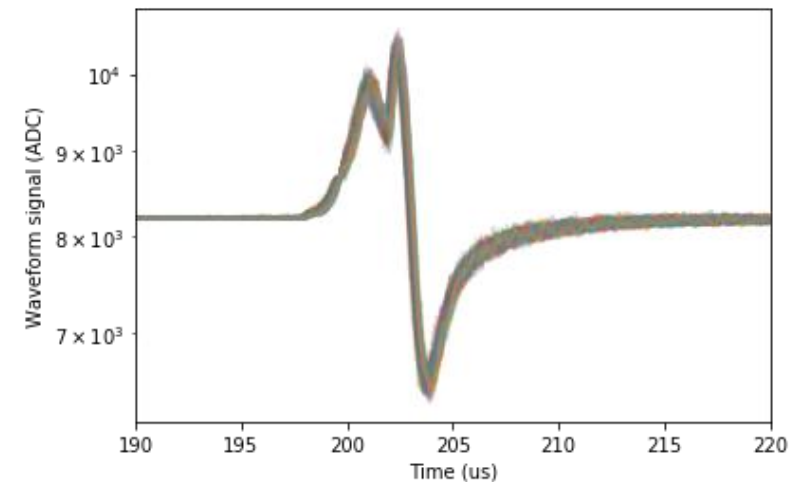
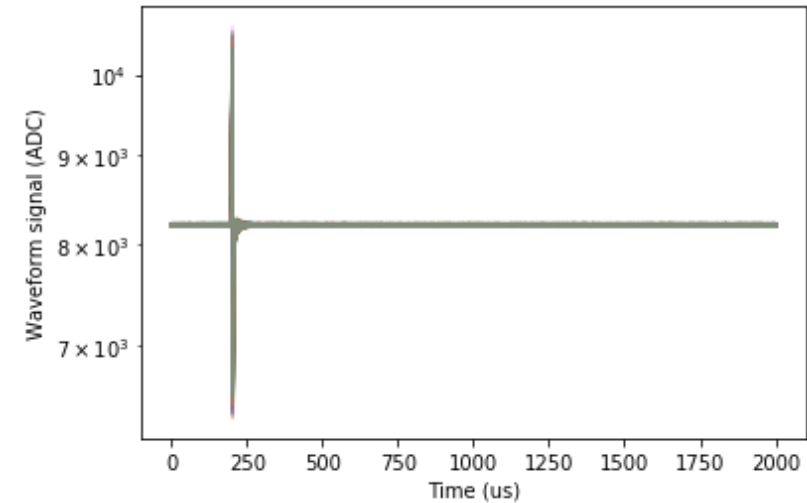


