Hit repeater and a new way of disambiguation

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The idea (by Robert Sulej)

- Omit disambiguation step

- Repeat hits on channels with multiple wires

- Run reconstruction on repeated hits

- After 3D reconstruction decide - hits on which wire should be selected

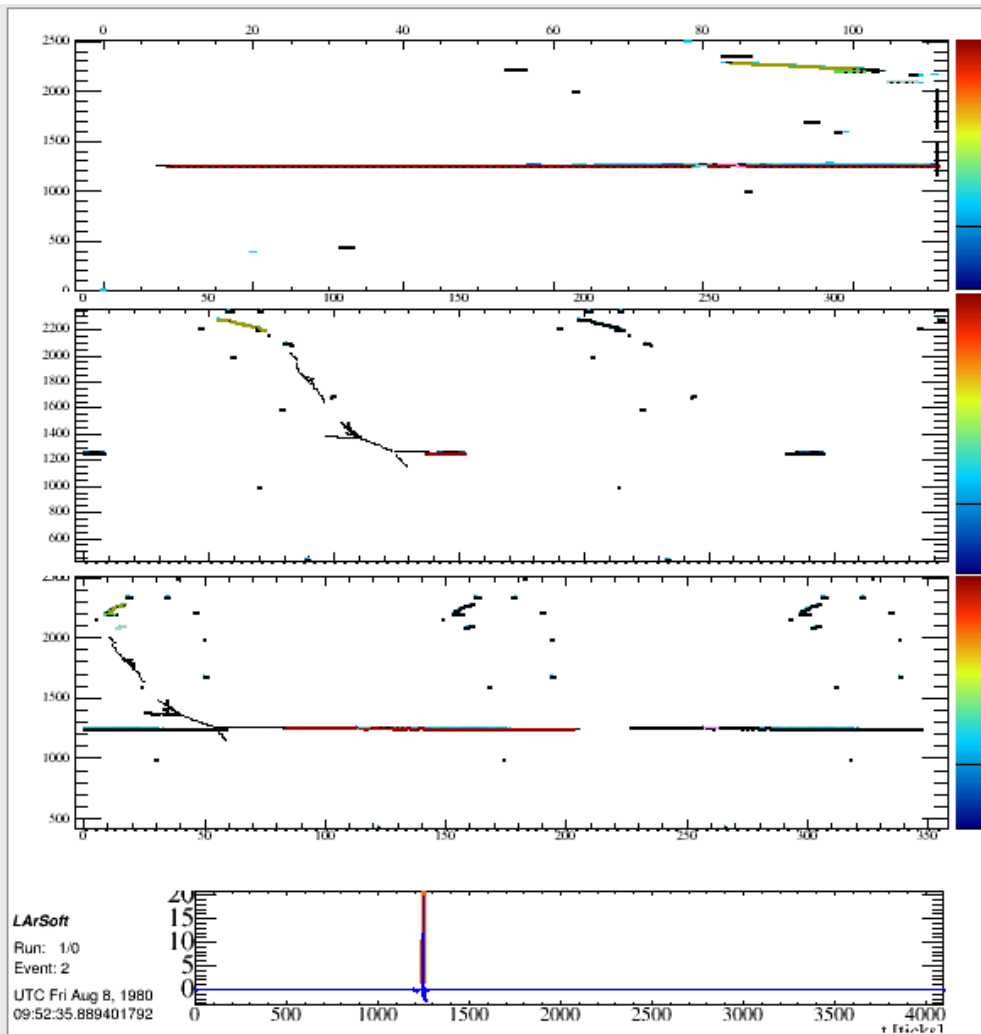- Allows quick testing existing LArSoft algorithms in "channel" space

