Subject: [FIXED] Error from PndMCTrackAssociator
Posted by MartinJGaluska on Wed, 21 Aug 2013 12:37:58 GMT
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Dear all,

when I simulate with trunk rev. 21304 and the official macros from macro/run 2000 events with one muon each using the FairBoxGenerator I get the following errors in the reco_complete.C macro:

Quote:
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
*** PndRecoKalmanFit::Exec Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
da PndTrkTracking2 : N. di Stt MC points = 0

The errors did not appear when I simulated only 100 events.

This error causes subsequent errors when I try to run the PndTrkQATask, because we have PndTrackCand which contain hits that are not accessible.

My modified sim_complete.C macro is attached to this post. I use the standard digi_complete.C and reco_complete.C from macro/run. The errors also occur when I replace PndTrkTracking2 with PndTrkTracking in the reco macro.

## File Attachments
1) sim_complete.C, downloaded 481 times

Subject: Re: Error from PndTracking/2
Posted by StefanoSpataro on Wed, 21 Aug 2013 15:25:02 GMT
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Hi,
I was able to reproduce your error, and I have seen that it happens that there are Track candidates from PndTracking/2 task with numbers even if the mvd/stt containers are empty or with smaller size:

fMvdPixelHitArray->GetEntriesFast() 0
fMvdStripHitArray->GetEntriesFast() 0
fSttHitInput->GetEntriesFast() 21
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!

-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #21 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #22 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!

or

fMvdPixelHitArray->GetEntriesFast() 0
fMvdStripHitArray->GetEntriesFast() 0
fSttHitInput->GetEntriesFast() 24
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #28 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #42 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #54 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #43 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #30 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #25 does not exist!!!

I believe there is something buggy in the tracking code, since the mctrackassociator is not touched since many months. Maybe the trackcandidate is not cleaned and it has some information from the previous event, or maybe some hits are deleted from the trackcand and maybe also from the original TCA. Gianluigi, can you please take a look?

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Subject: Re: Error from PndMCTrackAssociator
Posted by Gianluigi Boca on Thu, 22 Aug 2013 11:58:39 GMT
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Hi,
I think I fixed the problem. Please update the directory
tracking
and try again
Gianluigi

Martin J Galuska wrote on Wed, 21 August 2013 14:37Dear all,

when I simulate with trunk rev. 21304 and the official macros from macro/run 2000 events with one muon each using the
FairBoxGenerator I get the following errors in the reco_complete.C macro:

Quote:
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!

-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
*** PndRecoKalmanFit::Exec Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
da PndTrkTracking2 : N. di Stt MC points = 0

The errors did not appear when I simulated only 100 events.

This error causes subsequent errors when I try to run the PndTrkQATask, because we have PndTrackCand which contain hits that are not accessible.

My modified sim_complete.C macro is attached to this post. I use the standard digi_complete.C and reco_complete.C from macro/run. The errors also occur when I replace PndTrkTracking2 with PndTrkTracking in the reco macro.

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Subject: Re: Error from PndMCTrackAssociator
Posted by StefanoSpataro on Thu, 22 Aug 2013 12:21:52 GMT
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Hi Gianluigi,
I have just tried with 2000 events and the error has disappeared, thanks for the fast fix. Let's see if the error disappears also for Martin.

Meanwhile, could you plese put under a "if (istampa>0)" the line printing the message:

from PndTrkTracking2 : N. di Stt MC points = 0

I took it out from PndTracking, but is seems it is stil present in Pndtracking2.

Thanks in advance.

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Subject: Re: Error from PndMCTrackAssociator
Posted by MartinJGaluska on Thu, 22 Aug 2013 13:33:47 GMT
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Hello Gianluigi,

thank you for looking into the problem! The error has disappeared for PndTrkTracking2.

Unfortunately, I do still get the error for several events with trunk rev. 21353 when I switch to PndTrkTracking. It seems to happen less often, though.

