

MC Production Status

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- Current/Recent production activities
- Current issues (bugs, etc.)

WWW info.:

http://hep.physics.utoronto.ca/RachidMazini/cdf/cdf_mcprod.html

→ [list of MC requests for various physics groups](#)

http://www-cdf.fnal.gov/internal/mcProduction/Priority_20040625_2.txt

→ [Prioritized list/status as per physics conveners agreement](#)

Recently completed samples (highest priority):

- 5.3.2 (run dependent MC + 0 min. bias)
 - Pythia $t\bar{t}$ incl. (1M) (completed/on tape) ttopui
 - Herwig $t\bar{t}$ incl. (1M) (completed/on tape) ttopti
 - Pythia $W \rightarrow e\nu$ (2M) (completed) wtop1i
 - Pythia $W \rightarrow \mu\nu$ (2M) (completed) wtop2i
 - Pythia $W \rightarrow \tau\nu$ (2M) (50% completed) wtop3i
 - Pythia DY $Z \rightarrow ee$ (2M) (completed) ztop2i
 - Pythia DY $Z \rightarrow \mu\mu$ (2M) (completed) ztop0i
 - Pythia DY $Z \rightarrow \tau\tau$ (1M) (completed) ztop1i
 - Pythia QCD dijets $p_{T\min}=18$ (5M) (completed) jqcd1f
 - Pythia QCD dijets $p_{T\min}=40$ (5M) (completed) jqcd2f

continued...:

Switched to 5.3.3, as release as soon as it was validated/tested

- 5.3.3 (run dependent MC + 0 min. bias)
 - Herwig QCD dijets $p_{Tmin}=18$ (5M) (in production) jqcd1g
 - Herwig QCD dijets $p_{Tmin}=40$ (5M) (in production 85% completed) jqcd2g
 - Low Pt, b-tag scale factors (2M) (completed) btop4a

Current issues:

- File concatenation seems to be a big overhead at the moment
- Recently discovered bug (multiple runs implementation):
 - affects simulated runs with multiple run-sections: wrong event offset in last run-section.
 - already fixed (in the machinery) by Dave/Pasha
 - need to find a way to fix the produced MC samples before they go to tape if possible

Continued....:

- cdfSim: Silicon dead channels not loaded properly when accessing the DB (this is not reproducible). More likely a memory override.
- in Production: dead channels seem to be loaded properly.
- MC samples does not seem to be affected, since experts believe dead channels information only used at reconstruction stage.
- This was a reported problem for a while. Experts are looking more into it.

Conclusion:

- Overall production is going very well
 - 5.3.2 release: 22 millions completed
 - 5.3.3 release: 7 millions completed
- all of this need to go to tape...need to improve our efficiency in data handling
- Watch out for bugs !