

Trigger Offline Monitoring Report

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Thanks to shifters and slice experts!

Trigger General Meeting – 4th October 2011

Summary

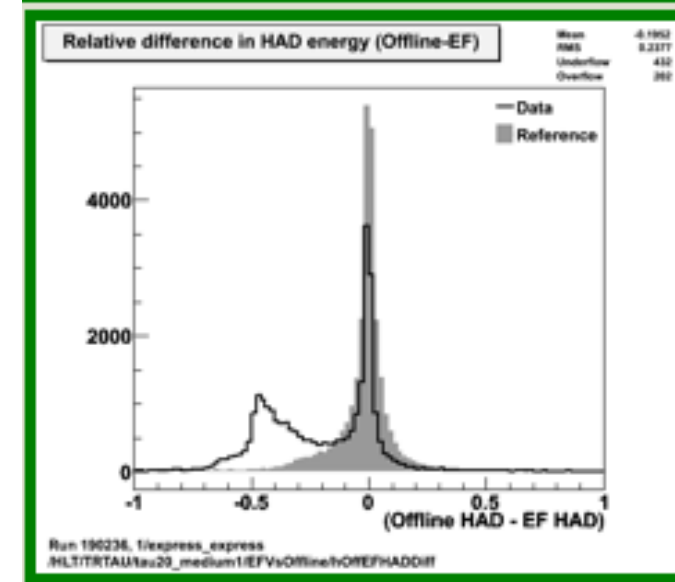
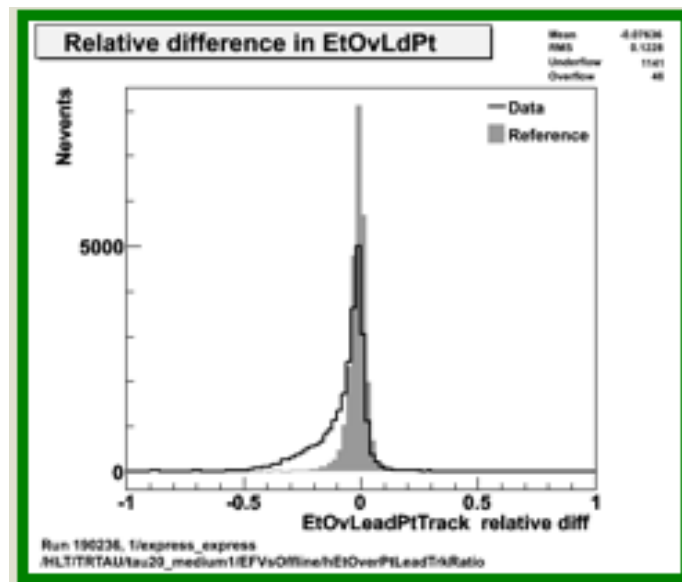
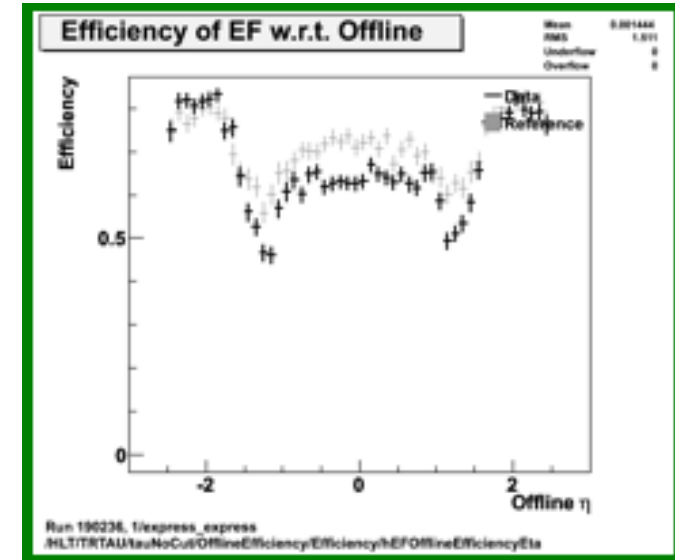
- High load on offline DB
- Tau DQ plots discrepancy in 190236
- Validation of 16.1.3.14.2 for 25ns running
- Panda birthing pains

Offline DB high load

- Small problem with reprocessing opening too many connections to DB (29 Sep)
- Seen in ACR during night shift: warning in CDS about high load on offline DB
- Large delay in transferring data to offline (2h)
- Trigger reprocessing was main client, but not only one
- Would be solved by using Frontier (planned)
- Not critical! Run could have survived without problems, only delay in reconstruction

