6.1.2pre1 validation

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25 August 2005

- Crash analysis 6.1.2pre1 and 6.1.2pre1_opt
- 6.1.2pre1 Performances evaluations
- Differences 6.1.2pre1 and 6.1.2pre1_opt
- 6.1.2pre1 vs 6.1.0

Crash Test

generated events:

Antonio's Results

14 (Physics processes) x 10 (CAF sections) x 5.000 events

6.1.1pre2:

0 crash from cdfSim
1 crash from Production (non reproducible)

6.1.2pre2opt:

6 crashes from cdfSim
1 from Production
core files are in .tgz on
fcdflnx4:/**cdf/data02/s5/mc/sidoti/612pre1_opt**

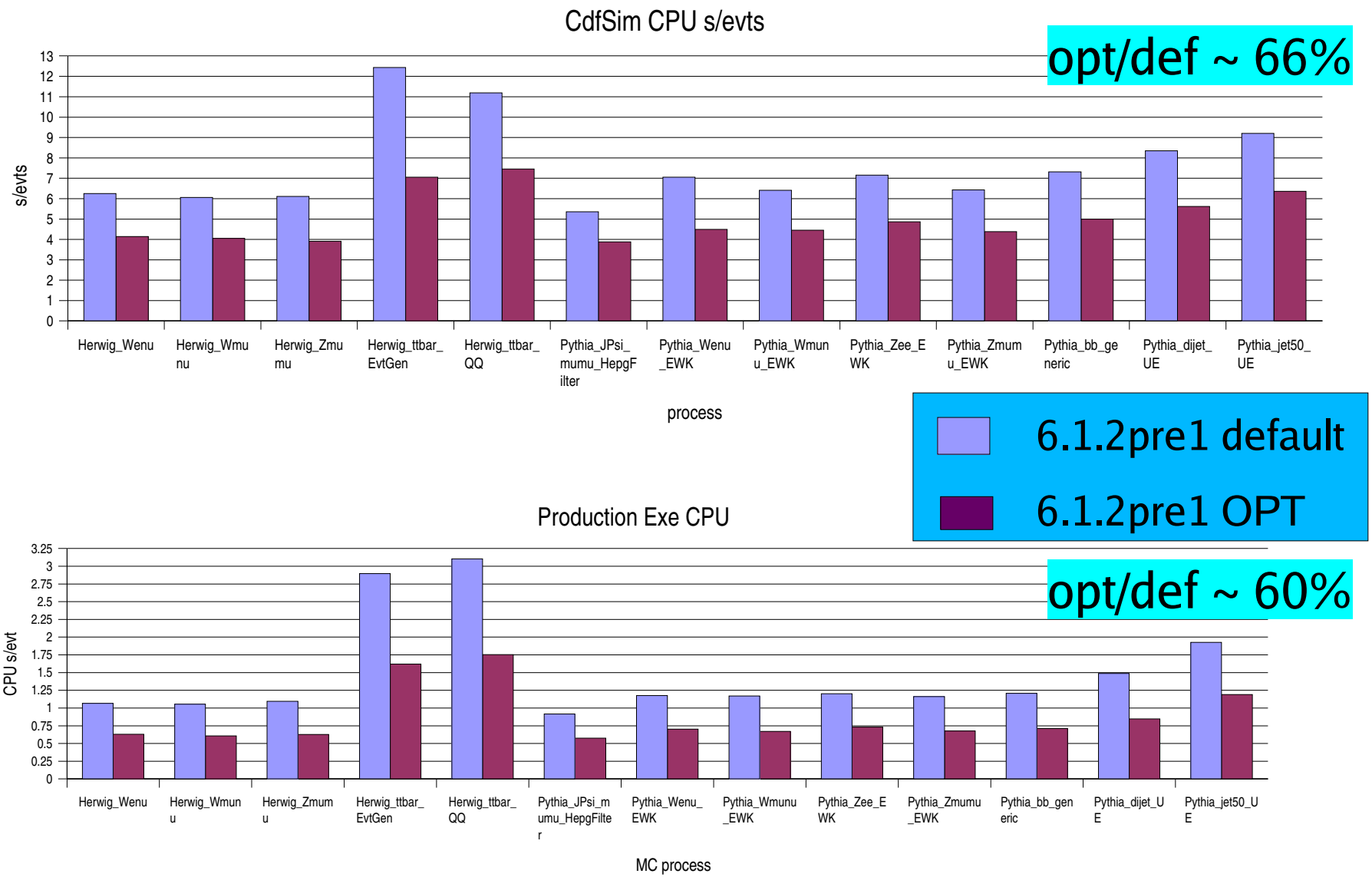
Soon's Results

5k evts/section

MC proc	crashed sections/total
Herwig_ttbar_EvtGen	2/20
Herwig_Wenu	1/20
Pythia_Zee_EWK	0/20
Pythia_jet50_UE	0/20
Total	3/80

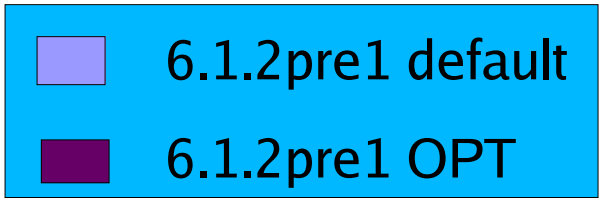
CdfSim Performances tests

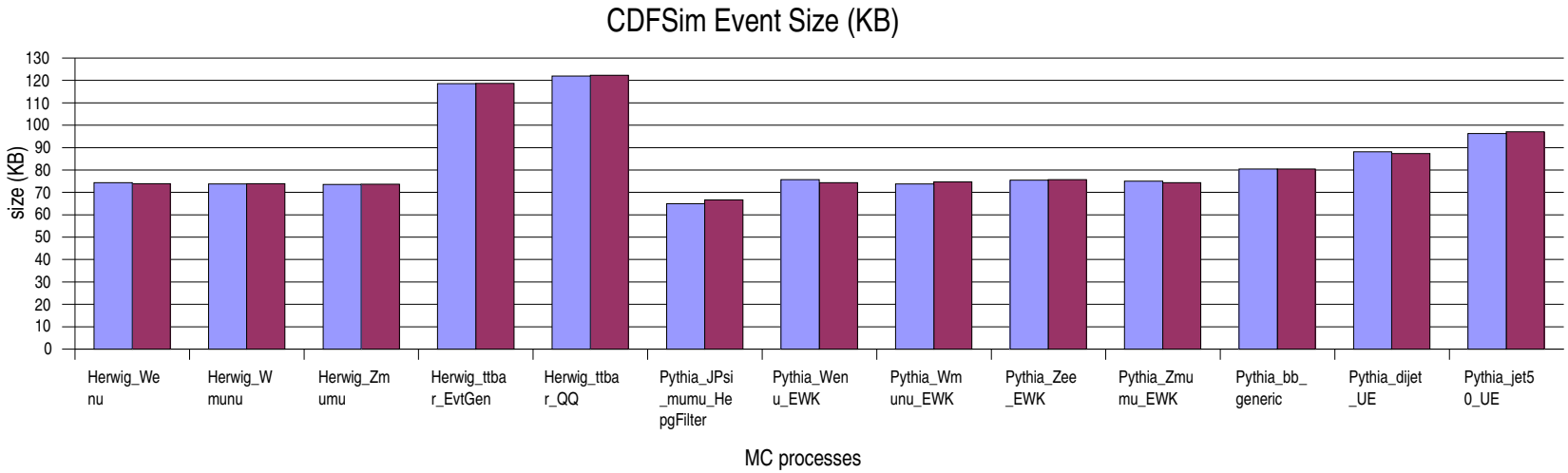
CPU seconds/event
1k events test on Intel(R) Pentium(R) 4 CPU 2.00GHz (ncmu04)

