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Special Data Productions

B->J/Psi (mu mu) Ks produced for tracking studies by M. Needham

- digi and sim files
- Each file 1000 events
- Lumi $2 \cdot 10^{32}$
- Gauss v24r6, Boole v11r5, database is 2006 standard - ie has beam-pipe section in the T region
- Spillover data is from standard production

Gaudi options [↗](#) and file catalog [↗](#) (*Hint: you only need to copy the link to your options*)

B->J/Psi(e e) Ks PFNs and files catalogs

- Data is from the standard production
- Database v30r8, Boole v12r1, Gauss v25r0

Gaudi options [↗](#) and digi file catalog [↗](#), sim file catalog [↗](#) (*Hint: you only need to copy the link to your options*)

Bu_D0K,KSpipi, PFNs and files catalogs

- Data is from the standard production
- Database v30r10, Boole v12r6, Gauss v25r4

Gaudi options [↗](#) and digi file catalog [↗](#), sim file catalog [↗](#) (*Hint: you only need to copy the link to your options*)

single pi0s used for Ecal calibration produced by Gael Rospabe

- Gauss v25r2, Boole v12r5 and Brunel v30r10.
- Pi0s have been produced with $0 < \theta < 300 \text{ mrad}$ and $0 < \phi < 2\pi$ for each energies.
- file location
 - ◆ .digi and .dst at /castor/cern.ch/grid/lhcb/user/g/grospabe/Pi0/
- Content
 - ◆ There are 7 files for different energies : 5, 10, 16.8, 34, 50, 100 and 168 GeV. In each of those files ten .digi and .dst are present, each contain 10.000 events.

single photons produced by Gael Rospabe

- Gauss v25r3, Boole v12r5 and Brunel v30r10.
- file location
 - ◆ .digi and .dst at /castor/cern.ch/grid/lhcb/user/g/grospabe/Pho * Content * (like for the PI0s) $10 \cdot 10.000$ at 5, 10, 16.8 and 33.8 GeV, to come 50, 100, 168.

Data Sets for Alignment challenge (A.Hicheur)

- Beam halo
 - ◆ Gauss ?, Boole ? and Brunel ?.
 - ◆ Contact person:
- Beam gas
 - ◆ Gauss ?, Boole ? and Brunel ?.
 - ◆ Contact person:
 - ◆ Personal samples (T.Lastovicka, V.Vagnoni):

- nominal beam-1H events

`/castor/cern.ch/user/v/vagnoni/lumi/test/v200511/beam1/`

`/castor/cern.ch/user/v/vagnoni/lumi/test/v200511/beam2/`

- nominal beam-Xe events:

`/castor/cern.ch/user/v/vagnoni/lumi/hijing/Xeon/new/beam1/`

`/castor/cern.ch/user/v/vagnoni/lumi/hijing/Xeon/new/beam2/`

- Minimum bias @ ECM = 900 GeV
 - ◆ Gauss \geq v25r4 provides example options PilotRun.opts that can be included after those of event type (30000000.opts for min bias). The default option given with Gauss v25r6 is to produce events with VELO open and Magnetic field off. There are indication for the other settings as comments.
 - ◆ Boole ? and Brunel ?.
 - ◆ Contact person:
 - ◆ Public test samples (Gloria Corti): 5k in various configuration (sim files), these files have been digitized by Matt Needham (digi files) see list at http://lhcb-reconstruction.web.cern.ch/lhcb-reconstruction/2007_running/data_sets.htm,
 - ◆ personal sample (Steve Blusk), 5k evts:
`/castor/cern.ch/user/s/sblusk/Boole/digi/Boole_Global_B0_450GeV_5000_1.digi`
- Minimum bias @ nominal energy: available in official production
- b events: available in official production

J/Psi -> ee samples for pilot run studies (O.Deschamps, A.Hicheur, T.Lastovicka)

Min bias at $2 * 10^{33}$ (G. Corti)

- 2 files of 500 k events (each file is 800 Mbytes)
`/castor/cern.ch/user/g/gcorti/Gauss/2006/v25r6/30000000.500ev.Lumi20.16Nov.sim`
`/castor/cern.ch/user/g/gcorti/Gauss/2006/v25r6/30000000.500ev.Lumi20.20Nov.sim`
- XML Catalog: `/afs/cern.ch/user/g/gcorti/public/POOL/Catalog_v25r6.xml`

-- ThomasRuf - 20 Oct 2006

B inclusive digi and sim files at high Luminosities (C.Jones)

Samples of high luminosity data sets are available, from the private Cambridge production I ran for the LHCb Upgrade meeting.

Samples at fixed luminosities of :-

- $L= 5 \times 10^{32}$
- $L= 8 \times 10^{32}$
- $L= 1 \times 10^{33}$
- $L= 2 \times 10^{33}$

are available. At each luminosity, 500 B inclusive SIM (Gauss v25r7) and DIGI (Boole v12r10) files are available (more are available and can be copied to castor if needed). The digi files were produced with spillover turned ON, so in addition 1500 min bias SIM events are also available.

The files are available in castor at

```
> nsls /castor/cern.ch/user/j/jonrob/data/HighLumi/
```

I hope the file names are self explanatory... The SIM files containing 10000000 are the B inclusive signal files, whilst those containing 10000000-30000000 are the corresponding min bias spillover files.

Note : Due to a ROOT feature, the minimum bias file at $L=2 \times 10^{33}$ was truncated at 1.9G, due to a legacy 2G file limit and a second file (the XXX_1.sim file) was started. This means the DIGI files at this setting have less than 500 events.

In addition, a POOL XML catalogue file is available, which can be used to provide transparent DIGI->SIM access, if needed.

Finally, DSTs could also be made available, if there is interest. However, these DSTs were produced with an untuned Brunel application (v30r14) with almost no changes from the vanilla version (A few tweaks to the seeding and RICH). So the quality of these data sets is unknown. First indications from the Upgrade Meeting [are](#) not horrible though...

-- ChrisRJones - 15 Jan 2007

This topic: LHCb > SpecialDataSets

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