LArSoft - Feature #18724

Have raw::RawDigit report their time reference frame

01/11/2018 11:45 AM - Gianluca Petrillo

Status:	Assigned	**Start date:**	01/11/2018
Priority:	Normal	**Due date:**	
Assignee:	Saba Sehrish	**% Done:**	0%
Category:	Architecture	**Estimated time:**	0.00 hour
Target version:		**Spent time:**	0.00 hour
Experiment:	-	**Co-Assignees:**	

Description

Yet and again people gets beaten by timing inconsistency between raw data and the rest of the system, particularly the TPC channel simulation (sim::SimChannel).

MicroBooNE has started some time ago trimming some of their raw::RawDigit collection to save storage space and memory. This requires global counteractions in DetectorClocks configuration.
This approach has two problems:

- time and again, the changes are forgotten and troubles arise
- being the approach global, it is possible to have only one of the raw::RawDigit time frames to work correctly, and all the others will be broken.

I propose to add in the event information of where each raw::RawDigit starts in time, with respect to a global reference (ideally, the same as sim::SimChannel TDC counts).

The details of the implementation can vary according to how user-friendly and efficient we want it (that is, which we are more willing to compromise).

History

#1 - 01/22/2018 10:27 AM - Lynn Garren

- Status changed from New to Assigned

Gianluca will arrange a meeting.

#2 - 04/03/2018 03:33 PM - Gianluca Petrillo

This proposal was discussed at LArSoft coordination meeting on March 27, 2018.

#3 - 04/10/2018 10:48 AM - Katherine Lato

- Assignee changed from Gianluca Petrillo to Saba Sehrish