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Week in Review: 06/09/03 –06/16/03

Keith Gollwitzer – FNAL

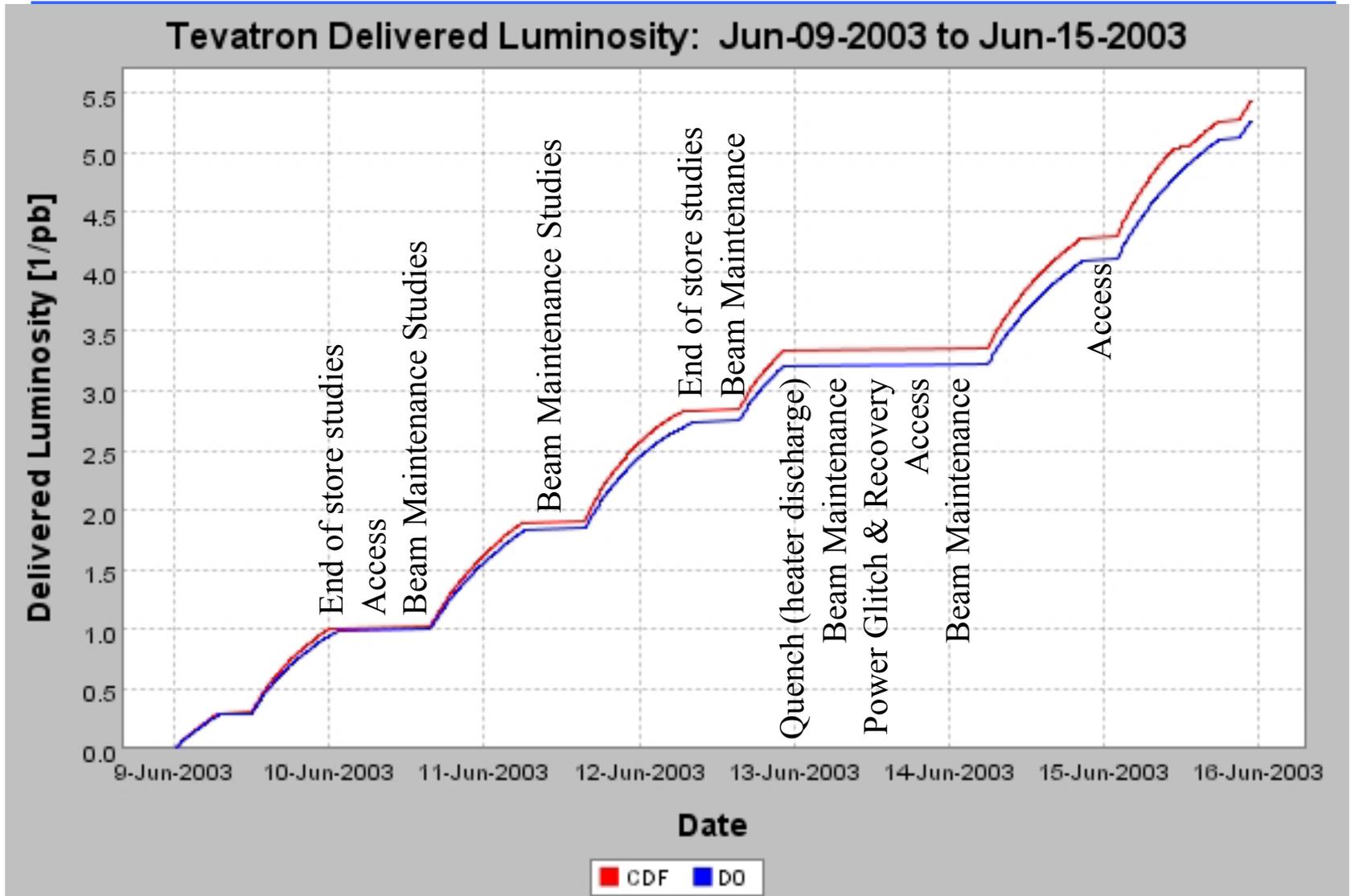
- Stores and Operations Summary
- Standard Plots

