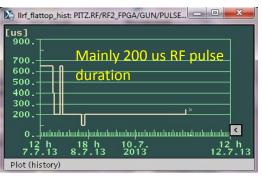
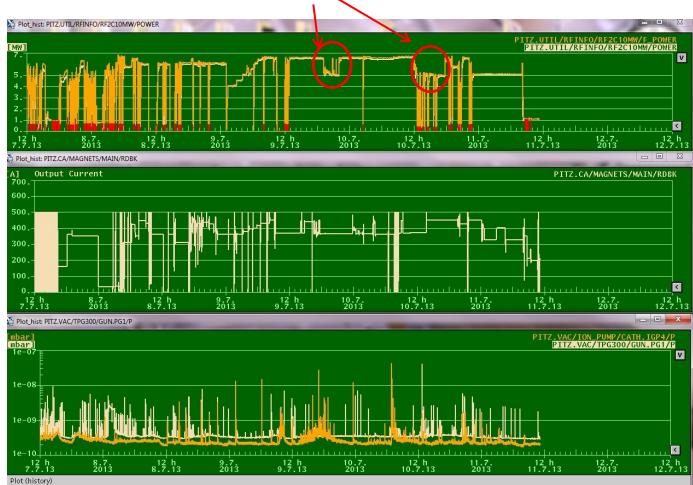
## PITZ RC 11.07.2013

#### Summary of the last 4 days of run

Last dark current measurement at 6.5MW in the gun (~84uA)



Yesterday M+A runs:
200 us, 6.5 MW in the gun, ~ 15 PM coupler interlocks per shift
Yesterday N run: 200 us,
5 MW in the gun -> no interlocks

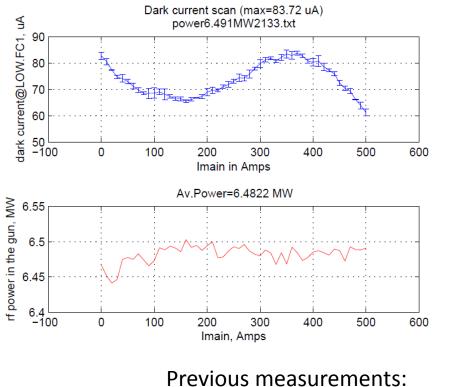


The real power was 6.5 MW!

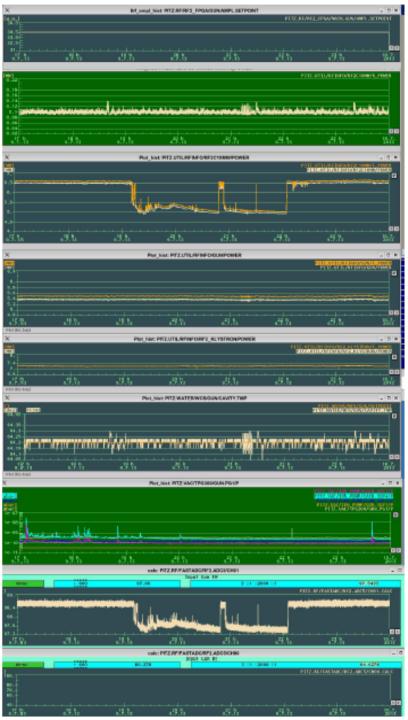
Gun photo diode gamma	9			
Gun PM coupler	8			
Gun e- coupler	70			
Vacuum at GUN.PG1	6:::			<
	1	h 12	$h_{13} = 12$	, h

## Dark current

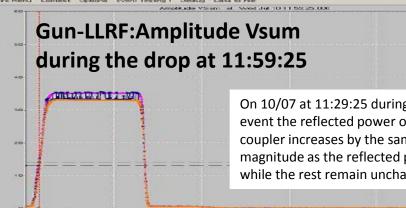
10\_07\_A, last measurement : 84uA with 6.5 MW power in the gun



Previous measurements: 10\_07\_M -> 98 uA (6.5 MW) 09\_07\_N-> 92 uA (6.4 MW) 09\_07\_M-> 133uA (6.5 MW), 124uA (6.4 MW)



Problem concerning the measurement of the power in the gun



On 10/07 at 11:29:25 during the drop event the reflected power of the 10MW coupler increases by the same order of magnitude as the reflected power on WG2, while the rest remain unchanged.

