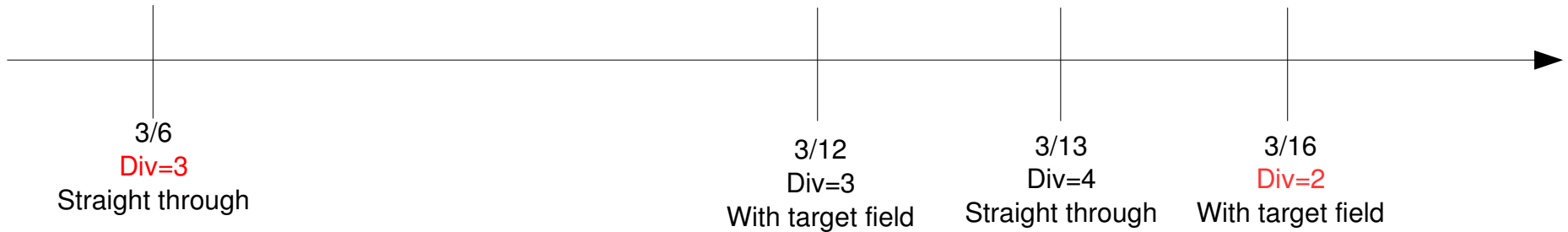


BPM status

Pengjia

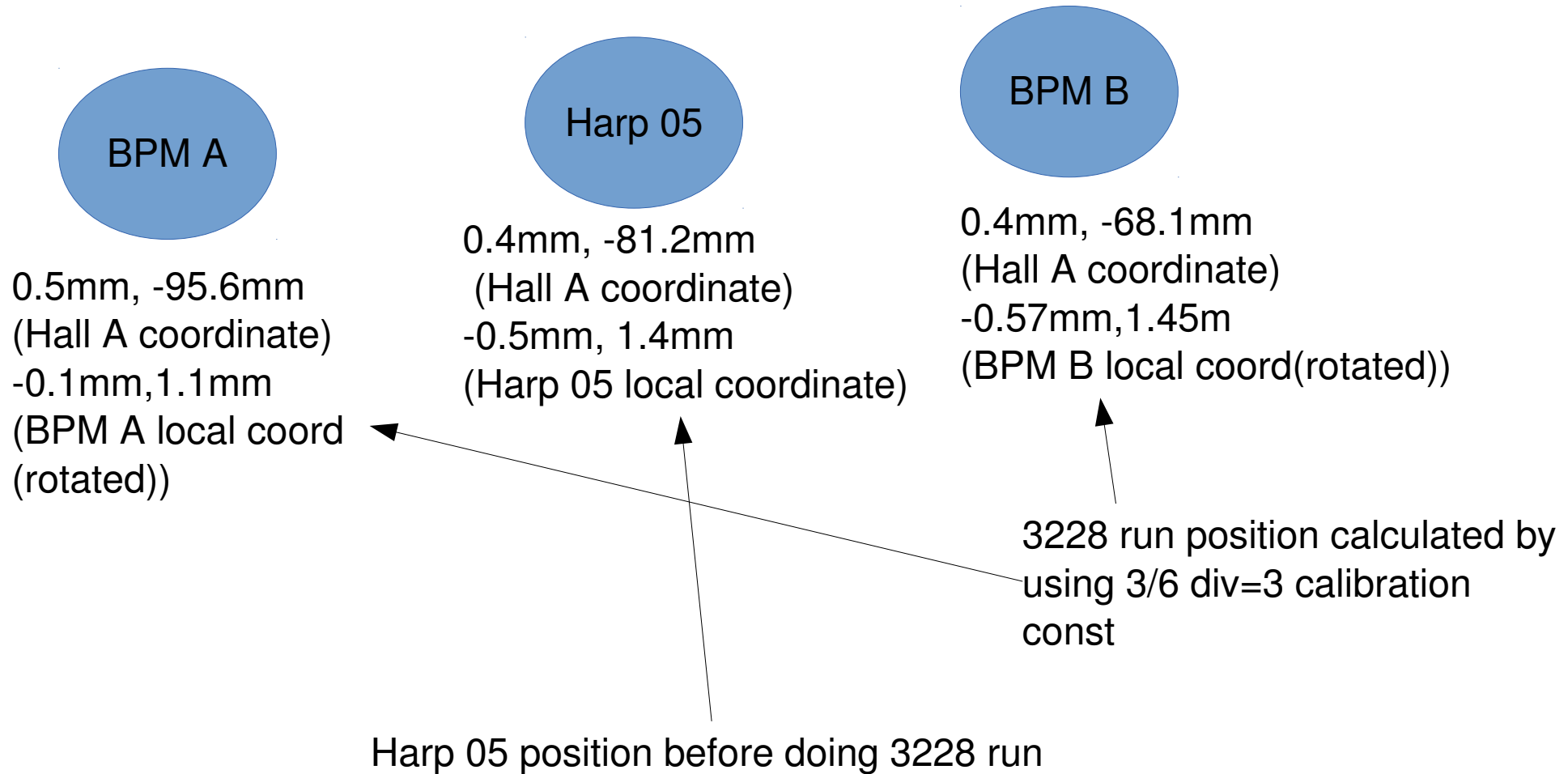
Calibration constant for optics runs near 3185(div=2)
Difficulties: no straight through calibrations for div=2



