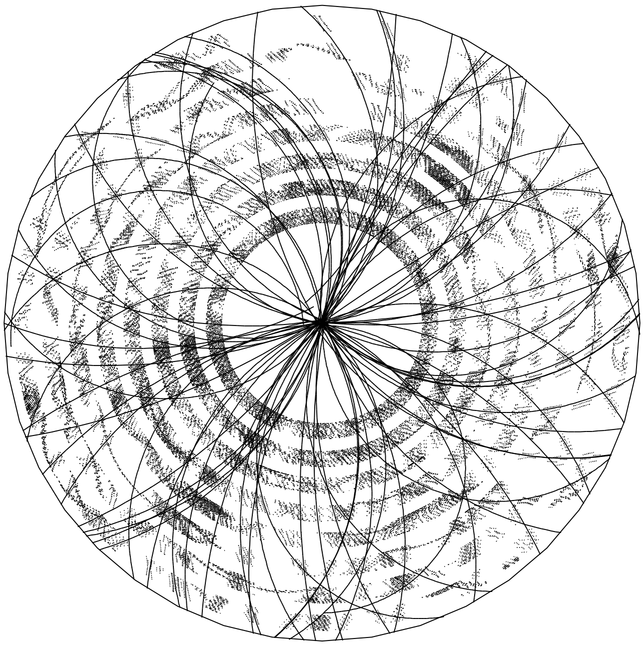
COT Update (June 24, 2002)



▷ COT channel count by superlayer:

Superlayer	12-wire Cells	Sense Wires
1	168	2016
2	192	2304
3	240	2880
4	288	3456
5	336	4032
6	384	4608
7	432	5184
8	480	5760
	2520	30240

▷ Front-end electronics:

- ⇒ ASDQ daughterboards (1260 total) service 2 cells
- ⇒ VME TDC's (315 total) input 4 ASDQ's (8 cells)

▷ HV electronics: (12 sense, 13 potential wires per cell)

- ⇒ HV daughterboards (2520 total) for each cell
- ⇒ BiRa HV supply, 200 channels (8 SL $\times$ 25 wires)

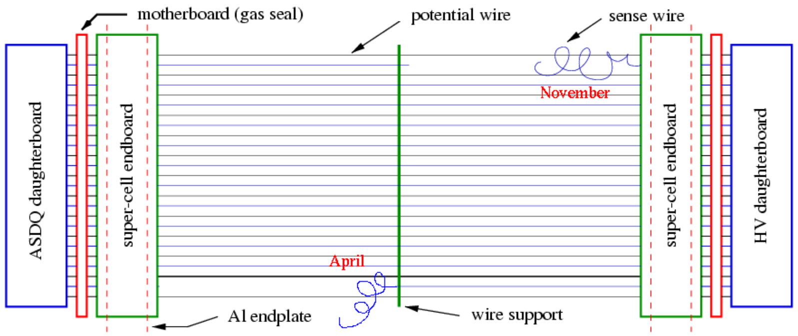
COT Status After June '02 Shutdown

▷ synopsis of two broken wires:

⇒ November break removed, cell recovered

⇒ complications in April, removed SL3 cell

COT super-cell (12 channels):



