# BPM status

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# Center position uncertainty

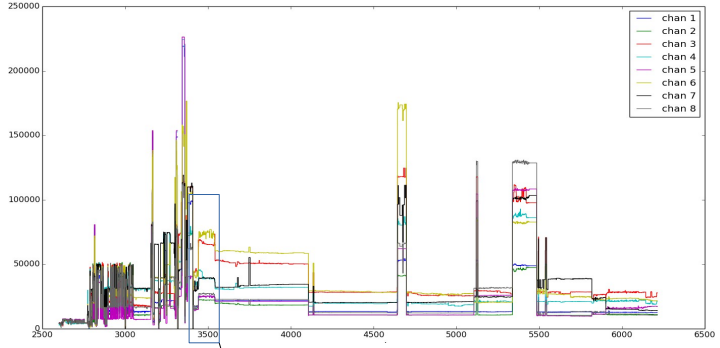
Calibration constant uncertainty:

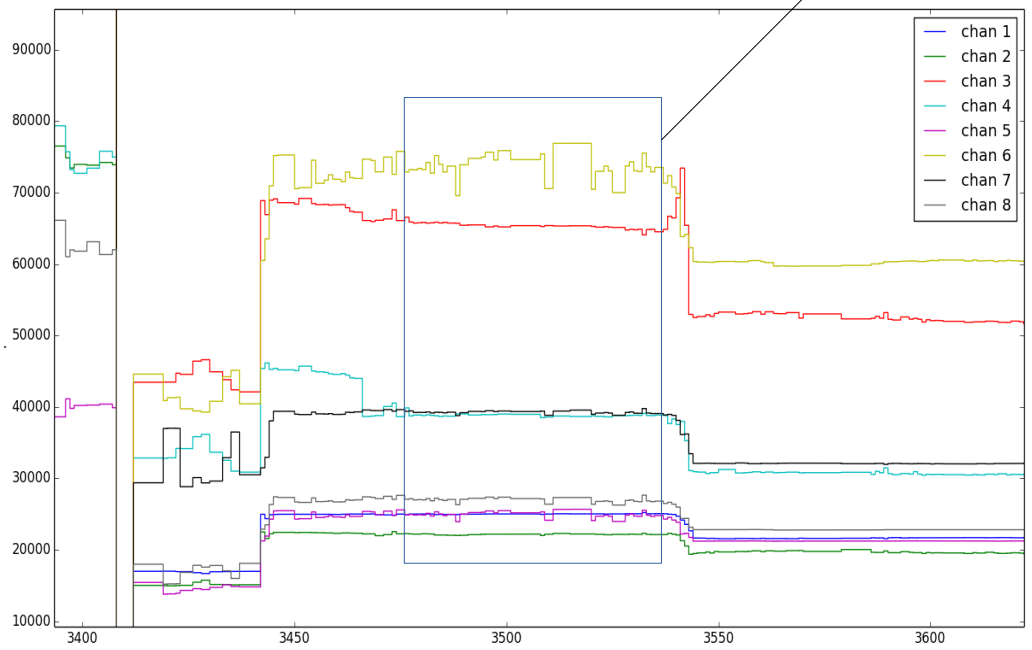
- harp's survey uncertainty
- bpm's survey uncertainty(for calibration run)
- calibration run's bpm resolution with 2Hz filter

BPM's survey uncertainty(for each run)
Pedestal uncertainty

Target field caused uncertainty not included (used for porting position from BPM to target)

