

Activities at BNL: Ladder Testing

**Li Han-sheng, Rachid Nouicer, Robert Pisani,
Steven Antrade, Dan Cacace, and Connor Miraval**

Outline: Ladder Testing



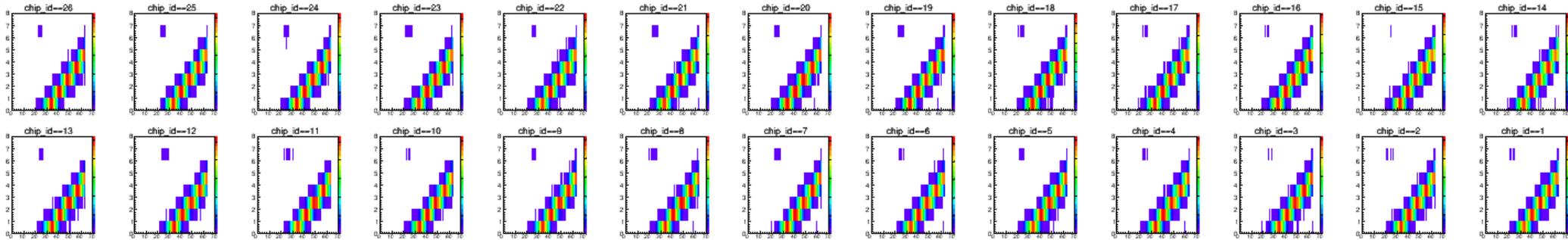
Production Ladders				HDIs/Chips																Sensors								Ladder				Live Channels										
Count	Barrel Type	Slave Batch-ID	HDID	U26	U25	U24	U23	U22	U21	U20	U19	U18	U17	U16	U15	U14	File	Wire Bonding	Sensor A	Leakage Current	Sensor B	Leakage Current	File	Sensor A	Leakage Current	Sensor B	Leakage Current	File	Delivered Date	Date Completed	Days In Queue	Survey File	South	File	North	File	Delivered Date	Date Completed	Days In Queue	1 to 5	Source Test File	
1	PB2-L001	2	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210319-1246_02	03/09/2021	03/18/2021	9	1.90	3	1.90	20210414-1137_01	2	1.90	3	1.90	20210414-1040_01	03/26/2021	4/5/2021	10		Green	Green	Green	Green	04/16/2021	04/16/2021	0		
2	PB2-L002	2	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210319-1220_03	03/10/2021	03/19/2021	9	2.40	2	2.00	20210414-1155_01	2	1.90	3	1.90	20210414-1206_01	03/29/2021	4/9/2021	11		Green	Green	Green	Green	04/16/2021	04/15/2021	0		
3	PB2-L003	2	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210329-1018_03	03/11/2021	03/20/2021	9	1.30	2	1.90	20210420-1228_01	2	1.90	2	1.90	20210419-1049_01	04/01/2021	04/16/2021	15		Green	Green	Green	Green	05/04/2021	05/04/2021	0		
4	PB1-L001	1	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210319-1028_02	03/12/2021	03/19/2021	7	1.90	2	1.90	20210414-1225_01	2	1.90	2	1.90	20210414-1221_01	03/26/2021	4/6/2021	11		Green	Green	Green	Green	04/16/2021	04/15/2021	0		
5	PB2-L004	2	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210322-1426_02	03/16/2021	03/19/2021	3	1.90	2	1.90	20210414-1305_01	2	1.90	2	1.90	20210414-1225_01	03/25/2021	4/2/2021	8		Green	Green	Green	Green	04/06/2021	04/08/2021	0		
6	PB1-L002	1	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210319-1618_02	03/16/2021	03/19/2021	3	1.90	2	1.90	20210414-0444_01	2	2.30	2	2.30	20210414-1000_01	03/29/2021	4/13/2021	15		Green	Green	Green	Green	04/16/2021	04/16/2021	0		
7	PB2-L005	2	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210325-1636_02	03/17/2021	03/19/2021	2	3.00	2	3.10	20210416-1108_01	2	1.90	2	1.90	20210416-1126_01	04/01/2021	4/16/2021	15		Green	Green	Green	Green	04/16/2021	04/20/2021	0		
8	PB1-L003	1	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210325-1804_02	03/17/2021	03/26/2021	9	2	2	2.00	20210418-0928_01	2	1.90	2	1.90	20210418-0928_01	03/20/2021	4/13/2021	15		Green	Green	Green	Green	04/16/2021	04/16/2021	0		
9	PB1-L004	1	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210329-1116_02	03/17/2021	03/26/2021	9	2	2	2.00	20210414-1444_01	2	1.90	2	1.90	20210414-1444_01	03/21/2021	4/16/2021	17		Green	Green	Green	Green	04/16/2021	04/20/2021	0		
10	PB2-L006	2	Batch 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210419-1116_02	04/08/2021	04/17/2021	9	2	2	2.00	20210420-1444_01	2	1.90	2	1.90	20210420-1444_01	04/19/2021	4/20/2021	1		Green	Green	Green	Green	04/20/2021	04/21/2021	0		
11	PB1-L005	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210505-1001_01	05/03/2021	05/06/2021	3	2.70	2	2.70	20210602-1532_01	2	2.70	2	2.70	20210602-1112_01	05/13/2021	05/19/2021	6		Green	Green	Green	Green	06/10/2021	06/21/2021	0		
12	PB1-L006	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210507-11120_01	05/04/2021	05/07/2021	3	2	2	2.00	20210519-1414_01	2	1.90	2	1.90	20210519-1422_01	05/13/2021	05/18/2021	5		Green	Green	Green	Green	05/20/2021	05/24/2021	0		
13	PB1-L007	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210507-1548_01	05/05/2021	05/07/2021	2	1.90	2	1.90	20210519-1621_01	2	1.90	2	1.90	20210524-1447_01	05/13/2021	05/19/2021	6		Green	Green	Green	Green	05/20/2021	05/24/2021	0		
14	PB1-L008	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210510-1644_01	05/06/2021	05/10/2021	4	1.90	2	1.40	20210524-1206_01	2	1.90	2	1.90	20210524-1151_01	05/20/2021	05/26/2021	6		Green	Green	Green	Green	05/26/2021	05/28/2021	0		
15	PB1-L009	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210511-1126_01	05/06/2021	05/11/2021	5	2.70	2	2.30	20210521-1109_01	2	1.90	2	1.90	20210521-1058_01	05/27/2021	05/28/2021	1		Green	Green	Green	Green	06/10/2021	06/22/2021	0		
16	PB1-L010	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210511-1716_01	05/07/2021	05/11/2021	4	1.90	2	1.90	20210602-1281_01	2	2.10	2	2.10	20210602-1117_01	06/01/2021	06/02/2021	1		Green	Green	Green	Green	06/10/2021	06/23/2021	0		
17	PB1-L011	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210511-1741_01	05/10/2021	05/11/2021	1	1.90	2	1.90	20210608-0928_01	2	2.10	2	2.10	20210608-1123_01	06/01/2021	06/07/2021	6		Green	Green	Green	Green	06/11/2021	06/23/2021	0		
18	PB1-L012	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210513-1354_01	05/10/2021	05/12/2021	2	2.70	2	2.70	20210602-1000_01	2	1.90	2	1.90	20210602-1000_01	06/01/2021	06/03/2021	2		Green	Green	Green	Green	06/11/2021	06/25/2021	0		
19	PB1-L013	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210519-1254_01	05/17/2021	05/18/2021	1	2	2	2.00	20210609-1944_01	2	1.90	2	1.90	20210609-1944_01	06/03/2021	06/10/2021	7		Green	Green	Green	Green	06/11/2021	06/23/2021	0		
20	PB1-L014	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210525-1248_01	05/21/2021	05/24/2021	3	2	2	2.00	20210611-1506_01	2	1.90	2	1.90	20210611-1457_01	06/04/2021	06/11/2021	7		Green	Green	Green	Green	06/11/2021	06/25/2021	0		
21	PB1-L015	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210525-1347_01	05/21/2021	05/24/2021	3	2	2	2.00	20210611-1545_01	2	1.90	2	1.90	20210611-1545_01	06/04/2021	06/11/2021	7		Green	Green	Green	Green	06/14/2021	06/25/2021	11		
22	PB1-L016	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210525-1404_01	05/21/2021	05/25/2021	4	1.90	2	1.90	20210615-1014_01	2	1.90	2	1.90	20210615-0928_01	06/04/2021	06/15/2021	11		Green	Green	Green	Green	06/21/2021	07/01/2021	10		
23	PB1-L017	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210525-1429_01	05/21/2021	05/25/2021	4	1.90	2	1.90	20210616-0928_01	2	1.90	2	1.90	20210616-1005_01	06/04/2021	06/15/2021	11		Green	Green	Green	Green	06/21/2021	07/01/2021	10		
24	PB1-L018	1	Batch 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	20210528-1121_01	05/26/2021	05/28/2021	2	1.90	2	1.90	20210616-1101_01	2	1.90	2	1.90	20210616-1047_01	06/04/2021	06/16/2021	12		Green	Green	Green	Green	06/21/2021	07/02/2021	11		

Shown by Milan

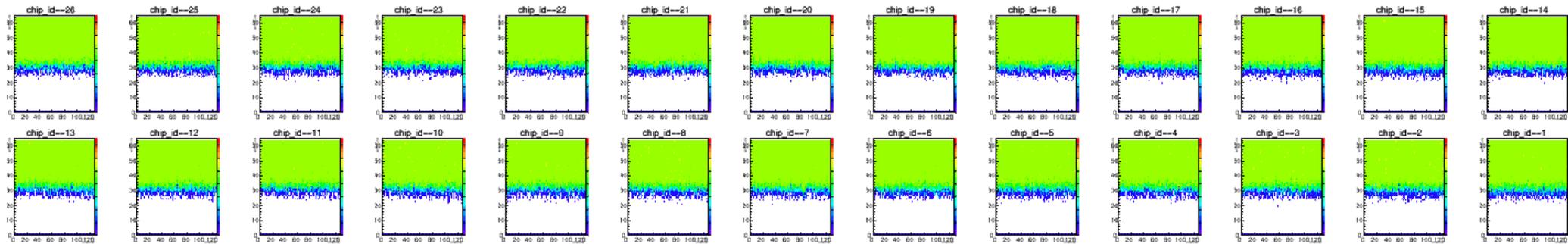
Today by Han

PB1-L012 shows high current in one sensor-B South side

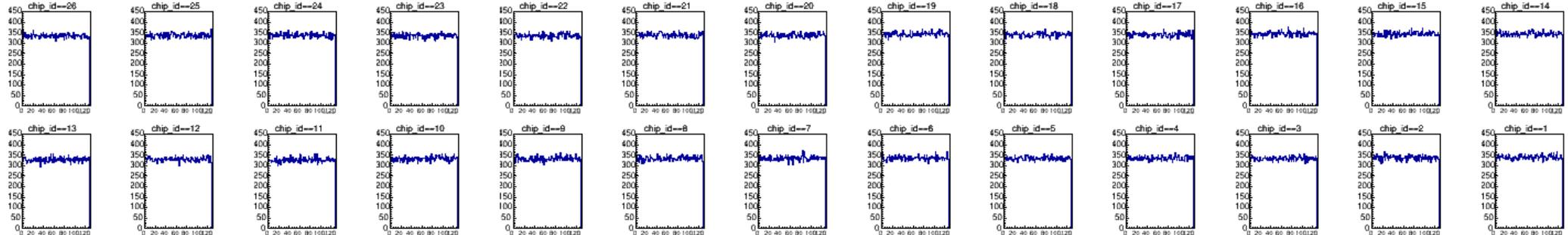
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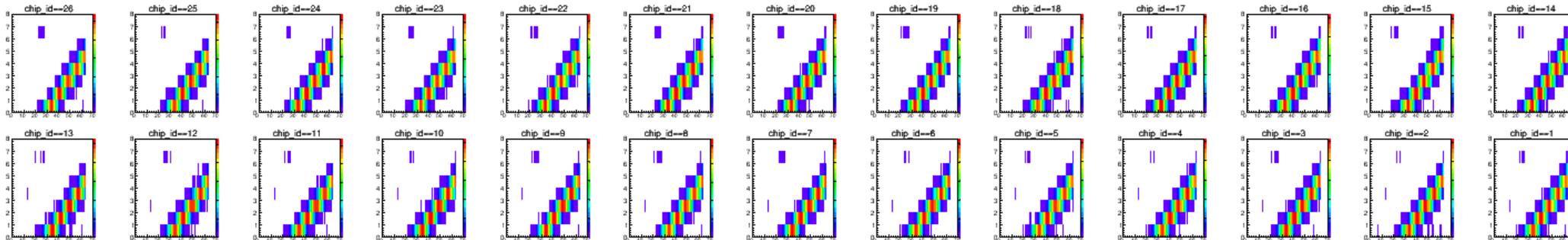
Amplitude vs Channel



