

# The Story So Far

## February 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11 4K Wave	12	13	14	15 Cold in both rings	16
17	18 PP12 lattice test evening	19	20	21	22	23
24	25	26	27	28	29	30
PS gave us e-lens		First Collisions			Overnight Stores 109x109	
					Start Physics	

## March 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11 6 hour stores with tune between				15 PA Maintenance	16
17	18	19	20 PA Maintenance	21	22	23
24	25 8hr Stores		27 APEX	28	29	30
31	Inject = 200e11					

# April 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3 Maintenance	4 Switch Fy Lattice	5 12	6 Pushed Intensity
7 Reach 200e11 At FT	8	9	10 APEX	11 Rotator	12 Tuning	13
14	15 MD Studies	16	17 Maintenance Golden Store 17396	18	19	20
21	22	23	24 APEX	25 Machine Dev.	26 Pushed Bunch Intensity	27
28	29	30 Test corrected Optics	APEX	Machine Dev.		

# May 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 APEX	2 MD Studies Installed Dpx	3	4
5	6	7	8 Maint.	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23 Dpx reduction In Blue removed	24	25
26	27	28	29 MD Spin Tune	30 Low E APEX	31	

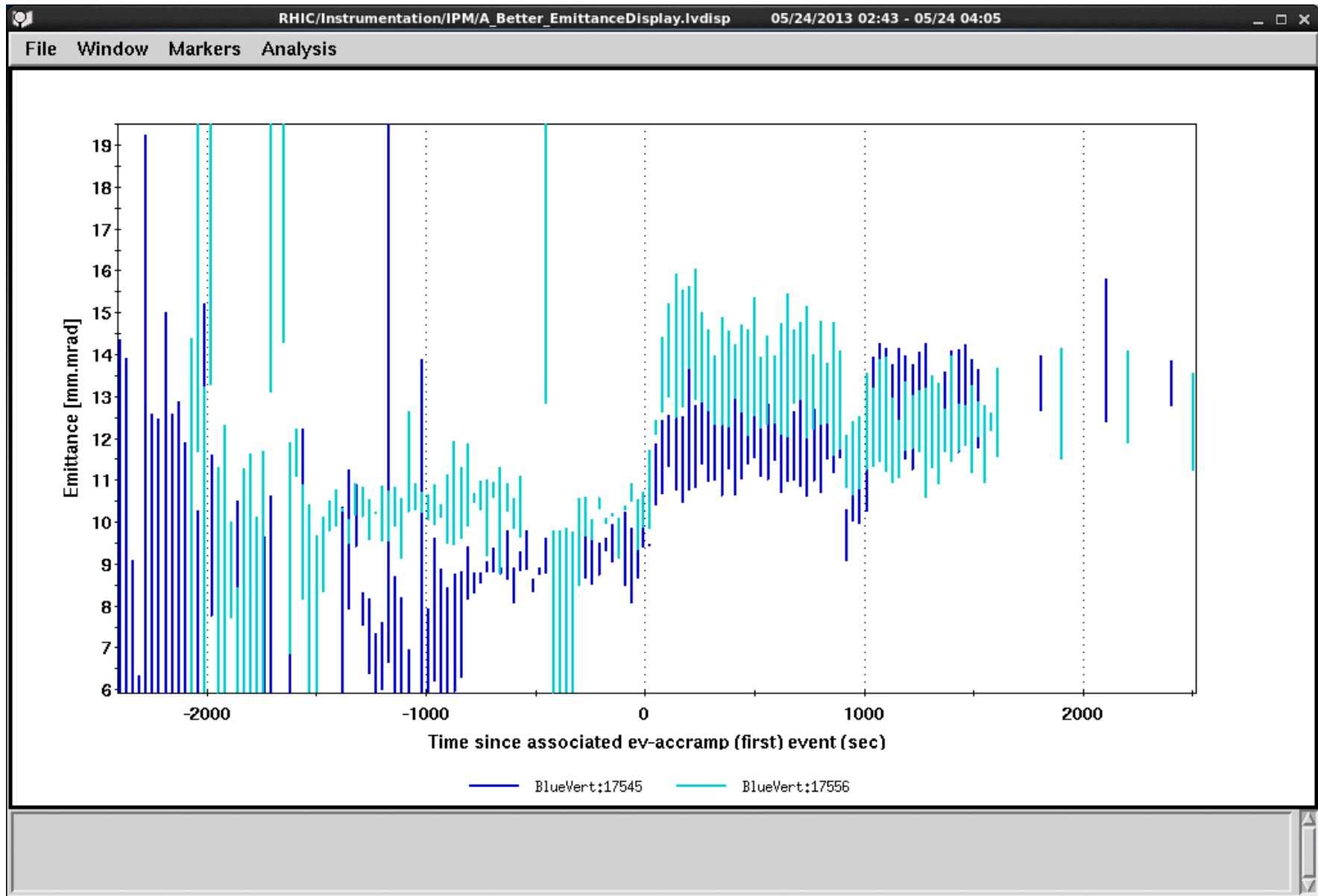
# Past week

- Machine Development
  - RF group Damper studies
  - Removed Dpx reduction in Blue
- Trouble with aborts
- Steering Star back into full collision
- Angles at IP's taken out

