

Subject: Crash in reco macro: "PndSttMvdTracking, nMvdPixelHitsInTrack[4] is 58 and it is > nmaxMvdPix

Posted by [MartinJGaluska](#) on Thu, 14 Jun 2012 13:35:33 GMT

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Hello,

I have just encountered this problem (see spoiler) while running a simulation of $X(3872) \rightarrow J/\psi \pi^+ \pi^-$ with the corrected VVpipi decay model on PandaRoot revision 15615 (Scientific Linux CERN SLC release 5.5 (Boron), 64 bit, fairroot: jan12, root session called with "root -q run_reco_sttcombi.C &> logreco2.log" in a screen session). I have previously run the same simulation with the same version of PandaRoot and have not seen this problem.

I have restarted the macro in order to see if the problem reoccurs.

Toggle Spoiler

from PndSttMvdTracking, nMvdPixelHitsInTrack[4] is 58 and it is > nmaxMvdPixelHitsInTrack (30); setting nMvdPixelHitsInTrack[ncand] to 30

*** Break *** segmentation violation

=====

There was a crash.

This is the entire stack trace of all threads:

=====

```
#0 0x000000300409a115 in waitpid () from /lib64/libc.so.6
#1 0x000000300403c481 in do_system () from /lib64/libc.so.6
#2 0x00002b78e8391902 in TUnixSystem::StackTrace() ()
   from /home/panda/fairsoft/jan12/tools/root/lib/libCore.so.5.32
#3 0x00002b78e838e79a in TUnixSystem::DispatchSignals(ESignals) ()
   from /home/panda/fairsoft/jan12/tools/root/lib/libCore.so.5.32
#4 <signal handler called>
#5 0x00002b78f6539a25 in
PndSttMvdTracking::OrderingConformal_Loading_ListTrackCandHit (this=0x2b78fa9ad010,
keepit=0x7fff8a38c270, ncand=2,
   info=0x7fff8a324990, Ox=0x7fff8a386560, Oy=0x7fff8a385f20,
   Rr=0x3300000041, Trajectory_Start=0x58e000002b78, CHARGE=0x7fff0000e710,
   SchosenSkew=0x7fff89e2f110)
   at /home/panda/pandaroot_sep12/trunk/sttmvdtracking/PndSttMvdTracking.cxx:1 2853
#6 0x0000003500000029 in ?? ()
#7 0x0000003300000041 in ?? ()
#8 0x000058e000002b78 in ?? ()
#9 0x00007fff0000e710 in ?? ()
#10 0x00007fff89e2f110 in ?? ()
#11 0x00650006004a0000 in ?? ()
#12 0x00007fff8a386560 in ?? ()
#13 0x00007fff8a324990 in ?? ()
#14 0x4057000034aa0006 in ?? ()
#15 0x00007fff8a38c270 in ?? ()
```

```
#16 0x00002b78fa9ad010 in ?? ()
#17 0xc04d896a3d8a5307 in ?? ()
#18 0x0002999999999999a in ?? ()
#19 0x00007fff8a38d770 in ?? ()
#20 0x00002b78f6566946 in PndSttMvdTracking::Exec (this=Cannot access memory at
address 0x1dff907764
    at /home/panda/pandaroot_sep12/trunk/sttmvdtracking/PndSttMvdTracking.cxx:2 625
=====
```

The lines below might hint at the cause of the crash.

If they do not help you then please submit a bug report at
<http://root.cern.ch/bugs>. Please post the ENTIRE stack trace
from above as an attachment in addition to anything else
that might help us fixing this issue.

```
=====
#5 0x00002b78f6539a25 in
PndSttMvdTracking::OrderingConformal_Loading_ListTrackCandHit (this=0x2b78fa9ad010,
keepit=0x7fff8a38c270, ncand=2,
    info=0x7fff8a324990, Ox=0x7fff8a386560, Oy=0x7fff8a385f20,
    Rr=0x3300000041, Trajectory_Start=0x58e000002b78, CHARGE=0x7fff0000e710,
    SchosenSkew=0x7fff89e2f110)
    at /home/panda/pandaroot_sep12/trunk/sttmvdtracking/PndSttMvdTracking.cxx:1 2853
#6 0x0000003500000029 in ?? ()
#7 0x0000003300000041 in ?? ()
#8 0x000058e000002b78 in ?? ()
#9 0x00007fff0000e710 in ?? ()
#10 0x00007fff89e2f110 in ?? ()
#11 0x00650006004a0000 in ?? ()
#12 0x00007fff8a386560 in ?? ()
#13 0x00007fff8a324990 in ?? ()
#14 0x4057000034aa0006 in ?? ()
#15 0x00007fff8a38c270 in ?? ()
#16 0x00002b78fa9ad010 in ?? ()
#17 0xc04d896a3d8a5307 in ?? ()
#18 0x0002999999999999a in ?? ()
#19 0x00007fff8a38d770 in ?? ()
#20 0x00002b78f6566946 in PndSttMvdTracking::Exec (this=Cannot access memory at
address 0x1dff907764
    at /home/panda/pandaroot_sep12/trunk/sttmvdtracking/PndSttMvdTracking.cxx:2 625
=====
```

Subject: Re: Crash in reco macro: "PndSttMvdTracking, nMvdPixelHitsinTrack[4]
is 58and it is > nmaxMv
Posted by [MartinJGaluska](#) on Thu, 14 Jun 2012 15:27:32 GMT
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I have seen that

trunk/sttmvdtracking/PndSttMvdTracking.cxx

was modified recently and have updated the trunk/sttmvdtracking folder. After compiling, I ran the reco macro again with the updated files and the same crash occurred again in event 490.

Subject: Re: Crash in reco macro: "PndSttMvdTracking, nMvdPixelHitsInTrack[4] is 58 and it is > nmaxMv

Posted by [Jens Sören Lange](#) on Fri, 15 Jun 2012 07:53:01 GMT

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Hi all, I guess that's a low pT curler track

-> question to anyone of the MVD experts

can Martin set nMvdPixelHitsInTrack to more than 30?
(if yes, where?)

P.S. Martin needs the plots by Monday, so if anyone has an idea, it would be great ...

Subject: Re: Crash in reco macro: "PndSttMvdTracking, nMvdPixelHitsInTrack[4] is 58 and it is > nmaxMv

Posted by [Lia Lavezzi](#) on Fri, 15 Jun 2012 08:51:09 GMT

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Dear Martin and Soeren,

the variable you want to change is nmaxMvdPixelHitsInTrack, which is set in line 103 of sttmvdtracking/PndSttMvdTracking.h.

It is in the compiled code, so you will have to recompile.

This code has been written by Gianluigi, who was on a conference in Varenna in these days. I just talked to him on the phone and he told me he is coming back to Pavia. I will see him this afternoon, so please try this fix and if it does not work let us know.

Best regards,
Lia.

Subject: Re: Crash in reco macro: "PndSttMvdTracking, nMvdPixelHitsInTrack[4] is 58 and it is > nmaxMv

Posted by [MartinJGaluska](#) on Fri, 15 Jun 2012 10:27:59 GMT

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Dear Lia and Gianluigi,

thank you for your message. I have set nmaxMvdPixelHitsInTrack from 30 to 60, recompiled PandaRoot and have not seen a segmentation violation in event 490 any more. It seems that adjusting this value has solved the problem.