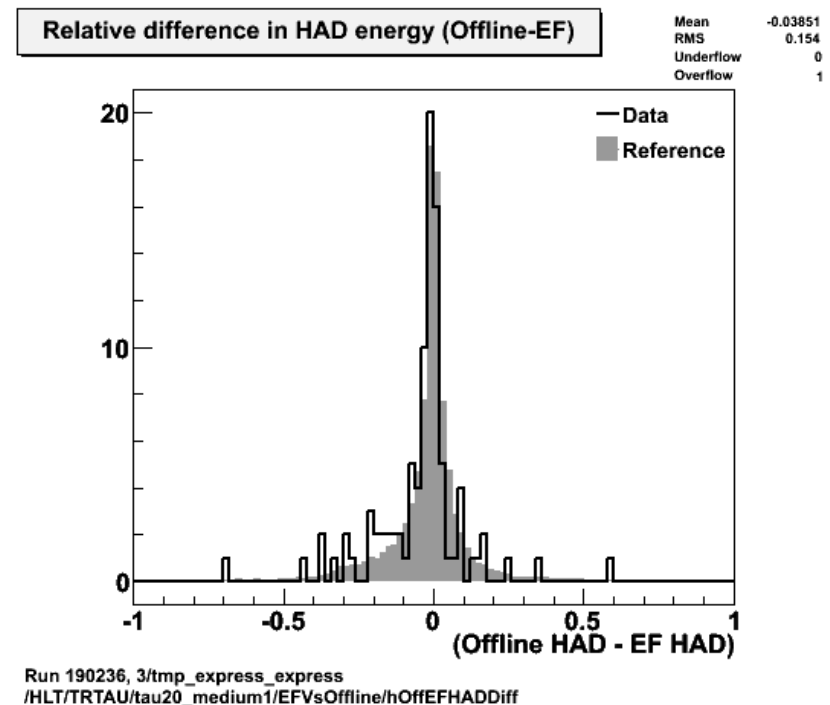
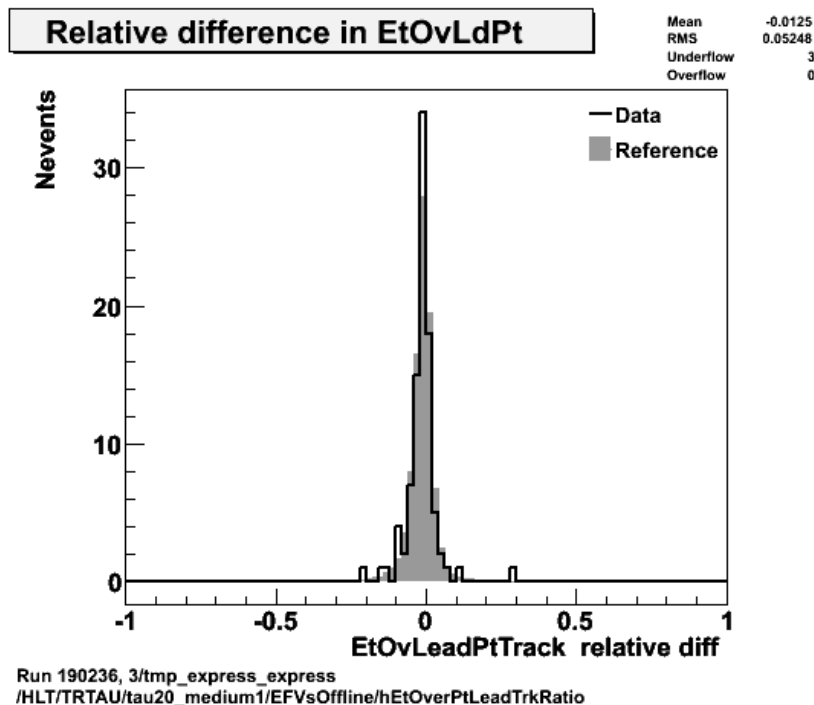
DQ for Run 190236

- Sharepoint: [See link](#)
- Check that conditions are back to normal after Alfa run (190160)
- egamma/tau expert (Valerio) found differences in tau efficiency wrt offline
- Monitored chains: tauNoCut, tauNoCut_L1TAU50, tau20_medium1
- All other slices looked fine



DQ for run 190236 (cont)

