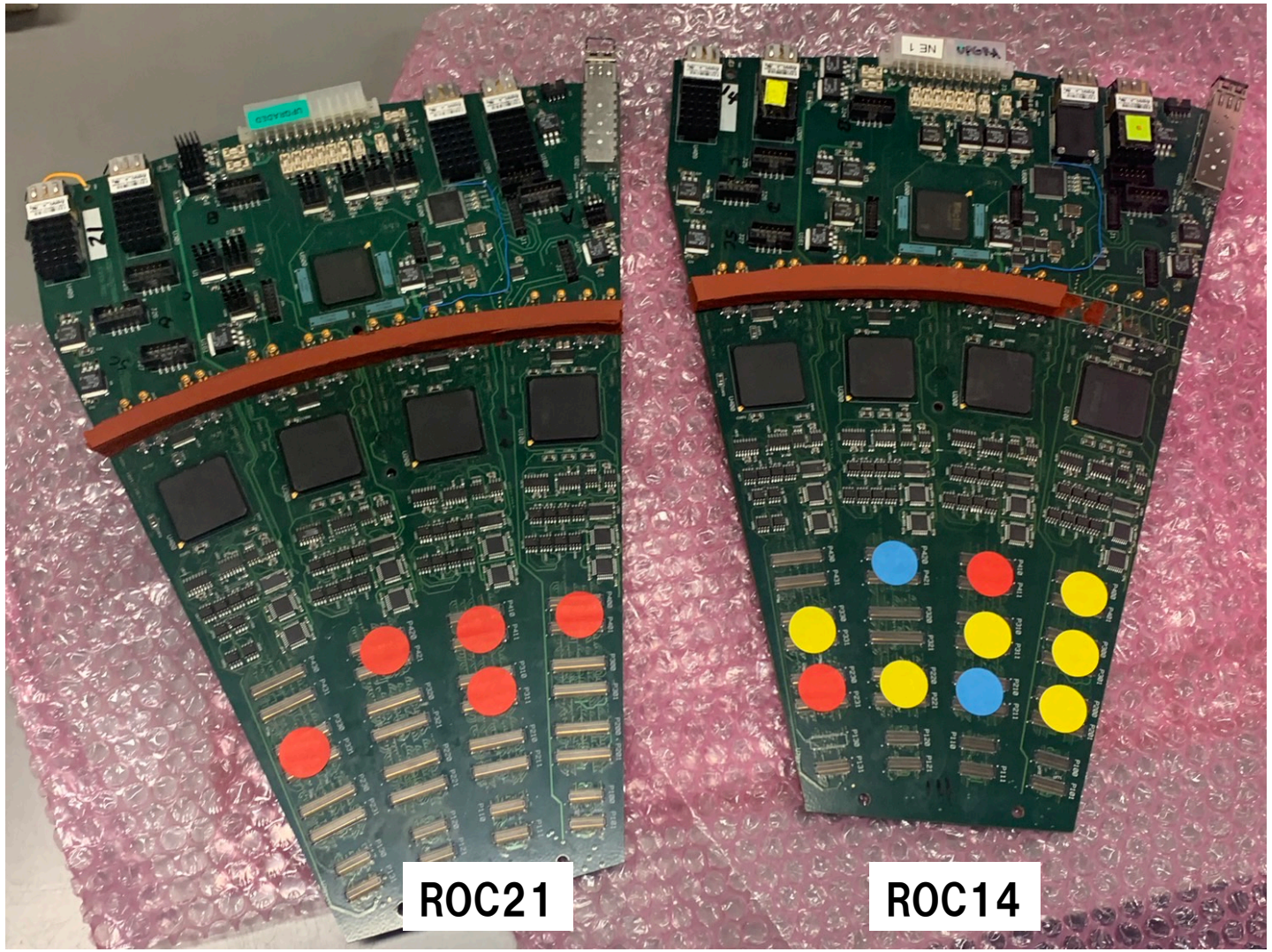
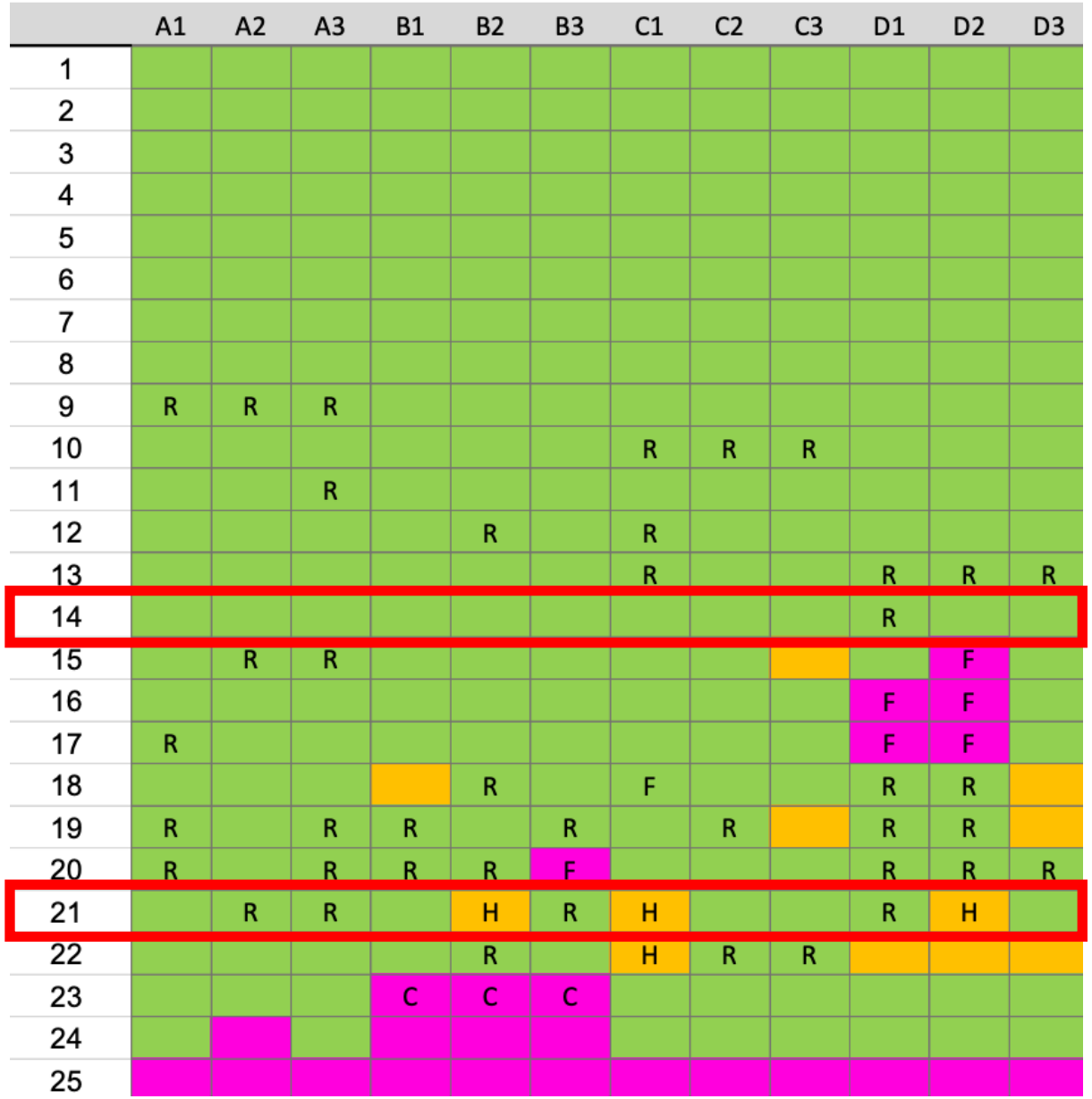
キャリブレーションテスト(20230627)



