

mTower Data Analysis

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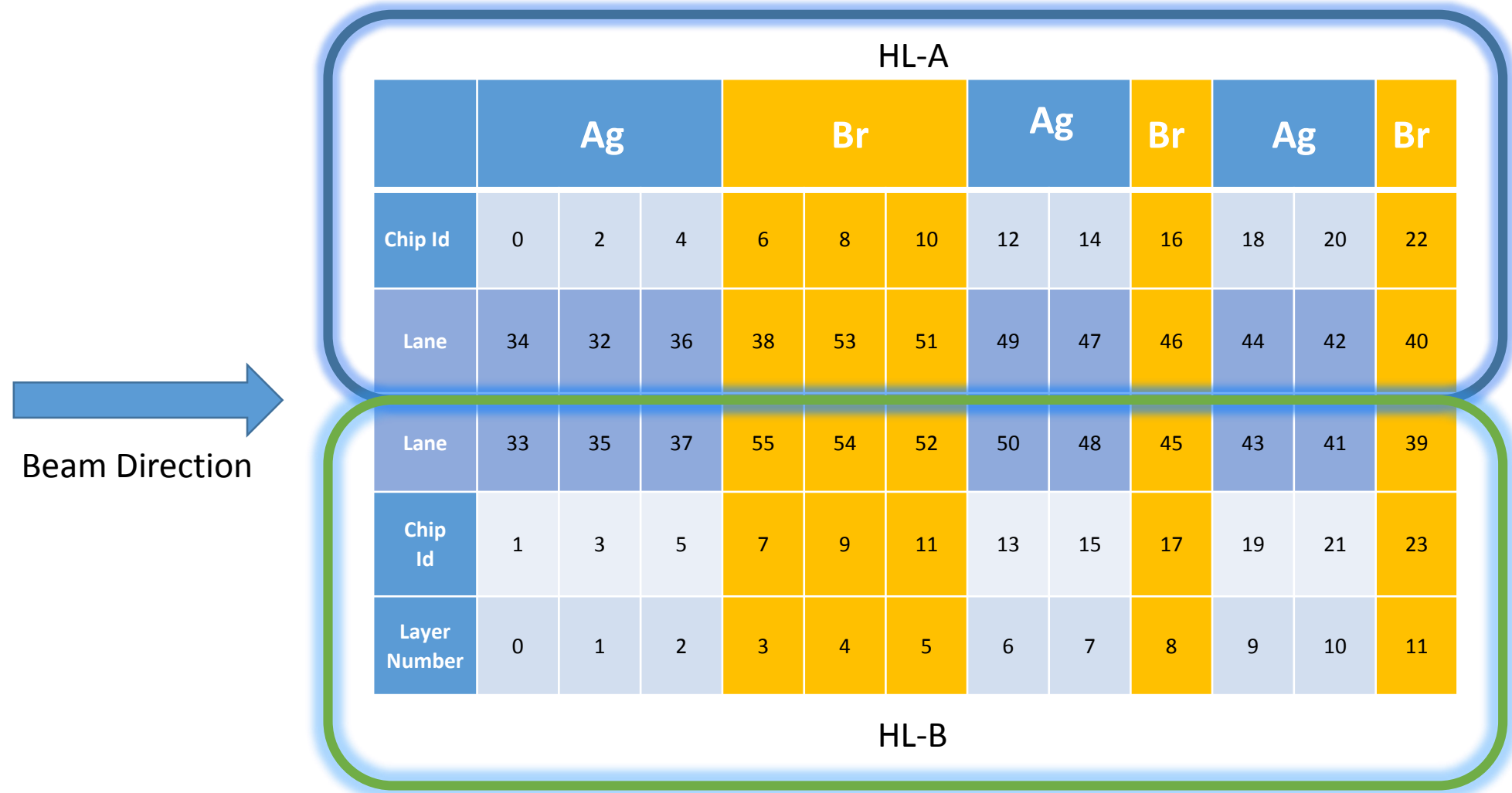


UiO : Universitetet i Oslo

Run Numbers to compare the beam data from Feb 2020 and Nov 2019 (ITHR-51 VCASN 50)