Kind regards,

Martin

Subject: Re: Error from PndMCTrackAssociator
Posted by Gianluigi Boca on Thu, 22 Aug 2013 14:52:13 GMT
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Hi Stefano,
now you shouldn't see that message any more
Gianluigi

Stefano Spataro wrote on Thu, 22 August 2013 14:21Hi Gianluigi,
I have just tried with 2000 events and the error has disappeared, thanks for the fast fix. Let's see if the error disappears also for Martin.

Meanwhile, could you plese put under a "if (istampa>0)" the line printing the message:

from PndTrkTracking2 : N. di Stt MC points = 0

I took it out from PndTracking, but is seems it is stil present in Pndtracking2.

Thanks in advance.

Subject: Re: Error from PndMCTrackAssociator
Posted by StefanoSpataro on Thu, 22 Aug 2013 15:07:20 GMT
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I do not see any difference, did you commit the class?

Subject: Re: Error from PndMCTrackAssociator
Posted by Gianluigi Boca on Thu, 22 Aug 2013 15:17:24 GMT
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now ...
Stefano Spataro wrote on Thu, 22 August 2013 17:07I do not see any difference, did you commit the class?

Subject: Re: Error from PndMCTrackAssociator
Posted by StefanoSpataro on Thu, 22 Aug 2013 15:29:15 GMT
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Much better now, thanks.
I can still see the MCTrackAssociator errors in PndTracking. Do you plan to fix them, or we will use definitely PndTracking2?

Subject: Re: Error from PndMCTrackAssociator
Posted by Gianluigi Boca on Thu, 22 Aug 2013 15:37:42 GMT
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I would prefere to fix PndTrkTracking  also. I sent a private message to Martin asking to send me the logfile of the error
but he hasn't answered yet.
Maybe you can send me yours?
Thanks
Gianluigi

Stefano Spataro wrote on Thu, 22 August 2013 17:29Much better now, thanks.
I can still see the MCTrackAssociator errors in PndTracking. Do you plan to fix them, or we will use definitely PndTracking2?

Subject: Re: Error from PndMCTrackAssociator
Posted by MartinJGaluska on Thu, 22 Aug 2013 15:42:37 GMT
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Hello Gianluigi, hello Stefano,

sorry for the late response, I have not seen your email until a couple of minutes ago. I have just sent an email to Gianluigi with my log and my macros.

Kind regards,
Martin

Subject: Re: Error from PndMCTrackAssociator
Posted by StefanoSpataro on Thu, 22 Aug 2013 15:43:43 GMT
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da PndTrkTracking  :  N. di Stt MC points = 0

-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
da PndTrkTracking  :  N. di Stt MC points = 0

da PndTrkTracking  :  N. di Stt MC points = 0

Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
da PndTrkTracking : N. di Stt MC points = 1052 and it is > MAXSTTHITS (900), therefore consider only the first 900 hits

da PndTrkTracking : N. di Stt Hits = 1052 and it is > MAXSTTHITS (=900), therefore consider only the first 900 hits

-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #6 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #5 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #4 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #3 does not exist!!!
*** PndRecoKalmanFit::Exec Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #6 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #5 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #4 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #3 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 has GetRefIndex()<0 -> noise hit
da PndTrkTracking : N. di Stt MC points = 0

da PndTrkTracking : N. di Stt MC points = 0

Found 0 tracks

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Subject: Re: Error from PndMCTrackAssociator
Posted by Gianluigi Boca on Sat, 24 Aug 2013 20:09:04 GMT
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Hello,
I checked with 20000 events
that the hits numbers are correct in PndTrkTracking.cxx
at the moment when the PndTrackCand and PndTrack TClonesArray
are loaded.
As far as I can tell no 'not existing' Mvd hits nor Stt hits are
loaded in those TClonesArray.