青→問題なし
赤→問題あり
黄→中間

以前の状態



	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
1												
2												
3												
4												
5												
6												
7												
8												
9	R	R	R									
10							R	R	R			
11			R									
12					R		R					
13							R			R	R	R
14										R		
15		R	R								F	
16										F	F	
17	R									F	F	
18					R		F			R	R	
19	R		R	R		R		R		R	R	
20	R		R	R	R	F				R	R	R
21		R	R		H	R	H			R	H	
22					R		H	R	R			
23				C	C	C						
24												
25												

藤木一真の卒業論文より

Previous Result

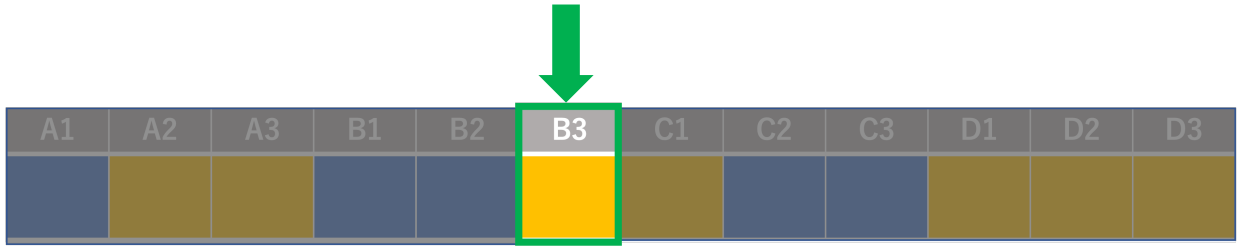
ROC14

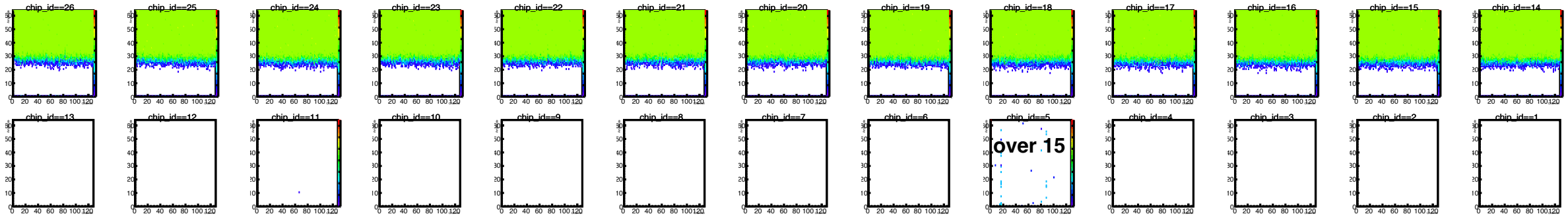
ROC21

原因がわかっているもの

ROC14

ROC14 (B2port)

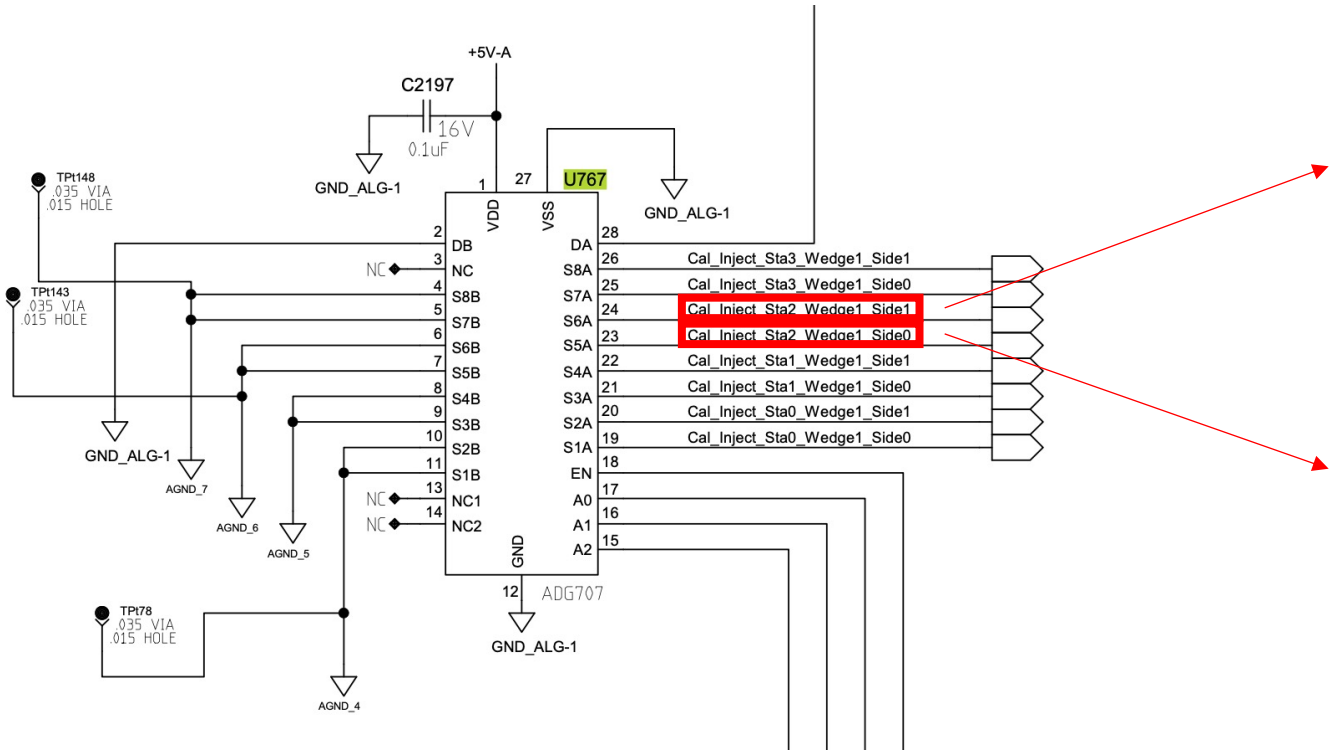




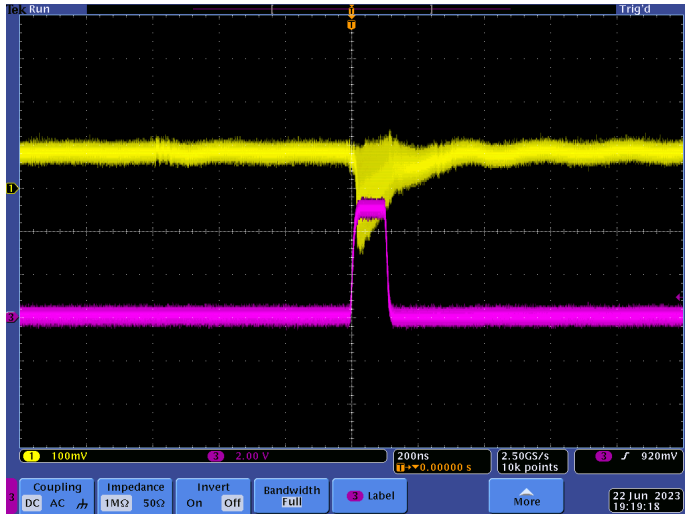
Check multiplexer!!

