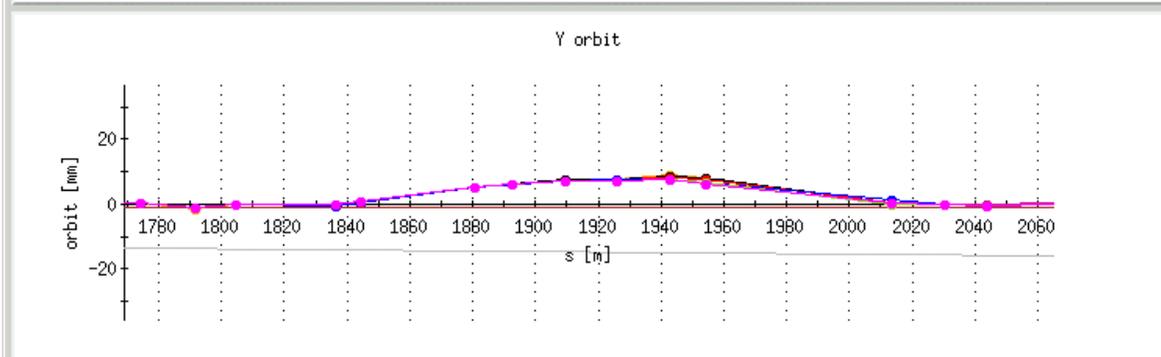
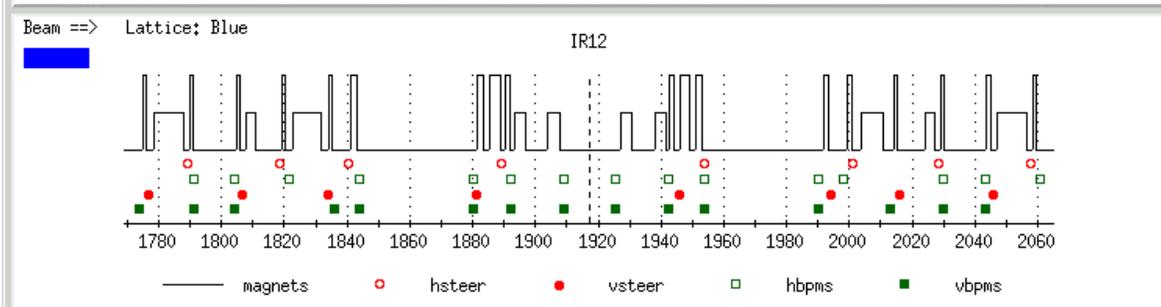
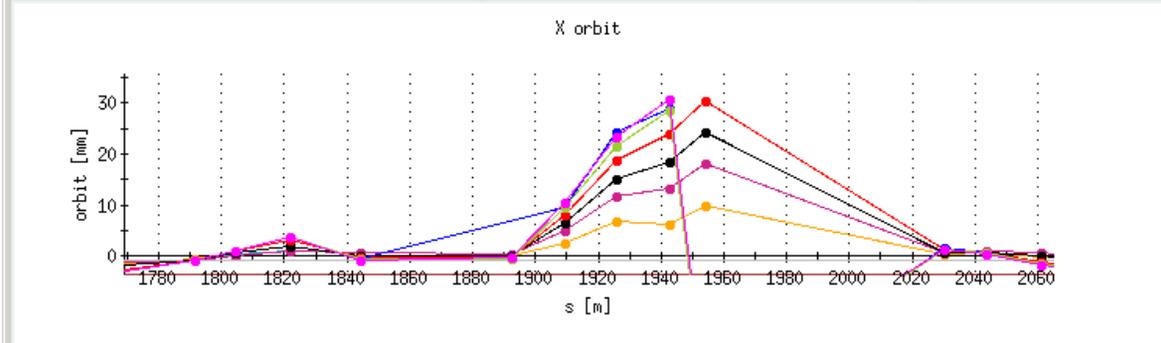


Beam Scraping at Bi12

- Control warm dipole from pet page.
- Synchronize with cold correctors by hands.
- The 5 bump (4 dipole correctors + warm dipole) was set up correctly -with good closure.
- The warm dipole strengths was increased to +300A, limit at the time.
- The bump amplitude of 38mm was not enough to observe scraping (no pressure rise, no electron detected).
- A -15 mm bump around Q4-Q5 was needed to avoid beam loss there.
- The pin diode at bi12 needs to be checked at next ring access.