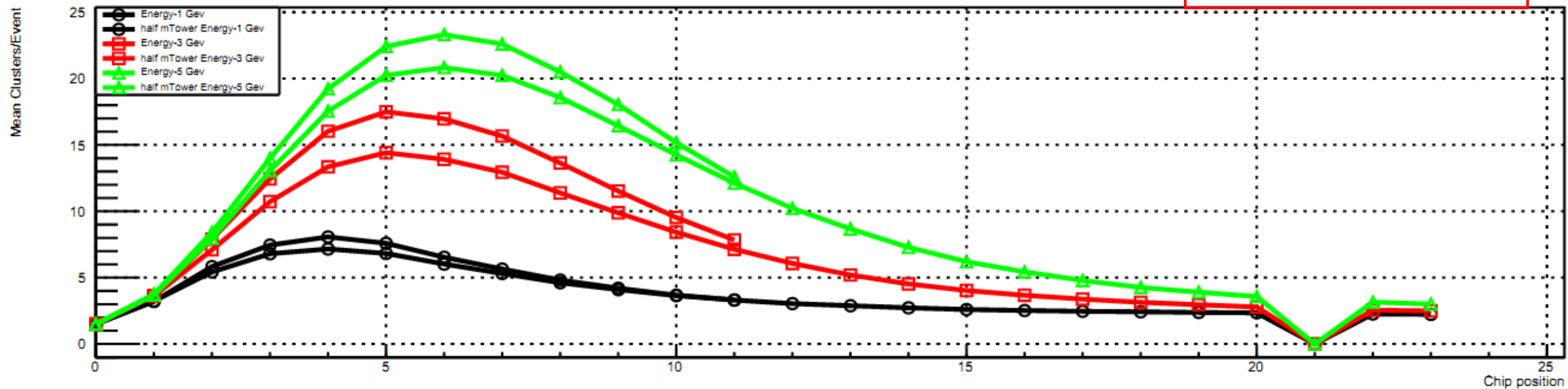
Run No	Energy (Gev)	No of Layers	Beam Time	No. of EvtS
304	1	12	Nov 2019	290669
371	2	12	Nov 2019	586812
306	3	12	Nov 2019	288853
301	4	12	Nov 2019	247732
320	5	12	Nov 2019	294265
1224	1	24	Feb 2020	380692
1225	2	24	Feb 2020	150620
1222	3	24	Feb 2020	395236
1231	4	24	Feb 2020	389708
1223	5	24	Feb 2020	378588

mTower (Half) Alpide chip position layout

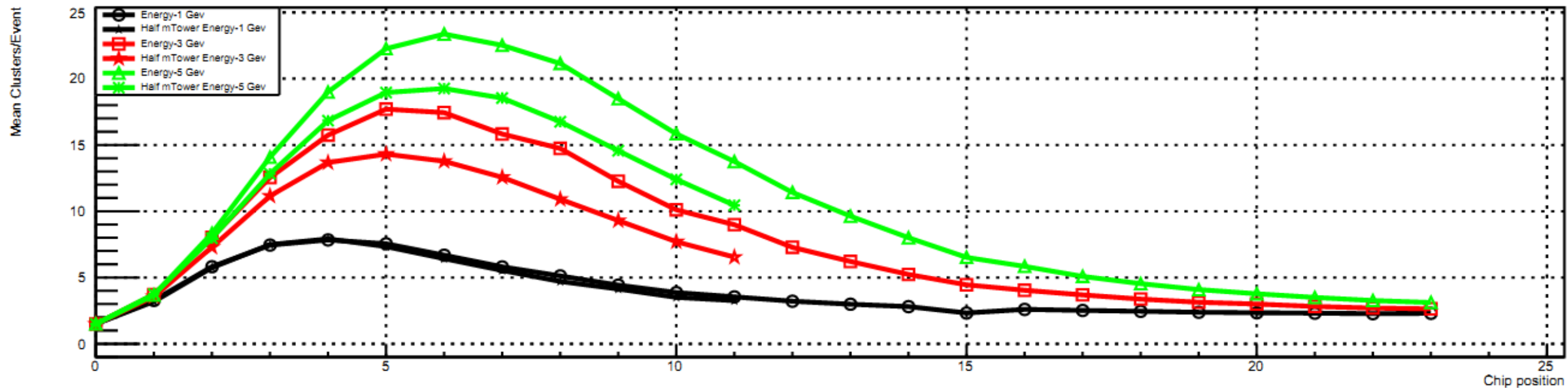


Half mTower		Full mTower					Half mTower
Layer No (Half)	Chip Id	Chip Id(HL-A)	Lane No	Lane No	Chip Id (HL-B)	Layer No (Full)	Chip Id
2	4	0	32	35	1	0	5
1	3	2	59	56	3	1	2
0	0	4	34	33	5	2	1
10	21	6	57	58	7	3	20
6	13	8	36	37	9	4	12
7	14	10	61	60	11	5	15
		12	38	55	13	6	
		14	79	62	15	7	
		16	54	53	17	8	
		18	77	78	19	9	
		20	52	51	21	10	
		22	75	76	23	11	
		24	50	49	25	12	
		26	73	74	27	13	
		28	48	47	29	14	
		30	71	72	31	15	
5	11	32	46	45	33	16	10
4	8	34	69	70	35	17	9
8	16	36	44	43	37	18	17
3	7	38	67	68	39	19	6
		40	42	41	41	20	
9	19	42	65	66	43	21	18
11	22	44	40	39	45	22	23
		46	63	64	47	23	