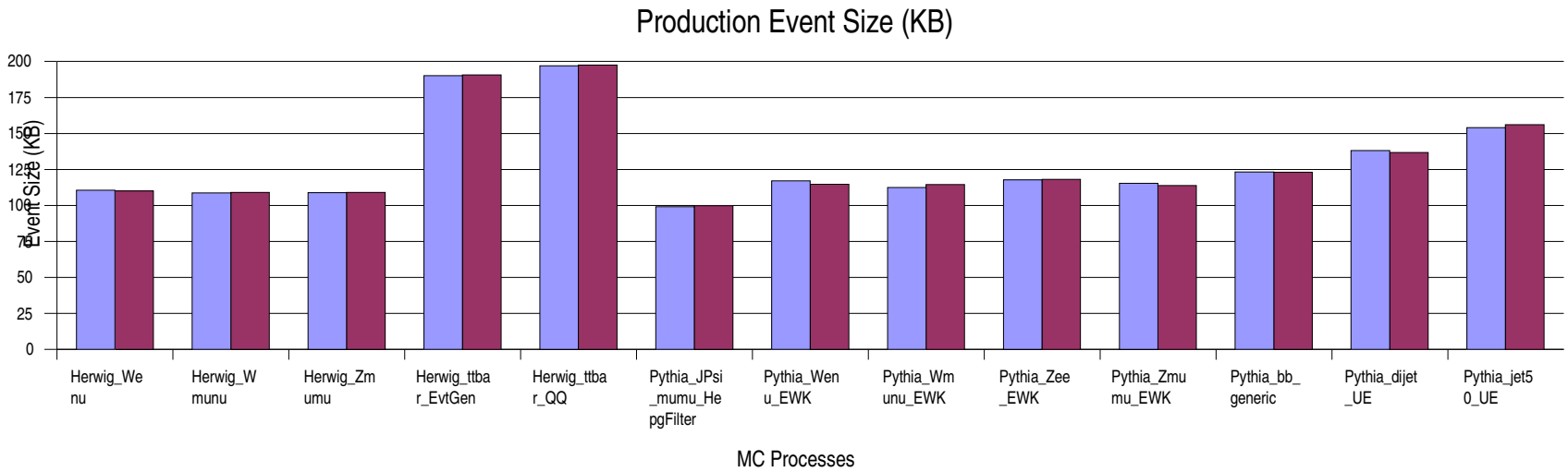


CdfSim Performances tests

Event Size (KB)

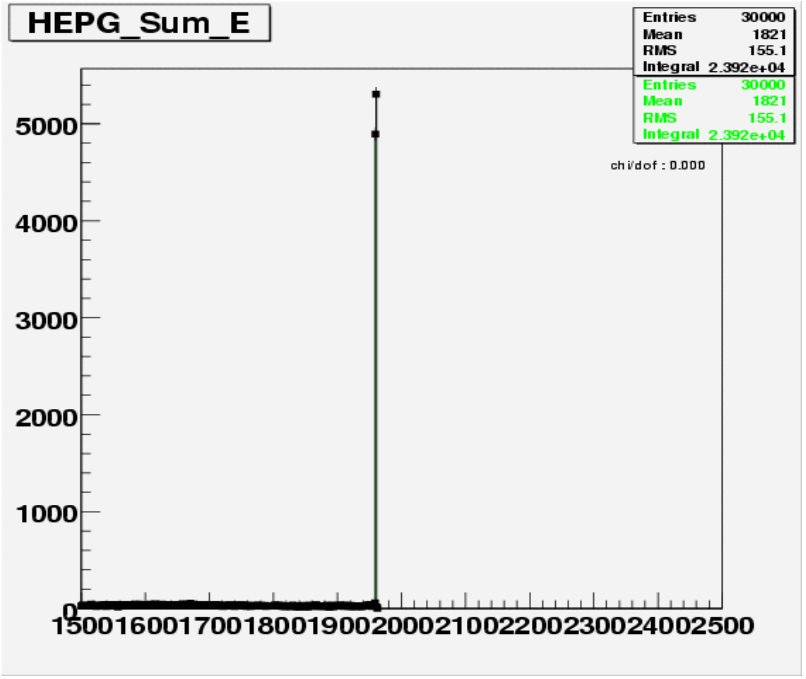


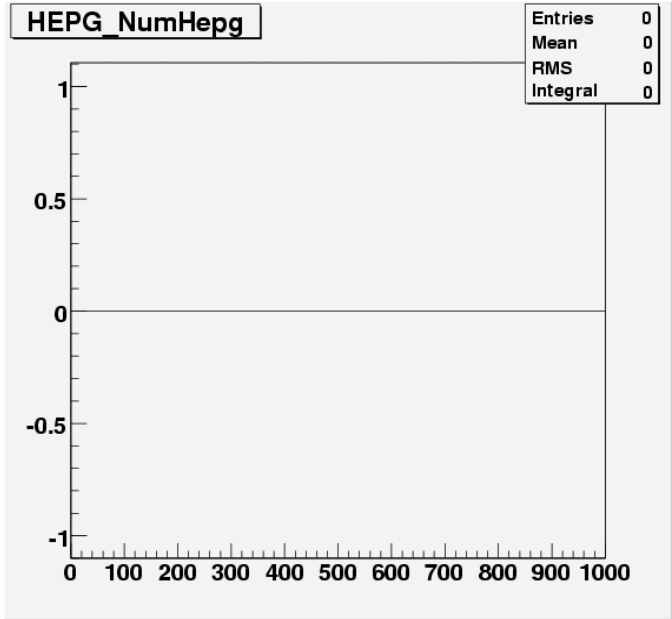




6.1.2pre1 vs 6.1.2pre1_opt

As usual results on http://lpnhe-lc.in2p3.fr/sidoti/val.html
No differences at HEPG Level



