

Jet/MET Trigger On-Call Report And some validation as well

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Missing E_T Trigger Meeting – 13/5/2015

Reprocessing – 1

- HLT EnhancedBias reprocessing with AtlasCAFHLT,20.2.1.1.3
 - <https://its.cern.ch/jira/browse/ATR-11022>
 - Run data_12TeV%212967, enhanced bias stream
 - Ref. r6634_p1831_p1831
 - Test: r6646_p1831_p1831
 - Compare HLTMON
- Signed off

Reprocessing - 2

- HLT EnhancedBias reprocessing with AtlasCAFHLT,20.2.1.1.2
 - <https://its.cern.ch/jira/browse/ATR-11022>
 - Run data_12TeV%212967, enhanced bias stream
 - Ref. r6634_p1831_p1831
 - Test: r6644_p1831_p1831
 - Newer repro: 20.2.1.1.3
 - Test: r6646_p1831_p1831
 - Compare HLTMON
- Calo ok – signed off

Reprocessing - 3

- L1Calo reprocessing
 - Purpose: exercise turn-around time of a reprocessing right after the run is over, and the HLT
 - Release: AtlasP1HLT,20.2.1.1
 - Menu: MC_pp_v5
 - Run: 264034
 - Stream: L1Calo
 - Prescales: [default]
 - Apply L1 prescales?: no
 - Rerun L1?: yes
 - Reconstruction?: no
 - <https://its.cern.ch/jira/browse/ATR-11055>
- Signed off

Reprocessing - 4

- L1Calo reprocessing
- Purpose: HLT reprocessing of 264034/L1Calo stream with offline outputs for ID trigger studies
 - Release: AtlasP1HLT,20.2.1.1
 - Menu: MC_pp_v5
 - Run: 264034
 - Stream: L1Calo
 - Prescales: [default]
 - Apply L1 prescales?: no
 - Rerun L1?: yes
 - Reconstruction?: yes
- Signed off