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Stores Summary

Store	Initial Lum. (E30)	Deliv'd Lum. (nb ⁻¹)	Termination	Duration (hr)	Comments
2665	29.9	838	Intentional	14.6	Stack of 157mA
2667	27.4	686	Intentional	12.3	Stack of 127mA; End of Store studies
2671	28.0	865	Intentional	14.7	Stack of 174mA
2673	31.5	905	Intentional	15.5	Stack of 146mA; End of Store studies
2676	27.5	484	Abort	7.0	Stack of 151mA; Quench via heater discharge
2684	30.0	918	Intentional	15.2	Stack of 106mA
2686	32.8	1040	Intentional	16.1	Stack of 138mA
2689	28.0	784	Intentional	15.3	Stack of 133mA ; lost 5 th pbar transfer
2692	26.1	-	On Going	-	Stack of 122mA

Integrated Luminosity for the Week



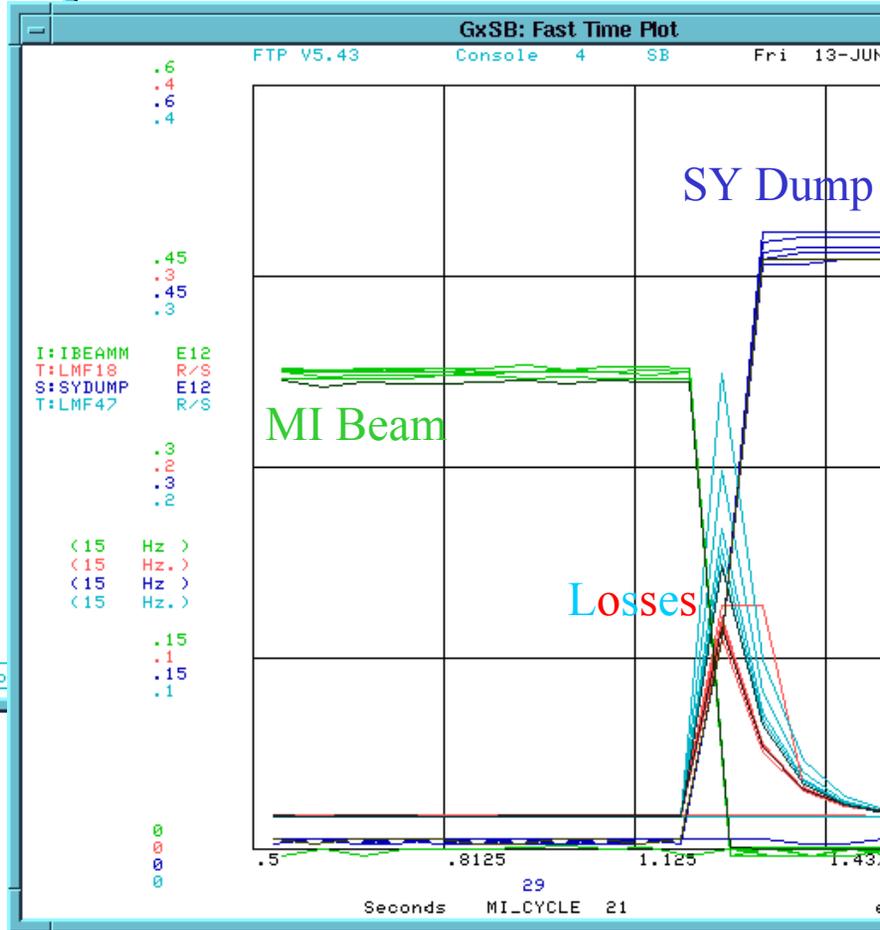
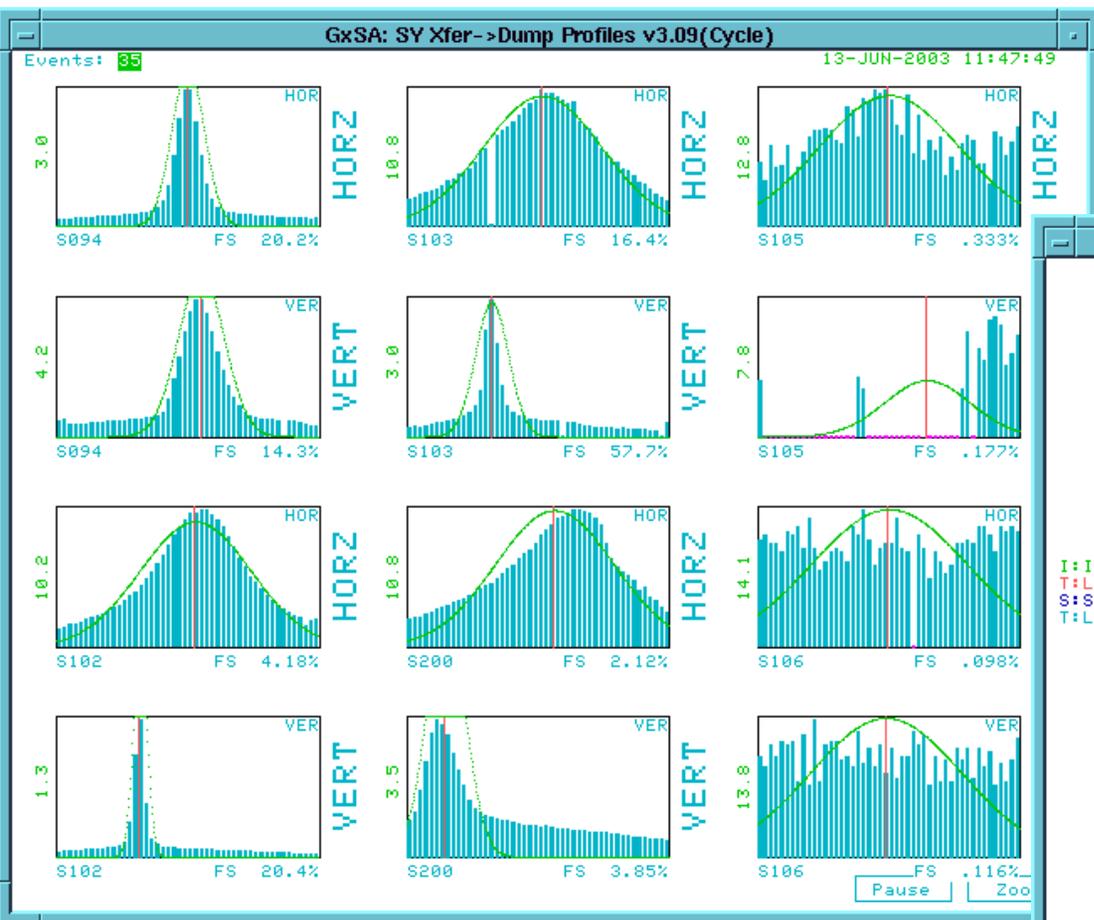
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- Lost Store; Lost Stack; Lost Power
 - Heater discharged causing quench at D0 low betas; HFU card replaced
 - A:LQ power supply burnt out termination; 90mA lost
 - Glitch; great effort to recover timely
 - Other problems
 - LRF2 driver tube replaced
 - KRF1 ignatron tube replaced
 - QPS308/QPS307 control card & bulk supply
 - Booster RF trips and water
 - B:MH2 regulation
 - D1 Refrig excursion
 - Continual tuning of proton source

