

IoLS Updates

David Rivera

October 22nd, 2024



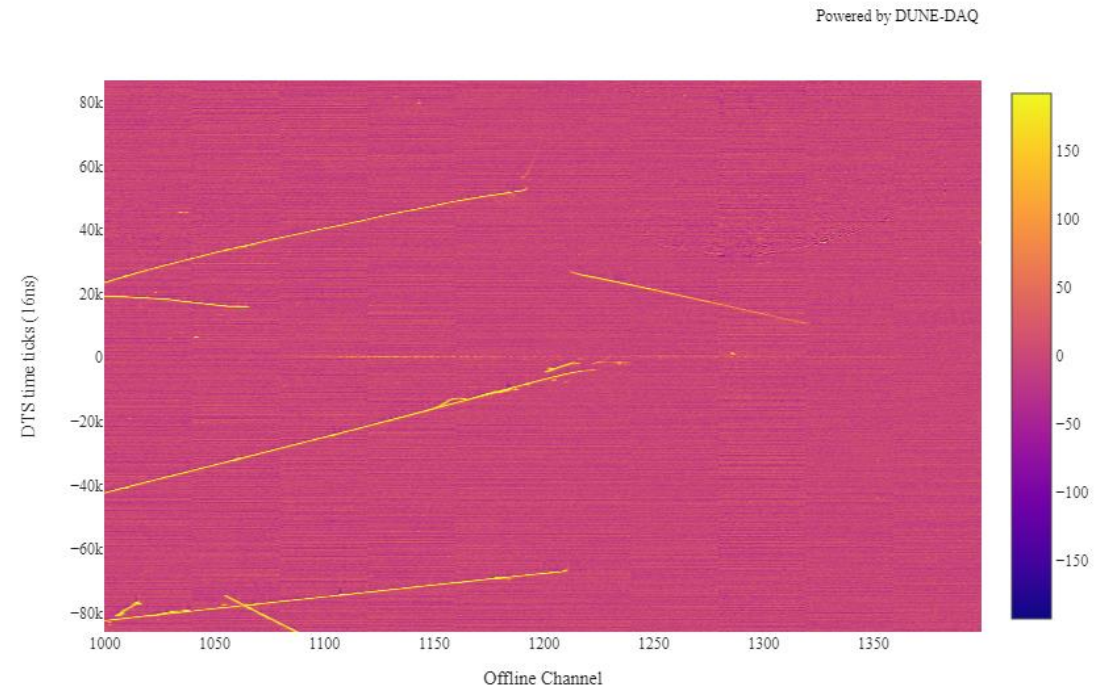
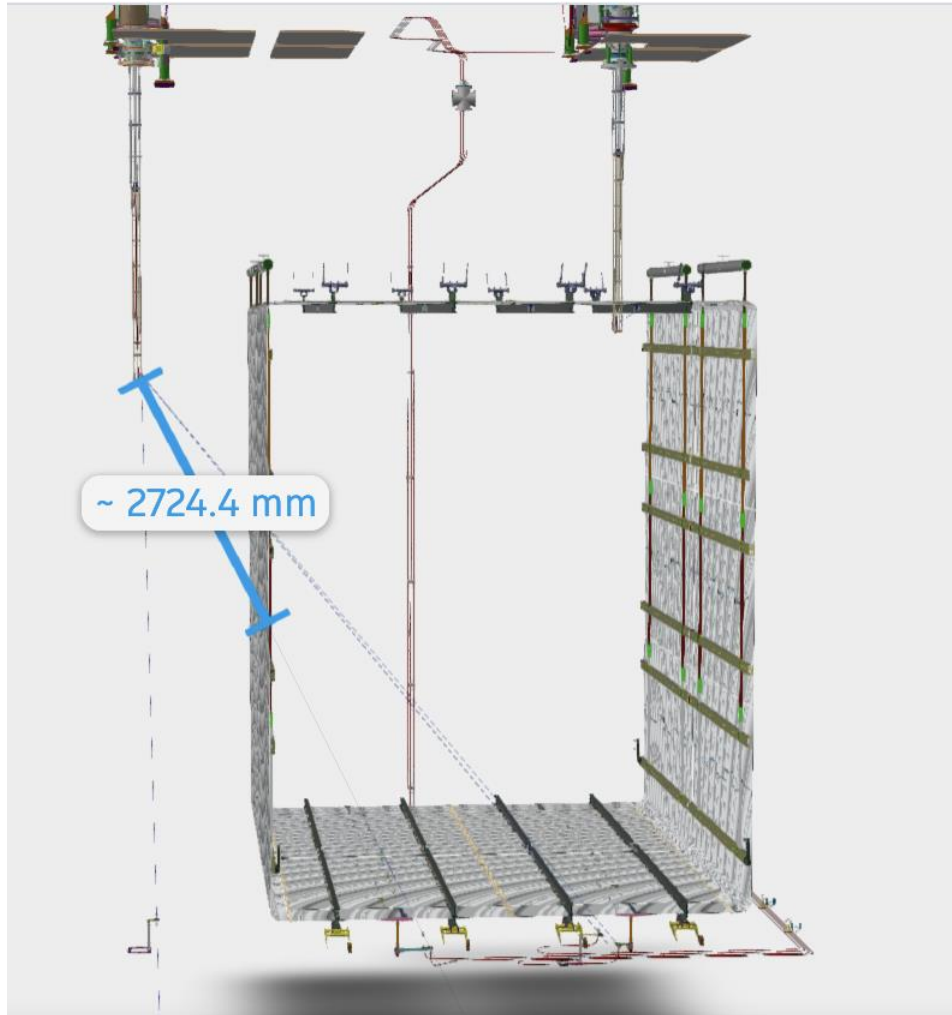
Schedule updates