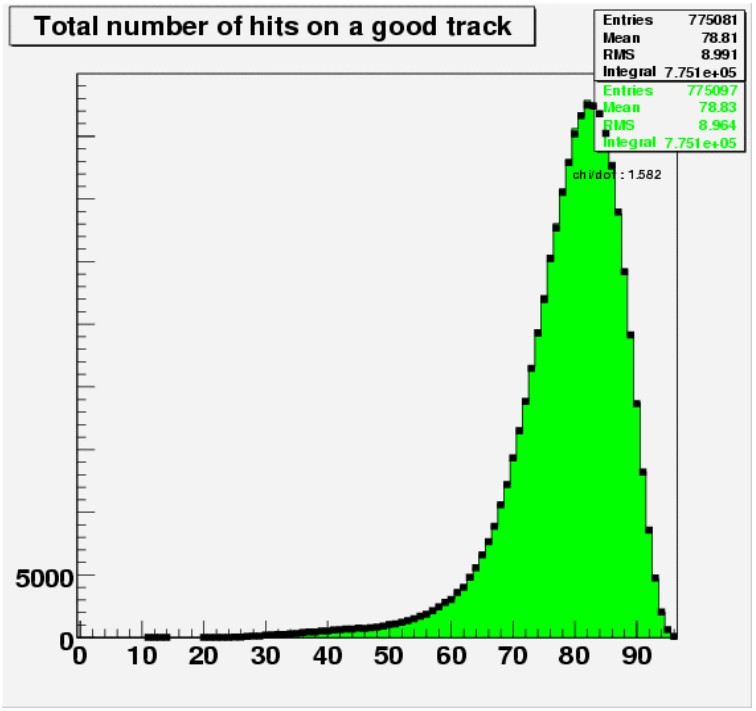


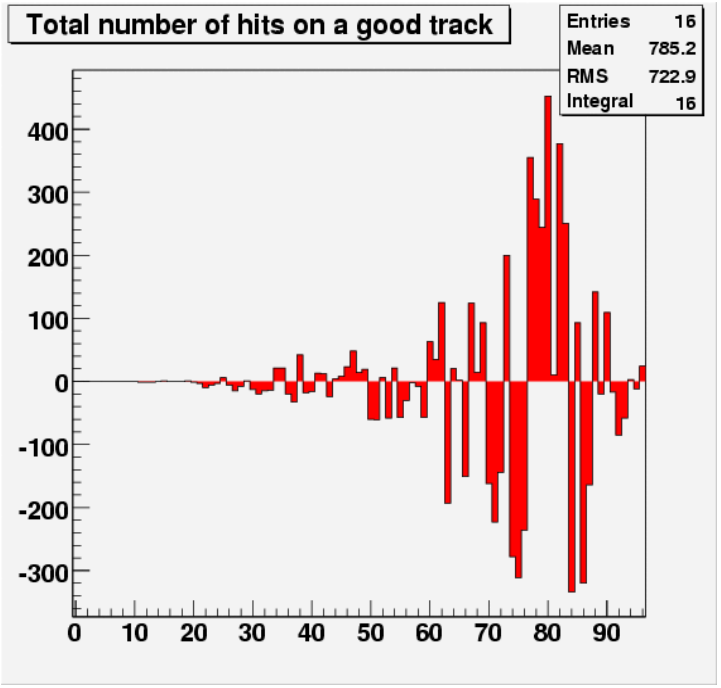
green: 6.1.2pre1_opt
dots: 6.1.2pre1

difference betwwen the two histos

6.1.2pre1 vs 6.1.2pre1_opt

differences in simulated variables: Just few examples





ttbar QQ

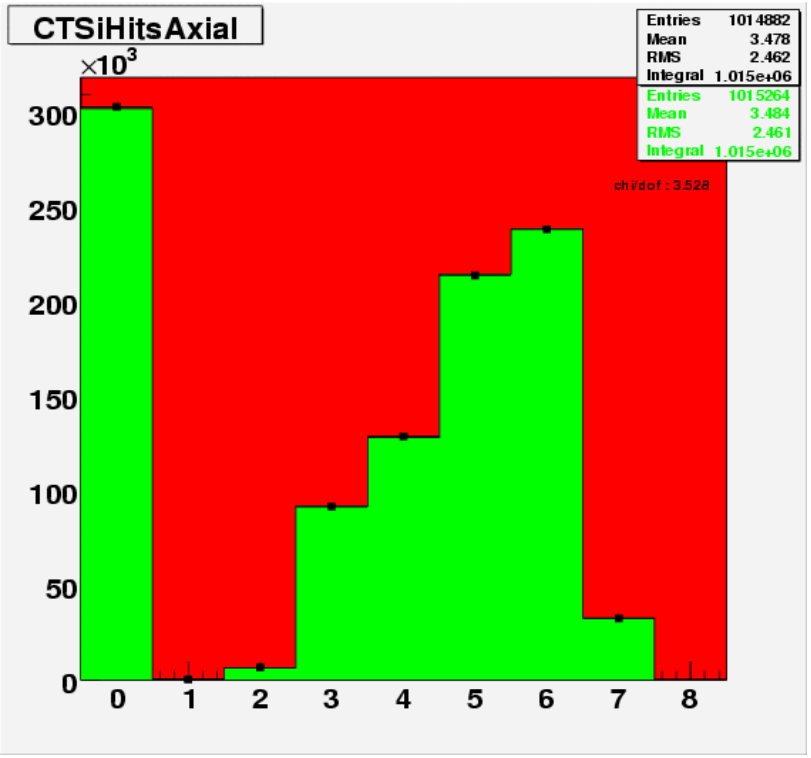
green: 6.1.2pre1_opt

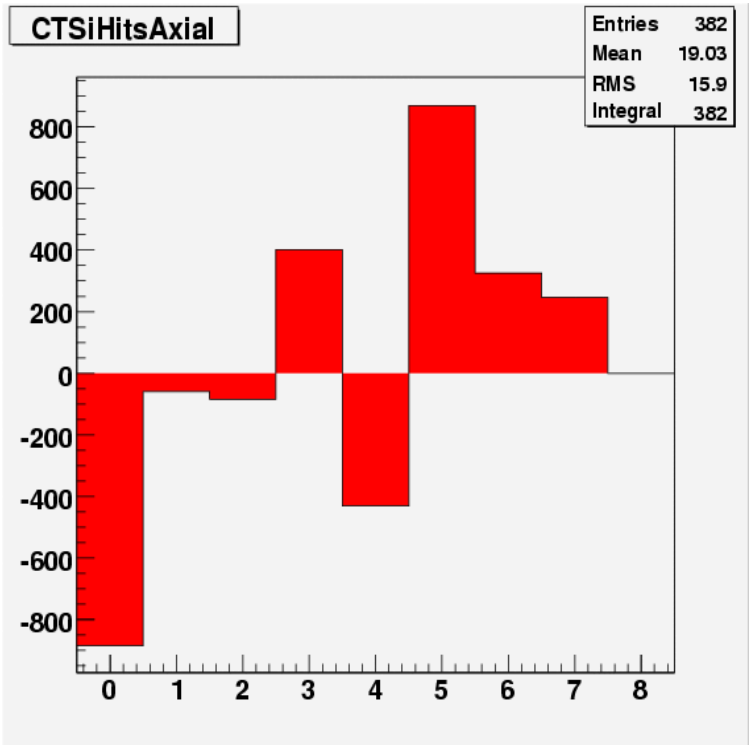
dots: 6.1.2pre1

difference between the two histos

6.1.2pre1 vs 6.1.2pre1_opt

differences in simulated variables: Just few examples





