



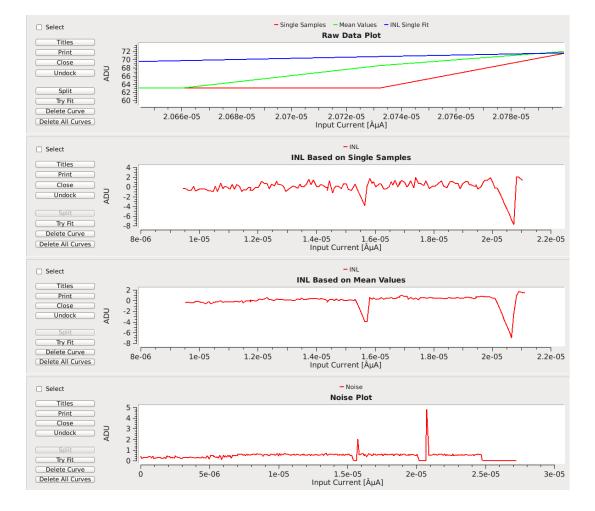


Various DCD Measurements





Missing Code at ADU 63





Settings for CMC measurements

- all measurements were done with internal source
- RefIn at 0.9V

MainWindow _ 🗆 🛪								
nitialization Tools								
Boundary Scan	CDB Global Settings	DCDB Pixel Settings	Switche	er Controlle	r Run Control	ADC C	haracter < >	
DAC IPAddOut	0	Monitor IPAddOut			Enable CMC Cap	,		
DAC IFBPBias	60	Enable DCDB			EnCap		3	
DAC IPSource	60	Pull-Down VDC Enable Digital Test Ir	niection		EnCapL		3	
DAC IPSource2	60	Test Sync0	.,		DAC VNDel		127	
DAC IPDel	127	Test Sync1		\checkmark	DAC RefNWell		64 🗘	
DAC InjPSignal					DAC IPAddIn		0	
DAC IPDAC		Test SampleEnR AmpOrADCGlobal			DAC IAmpPBias		120	
DAC ITCP		Enable Global Injecti	on	<u> </u>	DAC VNSubIn2			
		Enable external Stro	be		DAC IInjPSignal2	2	120 🗘	
DAC ITCPL	0	Enable Test		\checkmark	DAC AmpLowRe			
DAC IPSourceCase		ampSFON Enable 30			DAC AmpLowRe			
DACIFBNCasc	0	Enable 60		_	Monitor RefNWe			
DAC IFBRef	0	Enable 90			Monitor VDDA Te			
DAC INMOS	120	Enable 120			Monitor VDDA A	DC Top		
DAC ITCCasc	0	Enable Double Sampling			Monitor VDDA TIA Top			
DAC VNSubIn	6				Monitor VDDA Bottom			
DAC VNSubOut	0			_	Monitor VDDA Bottom2 Monitor Cap Load EnB			
DAC VTCSFN	0				Monitor DAC Bia			
	•							
	Program! Need to program the global chain							

Belle II Spring Test Campaign II



Measurement IPSource 2 - rows

IPSource2 = 60 IPSource = 0

IFBPBias = 0

22.0 21.5 21.0 current / JuA 20.5 20.0 19.5 L 5 10 15 20 25 30 row deviation from mean 1.5 1.0 0.5 current / μA 0.0 -0.5 -1.0^L0 10 15 25 5 20 30 row