- Week of Nov. 11 will be the installation of PMTs (and PINdiode)
- Week of Nov. 18 will be the laser feedthrough and periscope installation followed by the cryostat purge
- Week of Nov. 25 will be the start of the liquid transfer from NP04 to NP02

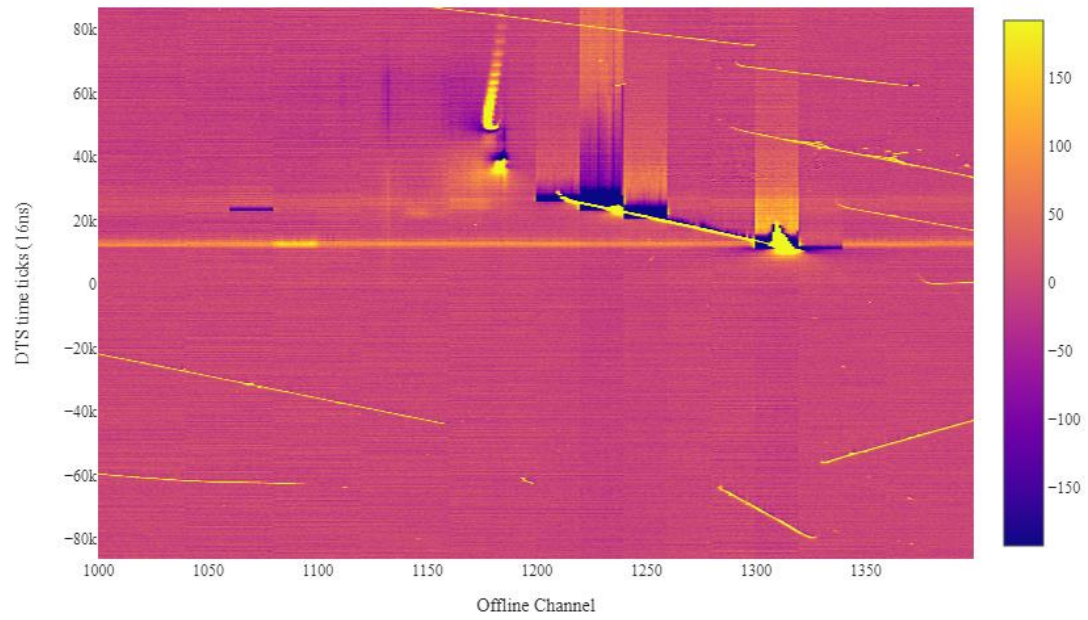
Laser Run Plan for Week of Oct. 21st

- **Monday:** run for ~30 min w/ P1 and at least 30 min w/ P2 while varying the intensity of the lasers
- **Tuesday:** scans w/ P1 to get tracks going upstream. This will also take ~1 hr and will require the same method of scanning and pausing until we get the Slow Controls interface working for an automatic scan
- **Wednesday:** scans with P2 to try to get through-going tracks. This should take ~1hr, given that I'll have to try various directions until we see a nice track. We'll have to aim, pause to change the direction and to check the evds for tracks, and then iterate a few times until we have an orientation that works
- **Thursday:** scans w/ P1 to try to hit the LBLS mirrors, ~1.5hr There are 4 modules; we will attempt to hit as many as we can.
- **Friday:** attempt to get crossing-tracks between P1 and P2. This will involve aiming P1 and P2 such that the resulting tracks intersect each other. The two periscopes don't have to run simultaneously. The plan would be to find fix the orientation of P1 and take a run and then also fix the orientation for P2 and take a run. For this, I think it would be good to have 1.5 hours, if possible, just in case it proves to be difficult

