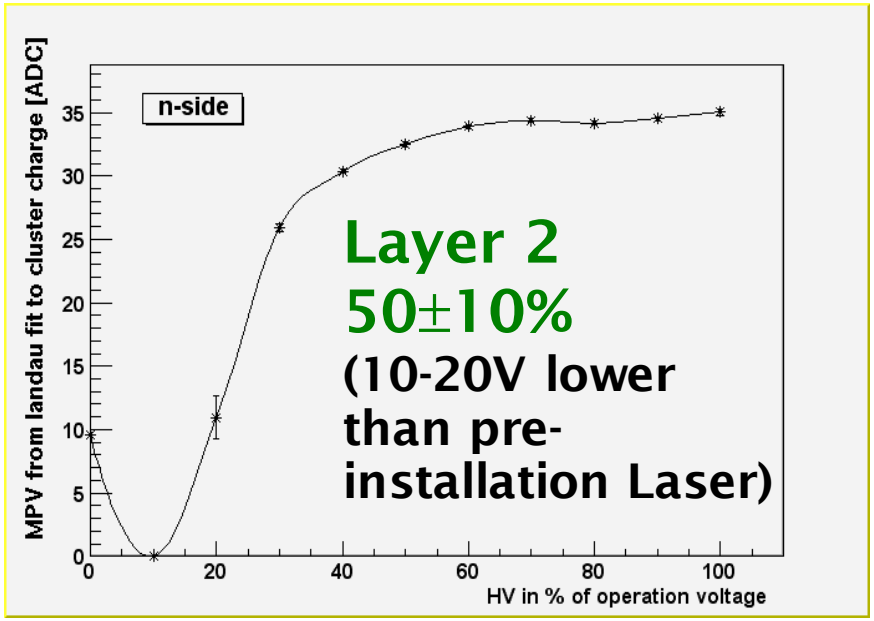
Data Taking Aug 11 – 17

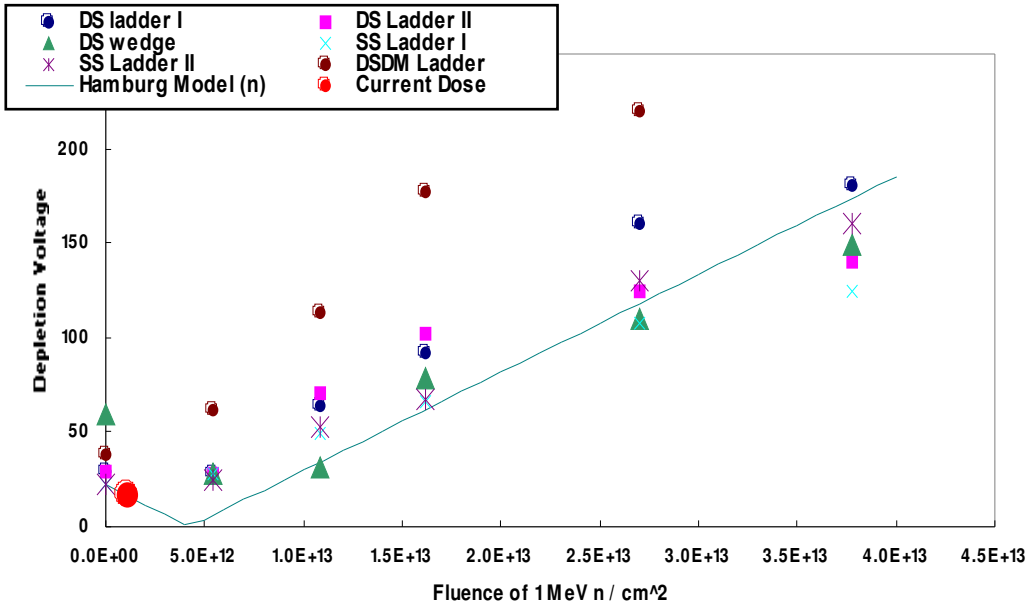
Day	*∫L dt (del)*	*∫L dt (rec)*	*Efficiency*
Mon	$5nb^{-1}$	$5nb^{-1}$	86.4%
Tue	$259nb^{-1}$	$192nb^{-1}$	74.1%
Wed	$881nb^{-1}$	$819nb^{-1}$	93.0%
Thu	$1404nb^{-1}$	$1293nb^{-1}$	92.1%
Fri	$1376nb^{-1}$	$1126nb^{-1}$	81.8%
Sat	$713nb^{-1}$	$521nb^{-1}$	73.0%
Sun	$1359nb^{-1}$	$1228nb^{-1}$	90.4%
This week	**$5997nb^{-1}$**	**$5184nb^{-1}$**	**86.4%**
Last week	**$6505nb^{-1}$**	**$5722nb^{-1}$**	**88.0%**
Best week	**$9786\ nb^{-1}$**	**$8604nb^{-1}$**	**87.9%**

