

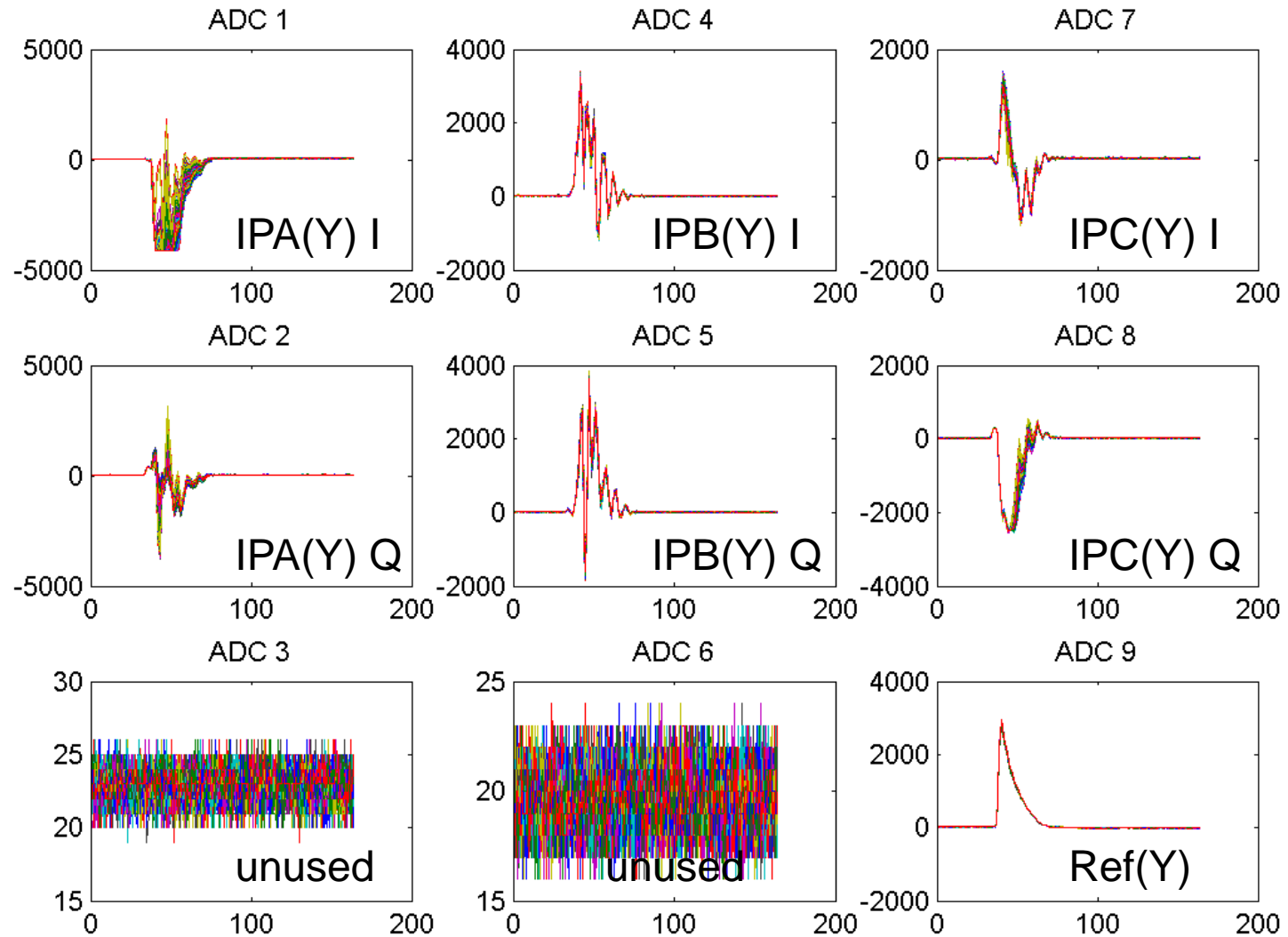
IP BPM shift report

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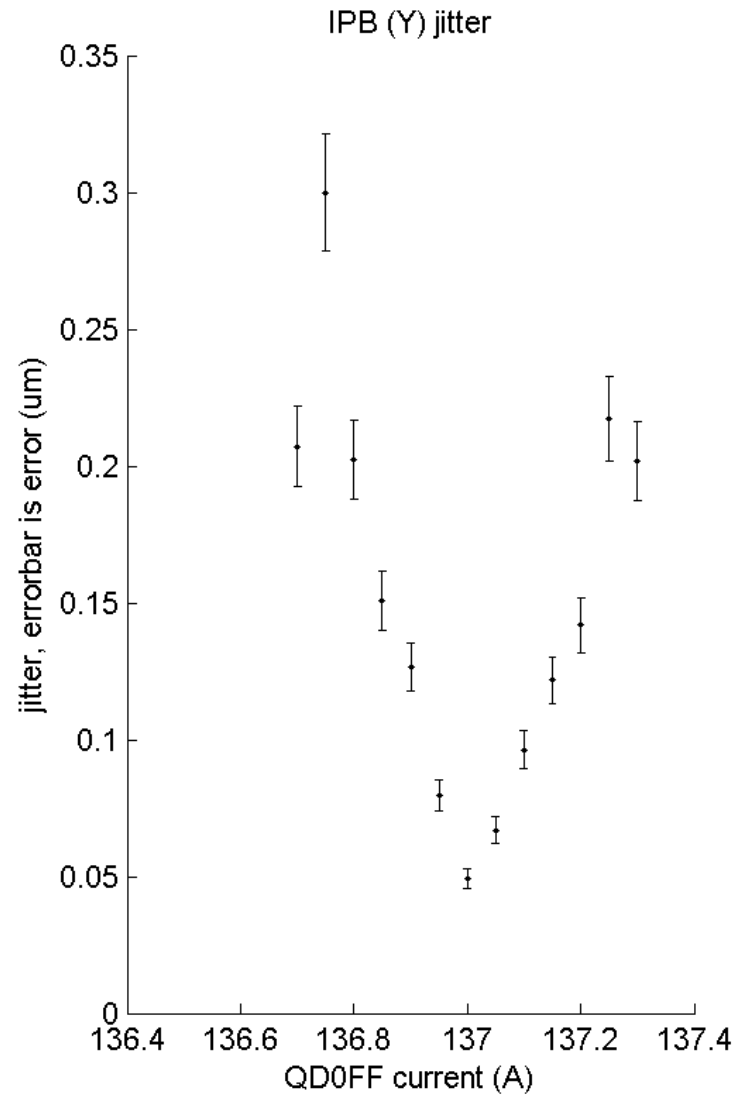
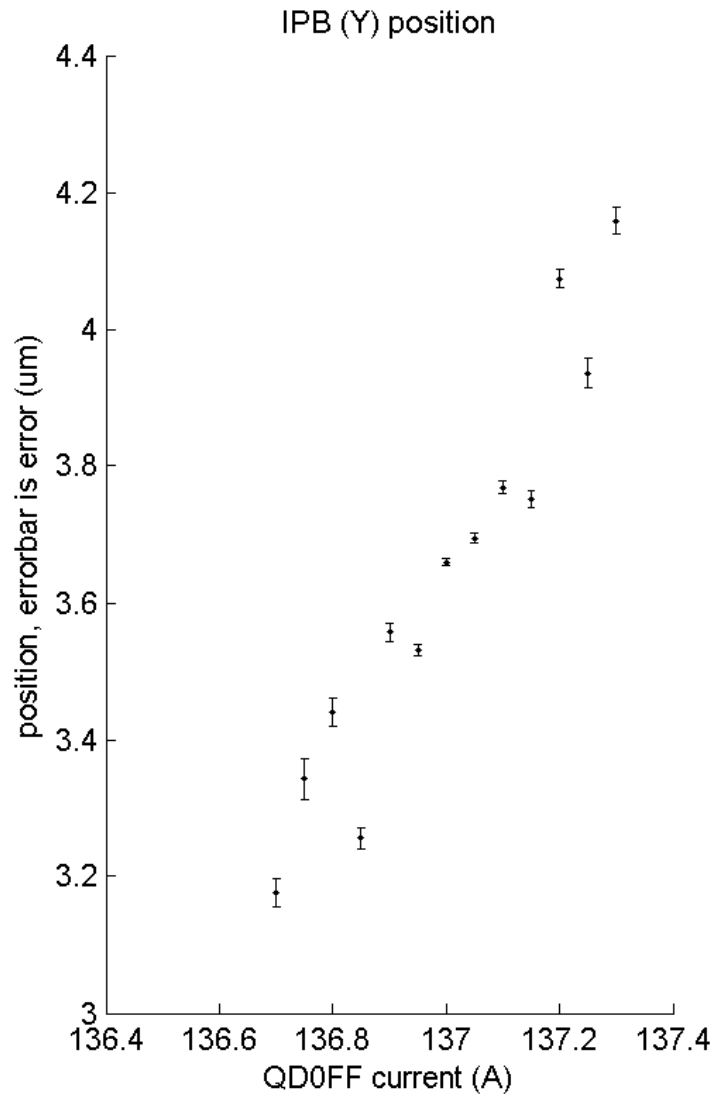
Low beta optics

- Used new IP BPMs with Honda electronics
- Processed & digitised IPA, IPB, IPC in Y
- Minimised jitter with waist on BPM
obtaining:
 - 66 nm with single-point sampling
 - 49 nm with 10 sample averaging (at 357 MHz)