I also modify PndTrkTracking.cxx (rev. 21380) such that if
'no-existing' hits are loaded a message like :

"from PndTrkTracking, problem event "

appears followed by details of the event number and candidate.
Please update the directory
tracking
and see if that message appears
thanks
Gianluigi

Martin J Galuska wrote on Thu, 22 August 2013 15:33Hello Gianluigi,

thank you for looking into the problem! The error has disappeared for PndTrkTracking2.

Unfortunately, I do still get the error for several events with trunk rev. 21353 when I switch to PndTrkTracking. It seems to happen less often, though.

Kind regards,
Martin

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Subject: Re: Error from PndMCTrackAssociator
Posted by StefanoSpataro on Sun, 25 Aug 2013 10:55:55 GMT
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from PndTrkTracking, problem event 83, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 83, cand. 0, hit n. 2  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 83, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
from PndTrkTracking, problem event 122, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 1  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0

);
from PndTrkTracking, problem event 122, cand. 0, hit n. 12  type Stt // hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 13  type Stt // hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 14  type Stt // hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 15  type Stt // hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 16  type Stt // hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 17  type Stt || hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 18  type Stt || hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 19  type Stt || hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 20  type Stt || hit; (nSttHit = 12 );
from PndTrkTracking, problem event 122, cand. 0, hit n. 21  type Stt || hit; (nSttHit = 12 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #12 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #13 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #14 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #15 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #16 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #17 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #18 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #19 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #20 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #21 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #12 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #13 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #14 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #15 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #16 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #17 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #18 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #19 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #20 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #21 does not exist!!!
from PndTrkTracking, problem event 138, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 138, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 138, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 138, cand. 0, hit n. 22  type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 138, cand. 0, hit n. 23  type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 138, cand. 0, hit n. 24  type Stt || hit; (nSttHit = 22 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!

-E- PndMCTrackAssociator::GetSttHits: SttHit #22 does not exist!!!

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Subject: Re: Error from PndMCTrackAssociator
Posted by MartinJGaluska on Mon, 26 Aug 2013 10:59:16 GMT
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Hello Gianluigi,

I can confirm Stefano's observation.

Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
from PndTrkTracking, problem event 11, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 11, cand. 0, hit n. 1  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 11, cand. 0, hit n. 2  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 11, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 11, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
from PndTrkTracking, problem event 135, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 135, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 135, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 135, cand. 0, hit n. 23  type Stt || hit; (nSttHit = 23 );
from PndTrkTracking, problem event 135, cand. 0, hit n. 24  type Stt || hit; (nSttHit = 23 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!

-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
*** PndRecoKalmanFit::Exec Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
could not convert GenfitTrack to PndTrack
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
from PndTrkTracking, problem event 273, cand. 0, hit n. 0 type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 1 type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 0 type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 29 type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 22 type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 23 type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 24 type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 25 type Stt || hit; (nSttHit = 22 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #29 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #22 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #25 does not exist!!!
*** PndRecoKalmanFit::Exec Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #29 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #22 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #25 does not exist!!!
from PndTrkTracking, problem event 305, cand. 0, hit n. 0 type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 1 type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 0 type Mvd Strip; (n. Mvd Strip Hit = 0 );

from PndTrkTracking, problem event 305, cand. 0, hit n. 2  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 23  type Stt || hit; (nSttHit = 23 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
from PndTrkTracking, problem event 317, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 317, cand. 0, hit n. 2  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 317, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 317, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
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Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
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Subject: Re: Error from PndMCTrackAssociator
Posted by Gianluigi Boca on Fri, 30 Aug 2013 20:46:01 GMT
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dear Martin and Stefano,
I think I fixed the problem.
Please update the tracking directory and run again and let
me know if there are still problems

