Vertical Drift Update

- wirecell 0.17.0 available with gojsonnet
  - Many thanks to Kyle Knoepfel and Lynn Garren
    - https://cdcvs.fnal.gov/redmine/issues/26157#change-85710
  - Brett's blog summarizing wirecell updates in 0.15.0, 0.16.0, 0.17.0
    - https://wirecell.github.io/news/posts/releases-15-16-and-17/

- **one file pgrapher/common/tools.jsonnet in dune_pardata needs to be updated for the 3view-30 FR to work**

Configuration update for Vertical Drift in dunetpc:

- Nitish's update for configurable plane labeling + many infrastructure updates
- Use PDSP ColdElecResponse for Vertical Drift to remove the pepper noise found by Slavic
- Switch to use jsonnet for VD Sim – much easier to change parameters
- Sim-SigProc combined workflow to reduce mem, disk usage
- Better interface with fcl configuration
  - default units consistent with DUNE services
- PR: https://github.com/absolution1/dunetpc/pull/4

Update for Horizontal Drift undergoing

gojsonnet is much faster!
compiling the config. for VD Sim

```
$time ./js.sh wcls-sim-drift-simchannel

real    3m3.728s
user    3m1.922s
sys     0m1.540s
```

jsonnet

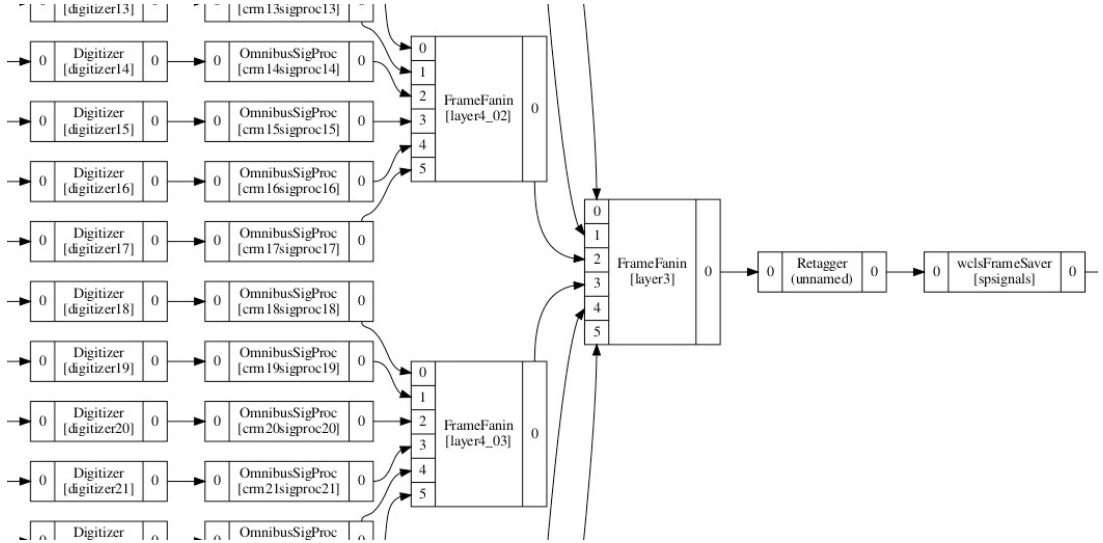
```
$time ./js.sh wcls-sim-drift-simchannel

real    0m1.040s
user    0m2.136s
sys     0m0.050s
```

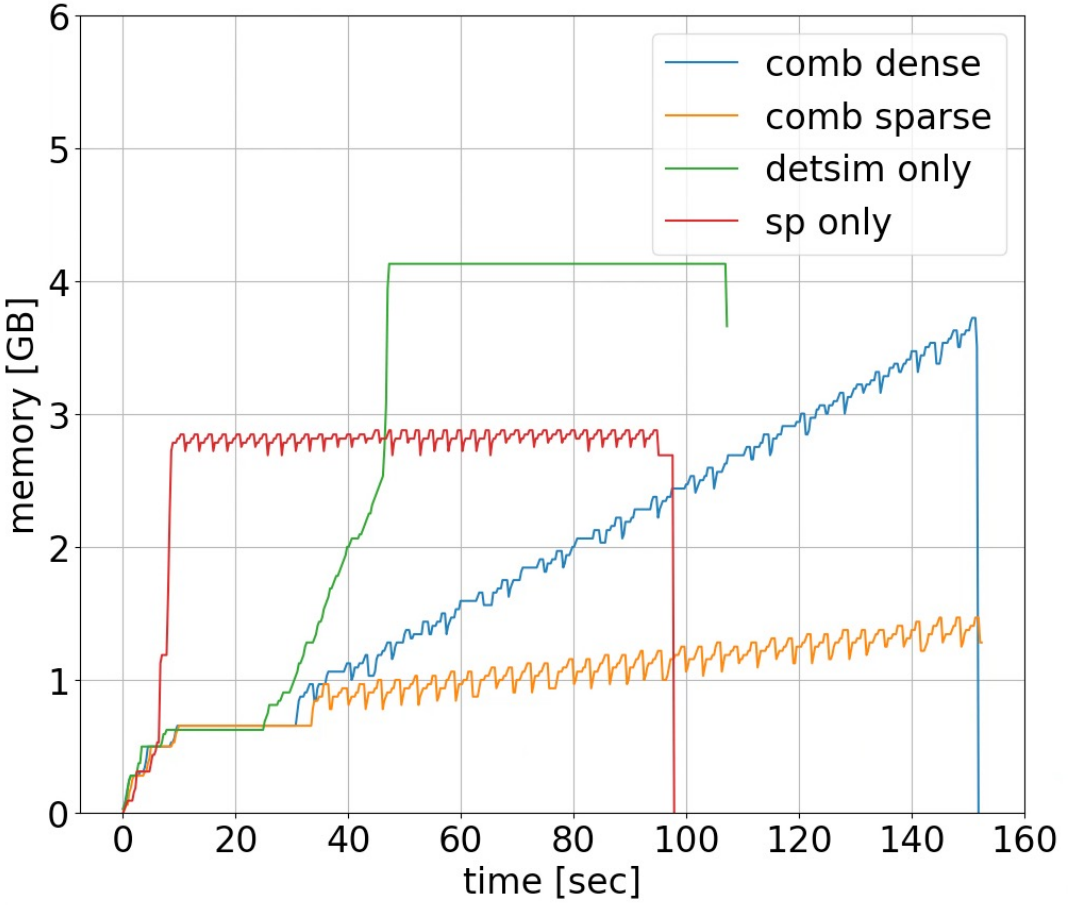
gojsonnet

VD Sim/SigProc is roughly 2-3 min/event

Some Tests for Vertical Drift

Work	outputCommands	Memory summary	disk
detsim+SigProc (dense)	keep*	VmPeak = 5257.82 VmHWM = 3979.98	9.1M
detsim+SigProc (sparse)	keep*	VmPeak = 2856.98 VmHWM = 1586.26	9.1 M
detsim	keep*	VmPeak = 5688.31 VmHWM = 4423.21	125 M





- Current WC graph keeps all last output edges and write out once, maybe write out for each edge may help
- Noise is hard to compress losslessly.
- Matthew Man and Nikolina Ilic from U. Toronto are investigating 2D ROI to mask signal regions.