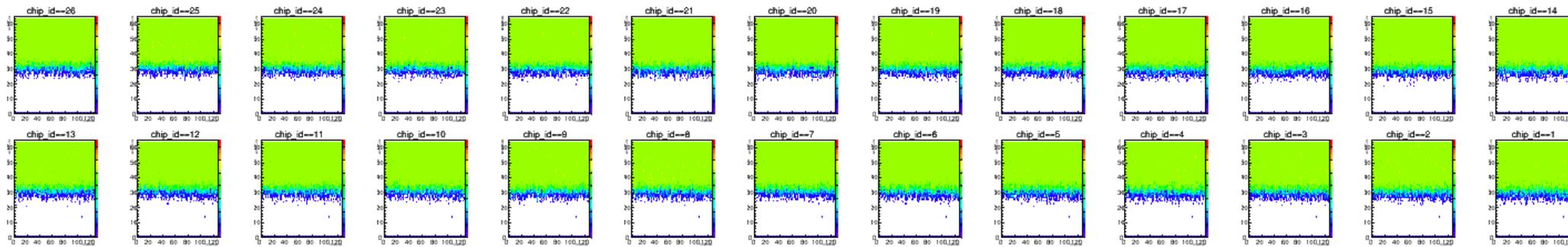
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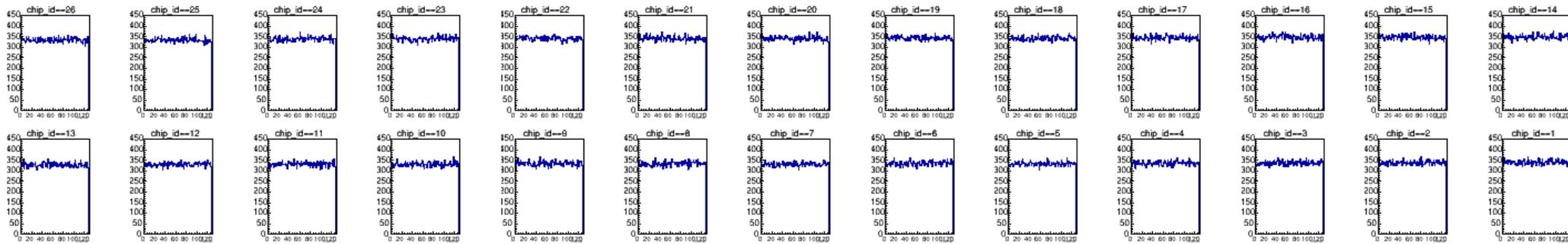
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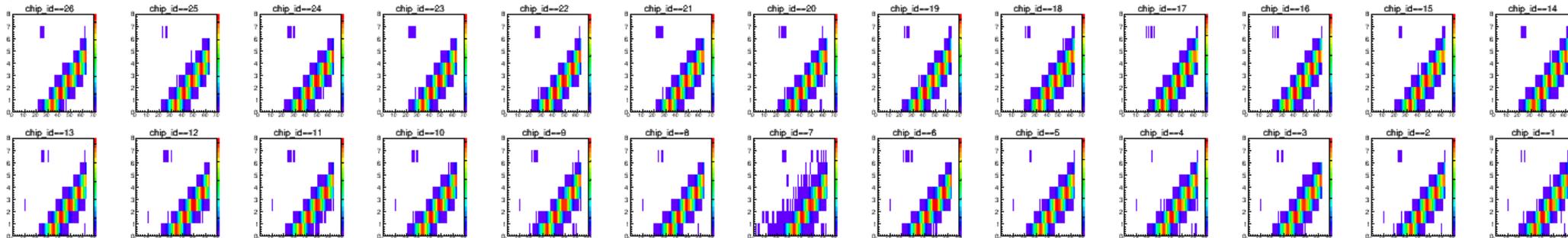
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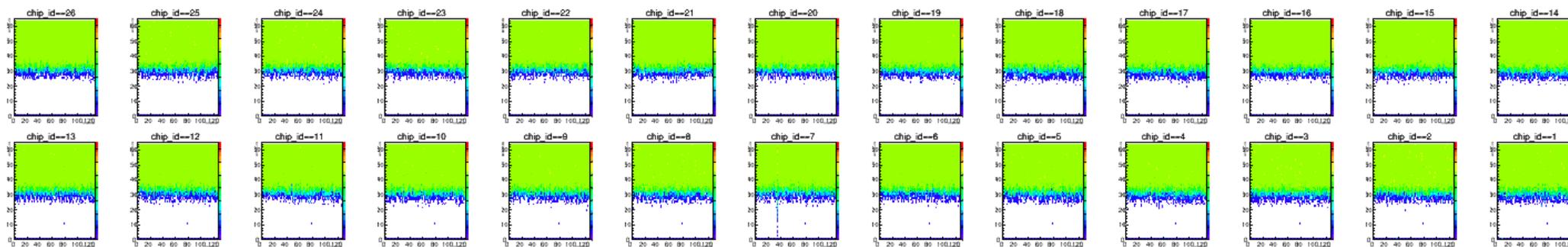
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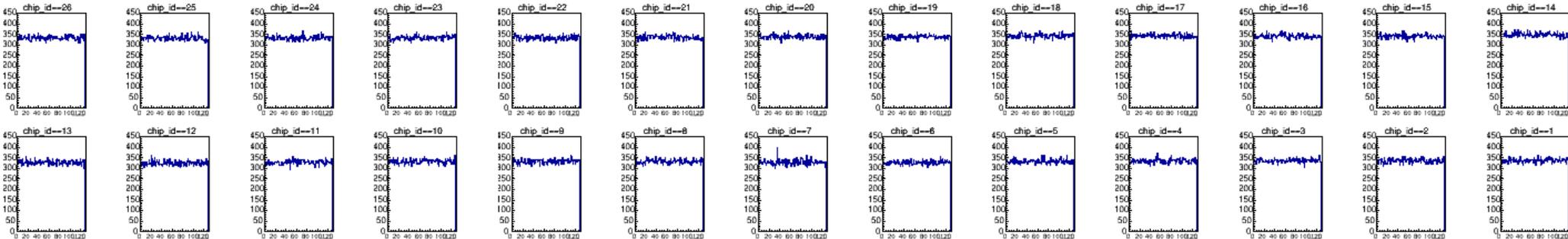
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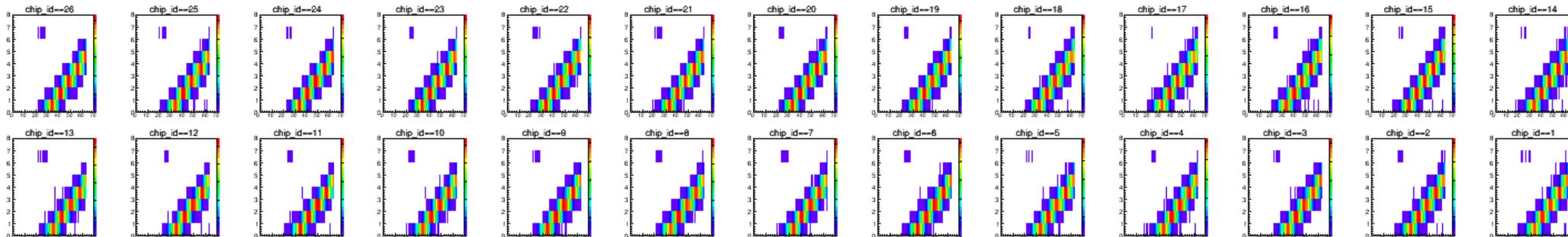
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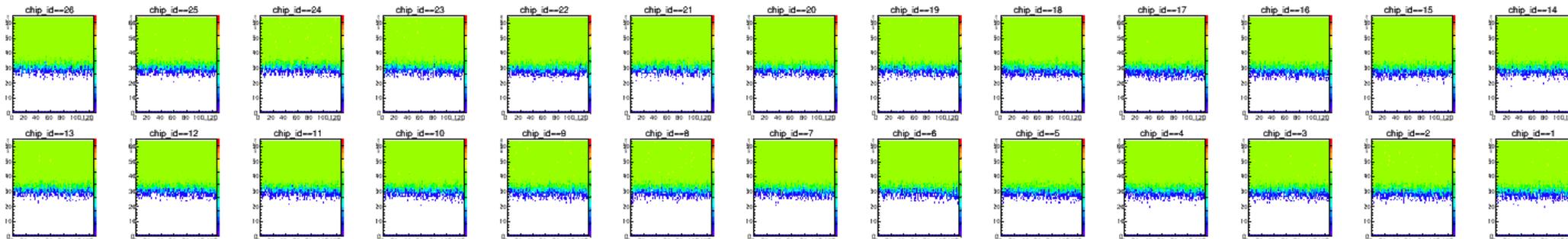
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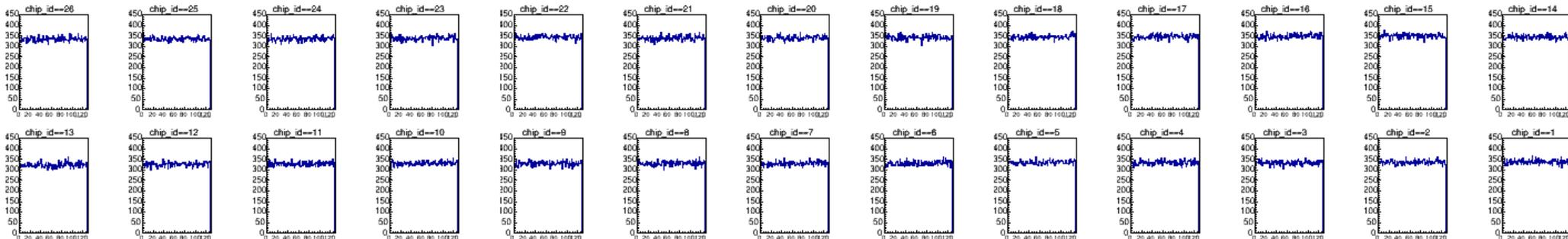
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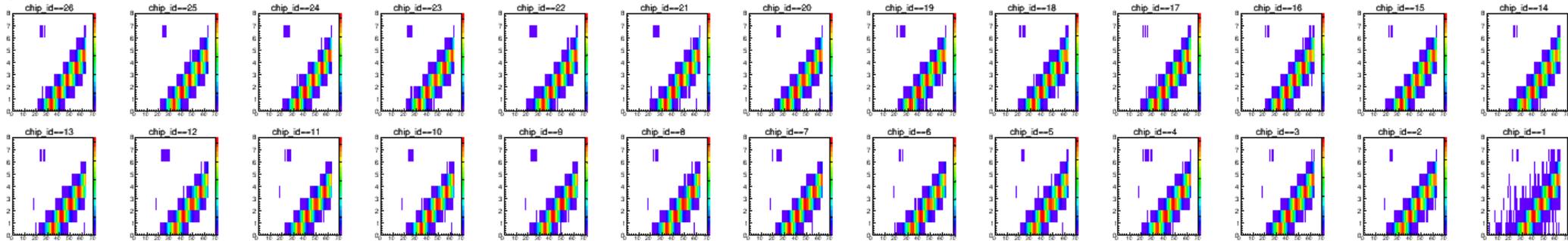
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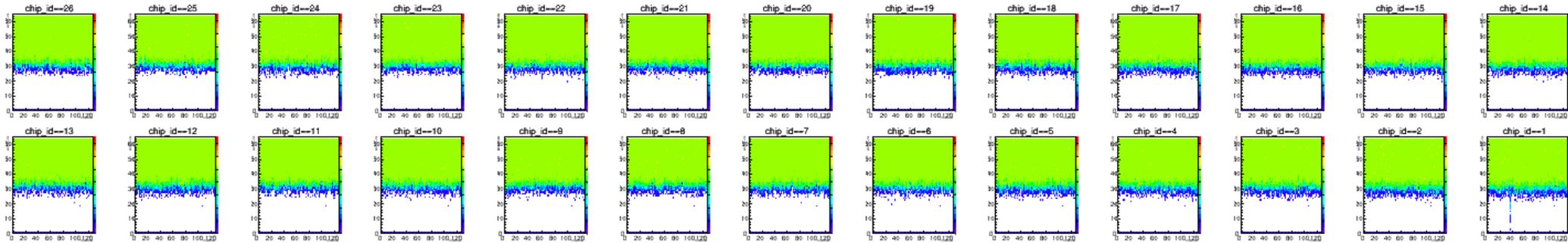
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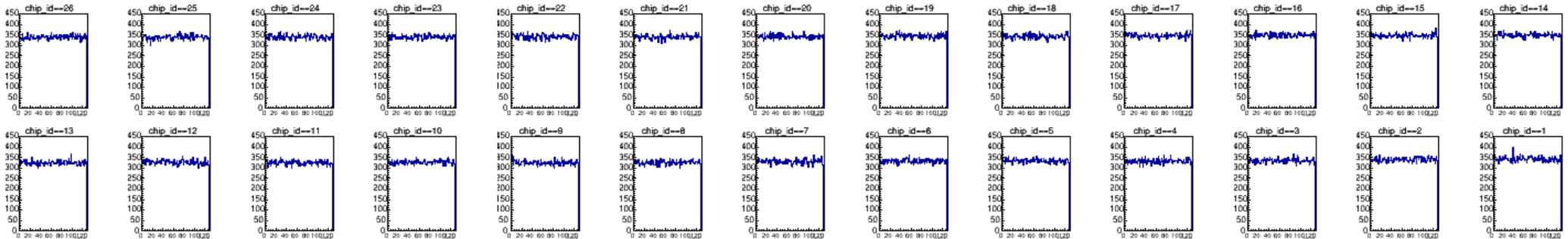
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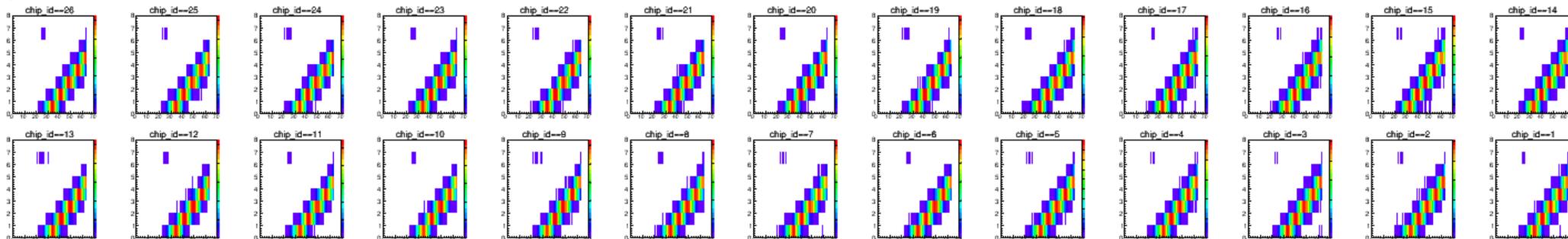
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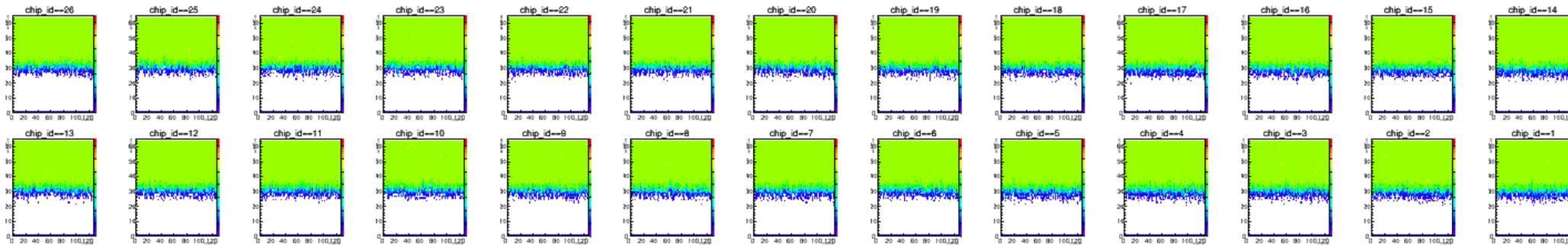
