

Monte Carlo mass production central processing for CALICE test beam based on the Mokka-06-06-Calice02

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MC mass production

- Software: Mokka-06-06-Calice02
- Tools: GRID and SRM at DESY, Hamburg.
- 300K events in 30 slcio files
- Event number from 0 to 299999
- File name from 001 to 030
- <https://twiki.cern.ch/twiki/bin/view/CALICE/TbCernAugust2006>

Webpage Screenshots

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r6 - 02 Apr 2008 - 17:21:16 - ShaoJun

Electron 45GeV TBCern0806_01_dchxy_new

- g4 commands will be used in next test production.

```

/run/verbose 0
/event/verbose 0
/tracking/verbose 0

/generator/generator particleGun
/run/particle/setCut 0.050 mm
/gun/particle e-
/gun/momentum 45 GeV
/gun/momentumSmearing 0.098 GeV
/gun/direction 0 0 1
/gun/position 1.5 0.6 -60000 mm
/gun/positionSmearing 11.0 4.8 0. mm
/gun/info
  
```

CALICE Web

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CERN Webs

- ABATBEA
- ACPP
- ADCgroup
- AfricaMap
- ALICE
- AliceTOF
- ALPHA
- AliceSPD
- ArdaGrid
- AthenaFCalTBAna
- Atlas
- AXIALPET
- CAF

The following MC production (001-030) were produced in DESY GRID.

- You could find the following MC production at `"/grid/calice/shaojun/"`. And in the same directory, you could also find the **Macro file, steer file and log file** in a **tar ball** which has the same name.
- Physicslist: **LHEP**
- Mokka-06-06-Calice01

slcio name	Physics List	Random Seed	Events	Size
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_001.slcio	LHEP	860100	0-9999	115974816
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_002.slcio	LHEP	860200	10000-19999	116027556
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_003.slcio	LHEP	860300	20000-29999	116235684 116005196
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_004.slcio	LHEP	860400	30000-39999	116114536 116048188
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_005.slcio	LHEP	860500	40000-49999	116114720 116017964
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_006.slcio	LHEP	860600	50000-59999	116111032 116087340

- steer file will be used in next test production.

```

/Mokka/init/userInitString TIMEOUT_TO_RELAX_TMP 120
/Mokka/init/userInitInt SLEEP_BEFORE_RETRY 5

/Mokka/init/detectorModel TBCern0806_01_dchxy_new
/Mokka/init/globalModelParameter EcalTranslateX -27 mm
/Mokka/init/globalModelParameter EcalTranslateY -39.5 mm

/Mokka/init/randomSeed 4100
/Mokka/init/startEventNumber 0
/Mokka/init/lcioFilename Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_001.slc
/Mokka/init/lcioDetailedShowerMode false
/Mokka/init/lcioWriteCompleteHepEvt true
/Mokka/init/lcioWriteMode WRITE_NEW

/Mokka/init/physicsListName LHEP
/Mokka/init/rangeCut 0.05 mm
  
```

Cloud Controls DefaultWeb DESgroup EGEE ELFms ETICS EgeePtf FIOgroup Gaudi GeneratorServices GuidesInfo HCC Inspire ILCBDSColl ILCTPC ItCommTeam Know LAr LCG LCGAAWorkbook LHCAccess

Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_025.slcio	LHEP	300251	240000-249999	116028476
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_026.slcio	LHEP	300261	250000-259999	116159624
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_027.slcio	LHEP	300271	260000-269999	116304916
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_028.slcio	LHEP	300281	270000-279999	116139464
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_029.slcio	LHEP	300291	280000-289999	116103760
Electron_45GeV_10kevt_TBCern0806_01_dchxy_new_030.slcio	LHEP	300301	290000-299999	116111600

