2002 CDF E-Log -- Eve shift. Sat Feb 16, 2002				
SciCo	DAQ Ace	Monitoring Ace	CO	(Operations Manager)
Kuni Kondo	Keyoung Sohn	Muge Unel	Ray Culbertson	Arnd Meyer

Start of Shift Notes:

```
We inherit Run 139277, Store#996. We will keep running. If Jonathan Lewis comes in,
test PHYSICS_TEST_1_01[3,264] with beam.
```

Sat Feb 16 16:27:04

```
Running smoothly. For the last 20 minutes, SVT_TRACKING_05 DTO & Proton Loss warning
Hz) .
```

- Keyoung :: (run 139277)

Sat Feb 16 16:28:44 ok, while Mircea is putting the end of shift plots, let me write:
the CSP, BSU, .., detectors mentioned to be red in prev shift turned grey a couple mins. ago. - muge
-- *Sat Feb 16 16:45:46 comment by...muge* -- Oleg (oleg@fnal.gov) was here for the muon scintillator hv red alarms. he said for some reason ifix database was shut off about an hour ago, but he now was able to put most systems in normal working condition. we can ignore the alarms for the duration of the shift, he said.

Sat Feb 16 16:32:14

```
Enabled Auto HRR for RC. B0 luminosity is 10 E30.
```

- Keyoung :: (run 139277)

Sat Feb 16 16:38:59

```
I inherited L3 farm with two column nodes(067~098) and two input nodes (05,06) not i
and one output node (03) dead (RIP). In RC configuration, output 4,5 should be desel
manually.
```

- Keyoung

Sat Feb 16 16:42:34 the lossbaseline is getting higher and we get warnings in the rc. lostp is now about 26 KHz. and b0plos is 18 kHz - muge :: (run 139277)
-- *Sat Feb 16 16:47:44 comment by...muge* -- we paged the silicon about the losses..
-- *Sat Feb 16 17:00:09 comment by...muge* -- the store apparently started at about ~22 kHz lostp value...

Sat Feb 16 16:54:54 Keyoung was just on the phone with silicon expert. The conclusion is that since lumi is high (~9E30), 25-27 kHz of lostp is not so unexpected. If we get unstable beam and/or baseline going close to 30kHz, expert wants to be paged again. - muge :: (run 139277)

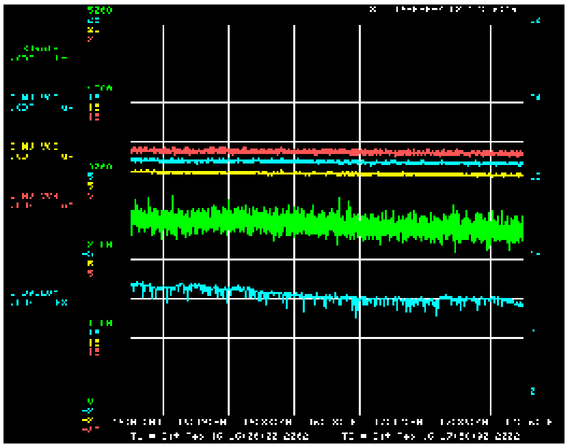
Sat Feb 16 17:01:40 watt can is at about 2.4 - muge

Sat Feb 16 17:29:22 Rick scalers are NOT the same!
2 0 23 16 0 0 1 14 0 1 - muge

Sat Feb 16 17:46:02 the lostp and b0plos baselines have not changed for an hour. sometimes we get b0plos a little bit higher than 20kHz which ends in a rc warning. - muge :: (run 139277)

Sat Feb 16 17:48:52 cmp south wall A1 tripped. no clear spikes were seen. back on. - muge :: (run 139277)

Sat Feb 16 17:59:08



cmp currents and b0rat2 since beginning of shift

- muge

Sat Feb 16 18:31:34 i was curious about the hv alarm problmes about muon scintillators. i have checked how they look in ymon. these are integrated-over-a-run plots but they seem to be filling in and occupied... - muge

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Sat Feb 16 18:34:19

```
Running Smoothly. L3 output 31Hz.
Total Dead time getting higher. 4.35(ave),7.35 (current)
L2/Total Dead time = 58
```

- Keyoung :: (run 139277)
-- *Sat Feb 16 18:42:07 comment by...muge* -- the luminosity corresponding to these values is: 8.2E30

Sat Feb 16 18:53:41

```
vrb_svx_02 BTO. Auto HRR.

54'36" triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),  busy.[RX
6'35" triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),  busy.[RXP
(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:6:06:37 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),
```

```
(MLE) b0svx01:Messenger:6:05:46 PM->Silicon Timeout:BUSY- Slots:  12:e140
```

- Keyoung :: (run 139277)