Chip1~13 No data

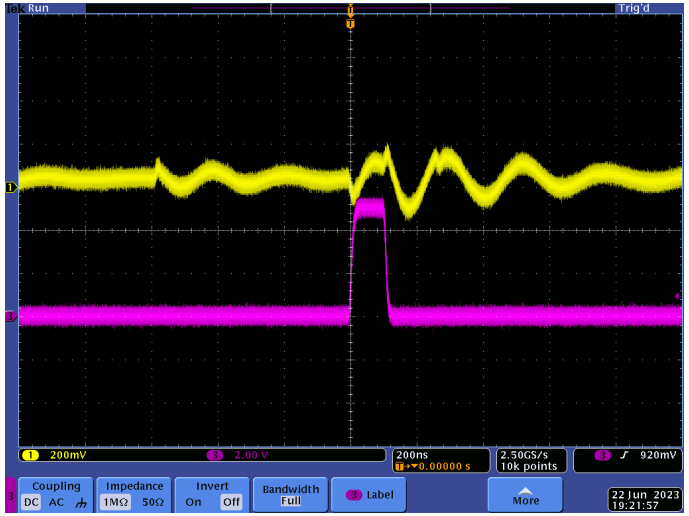
Mesurement of pulse (Check multiplexer)



B2port J1



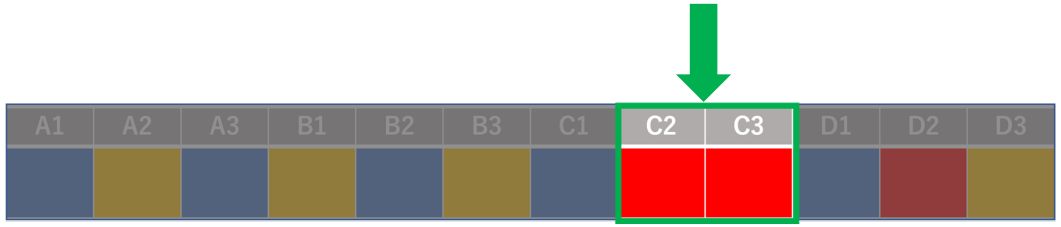
B2port J0



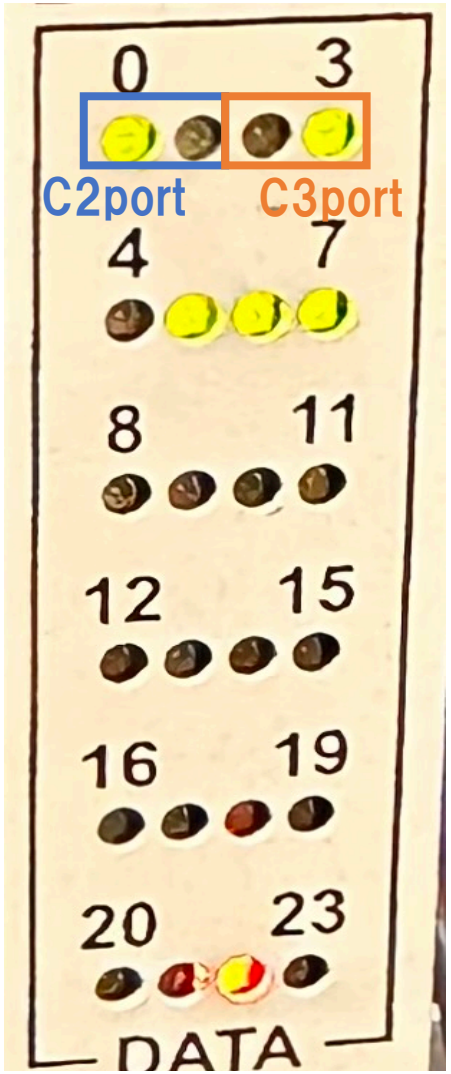
Multiplexer is **bad**!!

ROC21

ROC21 (C2, C3port)

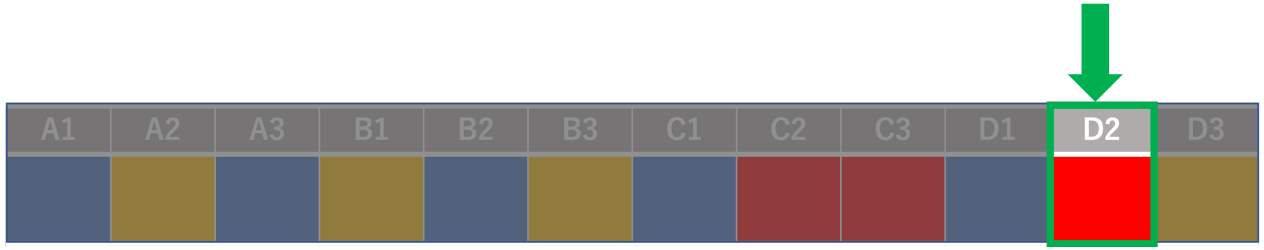


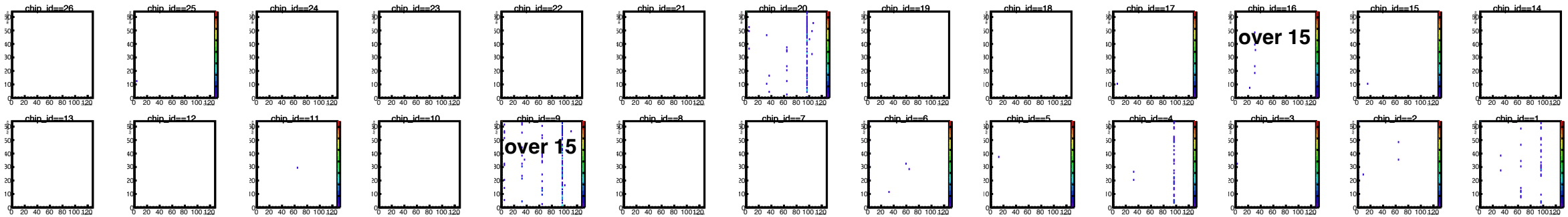
Fiber latch problem



Exchange serializer!

ROC21 (D2port)

