

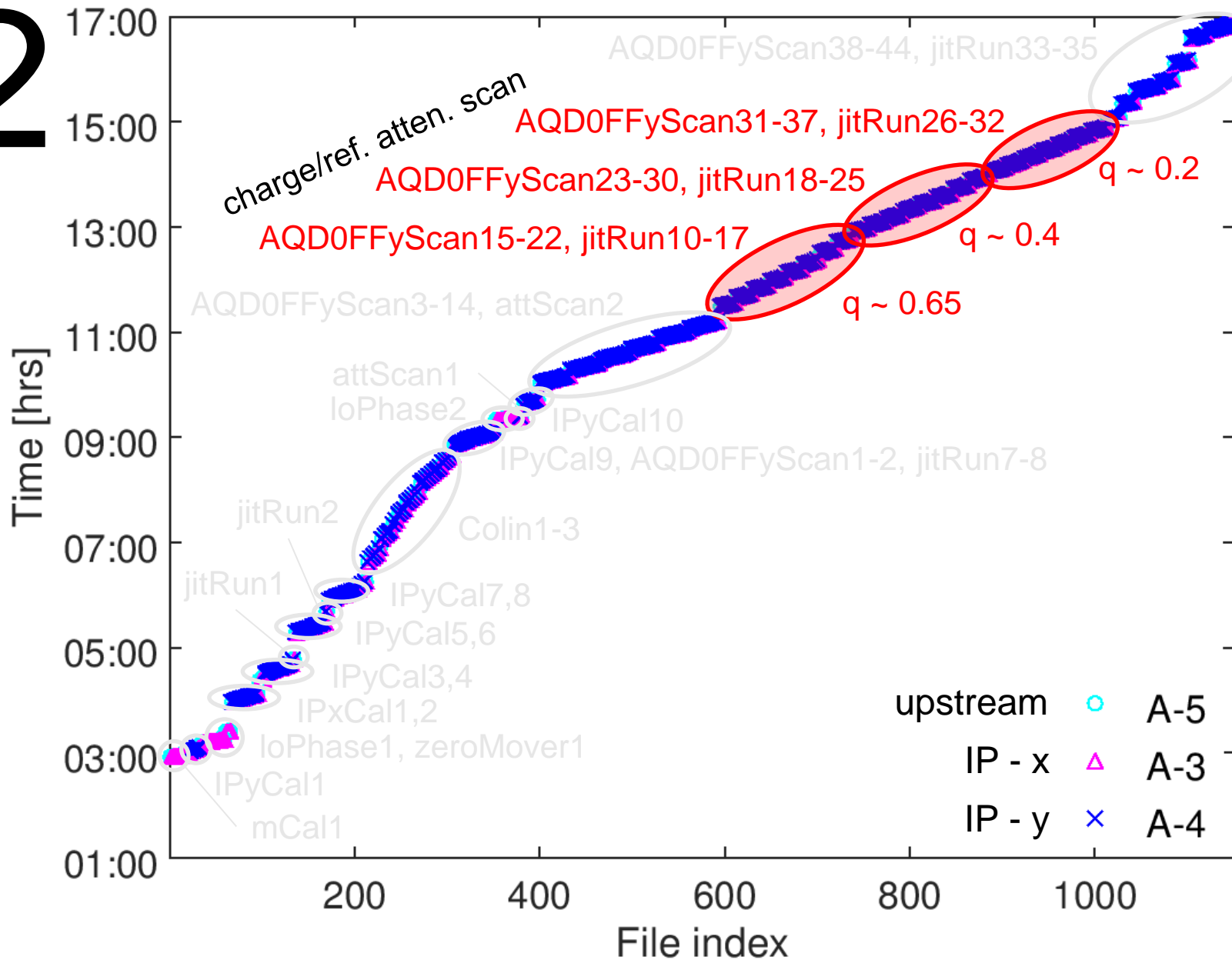
FONT Meeting

Friday 6 July 2018

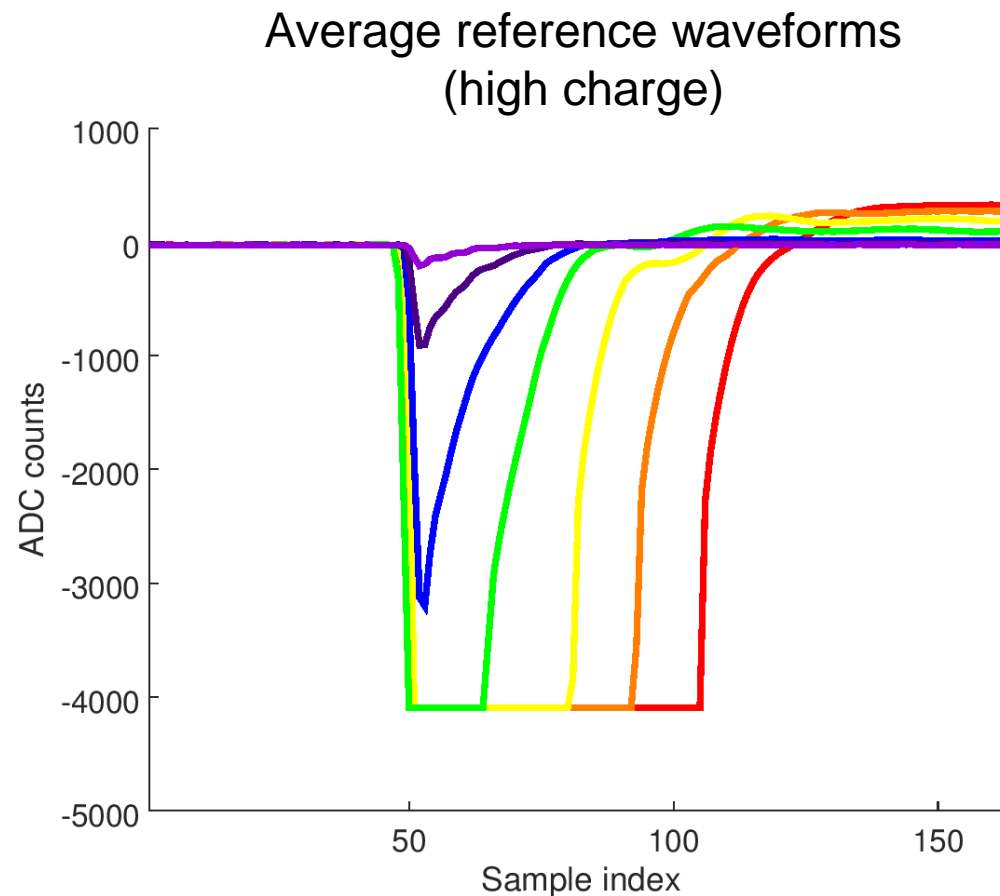
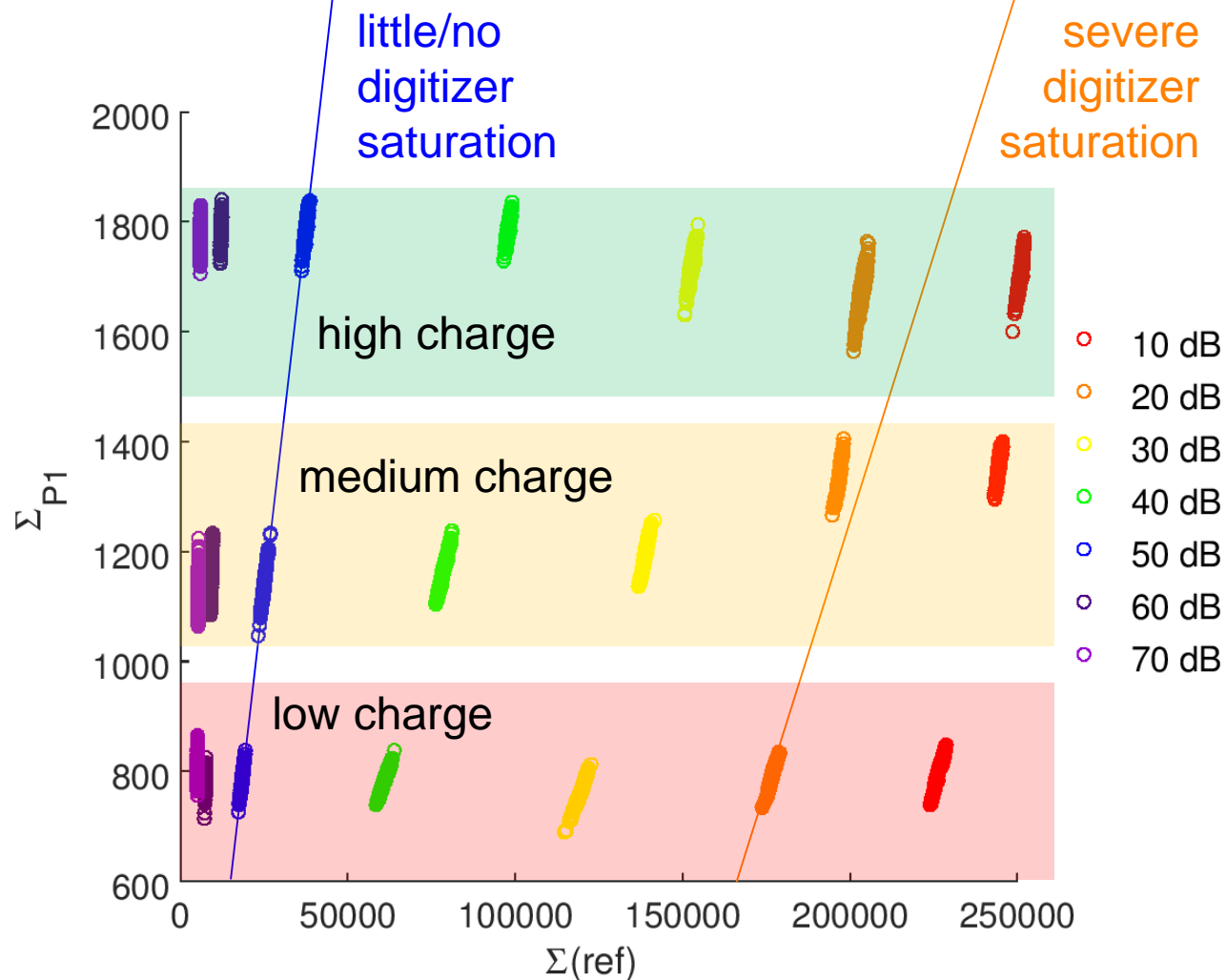
Charge/reference attenuation scan: waveforms

