Week 1

- Wednesday swing shift
  - Initial calibration / resolution
  - Initially 4 processors on BPM12
  - Poor signals (misshapen and ringing)
  - Moved to 4 processors on BPM11
  - Still poor, suspected splitters
  - Switched to 2 processors on BPM11

Week 1 cont.

- Thursday owl shift
  - Attempted feedback
  - Unable to get TMD amp to trigger
  - Switched to digital sampling investigation
  - **Single bunch**
  - RS232 good, no corruption over 1000’s pulses
  - No sign of previous sampling error

Week 1 cont.

- Friday day shift
  - Began setup for calibration/resolution
  - Obtained new amplifier trigger (TTL vs. NIM-bar)
  - Unable to locate all 3 bunches
  - New beam trigger at -1.4us worked
  - Time short, kick unconfirmed

Week 2

- Tuesday double shift
  - Setup for feedback
  - Amp triggering, 3 bunches found
  - New sampling errors in 3 bunch mode
    - Missing pulses
    - Corrupt pulses
    - Decision taken to continue and purge poor data
  - Beam ~centred
  - Brought in kicker strips (clip beam method)
  - Many data logged for various gains, FB settings

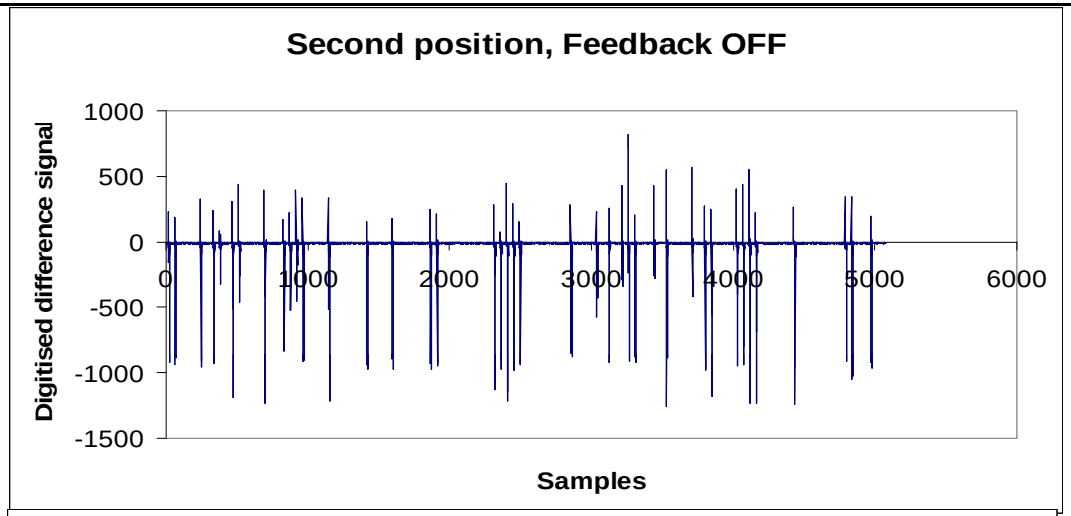
Week 2 cont.

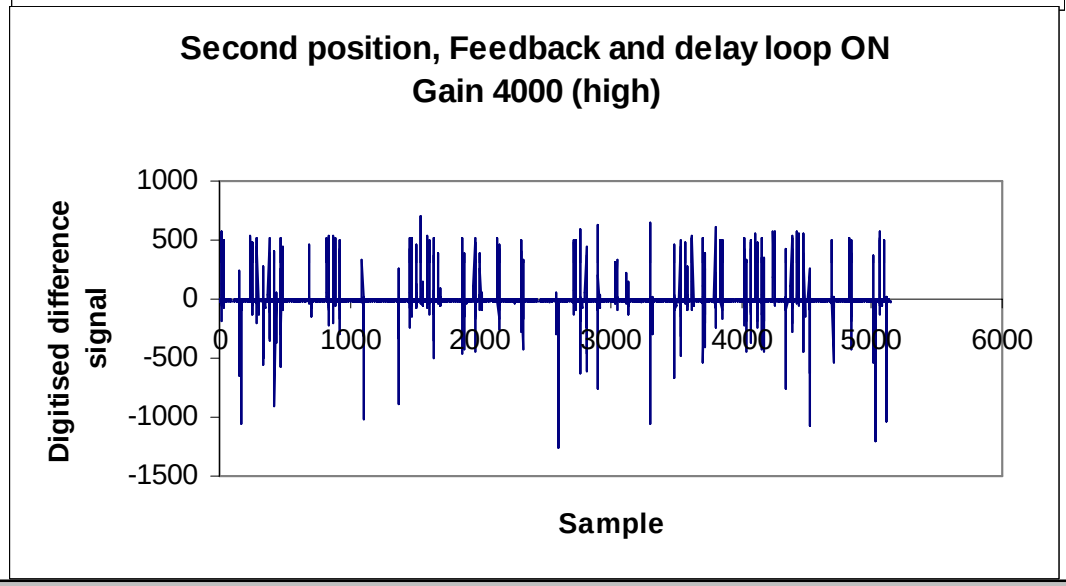
- Tuesday double shift cont.
  - Feedback was ‘affecting’ beam
  - Difficult to be precise due to sampling error
  - Very large beam required tuning
  - Able to close strips further (without radiation…)
  - More data logged with strips closer

Week 2 cont.