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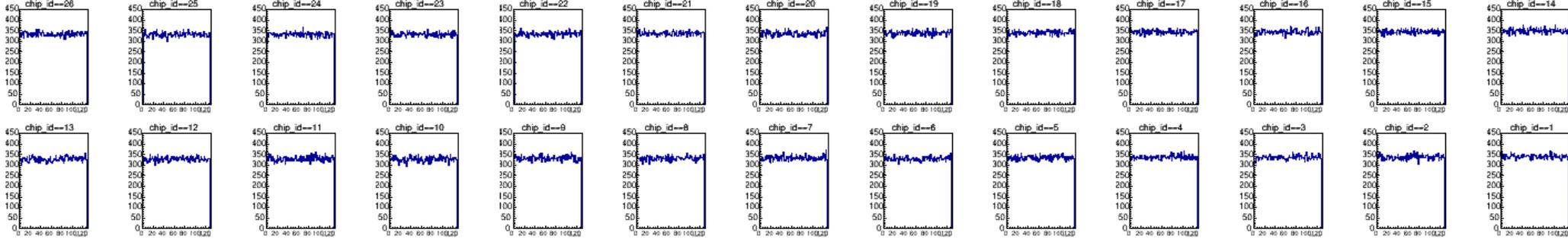
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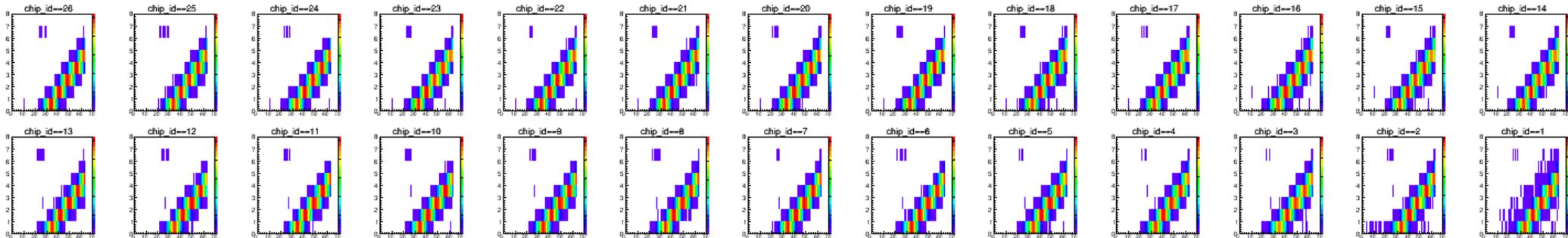
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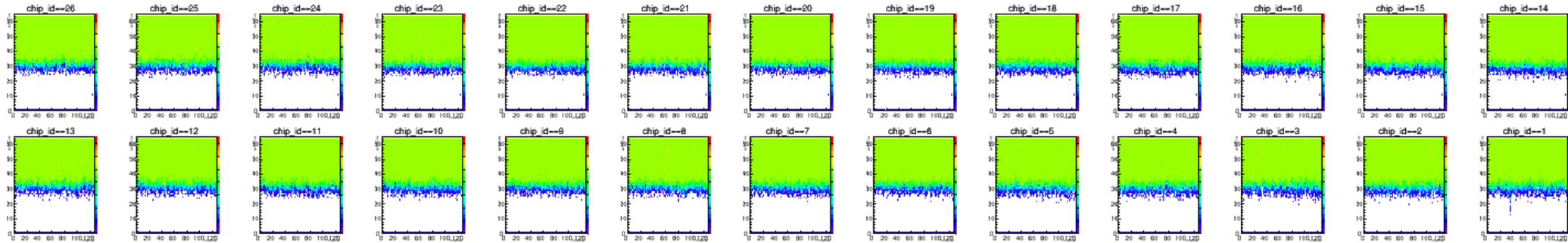
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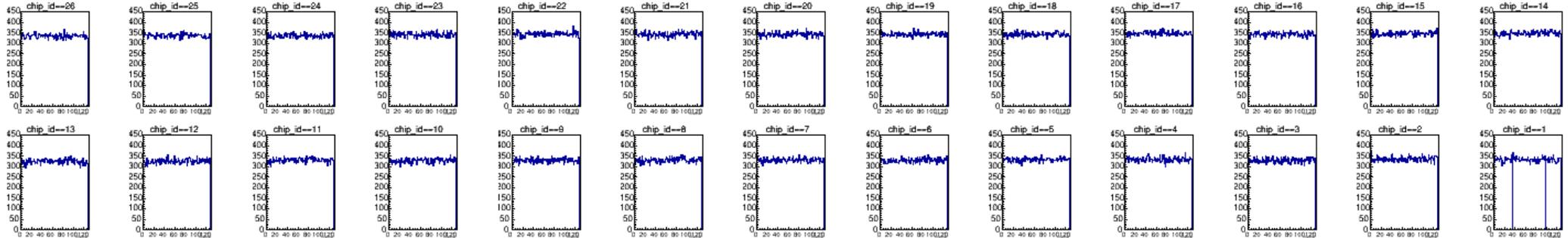
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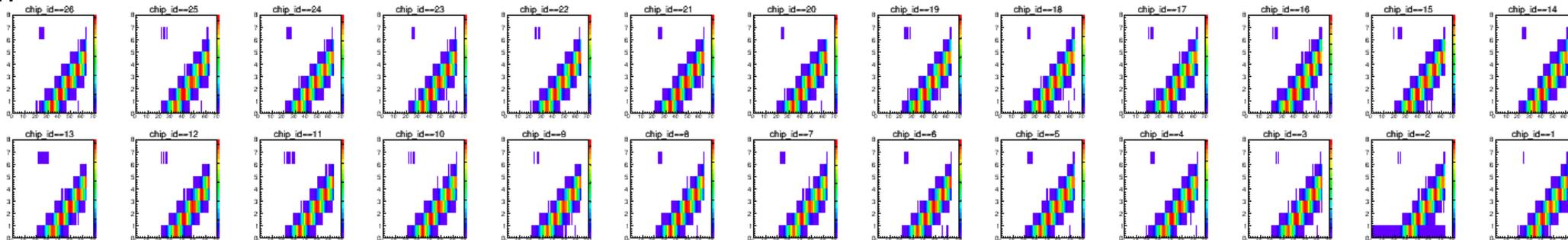
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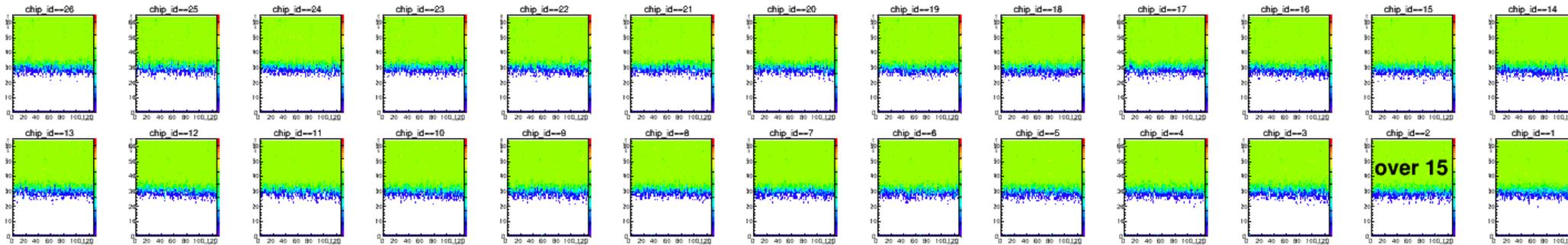
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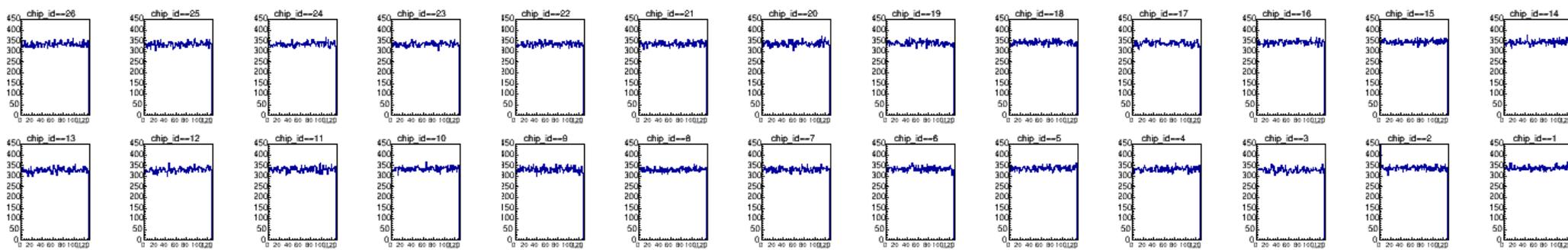
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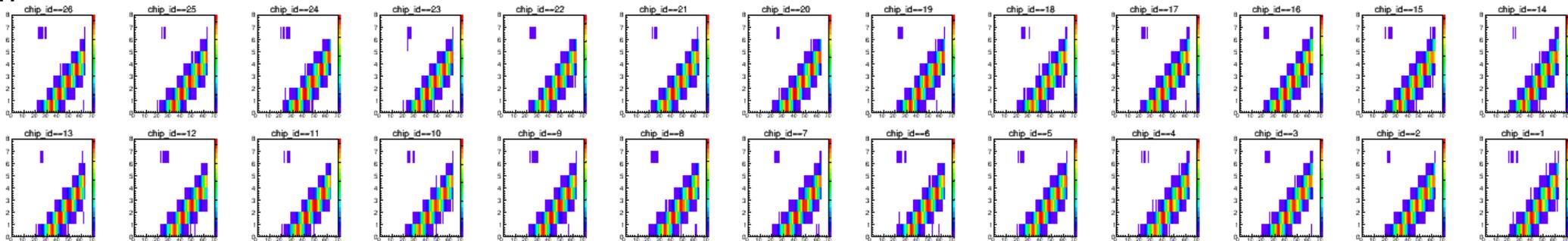
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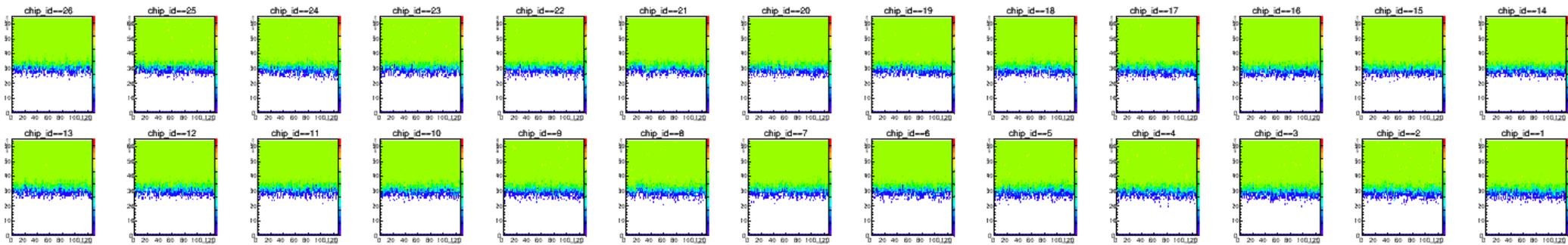
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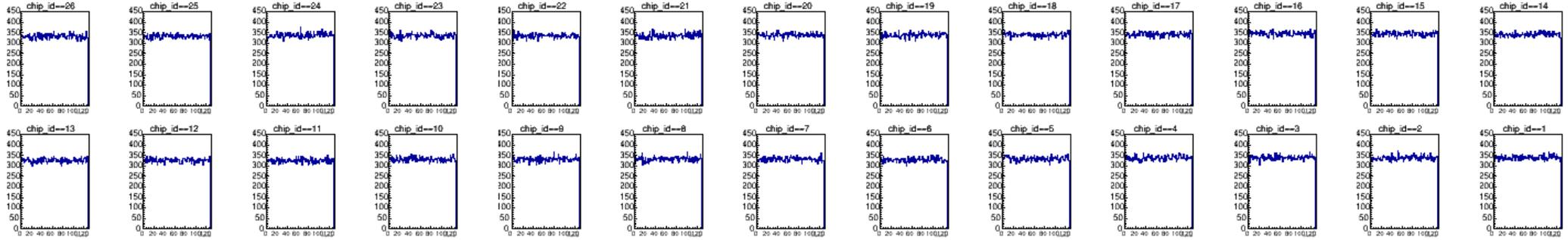
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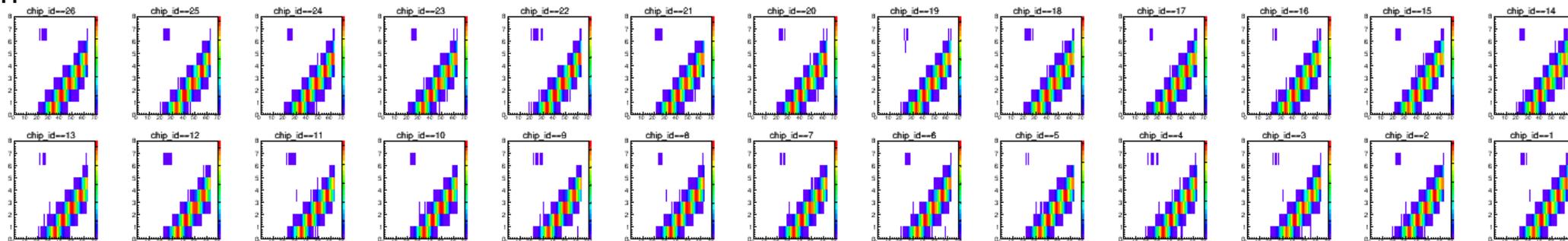
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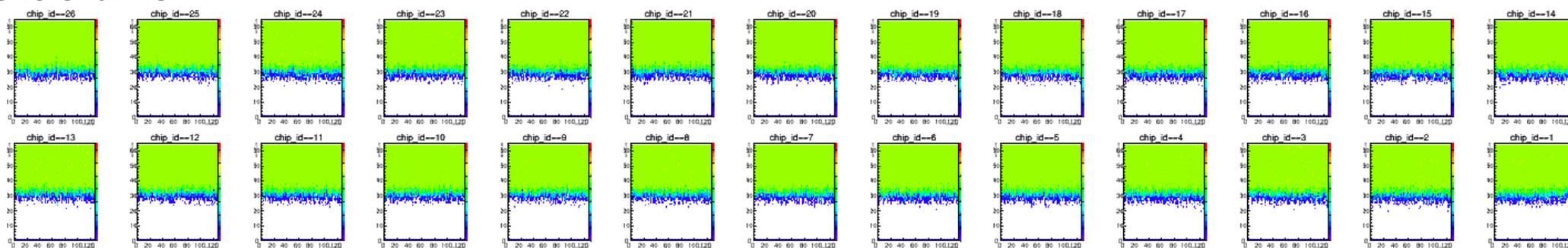