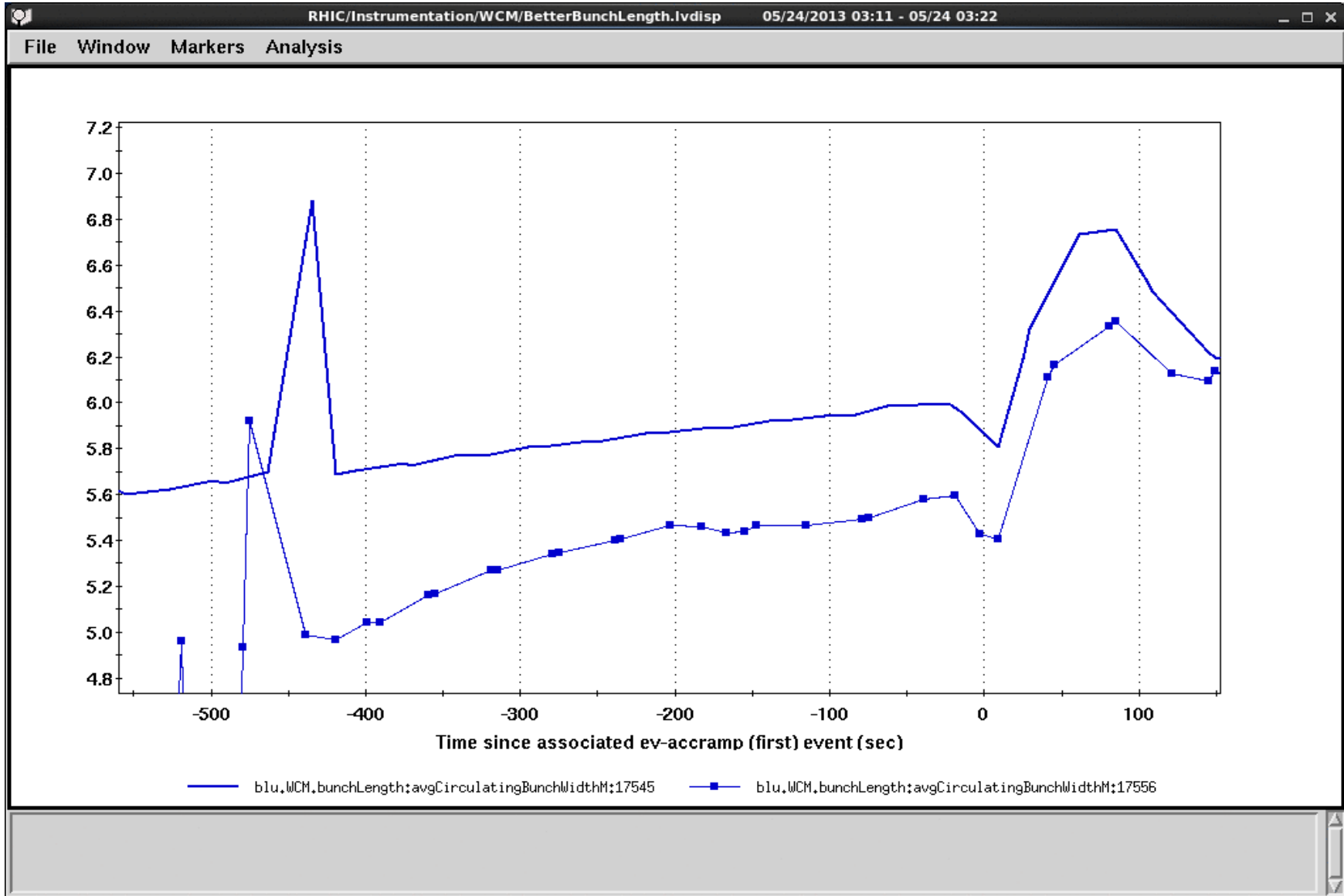
# Current Situation

- As compared to Period (17416-17451) Blue Jet average = 58% we are still low in Blue
  - During Period with Dpx reduction applied in Blue average Jet numbers for Blue = 51%
  - Since removal of Dpx reduction Blue Jet = 53%
  - Not clear that the Dpx reduction was a culprit, however Emittances on the ramp have seemed to blow up on the ramp since 17545 after removal of Dpx reduction so this may obscure issue. Also some of the fills had lower AGS injection numbers. Need more analysis.
- Yellow Appears 'healthy' any low jet numbers appear to be due to low AGS and/or source numbers.

# Blue emittance blow up on energy ramp



# Blue shorter bunch length





# Future Plans

- Run low intensity fill to help diagnose abort situation
- Sort out why angle's creeping back into IP's
- Spin Tune measurement at FT without rotators to make sure snake currents correct
- RF bb damper work to improve performance
- Better understand causes of emittance growth in Blue on energy ramp.