Douglas BETT

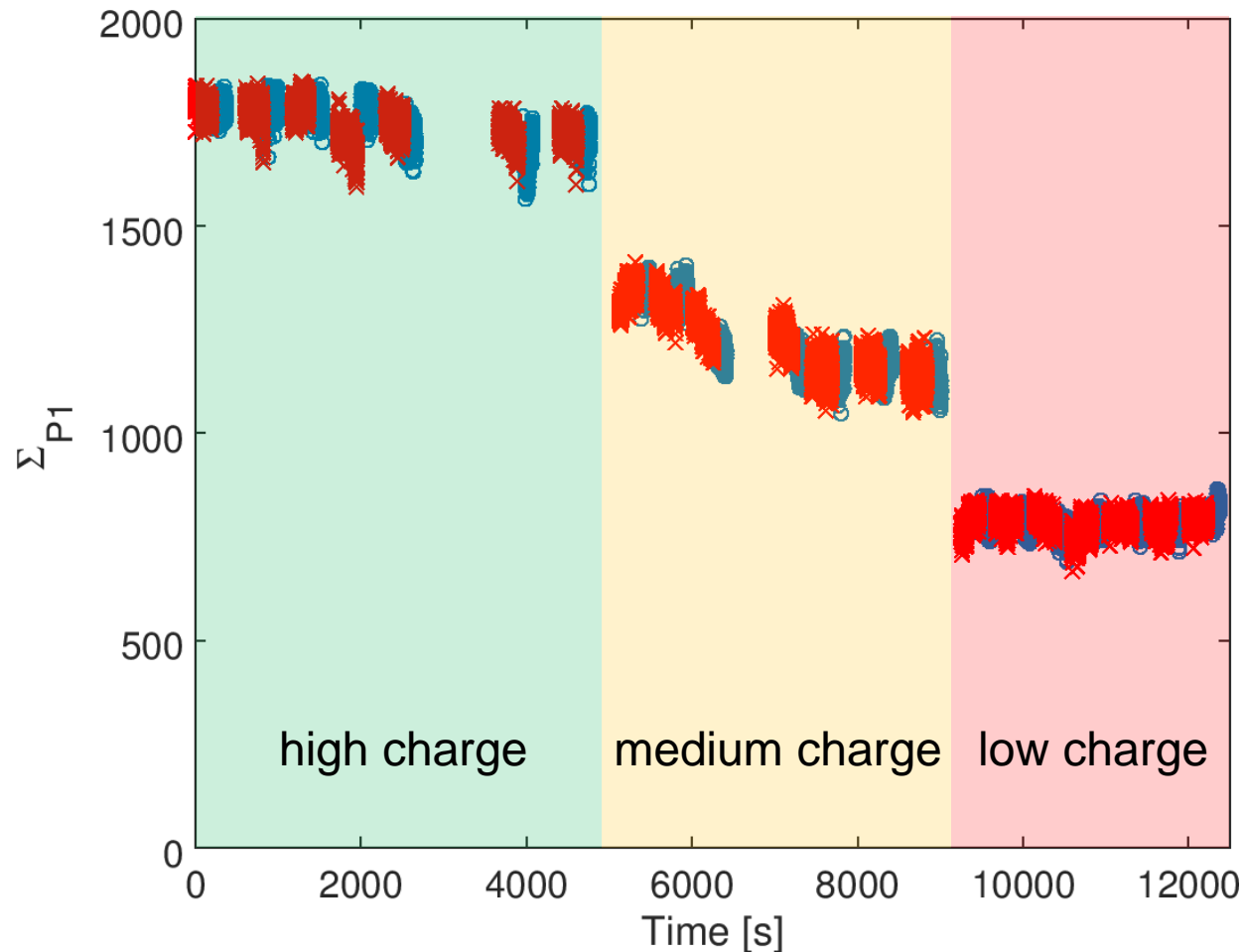
2



Integrated reference vs. upstream sum

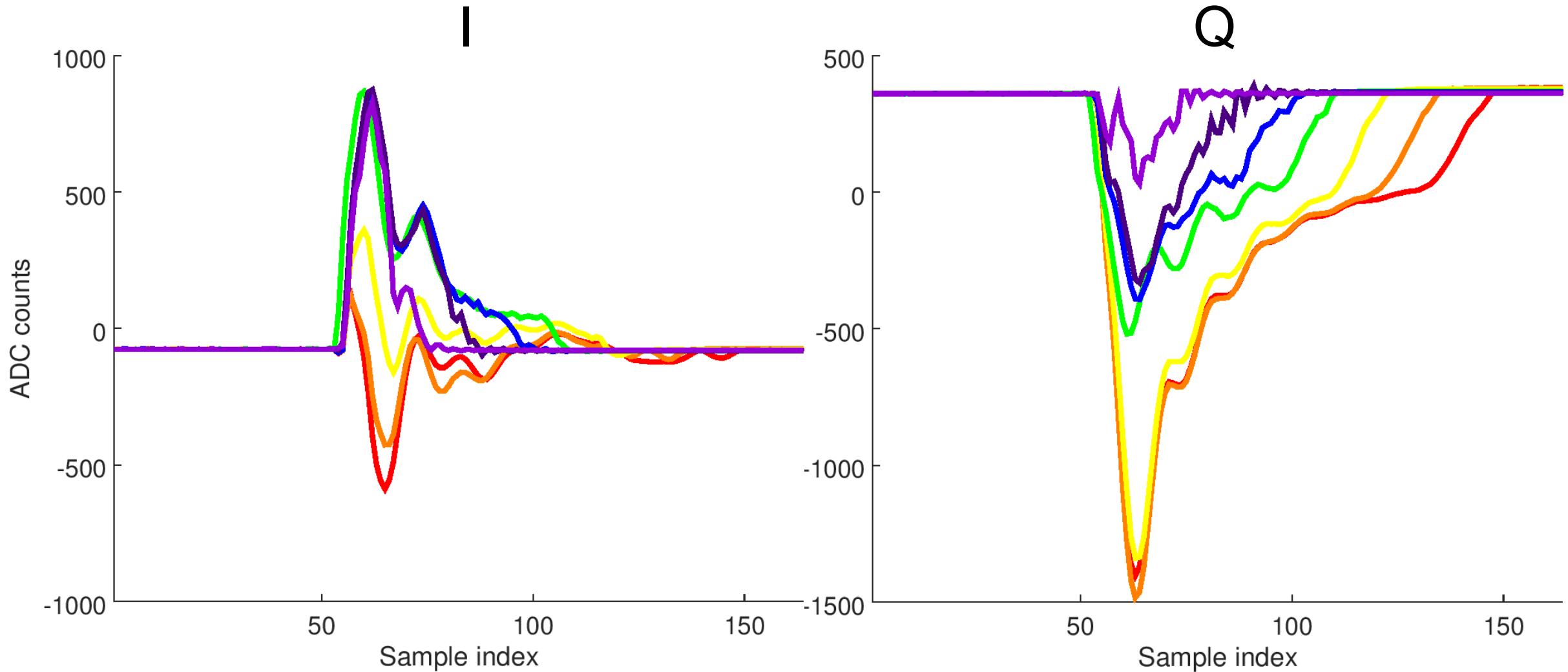


Charge as function of time

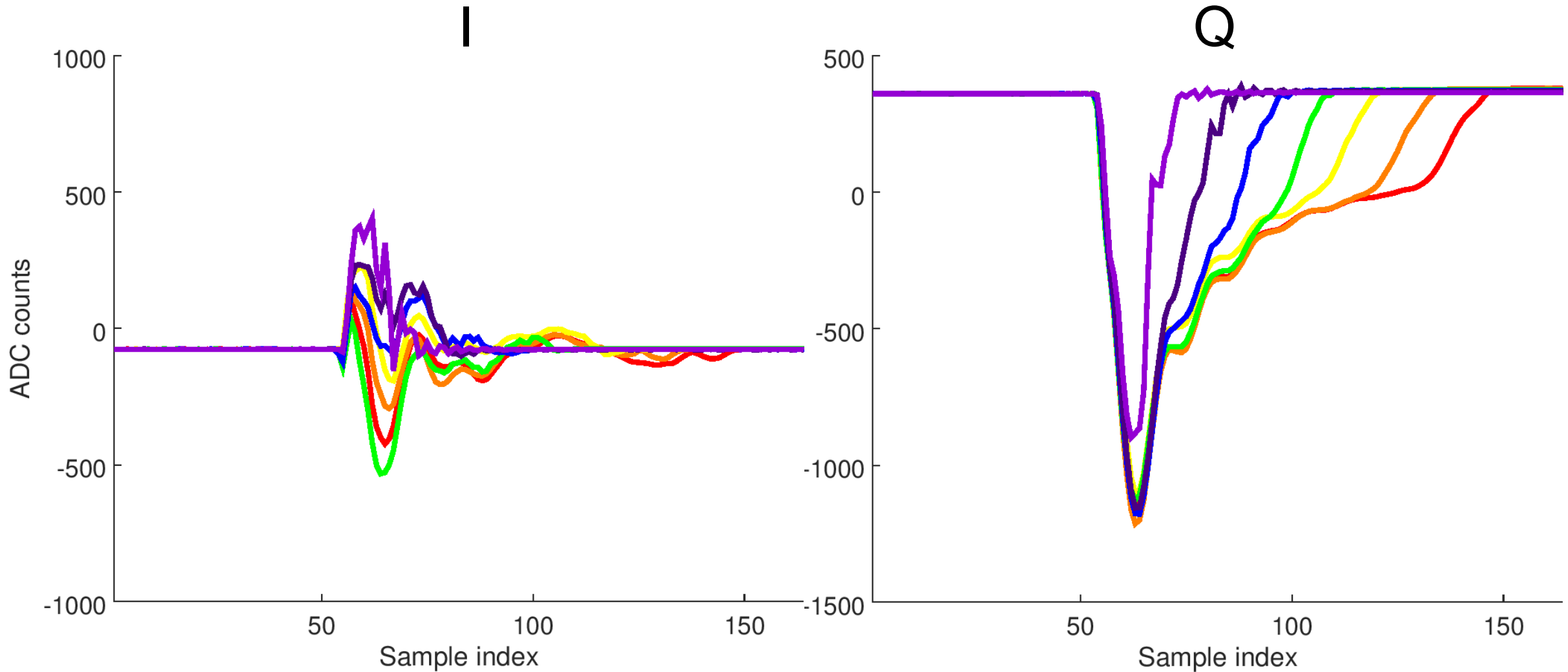


- Order of settings for high charge: 40 – 50 – 60 – 70 – 30 – 20 – 10
- Otherwise 10 to 70
- Blue: jitter runs (400 triggers)
- Red: calibration runs (-2 μm to +2 μm , 100 triggers / setting)