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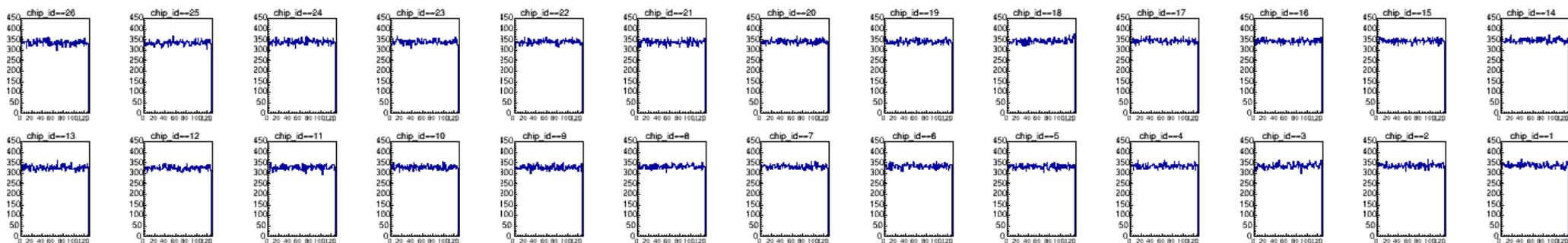
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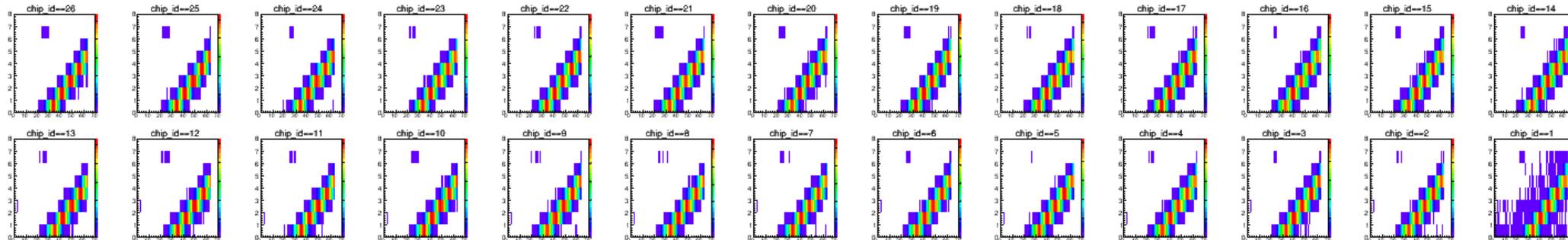
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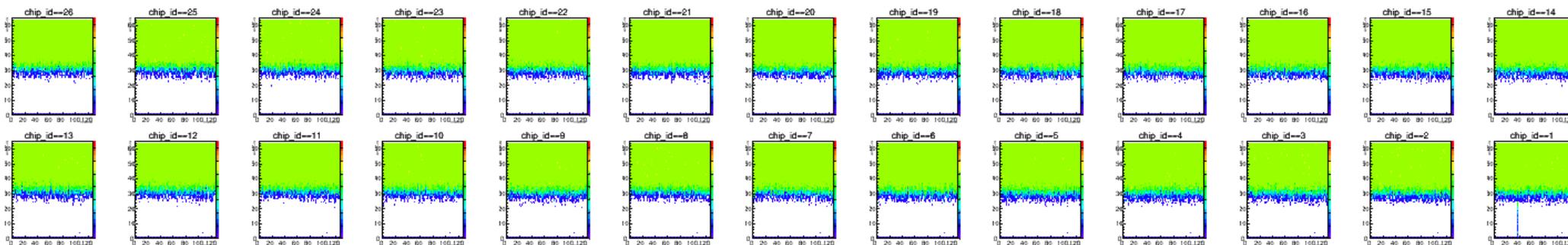
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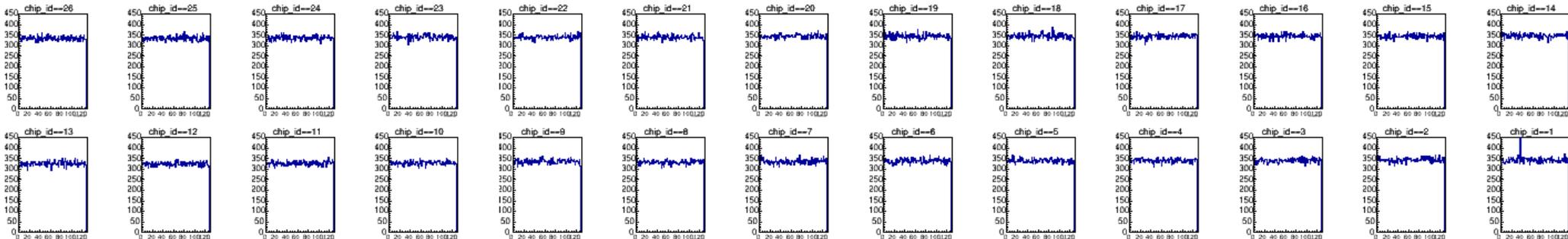
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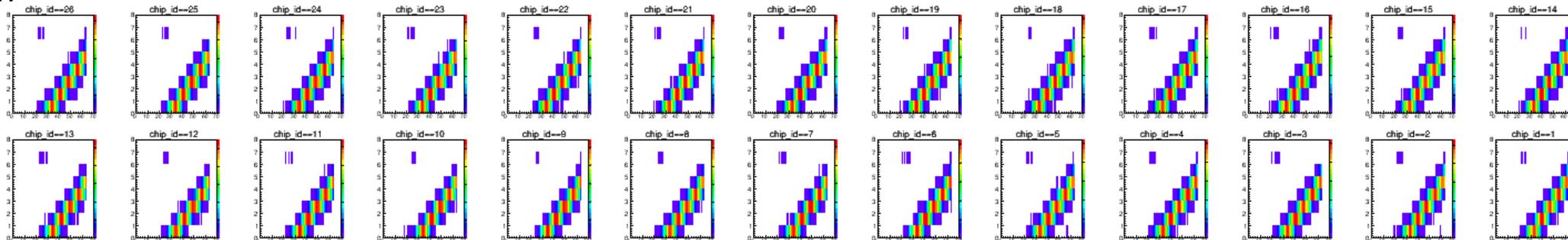
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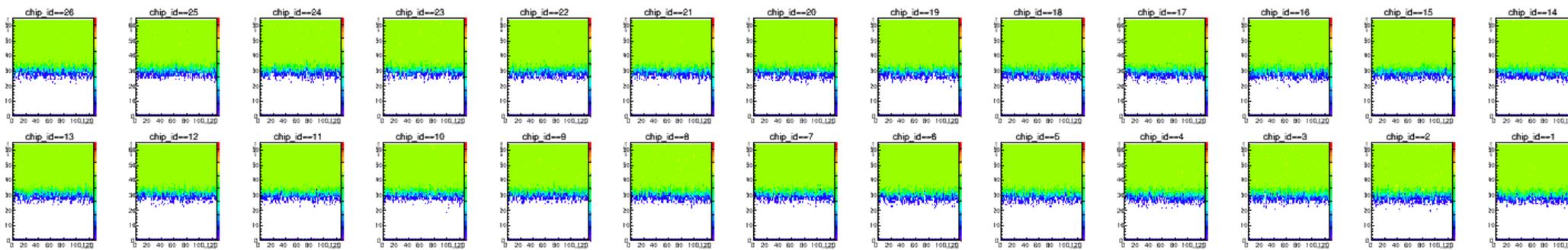
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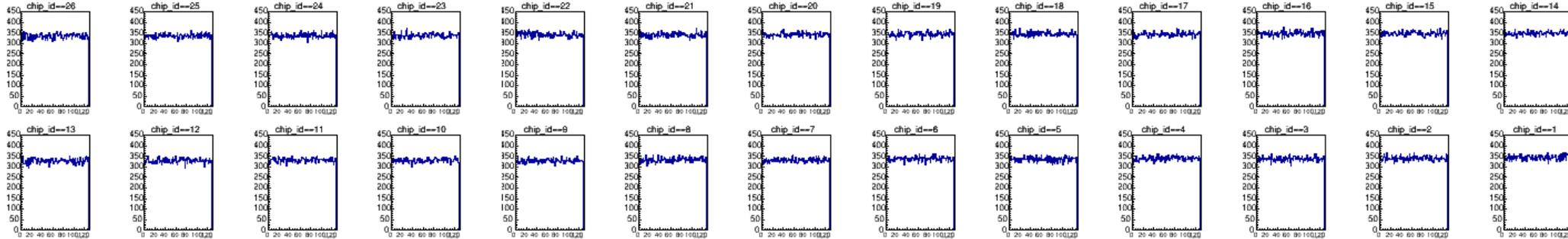
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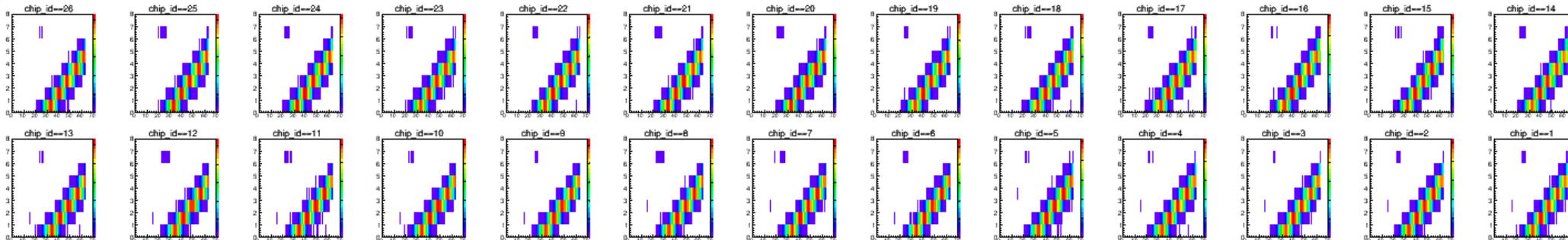
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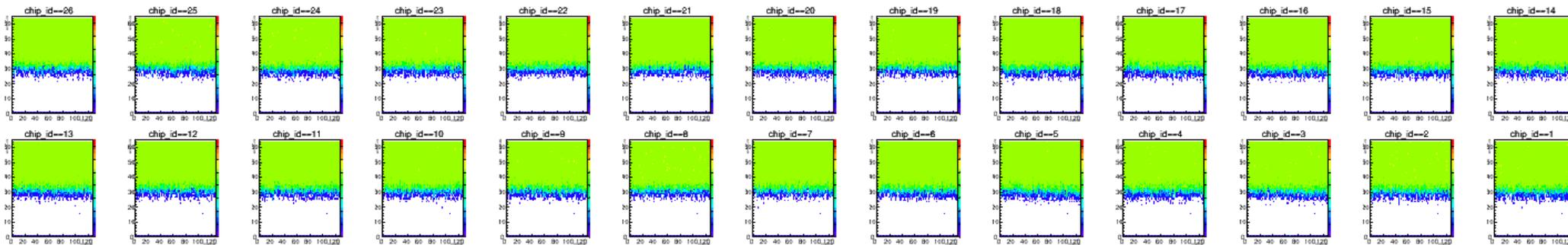
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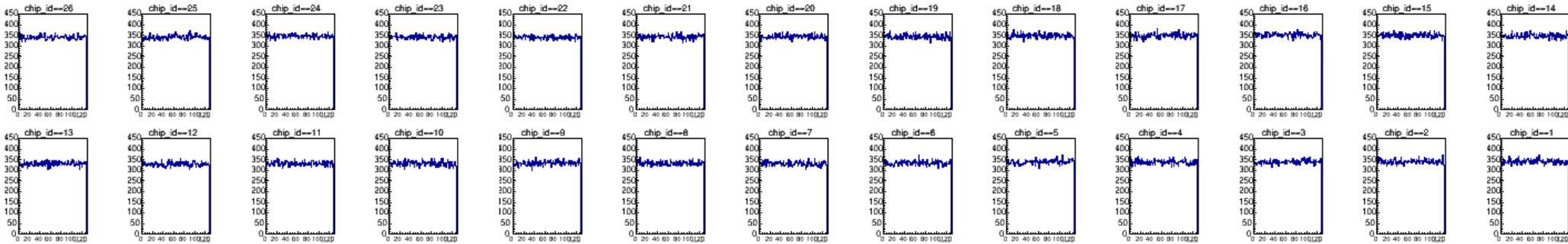
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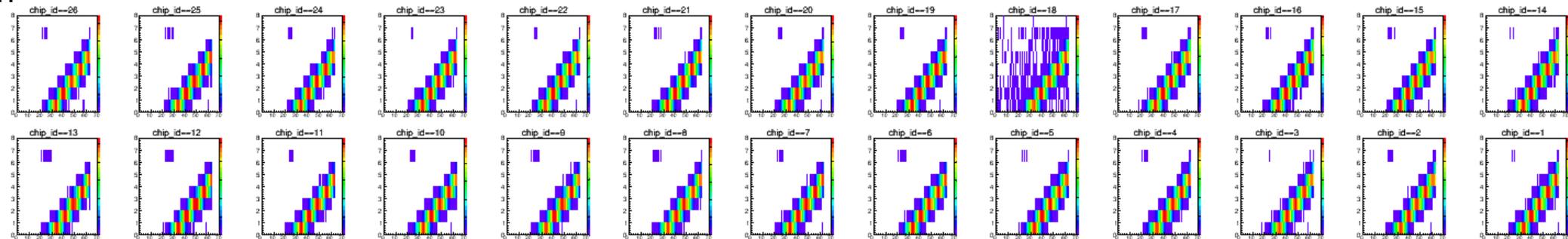