Commissioning is successful.

- Add BLM down stream of the warm dipole (next to the pin diode).
- Control the warm and cold correctors with a simple script (Johannes, Al).
- With 40% more fields, expect to see local scraping next time.



Scale Control:

Region: Orbit scale [mm]:

Orbit list:

S	D	Name	Comment	Src	Clr
	+	7	Tue Jan 13 21:52:23	Measured	Orange
	+	8	Tue Jan 13 21:55:27	Measured	Cyan
	+	9	Tue Jan 13 21:55:32	Measured	Magenta
	+	10	Tue Jan 13 21:55:35	Measured	Grey
	+	1	Tue Jan 13 21:58:19	Measured	Black
	+	2	Tue Jan 13 22:00:18	Measured	Red
	+	3	Tue Jan 13 22:01:49	Measured	Blue
	+	4	Tue Jan 13 22:01:53	Measured	Brown
	+	5	Tue Jan 13 22:06:47	Measured	Light Green
#	+	6	Tue Jan 13 22:11:28	Measured	Magenta

4

Turn: Increment:

Orbit Statistics:

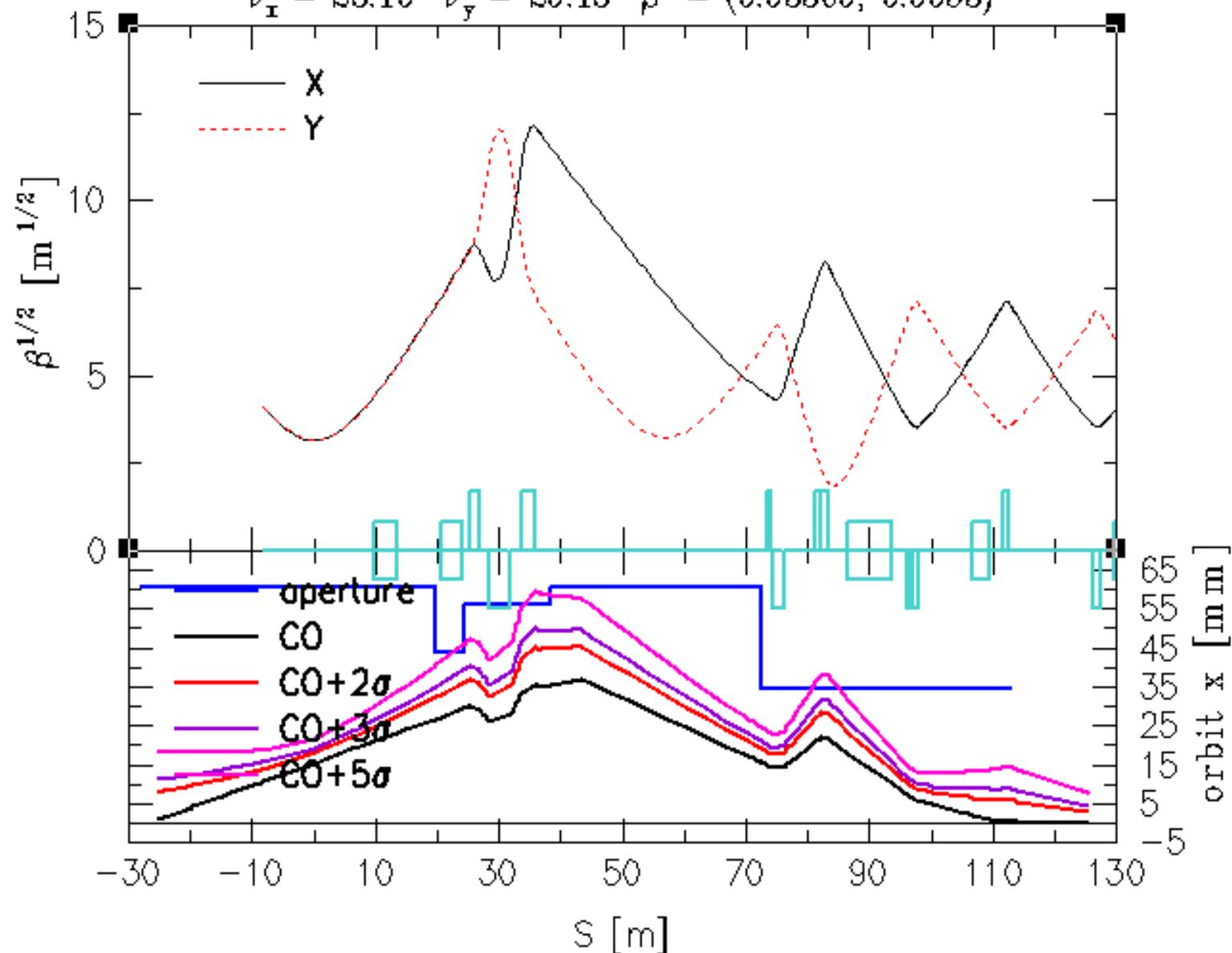
	mean	rms	lmaxl	Nbpms
X:	-0.0524	2.61329	6.342	59
Y:	-0.0796	0.69295	1.665	58