Sat Feb 16 19:11:34

```
SVT_Fitter_06 DTO -> reset ->

(MLE) b0svt05:Messenger:4:14:11 PM->FER_E_SVT, sync error in Wedges  10; HRR require
14'10" triggered readout sent events mismatch[EOR]1 crate/s: b0svt05(126),  Done TO.
55'50" triggered readout sent events mismatch[EOR]1 crate/s: b0svt06(124),  Done TO.
(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:6:55:50 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svt06(124),

(MLE) b0svt06:Messenger:7:04:23 PM->State transition not allowed
(MLE) b0svt06:Messenger:7:04:54 PM->State transition not allowed
```

- Keyoung :: (run 139277)
-- Sat Feb 16 19:24:35 comment by...Keyoung --

```
Total Dead time was high ( ~70). HRR. current Total dead time 1.86
```

Sat Feb 16 19:11:45 Between 18:00 and 19:00 we made the final changes to the BSC logic in order to feed additional information about B0 losses to ACNET. Our goal was to make the modifications and verify that LOSTP, LOSTPB, B0PLOS, and B0ALOS remain unchanged.

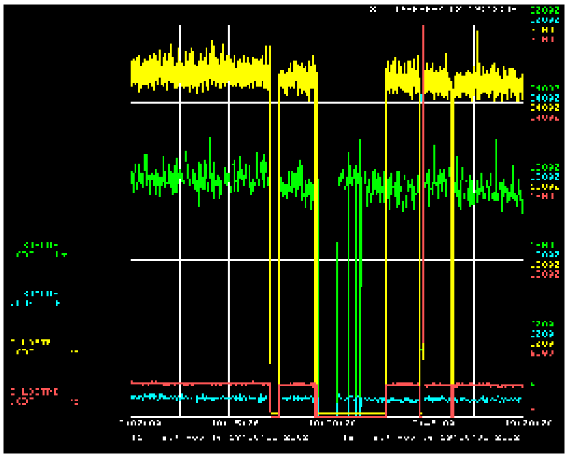
Previously, losses were sampled using the proton west beam pickup. Losses are now sampled every 132ns using a gate based on CDF_CLK. The gate is 15ns wide, centered 20ns before each collision. These loss rates (every 132ns) are input to the CLC01 crate. A second gate derived from the proton west beam pickup is then applied to obtain losses 20ns prior to actual collisions. This preserves the original LOSTP and LOSTPB signals.

The code in the CLC01 crate has also been modified to sample the proton and antiproton loss rates for 17 gates (each 15ns wide) during each of the three abort gaps. The average of the 17 gates for proton losses is reported to ACNET as B0ALOS[1] (abort gap between P12 and P13), B0ALOS[2] (abort gap between P24 and P25) and B0ALOS[3] (abort gap between P36 and P1). In the same way, B0ALOS[34]-B0ALOS[36] correspond to the antiproton losses.

Using B0ALOS[1]-[3] and [34]-[36] is not intended to be permanent, only temporary until new ACNET devices are established.

- Koji Terashi and Jay Dittmann

Sat Feb 16 19:15:58



Losses from 18:00-19:00 (see above e-log entry.)

- Koji Terashi and Jay Dittmann

Sat Feb 16 19:31:46 current lumi is ~ 7.7E30 and b0plos ~ 17kHz, lostp ~ 25 kHz - muge

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Sat Feb 16 19:34:57 Rick scalers are the same as 17:30 readings.. - muge

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Sat Feb 16 20:12:33

```
Ignore red alarm for SVT00,01,02,03,04,05,06,07 in
vxwork monitor. This will continue for a few days(until Tuesday?)
```

- Keyoung :: (run 139277)

Sat Feb 16 20:15:19

```
vrb_svx_02 BTO. HRR.

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:13:12 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

(MLE) b0svx01:Messenger:8:12:20 PM->Silicon Timeout:BUSY- Slots:  12:e140
```

- Keyoung :: (run 139277)

Sat Feb 16 20:18:28

```
Another vrb_svx_02 BTO

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:17:08 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

(MLE) b0svx01:Messenger:8:16:16 PM->Silicon Timeout:BUSY- Slots:  12:e140
```

- Keyoung :: (run 139277)

Sat Feb 16 20:22:06

```
vrb_svx_02 BTO

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:20:56 PM-> *** Received error message: err
```

HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

(MLE) b0svx01:Messenger:8:20:04 PM->Silicon Timeout:BUSY- Slots: 12:e140

- Keyoung :: (run 139277)

Sat Feb 16 20:24:20

vrb_svx_02 BTO

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:22:21 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

(MLE) b0svx01:Messenger:8:21:30 PM->Silicon Timeout:BUSY- Slots: 12:e140

- Keyoung :: (run 139277)

Sat Feb 16 20:26:53

From MCR e-log: Store to be terminated at 0500 and shot setup to follow.

