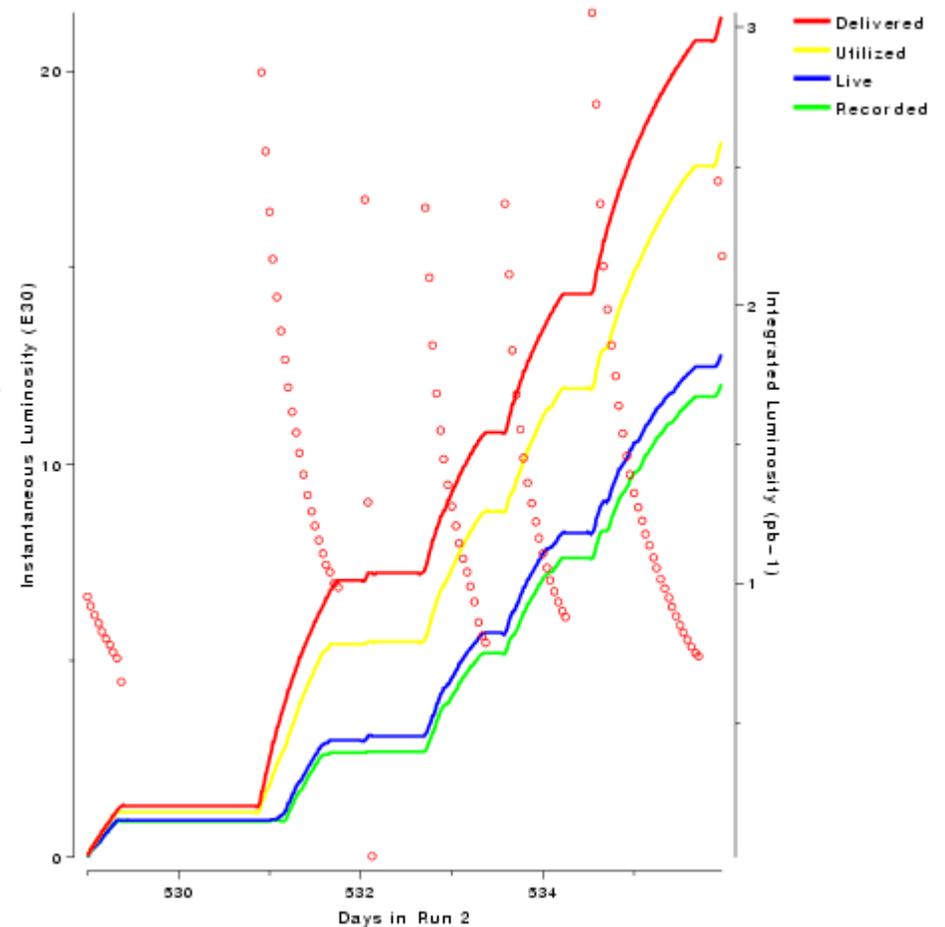
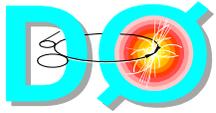


Week of August 12 to August 19 D0 Summary

- Delivered luminosity and operating efficiency
 - ◆ Delivered: 3.0pb^{-1}
 - ◆ Recorded: 1.8pb^{-1} (~65%)
- Data taking efficiency
 - ◆ front-end busy down to 1%
 - ◆ no major hardware/software problems
 - ◆ during weekend our “to tape” efficiency was stable at ~80%
 - ◆ major hit for lower overall efficiency
 - ▲ VME readout problems after Monday/Tuesday access
- Accelerator halo and beam position are stable

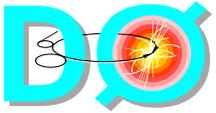




DO Run I I "record" Runs

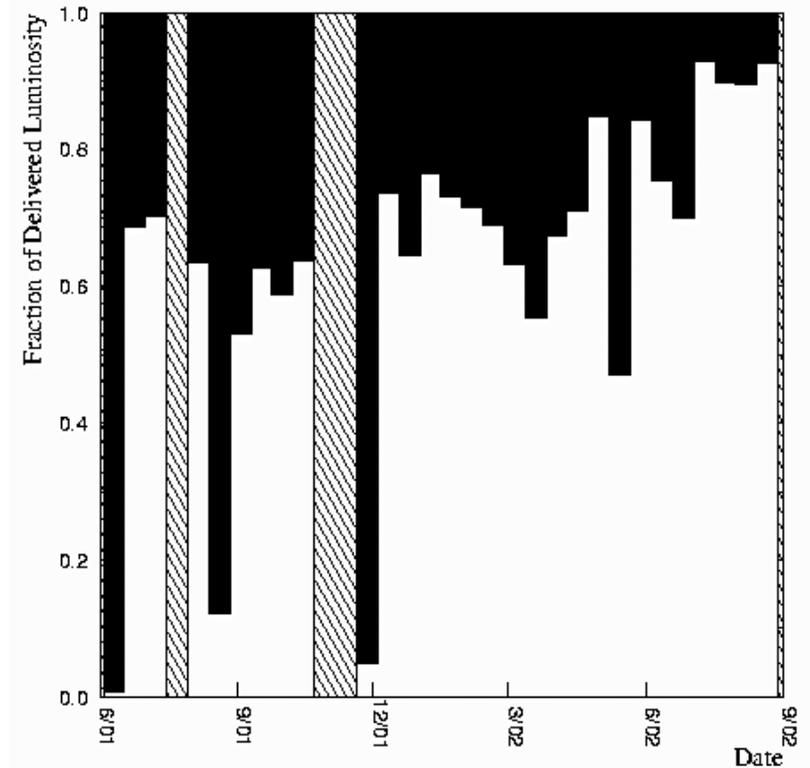
- All readout crates in the run
- No major high voltage or low voltage problems
- Duration greater than 3 hours, number of events greater than 300,000, rate to tape greater than 20 Hz