- ◇ Displayed Region
- ◇ Arcs

The orbit saved into /operations/app_store/RunData/rhic_au_fy04/04257/RHIC/RhicOrbitDisplay/Blue/orbit_data/warm159A
 The orbit saved into /operations/app_store/RunData/rhic_au_fy04/04257/RHIC/RhicOrbitDisplay/Blue/orbit_data/warm196A
 The orbit saved into /operations/app_store/RunData/rhic_au_fy04/04257/RHIC/RhicOrbitDisplay/Blue/orbit_data/warm233A
 The orbit saved into /operations/app_store/RunData/rhic_au_fy04/04257/RHIC/RhicOrbitDisplay/Blue/orbit_data/warm273A

Relativistic Heavy Ion Collider (BI12)

$$\nu_x = 28.19 \quad \nu_y = 29.18 \quad \beta^* = (9.93309, 9.9953)$$



Dataset Name	Source	Info	Graph	Data	Lock
Acq. 2899 - 22:31:18	Live	No	Yes	No	No
Acq. 2898 - 22:31:16	Live	No	No	No	No
Acq. 2897 - 22:31:14	Live	No	No	No	No

Fill: 4258

Max for Plots: 2

Acquire Once

Acquire Continuous

Acquire From/To:

STOP

RHIC (circ. avg.)

- Sector 6
- Sector 7
- Sector 8
- Sector 9
- Sector 10
- Sector 11**
- Sector 12**
- Sector 1
- Sector 2
- Sector 3
- Sector 4
- Sector 5

