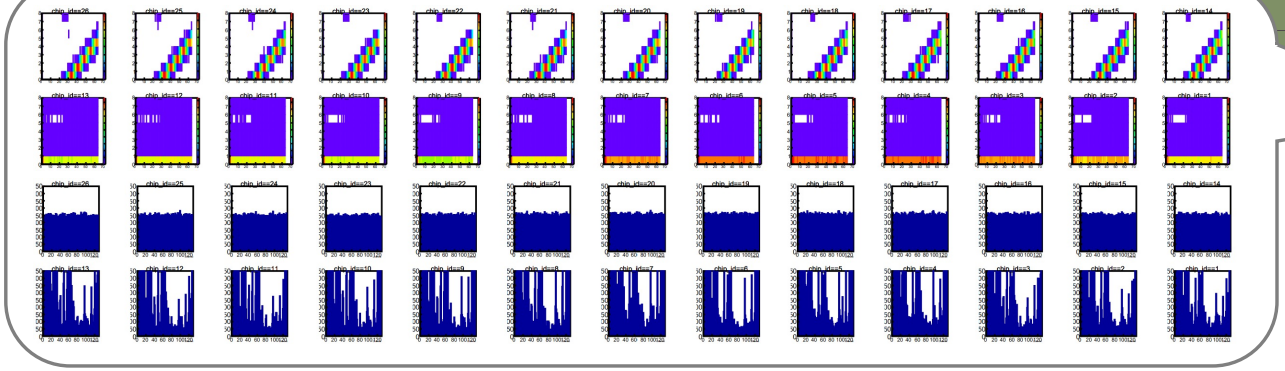
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										F	F	
24	SE4	2									All Chips Few Entries		F	
17	NW3	2												
														Chip 1~13 No Entry
											Chip 1~13 Noisy			Chicken Issue



ROC 21



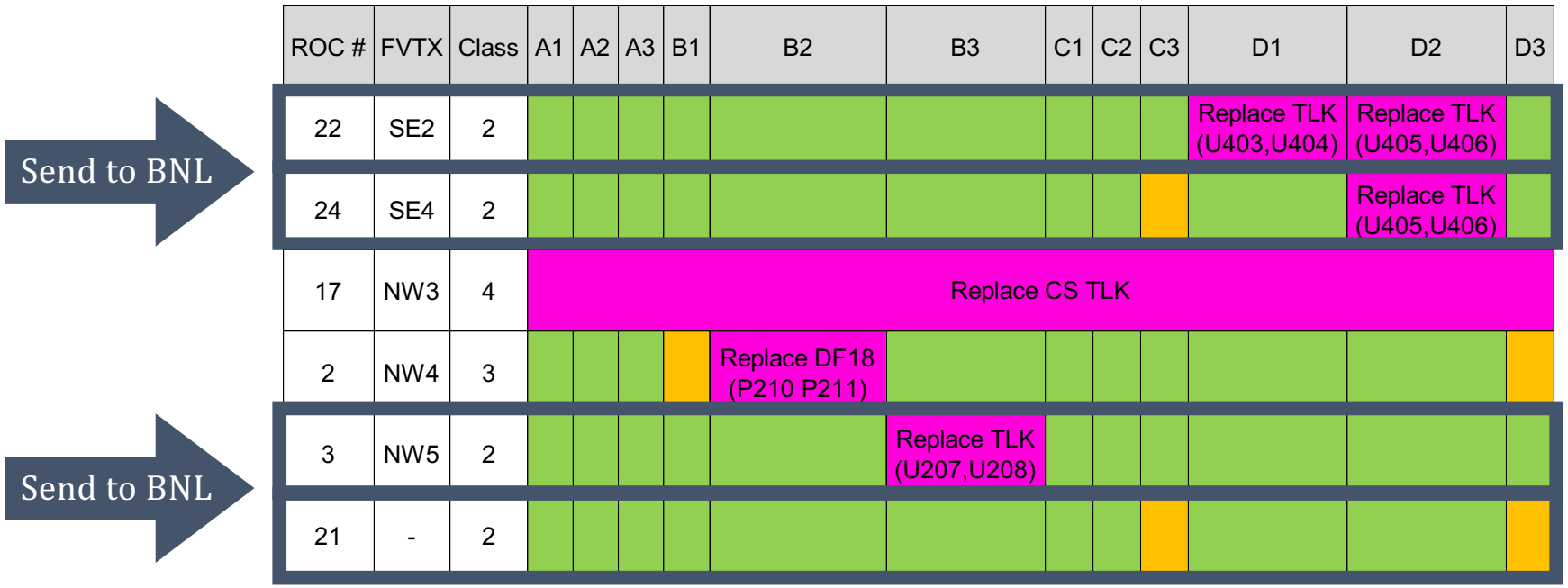
ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1		D3
22	SE2	2										F		
24	SE4	2									All Chips Few Entries			
17	NW3	2												
														p 1~13 o Entry
											Chip 1~13 Noisy			Chicken Issue