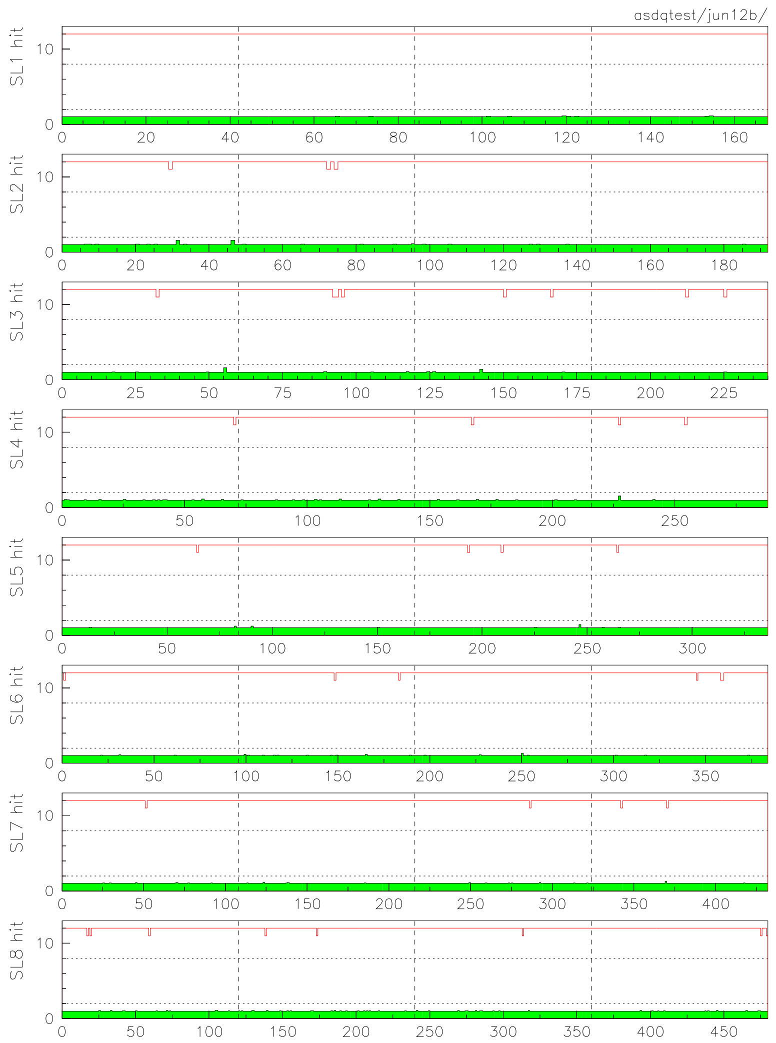
▷ June Shutdown activity:

⇒ SL3 wire HV disable (restored quadrant)
SL1,SL3 at 100% HV, others at 101.5%

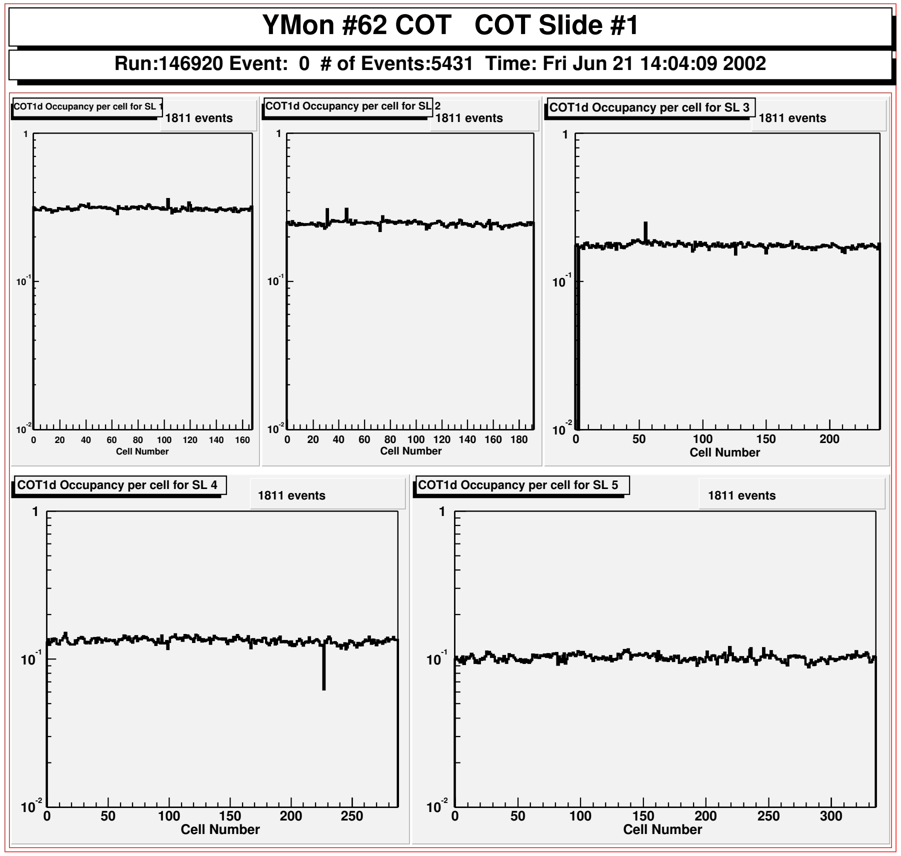
⇒ faulty TDC swapping and reseating
restored 100% TDC readout