Average IPA waveforms – high charge

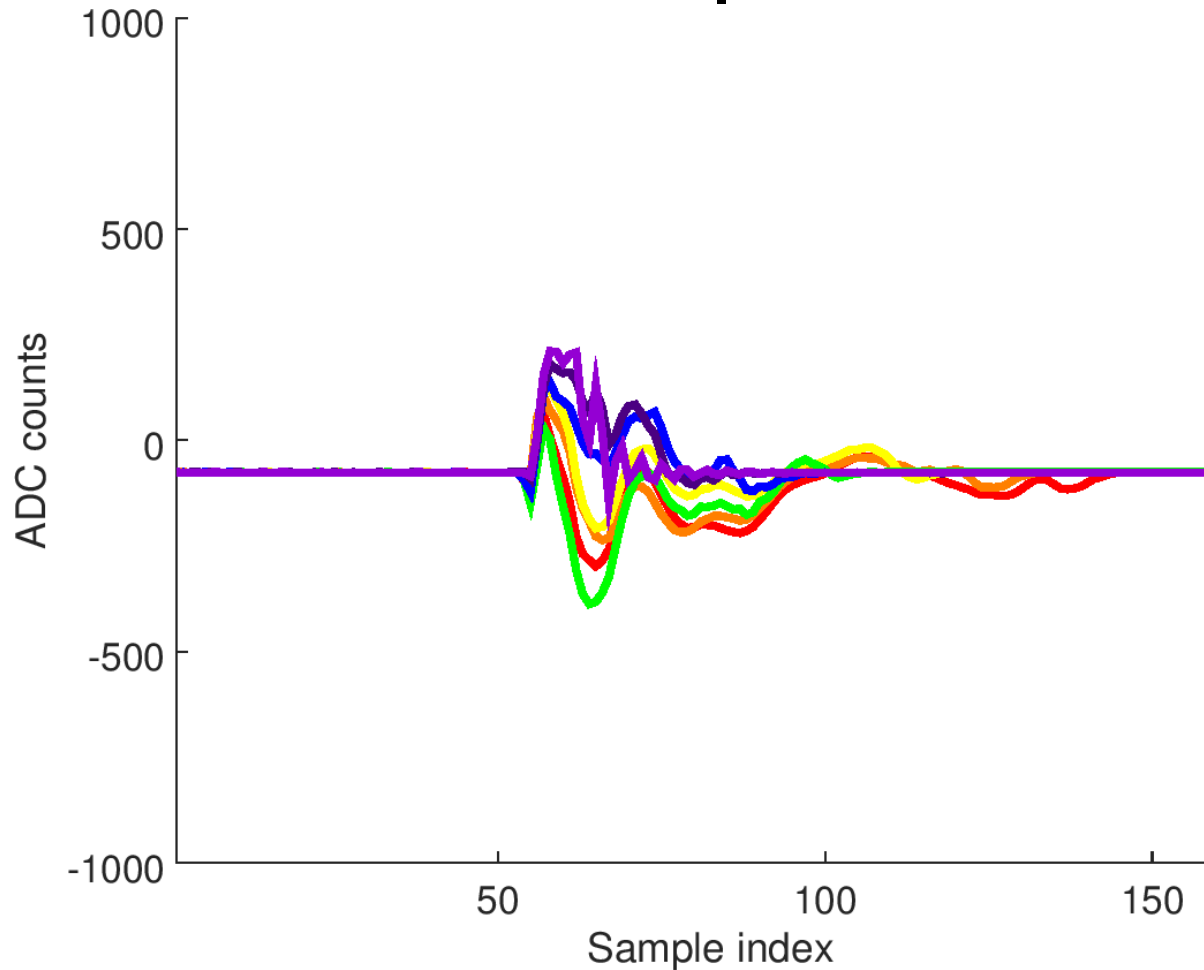


Average IPA waveforms – medium charge

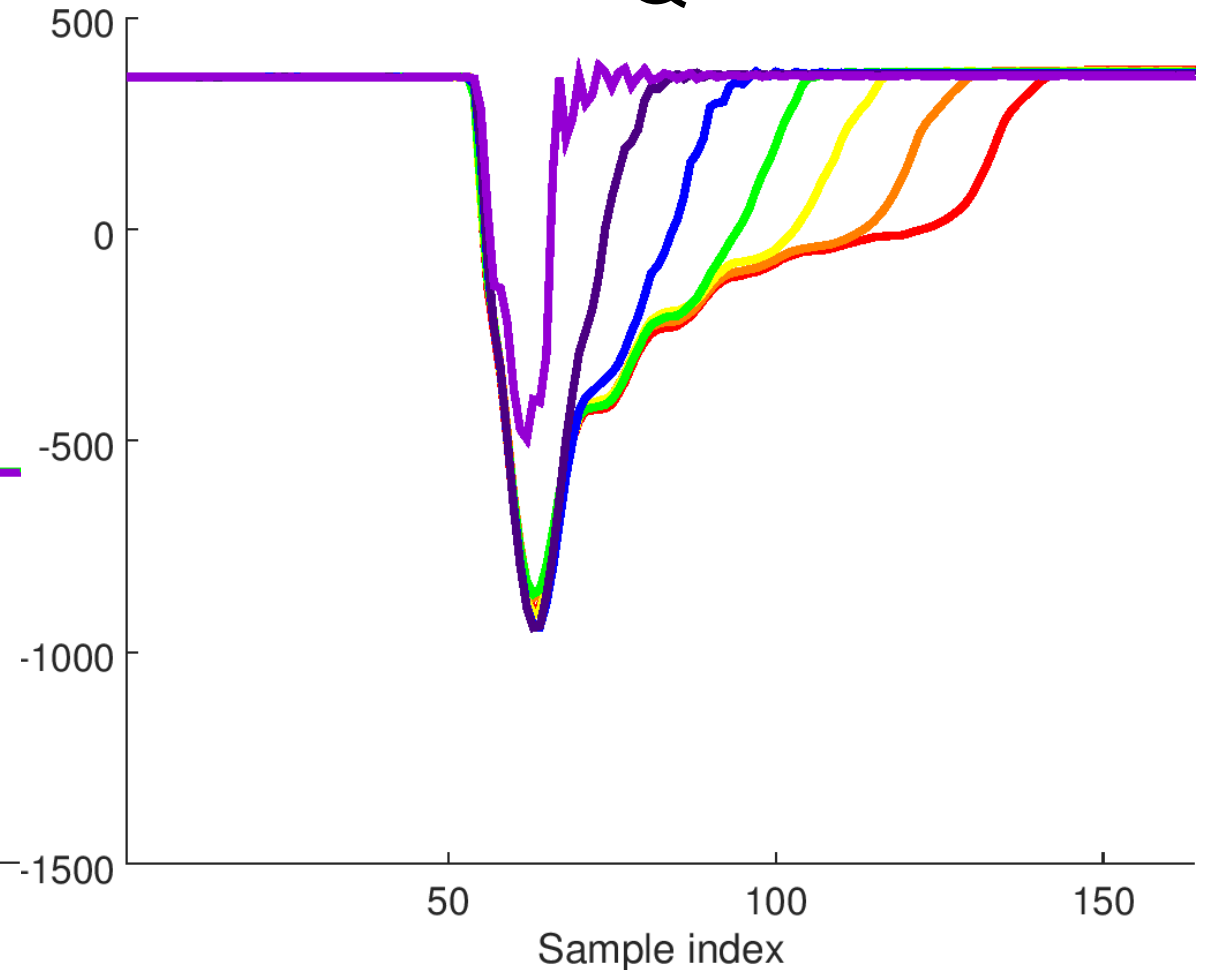


Average IPA waveforms – low charge