Implementation

- In path lbnecode/lbne/HitFinderLBNE/
- Module implementation HitRepeater_module.cc
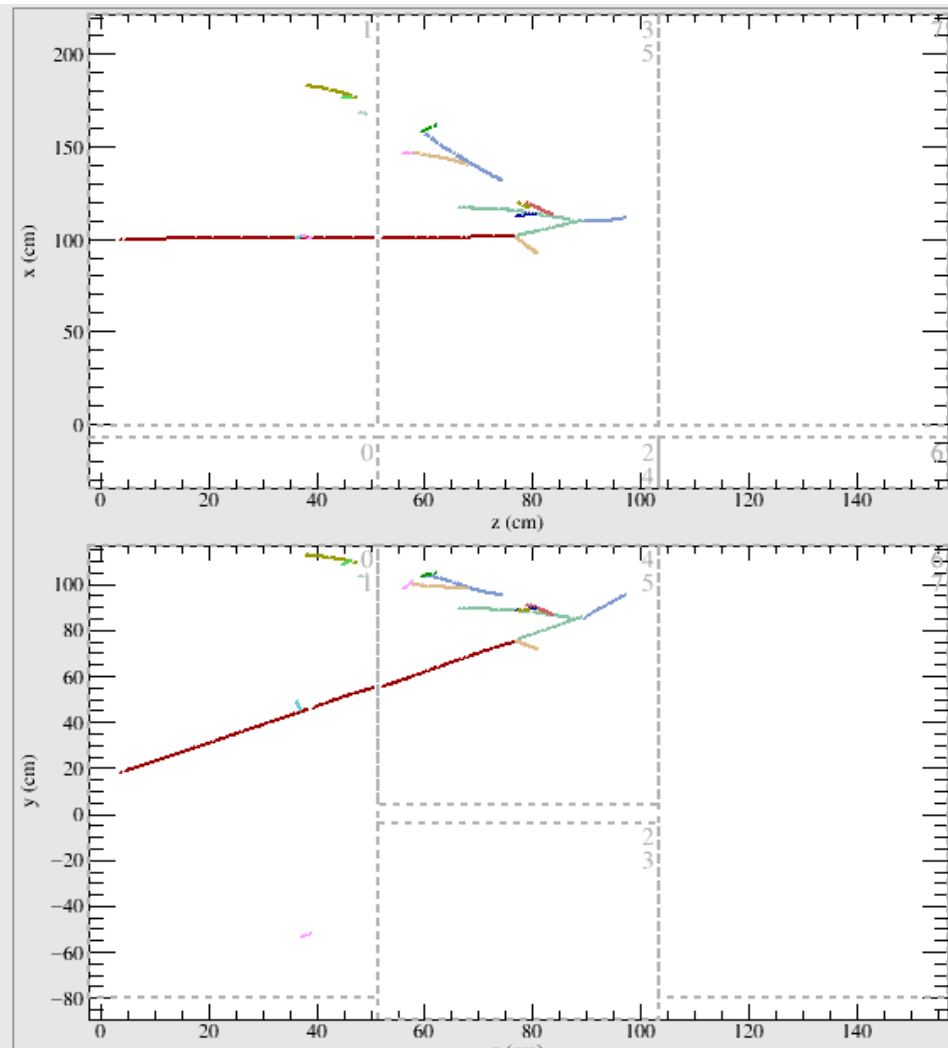- Module parameters in hitfindermodules_lbne.fcl in hit_repeater definition