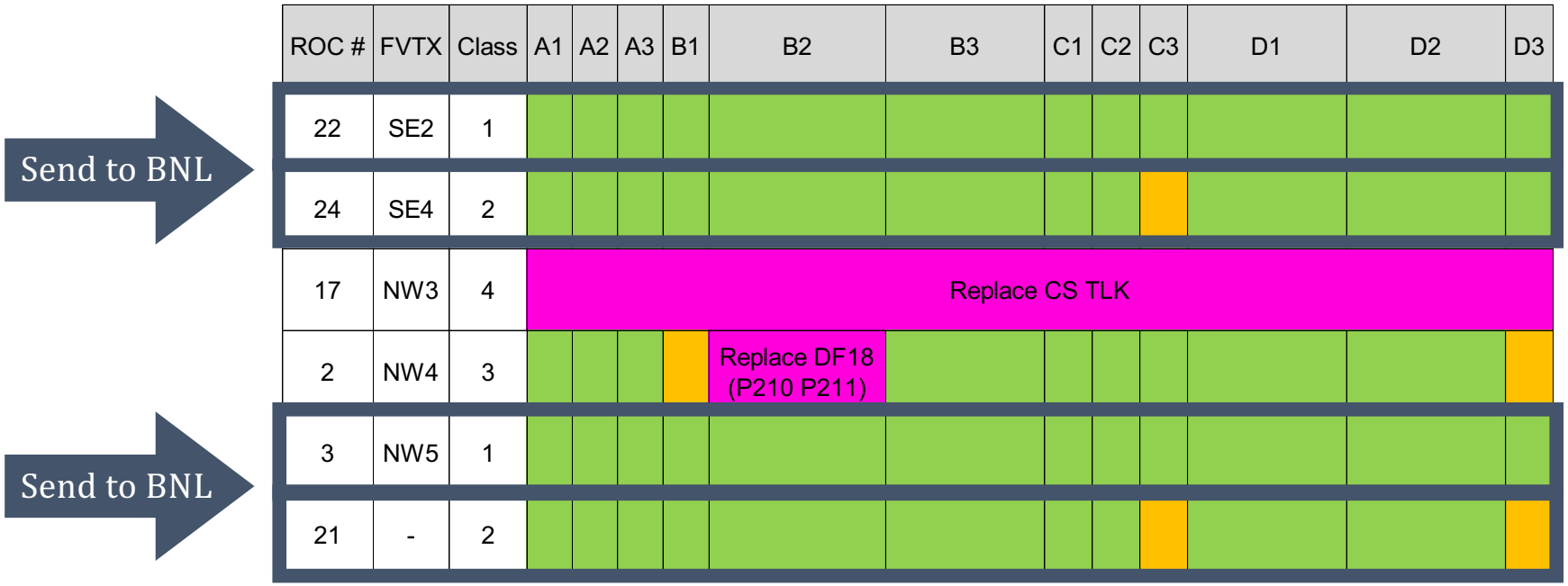
Improvement Plan

ROC #	FVTX	Class	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
22	SE2	2										Replace TLK (U403,U404)	Replace TLK (U405,U406)	
24	SE4	2											Replace TLK (U405,U406)	
17	NW3	4	Replace CS TLK											
2	NW4	3					Replace DF18 (P210 P211)							
3	NW5	2						Replace TLK (U207,U208)						
21	-	2												

Improvement Plan



Improvement Plan



Summary

- Fiber Latch Issues are fixed by replacing TLK.
- Previously good ports have Fiver Latch Issue.
- SE2, SE4, NW5, and ROC21 are going to be sent to BNL today.