Subject: FEEMC from ROOT file
Posted by Aleksandra Biegun on Wed, 14 Nov 2007 17:41:11 GMT
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Hi All,

I just commit to svn a macro for creating a ROOT file for
forward end-cap of emc (FEEMC) "createRootGeoFileFwEnd.C"
which is in
/pandaroot/macro/emc/
directory. This end-cap geometry is created according to
design made by Herbert Loehner and Henk Smit at KVI
(discussed and accepted by PANDA collaboration at CM in Dubna).

I also adapted the PndEmc.cxx (*.h) code for it.
This endcap is also called "module 3",
so now one should not use both inputs for this endcap
at the same time.

If someone wants to run simulation with barrel and backward endcap (from "emc_module1245.dat", without module 3) and forward endcap (from "emc_module3.root") one should called twice PndEmc class:

```
CbmDetector *Emc = new PndEmc("EMC",kTRUE);
Emc->SetGeometryFileName("emc_module1245.dat");
Emc->SetVerboseLevel(3);
fRun->AddModule(Emc);

CbmDetector *Emc = new PndEmc("EMC",kTRUE);
Emc->SetGeometryFileName("emc_module3.root");
Emc->SetVerboseLevel(3);
fRun->AddModule(Emc);
```

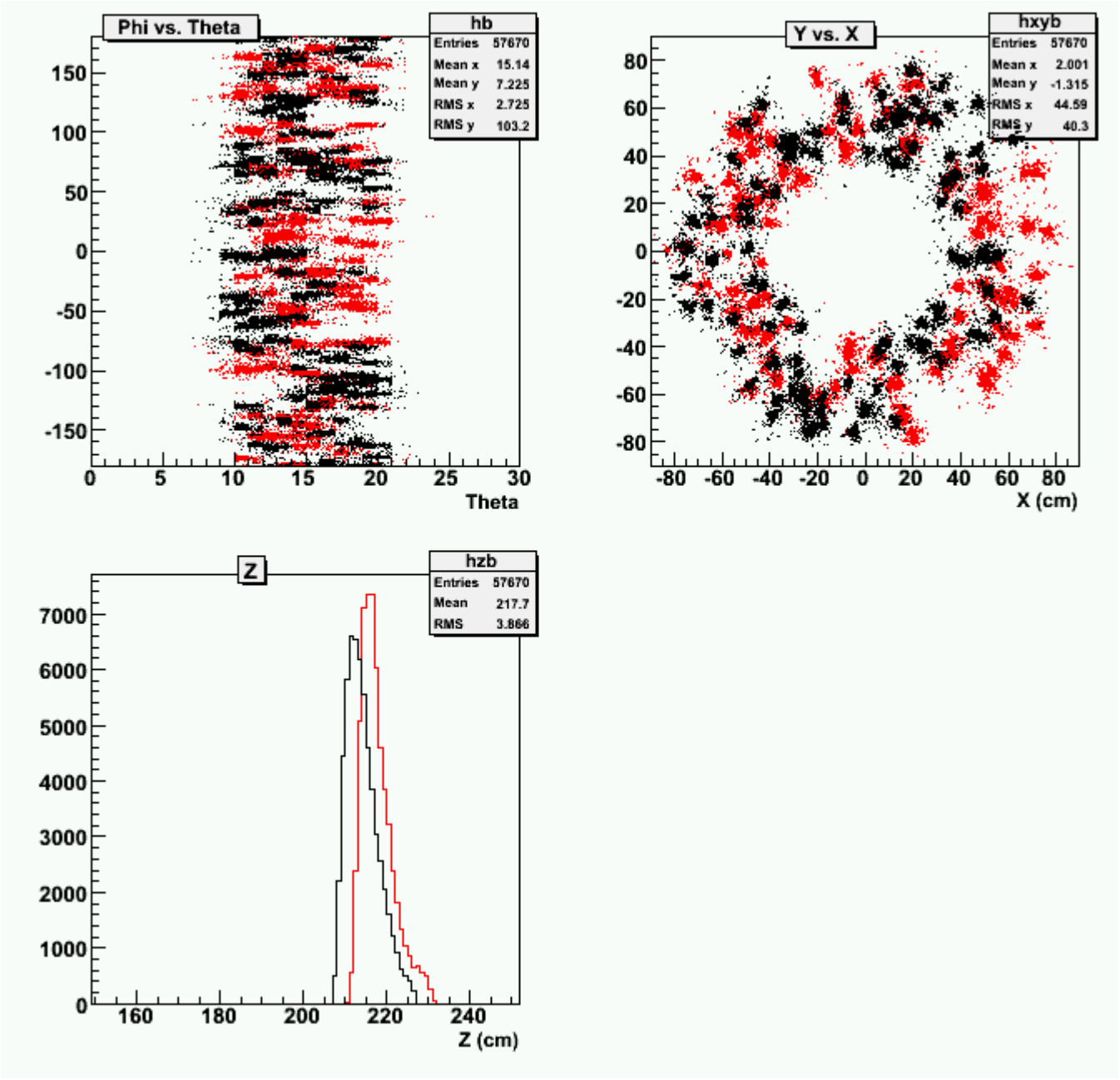
In attachment you can find plots for Points when variables,
expecially energy of points, are compared for previous
(black) and new (ROOT) version (red) of forward end-cap.

