

Preparations for pass1 2016 data

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2016 Data, pass0 and pass1

pass0

10 % pass, every 10th file
Took about 4 days to process

Pass0 included

===ECAL===

- ★ time calibration
- ★ energy calibration
- ★ time walk corrections
- ★ time offset corrections

===SVT===

- ★ time offsets

===run/event info===

- ★ SVT header flag
- ★ SVT burst-mode noise flag
- ★ SVT latency flag (should always be good)

Things to add in pass1

===ECAL===

- ◆ Time depended Ecal gains (Sebouh)

===SVT===

- ◆ check that alignment
- ◆ Include Bad SVT channels
- ◆ Check all calibrations are correct
- ◆ Fix track parameters for detached vertex.

===run/event info===

- ◆ Event timestamp is just TI timestamp (not real time)
- ◆ SVT bias flag
- ◆ SVT position flag
- ◆ run DB information
- ◆ Improved Cluster-Track Matching (Sebouh)
Matching is different for 5 and 6 hit tracks.
---- If SVT alignment will be changed, then matching should be recalculated

Suggestions are welcome

Blinding/Unblinding

Pass1 (blinded pass)

Every 10th file 0, 10, 20 etc

Skims

Fee, Moller, V0, with their corresponding DSTs and Ntuples

Ntuple maker is now more practical, should it go to production?

V0: Only requires v0 candidate
Moller: Moller Candidate && pair0
Fee: Only single1 trigger

Tightening skims?

Will be good to have a document validating cuts, and someone (or two) to review, especially v0

DQMs

Does DQM get enough attention?
Should we keep it?

Upass1 (Unblinded)

All skims that don't interfere with the trident analysis in principle can be unblinded

Pulser, Single0, Single1, Pair0?
Above skims are faster (x10), only events with the corresponding trigger are reconstructed.

This can also include calibration runs, Straight through tracks, Carbon, bias scan, Ecal only, low/high current

When pass1 is done, this skim can be started

Job outputs/processing time

	File Size [Mib]	Reduction (%)	10% of the run [Gib]	Whole 10% [Tib]
slcio	6330.4	100.0	126.6	18.3
dst	590.7	9.3	11.8	1.605
Moller	275.5	4.4	5.5	0.574
Pulser	274.6	4.3	5.5	0.595
s0	182.1	2.9	3.6	0.383
v0	543.7	8.6	10.9	1.097
Fee	463.4	7.3	9.3	1.206
DST Moller	43.0	0.7	0.9	0.085
DST Pulser	11.8	0.2	0.2	0.022
DST s0	17.5	0.3	0.4	0.032
DST v0	93.0	1.5	1.9	0.184
DST Fee	42.6	0.7	0.9	0.097
Nt_tri	33.6	0.5	0.7	0.066
Nt_Moller	14.1	0.2	0.3	0.031
Nt_Fee	30.5	0.5	0.6	0.069
Sum, except Recon.slcio			52.3	6.0

To reduce tape operations, if the total size doesn't exceed 20 Gib, the whole run can be tarred, and sent to tape as a single file

Except the recon.slcio, the rest of the blinded pass1 can go to work disk, until we are will be ready for unblindg the whole data set.

$$\frac{15\text{h}(\text{per recon}) \cdot 3000(\text{files})}{500(\text{nodes})} = 90(\text{h})$$

Unblinding the 100%, estimated time will be 900h which translates into 37.5 days