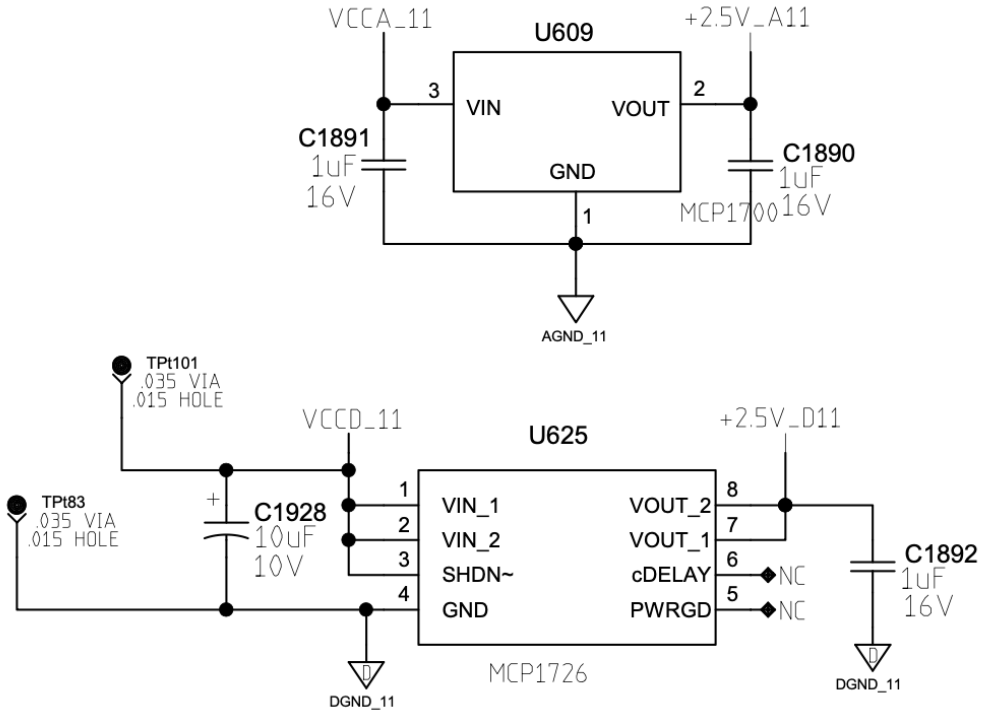


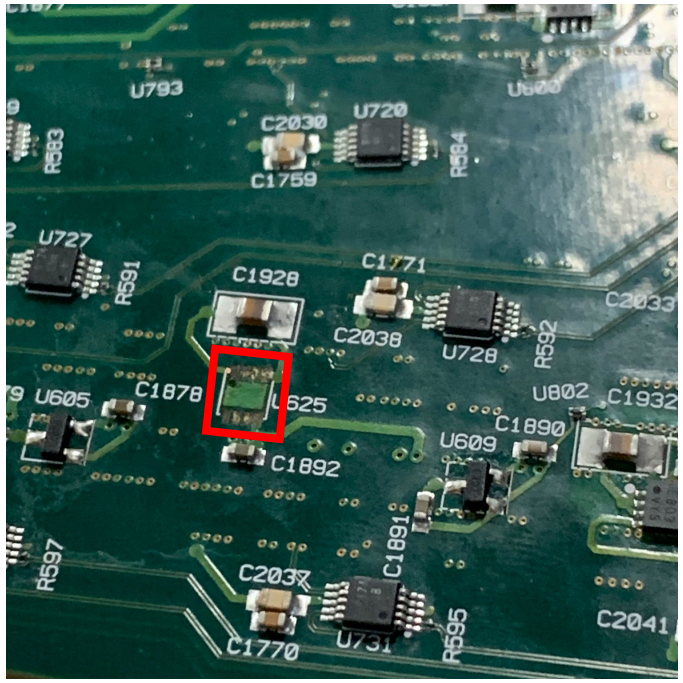


Check input and output of regulator!!

1343.dat

ROC21 (D2port) (Regulator Test)





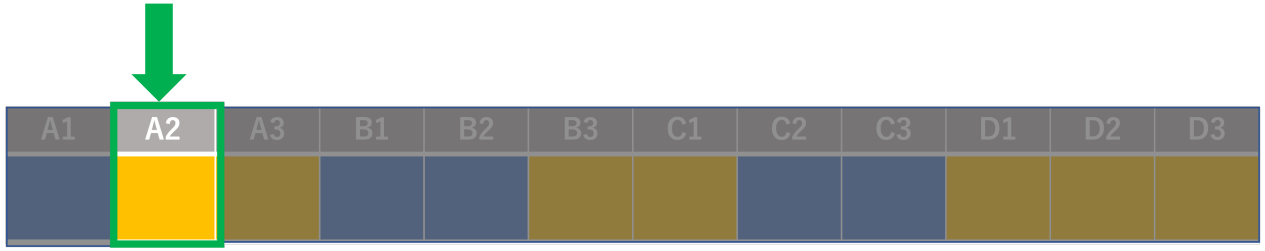
Output C1892→0.601V (usually 3.00V)
Input C1928→4.914V (usually 3.50V)

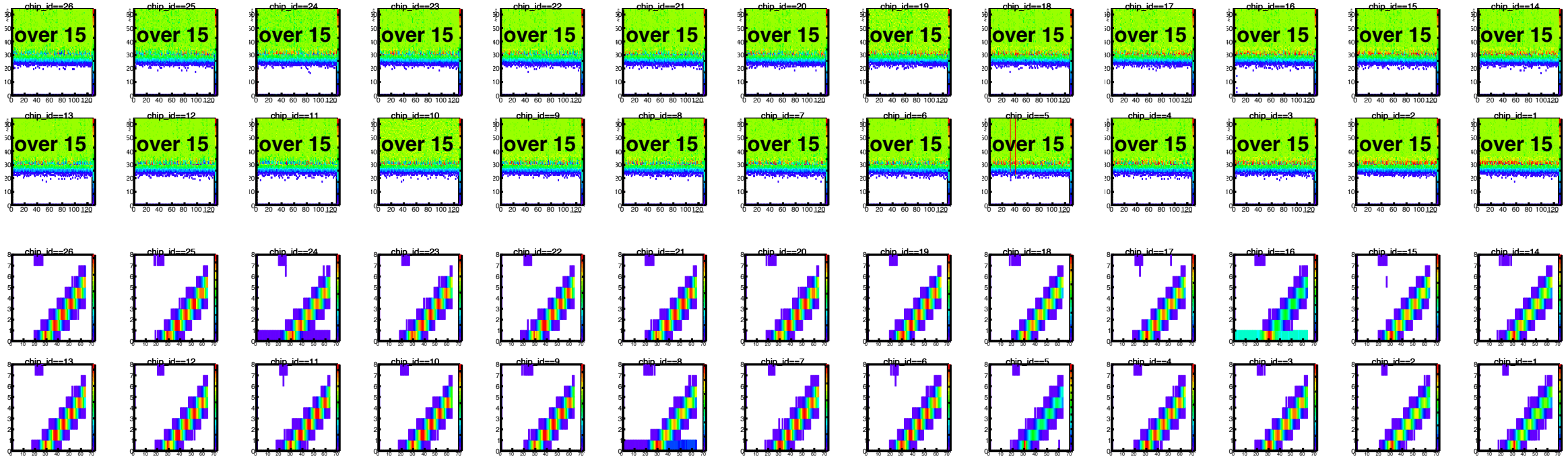
→ U625 is lost

原因不明なもの

ROC14

ROC14 (A2port)

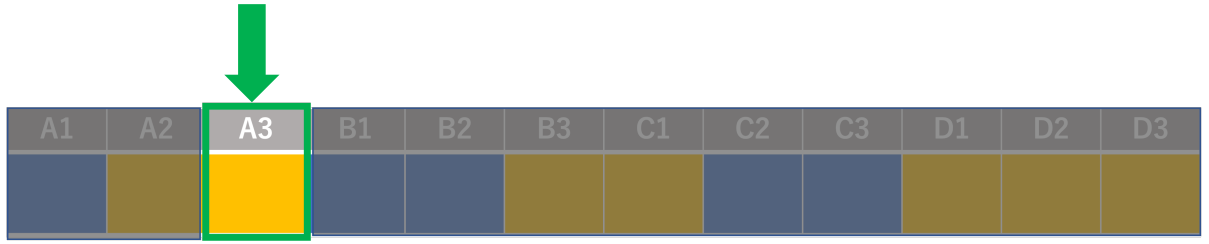


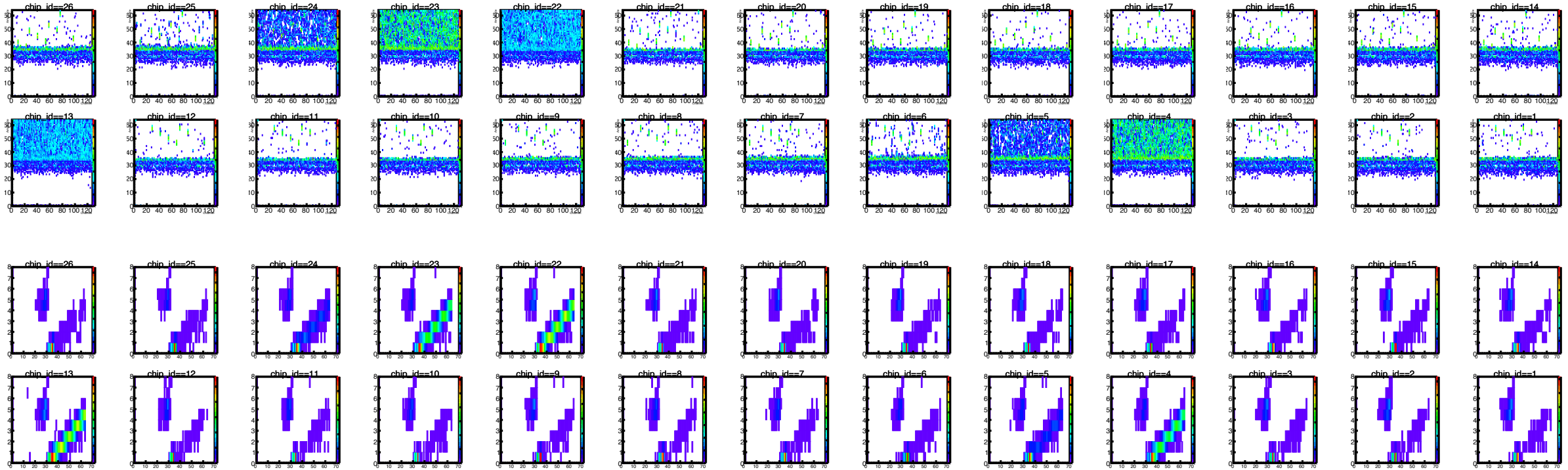


全データがover15

1652.dat

ROC14 (A3port)