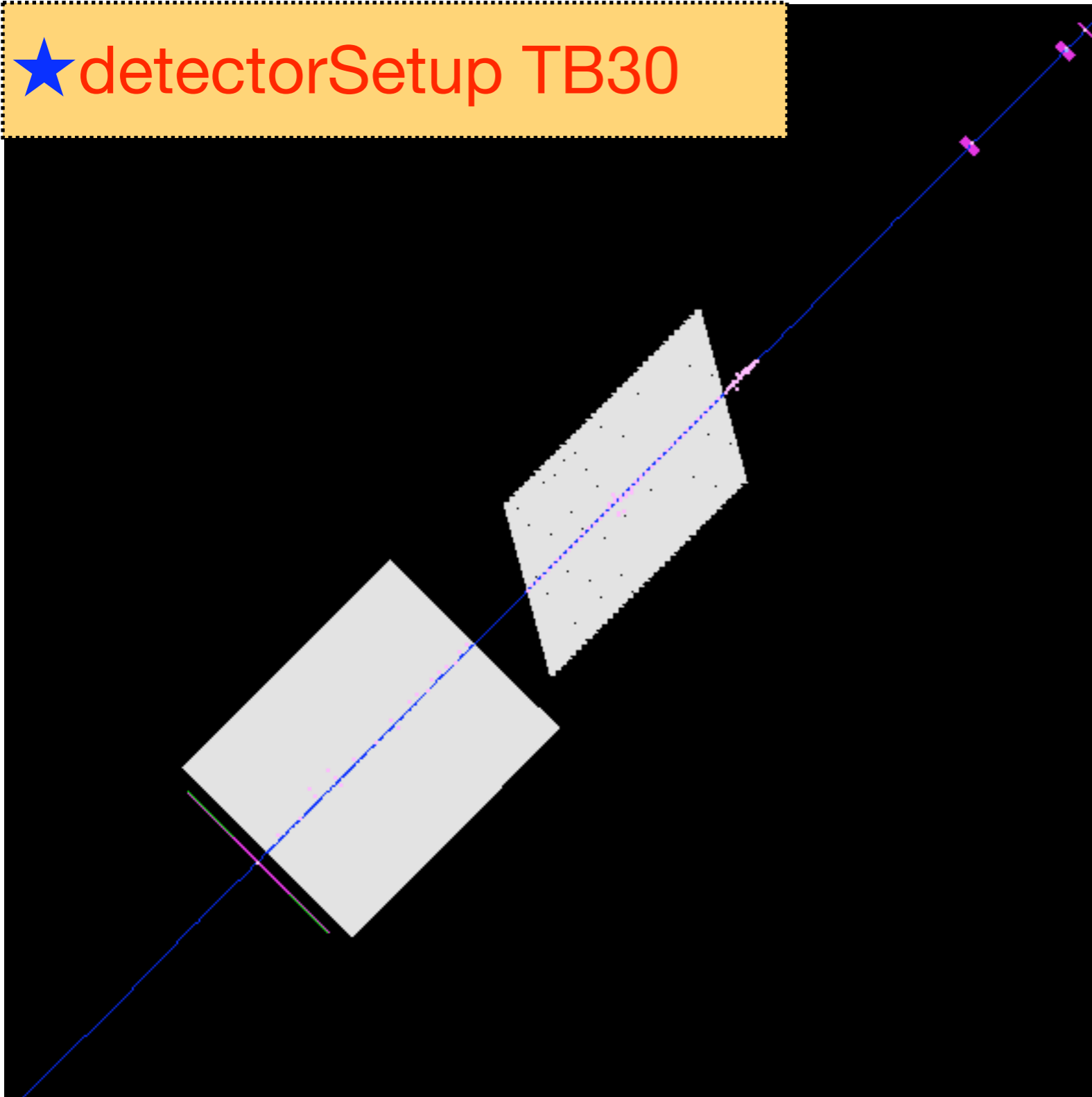
Where are they?

- The slcio files are in the directory “/grid/calice/shaojun/”.
- More detail information about the “g4 Macro file” and “Mokka steering file”, please check the twiki webpage. “<https://twiki.cern.ch/twiki/bin/view/CALICE/TbCernAugust2006>”.

