



CDF Operations Report

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28-April-2008

All Experimenters' Meeting



STORE SUMMARY

Store #	Start	Hours	InitL (x10**30 cm-2s-1)	Deliv (pb-1)	LiveLumi (pb-1)	Live Eff%	Good Eff%	Comments on efficiency
6069	2008.04.21	13.9	248.7	5.54	4.36	79%	75%	Cal HV, COT trip,L2XFT
6070	2008.04.22	14.9	240.0	5.91	5.07	86%	86%	EVH hang (op-err)
6076	2008.04.23	2	126.3	0.70	0.66	95%	95%	
6080	2008.04.24	11.9	142.9	3.15	2.48	79%	79%	Muon Trips, CPR PC
6082	2008.04.25	16.5	210.8	5.50	4.73	86%	86%	CPR PC, Pcal readout
6090	2008.04.26	13.6	168.7	4.24	3.39	80%	51%	CPR PC, SVX PS,COT Trip
6093	2008.04.27	16.8	199.3	5.20	4.15	80%	35%	SMXR readout, Pcal PS
Total		89.6	191.0	30.22	24.85	82%	74%	
1284 Run II Stores		24,343		3,960	3,240	82%	72%	

Plus stores 6071 and 6083 lost before physics declared.



Details on problems and inefficiencies...

- COT has been having trips caused by one potential wire and one sense wire in SL8. These wires have been put on separate HV supplies with slightly reduced voltages to reduce frequency of trips. Although impact on efficiency and resolution is small, probability of additional degradation is significant. COT experts have requested an access to disable these two wires. Such an access requires a plug pull and is nominally two shifts.
- Problems with XFT (fast tracker) sending corrupted (or out of sync) data to Level 2 trigger have caused additional deadtime (1%??). Experts working on solution but biggest impact is annoying voice messages which require shift crew to push the magic button.
- Lost a readout card for showermax system. Repaired during access Thursday owl shift. (Data were bad, thank you...)
- Lost a HV module in Caen crate for silicon. Repaired this morning during access.
- Lost two HV modules in CAEN crate for plug calorimeter. Repaired this morning during access. (Data were bad, thank you...)
- Have lost time recovering HV control program for CLC and CPR. Normally this is a quick fix by shift crew but we have lost moderate amount of data on three occasions when recovery did not go as expected. It is not clear if this is new problem or operator error by new "Aces".

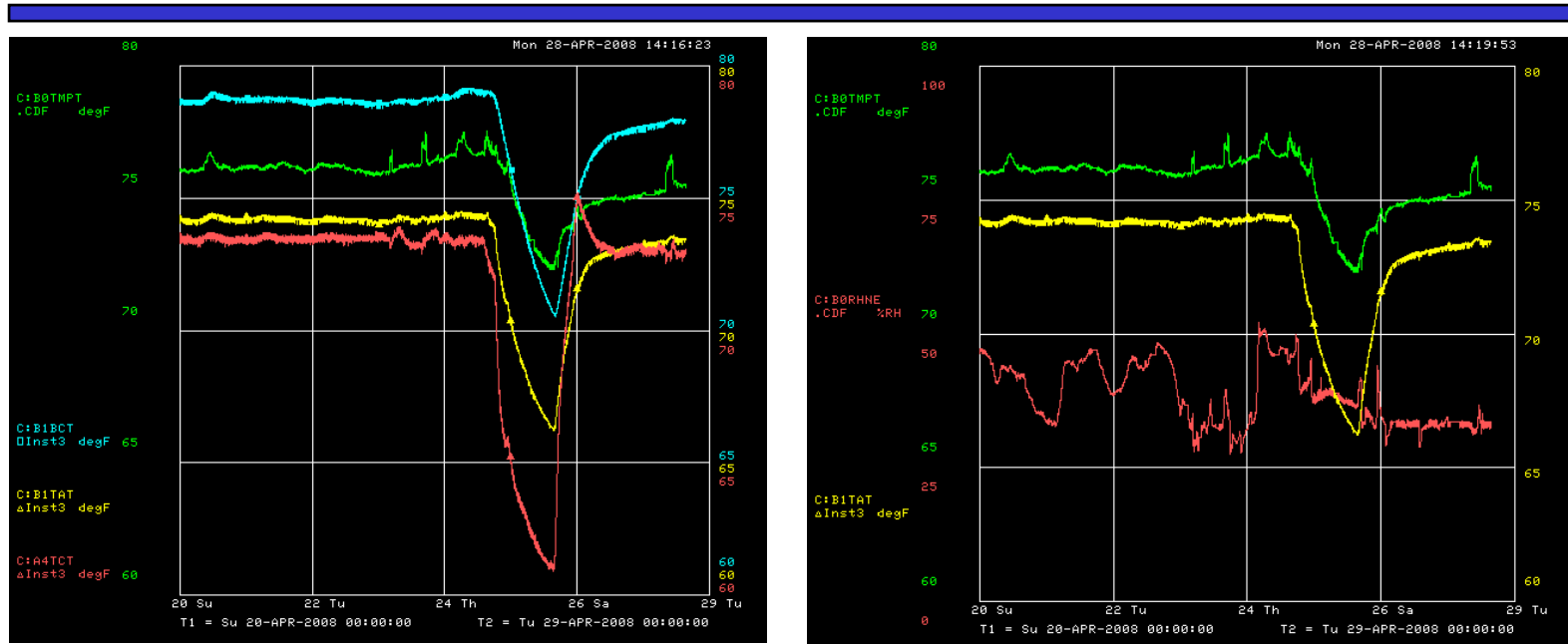


Details on problems.... (cont'd)

- On Friday morning CDF lowered the humidity target setpoint for HVAC in the hall to a value used last August.
- The HVAC regulates on pressure differential, humidity, and temperature.
- Evidently (for ambient conditions of last week), the "re-warming" heater could not keep up with the chillers removing moisture and hall went into a temperature slide. We did not pick this up.
- Humidity target was reset after Tevatron experts realized what was going on... (you have probably already heard this story earlier in meeting). Quads in B0 were rocking and rolling Sorry.
- We will be more cautious next time and will investigate better algorithm or at least better alarms.



HVAC



Quad column temps: B1BCT,A4TCT,B1TAT (air)
Collision Hall temp: BOTMPT (top of hall)
Collision Hall relative humidity: BORHNE (northeast corner)