TrajCluster - Bug #18481

BackTracker not working

12/06/2017 09:27 AM - Tingjun Yang

Status:	Resolved		**Start date:**	12/06/2017
Priority:	Normal		**Due date:**	
Assignee:	Tingjun Yang		**% Done:**	100%
Category:			**Estimated time:**	0.00 hour
Target version:			**Spent time:**	0.00 hour

Description

Bruce reported the following problems:
It's been a few weeks since I checked TrajCluster performance using my standard reference data set. I discovered that none of the recob::Hits were matched to MCParticles. I see that the code in TCTruth has changed a bit. The BackTracker pointer variable name changed from bt to bt_serv and there is a new pointer to the ParticleInventoryService. I find that nothing is returned from bt_serv->HitToSimIDEs_Ps(rhit).

This is in v06_58_00 after the changes to backtracker.

History

#1 - 12/06/2017 09:06 PM - Tingjun Yang

- File mcc8.fcl added

Command to reproduce the problem:
lar -c mcc8.fcl
/pnfs/uboone/persistent/users/greenlee/devel/v06_26_01_08/reco2/test_mc_bnb/543790_36/prodgenie_bnb_nu_cosmic_uboone_5_20171013T2208 02_gen0_d145153e-7ff6-4719-ba91-f29a45418d94_20171013T223913_g4_20171014T001531_detsim_20171018T025822_reco1_20171018T03575 9_reco2.root -n 1

#2 - 12/06/2017 09:54 PM - Tingjun Yang

- Assignee set to Tingjun Yang

- % Done changed from 0 to 100

There are a few issues. Some in backtracker and some in trajcluster.
larsim:

- Sometimes backtracker does not get SimChannel from a hit. This is fixed in larsim:81d8ead8b8cd1348b423754edc9cd9eb758fa232 and larsim:a660cff8c6cd4421934ca7eb1c065e9ca06fb02e. Related issue #18483.
- Backtracker did not take into account trigger offset. This is fixed in larsim:4c075018cf2bc6119b9b2dea914a8cfe58906c7d.

Fortunately the above two bug fixes will be incorporated into this week's release.

larreco:

- In TrajClusterAlg.cxx fIsRealData was set after it was used. Fixed in larreco:bcf49c321cc980065b3fd3483503938b2e677831.
- In TCTruth.cxx, HitToSimIDEs was changed to HitToTrackIDEs: larreco:5c84f627728f7c34a9eaa20377817c7c7f9f9f94.

#3 - 02/10/2018 07:57 PM - Tingjun Yang

- Status changed from New to Resolved

Files

mcc8.fcl		8.48 KB	12/07/2017	Tingjun Yang