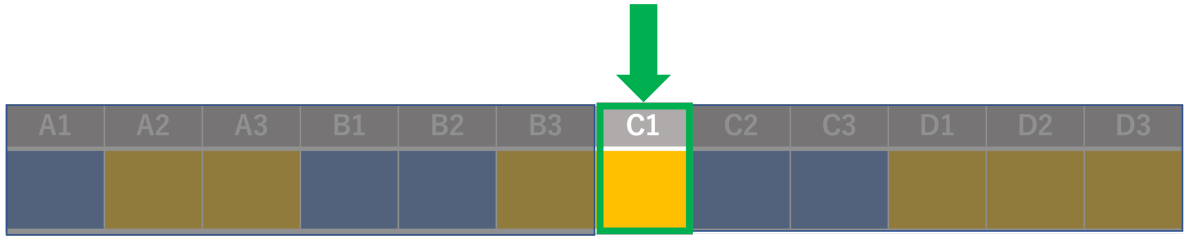


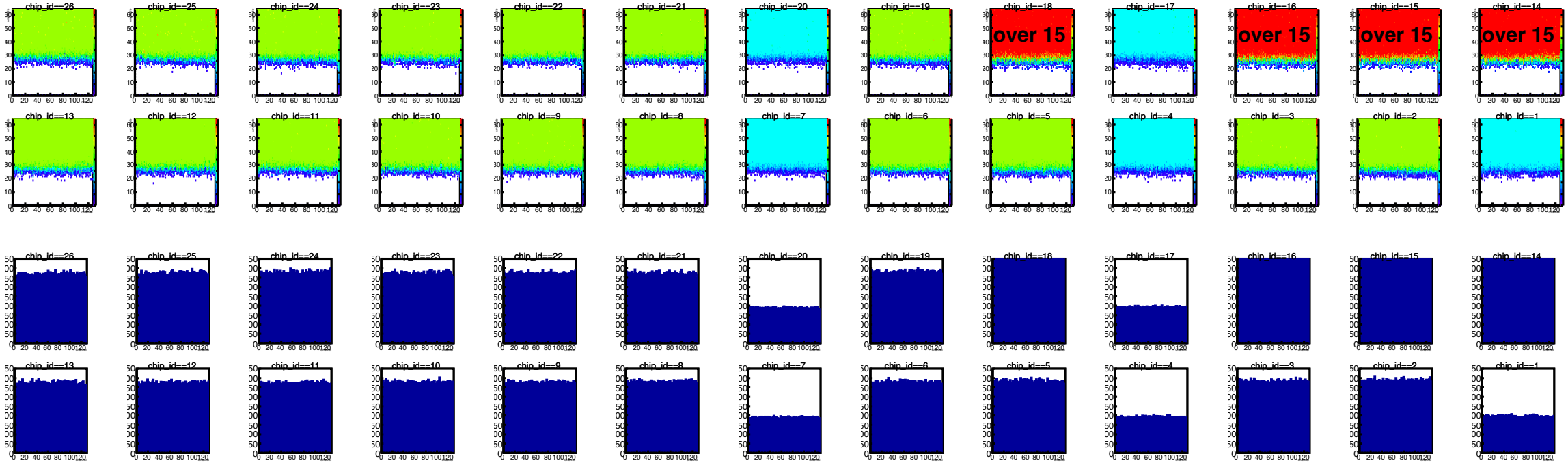


全体的にデータ数が少ない。奈良女で見たニワトリデータ？

1702.dat

ROC14 (C1port)

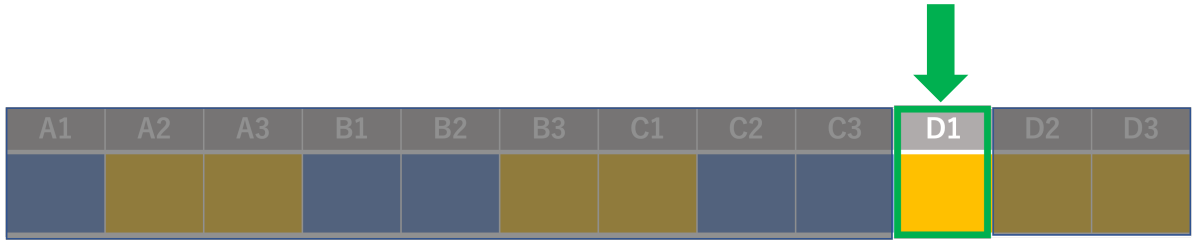


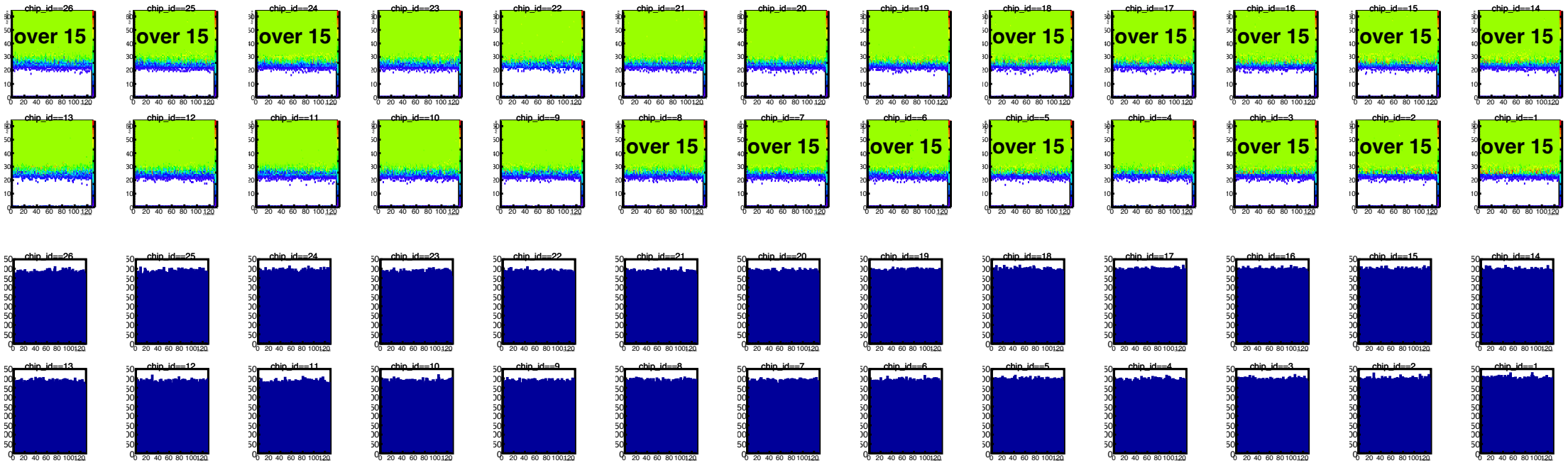


Chip1,4,7,17,20→half entry
Chip10,12,14,15,18→over15

1712.dat

ROC14 (D1port)