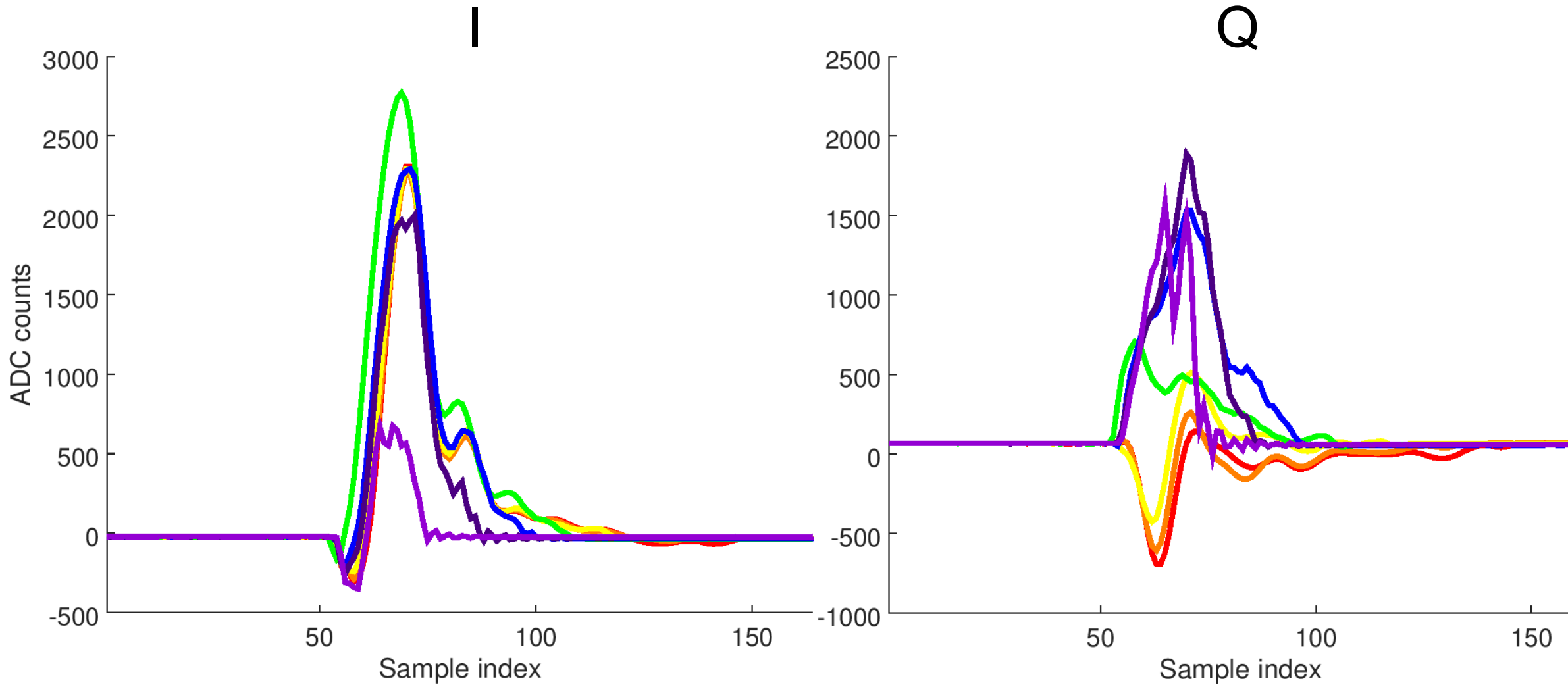
I



Q



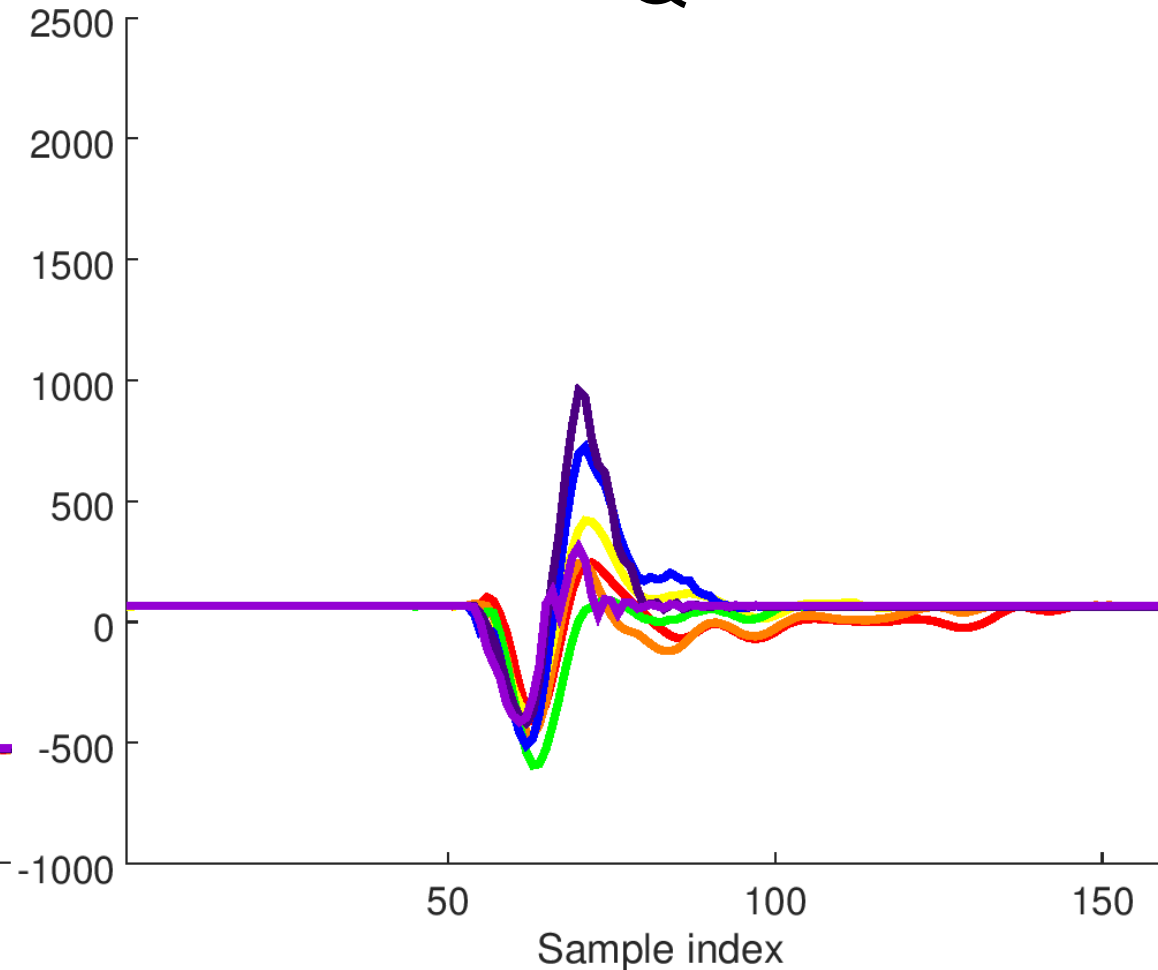
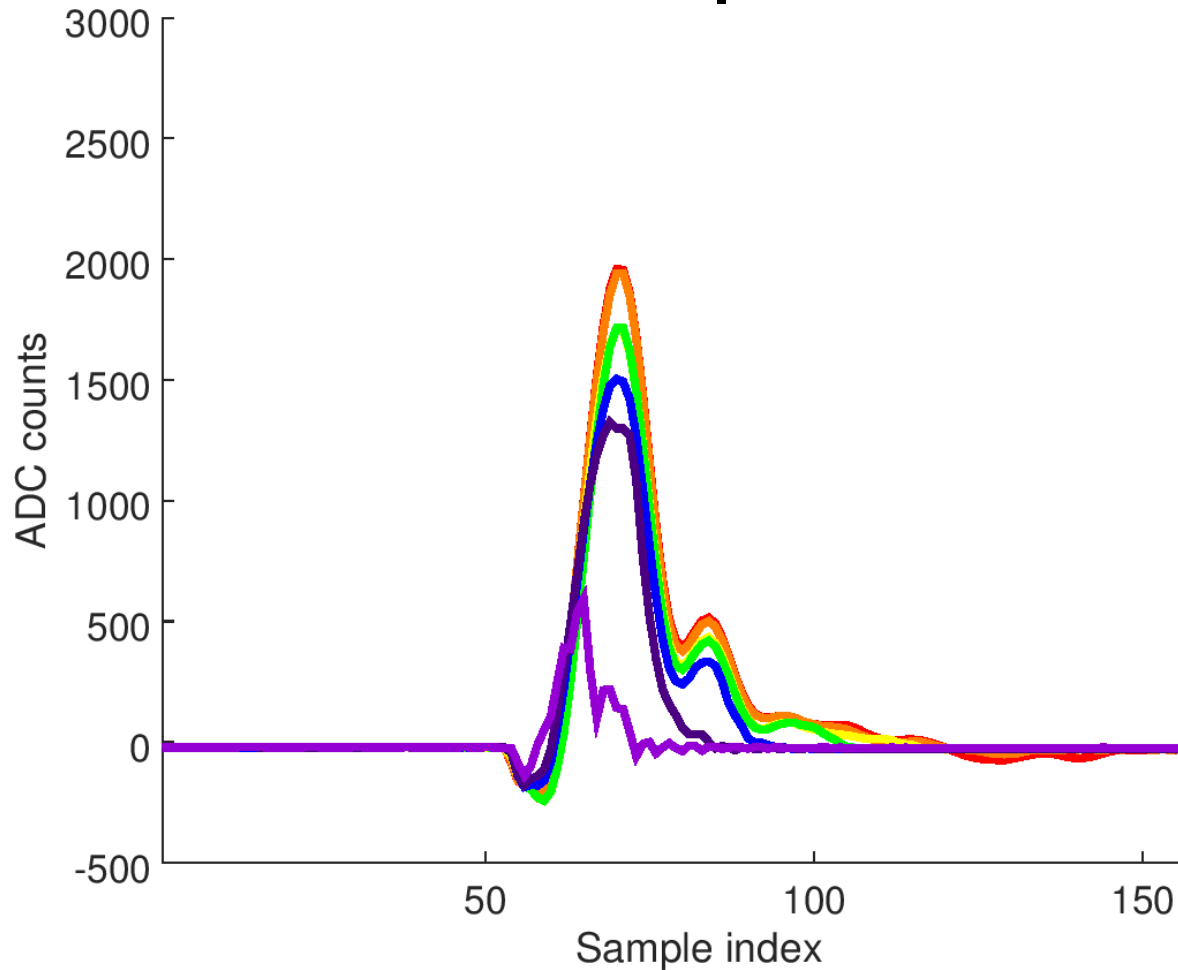
Average IPB waveforms – high charge