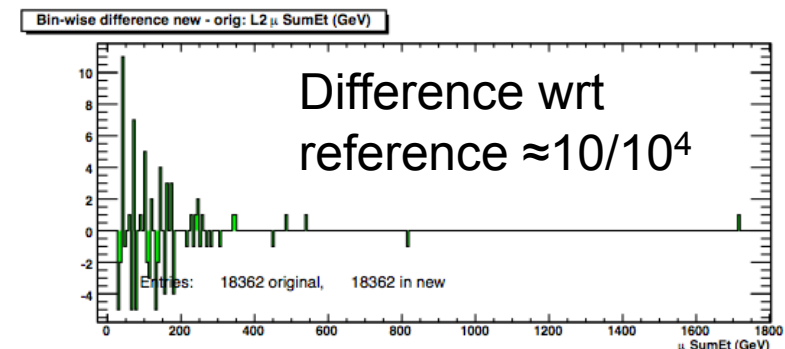
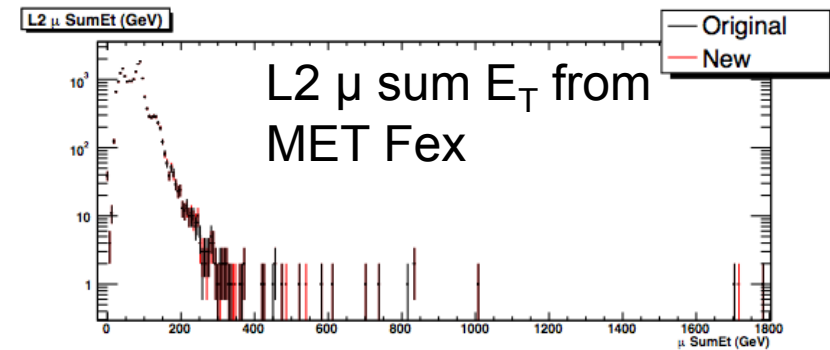
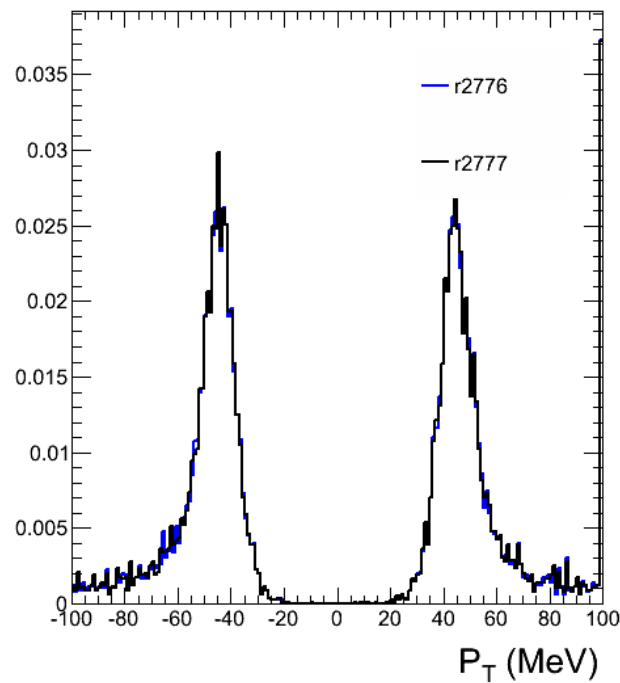
- Likely hypothesis was that offline reconstruction was affected by bad version of Tile calorimeter DSP code, which affected eformat
- DSP fragment used by offline was affected; not the one used by HLT
- Express stream later reconstructed with good version of the Tile DSP code and tau plots looked fine after that (below)



Validation of cache for 25ns running

- Sharepoint [link](#)
- AtlasCAFHLT-16.1.3.14.2 to be validated (tag r2776)
- Included new TRT tag for 25ns running
- Differences at 1/1000 level wrt reference (16.1.3.14.1, r2777)

MuCombStauHypo
pT>40GeV



Panda birthing pains

- Now using Panda for submitting reprocessing jobs as a replacement for TOM
- Seems ok – most problems arise from lack of experience by experts – will need iterating
- Real strong point is people power behind tool
- Best way is to compare each task to a previous successful task – and try job transform in Ixplus

Debug Stream

Run	Errors	DQ and Observations
190256	3 events with L2HltTimeou in muons; 1 ev rejected; 2 accepted	Affected chains: L2_mu10_Jpsimumu and L2_mu10_Upsimumu_tight_FS timeout at L2.
	3 events with L2ProcTimeout in muons; all accepted after repro	The three events have missing features in EF_2mu4T_*_noMu and EF_3mu6_Msonly
190236	No events in debug stream	MuGirl lower eff (~93%) number of bad cells per event is off
190295	Debug stream empty	Low stats
190297	L2HltTimeout in taus; all recovered	All events in same lumi block

Reprocessing

Date	AMI Tag	Savannah	Release	Run/Stream	Reason
27 Sep 30 Sep	r2772	#22753 – task 530246 OPEN	16.1.3.13.1	186923	Validation of new CAF build for online deployment, setting Rerun L1 to False; set enLVL1prescales=TrigByteStrTeamools.trigbs_prescaleL1
1 Oct	r2771 vs r2763	#22913 OPEN	14.1.3.14.1	189719 DRAW Z->mumu	Repro of DRAW Zmumu data to validate the new MDT muon endcap alignment
2 Oct 4 Oct	r2777 vs r2776	#22992 - task 533374 CLOSED	16.1.3.14.2 vs 16.1.3.14.1	189719	Test new cache 16.1.3.14.2 incl. new TRT tag for 25ns running