

BAFFLES

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Compare 3 baffles in 2 variants

Baffles:

- BaBar I I (More) — BaBar design with 5 plates added
- More I — Modification of BaBar I I, larger acceptance; used in PCDR
- $0.55 \times 5^\circ$ (“5555”) — I I plate baffle optimized for $0.55 < x < 0.8$

Variants:

- Minimum outer diameter (from ~ 42 cm to 140 cm)
- Maximum outer diameter (all 140 cm)

All runs are $20e6$ e- on target, lead baffles, 4 GEMs.

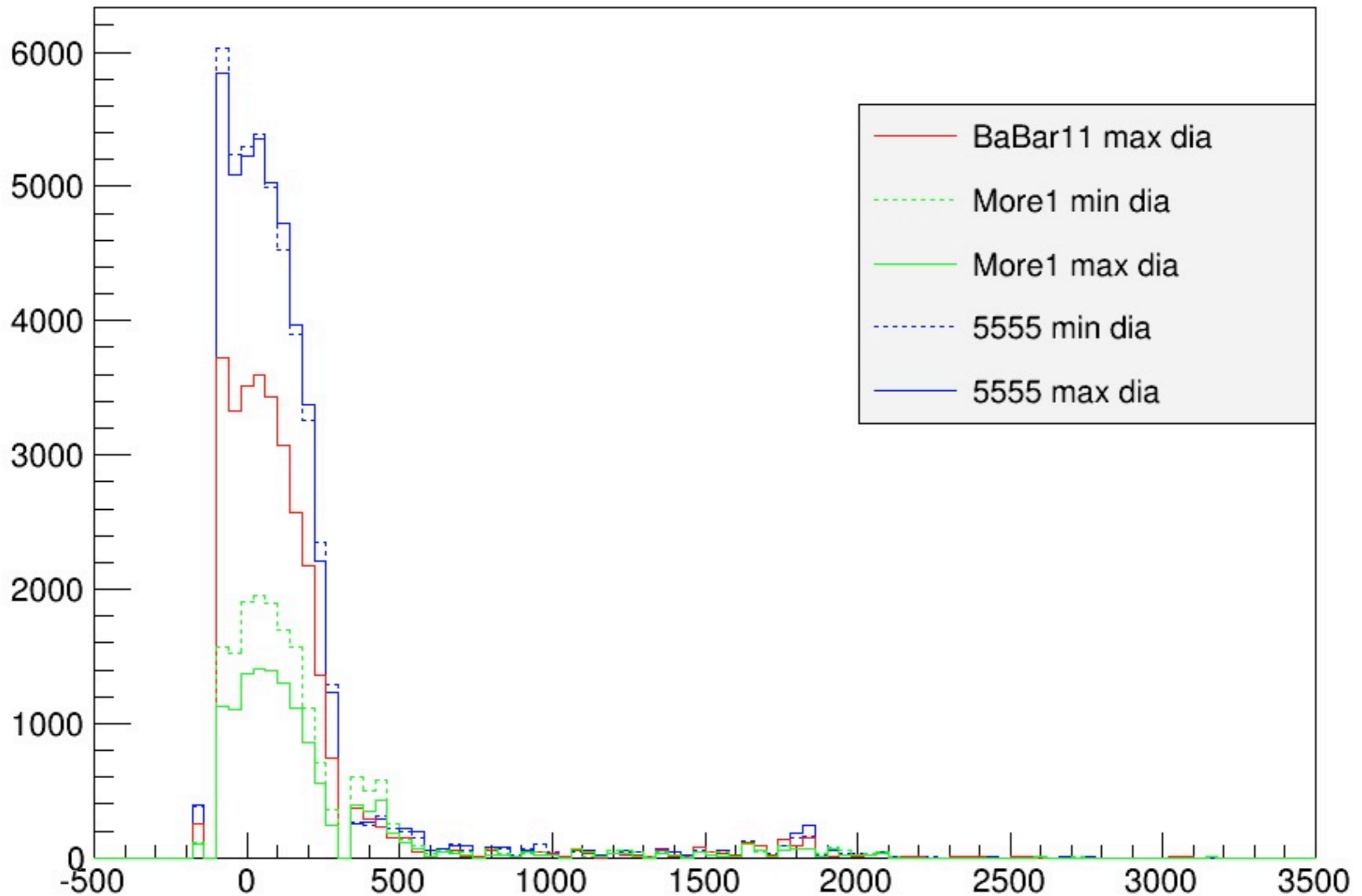
		Min Diameter				Max Diameter			
		gamma (all)	gamma (targ)	e- eff (%)		gamma (all)	gamma (targ)	e- eff (%)	
BaBar I I	Plane 1					67181	60953	559	0.83
	Plane 2					37836	33546	321	0.85
	Plane 3					31539	28683	270	0.86
	Plane 4					30571	27776	282	0.92
More I	Plane 1	40892	35744	375	0.92	30157	26326	338	1.1
	Plane 2	21184	16949	226	1.1	15539	12342	126	0.81
	Plane 3	19200	15161	116	0.6	14061	11126	107	0.76
	Plane 4	18260	14404	117	0.64	13408	10599	101	0.75
5555	Plane 1	2-3 times larger than More I				almost no change from min dia			
	Plane 2	80710	74872	641	0.79	79459	73625	636	0.8
	Plane 3	54006	49119	473	0.88	52766	47923	451	0.85
	Plane 4	48290	44415	250	0.52	47828	43971	279	0.58
	Plane 4	46417	42683	277	0.6	46152	42439	325	0.7

gammas 25% down,
downstream fraction unchanged

e- 10% down — EXCEPT PLANE 2

Vertex z for BG photons, GEM 3

fGEMClust.fVertex.fZ (fWeight*(fGEMClust.fPlane==3&&fGEMClust.fPID==22&&abs(fGEMClust.fVertex.fZ-2250)<2750))



EXTRAS