Average IPB waveforms - medium charge

I

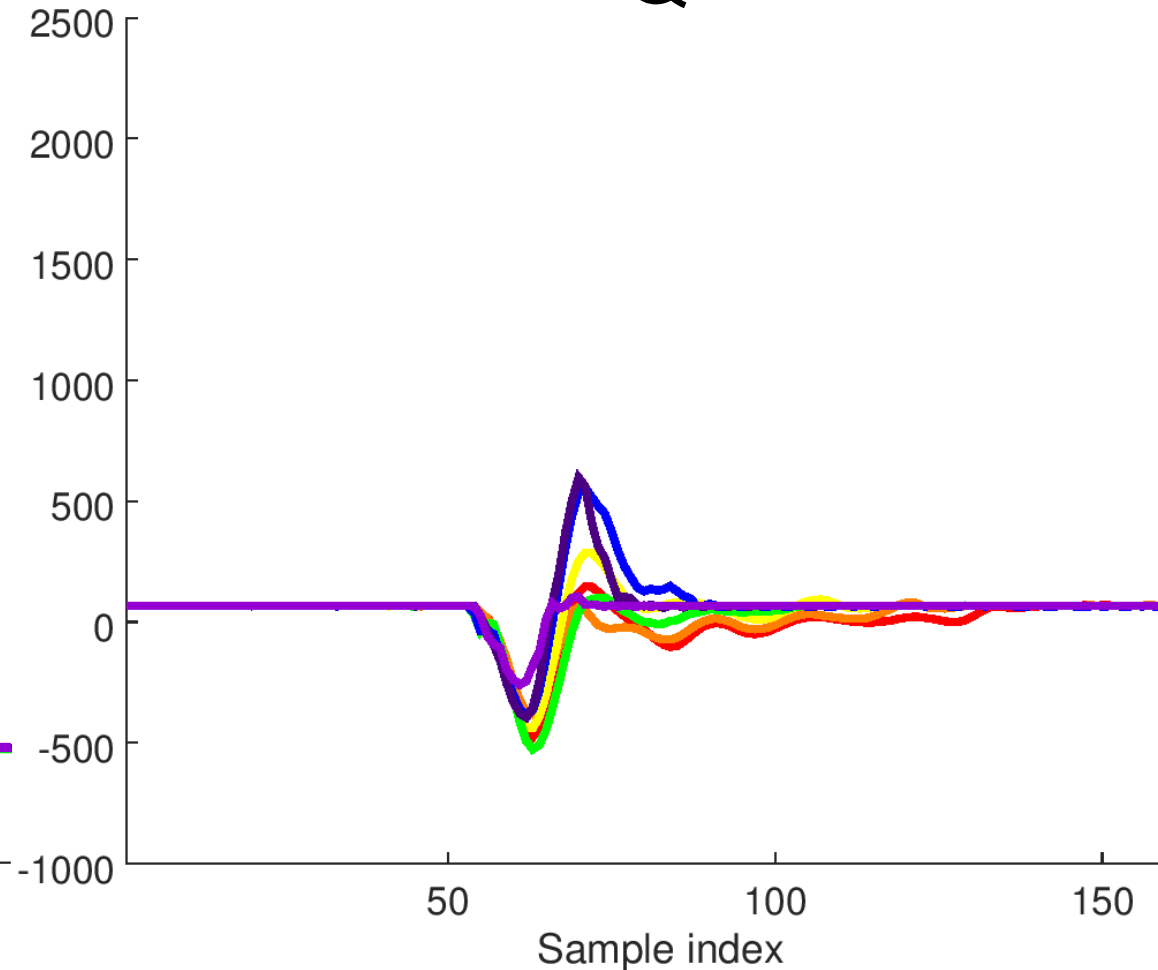
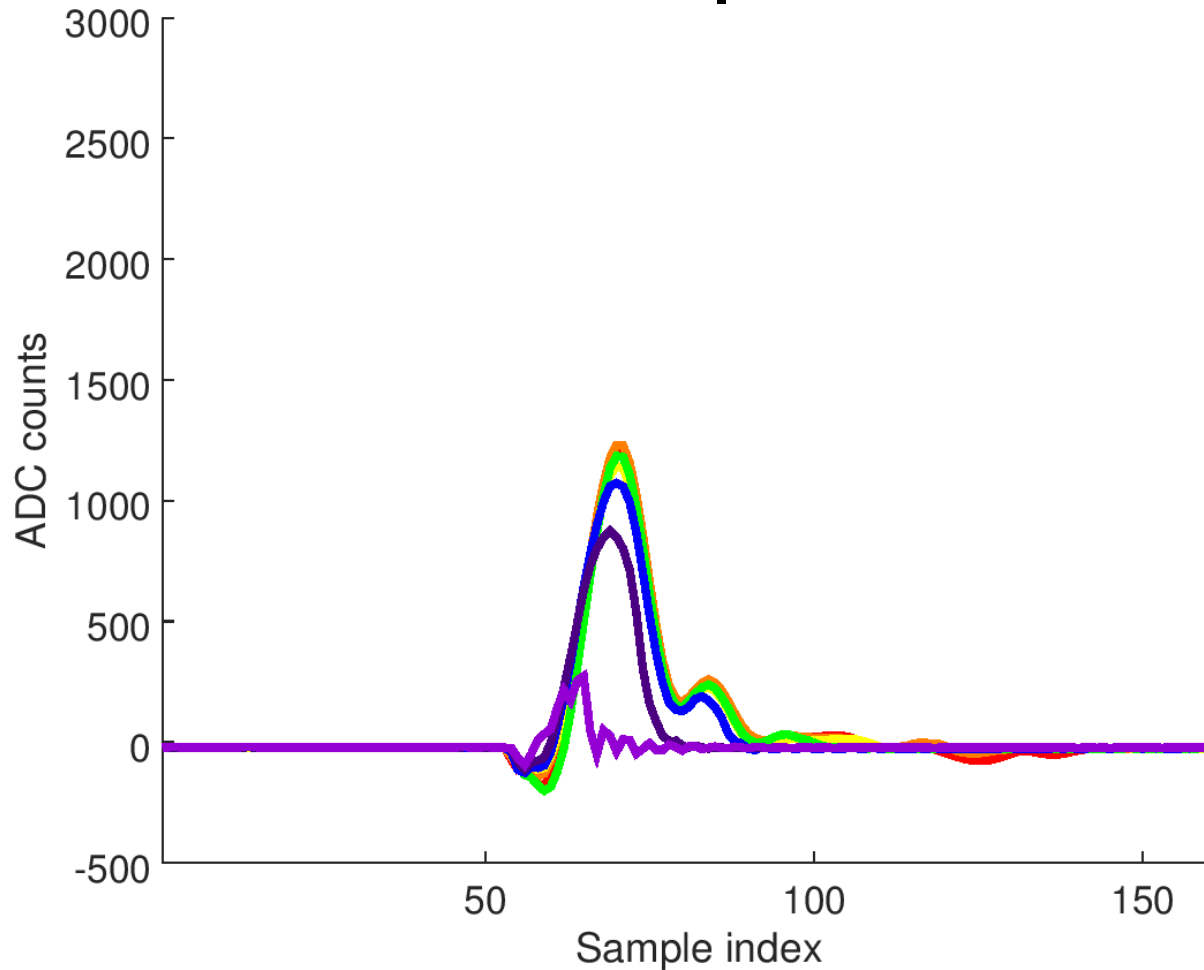
Q