Flashlamp Update

21/10/25

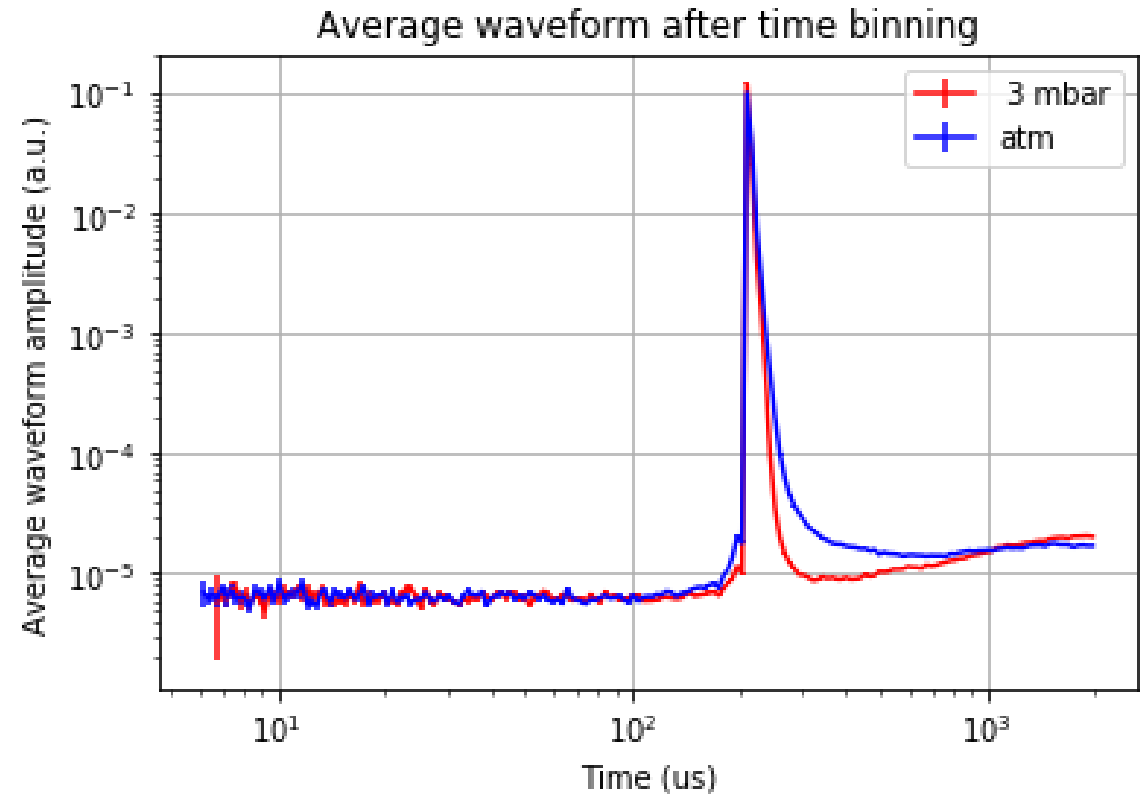
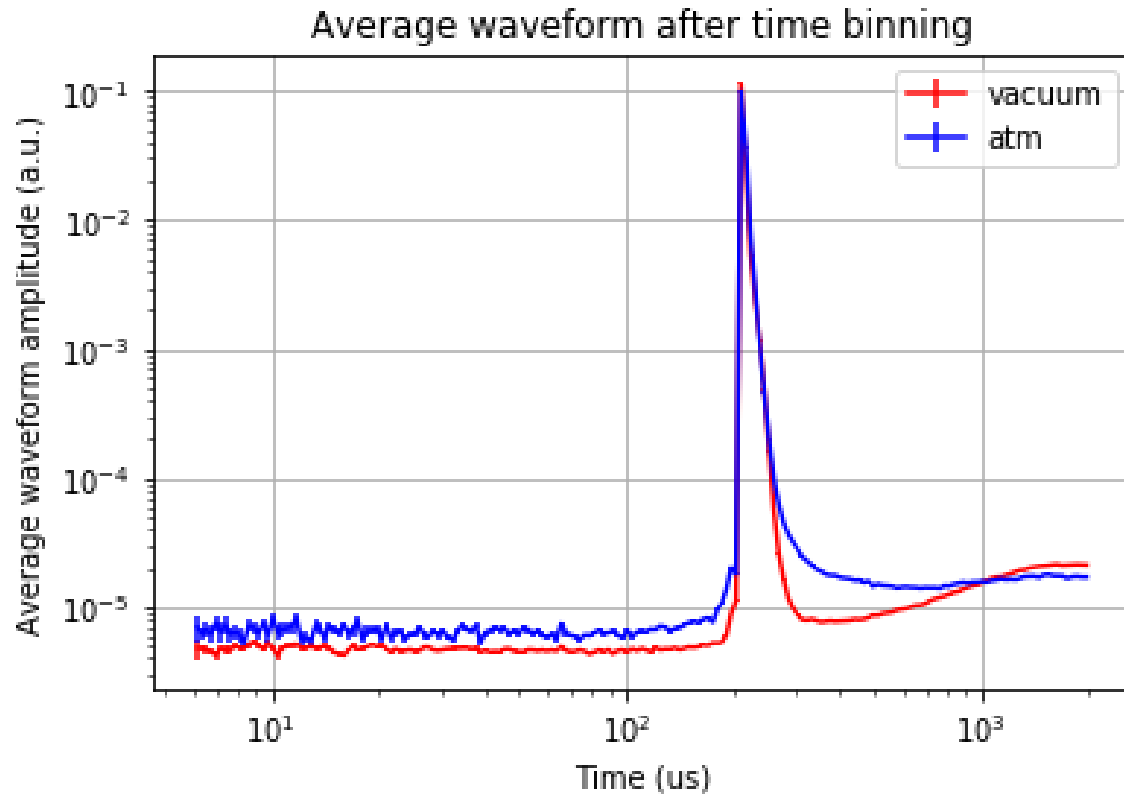
Can we see delayed argon light?