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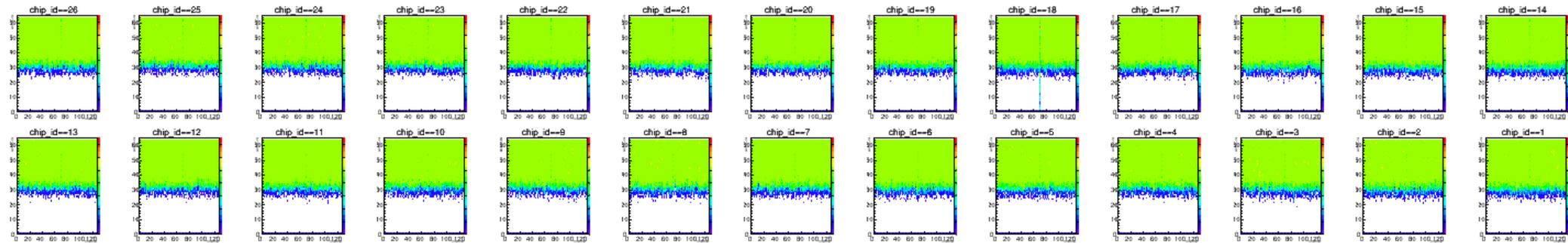
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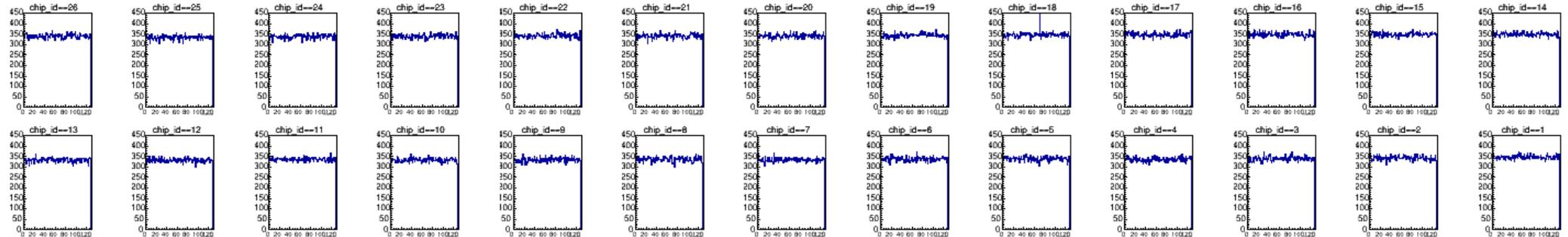
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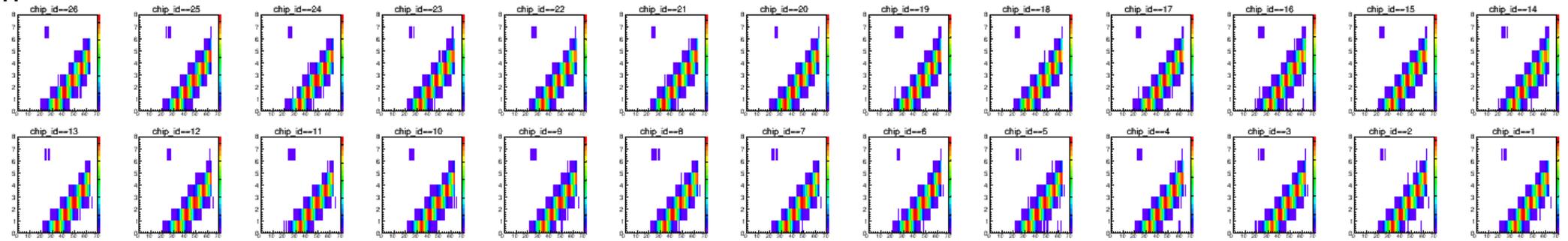
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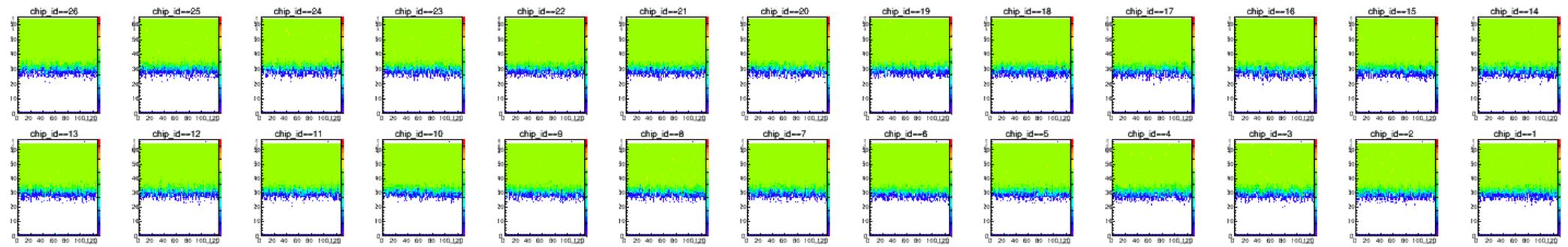
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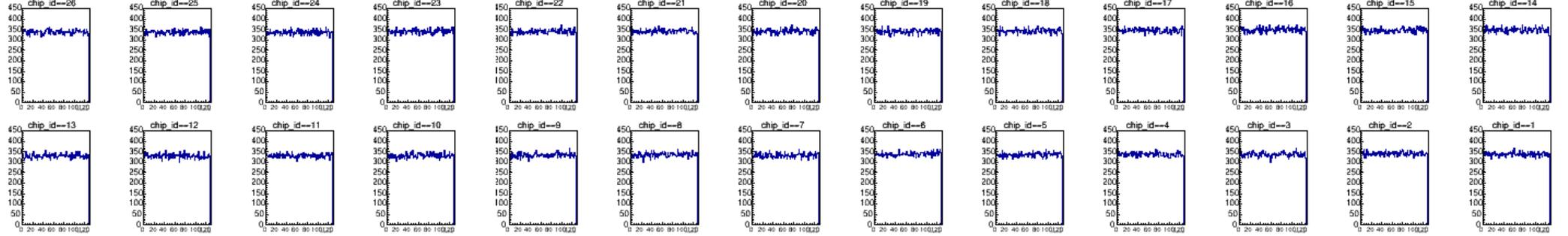
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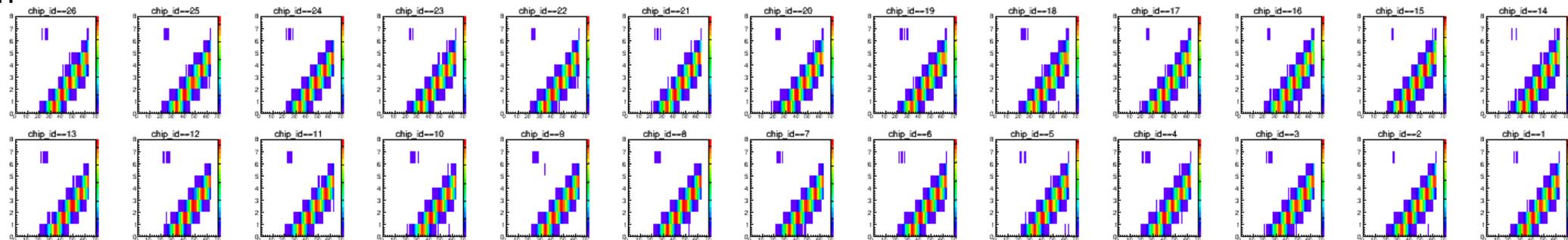
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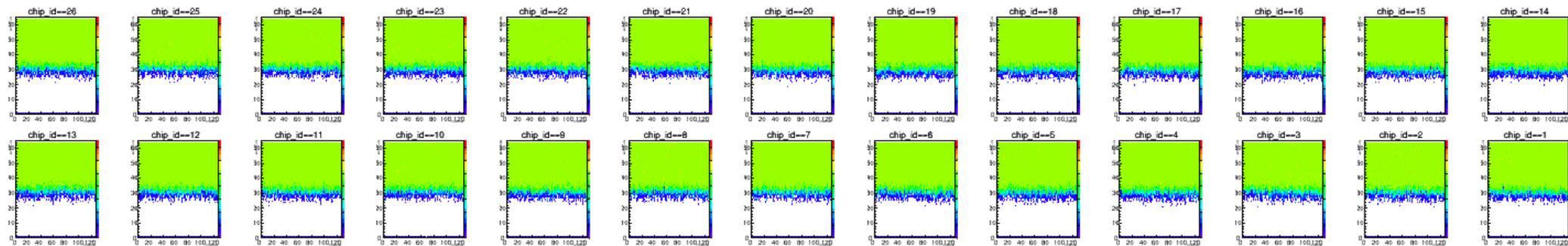
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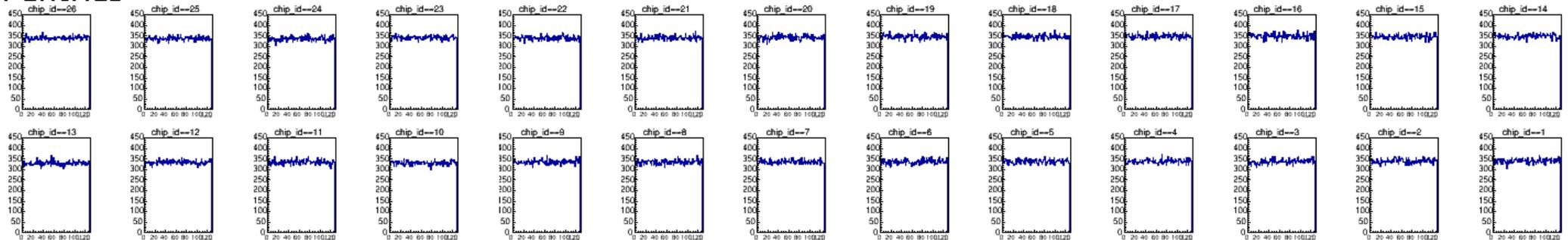
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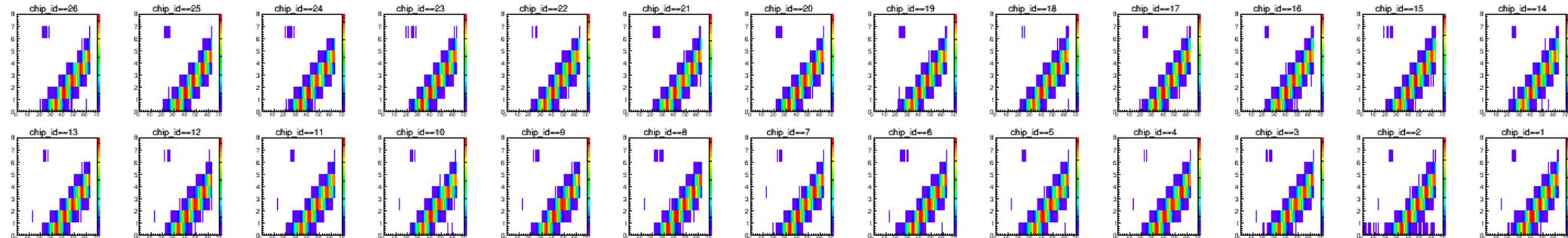
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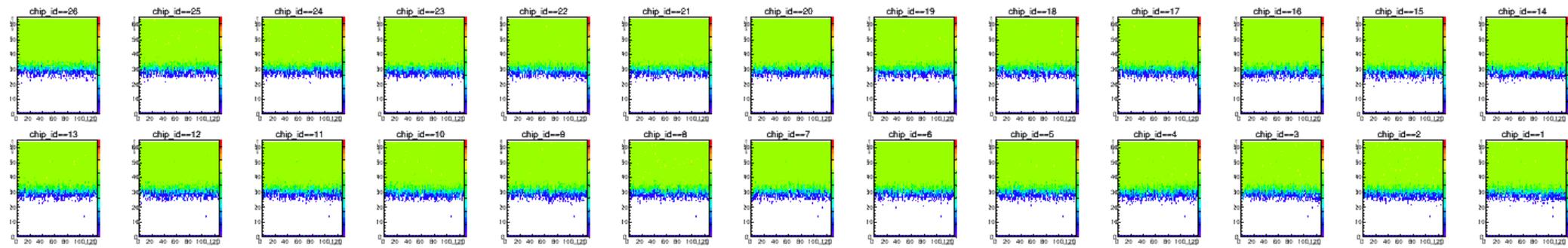
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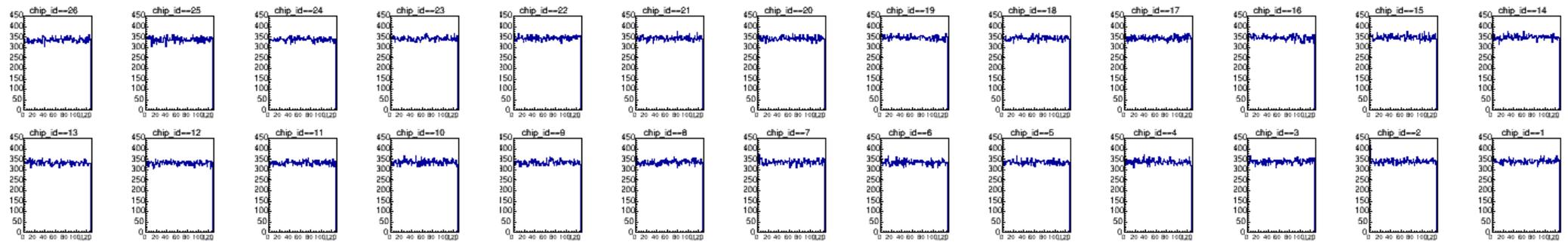
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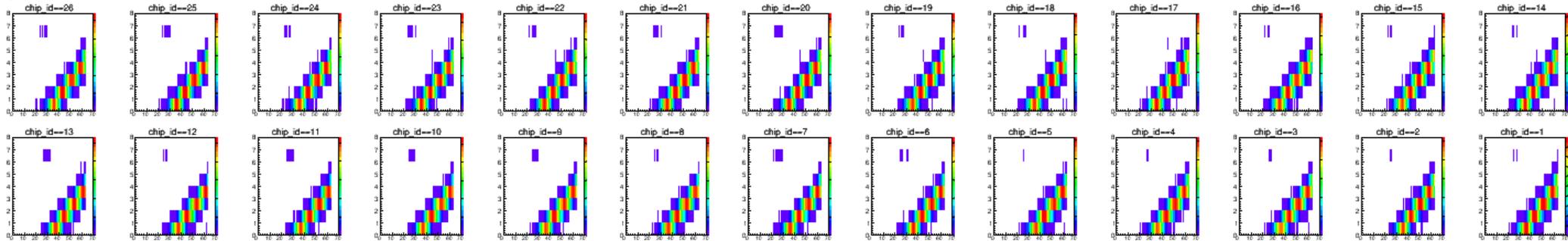