The most closed result for div=2 calibration is $3/6$ div=3
Calibration for $3/6-3/28$ (autogain): without subtracting pedestal

Comparison between 3/6 div=3 calibration with 3/16 div=2 harp scan data

3/16 3228 run: a bpm calibration run, with harp 05 scan result

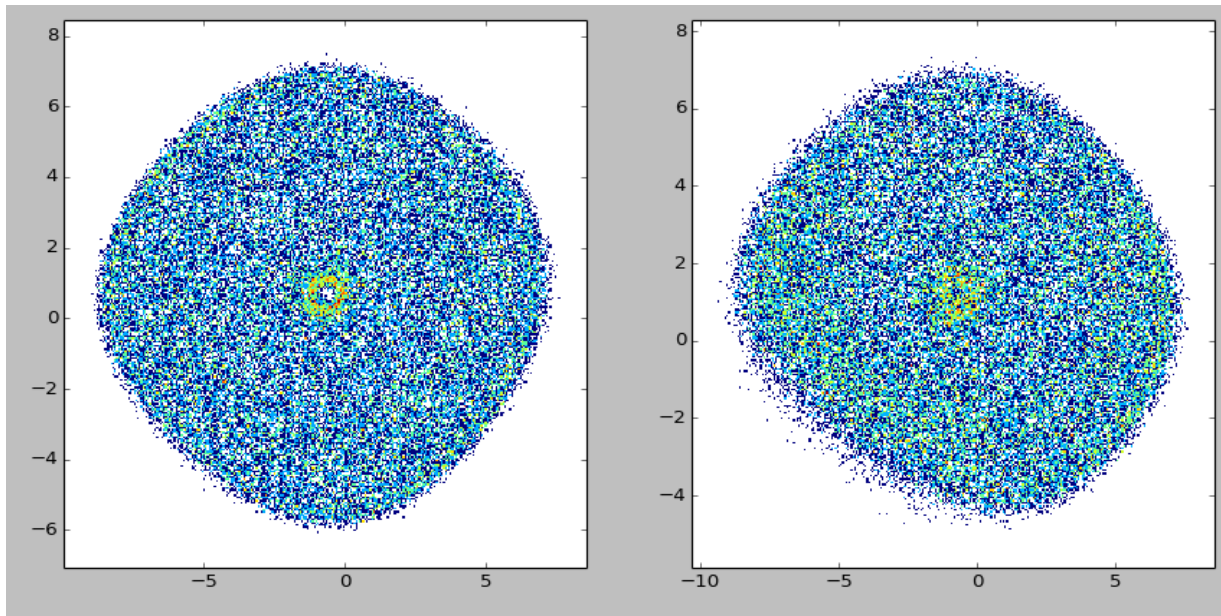


3185 run position calculated by using 3/6 div=3 calibration const

-0.84mm(x)

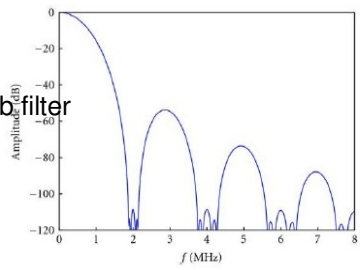
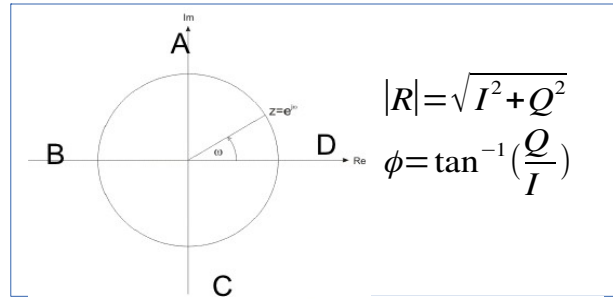
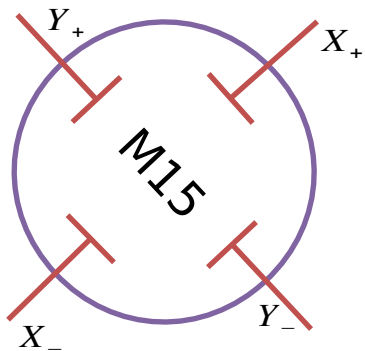
2.39mm (y) at target