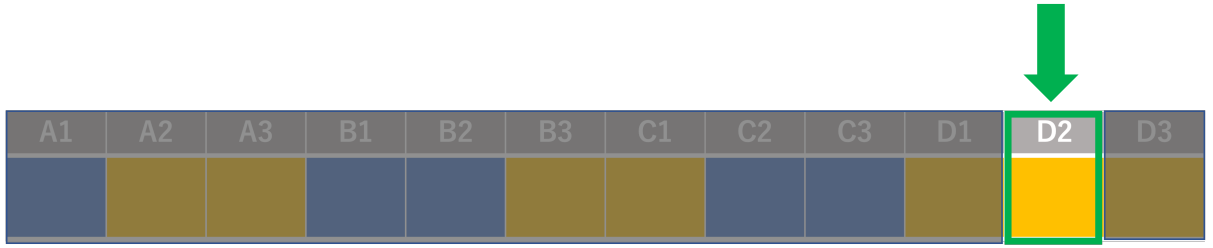


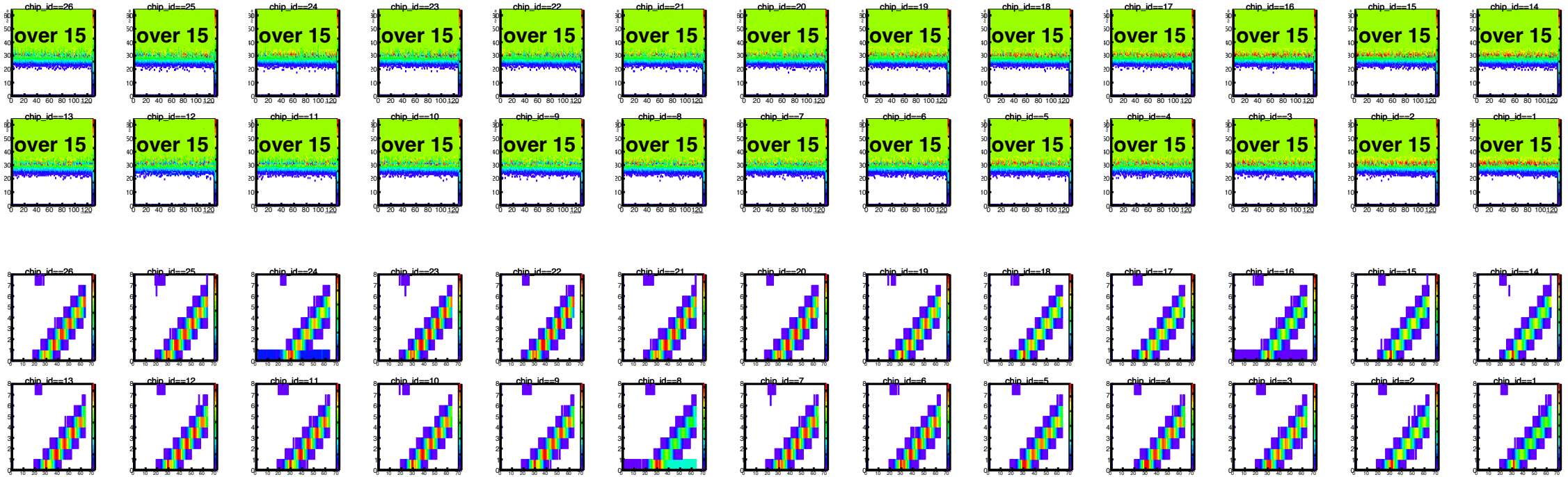


Chip1～3, 5～8, 14～18, 24～26→over15

1503.dat

ROC14 (D2port)

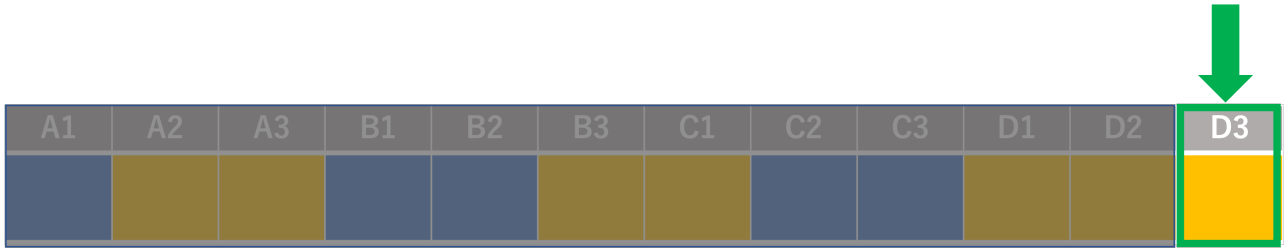


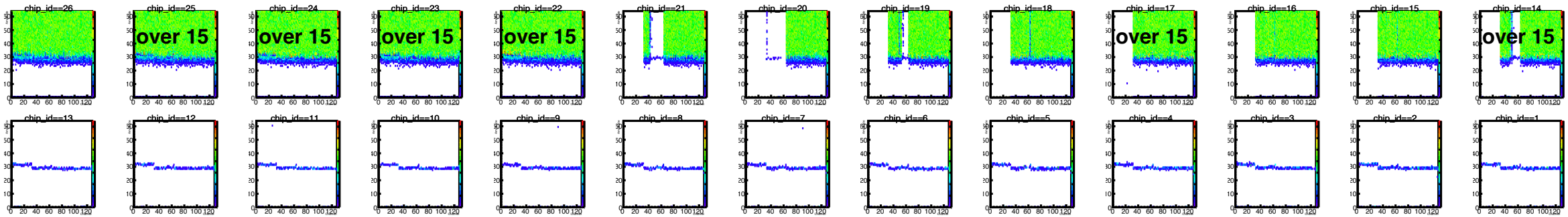


全chipがover15

1518.dat

ROC14 (D3port)