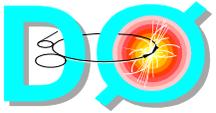
Run	Store	Start Time	Delivered Lumi (nb-1)	DAQ Shifters	Live Fraction	Duration (hrs)	Events	Rate to Tape (Hz)
162009	1665	2002 Aug 15 19:07:49 CDT	144.34	Michiel Sanders	85.1%	3.75	353318	28.3
162049	1667	2002 Aug 16 17:13:26 CDT	150.35	Michiel Sanders	82.3%	3.99	368064	25.5
161662	1657	2002 Aug 12 02:10:23 CDT	82.63	Shuichi Kunori	81.9%	3.95	308961	21.8
162012	1665	2002 Aug 16 01:50:18 CDT	105.85	Maciek Przybycien	81.7%	3.92	337168	23.9
161656	1656	2002 Aug 11 10:49:00 CDT	178.74	Vivan O'Dell	81.6%	3.63	396281	30.4
162078	1668	2002 Aug 18 02:27:26 CDT	111.64	Maciek Przybycien	81.4%	3.88	345244	24.6
160693	1594	2002 Jul 29 04:00:37 CDT	124.15	Terry Toole	81.0%	3.73	315746	23.4
162104	1670	2002 Aug 19 06:09:15 CDT	115.61	Joshua Dyer	80.1%	4.02	350708	24.2



D0 Downtime

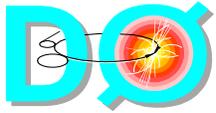
- Down time definition
 - ◆ data taking run is not configured due to major hardware or software problem during colliding beams
- Over last year the downtime is reduced from ~50% to ~10% lately
- Our plan is to reduce it down to ~5%
 - ◆ reasonably low level
 - ◆ reliability well above what experiment was designed for is needed to operate with better than ~5% downtime
- Difference between downtime and overall data taking efficiency
 - ◆ data taking run could be interrupted by multiple reasons
 - ▲ high front-end busy fraction
 - ▲ pauses to resolve “bad” conditions (HV trips, etc.)





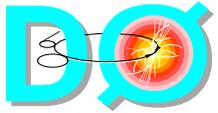
D0 Detectors Status

- Luminosity detector
 - ◆ Stable operation
- Silicon detector
 - ◆ Power supplies are running well
 - ◆ Noises stable: ~94% of channels are in operation
- Calorimeter
 - ◆ Stable
 - ◆ Calibration of Level 1 trigger energy scale
- Muon
 - ◆ Stable operation
- Forward proton detector
 - ◆ inserting pots during most stores
 - ◆ integrating FPD into global D0 DAQ



Off-line Farms Processing

- There is backlog of ~25M events not reconstructed on the farms
 - ◆ events collected after June 2002 shutdown
- Typical number of events per week DO is recording
 - ◆ ~6M events last week
 - ◆ (DAQ is designed for ~15M events per week)
- DO farms processing rate
 - ◆ farms are running with ~80% efficiency, but the reco is slower than planned
 - ◆ 2.6M events per week since early July
 - ▲ new reco version is considerably slower, than previous one
 - ▲ lower calorimeter zero-suppression thresholds added to both data size and processing time
 - ◆ 3.7M events per week
 - ▲ "off-line" increase in calorimeter zero-suppression (just introduced)
 - ◆ 20M events per week
 - ▲ after 240 new 1.8GHz nodes are running (early October)
- Operating strategy
 - ◆ code speed up for next reco version(s)
 - ◆ process some number of events from each week of data taking
 - ◆ potentially reduce rate to tape by ~ factor of 2
 - ▲ better for un-prescaled triggers
 - ▲ all others will get hit in data samples
- With new nodes backlog could be eliminated by late December or earlier, if rate to tape is reduced



Summary

- DØ detector is progressing well with physics data taking
 - ◆ no major problems with detectors/electronics/triggers/DAQ
 - ◆ all detectors are in readout
 - ◆ trigger list 8.10 is running on-line
 - ▲ collected ~6 mln. events last week
- Ready to continue data taking as soon as beam is back