green: 6.1.2pre1_opt
dots: 6.1.2pre1

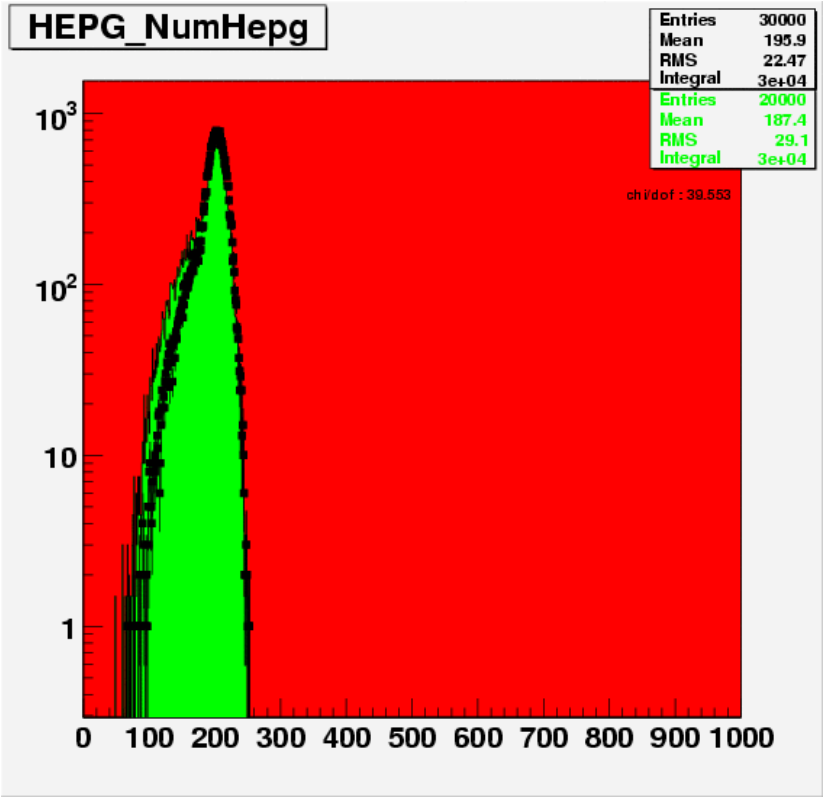
difference between the two histos

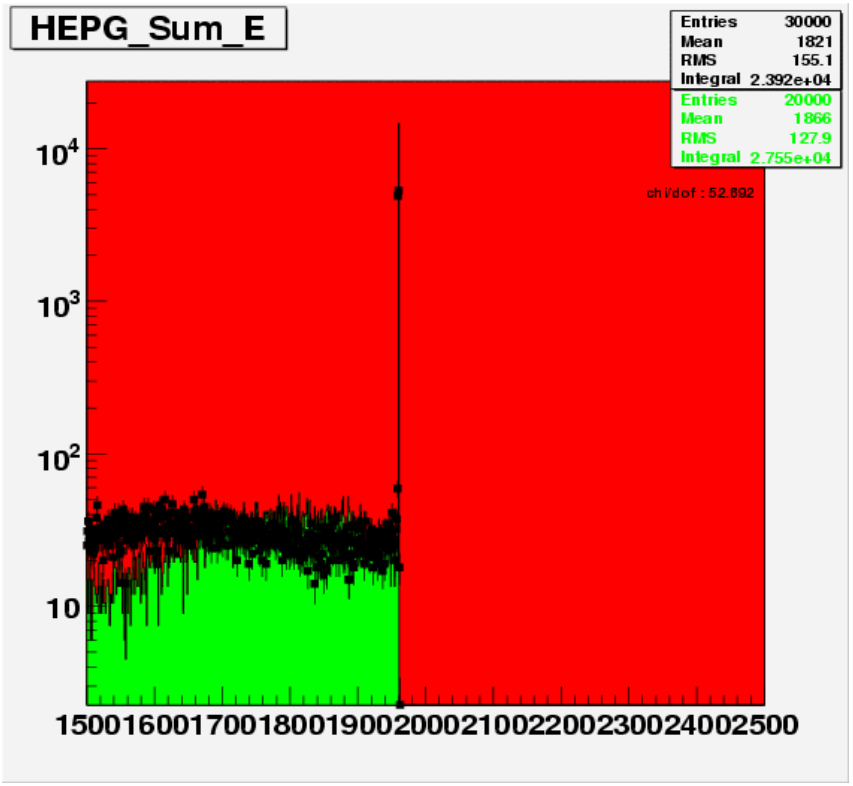
Z->mu mu

It seems that larger differences occur in Tracking variables

6.1.2pre1 vs 6.1.0

HEPG Variables



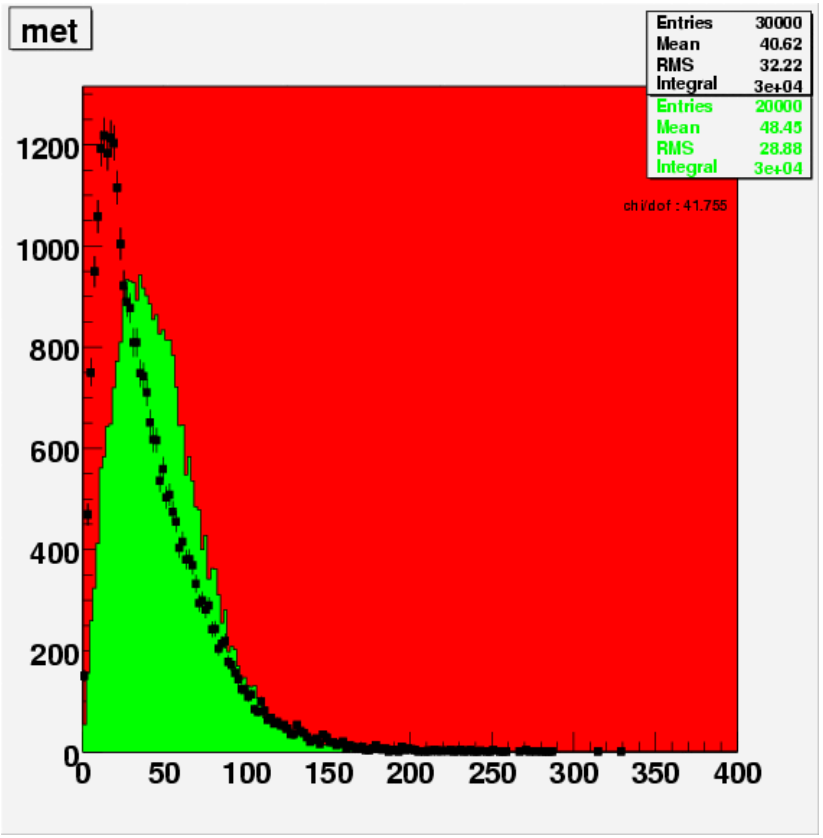


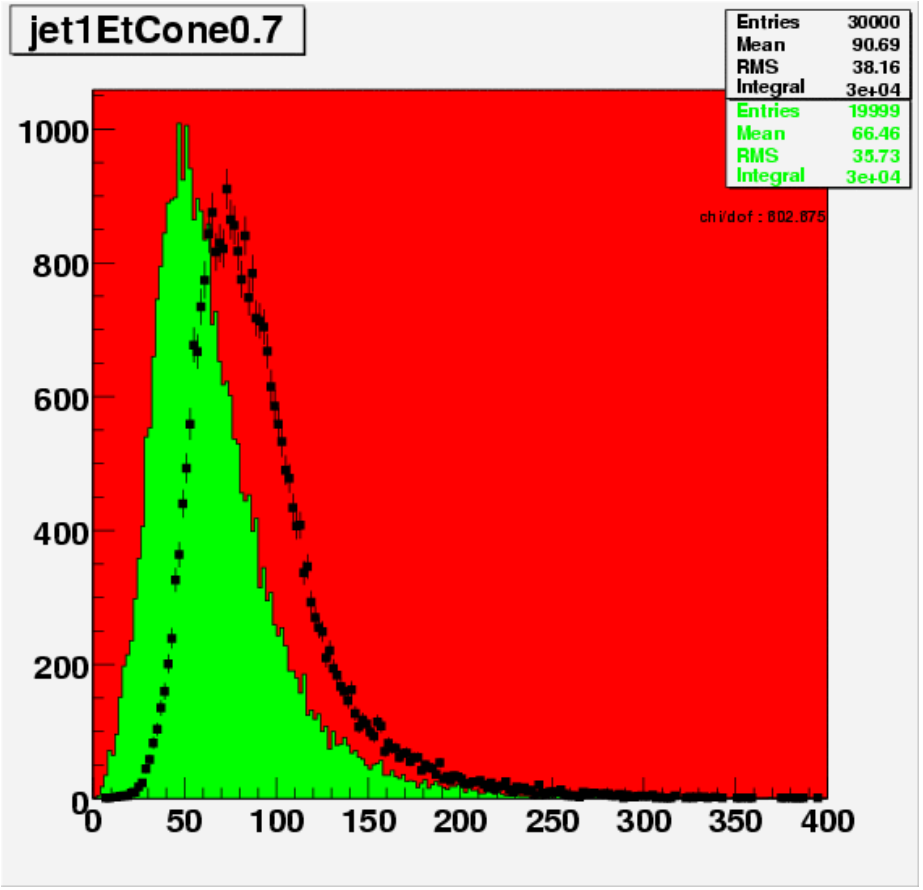
green: 6.1.0
dots: 6.1.2pre1

ttbar QQ

6.1.2pre1 vs 6.1.0

Large differences



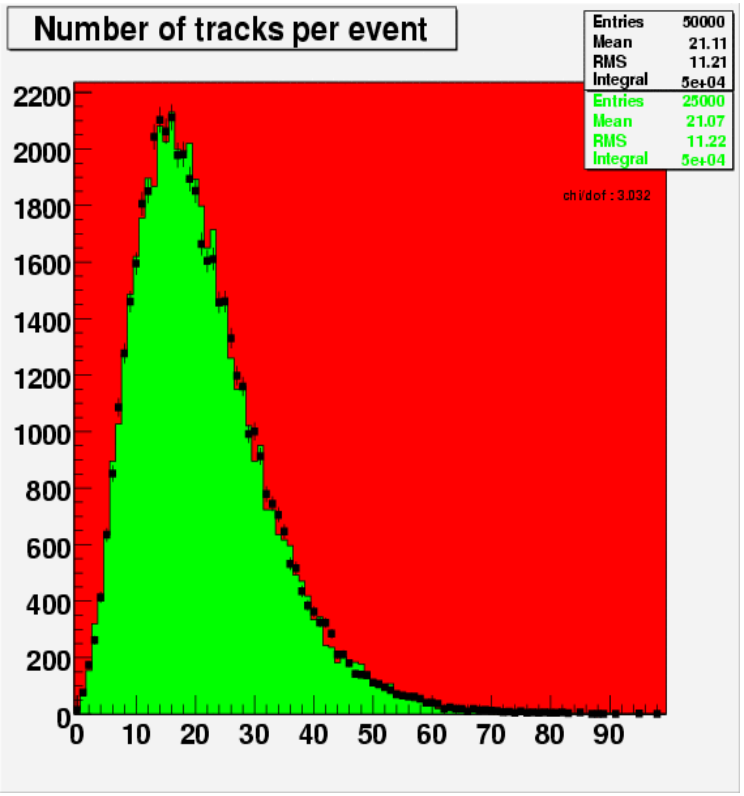


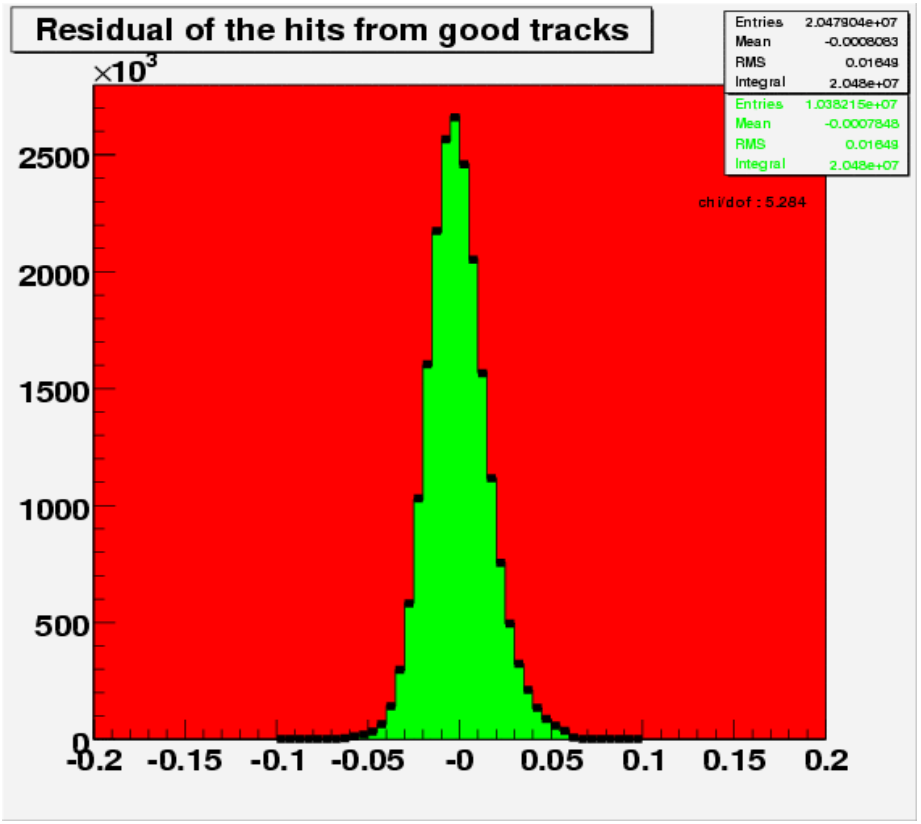
