Subject: EmcCluster: Map version 0 does not exist
Posted by Jens Sören Lange   on Sat, 14 Jun 2008 13:37:10 GMT
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Hi all,

another problem.

I have a root file and I can see that in the cbmsim there is EmcCluster and I can even click in the TBrowser on EmcCluster.fEnergy and see that there are entries.

However, when I try to access them in a macro:

TClonesArray* cluster_array=new TClonesArray("PndEmcCluster");
chain->SetBranchAddress("EmcCluster",&cluster_array);

for (Int_t i5=0; i5<cluster_array->GetEntriesFast(); i5++) {
  PndEmcCluster *cluster=(PndEmcCluster*)cluster_array->At(i5);
  cout << "cluster energy " << cluster.energy() << "\n";
}

I get for every event:

Map version 0 does not exist

and I cannot access any of the clusters.

(I remember roughly that Stefano already saw this, but I don't know if there was a solution to it).

Any idea?

Soeren

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by StefanoSpataro on Sat, 14 Jun 2008 16:23:17 GMT
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Hi,
in theory this should be just a warning, and the cluster should be given anyhow.

In each case, in order to avoid the problem, you should add your simulation file as friend of your analyzed tree. I.e., if your tree is called "chain", after you create your tree you have to type:

chain->AddFriend("cbmsim","simulationfile.root");
PndEmcMapper *emcMap=PndEmcMapper::Instance(1);

In simulationfile.root there should be the geometry, and then PndEmcMapper should be able to

create the proper map.
If this does not work, try to set the branch address of the digi:

```
TClonesArray* digi_array=new TClonesArray("PndDigiCluster");
chain->SetBranchAddress("EmcDigi",&digi_array);
```

If this still does not work... I have no idea, ask Dima

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Dima Melnychuk on Sun, 15 Jun 2008 14:14:06 GMT
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Hi Soeren,

Did suggestion of Stefano work for you?

I mean:
```
chain->AddFriend("cbmsim","simulationfile.root");
PndEmcMapper *emcMap=PndEmcMapper::Instance(1);
```

But it's strange that the code you posted does not access the energy of EmcCluster.
I have just checked and for me the message
"Map version 0 does not exist" is only a warning but energy is accessed.

Dima

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Jens Sören Lange   on Mon, 16 Jun 2008 17:45:23 GMT
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This works now (thanks to Dima).

The correct sequence is (load the sim file first for the map):

```
TFile* fsim = new TFile("simfile.root");
TTree *tsim=(TTree *) fsim->Get("cbmsim");
PndEmcMapper *emcMap=PndEmcMapper::Instance(1);
TChain *chain = new TChain("cbmsim");
chain->Add("recofile.root");
TClonesArray* cluster_array=new TClonesArray("PndEmcCluster");
chain->SetBranchAddress("EmcCluster",&cluster_array);
...
```

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Vishwajeet Jha on Thu, 16 Oct 2008 16:11:49 GMT

Hi.....

When I run the macro

/macro/fsim/writeMicro.C with the simulation and reconstruction file generated through runMC.C and runReco.C I get the following error

Map version 0 doesn't exist

(For the EMC clusters)

The solution provided earlier for the similar problem as quoted doesn't help.

What is wrong??

Vishwajeet Jha

Jens Soeren Lange wrote on Sat, 14 June 2008 15:37Hi all,

another problem.

I have a root file and I can see that in the cbmsim there is EmcCluster and I can even click in the TBrowser on EmcCluster.fEnergy and see that there are entries.

However, when I try to access them in a macro:

TClonesArray* cluster_array=new TClonesArray("PndEmcCluster");
chain->SetBranchAddress("EmcCluster",&cluster_array);

for (Int_t i5=0; i5<cluster_array->GetEntriesFast(); i5++) {
  PndEmcCluster *cluster=(PndEmcCluster*)cluster_array->At(i5);
  cout << "cluster energy " << cluster.energy() << "\n";
}

I get for every event:

Map version 0 does not exist

and I cannot access any of the clusters.

(I remember roughly that Stefano already saw this, but I don't know if there was a solution to it).

Any idea?

Soeren

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Aleksandra Biegun on Fri, 17 Oct 2008 07:28:51 GMT
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Hello Vishwajeet Jha,

try to change map version number from 1 to 2, i.e.

from:
TFile* fsim = new TFile("simfile.root");
TTree *tsim=(TTree *) fsim->Get("cbmsim");
PndEmcMapper *emcMap=PndEmcMapper::Instance(1);
...

to:

```
TFile* fsim = new TFile("simfile.root");
TTree *tsim=(TTree *) fsim->Get("cbmsim");
PndEmcMapper *emcMap=PndEmcMapper::Instance(2);
```

Now, we use map version number 2.
You can check which map version you use in the parametrisation file in
./trunk/macro/params/emc.par

Do not edit this file via "jed", use for instance "emacs" or just
loot into in via "more" or "less" programs.