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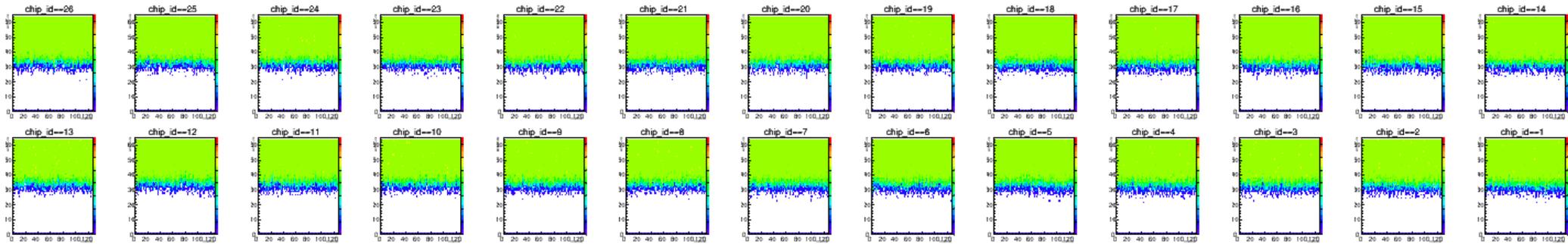
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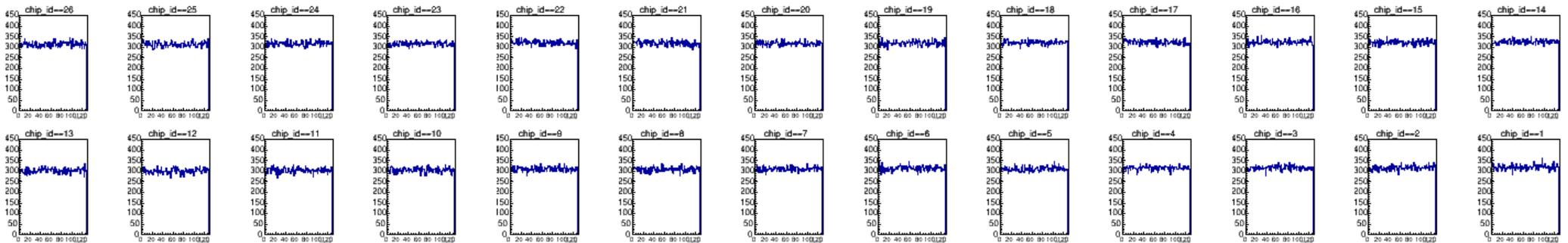
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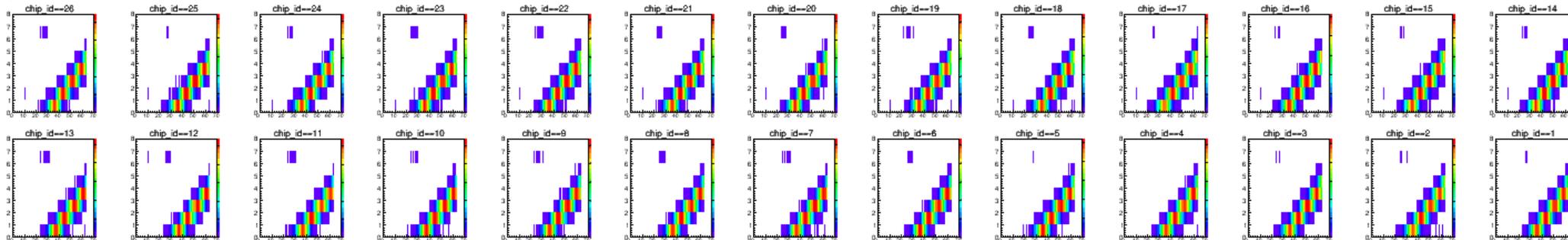
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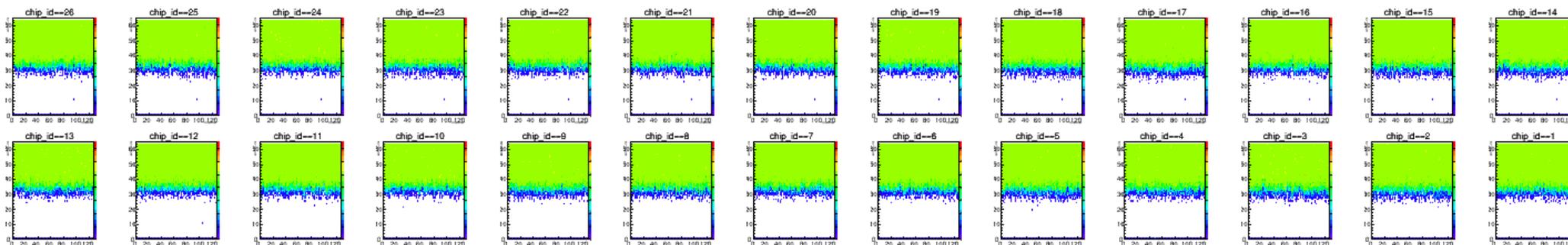
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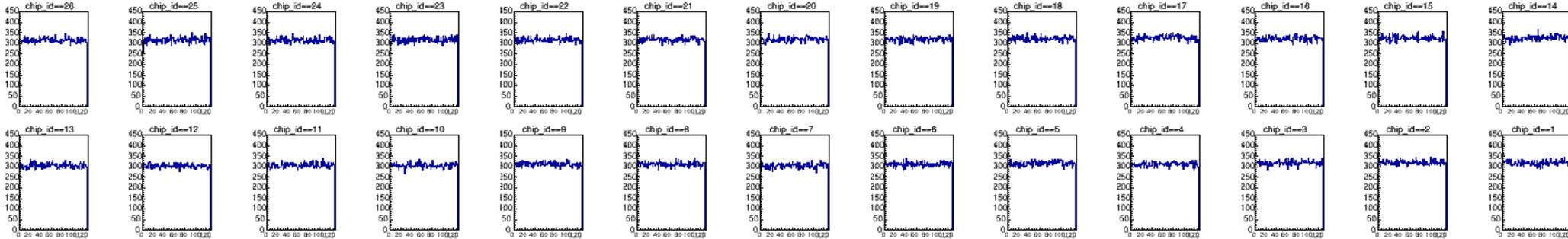
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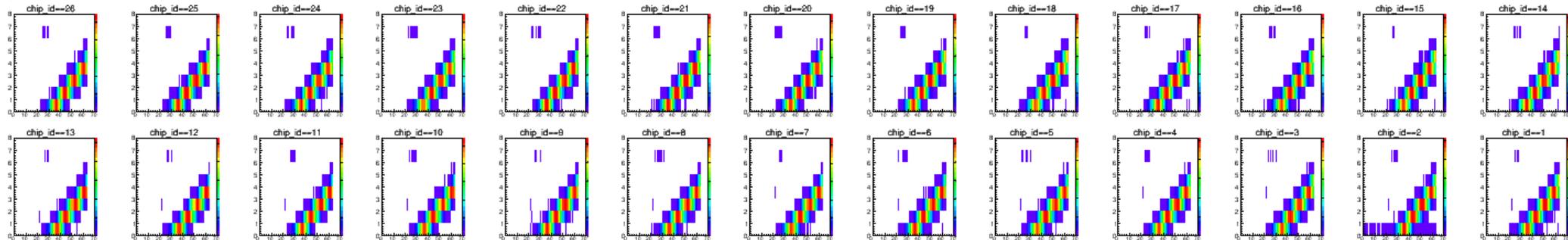
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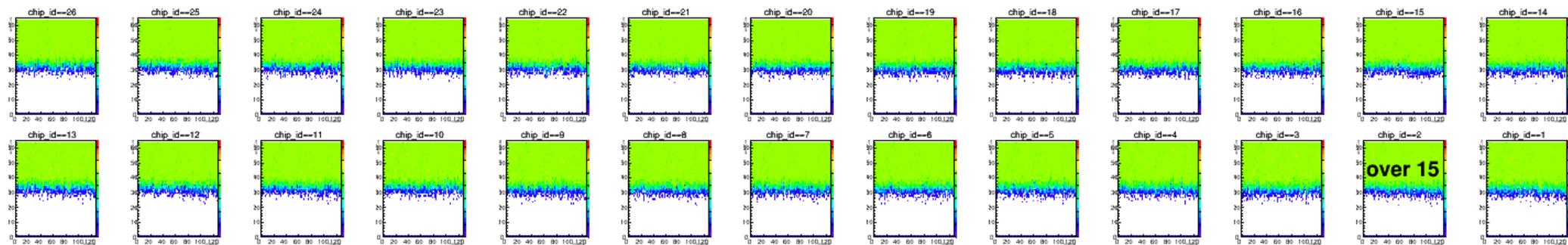
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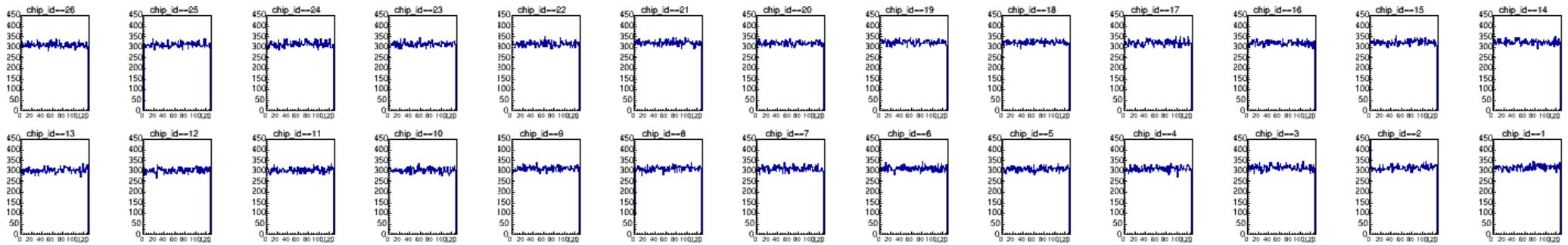
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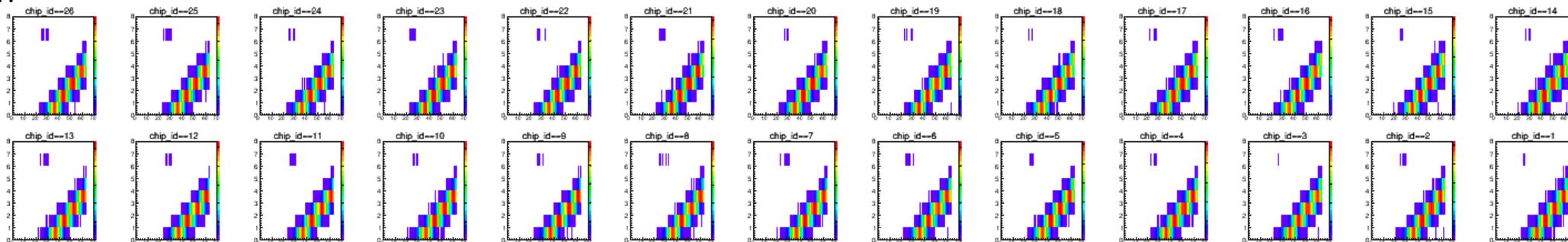
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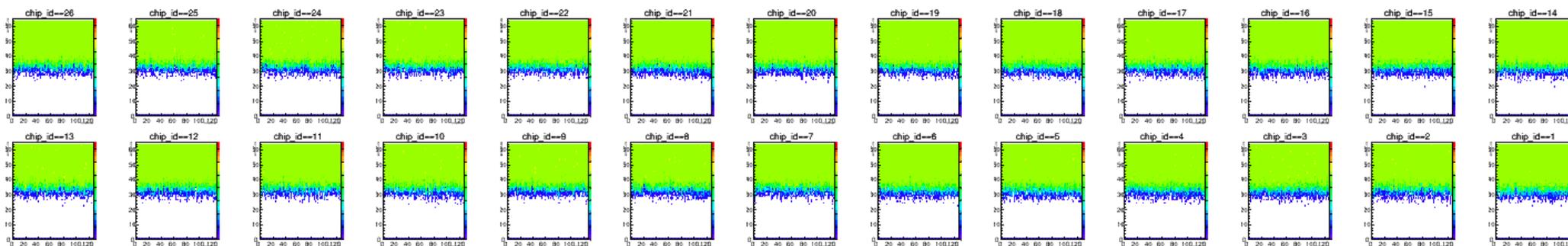
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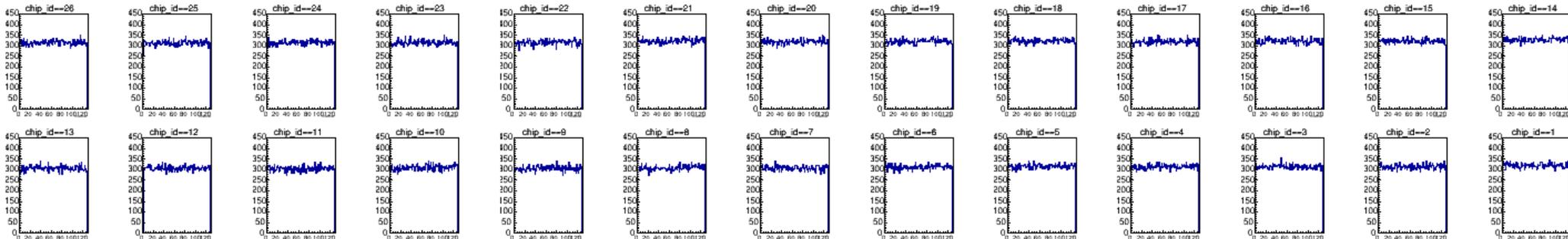
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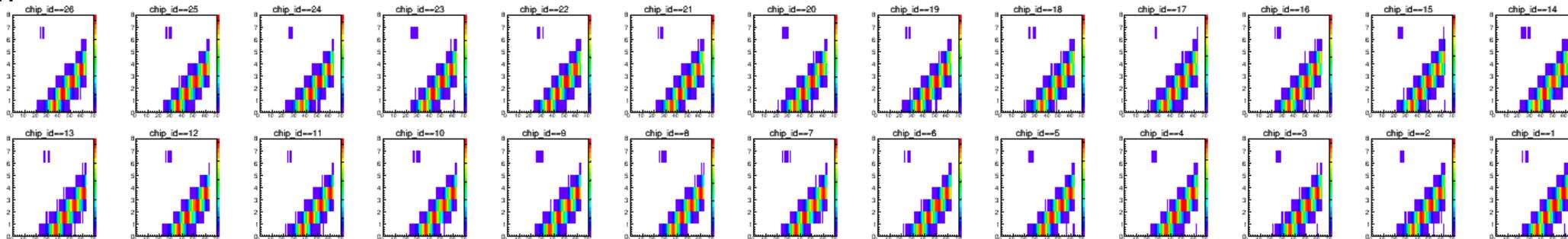