- VUV SiPM in optical line.
- No filter present.
- Small collimator.
- Optical line at different pressures, 10^{-7} mbar, 3 mbar and atmospheric.
- Lots of undershoot.
- Only one Population.



200 waveforms in vacuum

Can we see delayed argon light?

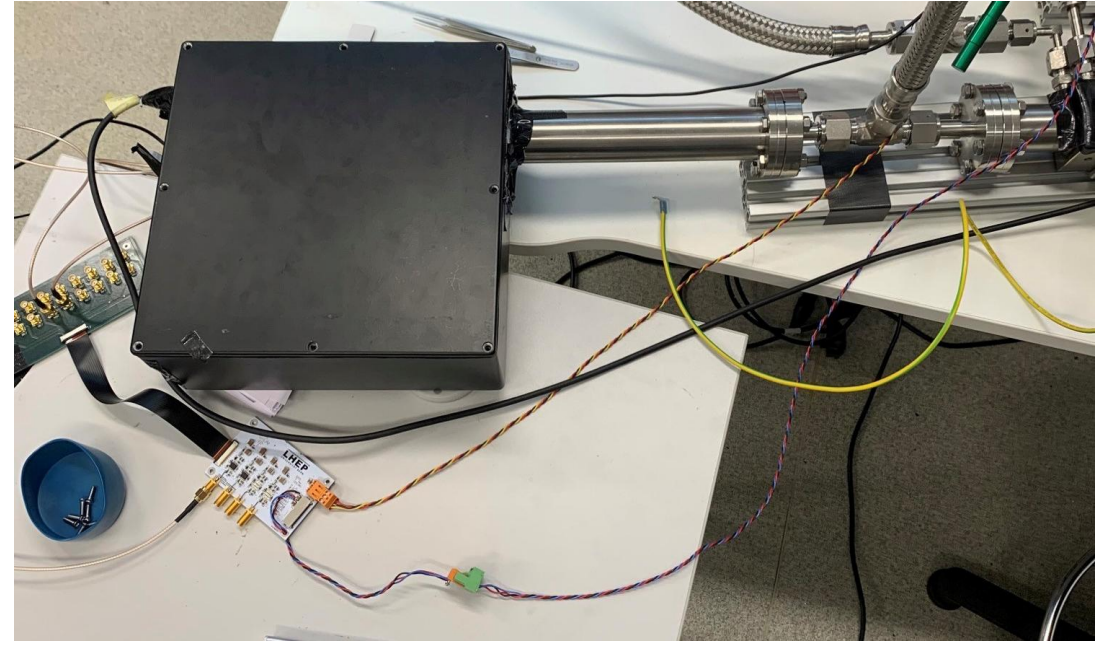


These average waveforms are normalised. More analysis is needed on this.