Run by Run DQ Summary

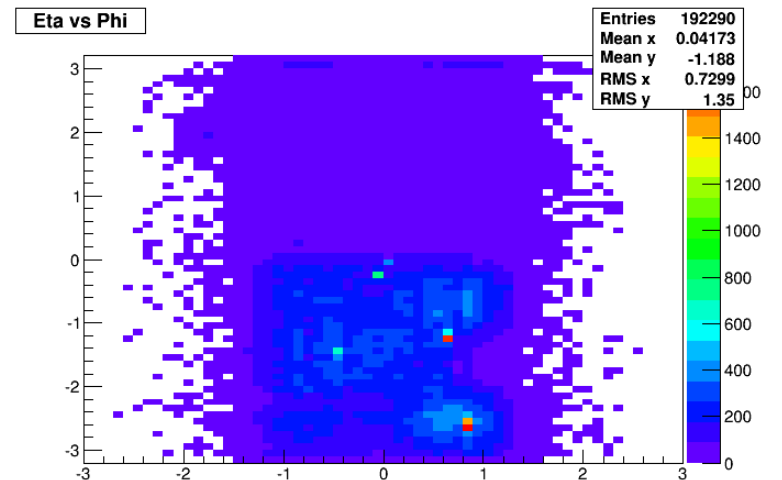
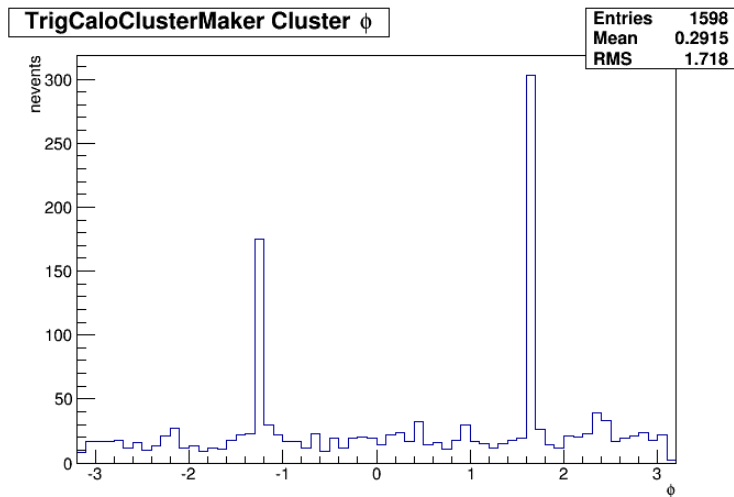
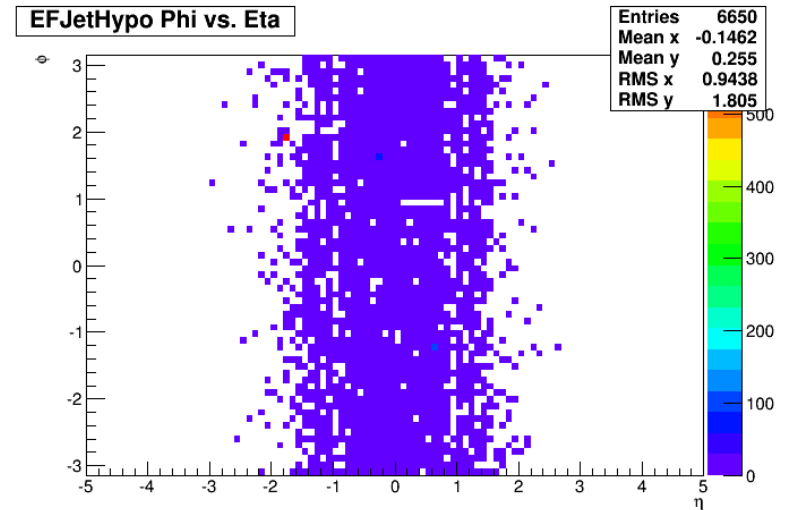
Run	Duration	Ended	Events	Online Hist.	Offline Hist.	Obs.
263896	856.4m	Mon 10:43	8512363	Ok	Ok	No j0_lcw_L1J12
263956	229.3m	Mon 23:17	535922	Ok jet Ok met Ok calo	Ok jet Ok met	No j0_lcw_L1J12 in menu Jet spike (eta,phi)=(-2,2) Spike not in HLTCalo plots
263961	565.9m	Tue 09:02	1652781	Ok met Ok jet		Strange cluster phi distr. Spike in eta,phi=1,1 (cluster & jet)
263964	130m	Tue 12:41	1808555	No HLT	Ok jet Ok met	900GeV collisions!
263965	225m	Tue 15:09	3289095	No HLT	Ok jet Ok met	900GeV collisions!
263989	227.9m	Tue 22:05	2801086	Ok met Ok calo Ok jet	Ok jet Ok met	Jet spike (eta,phi)=(0.7,-1)

Run	Duration	Ended	Events	Online Hist.	Offline Hist.	Obs.
263993	731.5m	Wed 10:30	10750593	Ok met Ok jet Bad calo	Ok jet Ok met	Spike eta=0.6,phi=-1.2 Cluster hot square, not in tcemFS or in tclcwFS
264058	429.4m	Thu 09:07	1324162	Ok met Ok jet Bad calo	Ok jet Ok met	Spike eta=0.6,phi=-1.2 Different cluster hot square: eta,phi=1,2
264219	34.3m	Thu 20:32	404965	Empty met & jet Bad calo	Empty jet & met	Again cluster hot area – change in shape? HLT_j0_lcw_jes_L1J12 now in menu
264220	728.3m	Fri 08:53	14455898	Ok met Ok jet Bad calo	Ok met Ok jet	Jet spike at phi=1.6 Cluster hot sector
264330	140.5m	Fri 19:59	4522402	Ok met Ok jet Bad calo	Ok met Ok jet	Low stats Cluster hot sector
264336	841.1m	Sat 10:19	11240468	Ok met Ok jet Bad calo	Ok met Ok jet	Cluster hot sector