- TeV beam maintenance
 - End of store studies
 - Tunes at 980GeV and losses
 - Separator strength and helix position
 - Between stores beam maintenance studies
 - Reduction of S6 strength; not able to decouple on helix orbits
 - Center beam in aperture; change in 10 locations
 - Find magnetic center of S6 elements
 - Isolate effect of cogging on proton lifetime
 - Lattice measurements at Flat top and low beta
 - Investigation of S6 strength
 - Full restore and checkout after power glitch
 - Orbit smoothing

- Some Good News
 - After Glitch recovery and orbit smoothing, some progress in returning to better shots and stores
 - Still work to go; there will be more between stores beam maintenance studies
 - Burle is to have sent tube today!
 - Will have to prepare here; next **new** tube is being scheduled
 - SY120 studier was able to coexist with 150GeV beam maintenance studies and make progress

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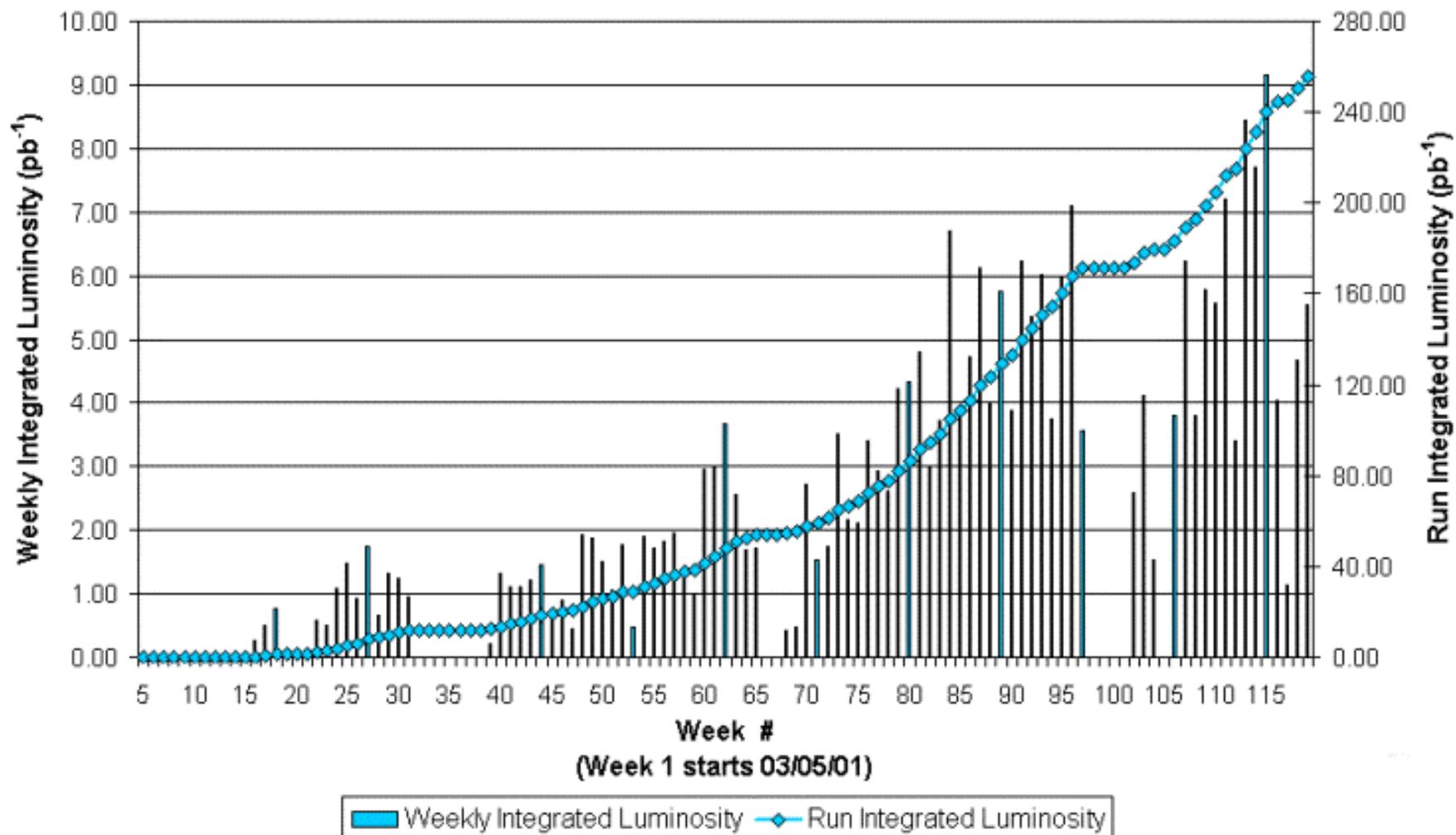
SY120 Progress: Beam to SY Dump!!!!