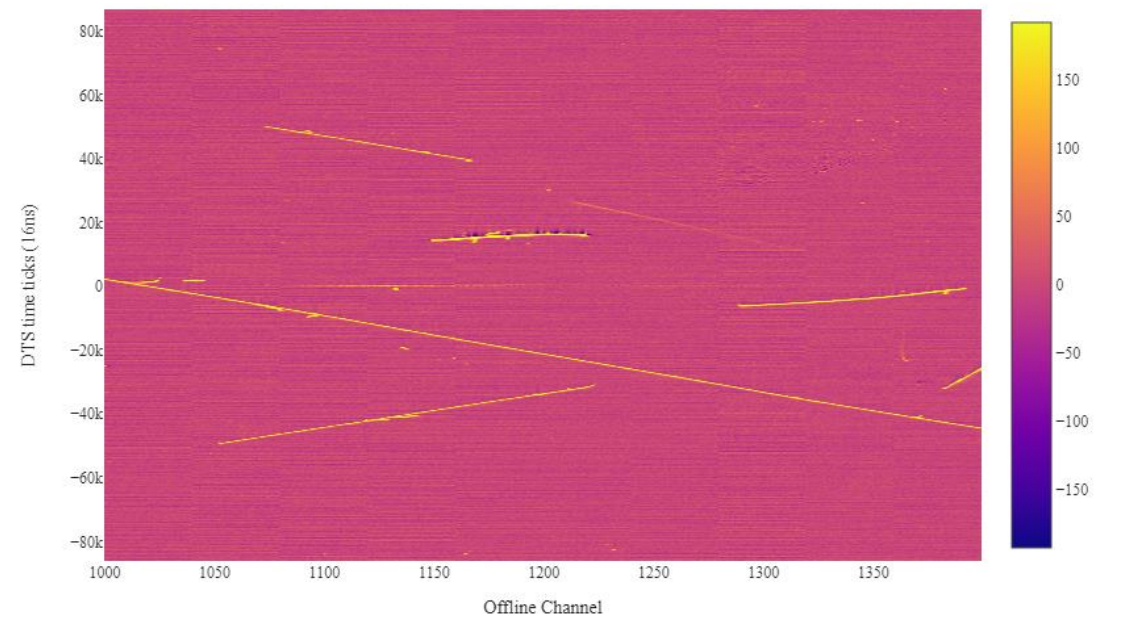
Monday



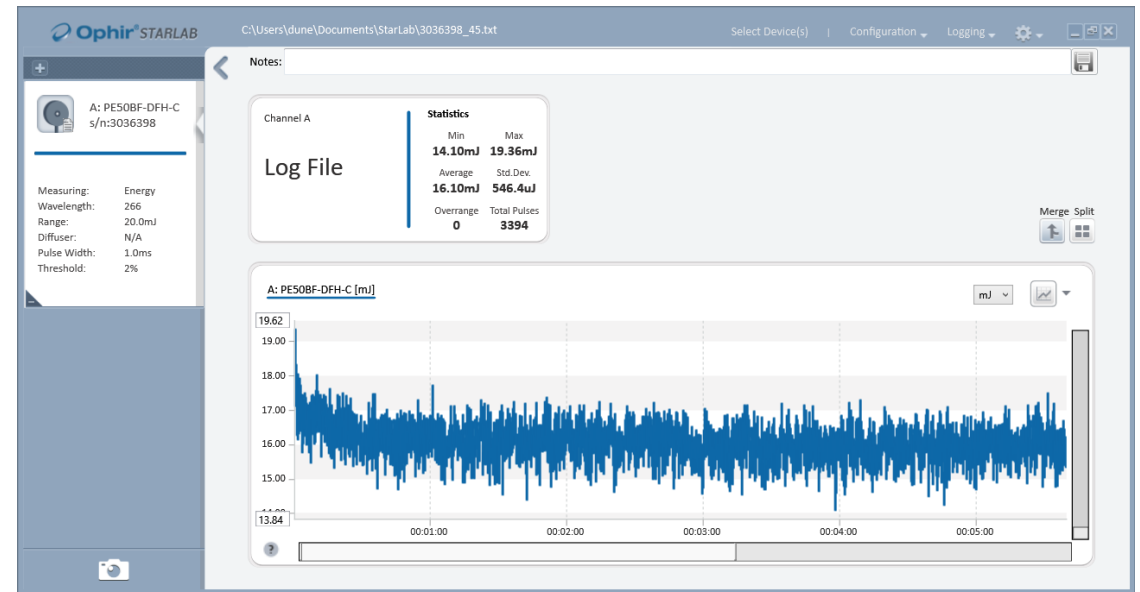
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- P2 energy peaks at the beginning
- The anomalous events most common in the first few tens of triggers at the start of the run