Run	Duration	Ended	Events	Online Hist.	Offline Hist.	Obs.
264345	99.4m	Sat 12:33	2760289	Empty Ok calo	Empty	Low stats Cluster hot sector
264379	29.9m	Sat 13:12	799783	Empty Ok calo	Empty	Low stats Cluster hot sector
264391	82.4m	Sat 15:53	704856	Ok met Ok jet Ok calo	Ok met Ok jet	Low stats Cluster hot sector
264415	921.1m	Sun 10:11	36467721	Ok jet bad met & calo	No histos	Jet spike eta,phi=-0.4,1.6 Double peak in MET Cluster hot sector
264425	251.6m	Sun 14:33	7655317	Empty met & jet	Ok met Jet empty	Low stats Cluster hot sector
264467	207.1m	Sun 18:12	4082322	Empty met & jet Bad calo	Ok met Empty jet	Low stats Cluster hot sector

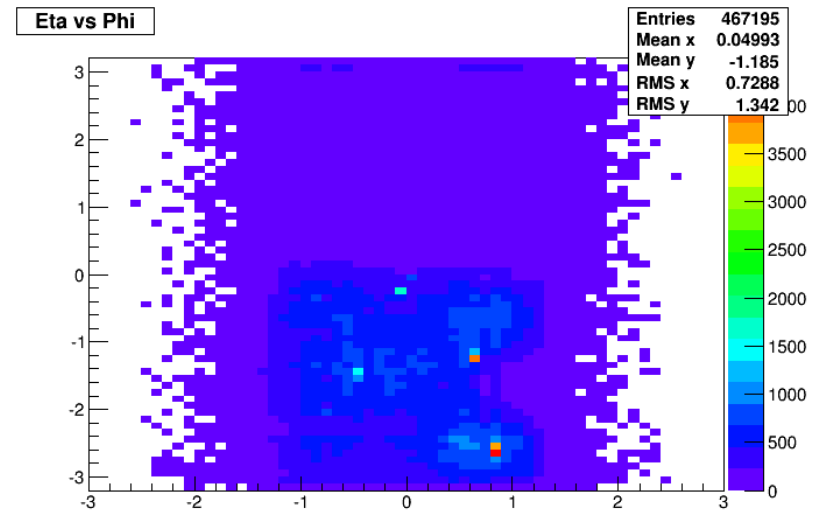
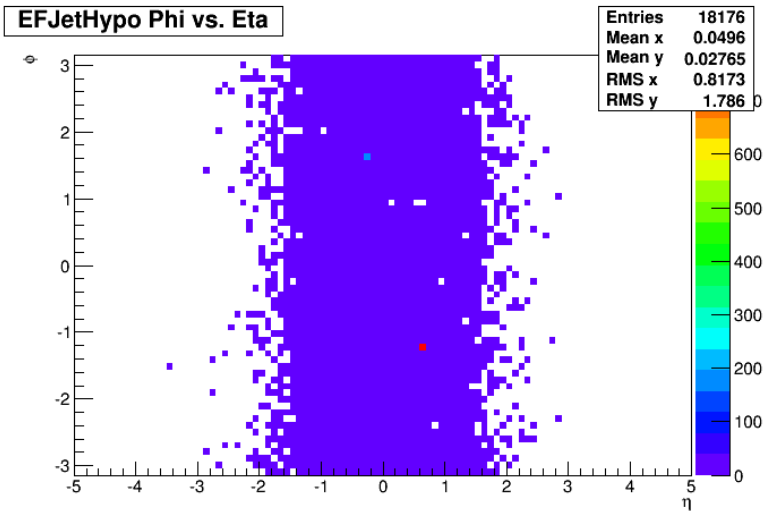
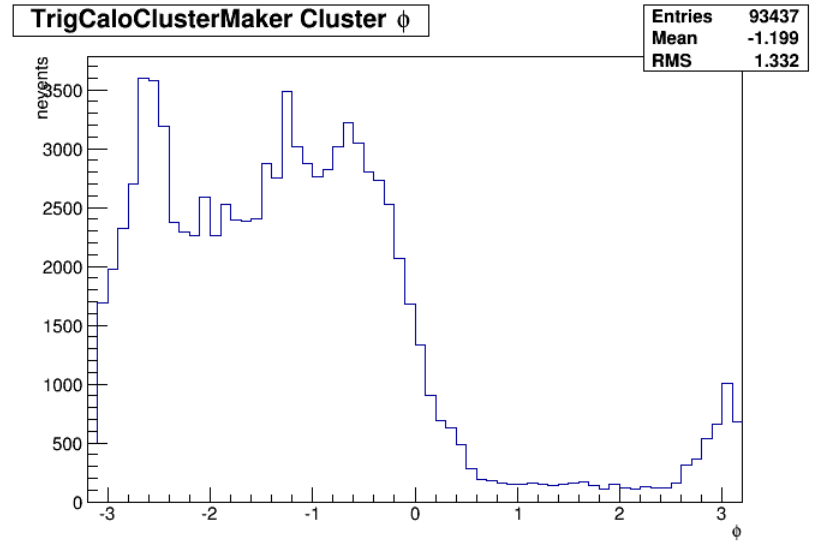
Run 263956