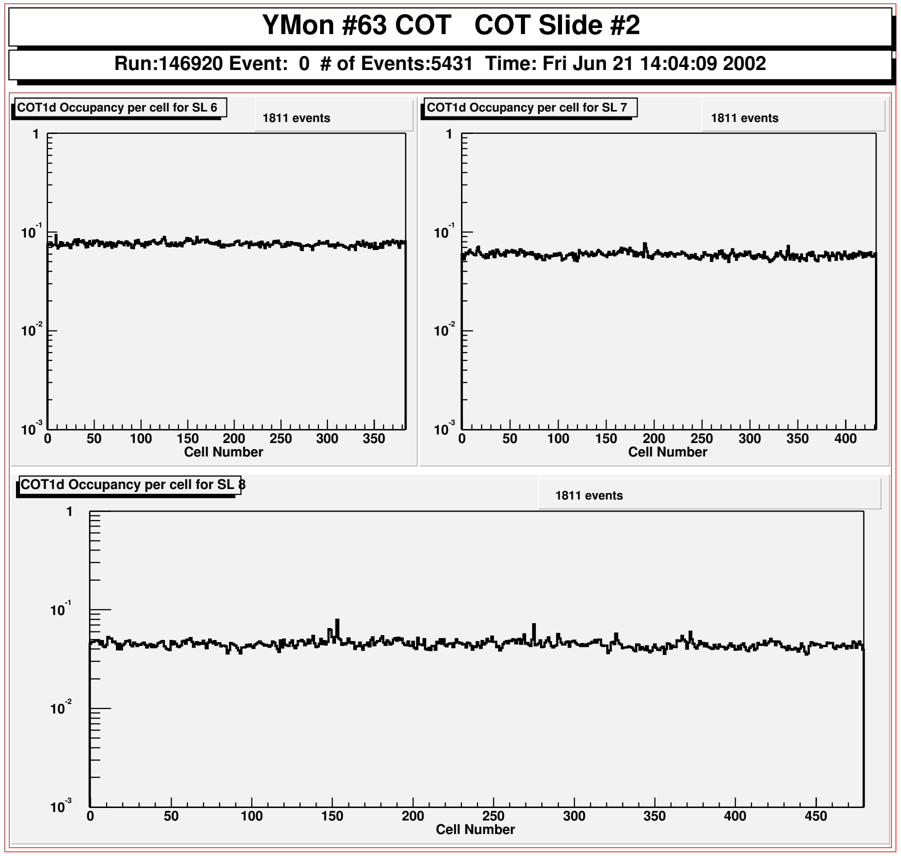
⇒ minor front-end work (LV, cabling)
100% ASDQ cell coverage

▷ front-end : cell occupancy, wires/cell



COT YMon Occupancy





- ▷ SL4 dip from half-dead cell 227 (want to replace after SL3/5 broken wire cells)
- ▷ SL2 spikes from single hot channels, others from noisy cells

COT Status Summary

▷ dead channel totals:

⇒ ∼34 channels have dead HV, disabled

- 12 from SL3-002 (April), 6 from SL4-227

⇒ ∼40 from front-end problems

- μ-coax, TDC

▷ single-channel problems: ∼100 (0.3%)

⇒ TDC (dead, noisy, bad widths): ∼20

⇒ broken μ-coax, repeater, FC, ASDQ:

- ∼20 dead, ∼20 noisy, ∼8 hot
- ∼5 bad time, ∼10 width, ∼10 DTH

▷ cell-level problems:

⇒ 1 bad ASDQ QDR voltage (high width)

⇒ ∼20 cells noisy or bad calibration width (μ-coax)

▷ TDC-level problems:

⇒ intermittent occupancy/timing glitches