green: 6.1.0
dots: 6.1.2pre1

ttbarQQ

6.1.2pre1 vs 6.1.0

Large differences



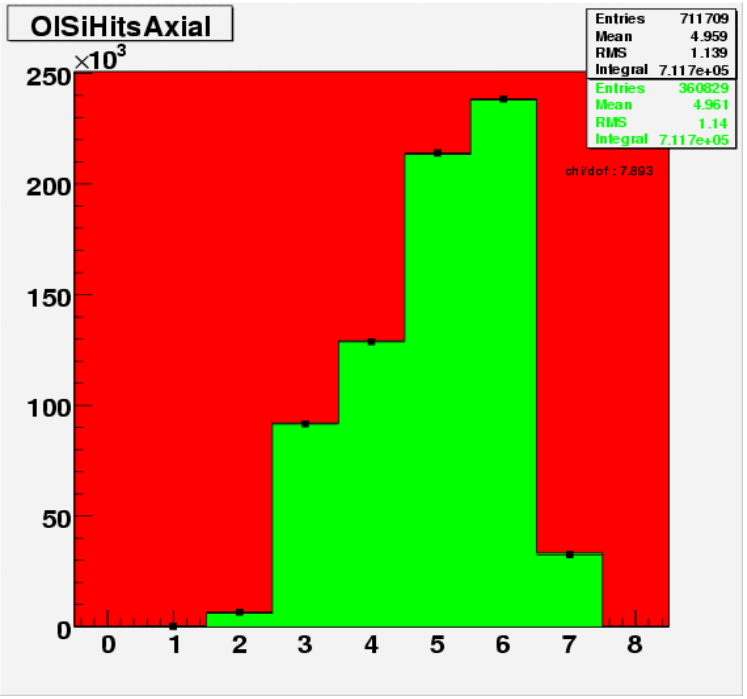


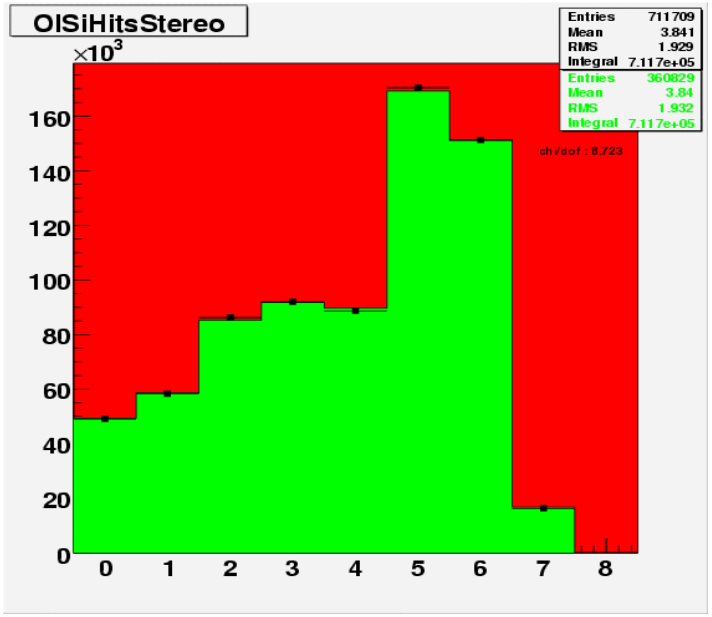
green: 6.1.0
dots: 6.1.2pre1

Z->mumu

6.1.2pre1 vs 6.1.0

Large differences



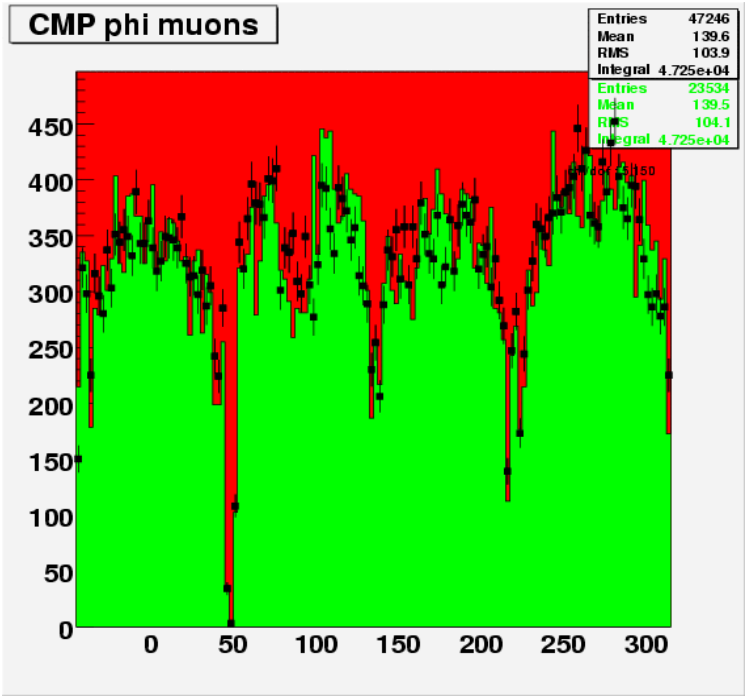


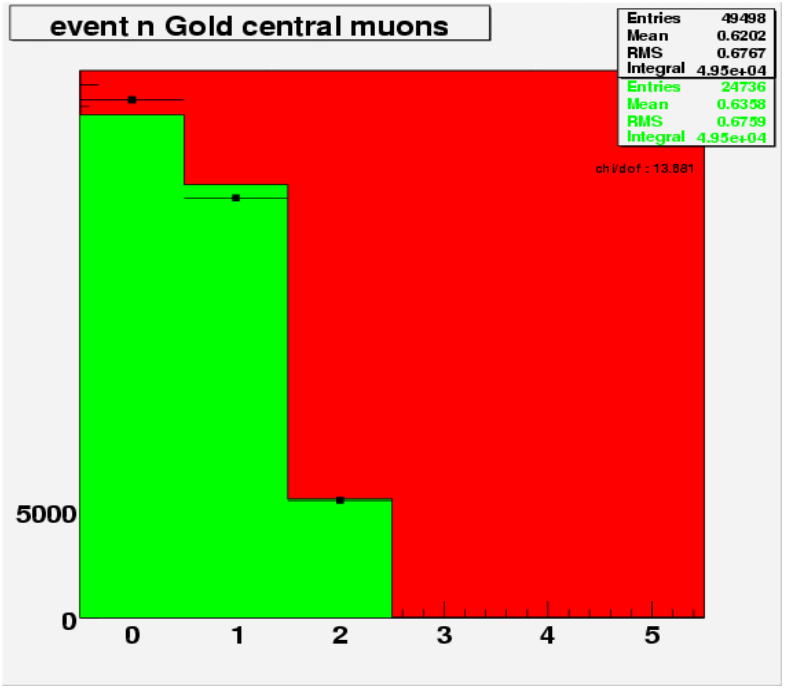
green: 6.1.0
dots: 6.1.2pre1

Z->mumu

6.1.2pre1 vs 6.1.0

Large differences



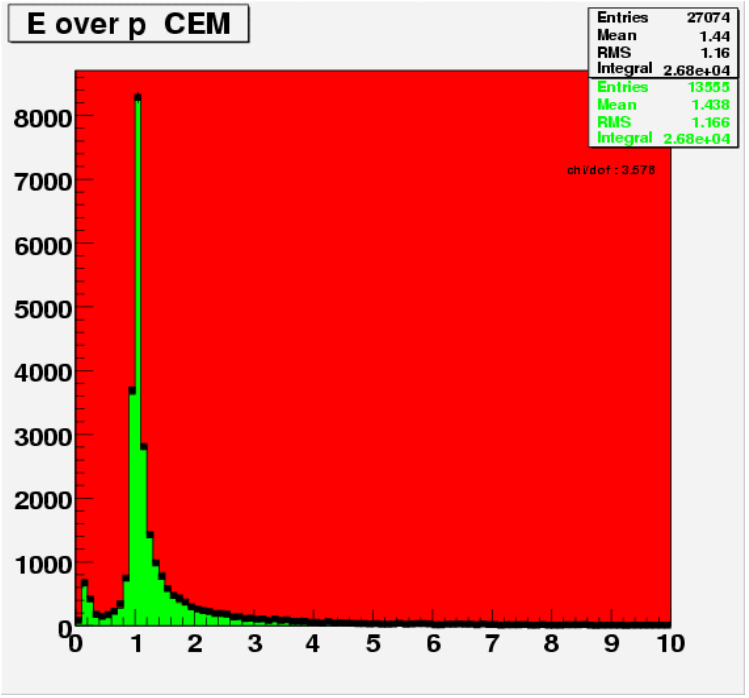


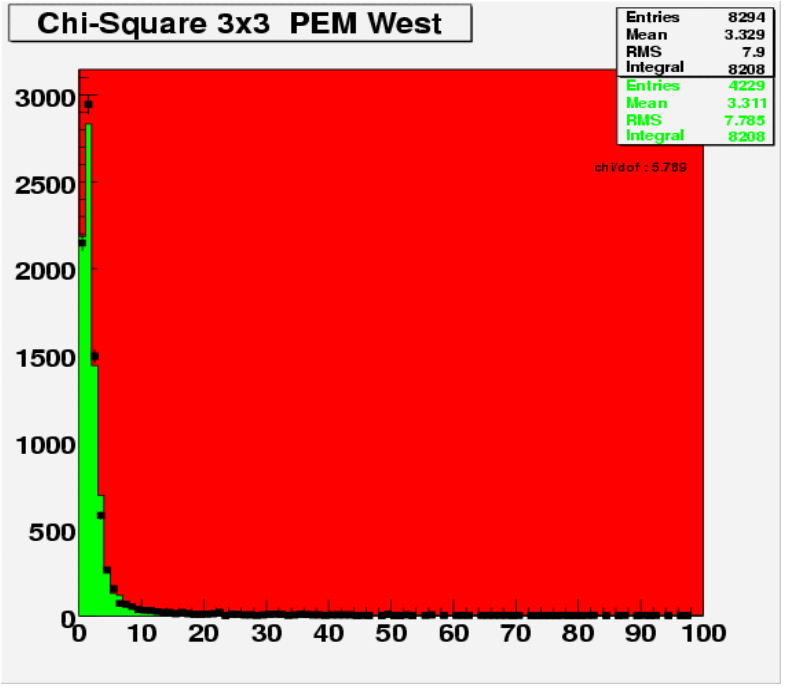
green: 6.1.0