If you have any comments or problems with running simulation
with the new file, please let me know.

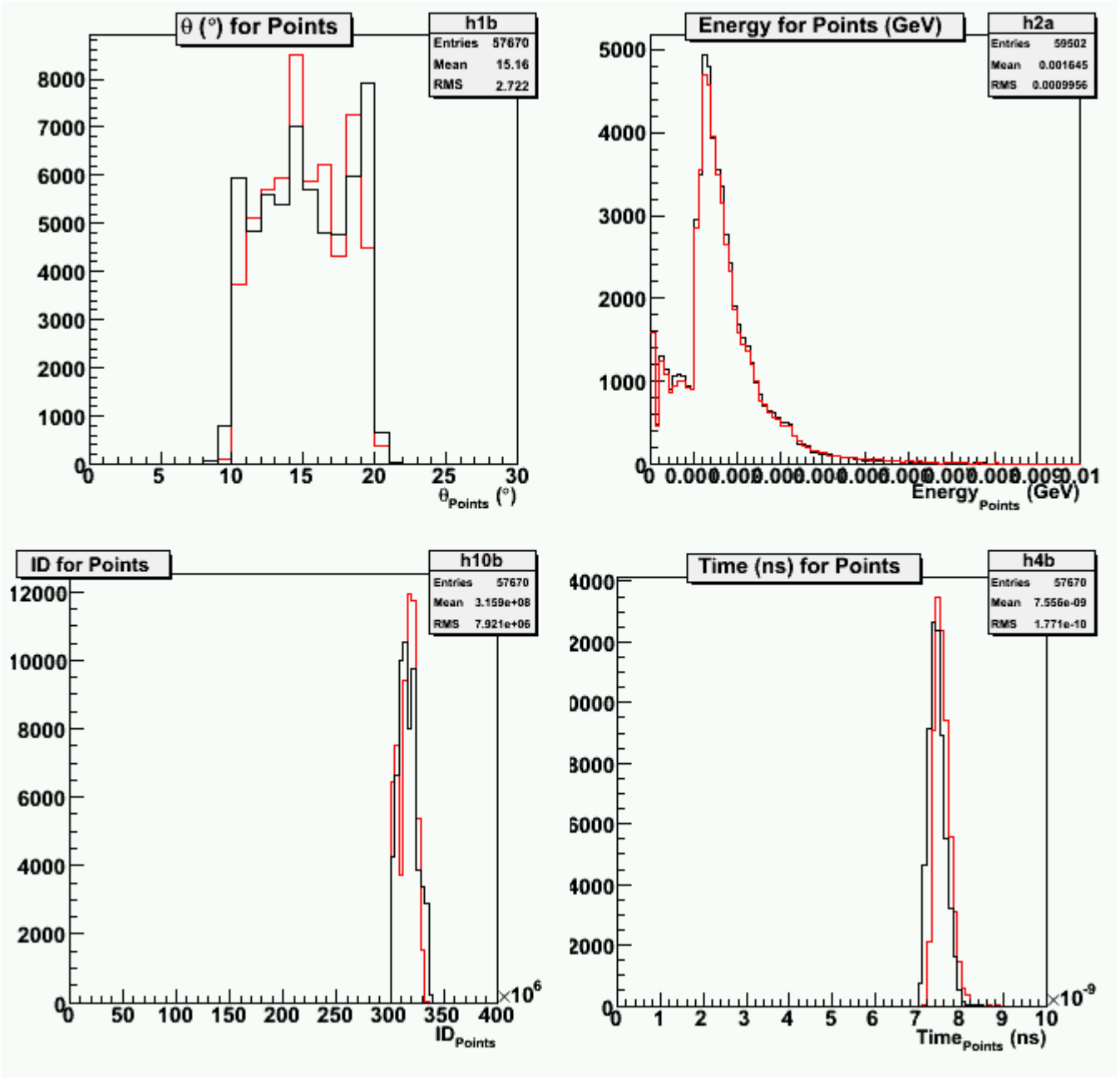
Best regards,
Aleksandra.

File Attachments

1) points_10th20_xy_z_thphi.png, downloaded 1405 times



2) points_10th20_en_id_time.png, downloaded 1368 times


θ (°) for Points
h1b
Entries 57670
Mean 15.16
RMS 2.722
θPoints (°)
Energy for Points (GeV)
h2a
Entries 59502
Mean 0.001645
RMS 0.0009956
EnergyPoints (GeV)
ID for Points
h10b
Entries 57670
Mean 3.159e+08
RMS 7.921e+06
×10^6
IDPoints
Time (ns) for Points
h4b
Entries 57670
Mean 7.556e-09
RMS 1.771e-10
×10^-9
TimePoints (ns)