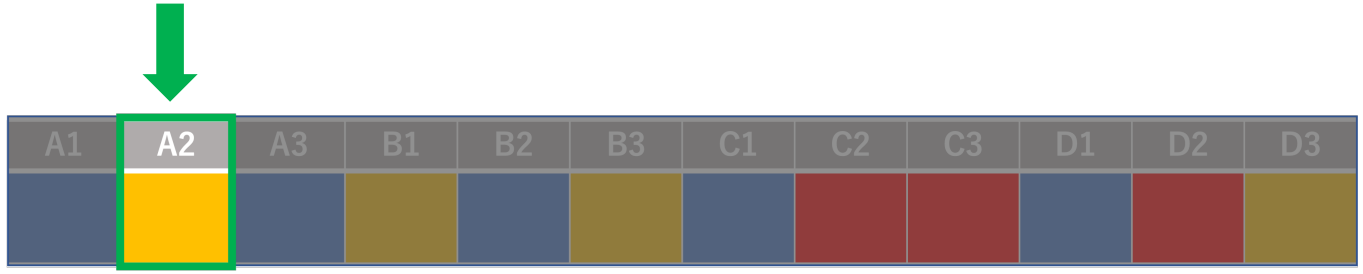


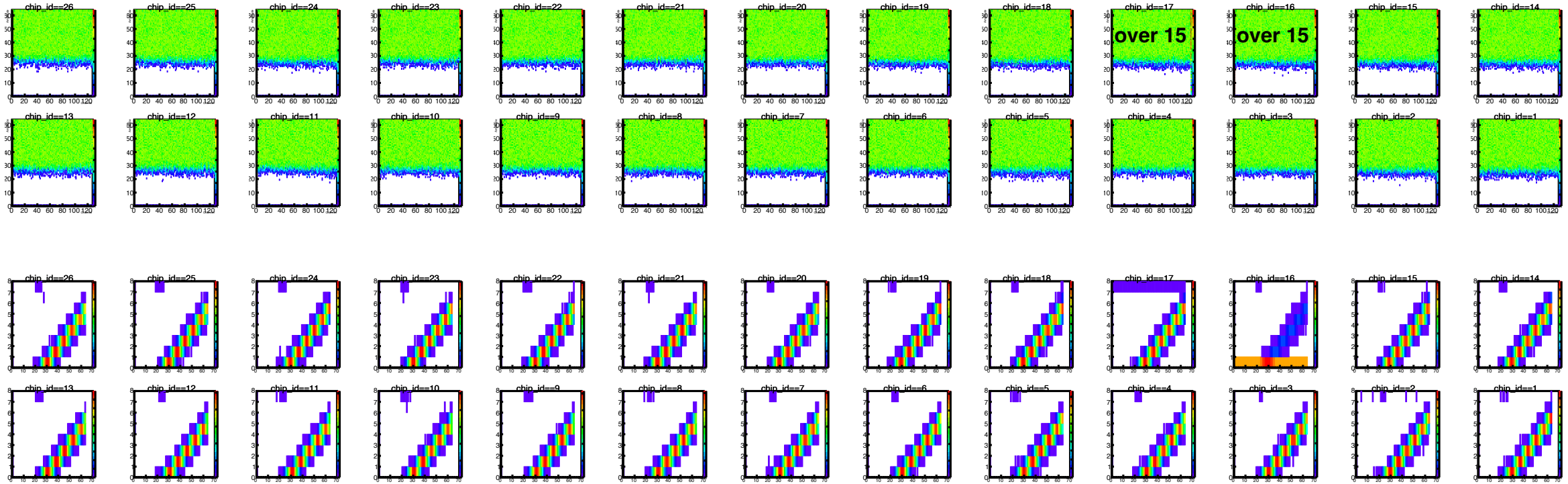
Chip1~13→ほぼ空データ
Chip14~21→データかけ

1524.dat

ROC21

ROC21 (A2port)

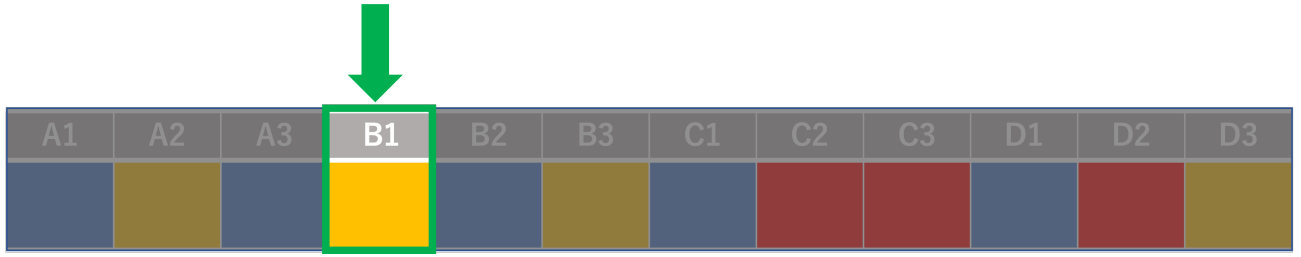


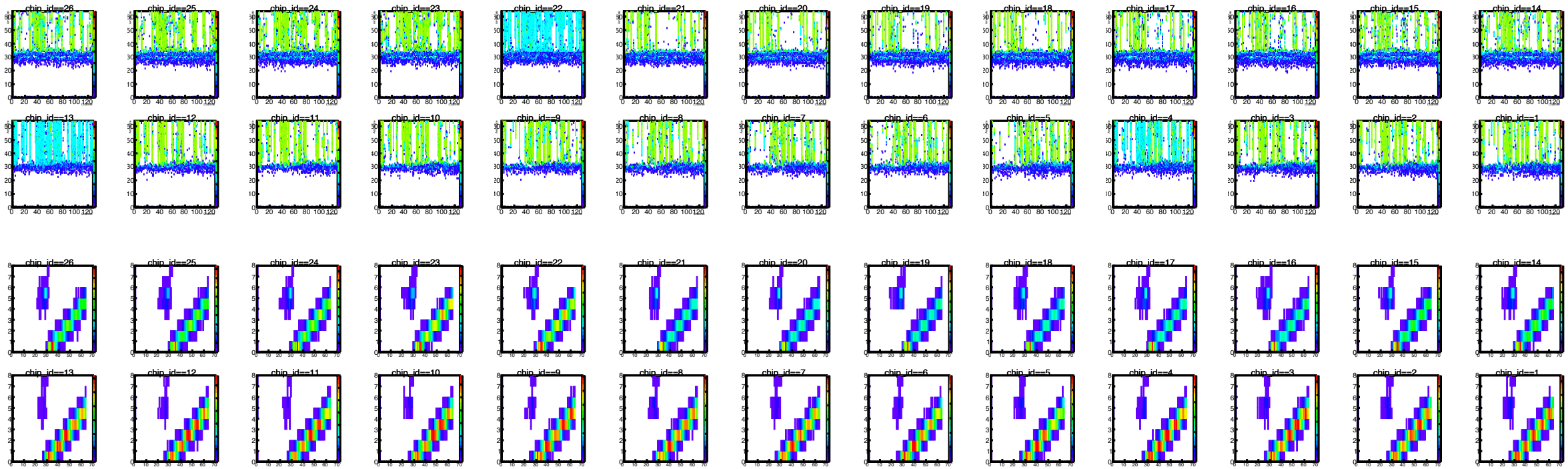


ノイズが大量に来た。Chip15,17がover15

1420.dat

ROC21 (B1port)

