

## LArSoft - Bug #23401

### TStreamer Error While converting old data product to new

10/09/2019 11:24 AM - Jaydip Singh

<b>Status:</b>	Accepted	<b>Start date:</b>	10/09/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>	External Packages	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	develop/HEAD	<b>Spent time:</b>	0.00 hour
<b>Occurs In:</b>		<b>Co-Assignees:</b>	
<b>Experiment:</b>	DUNE		

#### Description

```
cet::exception caught in art
---- OtherArt BEGIN
---- EventProcessorFailure BEGIN
  EventProcessor: an exception occurred during current event processing
---- EventProcessorFailure BEGIN
  EndPathExecutor: an exception occurred during current event processing
---- ScheduleExecutionFailure BEGIN
  Path: ProcessingStopped.
---- FatalRootError BEGIN
  Fatal Root Error: @SUB=TStreamerInfo::BuildOld
  Cannot convert recob::Trajectory::fPositions from type: vector<ROOT::Math::PositionVecto
r3D<ROOT::Math::Cartesian3D<double>,ROOT::Math::DefaultCoordinateSystemTag> > to type: vector<ROOT
::Math::PositionVector3D<ROOT::Math::Cartesian3D<Double32_t>,ROOT::Math::GlobalCoordinateSystemTag
> >, skip element
  cet::exception going through module trackAna/trackAna run: 20000031 subRun: 1 event: 1
---- FatalRootError END
  Exception going through path end_path
---- ScheduleExecutionFailure END
---- EventProcessorFailure END
---- EventProcessorFailure END
---- OtherArt END
%MSG
Art has completed and will exit with status 1.
```

#### History

##### #1 - 10/09/2019 11:29 AM - Jaydip Singh

Copy of response to original email query:

Hi Kyle, Tom, Jaydip,

I would refer you to the art stakeholders meeting slides describing the resolution to the problem described in issue 23013. Unfortunately, based on the error message you relate below, you are not having trouble specifically with the double -> Double32\_t aspect of the schema evolution here. The data product you're having trouble with had two relevant changes: a nested object changed from vector<ROOT::Math::PositionVector3D<ROOT::Math::Cartesian3D<double>,ROOT::Math::DefaultCoordinateSystemTag> > to vector<ROOT::Math::PositionVector3D<ROOT::Math::Cartesian3D<double>,ROOT::Math::GlobalCoordinateSystemTag> >, and then subsequently to vector<ROOT::Math::PositionVector3D<ROOT::Math::Cartesian3D<Double32\_t>,ROOT::Math::GlobalCoordinateSystemTag> > (changes in red / bold). The latter change is the one that has been resolved in the current LArSoft by updating to a recent ROOT and removing the related I/O rule entirely; unfortunately your data file is sufficiently old that the former change must also be accounted for, and that is an aspect of the ROOT issue <https://sft.its.cern.ch/jira/projects/ROOT/issues/ROOT-10271> that has not been addressed to date.

I have CC'd the ROOT developer currently working on the problem. Please enter a Redmine issue with the full specifics of the problem, and I will add a reference to it in the upstream ROOT issue.

We are sorry that you are experiencing this, but the TL;DR is that you will be unable to read these older files with ROOT >= 6.16/00 until the underlying ROOT issue is fixed. While understood as urgent by the ROOT developers, there is not currently a timeline for resolving this.

Best,

Chris.

**#2 - 10/14/2019 01:11 PM - Christopher Green**

- *Status changed from New to Accepted*
- *Description updated*

**#3 - 10/14/2019 01:15 PM - Christopher Green**

- *Assignee deleted (Kyle Knoepfel)*

We will escalate this with the ROOT team. Philippe was notified upon receipt of the original email last week, and now there is a ticket in the Redmine system it will be added to the [JIRA ticket](#).