Processing of SlowDROP package particulate absorption and attenuation data.

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One AC-S was used, acs101

1. Tar the pressure to -1db at the top position of the profile (sensors intake position).
2. Define the profile start and end time by clicking on those position on a graph (bracket area when package is continuously sinking from its own weight. Typical sinking velocity 20cm s-1).
3. Delay between AC-S profile and CTD (due to time it takes for water to pass through the sensor) is determined by finding the delay (in 0.2s increments) that provide the best fit (smallest residuals) between absorption at a wavelength > 730nm and temperature. The absorption goes through a 20pt median filter prior to this analysis. Delay is applied to AC-s time.
4. The ac-s data is then passed through a 5pt (1.25 s) median filter to remove spikes due to bubbles.
5. Overlap time between CTD and AC-s is determined (if smaller than initial choice of CTD time).