Next page: uncertainty for some period runs



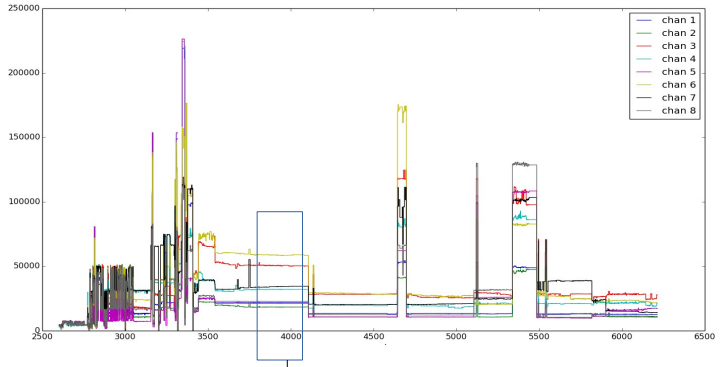



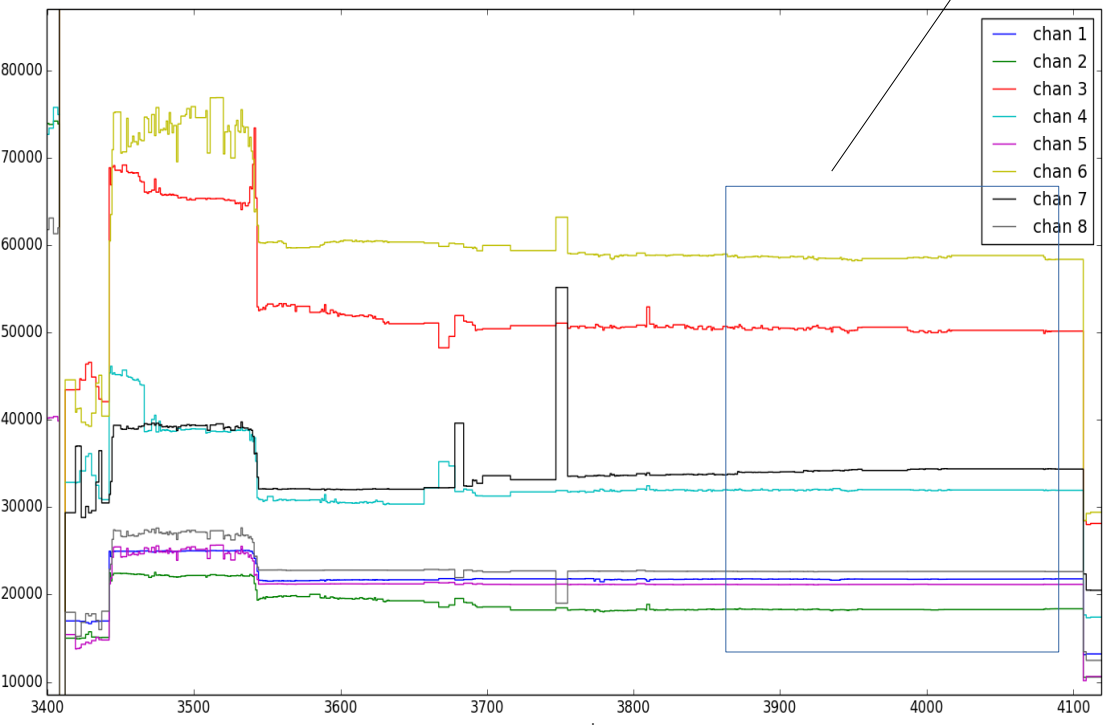

Run range 3491-3537 (near March 30)

Calibration uncertainty(token in May 3):
0.17mm for BPM A
0.2mm for BPM B

Pedestal uncertainty(8 channels):
(use root mean square for all of pedestals in this range(one value per run), will be worse if consider for pedestal rms for each run)
(44 60 328 138 476 1849 227 349)

Total uncertainty for center position:
0.4mm for BPM A
0.5~0.6mm for BPM B
2~2.4mm at target x/y
0.0023 rad for target theta/phi



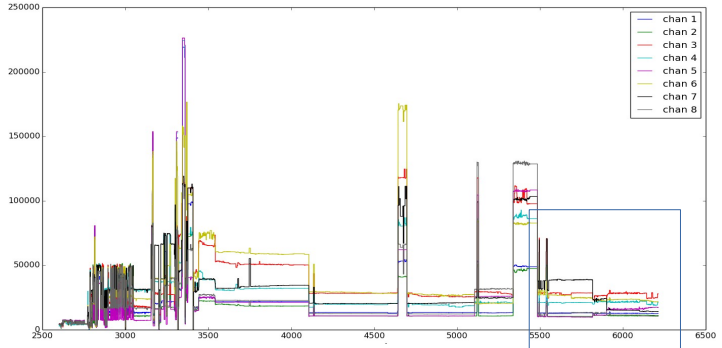



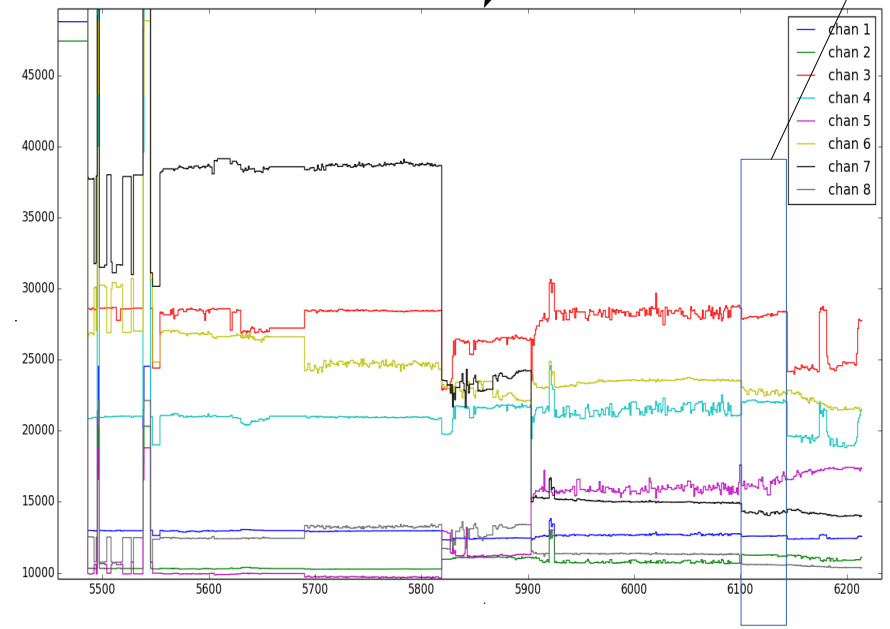

Run range 3755-4017 (near April 5)

Calibration uncertainty(token in May 3):
0.17mm for BPM A
0.2mm for BPM B

Pedestal uncertainty(8 channels):
(use root mean square for all of pedestals in this range)
( 92 76  91 77 11 87 64 8)

Total uncertainty for center position:
0.3mm for BPM A
0.4mm for BPM B
1.7mm at target x/y
0.0017 rad for target theta/phi




Run range 6101-6143 (near May 14)

Calibration uncertainty(token in May 3):
0.17mm for BPM A
0.2mm for BPM B

Pedestal uncertainty(8 channels):
(use root mean square for all of pedestals in this range)
( 16 41 169 58 336 159 77 21)

Total uncertainty for center position:
0.46mm for BPM A
0.6mm for BPM B
2.5mm at target x/y
0.0023 rad for target theta/phi

# For the runs in autogain

Runs before March 30

No way to get pedestal uncertainty

Use 2000 for pedesal uncertainty

0.15mm for calibration uncertainty
2.4~3mm at target x/y
0.003~0.004 rad for theta/phi