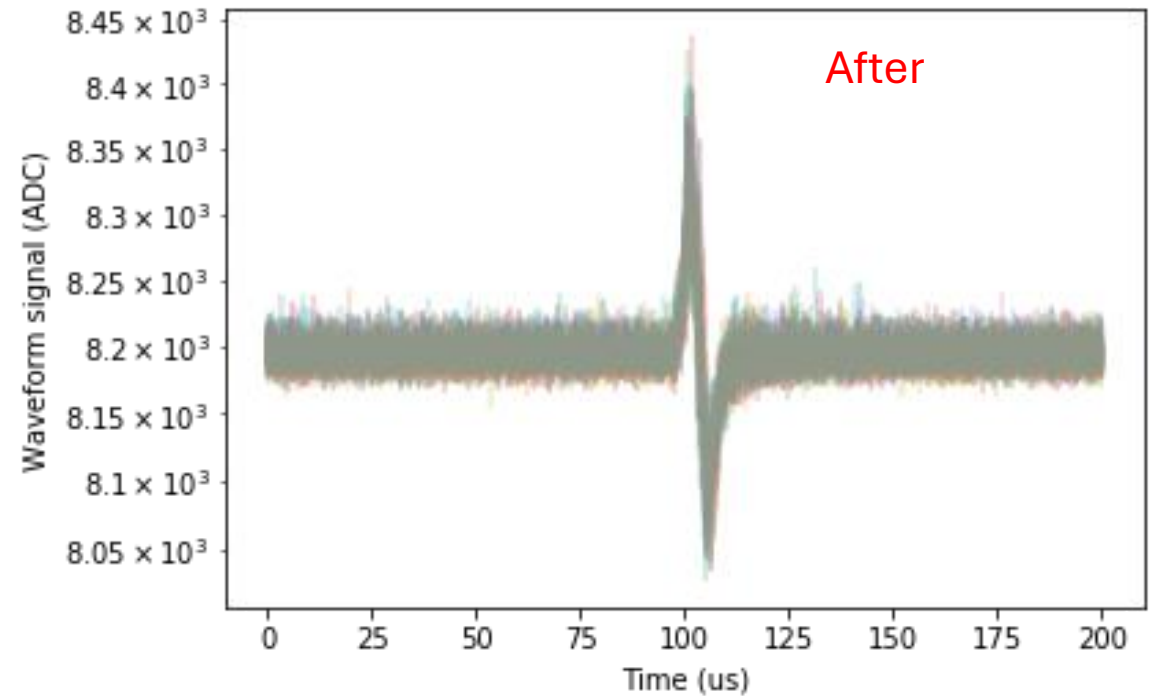
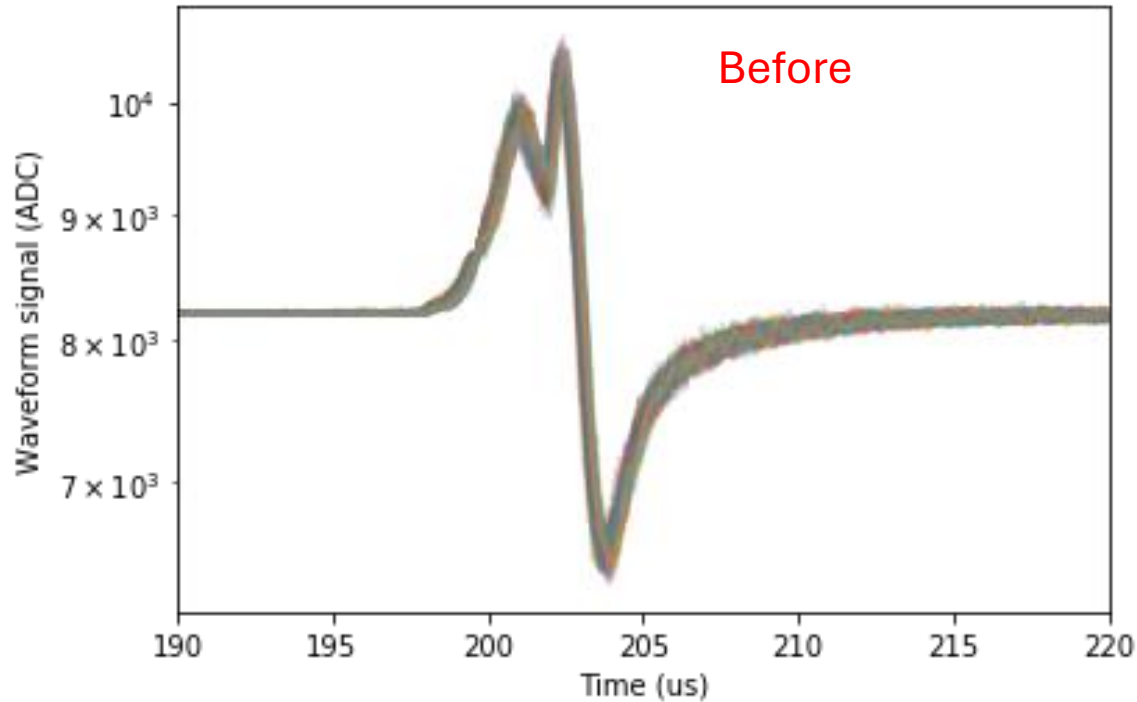
We still see light when the optical line is at atmospheric pressure – confirming that we need the filter.

Finalising the setup

- The plan is to leave the optical line in its final state.
- Large aperture collimator, VUV filter, MgF2 window at the end.
- The SiPM is now in a dark box outside of the optical line.



Before and after changes



A comparison of the raw data (200 waveforms). The amplitude has decreased after the changes to the setup have been made, this is expected due to the filter being added and the MgF2 window being in front of the SiPM.