TRGSim++

svtfilter

Prereq

Sample:

Bs → $D_s \mu \nu_\mu$

Realistic MC

WORK IN PROGRESS

Bgenerator, EvtGen

Plan: use same sample to validate B_CHARM and B_SEMI

agreement looks much better

141508	Input	638	Output	9	L1_TWO_TRK2_OPPQ_v-3	8	L2_TWO_SUMPT5.	8
144578	Input	3047	Output	32	L1_TWO_TRK2_OPPQ_v-3	32	L2_TWO_SUMPT5.	32
146920	Input	1839	Output	24	L1_TWO_TRK2_OPPQ_v-3	21	L2_TWO_SUMPT5.	21
150799	Input	1691	Output	27	L1_TWO_TRK2_OPPQ_v-3	27	L2_B_CHARM_v-1	27
150799	Input	1693	Output	40	L1_TWO_TRK2_OPPQ_v-3	37	L2_B_CHARM_v-1	37
150799	Input	1724	Output	35	L1_TWO_TRK2_OPPQ_v-3	28	L2_B_CHARM_v-1	28
151513	Input	1170	Output	26	L1_TWO_TRK2_OPPQ_v-3	25	L2_B_CHARM_v-1	25
152747	Input	1872	Output	34	L1_TWO_TRK2_OPPQ_v-1	32	L2_B_CHARM_v-1	32
152747	Input	1975	Output	32	L1_TWO_TRK2_OPPQ_v-1	30	L2_B_CHARM_v-1	30
152747	Input	1975	Output	25	L1_TWO_TRK2_OPPQ_v-1	24	L2_B_CHARM_v-1	24
153618	Input	1648	Output	31	L1_TWO_TRK2_OPPQ_v-2	30	L2_B_CHARM_v-1	30
153618	Input	1613	Output	25	L1_TWO_TRK2_OPPQ_v-2	24	L2_B_CHARM_v-1	24
153618	Input	1648	Output	29	L1_TWO_TRK2_OPPQ_v-2	29	L2_B_CHARM_v-1	29
153618	Input	1650	Output	28	L1_TWO_TRK2_OPPQ_v-2	27	L2_B_CHARM_v-1	27
153618	Input	1634	Output	34	L1_TWO_TRK2_OPPQ_v-2	34	L2_B_CHARM_v-1	34
153618	Input	1643	Output	37	L1_TWO_TRK2_OPPQ_v-2	34	L2_B_CHARM_v-1	34
153618	Input	1632	Output	30	L1_TWO_TRK2_OPPQ_v-2	29	L2_B_CHARM_v-1	28
153618	Input	1733	Output	20	L1_TWO_TRK2_OPPQ_v-2	20	L2_B_CHARM_v-1	20

Run svtfilter -------- trigger bits ----------

Validation of 5.3.1pre4 MC samples

no.	Physics	Decay	Release	Gen.	Ut evt	GenFilter	# Generated	sigma (ub)	# Simulated	# L2 Filter	# Production	Available	tcl+log	valid
98	Bs/BsB	Ds Pi	5.3.1pre4	Bgen	no	2TRK 1.5 GeV	0.5M	---	5188	B_CHARM	5188	mbot502CAF	sim+prd+trg	--
99	B+/B-	J/Psi K	5.3.1pre4	Bgen	no	2TRK 1.5 GeV	0.2M	---	63268	--	63268	mbot501CAF	sim+prd+trg	--
100	b/bbar	J/Psi X	5.3.1pre4	Pythia	A	2mu	0.1M	---	17784	--	17784	mbot503CAF	sim+prd+trg	--
101	Bs/BsB	Ds munu	5.3.1pre4	Bgen	no	2TRK 1.5 GeV	0.1M	---	30825	--	30825	mbot504CAF	sim+prd+trg	--

In addition, a sample B+/B- to D0 pi to K Pi Pi has been produced and Kim Giolo had a quick look:

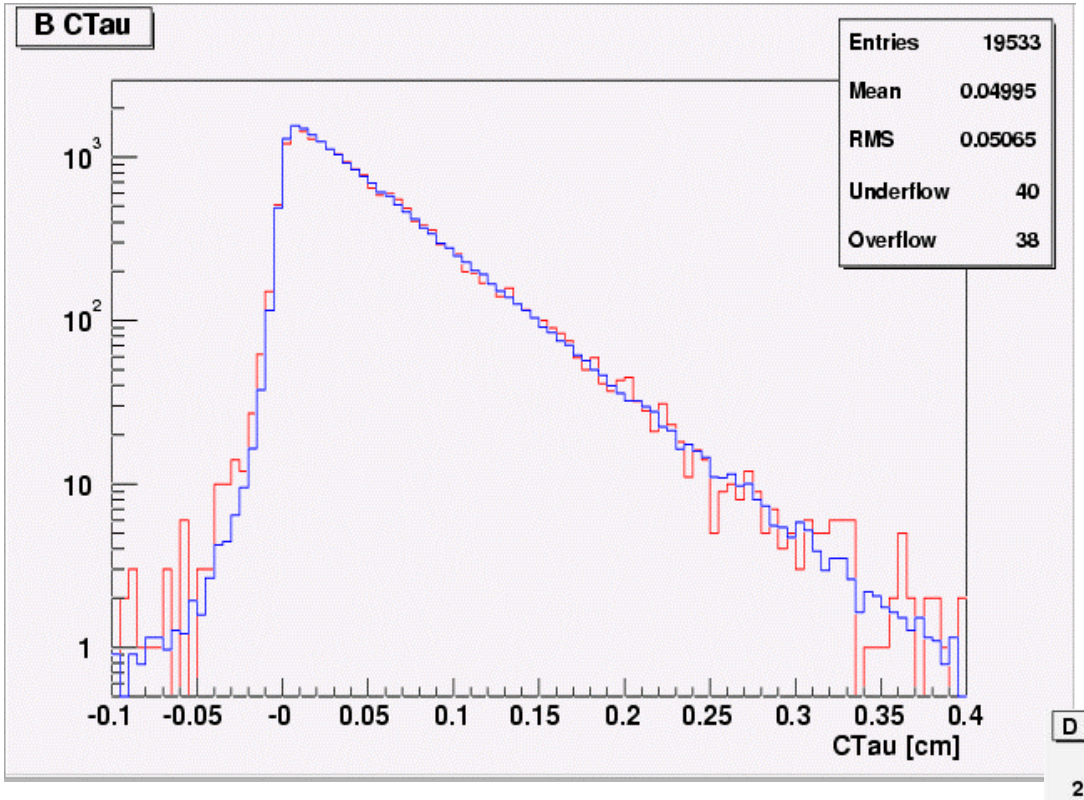
	4.11.2+4.91hpt3	5.3.1pre4
B+/- mass	5276 MeV	5272 MeV
B+/- width	17.0 MeV	16.6 MeV
d0 diff	-21μm	-0.09 μm
D0 mass	1863 MeV	1861MeV
D0 width	8.0 MeV	7.5 MeV

- same refitting as “old” (no phantom layer)

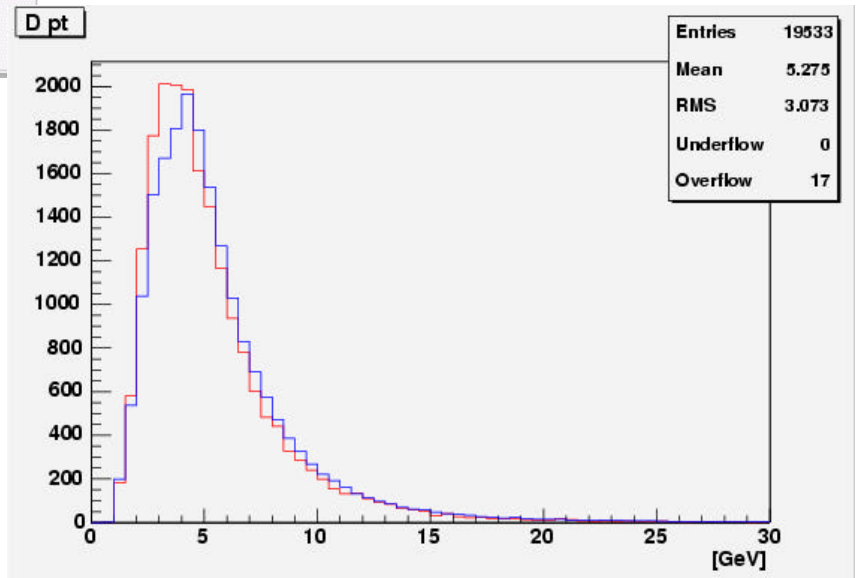
4.11.2 had geometric cdm

Set of instructions to use MC are needed. Web page Bgroup

Validation of 5.3.1pre4 MC samples



MC-to MC comparison

Red = 5.3.1pre4
Blue = 4.11.2 + 4.9.1hpt3

B+/B- to D0 pi to K Pi Pi
mbot505