

## LArSoft - Idea #22452

### Tons of messages for background simulations.

04/25/2019 09:10 PM - Jason Stock

<b>Status:</b>	Feedback	<b>Start date:</b>	04/25/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.00 hour
<b>Experiment:</b>	-		
<b>Description</b>			
The drift messages from LArVoxelReadout completely saturate the output of radiological simulations due to charge regularly being made outside the active volume.			
Can we make this message a debug message so it doesn't spam the logs?			
Example:			
<pre>%MSG-w LArVoxelReadout: LArG4:largeant@BeginModule 25-Apr-2019 21:06:47 CDT run: 20000061 subRun : 0 event: 1 unable to drift electrons from point (136.377,-513.393,231.755) with exception ---- Geometry BEGIN   Can't find nearest wire for position (3.00155,-513.478,231.628) in plane C:0 T:5 P:2 approx wire   number # 0 (capped from -2) ---- Geometry END</pre>			

#### Associated revisions

##### Revision 340d537d - 05/13/2019 02:56 PM - Jason Stock

Changing warning message from LArVoxelReadout that write many messages for particles outside of the TPC or for each event to be debug level.  
This addresses LArSoft issue #22452

#### History

##### #1 - 04/29/2019 10:49 AM - Kyle Knoepfel

- Status changed from New to Feedback
- Description updated

Jason, are you able to make a feature branch with the desired change? If this type of message indicates a normal situation, then changing the logging to MF\_LOG\_DEBUG is reasonable. Otherwise, some more thought should go into it. If this is not an exceptional circumstance, then throwing/catching an exception is not the best solution.

##### #2 - 05/06/2019 10:36 AM - Kyle Knoepfel

Any update on this, Jason?

##### #3 - 05/06/2019 11:04 AM - Jason Stock

No. I haven't done any work on this. I have not worked with this piece of the simulation, and reported the issue to solicit help/feedback from the maintainers responsible for LArVoxelReadout.

I don't think this is exceptional, as any charge generated outside the active region will not drift to a wire and any charge in the dead region will not drift to a wire. As I didn't introduce the warning however, I am not sure how important the author thinks this warning is.

##### #4 - 05/13/2019 11:23 AM - Kyle Knoepfel

LArVoxelReadout is no longer necessary with the refactored larg4 code. Once the experiments migrate to larg4, they will not see these messages. In the meantime, changing to MF\_LOG\_DEBUG is a good idea. Can you please do that?

##### #5 - 05/13/2019 11:37 AM - Jason Stock

Will do. I'll it later today (when I'm back to a computer)