Running jobs

top view

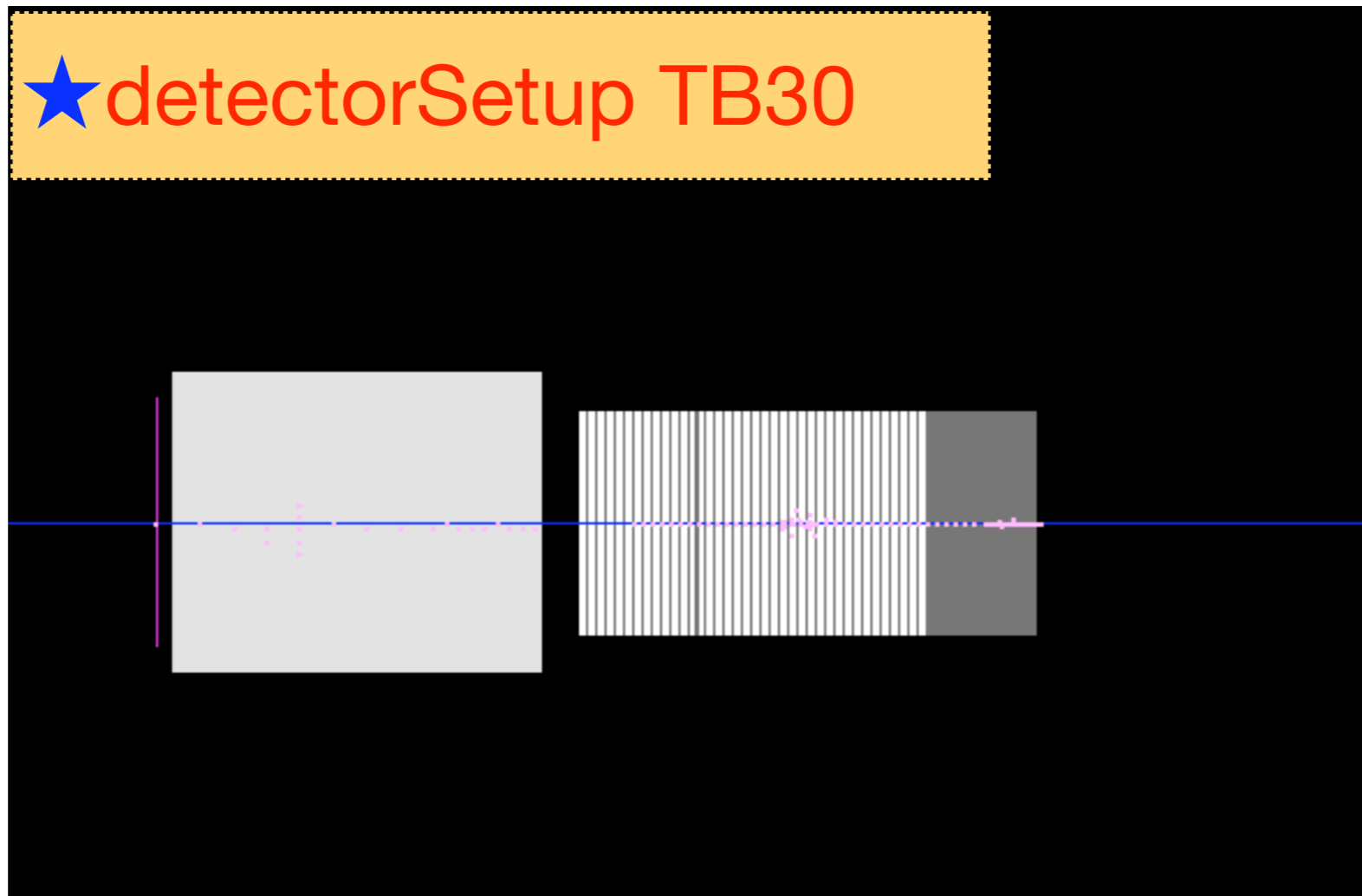
★ detectorSetup TB30



- Test beam at CERN for rotation HCAL
- 15GeV Pion test beam, HCAL rotated 30 degree: reference run 350383

Running jobs

side view



Summary the jobs are done

- test beam at cern:
- 10GeV electron testbeam: reference run 300200, 310056 and 300672
- 12GeV electron testbeam: reference run 300673
- 15GeV electron testbeam: reference run 300202
- 20GeV electron testbeam: reference run 300236
- 30GeV electron testbeam: reference run 300207
- 40GeV electron testbeam: reference run 300235
- 45GeV electron testbeam: reference run 330384 and 300195
- test beam for rotation HCAL
- 15GeV Pion test beam, HCAL rotated 30 degree: reference run 350383

Summary the jobs are required

- test beam at cern:
- 15GeV Pion test beam, HCAL rotated 30 degree: reference run 350383
- 10GeV Pion test beam, HCAL rotated 30 degree: reference run 350384
- 12GeV Pion test beam, HCAL rotated 30 degree: reference run 350390
- 8GeV Pion test beam, HCAL rotated 30 degree: reference run 350391

If you find any problem in the MC productions, please let me know, I appreciate it very much.