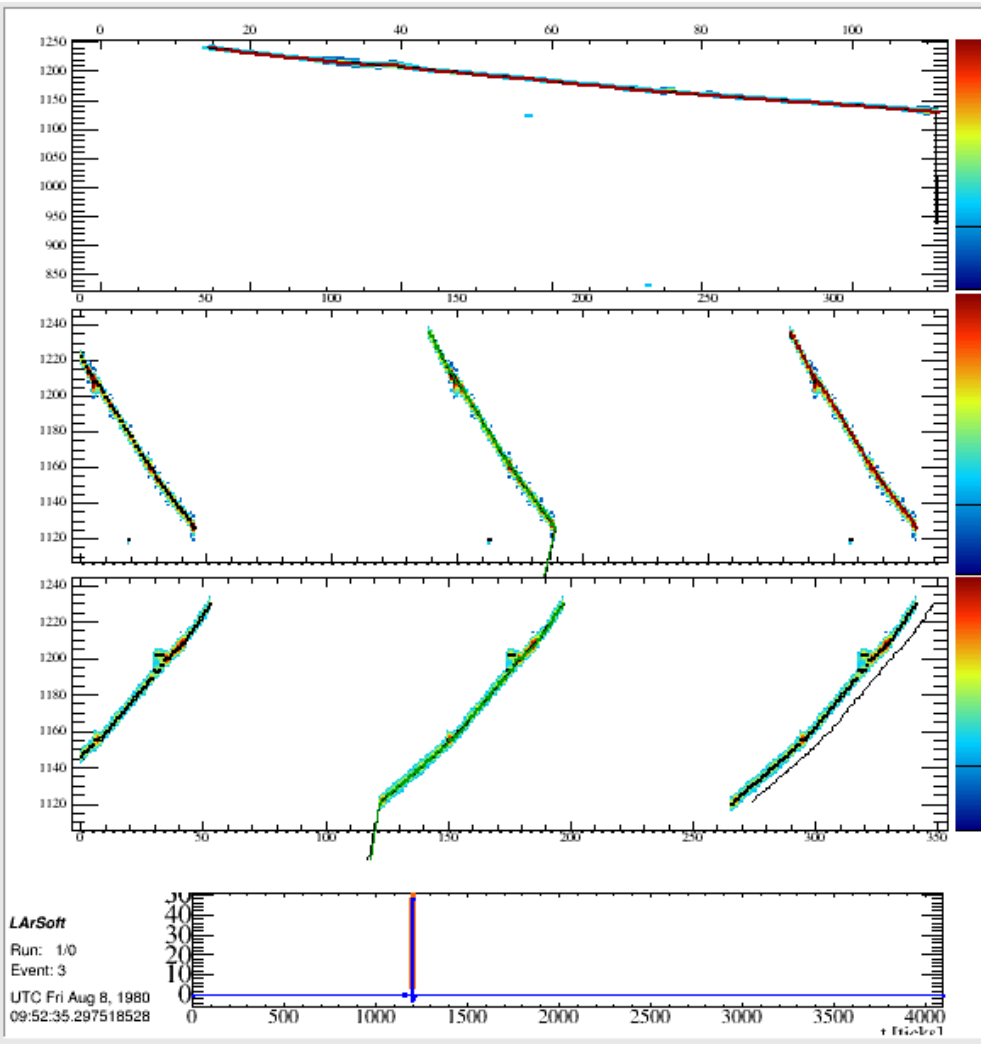
Example 1
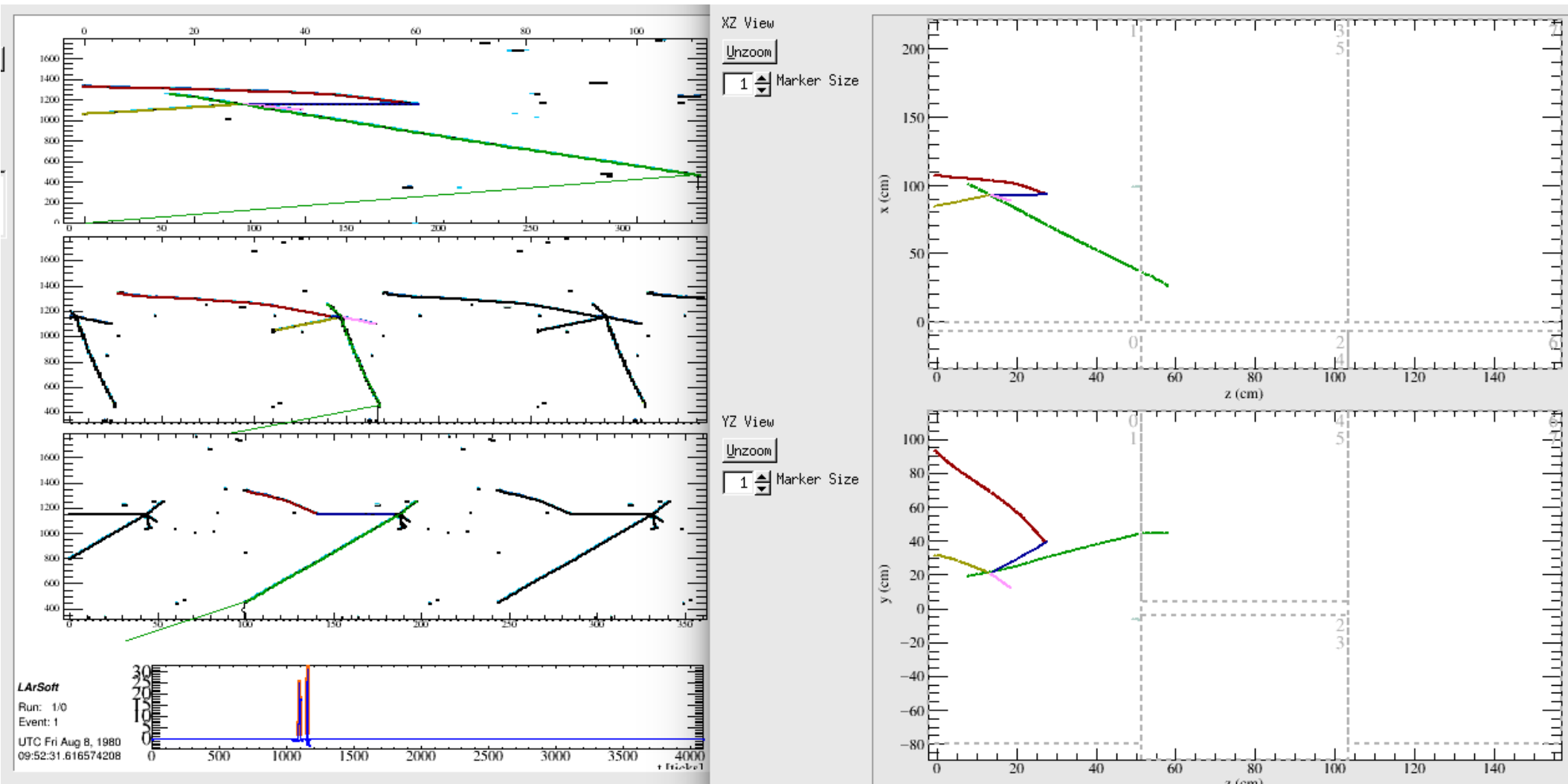
Example 2
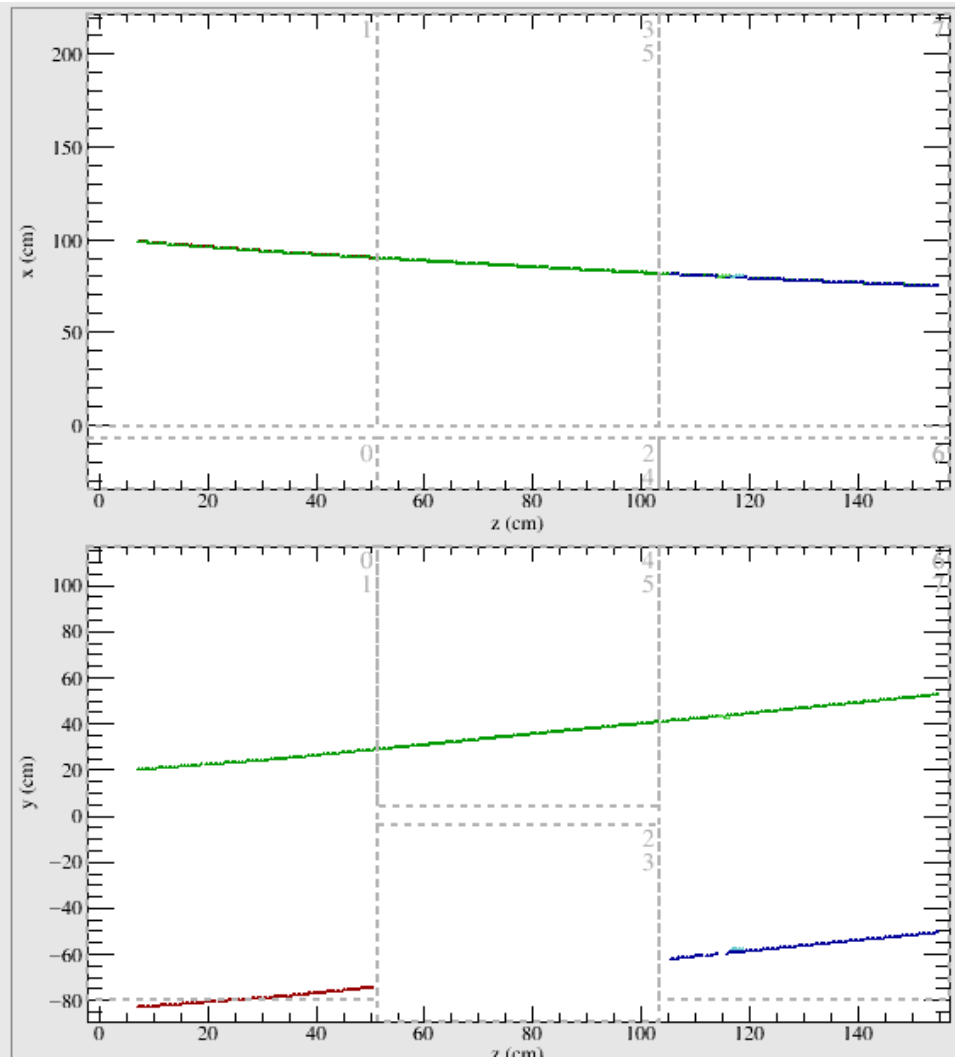
Example 3

Next steps

- Disambiguation step is postponed after reconstruction

- There are situations that there are two good responses (example 3). It can be solved by checking for existence of sub-tracks in tracks.

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