A couple of special runs keep average below 90%

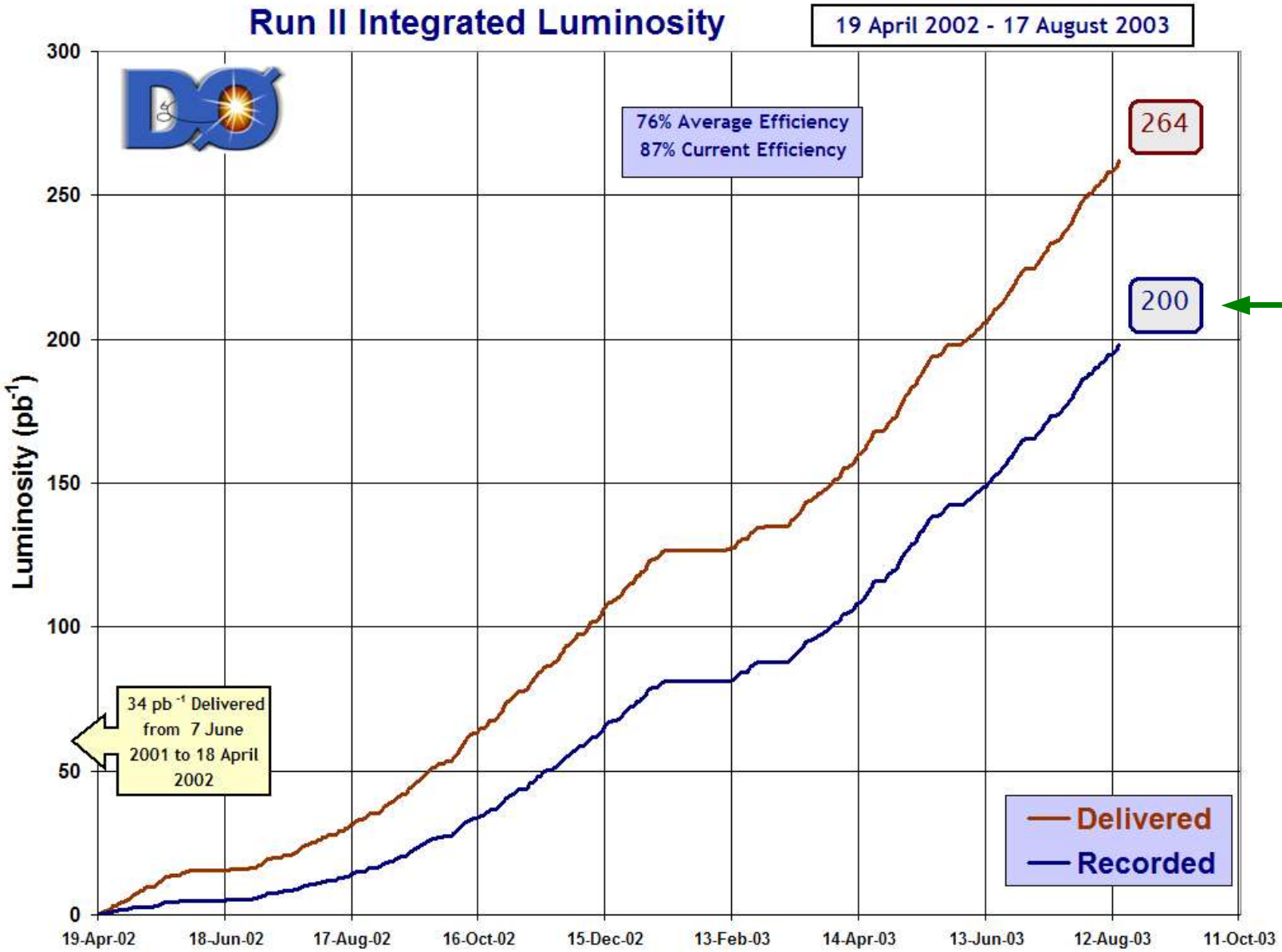
SMT Bias Scans

- Measure depletion one layer at a time
  - Use tracks determined from CFT and other SMT layers to determine cluster charge as a function of HV
  - Runs with HV varied between 0% and 100% in 10% steps
  - SMT in full readout (no sparsification)
  - Average over ladders (statistics)
- Had done layer 2 about 2 weeks ago, completed during 3 hours of beam time Friday/Saturday