Mean cluster/event Vs HL-A Layer wo noise @0°

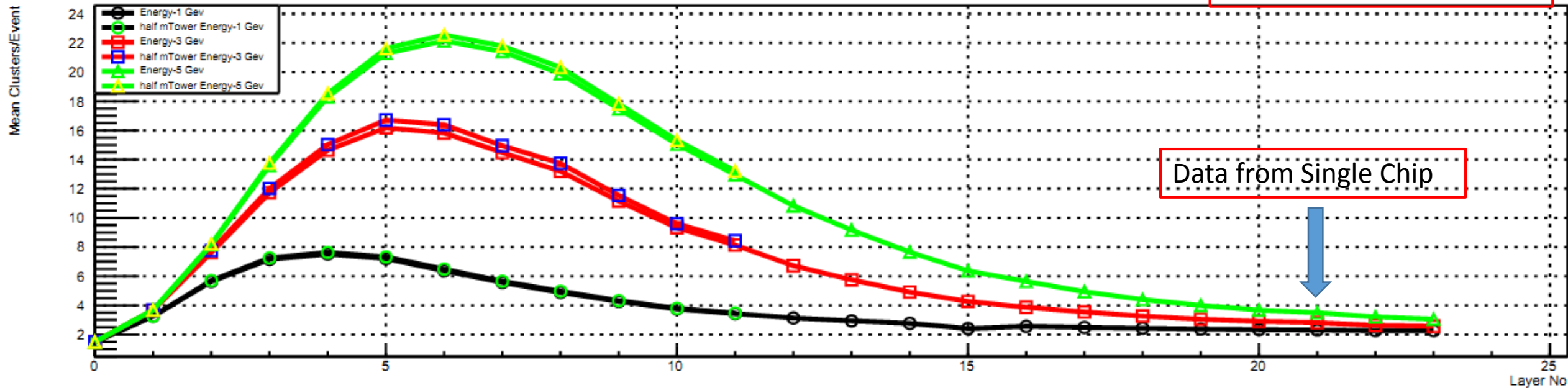
Only 1 particle in 1st layer

Mean cluster/event Vs HL-B layer wo noise @0°



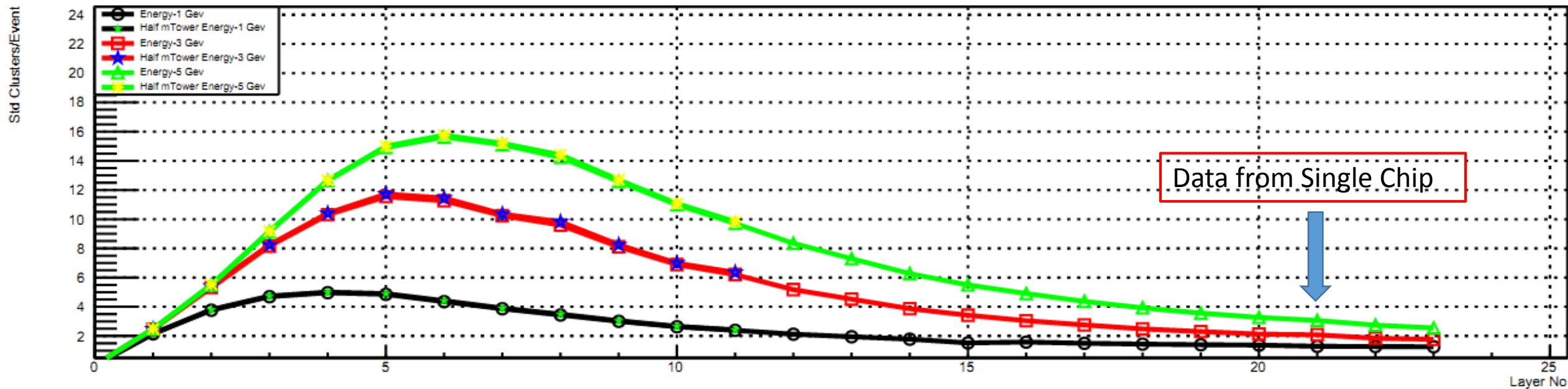
Mean cluster/event Vs Layers (Optm_fil) @0°