- Jet spike not in HLTCalo



263961

- Strange phi distribution?



Collisions @ 900GeV

- Runs 263964 and 263965

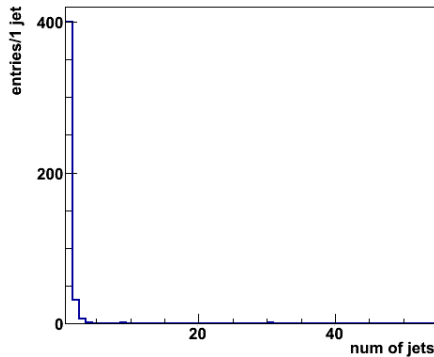
Run 263964, 1/express_express

Pass= LB Change=
 Display side-by-side with Run(-processing)=

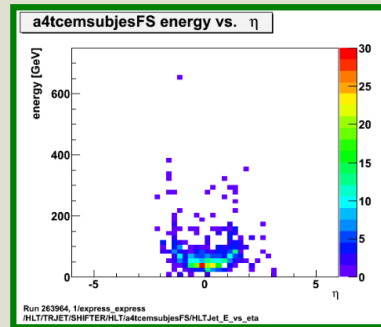
[Up]

HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS

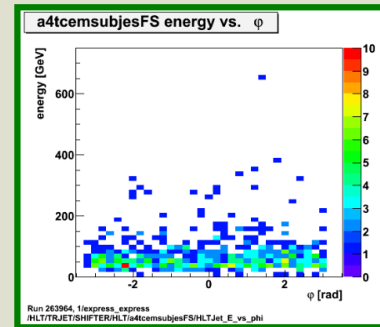
a4tcmsubjesFS jet multiplicity



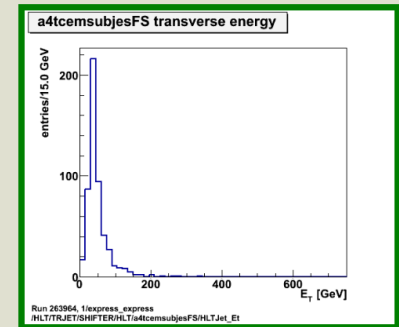
Run 263964, 1/express_express
/HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS/HLTJet_n



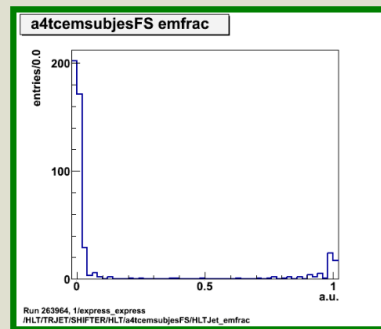
Run 263964, 1/express_express
/HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS/HLTJet_E_vs_eta



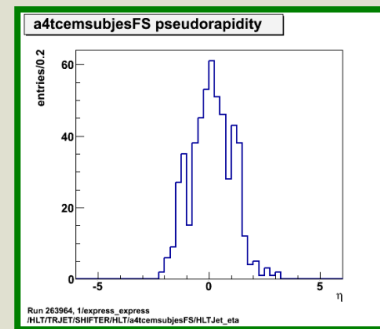
Run 263964, 1/express_express
/HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS/HLTJet_E_vs_phi



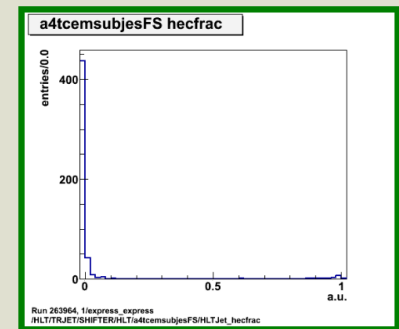
Run 263964, 1/express_express
/HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS/HLTJet_ET