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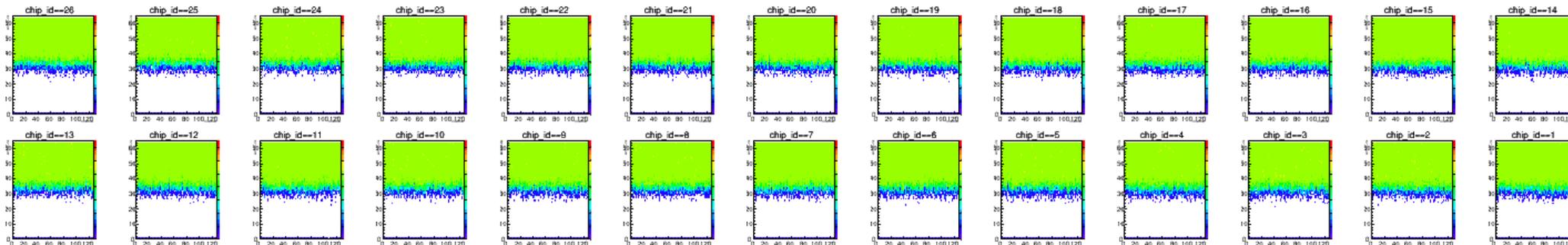
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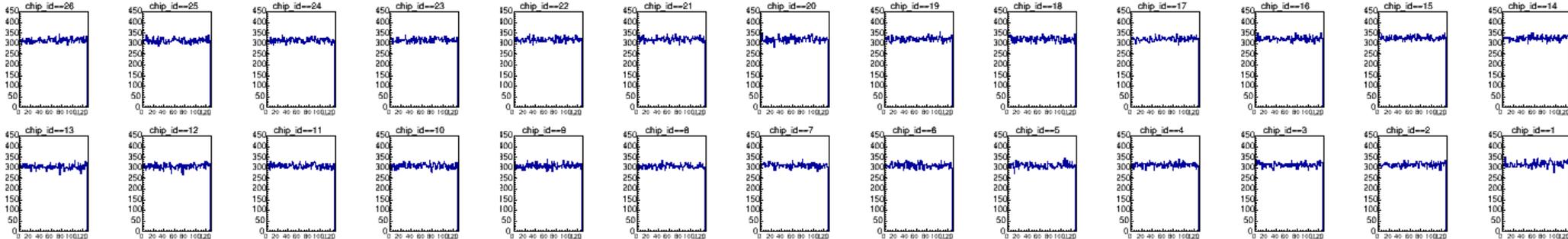
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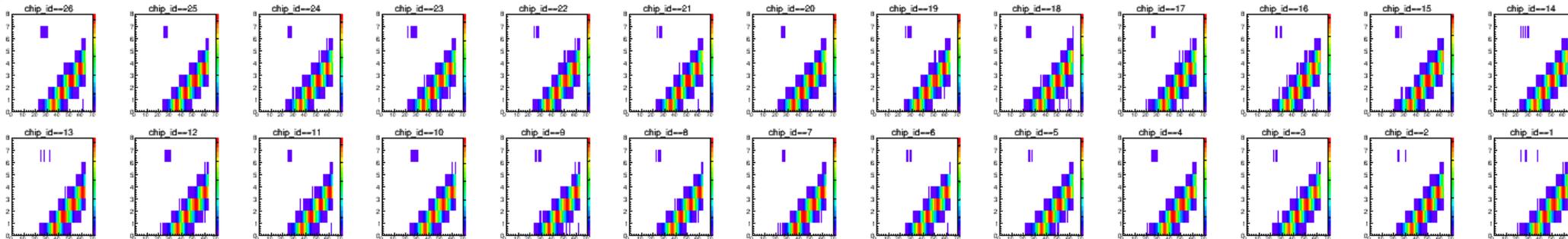
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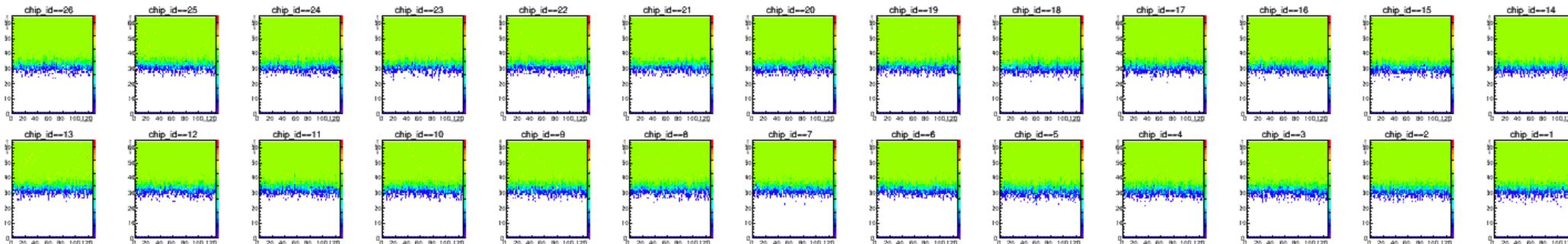
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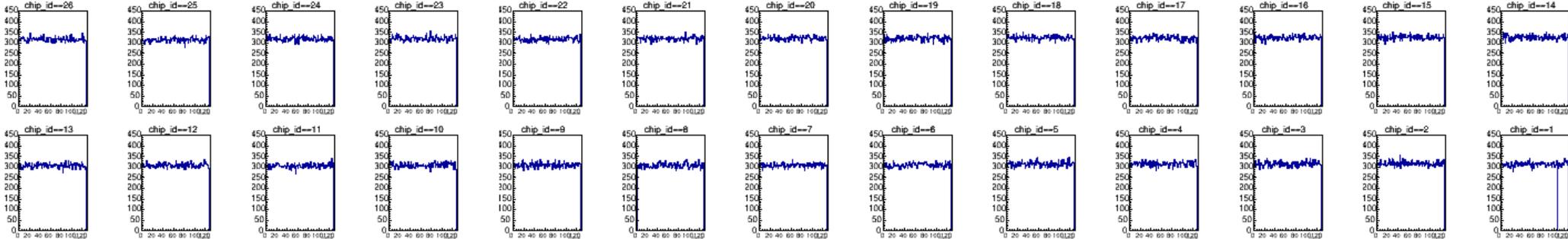
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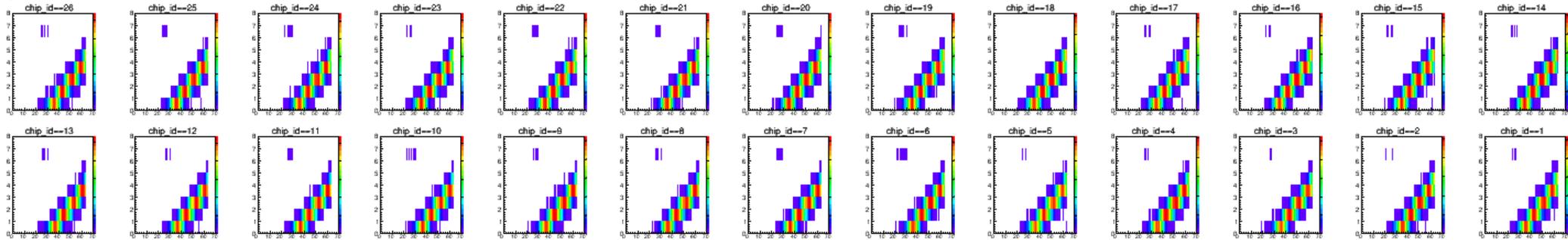
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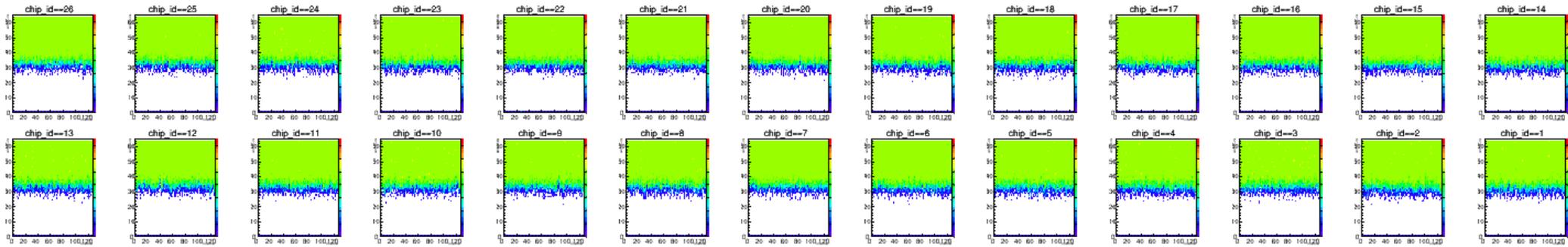
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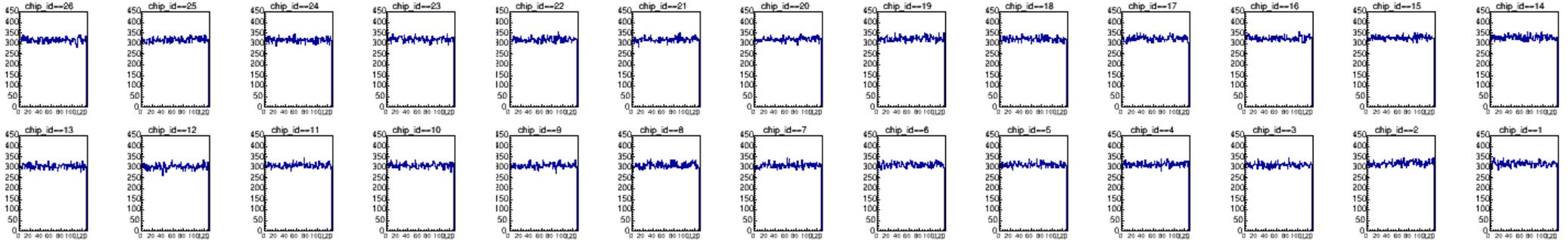
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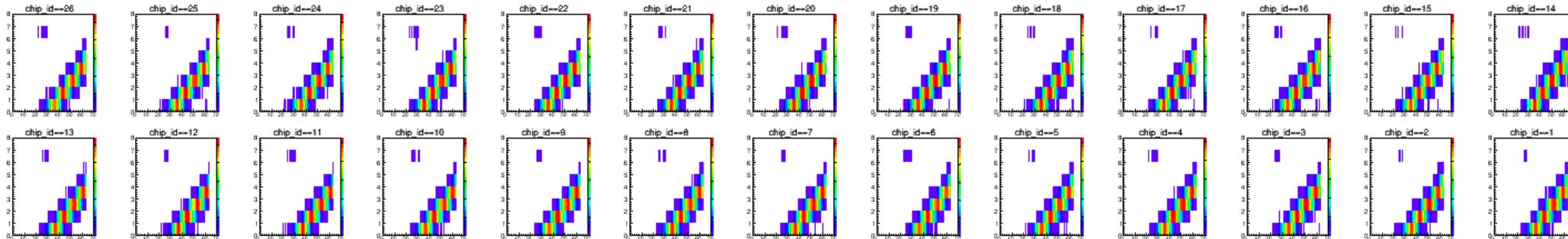
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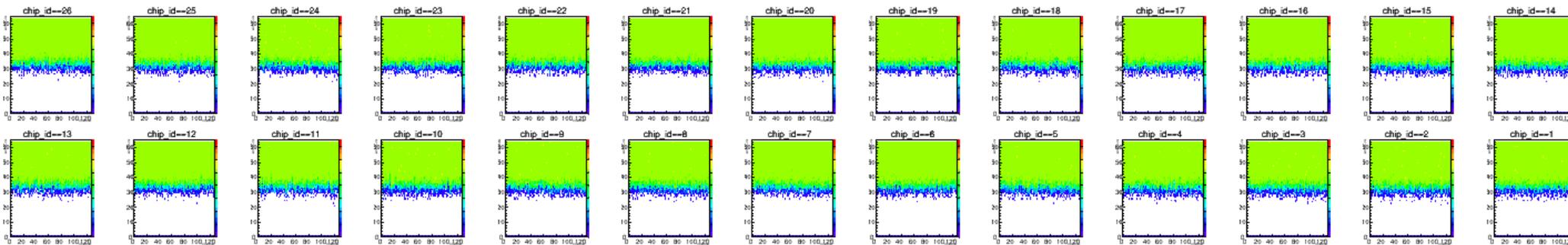
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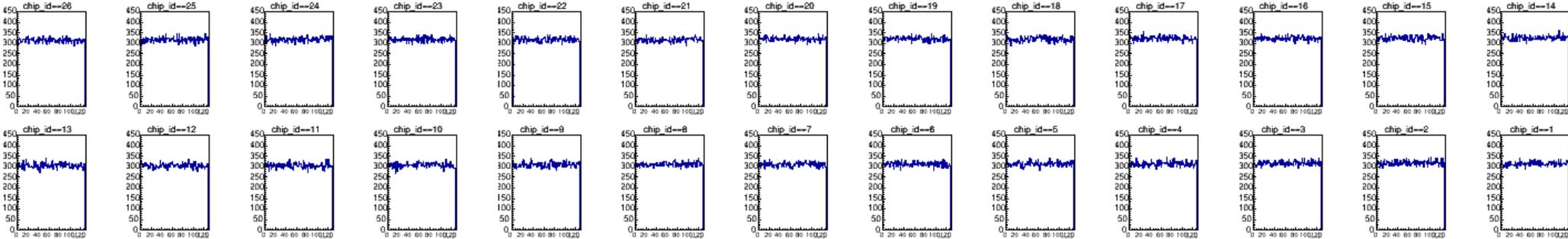
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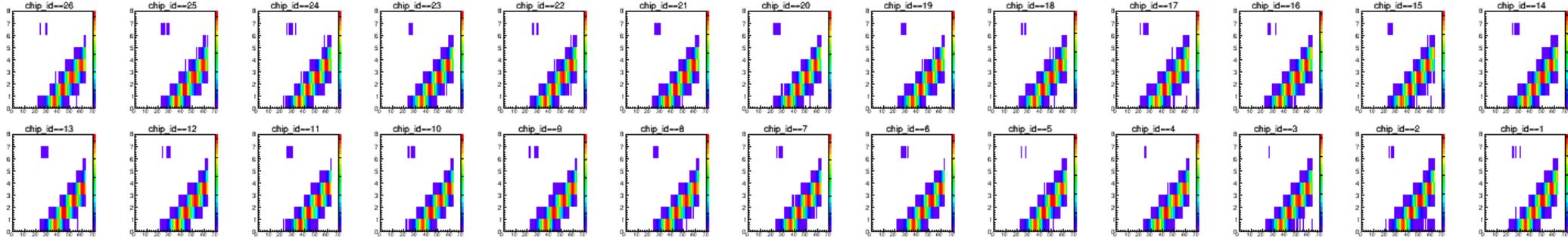