Average IPB waveforms - low charge

I

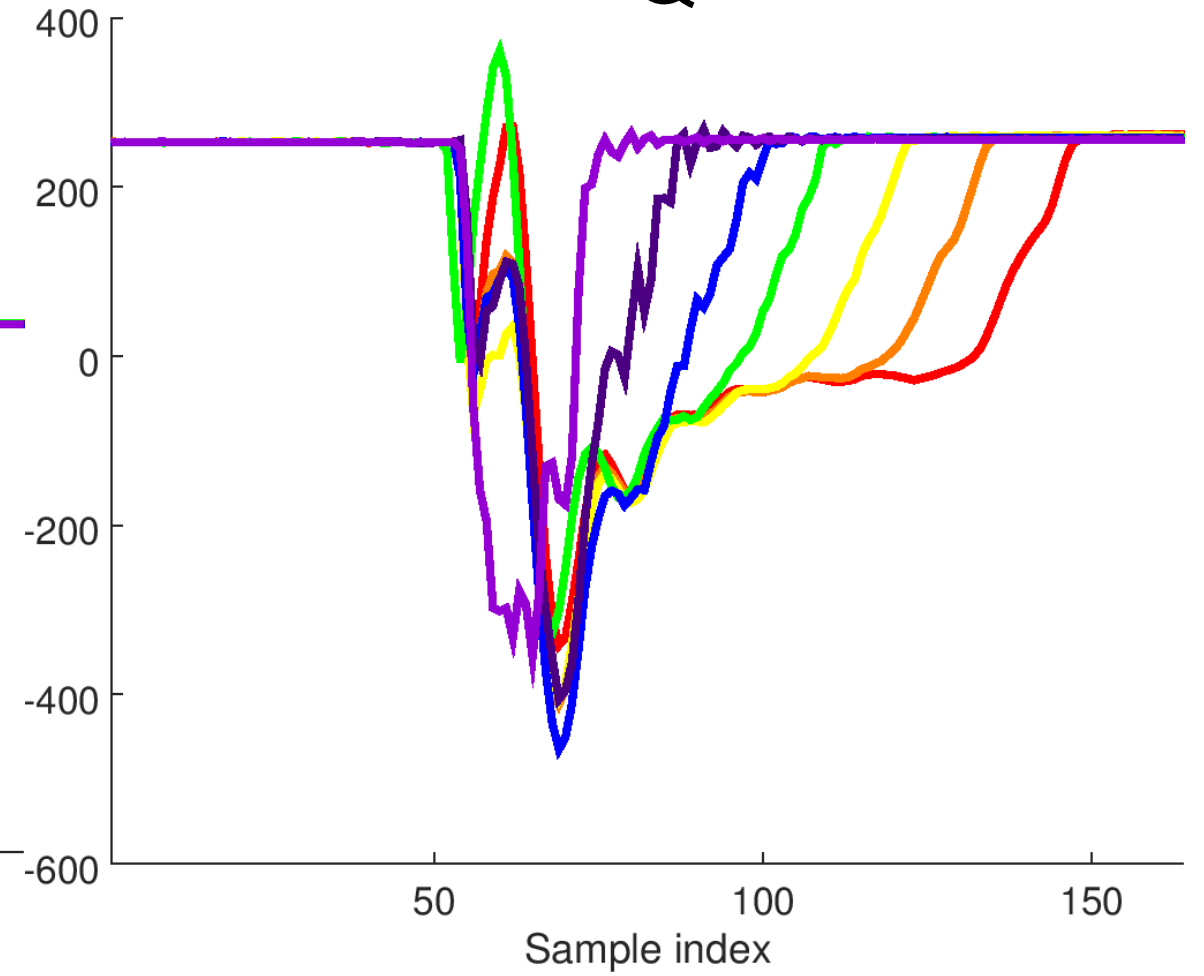
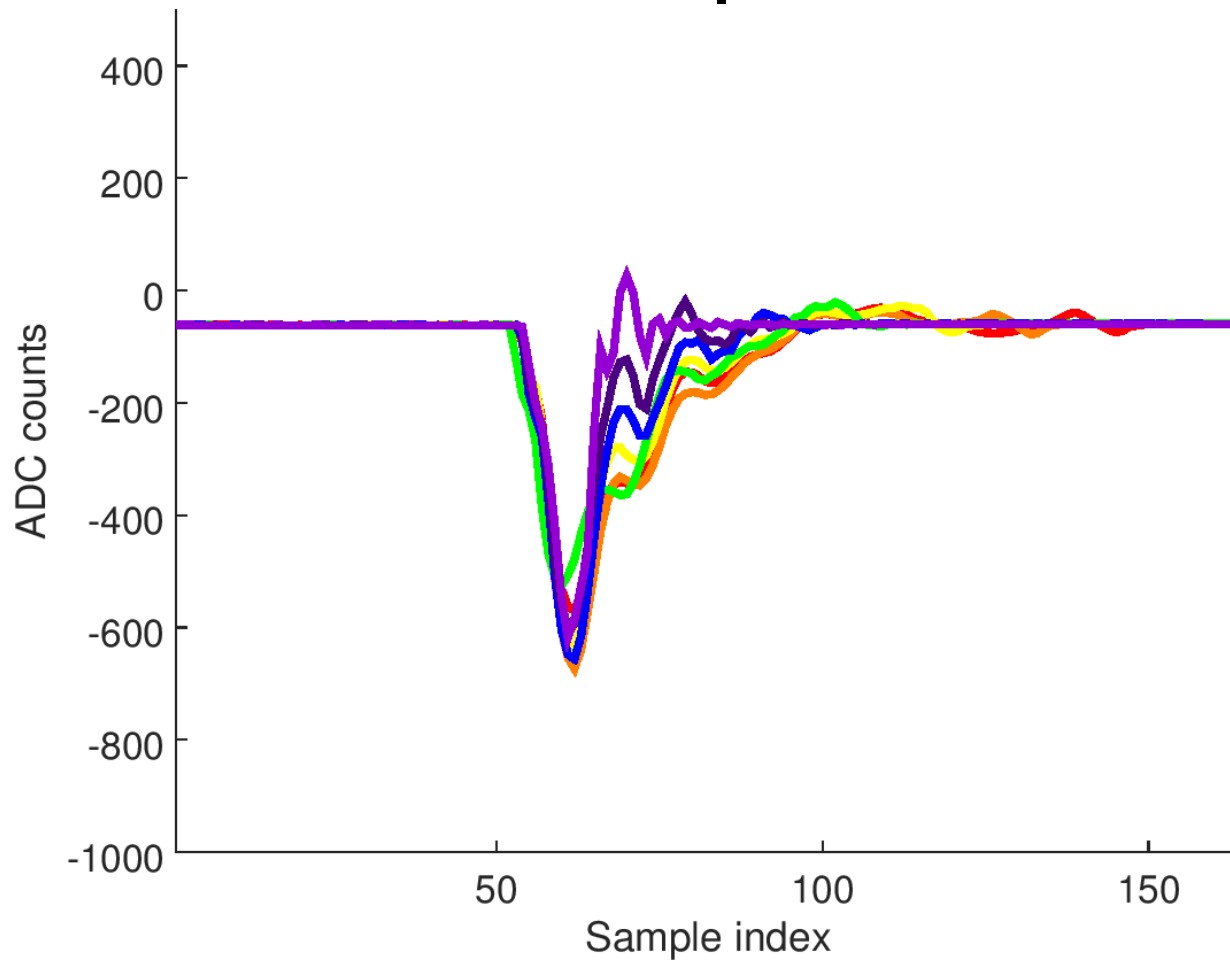
Q