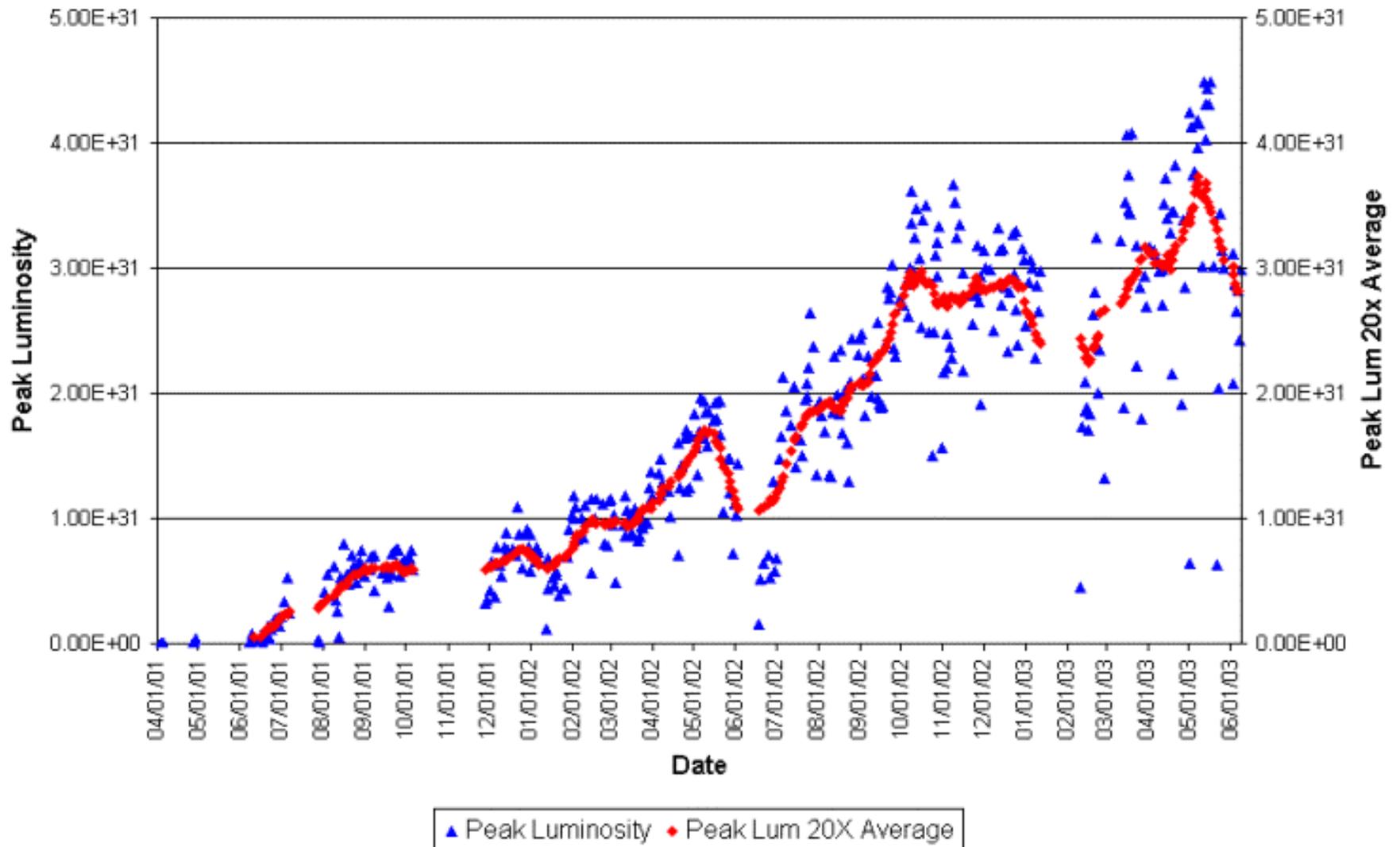
Work to be done: fix diagnostics; optics; slow spill; orbit & losses; run with TeV @ 980GeV

Beam has gone 1.7km; still 1.3km to experiments

Collider Run IIA Integrated Luminosity



Collider Run IIA Peak Luminosity



- The week
 - 4 periods of TeV beam maintenance studies
 - 91hrs of stores
 - Quench lost store; power supply failure lost stack; power glitch
 - SY120 beam to dump!
- FY03 total is 161pb^{-1} ; 10 weeks to shutdown
- Goal for this week
 - Stack and Store
 - Will do at least one between stores TeV maintenance period(s)
 - Tunes and chromaticities up ramp through squeeze
 - 8hr Tue access (while in store): new RR BPM preamp installation
{+ other maintenance work in MI, Booster and Linac tunnels}