Run 263964, 1/express_express
/HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS/HLTJet_emfrac



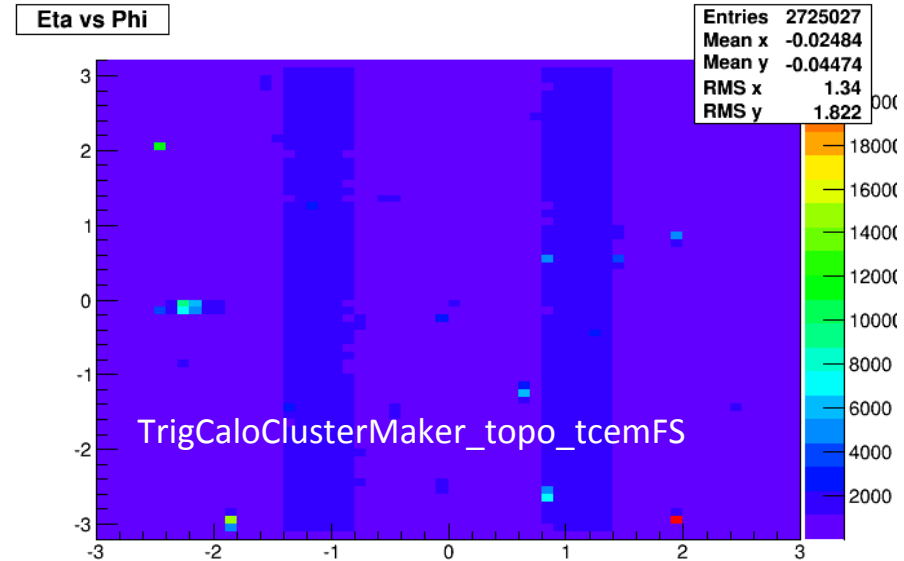
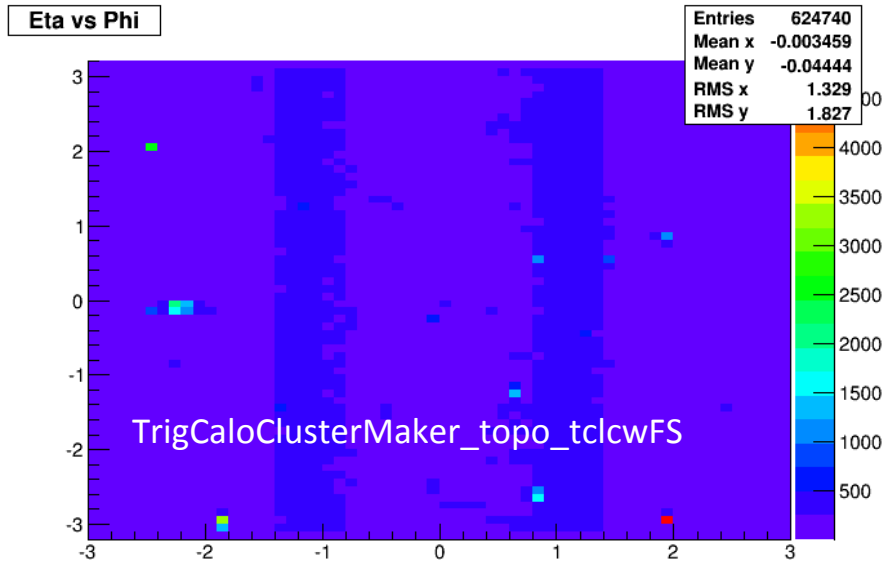
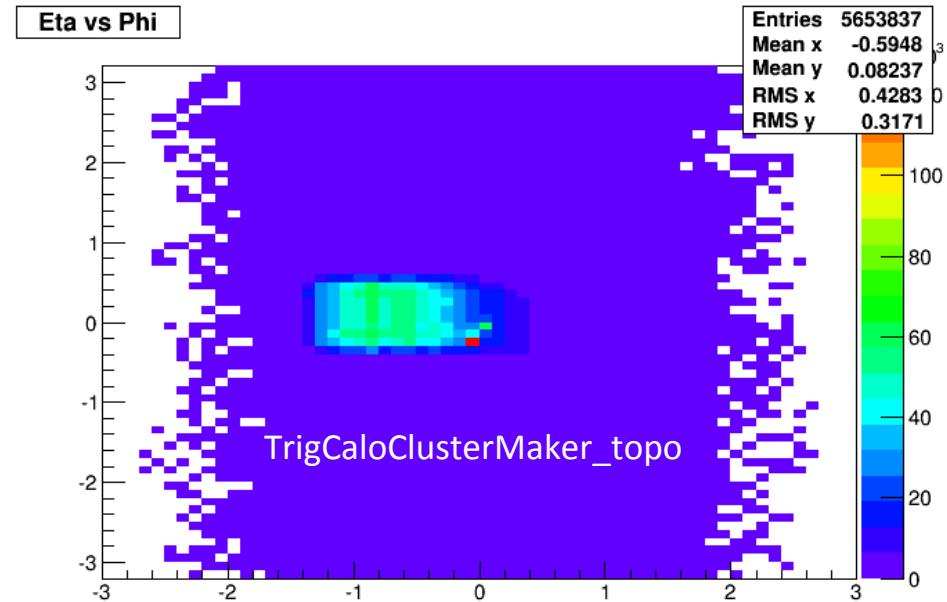
Run 263964, 1/express_express
/HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS/HLTJet_eta