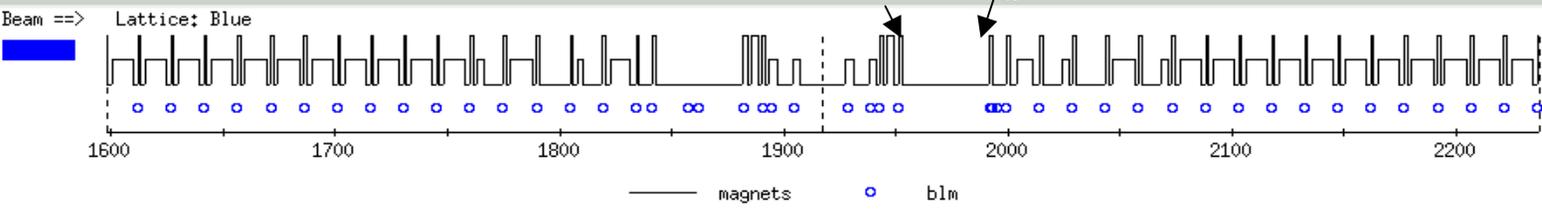
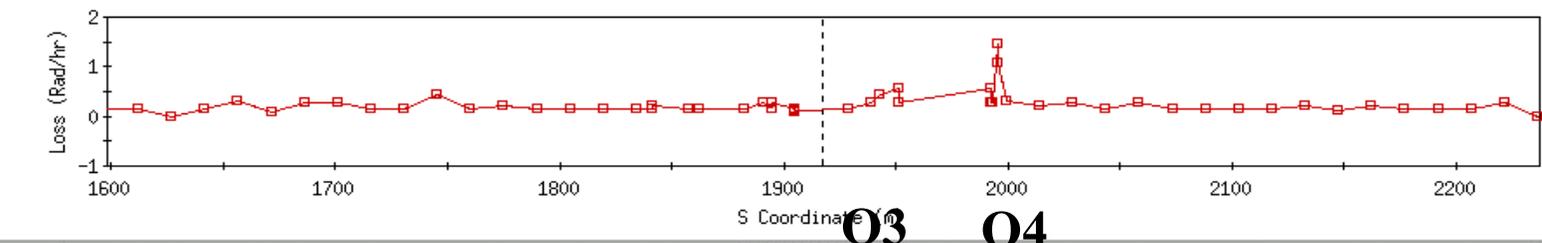
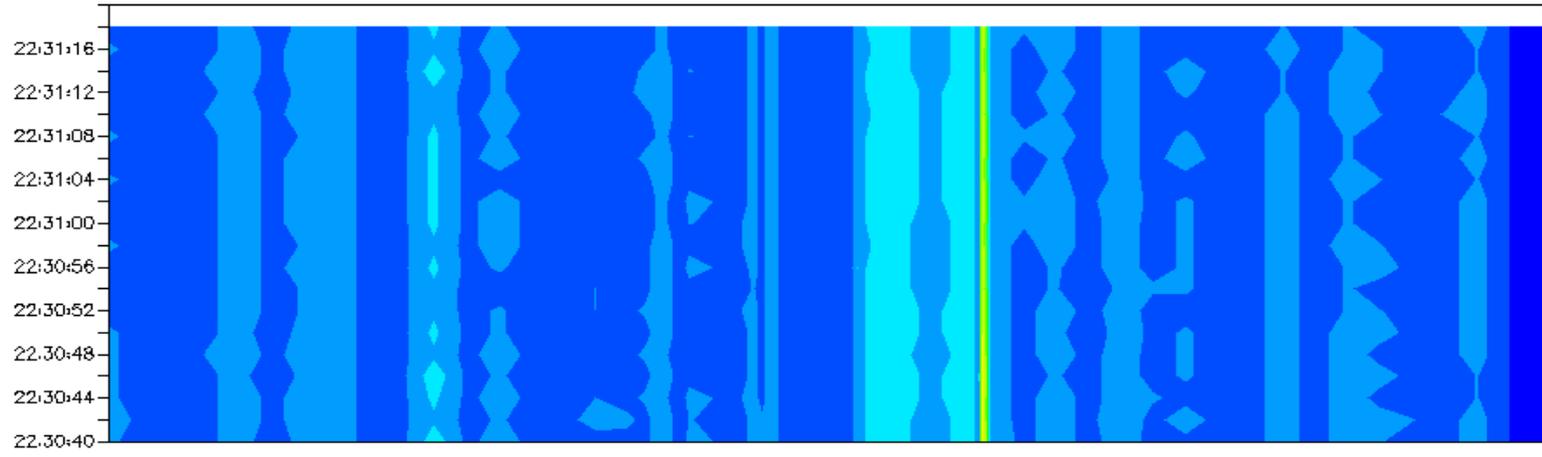
XF Avg Current

wxf1 4.59e+02

xxf1 4.52e+02

yxf1 4.61e+00

243



Smoothing has been turned on in 3D graph (Jan 13 22:14:48)

Smoothing has been turned on in 3D graph (Jan 13 22:27:44)