absolute

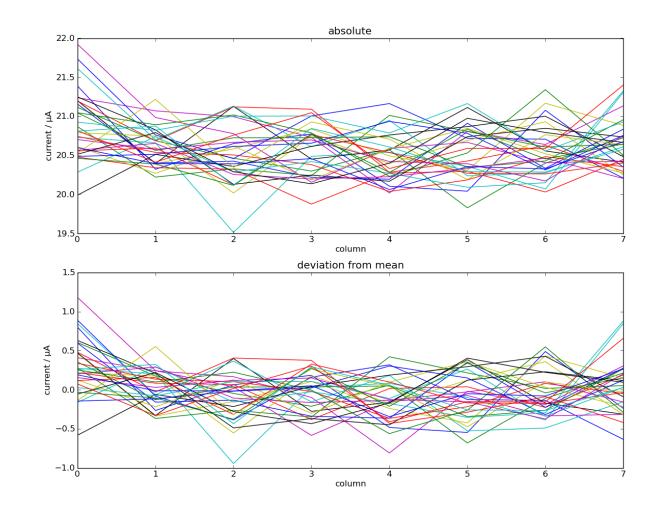


Measurement IPSource 2 - columns

IPSource = 0

IPSource2 = 60

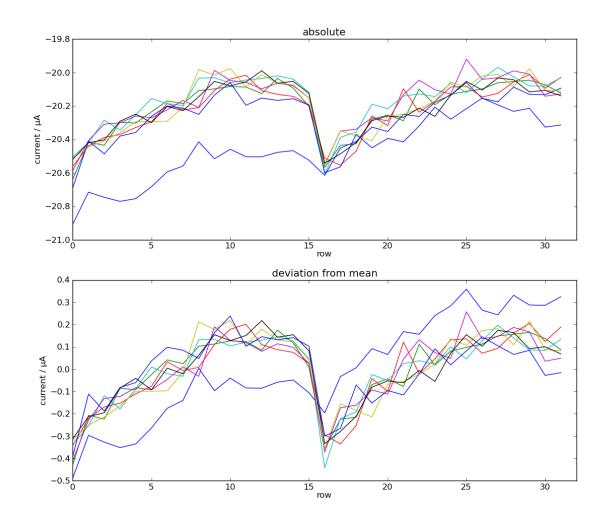
IFBPBias = 0





 $\mathsf{IPSource} = 60$

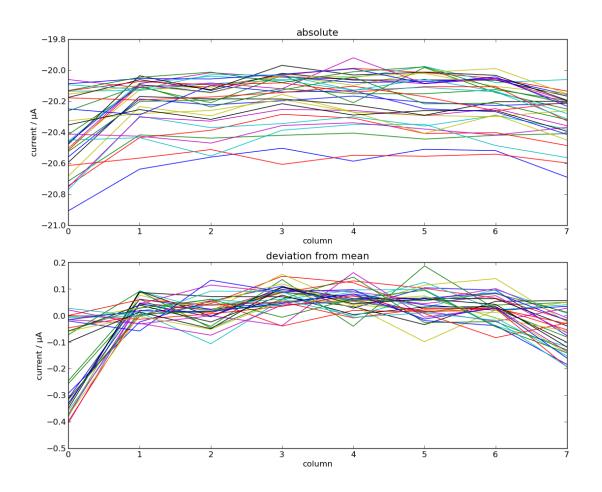
IFBPBias = 0





IPSource = 60

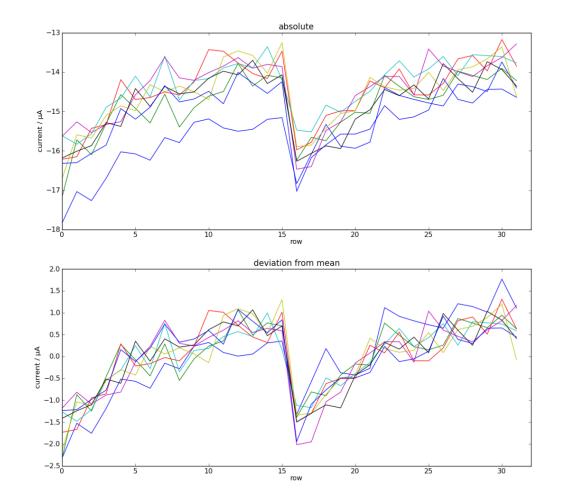
IFBPBias = 0

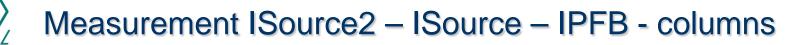




IPSource = 60

IFBPBias = 60



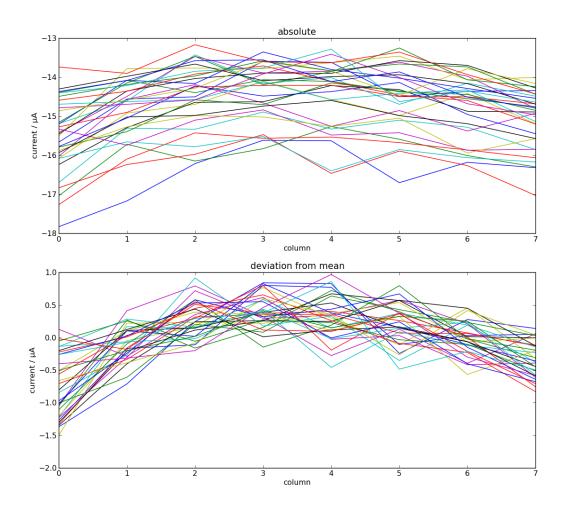


MPG

 $\Delta q \ge \frac{1}{2} t$

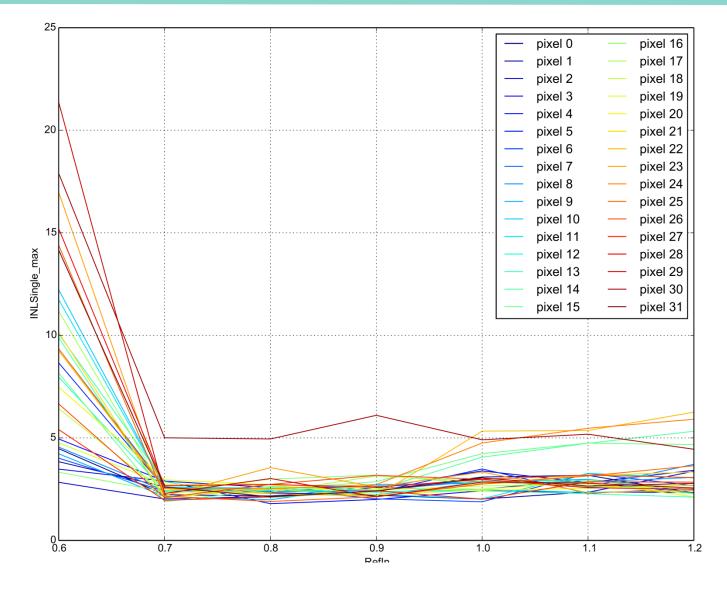
IPSource = 60

IFBPBias = 60





Comparison of different RefIn with INL max





Comparison of different AmpLow with INL max

