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Merging CMS+TOTEM ntuples

Producing CMS UATree ROOT-tuple

CMS+TOTEM datasets

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Totem Run	CMS Run	Fill	run type	Trigger/Filling scheme
8767	210494	3474	"commissioning" ?	T2_MB on b.0, Single_13b_8
8769,8770,8771,8772,8773,8774,8775, 8776	210498	3474	physics	T2_MB on b.0, Single_13b_8
8781, 8782,8783,8784, 8785, 8786, 8787,8788	210534	3478	physics	T2+T2_LM+L1SA on b.102, 200ns_96p_120Pb_4inj24bpi
8791	210584	3479	commissioning	T2+T2_LM+L1SA on b.1027 200ns_338p_338Pb_15inj24b
8792	210585	3480	commissioning	? , 200ns_338p_338Pb_15inj
8793	?	3480	commissioning	? , 200ns_338p_338Pb_15inj
8794	210589	3480	commissioning	T2+T2_LM+L1SA , 200ns_270p_248Pb_15inj24b
8795	210590	3480	commissioning	T2+T2_LM+L1SA , 200ns_270p_248Pb_15inj24b
8798	210610	3481	commissioning	T2+T2_LM+L1SA on all b., 200ns_270p_248Pb_15inj24b
8799	210611	3481	commissioning	T2+T2_LM+L1SA on b.102, 200ns_270p_248Pb_15inj24b
8801	210614	3481	physics	T2+T2_LM+L1SA on b.102, 200ns_270p_248Pb_15inj24b
8805,8806,8807	210634	3482	commissioning	T2+T2_LM+L1SA , 200ns_270p_248Pb_15inj24b
8808	210634	3482	physics	T2+T2_LM+L1SA , 200ns_270p_248Pb_15inj24b
8818	210634, 210635	3482	physics	56_RP.OR on ~50 b.,T2 trigg 200ns_270p_248Pb_15inj24b
8819	210635	3482	physics	56_RP.OR on ~50 b., 200ns_270p_248Pb_15inj24b
8820	210638	3482	physics	T2+T2_LM+L1SA on b.102, 200ns_270p_248Pb_15inj24b
8822	210658	3485	physics	T2+T2_LM+L1SA, 200ns_338p_338Pb_15inj24b
8823	210658	3485	physics	56_RP.OR on first 50b., 200ns_338p_338Pb_15inj24b
8825, 8826	210670	3486	calibration	T2+T2_LM+L1SA, 200ns_338p_338Pb_15inj24b
8830	210676	3486	physics	L1SA, 200ns_338p_338Pb_15inj24b
8831	210718	3488	physics ??	T2+T2_LM+L1SA, 200ns_338p_338Pb_15inj24b
8832	210721	3489	physics	L1SA+BX, 200ns_338p_338Pb_15inj24b
8833 8834 8835 8836	210738	3489	physics	L1SA+BX+RP220, 200ns_338p_338Pb_15inj24b
8837	210759	3490	physics	L1SA+BX, 200ns_338p_338Pb_15inj24b
8838	210759	3490	physics	L1SA+BX+RP220, 200ns_338p_338Pb_15inj24b
8840	?	3488	calib?	T2+T2_LM+L1SA, 200ns_338p_338Pb_15inj24b
8841,8842	210818	3493	physics	L1SA+BX, 200ns_338p_338Pb_15inj24b

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8843,8844,8845,8847,8849,8851,8853	210818	3493	physics	L1SA+BX+RP220, 200ns_338p_338F
8854	210826-210828	3494	calibration	L1SA+BX, 200ns_338p_338F
8855	210830	3494	calibration	L1SA+BX, 200ns_338p_338F
8856	210832-210833	3494	calibration	L1SA+BX, 200ns_338p_338F
8857 8858 8859 8861	210837	3494	physics	L1SA+BX, 200ns_338p_338F
8863,8864,8865,8866,8867,8868	210855	3495	physics	L1SA+BX+RP220, 200ns_338p_338F
8869,8870,8871,8872,8873,8874,8875,8876	210885	3496	physics	L1SA+BX+RP220, 200ns_338p_338F (see files attached)
8877, 8878,8879,8880	210906	3498	physics	L1SA+BX+RP220,200ns_338p_338F
8883,8884	210909	3498	physics	L1SA+BX+RP220,200ns_338p_338F
8890	210983	3503	commissioning	L1SA+BX, 200ns_272p_338F
8891 8892 8893	210986	3503	physics	L1SA+BX,200ns_272p_338F
8896 8897	210998	3505	physics	L1SA+BX,200ns_272p_338F
8898 8899 8901	211000	3505	physics	L1SA+BX,200ns_272p_338F
8903	211024	3506	commissioning	L1SA, 200ns_338p_338Pb_1
8904	211025	3506	commissioning	L1SA, 200ns_338p_338Pb_1
8905	211026	3506	commissioning	L1SA, 200ns_338p_338Pb_1
8906	211029	3506	commissioning	L1SA, 200ns_338p_338Pb_1
8907 8908 8909	211032	3506	physics	L1SA+BX, 200ns_338p_338F
8911	211178	3509	commissioning	L1SA+BX, 200ns_338p_338F
8915	211252	3510	commissioning	L1SA+BX, 200ns_338p_338F
8917	211256	3510	physics	L1SA+BX,200ns_272p_338F
8918	211258	3510	physics	L1SA+BX,200ns_272p_338F
switch beam				
8931	211313	3516	physics	L1SA+BX, 200ns_96Pb_120
8932	211313	3516	physics	L1SA+BX+RP220, 200ns_96Pb_120
8933 8934	211328	3520	physics	L1SA+BX+RP220, 200ns_192Pb_210
8935	211347	3522	physics	L1SA+BX+RP220, 200ns_192Pb_210
8937 8938	211354	3523	physics	L1SA+BX+RP220, 200ns_192Pb_210
8940	?	3524	physics	L1SA+BX, 200ns_192Pb_210