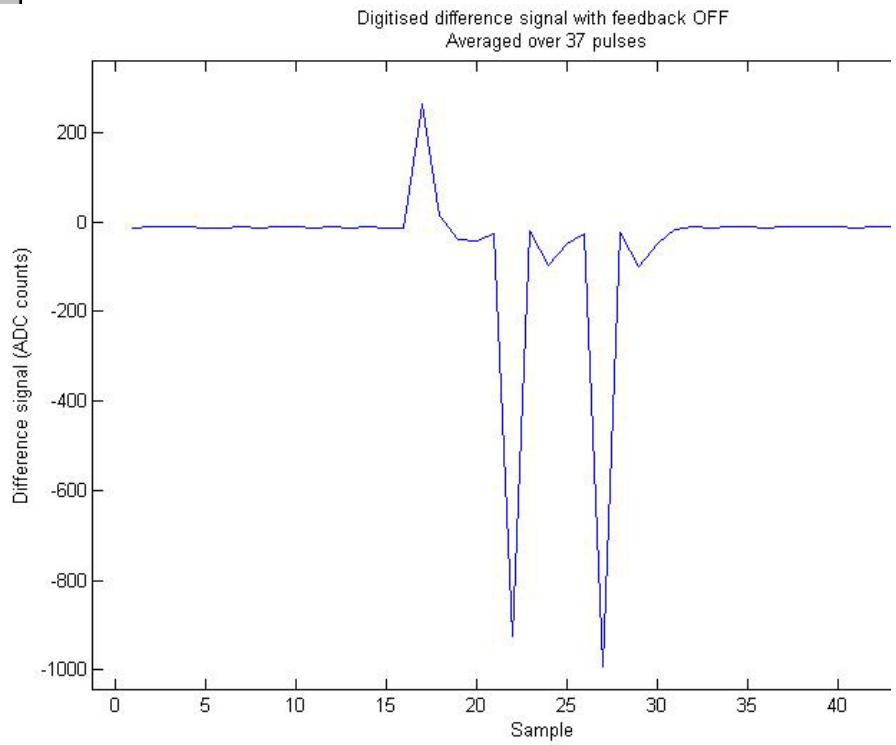
- Wednesday owl shift
  - Setup Alexander's processors
  - Unable to balance paths
    - 714MHz pickup not visible
  - Proceeded with resolution data taking
  - Took further FONT processor resolution/calibration (4 processors on 1 BPM)

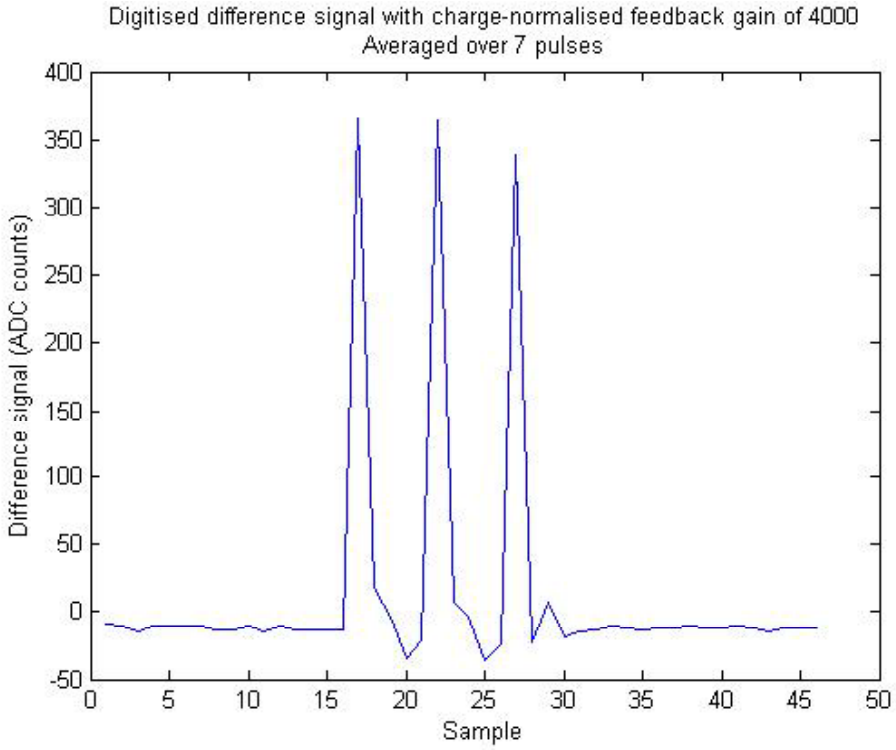
FB data


Second position, Feedback OFF
Digitised difference signal
1000
500
0
-500
-1000
-1500
0
1000
2000
3000
4000
5000
6000
Samples


Second position, Feedback and delay loop ON
Gain 4000 (high)
Digitised difference signal
1000
500
0
-500
-1000
-1500
0
1000
2000
3000
4000
5000
6000
Sample

FB data cont.





Feedback **OFF**

Feedback **ON**

Clock stability