Integrated Luminosity



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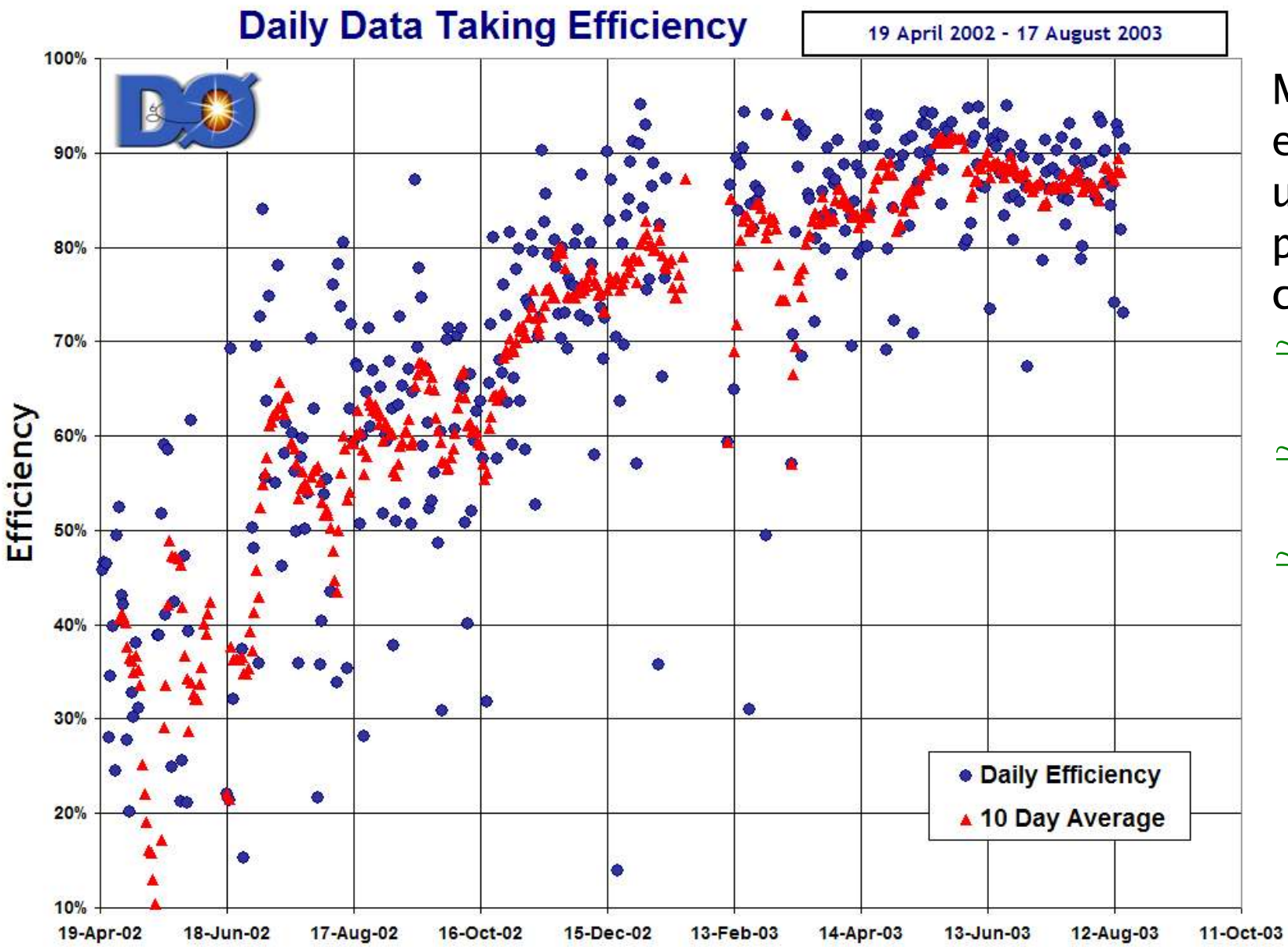
Detector complete

Data Taking Efficiency



Maximum efficiency under present conditions is ≃95%:

≃4% deadtime

≃1-2% store begin/end and run transitions

Other News

- Upgraded the CFT readout crate with largest data size to Gbit Ethernet
  - 1.5 kHz readout rate in test runs
  - One of the last bottlenecks removed for 1 kHz L2 Accept rate (850 Hz now)
- Level 2 CTT (track trigger) successfully included in readout – accumulate some data before the shutdown
- $\simeq$4 controlled accesses
  - Swapped CFT power supply Tue, CFT board (stereo) Wed, power-cycled Muon supply today
- Planning for the shutdown is well underway - dedicated scheduling meetings this and next week
  - **Silicon:** recover problems
  - **Fiber tracker:** modify AFE boards for higher readout speed and reduced data volume
  - **Calorimeter:** replace all cooling fans with more reliable version
  - **Muon systems:** remote power-cycling of electronics in the collision hall