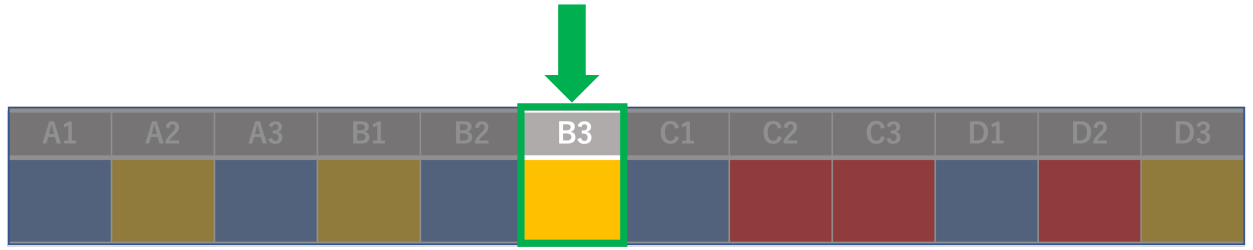


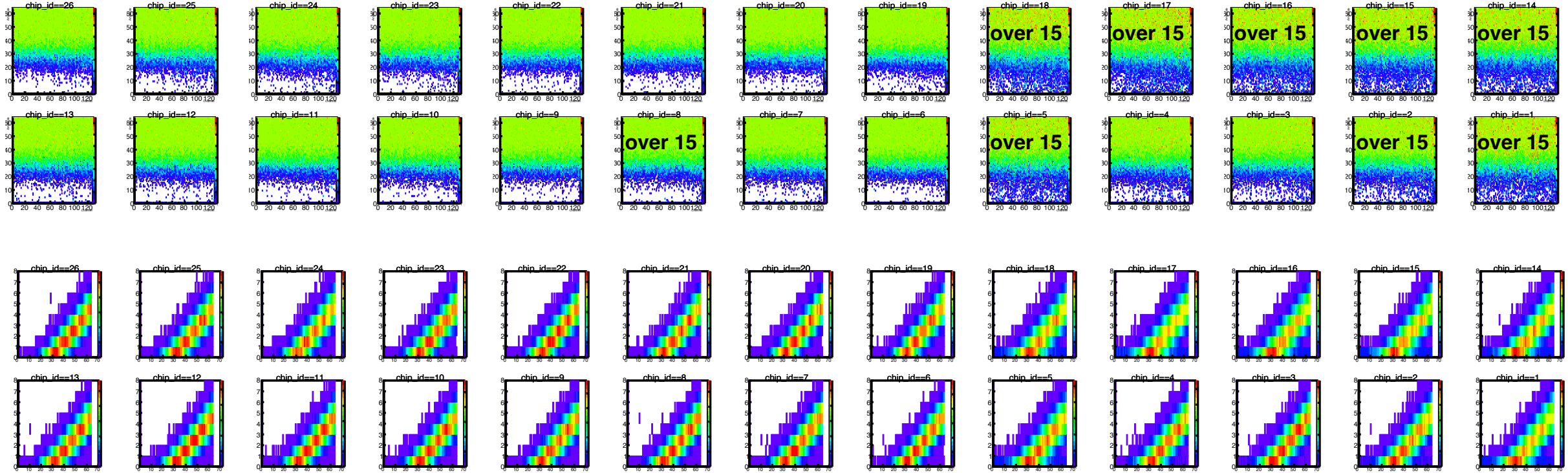


全chipでエントリーが足りていない。

1244.dat

ROC21 (B3port)

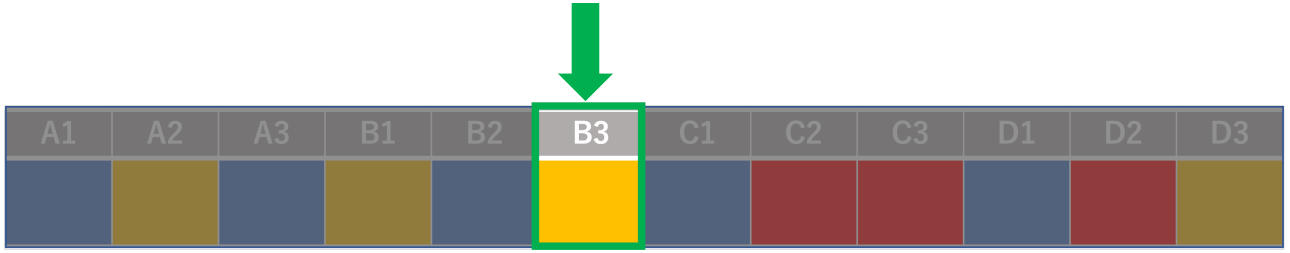




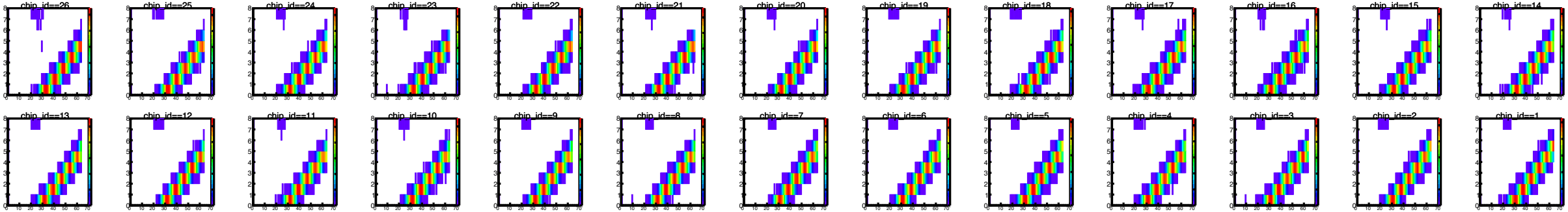
Chip1, 2, 5, 8, 14, 15, 16, 17, 18→over15

1315.dat

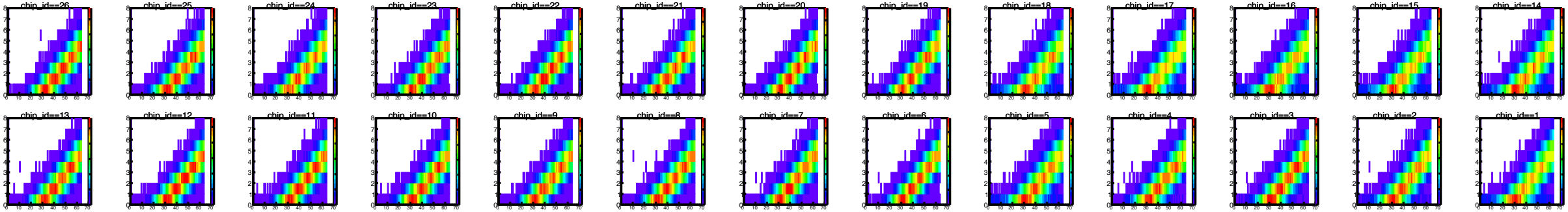
ROC21 (B3port)



正常なデータ



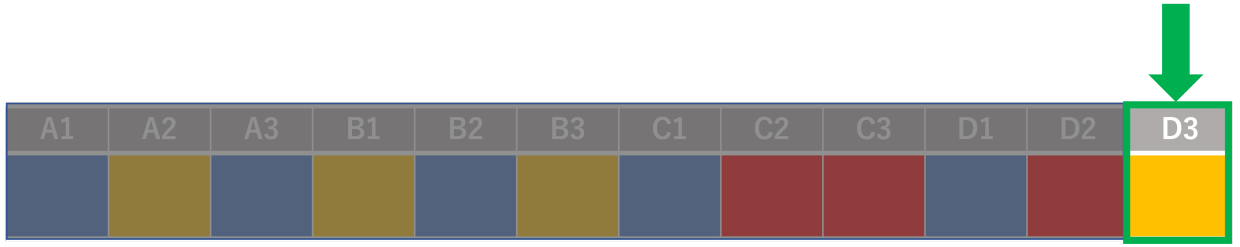
今回のデータ

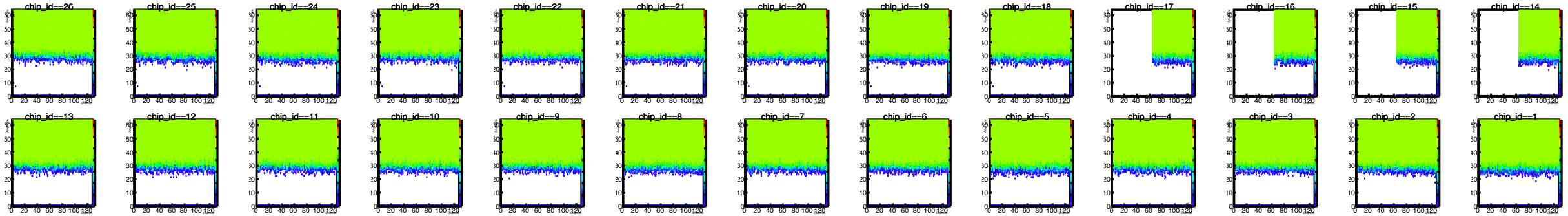


Chip1, 2, 5, 8, 14, 15, 16, 17, 18→over15

1315.dat

ROC21 (D3port)





D3ポート欠け。

1353.dat

まとめ

- ROC14, 21のキャリブレーションテストを行なった。
- 2台のROCはBNLに送る前の状態と比べてだいぶ悪くなっていた。

今後の展望

- 原因がわかっているものに関して、とりあえず修理に出し、
- 修理されたROCが届き次第、原因不明のポートの調査を進めたいと考えている。