Today

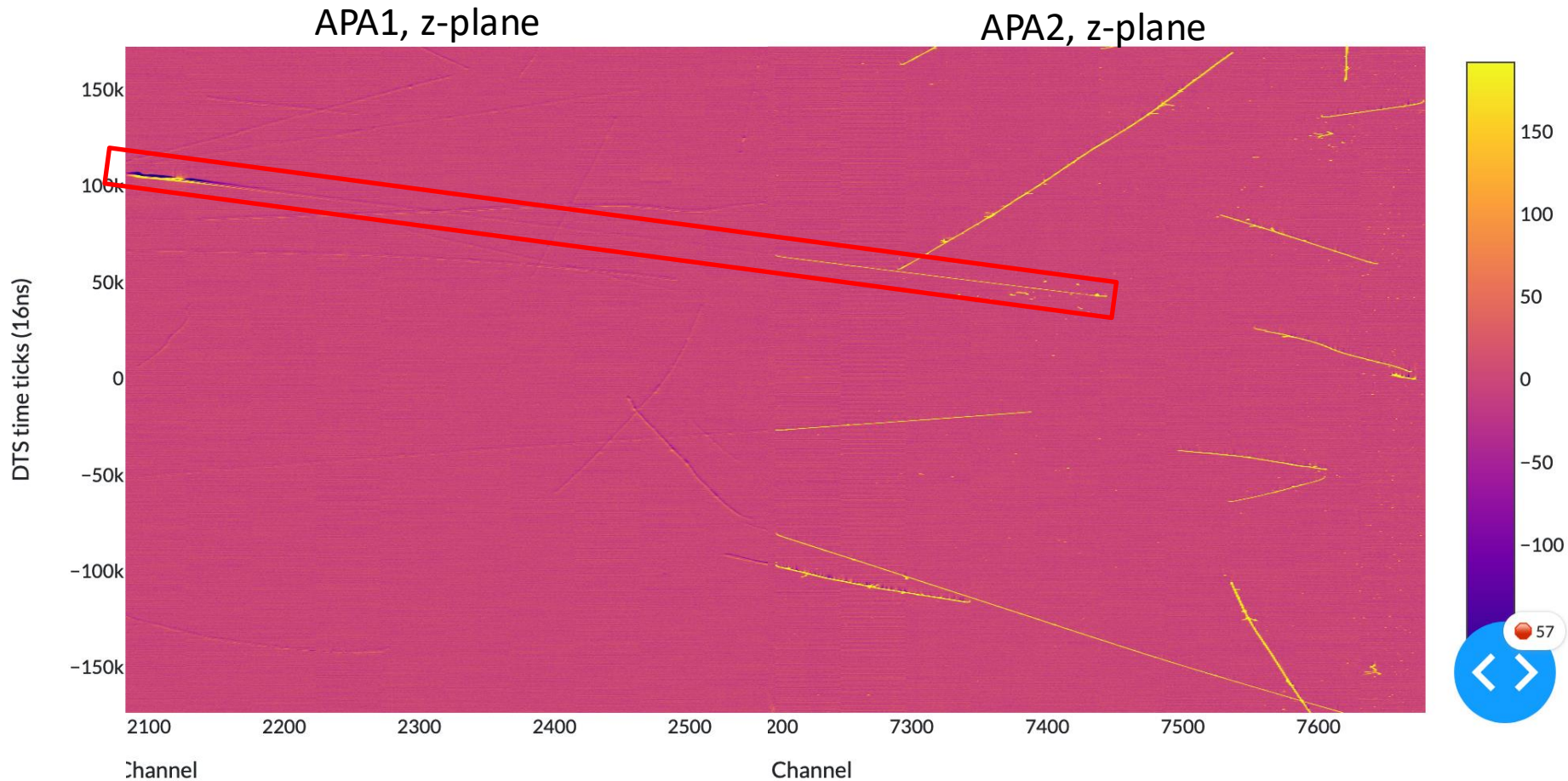
- Aimed P1 in the upstream direction w/ the steerable mirror