Only 1 particle in 1st layer

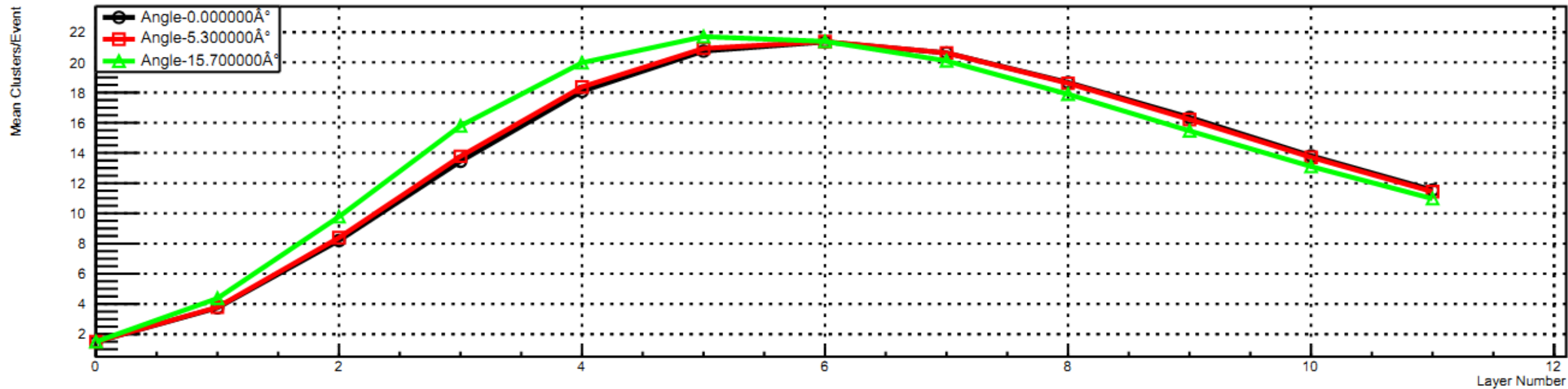


Std cluster/event Vs HL-B layer (Optm_fil) @0°

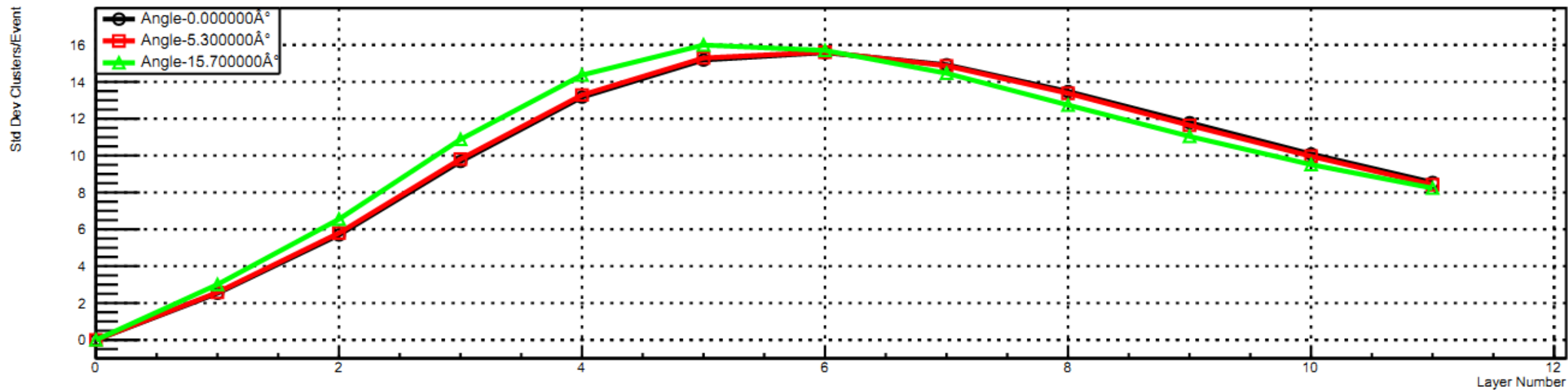
Data from Single Chip



