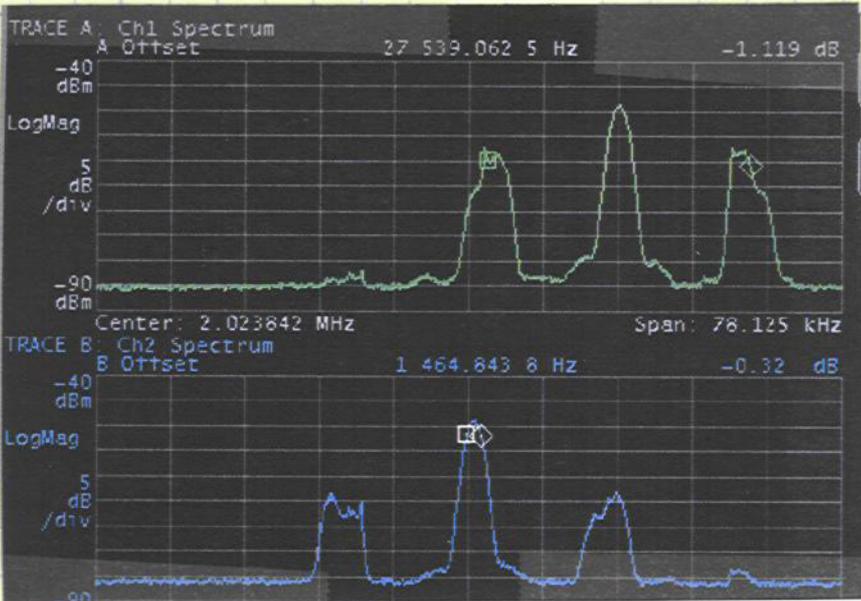


Then the evening Schottky repeatedly showed smearing of synchrotron satellites, appearing to be resulting from beam-beam interaction



$$\eta = .0008$$

Schottky yellow at $\gamma = 30$

$$q_x \sim q_y \sim .173$$

$$\left(\frac{\Delta P}{P}\right)_{RMS} = \frac{.735 \Delta f_{3dB}}{2.069 \text{ MHz} - \eta}$$

$$\sigma_P = 6.5 \times 10^{-4}$$

The following is what was entered into the Shift Summary Log. Date: June 3, 2000 Shift: Eve: 16:00-24:00

Shift Leader: A: Angelika Drees Crew: Thomas Roser, Chunmei Tang, Mei Bai, Pete Cameron, Steve Tepikian, Paul, Dermot, Seth

Logbook: 27 Pages: 90 - 106

Shift summary:

- (*) After we got beam back (and had a glass of champagne) we worked on improving blue lifetime. Tunes were moved up from (h): 0.109-0.168 (v): 0.133-0.171 towards the yellow settings which give good lifetime. Lifetime was surprisingly stable while moving the tunes (p95) unlike earlier experience. We stopped at 0.168 and 0.171 when both rings had comparable slopes @ injection of about 3 h.
- (*) As a first approach +0.059 and 0.034 were added to the tune settings in all stones for blue ramp (p96).
- (*) Loss monitors in average mode could track slower losses after injection and during the ramp indicating losses at 10 o'clock coming from the blue beam and at injection area coming from yellow. Gpm displays are setup for the dump area (p95).
- (*) 5 attempts to ramp were made during this shift. Yellow beam survived transition only once (p105) but with only about 5 % intensity remaining. after chromaticity was corrected in stone 11 (p103) by +6 units in both planes. Schottky indicates to change chromX by +2 more. Tunes have to be adjusted for both, blue and yellow. We started working on stone 17 and snapback for yellow. gammat jump timing was changed to improve transition efficiency. We'll continue during the night with both.
- (*) 6 bunches (blue) and 5 bunches (yellow) have been successfully injected into RHIC and circulated at injection. RF worked on cogging the blue beam while we were tuning the tune-setpoint.

Known problems:

- (*) cfe-10a-qd1 (quench linke FEC) not running, we'll reboot later
- (*) one (blue) sextant quenched