dots: 6.1.2pre1

Z->mumu

6.1.2pre1 vs 6.1.0

Large differences



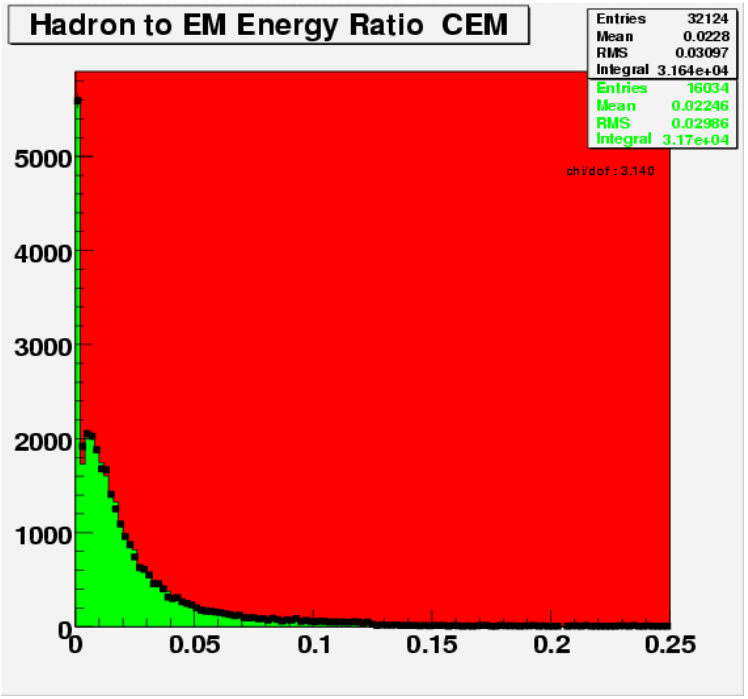


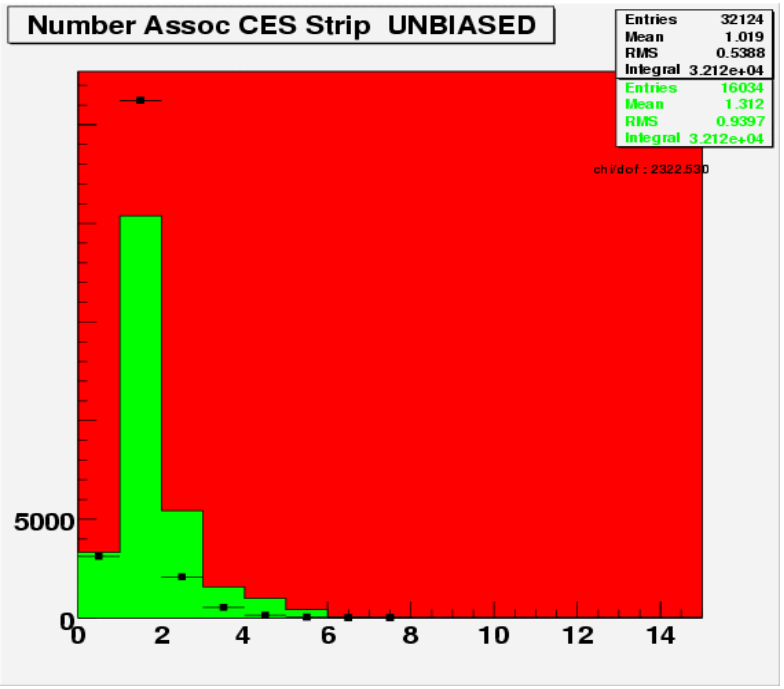
green: 6.1.0
dots: 6.1.2pre1

W->e nu

6.1.2pre1 vs 6.1.0

Large differences





green: 6.1.0
dots: 6.1.2pre1

W->e nu

Conclusions

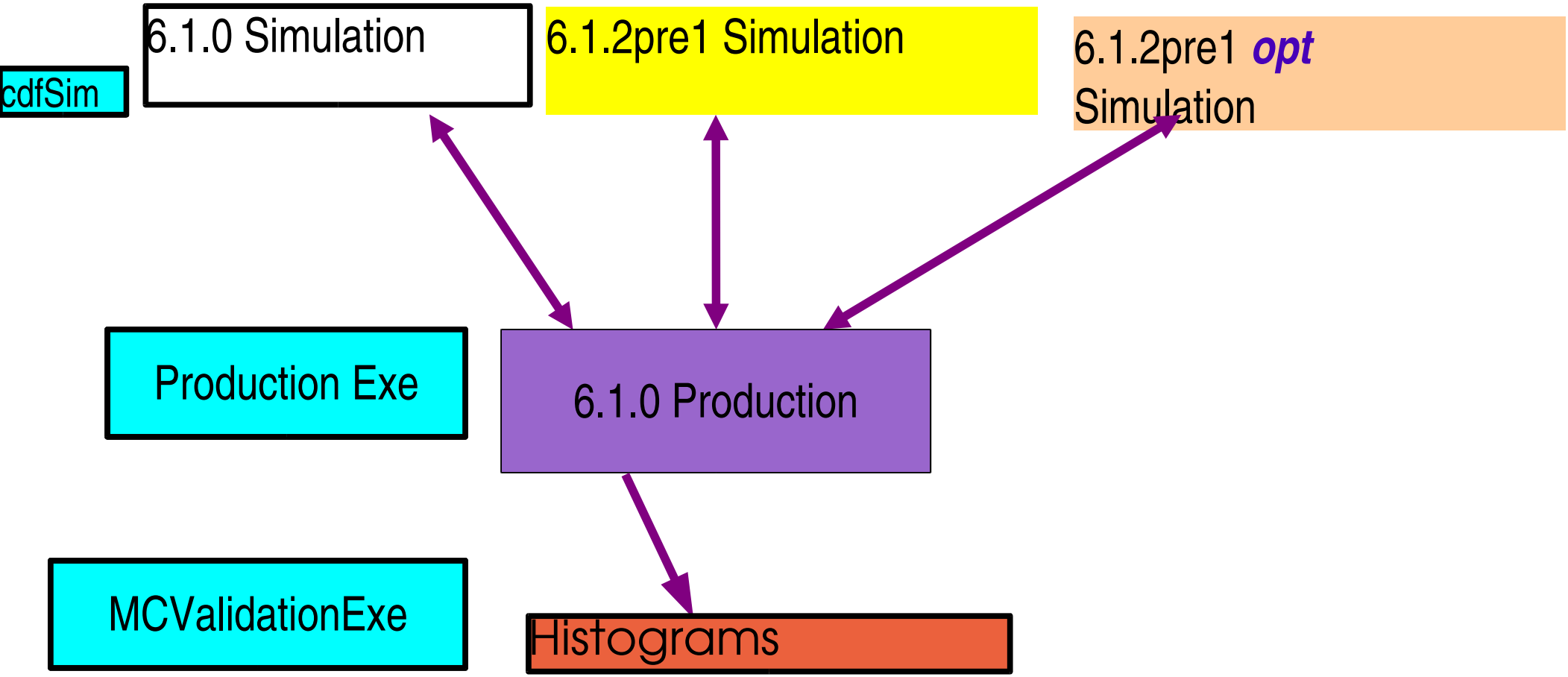
- Crash rate seems acceptable for 6.1.2pre1, larger for optimized cdfSim
- cdfsim optimized takes ~40 % less than the default version