Run 263964, 1/express_express
/HLT/TRJET/SHIFTER/HLT/a4tcmsubjesFS/HLTJet_hecfrac

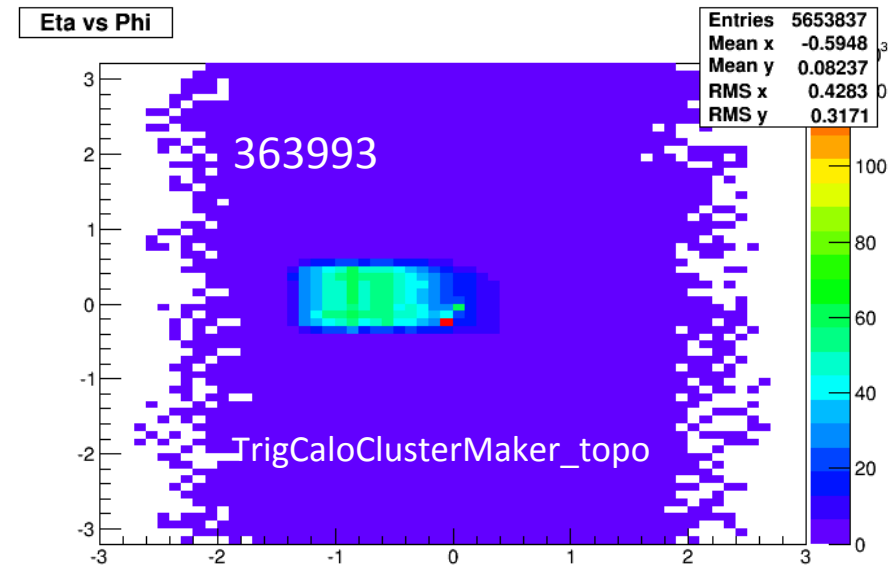
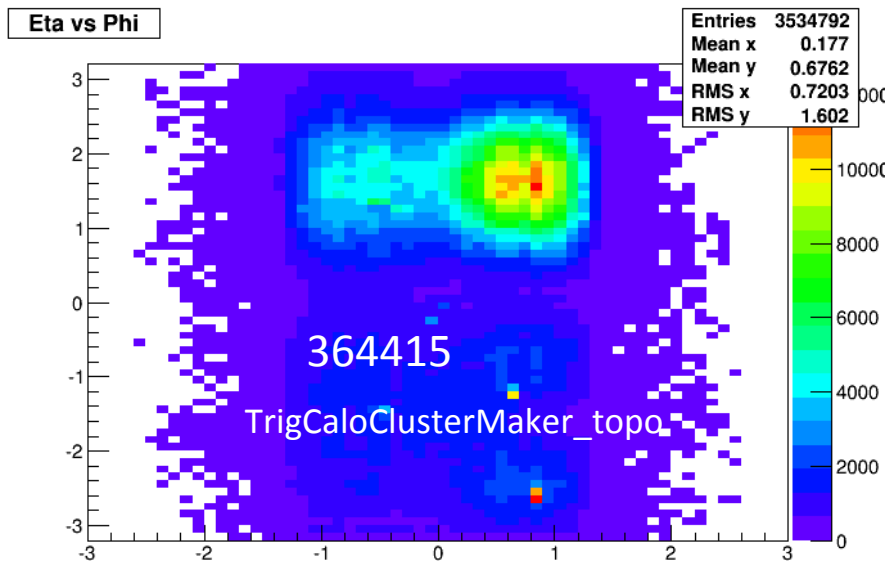
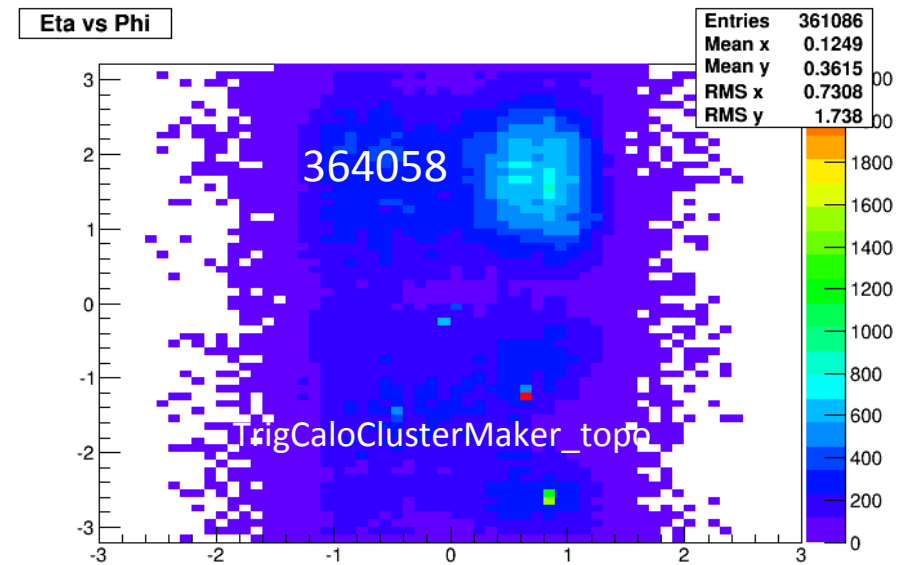
263993

- Hot sector in HLTCalo topocluster eta,phi distribution
- Not in tcm or tclw
- Comes from L1Muon-seeded tau chains! (thanks Sebastien!)



