

dunetpc - Task #14189

Tune noise in 35t simulation to match 35t data

10/20/2016 10:32 AM - David Adams

Status:	Closed	Start date:	10/20/2016
Priority:	Normal	Due date:	
Assignee:	David Adams	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
We would like the 35t simulation noise to have a level and frequency spectrum similar to that in data.			

History

#1 - 10/20/2016 01:13 PM - David Adams

- Status changed from Assigned to Closed

ExponentialChannelNoiseService has been modified to add a term with incoherent noise.

The values for the corresponding new parameters and the old parameters have been tuned to provide a rough match with data for run 13843. I expect this comparison will be shown at the next 35-ton sim/reco meeting, presumably Oct 26. The BG parametrization for the collection planes is the same as that shown (by me) at the Oct 19 meeting.

The new parameters are in the default production fcl. It should be possible to recover the old simulation with

```
services.ChannelNoiseService: @local::chnoiseold
```

The Oct 19 meeting also compares that simulation with data.

I close this report.