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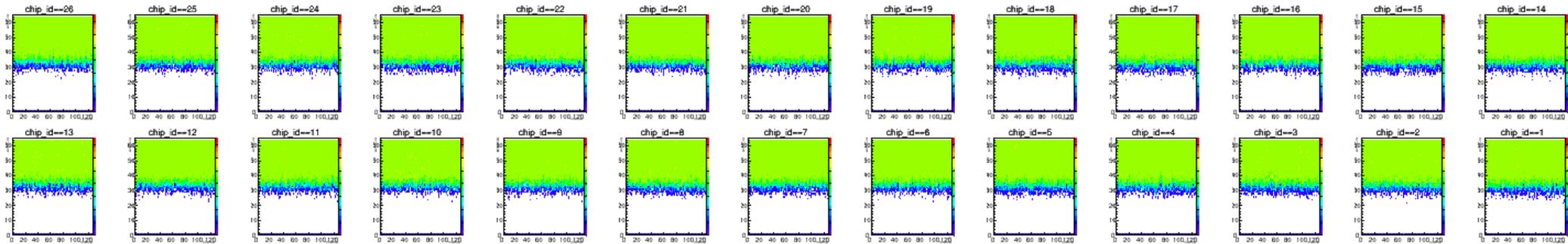
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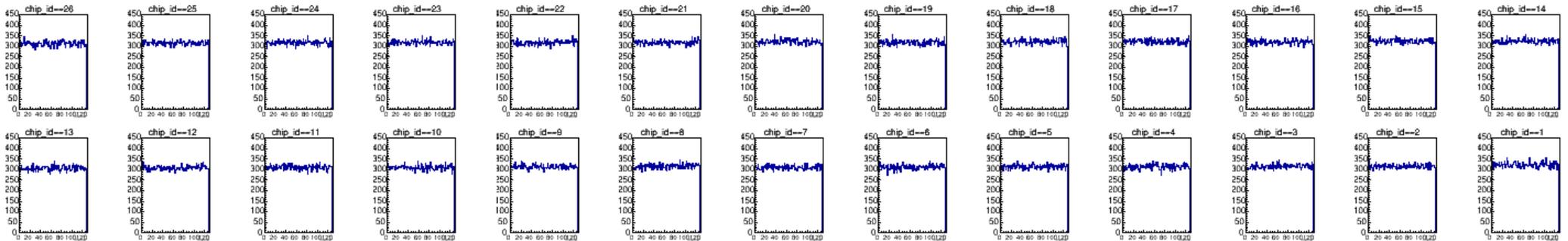
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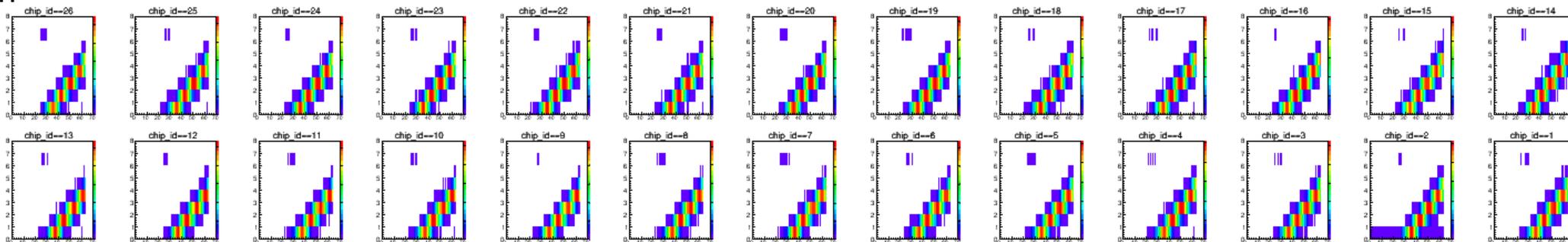
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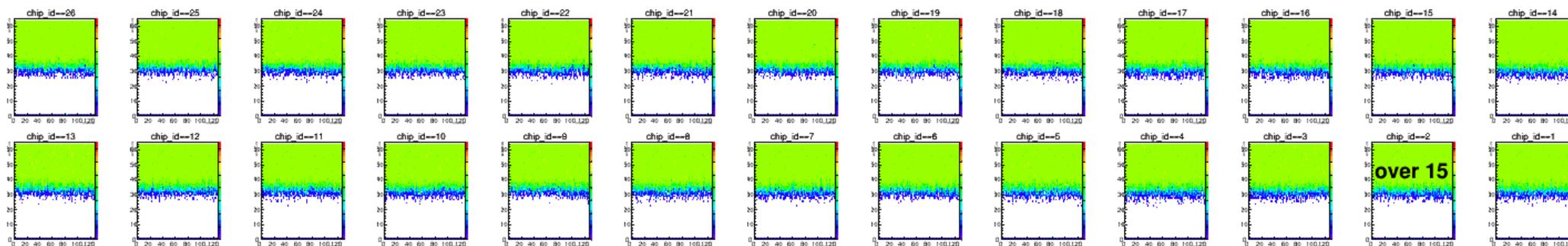
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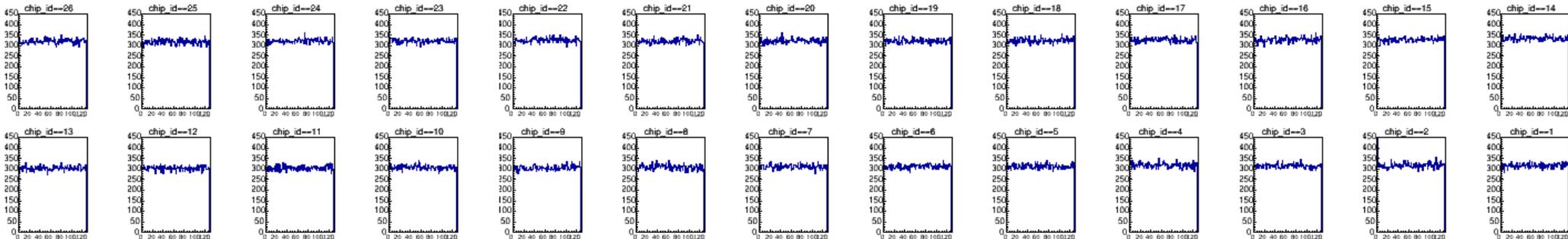
Calibration



Amplitude vs Channel



Number of entries



Summary:

1) 14 Ladders Type 1 have been assembled: PB1-L005 to PB1-L018

- HDIs, Chips were all working properly (no failure)
- **After gluing sensors** and testing ladders at 100 V:
 - 13 ladders show excellent results
 - 1 ladder (PB1-L-12) shows high current in one sensor-B South side.

PB2-L012 will be rejected

- **After encapsulation:** the 13 ladders show excellent results (no failure).

We did not observe failure with HDIs during the assembly of ladders

PB1-L05 to PB1-L018

Note: The ladder classification has not been done and this is going to be a serious issue because barrel assembly will start by the end of July.