Subject: TPC digitization: file missing?
Posted by StefanoSpataro on Mon, 20 Aug 2007 12:24:21 GMT

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Hello,
if I try to run the macro/runDigi.C macro, after copying the *.dat and *.asc files in the directory
where I launch the macro, I get the following error:

-I- CbmFieldMap: Reading field map from ROOT file
/home/spataro/pandaroot/input/TransMap.root
-I- CbmFieldMap: Reading field map from ROOT file
/home/spataro/pandaroot/input/DipoleMap.root
-I- CbmFieldMap: Reading field map from ROOT file
/home/spataro/pandaroot/input/SolenoidMap.root
Fatal in <TpcDevmapCylLoader::load()>: devmap-file could not be found.
aborting
Using host libthread_db library "/lib/libthread_db.so.1".
Attaching to program: /proc/32606/exe, process 32606
`system-supplied DSO at 0xffffe000' has disappeared; keeping its symbols.
[Thread debugging using libthread_db enabled]
[New Thread -1235716432 (LWP 32606)]
0xffffe410 in __kernel_vsyscall ()
#1 0xb6641a03 in waitpid () from /lib/libc.so.6
#2 0xb65ec569 in strtold_l () from /lib/libc.so.6
#3 0xb66e336d in system () from /lib/libpthread.so.0
#4 0xb79276ab in TUnixSystem::Exec () from
/d/c0/cbmsoft/ccacbmsoft/tools/root/lib/libCore.so.5.14
#5 0xb792bbca in TUnixSystem::StackTrace () from
/d/c0/cbmsoft/ccacbmsoft/tools/root/lib/libCore.so.5.14
#6 0xb77e9f82 in DefaultErrorHandler () from
/d/c0/cbmsoft/ccacbmsoft/tools/root/lib/libCore.so.5.14
#7 0xb77e99bb in ErrorHandler () from /d/c0/cbmsoft/ccacbmsoft/tools/root/lib/libCore.so.5.14
#8 0xb77e9a24 in Fatal () from /d/c0/cbmsoft/ccacbmsoft/tools/root/lib/libCore.so.5.14
#9 0xb3513420 in TpcDevmapCylLoader::load (this=0xaa395d0) at
/home/spataro/pandaroot/tpc/TpcDevmapCylLoader.cxx:51
#10 0xb351306d in TpcDevmapCyl (this=0xaa395e8, fileName=0xb358ea4c
"DevMap_29-06-07_E_and_B_new_fieldclass.dat", vDrift=0.0027314000000000001)
    at /home/spataro/pandaroot/tpc/TpcDevmapCyl.cxx:31
#11 0xb34e7f0c in TpcDriftTask::Init (this=0x8fdc0a8) at
/home/spataro/pandaroot/tpc/TpcDriftTask.cxx:60
#12 0xb36e5db2 in CbmTask::InitTask (this=0x8fdc0a8) at
/home/spataro/pandaroot/base/CbmTask.cxx:36
#13 0xb36e5e96 in CbmTask::InitTasks (this=0x889adc0) at
/home/spataro/pandaroot/base/CbmTask.cxx:101
#14 0xb36e5e4d in CbmTask::InitTask (this=0x889adc0) at
/home/spataro/pandaroot/base/CbmTask.cxx:43
#15 0xb36e27dd in CbmRunAna::Init (this=0x8c09f00) at
/home/spataro/pandaroot/base/CbmRunAna.cxx:99
#16 0xb371415b in G__CbmDict_764_0_7 (result7=0xbfdf3cdc, funcname=0x8c11450 "\001",
libp=0xbfdf0238, hash=0) at /home/spataro/cbuild/base/CbmDict.cxx:9057

If I have understood well the file DevMap_29-06-07_E_and_B_new_fieldclass.dat is missing,

somewhere.
The same problem was found by Alicia some time ago.

Is it possible to fix it?
Thanks

Ste

Subject: Re: TPC digitization: file missing?
Posted by Sebastian Neubert on Mon, 20 Aug 2007 12:58:37 GMT
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Hi!

This is fixed. Turn off the distort option for the drifter task.
The macros are not running out of the box. You should never rely on them as they are in the repository! IMHO that is the point of having macros.

There is no "standard" TPC digitization yet. And I would ask you to be carefull what you present from the results you get from this code.

However I agree that we have to provide all the files and parameters in a proper way. Maybe it would be a good idea to add a better error trap at that point.

Cheers! Sebastian.

Subject: Re: TPC digitization: file missing?
Posted by StefanoSpataro on Mon, 20 Aug 2007 13:20:54 GMT
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Hi,
and how to disable the distortion?

I tried commenting out all the functions of TpcDriftTask:

  TpcDriftTask* tpcDrifter = new TpcDriftTask();
// tpcDrifter->SetPersistence();
 // tpcDrifter->SetTransverseDiffuse(true);
 // tpcDrifter->SetLongitudinalDiffuse(true);
  fRun->AddTask(tpcDrifter);

(with and wothout persistence) but I got always the same error. I have only to disable tha task to make the macro running, and of course then the latter tasks are not launched.

Subject: Re: TPC digitization: file missing?
Posted by Sebastian Neubert on Mon, 20 Aug 2007 13:26:32 GMT
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Hi Stefano

When you look into the header of the task you will find the method SetDistort.

However I have just implemented a better error handling. give me a minute to test, then I will submit it.

Cheers! Sebastian.

Subject: Re: TPC digitization: file missing?
Posted by StefanoSpataro on Mon, 20 Aug 2007 13:28:52 GMT
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Moment,
I found that I have a not updated my version of the tpc code.
Now I am recompiling and I will let you know with the new code

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Subject: Re: TPC digitization: file missing?
Posted by Sebastian Neubert on Mon, 20 Aug 2007 13:32:51 GMT
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Hi Stefano!

Please use at least revision 1318. Should be much more comfortable now. Also the default is no distortion now.

Cheers! Sebastian.

Subject: Re: TPC digitization: file missing?
Posted by StefanoSpataro on Mon, 20 Aug 2007 15:23:51 GMT
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Ok,
now it works (or at least I get not errors and the categories are filled).

It seems a bit slow... or maybe because I tried it with DPM events at 15 GeV/c

Regards

Subject: Re: TPC digitization: file missing?
Posted by Sebastian Neubert on Mon, 20 Aug 2007 15:37:57 GMT
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Cool!

It IS slow. The DPM will make headaches but in any case the TPC is a bit beasty. This is because every primary ionization electron is treated individually.

So I have to aks for your patience

Cheers, Sebastian.