I hope it will work for you.

Regards,
Aleksandra.

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by StefanoSpataro on Fri, 17 Oct 2008 07:38:29 GMT
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Aleksandra Biegun wrote on Fri, 17 October 2008 09:28
```
TFile* fsim = new TFile("simfile.root");
TTree *tsim=(TTree *) fsim->Get("cbmsim");
PndEmcMapper *emcMap=PndEmcMapper::Instance(2);
```


Instead of the previous lines, you can use the much more compact form:

```
PndEmcMapper *emcMap=PndEmcMapper::Instance(2,"simfile.root");
```

which is doing exactly the same thing.

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Vishwajeet Jha on Fri, 17 Oct 2008 13:53:12 GMT
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Hi...

It still doesn't solve my problem specifically in

/macro/fsim/writeMicro.C

I get the error

CBMGeom object is not found.

I have the geometries loaded and the simulation file included in the macro.

Regards
Vishwajeet

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by StefanoSpataro on Fri, 17 Oct 2008 14:18:59 GMT
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Where have you copied exactly those command lines?

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Vishwajeet Jha on Fri, 17 Oct 2008 15:36:18 GMT
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I have added at

in /macro/fsim/writeMicro.C

after the reco and simulation files are loaded.

Vishwajeet

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by StefanoSpataro on Fri, 17 Oct 2008 15:38:59 GMT
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Question:
if you open your sim file, do you find the object called CBMGeom ?

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Dima Melnychuk on Fri, 17 Oct 2008 15:50:59 GMT
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Just an idea,

Try to add
fRunA->LoadGeometry();

before
//append the analysis task
PndMicroWriter *tcandTask=new PndMicroWriter();
fRunA->AddTask(tcandTask);

Dima

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Vishwajeet Jha on Fri, 17 Oct 2008 16:08:57 GMT
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I had tried appending

fRunA-> LoadGeometry();

It doesn't help.

I do find object CBMGeom when i open my simulation file.
(generated thr' macro)
/macro/fsim/runMC.C

Vishwajeet

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by StefanoSpataro on Fri, 17 Oct 2008 16:39:46 GMT
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I have tried to run the macros runMC.C, runReco.C and I have modified writeMacro.C, adding after line 53 the following line:

    fRunA->SetOutputFile.Data());
->   PndEmcMapper *emcMap = PndEmcMapper(2,simfile);

and I have no errors.
Are you sure you have written everything correctly?

Subject: Re: EmcCluster: Map version 0 does not exist
Posted by Vishwajeet Jha on Tue, 21 Oct 2008 13:38:03 GMT
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Hi...

I tried few things as suggested by adding lines in
writeMicro.C, none work for me , I list the errors which I get

i) PndEmcMapper *emcMap = PndEmcMapper (2,simfile);

-I- CbmRunAna Input file: output.evt.mc.root is connected to friend: output.evt.mcreco.root
Error: Symbol null is not defined in current scope writeMicro.C:71:
*** Interpreter error recovered ***

ii) PndEmcMapper *emcMap = PndEmcMapper::Instance(2,simfile);

-I- CbmRunAna Input file: output.evt.mc.root is connected to friend: output.evt.mcreco.root
Error: Incorrect assignment to emcMap, wrong type 'Reflex::Instance' writeMicro.C:57:
*** Interpreter error recovered ***

iii)   PndEmcMapper *emcMap = PndEmcMapper::Instance(2);

In this case we had to add the simfile first and recofile as the friend (opposite to what is there in macro), then the CBMGeom object is recognized, but now the error is

create PndFieldPar container PndConstPar
create PndFieldPar container PndMultiFieldPar

 *** Break *** segmentation violation
Using host libthread_db library "/lib/libthread_db.so.1".
Attaching to program: /proc/9046/exe, process 9046
[Thread debugging using libthread_db enabled]
[New Thread -1228196144 (LWP 9046)]
0xb7f44410 in __kernel_vsyscall ()
#1 0xb6d735c3 in __waitpid_nocancel () from /lib/libc.so.6
....

Without including the EMC in the simfile everything runs fine for me. That's not all. Same thing in another computer (of Tobias) has problems in runReco.C itself in Kalman

double Kalman::getChi2Hit(AbsRecoHit* hit, AbsTrackRep* rep)
assert(chisq.GetNoElements()==1;

Regards,
Vishwajeet