Multiple Peaks

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 In the most cases arriving time will be taken from edge of first peak. •Overlapping signals coming not often than one per orbit. Distance between overlapping peaks is of about 20-30 ns. •It can not be a reason for multiple peak structure in arriving time histograms for TDC or ADC.



Signal time over threshold



1/1 -red; 1/2 -green; 1/3 -blue; 1/4 -black;

- > Mainly MPV of signal length have same location.
- > Only channel 1/4 have different shape.
- > Could be explained as double peak appearance.



Threshold time definitions



- > Signals arriving time is calculated as soon signal reach a threshold.
- It can be obtained from 2ns samples of ADC or with interpolation.
- > Two methods are shown(up with interpolation and down without interpolation) and fitting of one bunch peak gives similar results.



Time structure



Amplitude spectra



Baseline



Conclusions

- > ADC resolution 2ns do not allow to see if there are multiple peak structure in time information.
- > Other data will be analyzed.