P1 Upstream-Going Tracks

Run31355, Trigger 2016

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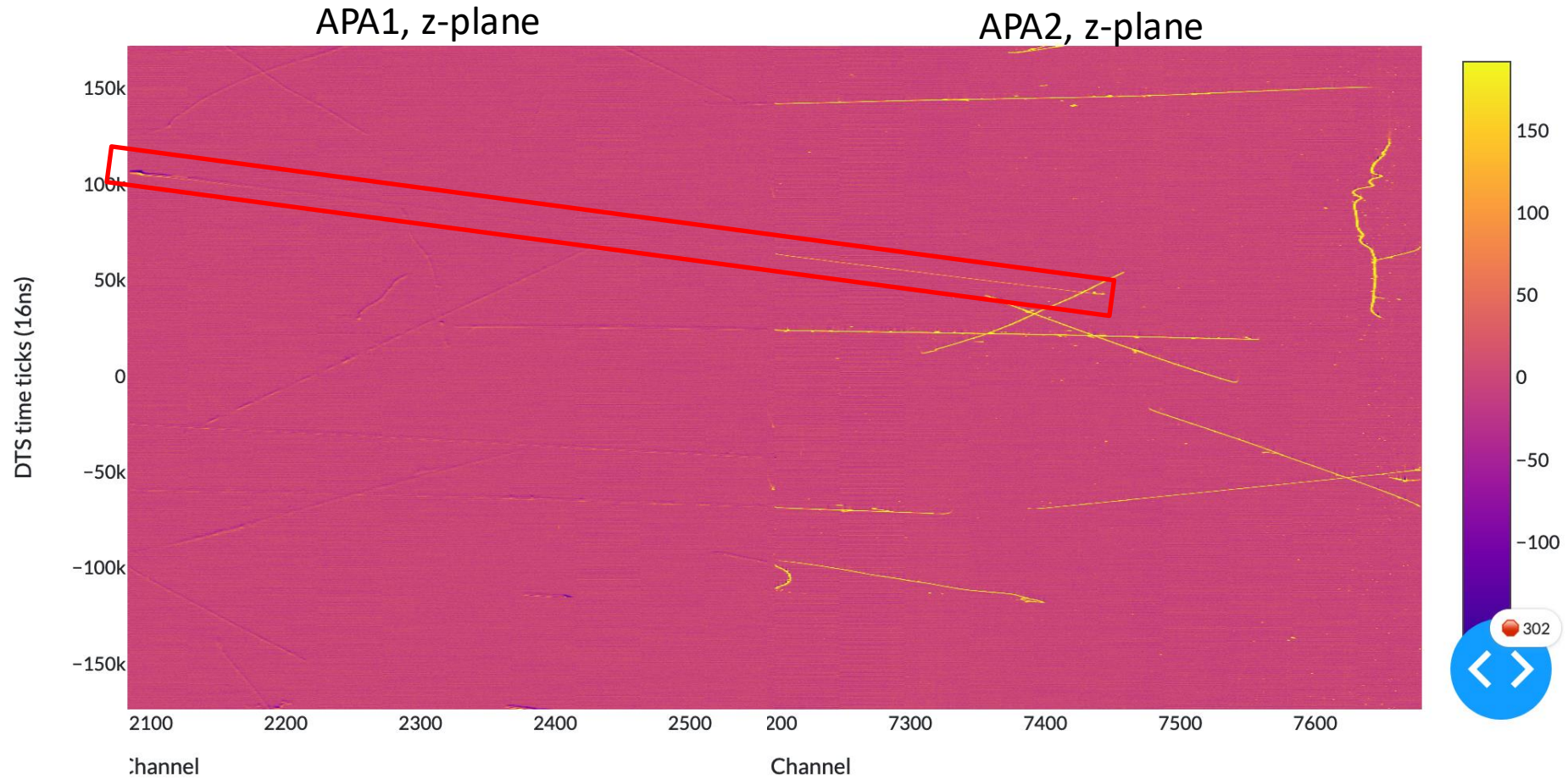


P1 Upstream-Going Tracks

Run31355, Trigger 2016

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