#### See also the entries in the 10\_07\_A

During this time the measured maximum beam momentum at LEDA was 6.3 MeV (corresponding to  $\sim$  6.5MW in the gun) while the read power was 5MW

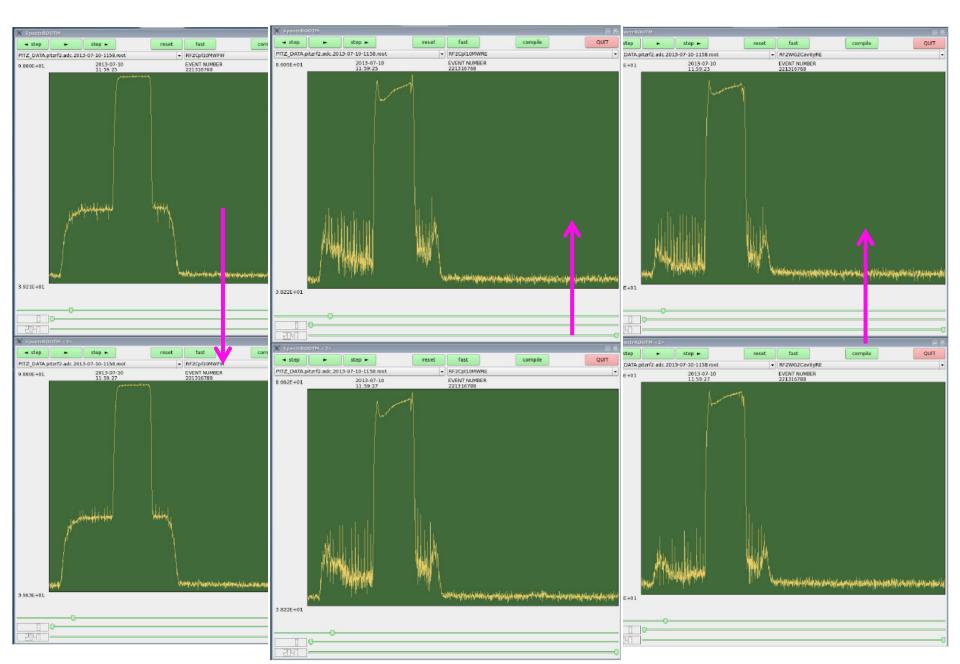
Logbook	entry	RF2 SP Gun forward RB(MW)			Power in Gun	Imain	LEDA Dipole current	Pmax from LEDA	Prms,min from LEDA	
Date	Time		Klystron	T-combiner	10MW coupler	(MW)	(A)	(A)	(MeV/c)	(keV/c)
09.07.2013	08:58	34.5	7.22	5.50	6.62	6.5	450	-1.71	6.36	9.44
	09:06	34.5	7.21	5.49	6.61	6.5	450	-1.71	6.35	8.20
	14:13	34.5	7.23	5.50	6.57	6.5	430	-1.70	6.40	17.69
	17:37	34.5	7.20	5.47	6.56	6.5	450	-1.71	6.35	9.76
10.07.2013	04.03	34.5	7.10	5.45	6.55	6.4	443	-1.72	6.36	19.3
	09:07	35.2	7.30	5.52	6.61	6.5	447	-1.75	6.37	8.75
	09:16	35.2	7.25	5.54	6.65	6.5	447	-1.75	6.38	8.33
	14:11	35.21	7.30	5.54	5.13	5.0	450	-1.70	6.38	18.35
	14:55	35.21	7.30	5.53	5.09	5.0	450	-1.70	6.34	22.70

- 09/07 roughly between 19:00 and 22:00
- 10/07 roughly between 12:00 and 17:45

#### RF2 CPL 10MW FW

#### RF2 CPL 10MW RE

#### RF2 WG2 RE

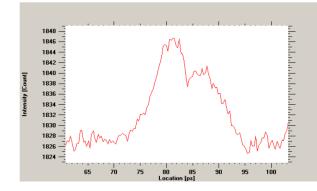


# Beam modulation & satellites 1/3

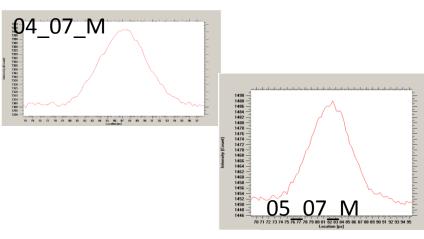
### Laser

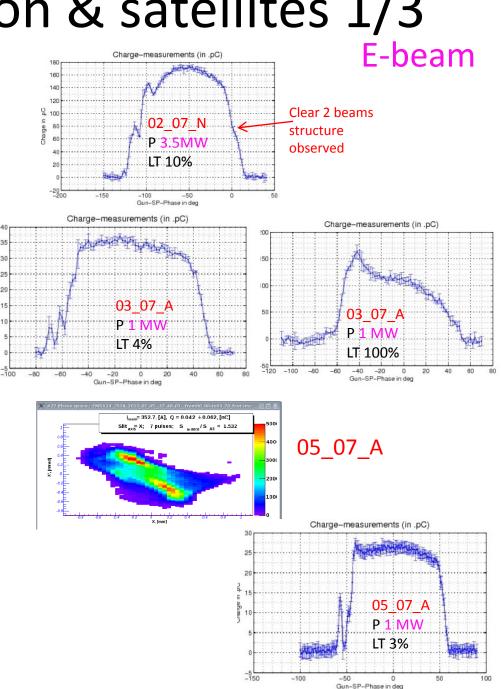
(short gaussian)

Measured on 03\_07\_M:

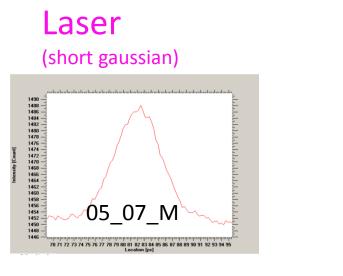


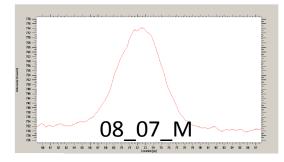
Measurements on 04\_07\_M, 05\_07\_M, 08\_07\_M, 10\_07\_M do not show any modulation:

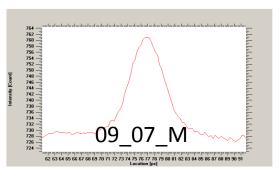


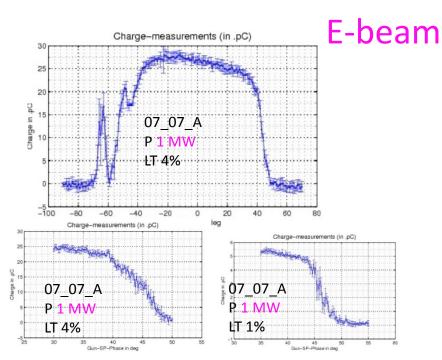


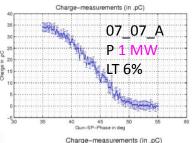
# Beam modulation & satellites 2/3

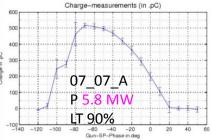




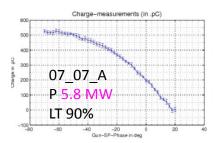








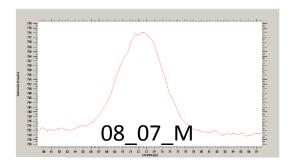
No trace of the second beam on the right side of the curve

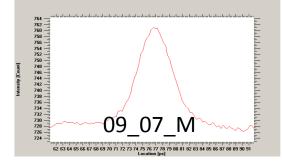


# Beam modulation & satellites 3/3

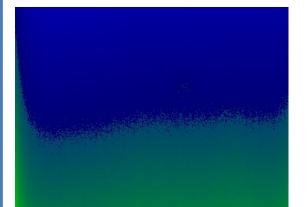
### Laser

(short gaussian)

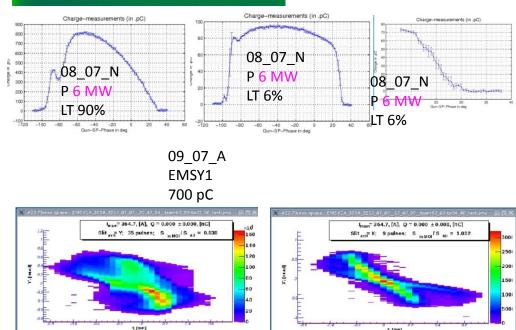




Low.Scr1 while scanning the gun phase in the range -100 / +30 deg



**E-beam** 08\_07\_A 3 beams can be seen. beam focus phases are about -80, -36, and -6 deg.



to do:	Run Period										
Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun				
28	Jul-08	Jul-09	Jul-10	Jul-11	Jul-12	Jul-13	Jul-14				
Morn.											
07:00	Malyutin	Malyutin	Malyutin	K	Selenci	nikov					
to	Martin	Pathak	Martin		Solenoid BBA						
15:30											
Late											
15:00	Kourkafas	Kourkafas	Kourkafas			Emit	tance				
to	Prach B.	Prach B.	Prach B.			measur	ements?				
23:30											
Night				1							
23:00	Otevrel	Otevrel	Otevrel				Dark				
to	Kalantaryan	Kalantaryan	Kalantaryan				current				
07:30				Trip rate monitoring at 200us x [ 5.5; 6.0; 6.5MW]							
Resp. Phys						0003 x [ 5.5, 0.	5, 0.514144]				
Laser	Gross	Gross	Gross	Krasilnikov	Krasilnikov	Krasilnikov	Krasilnikov				
RF	Koehler	Koehler	Koehler	Koehler	Koehler	Koehler	Koehler				
Vaku.	Bienge	Bienge	Bienge	Bienge	Bienge	Bienge	Bienge				
Contr.	Petrosyan	Petrosyan	Petrosyan	Petrosyan	Petrosyan	Petrosyan	Petrosyan				
Electr.	Schade	Schade	Schade	Schade	Schade	Schade	Schade				
Infrast.	Schulze	Schulze	Schulze	Schulze	Schulze	Schulze	Schulze				
SSB	Petrosyan	Petrosyan	Petrosyan	Petrosyan	Petrosyan Petrosyan I		Petrosyan				
Schichtabsich	Schichtabsich Gross Gross			Isaev	Isaev	Kourkafas	Kourkafas				
Issued on 21-Jur	r-2013		A gr	A gray field means the status has changed since the last version							