3217 run's raster shape calculated by using 3/6 div=3 calibration const



backup

New BPM Receiver



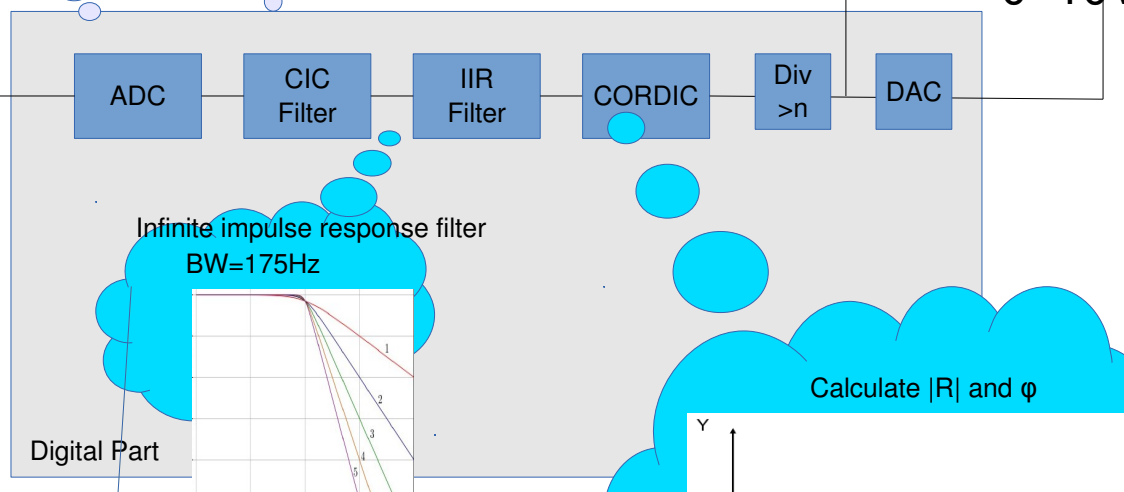
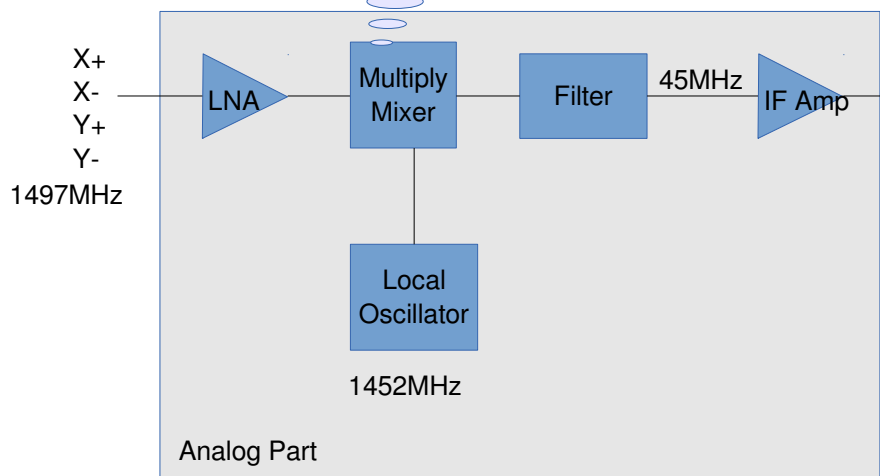
Cascaded integrator-comb filter

$\int a \frac{d}{dt}$

Noise limit
exclude out-of-band signal

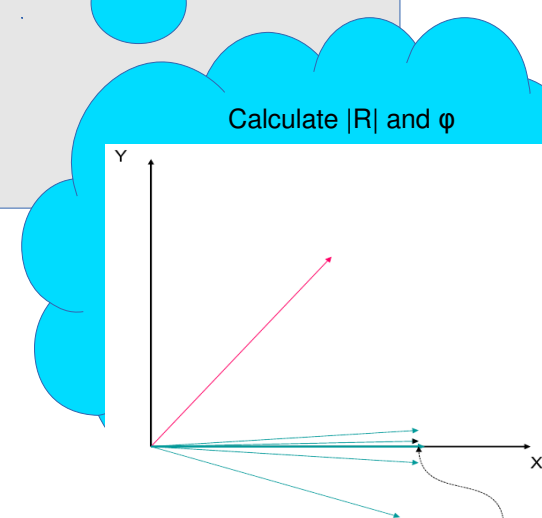
Harmonic sampling
Sample Rate: 36MSPS

$\sin \theta \sin \varphi = \frac{1}{2} \cos(\theta - \varphi) - \frac{1}{2} \cos(\theta + \varphi)$



Infinite impulse response filter
BW=175Hz

We can not see fast raster signal



Last week