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8941	211363	3525?	physics	L1SA+BX+RP220, 200ns_19
8943	211371	3525	physics	L1SA+BX+RP220, 200ns_33
8945	211390	3526	physics	L1SA+BX, 200ns_338Pb_33
8946 8947	211421	3529	physics	L1SA+BX+RP220, 200ns_33
8948 8949 8950	211460	3533	physics	L1SA+BX+RP220, 200ns_33
8972 8973 8974	211532	3534	physics	L1SA+BX+RP220, 200ns_33
8976 8977 8978	211538	3535	physics	L1SA+BX+RP220, 200ns_33
8989	211561	3537	physics	L1SA+BX+RP220, 200ns_33
8993	211568	3538	physics	L1SA+BX+RP220, 200ns_33
8994	211571	3538	physics	L1SA+BX+RP220, 200ns_33
8995 8996	211587	3540	physics	L1SA+BX, 200ns_314Pb_27

CMS+TOTEM merged datasets

TOTEM ntuples for injection runs: /castor/cern.ch/totem/offline/CMSTOTEM/TotemNtuples/InjectionRuns

TOTEM run number	CMS run number	CASTOR Path (CMS)
8869/8876	210885	/castor/cern.ch/totem/offline/CMSTOTEM/CMSNtuples/pA/2013/run210885
8869/8876	210885	/castor/cern.ch/totem/offline/CMSTOTEM/CMSNtuples/pA/2013/PAMinBiasUPC_HIRun201
8933	211328	/castor/cern.ch/totem/offline/CMSTOTEM/CMSNtuples/pA/2013/PAMinBiasUPC_HIRun201
8946	211421	/castor/cern.ch/totem/offline/CMSTOTEM/CMSNtuples/pA/2013/PAMinBiasUPC_HIRun201

Trigger (CMS)

Level 1 : Example in CMS run 210855

<i>CMSbit #</i>	<i>name</i>	<i>rate</i>	<i>_Description</i>
99	L1_CastorEm_TotemLowMultiplicity	25.01	TechBit55 & CastorEM
105	L1_DoubleJet20_TotemDiffractive	2.58	TechBit52 & Jet20
114	L1_CastorTotalEnergy_TotemLowMultiplicity	0.00	
115	L1_DoubleJetC36_TotemDiffractive	0.20	
116	L1_SingleMu20_TotemDiffractive	0.23	
117	L1_SingleEG20_TotemDiffractive	0.11	
118	L1_DoubleMu5_TotemDiffractive	0.10	
119	L1_DoubleEG5_TotemDiffractive	0.54	
120	L1_SingleJet52_TotemDiffractive	0.34	
121	L1_ZdcCaloPlus_TotemDiffractive_QElastic	0.00	
52	L1Tech_TOTEM_Diffractive.v0	43,717.46	T2 SingleArm OR RP
53	L1Tech_TOTEM_MinBias.v0	41.97	T2
54	L1Tech_TOTEM_ZeroBias.v0	57.98	BX
55	L1Tech_TOTEM_LowMultiplicity.v0	43,729.57	

is[*99*,*105*,114,115,116,117,118,119,120,121] +[*53*]

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HLT: Example in CMS run 210855

<i>_bit#</i>	<i>name</i>	<i>rate</i>	<i>Description</i>
38	HLT_PACastorEmTotemLowMultiplicity	23.42	"L1_CastorEm_TotemLowMultiplicity"
75	HLT_PAL1CastorTotalTotemLowMultiplicity_v1 (105833)	0.00	"L1_CastorTotalEnergy_TotemLowMul..."
78	HLT_PAL1DoubleJet20_TotemDiffractive_v1 (105848)	2.55	"L1_DoubleJet20_TotemDiffractive"
84	HLT_PAL1Tech53_MB_SingleTrack_v1 (105825)	23.16	"53"
85	HLT_PAL1Tech53_MB_v1 (105824)	41.71	"53"
86	HLT_PAL1Tech54_ZeroBias_v1 (105826)	57.52	"54"

Trigger (TOTEM)

bit 0 --> RP220_V
bit 1 --> RP220_H
bit 2 --> RP220_Cross
bit 3 --> RP147_V
bit 4 --> CMS & L1SA (Was RP147_H)
bit 5 --> T2_Single_Arm (Was RP147_Cross)
bit 6 --> T2
bit 7 --> T2_HighMultiplicity
bit 8 --> T1
bit 9 --> BX
bit 10 --> T2_LM (Was SD220)
bit 11 --> L1SA (Was SD147)
bit 12 --> RP_220_H & CMS
bit 13 --> T2 & CMS
bit 14 --> T1 & T2 & CMS
bit 15 --> CMS

This topic: TOTEM > PARun

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