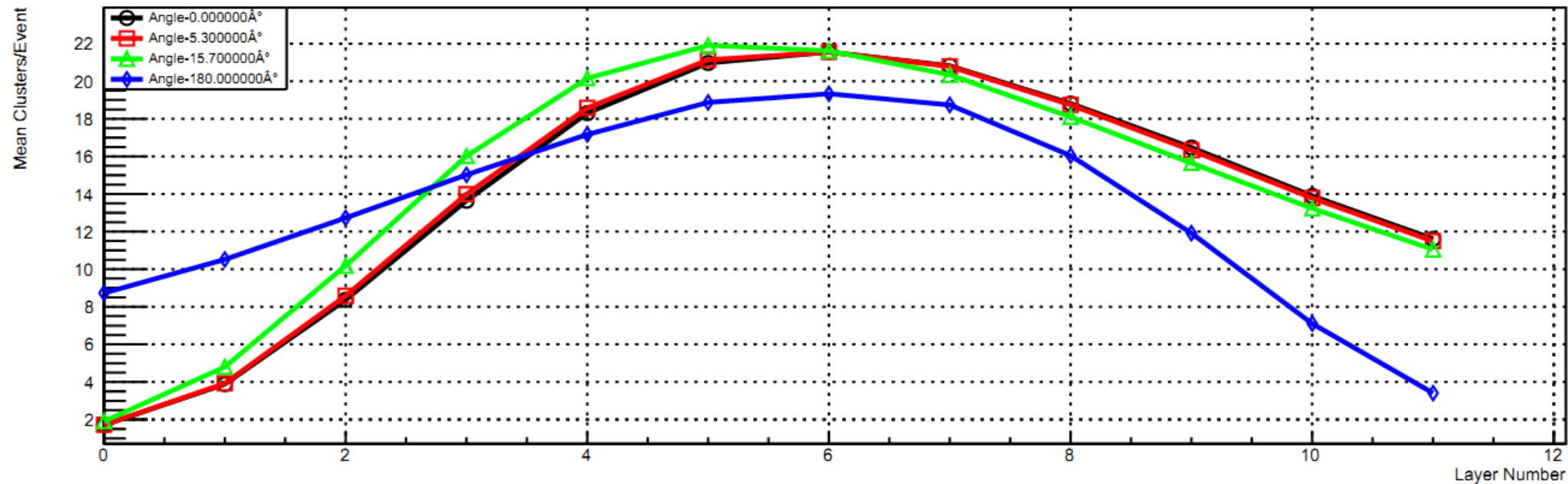
Mean nCluster/Event Vs layers @5 Gev



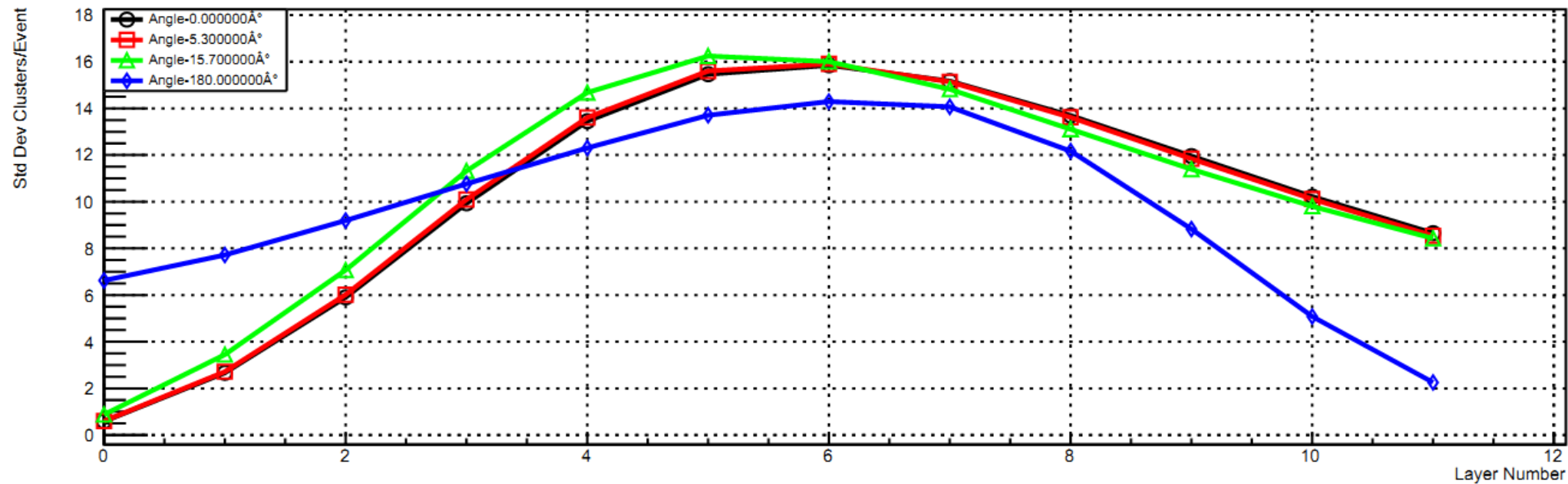
Std Dev nCluster/Event Vs layers @5 Gev