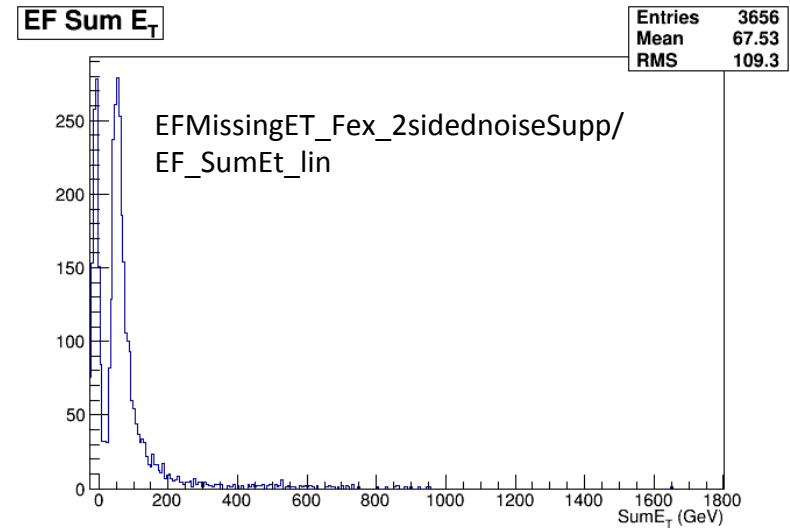
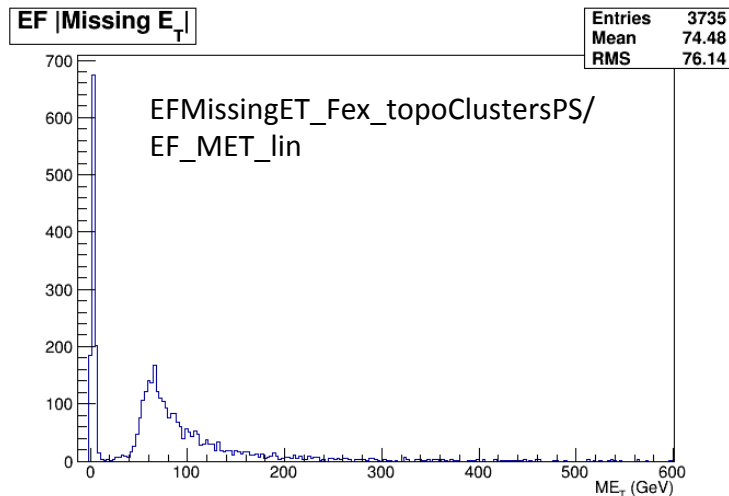
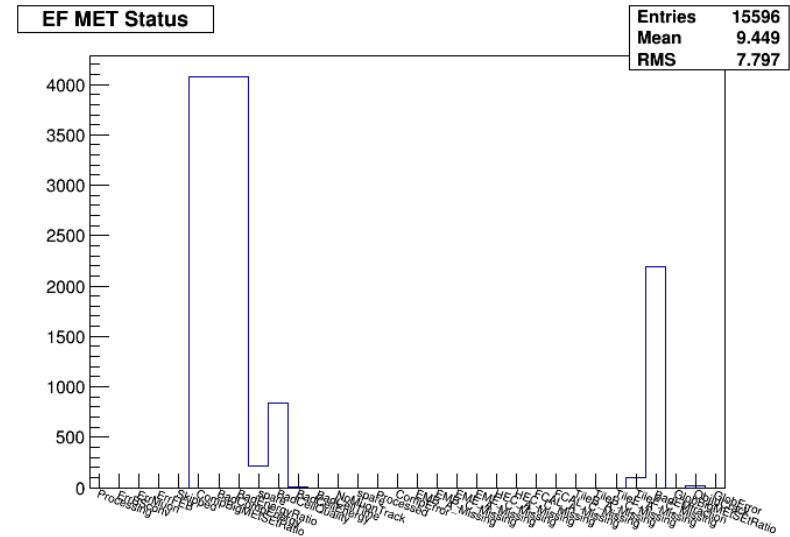
264058/264219/2 64415

- Different hot sector than run 363993 in HLTCalo topocluster eta,phi distribution
- Again not in tclcwFS and tcemFS



264415

- Double peak in MET and spike in MET phi=0.1
- Events with a true muon not accounted by L1??



Run	Defect/OK
263956	TRIG_HLT_JET_HI_hotspot
263961	TRIG_HLT_JET_HI_hotspot
263989	TRIG_HLT_JET_HI_hotspot
263993	TRIG_HLT_JET_HI_hotspot TRIG_HLT_MET_missing_energy_spike
264058	TRIG_HLT_JET_HI_hotspot TRIG_HLT_MET_missing_energy_spike
264219	TRIG_HLT_JET_LOWSTAT TRIG_HLT_MET_missing_energy_spike
264220	TRIG_HLT_JET_HI_hotspot TRIG_HLT_MET_missing_energy_spike
264330	TRIG_HLT_MET_missing_energy_spike
264336	TRIG_HLT_MET_missing_energy_spike
264345	TRIG_HLT_MET_missing_energy_spike
264379	TRIG_HLT_MET_missing_energy_spike
264391	TRIG_HLT_MET_missing_energy_spike
264415	TRIG_HLT_MET_missing_energy_spike
264425	TRIG_HLT_JET/MET_LOWSTAT TRIG_HLT_MET_missing_energy_spike
264467	TRIG_HLT_JET/MET_LOWSTAT TRIG_HLT_MET_missing_energy_spike

Sign-off/defects