- Some differences between default and optimized version on simulated variables (HEPG are the same)
- Large differences betweens 6.1.0 and 6.1.2pre1 (in particular for ttbar QQ)

Backup

MC Validation

Current list of MC processes from Simulation group
SimulationMods/validation/validation.list
We have run 50k events for each of the 14 processes

Example:



We start with **exactely** the same random number seeds

WEB report

File Edit View Go Bookmarks Tools Help

http://lpnhe-lc.in2p3.fr/sidoti/val.html

Getting Started Latest Headlines

MC Validation version 0.0 | L'espresso | http://www-cdf.f...rk_612pre1.html | http://www-cdf....nute050803.html

MC VALIDATION

- 5.3.3 vs 5.3.4
- 5.3.4 vs 6.1.0pre4
- 5.3.4 vs 6.1.0 vs 6.1.0 opt (ttbar)
- 5.3.4 vs 6.1.0 vs 6.1.0 opt (Z->mumu)
- 5.3.4 vs 6.1.0 vs 6.1.0 opt (W->enu)
- 5.3.4 vs 6.1.0 vs 6.1.0 opt 2 (ttbar)
- Difference 6.1.0 vs 6.1.0 opt (ttbar)
- Difference 6.1.0 vs 6.1.1pre2
- 6.1.2pre1 vs 6.1.0 (NEW)
- Difference 6.1.2pre1 - 6.1.2pre1 OPT (NEW)
- 6.1.2pre1 vs 6.1.2pre1 OPT (NEW)

Done