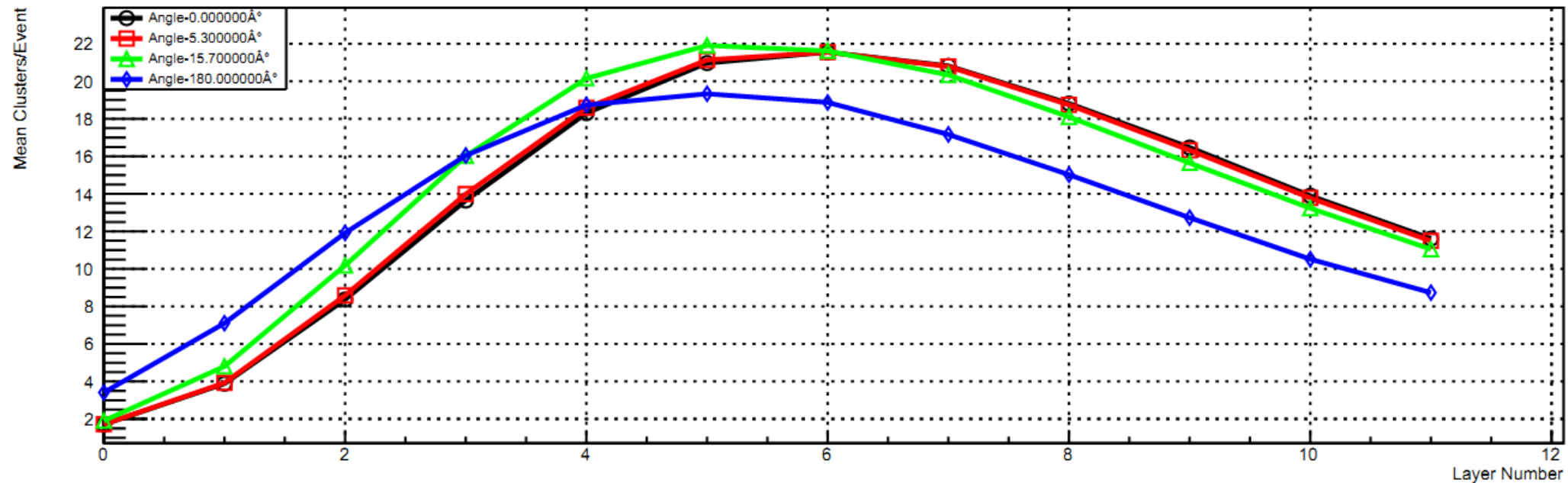
Mean nCluster/Event Vs layers @5 Gev



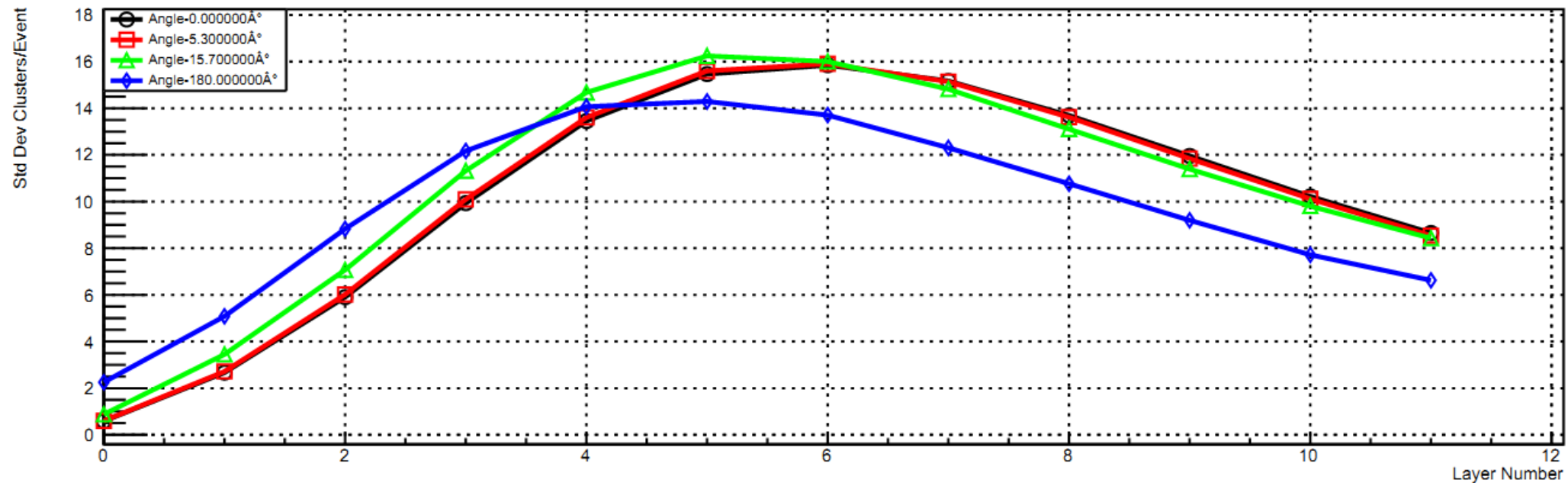
Std Dev nCluster/Event Vs layers @5 Gev