thanks
Gianluigi

Martin J Galuska wrote on Mon, 26 August 2013 12:59Hello Gianluigi,

I can confirm Stefano's observation.

```
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
from PndTrkTracking, problem event 11, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0
);
from PndTrkTracking, problem event 11, cand. 0, hit n. 1  type Mvd Pixel; (n. Mvd Pixel Hit = 0
);
from PndTrkTracking, problem event 11, cand. 0, hit n. 2  type Mvd Strip; (n. Mvd Strip Hit = 0
);
from PndTrkTracking, problem event 11, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0
);
from PndTrkTracking, problem event 11, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0
);
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
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Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
from PndTrkTracking, problem event 135, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit =
0 );
from PndTrkTracking, problem event 135, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0
);
from PndTrkTracking, problem event 135, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0
);
from PndTrkTracking, problem event 135, cand. 0, hit n. 23  type Stt || hit; (nSttHit = 23 );
from PndTrkTracking, problem event 135, cand. 0, hit n. 24  type Stt || hit; (nSttHit = 23 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
*** PndRecoKalmanFit::Exec      Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
```

-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #24 does not exist!!!
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could not convert GenfitTrack to PndTrack
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from PndTrkTracking, problem event 273, cand. 0, hit n. 0  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
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from PndTrkTracking, problem event 273, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 29  type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 22  type Stt || hit; (nSttHit = 22 );
from PndTrkTracking, problem event 273, cand. 0, hit n. 23  type Stt || hit; (nSttHit = 22 );
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-E- PndMCTrackAssociator::GetSttHits: SttHit #29 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #22 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
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-E- PndMCTrackAssociator::GetSttHits: SttHit #25 does not exist!!!
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from PndTrkTracking, problem event 305, cand. 0, hit n. 1  type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 0  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 2  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 1  type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 305, cand. 0, hit n. 23  type Stt || hit; (nSttHit = 23 );
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-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
*** PndRecoKalmanFit::Exec Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #1 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
-E- PndMCTrackAssociator::GetSttHits: SttHit #23 does not exist!!!
from PndTrkTracking, problem event 317, cand. 0, hit n. 0 type Mvd Pixel; (n. Mvd Pixel Hit = 0 );
from PndTrkTracking, problem event 317, cand. 0, hit n. 2 type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 317, cand. 0, hit n. 0 type Mvd Strip; (n. Mvd Strip Hit = 0 );
from PndTrkTracking, problem event 317, cand. 0, hit n. 1 type Mvd Strip; (n. Mvd Strip Hit = 0 );
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
*** PndRecoKalmanFit::Exec Genfit Exception: trk->addHitVector
-E- PndMCTrackAssociator::GetMvdHitPixels: MvdHitPixel #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #2 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #0 does not exist!!!
-E- PndMCTrackAssociator::GetMvdHitStrips: MvdHitStrip #1 does not exist!!!
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
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Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps
Error in <TDecompSVD::Diagonalize>: no convergence after 21 steps

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Subject: Re: Error from PndMCTrackAssociator
Posted by StefanoSpataro on Fri, 30 Aug 2013 21:31:02 GMT
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In my case the problem is still present, even after updating tracking folder.

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Subject: Re: Error from PndMCTrackAssociator
Posted by StefanoSpataro on Mon, 02 Sep 2013 13:39:27 GMT
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I do not see this error anymore, now the code is fixed!

Subject: Re: Error from PndMCTrackAssociator
Posted by MartinJGaluska on Mon, 02 Sep 2013 14:03:23 GMT
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I can confirm that the error is gone. I have rechecked as well and I also do not see the error any more.

Subject: Re: Error from PndMCTrackAssociator
Posted by Gianluigi Boca on Mon, 02 Sep 2013 18:35:23 GMT
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I also added a missing (by mistake) piece in order to load
the PndTrak and PndTrackCand in the correct way, please
update again the tracking directory

Gianluigi

Martin J Galuska wrote on Mon, 02 September 2013 16:03I can confirm that the error is gone. I have rechecked as well and I also do not see the error any more.

Subject: Re: Error from PndMCTrackAssociator
Posted by MartinJGaluska on Tue, 03 Sep 2013 10:10:29 GMT
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I have rechecked with the updated PndTrkTracking2.cxx (there was no change in PndTrkTracking.cxx or PndTrkTracking.h since my last test). The error does also not appear with the new version of the code.