IP BPM waveforms for jitRun4_Board2 on 091214 including all triggers



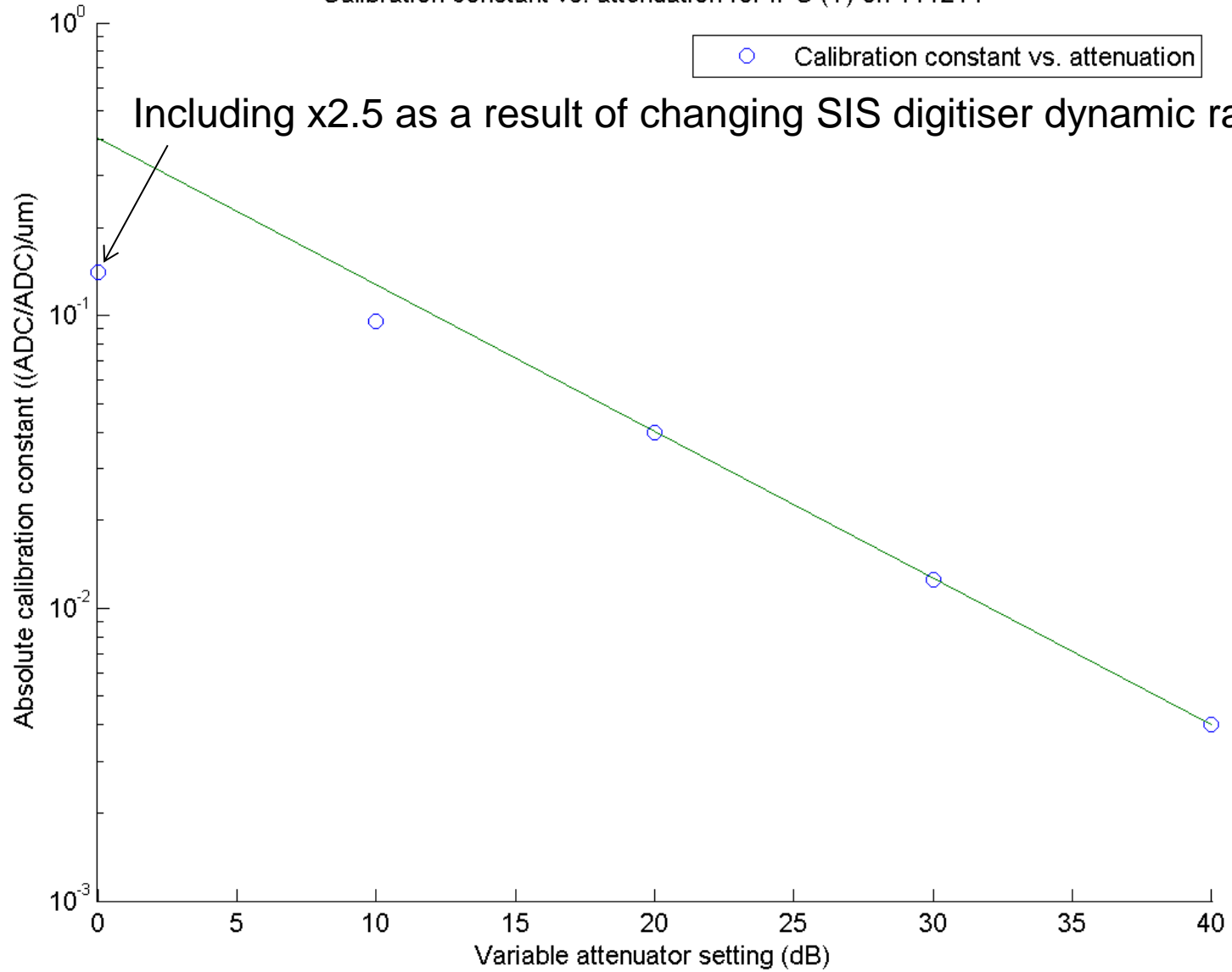
QD0FFzScan3 on 091214 using Homodyne



High beta optics

- Performed 3 IP BPM resolution study
- 3 BPM system well aligned in chamber:
 - IPAB and IPC at almost centre positions
 - IPAB pitch correction within mover range
- Offset in x required moving AQD0FF(X) by 350 μm !
- Difficulty calibrating at 0 and 10 dB but calibrations still used

Calibration constant vs. attenuation for IPC (Y) on 111214



Resolution

- Resolution calculated by fitting, using calibrations at each attenuation
- 10 sample averaging used (at 238 MHz)
- X positions not processed and therefore not included in resolution calculation
- Resolution measurement appears limited at >100 nm even though resolution known to be better

Resolution by fitting vs. attenuation on 111214