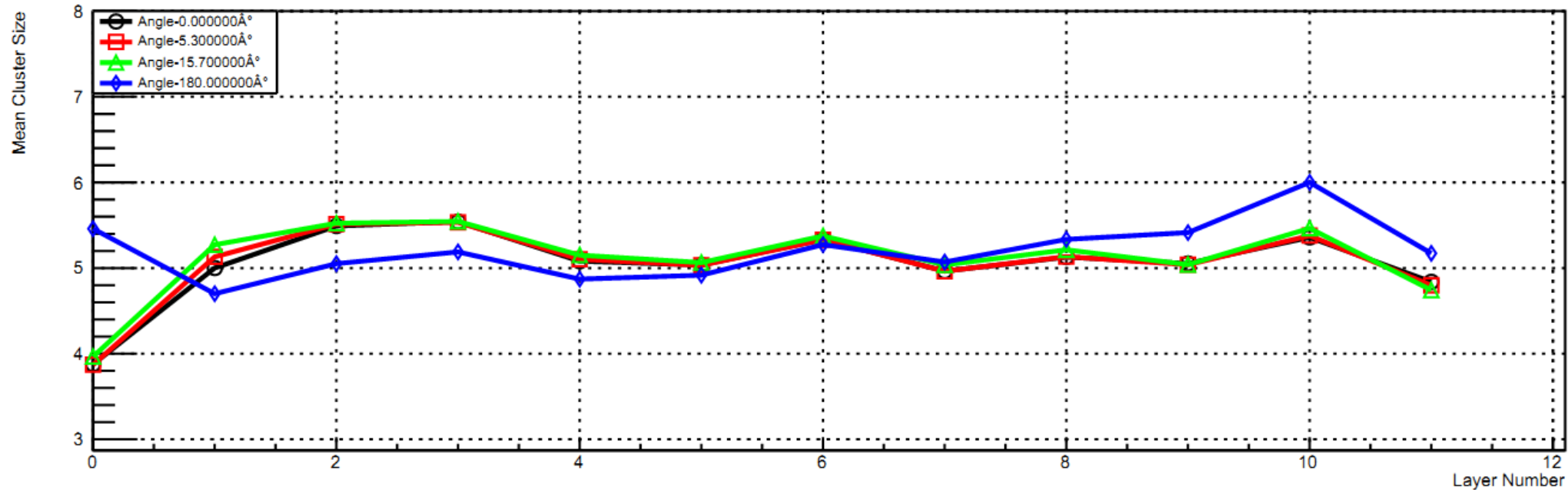
Mean nCluster/Event Vs layers @5 Gev



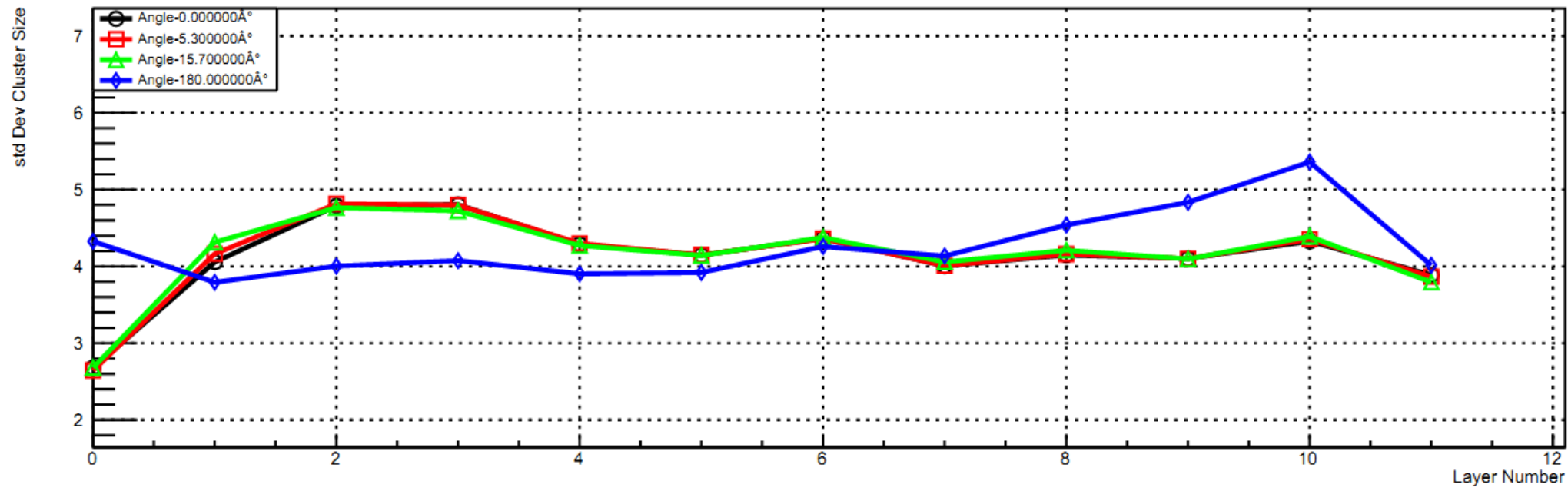
Std Dev nCluster/Event Vs layers @5 Gev



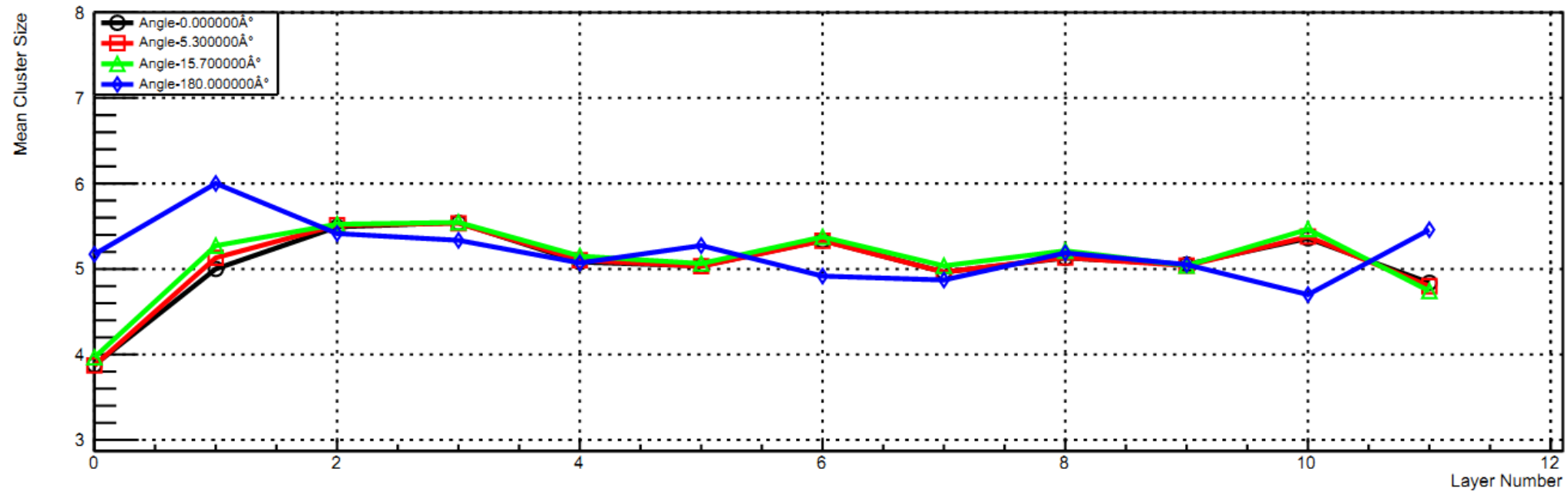
Mean Cluster Size Vs layers @5 Gev



Std Dev Cluster Size Vs layers @5 Gev



Mean Cluster Size Vs layers @5 Gev



Std Dev Cluster Size Vs layers @5 Gev