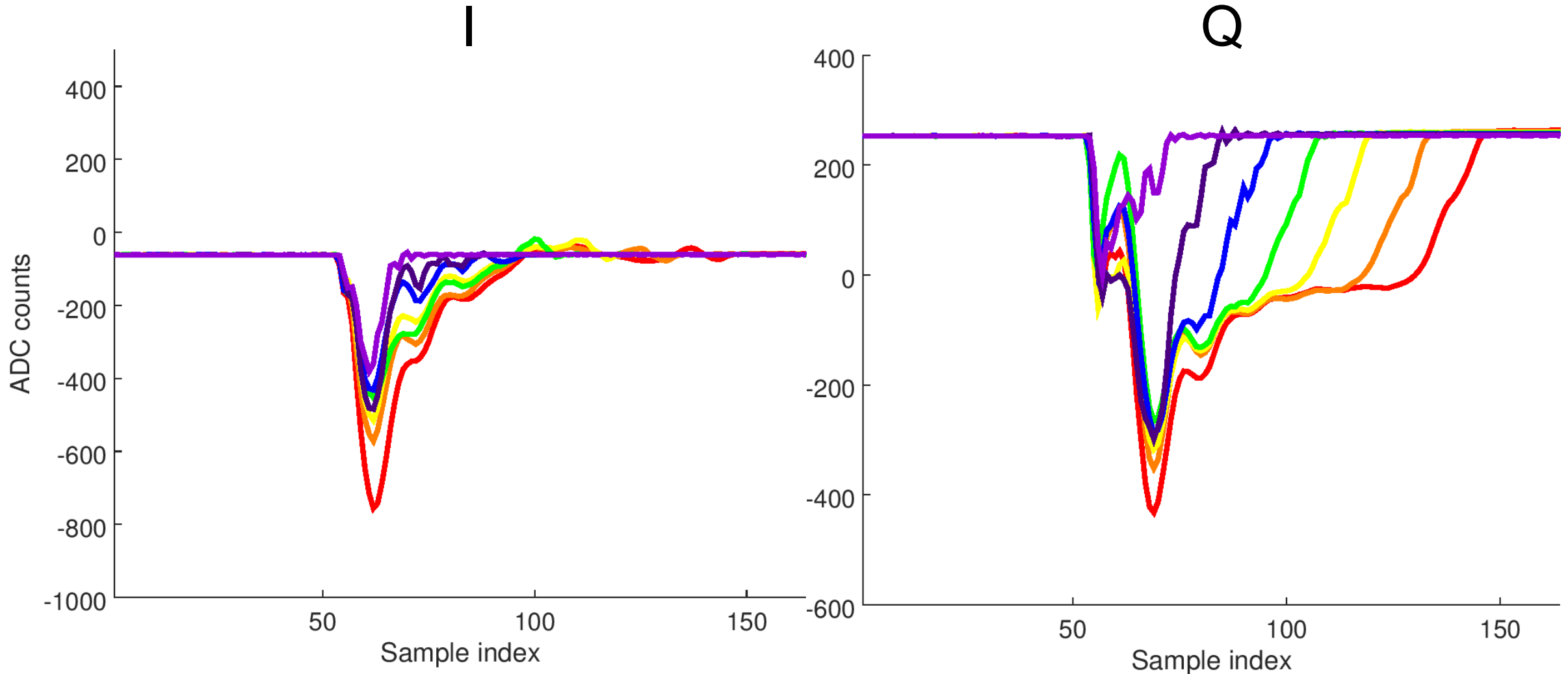
Average IPC waveforms – high charge

I

Q



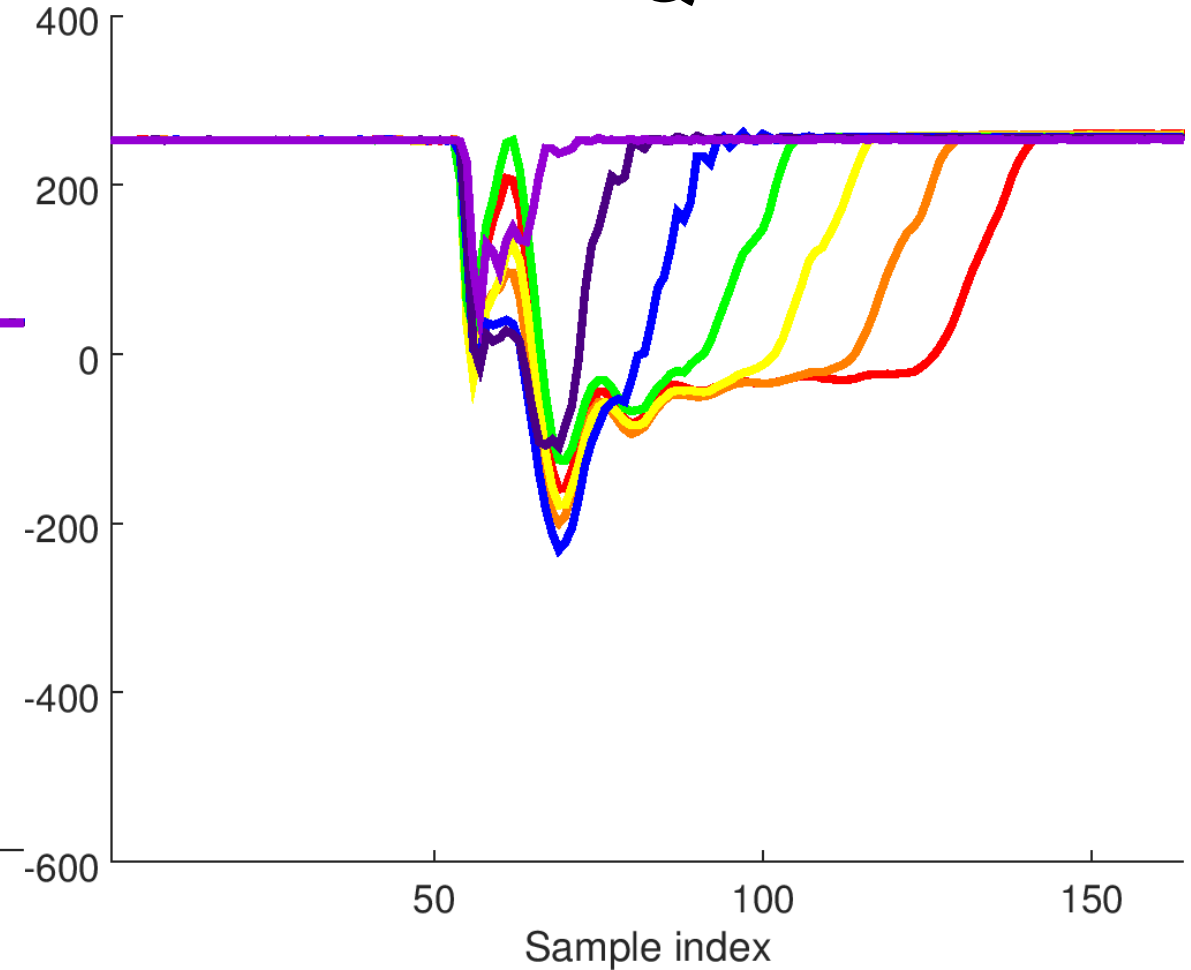
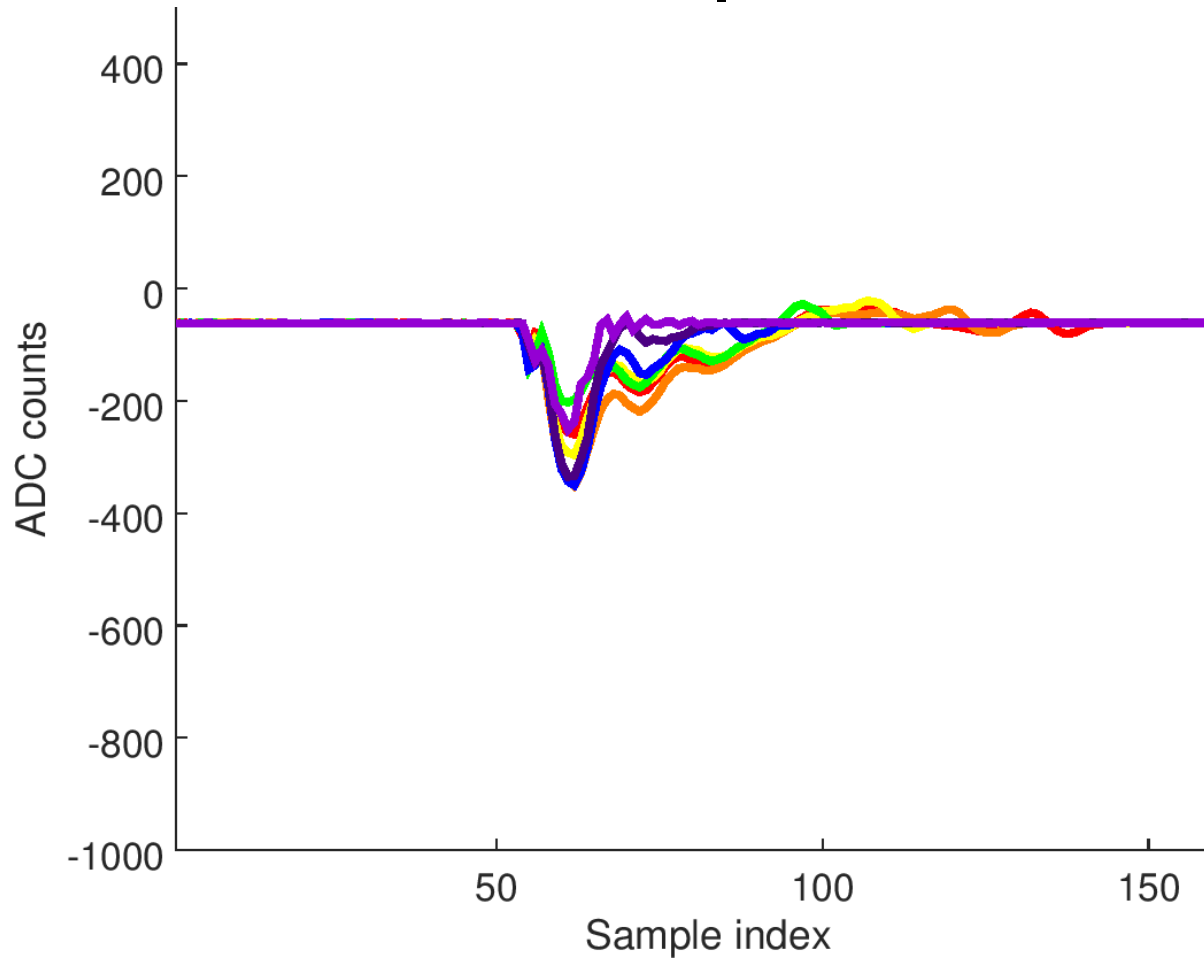
Average IPC waveforms – medium charge



Average IPC waveforms – low charge

I

Q



Conclusion

- Very pronounced Q baseline for IPA, IPC
- Several puzzling features have to be checked but are presumably due to position drifts:
 - IPA-Q @ 70 dB larger for high charge than medium charge
 - IPB-I @ high charge larger for 40 dB than lower attenuation settings