- Kuni

Sat Feb 16 20:28:53

vrb_svx_02 BTO

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:27:40 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

(MLE) b0svx01:Messenger:8:26:49 PM->Silicon Timeout:BUSY- Slots: 12:e140

- Keyoung :: (run 139277)

Sat Feb 16 20:34:29

vrb/evb busy condition -> HRR

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:29:01 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

- Keyoung :: (run 139277)

Sat Feb 16 20:36:58

There was DTO from IMU_01 about 30 minutes ago.

(MLE) b0imu01:Messenger:8:02:31 PM->Event 2867390: Bunchcounters in slot 13 and slot
least)

(MLE) b0imu01:Messenger:8:02:31 PM->Runtime Error 1, Event 2867390: Bunch counter mi
count = 1

2'32" triggered readout sent events mismatch[EOR]1 crate/s: b0imu01(81), Done TO.[R
(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:02:32 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0imu01(81), D

- Keyoung :: (run 139277)

Sat Feb 16 21:01:30

```
vrb_svx_02 BTO -> HRR

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:8:59:14 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

(MLE) b0svx01:Messenger:8:58:22 PM->Silicon Timeout:BUSY- Slots:  12:e140
```

- Keyoung :: (run 139277)

Sat Feb 16 21:14:00 some redundant info: lumi = 7.3E30, b0plos = 16 kHz, lostp = 23 kHz. run 139277 still ongoing.. - muge

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Sat Feb 16 21:26:57

```
xft_xtrp_00 DTO -> HRR

(MLE) b0xtrp00:Messenger:9:24:15 PM->VISION read failed in slot 8
24'18" triggered readout sent events mismatch[EOR]1 crate/s: b0xtrp00(96),  Done TO.
(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:9:24:18 PM-> *** Received error message: err
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0xtrp00(96),
```

- Keyoung :: (run 139277)

Sat Feb 16 21:29:35 Rick's scalers are the same as 19:30 reading...
2 0 23 16 0 0 1 14 0 1 - muge

Sat Feb 16 22:14:50 watt can is 3.95. if asuming *linear dep.* on time, i *guess* this should be ok until end of this store without pumping it.. - muge
-- *Sat Feb 16 22:20:02 comment by...mmuge* -- but making assumptions is always risky, so the value should not be ceased to be monitored!

Sat Feb 16 22:29:52

```
Strange thiing. All L3 rates are zero in the trigger mon, although everything's alri
happened today's day shift too.
```

- Keyoung :: (run 137299)

Sat Feb 16 22:36:49

```
vrb_svx_02 BTO -> HRR

(MLE) b0dap59.fnal.gov:AWT-EventQueue-0:10:35:21 PM-> *** Received error message: er
HaltRecoverRun triggered readout sent events mismatch[EOR]1 crate/s: b0svx02(112),

(MLE) b0svx01:Messenger:10:34:28 PM->Silicon Timeout:BUSY- Slots:  12:e140
```

- Keyoung :: (run 139277)

Sat Feb 16 22:48:29 either i am getting sleepy or it seems to me the HV bars (especially the left one representing the lowest hv value) for CMX is going up/down a few % in ifix summary page.. this happened 3 times by now in 2-3 mins. also ISL left bar seemed to do it but i am not sure (this one is already around 80% which is the way i inherited it tonight). is this normal? - muge
-- *Sun Feb 17 00:53:28 comment by...Andy H.* --

```
For the time being for ISL, this is normal (the left bar being
at 80%, I mean... "jumping around" isn't normal, but I doubt it
was really doing that).
```

Sat Feb 16 22:50:27 svx ps-trip. b1w10l4 vbias4 overcurrent. paged svx.. - muge :: (run 139277)
-- *Sat Feb 16 23:20:19 comment by...muge* -- with silicon expert, we tried to reset the trip. it tripped again. we put it it stby. but the trigger inhibit did not clear. we paged the interlock expert, but apparently this feature is newly implemented and we have to reach Andy Hocker. unsuccesfull.
-- *Sat Feb 16 23:54:00 comment by...muge* -- i missed a step here: we tried to reset the bias value to clear the inhibit which was in vain..

Sat Feb 16 22:52:15

```
SVX Trip/ Paused the run. B1W10 layer 4.
```

- Keyoung :: (run 139277)
-- *Sat Feb 16 23:44:38 comment by...Keyoung* --

```
***Trigger Inhibit message from error logger***
SVX Silicon Tracking Detector
```

Sat Feb 16 23:17:14 Run 139277 Terminated at 2002.02.16 23:16:30 - RunControl

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Sat Feb 16 23:25:26 Run 139278 Activated at 2002.02.16 23:24:46 - RunControl

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Sat Feb 16 23:30:12 well, finally we disabled the inhibit and started a new run like this. Andy Hocker is suppsed to be here tonight, so we will inform him about this sissue. (btw, thanks a lot Eva H.!) - muge
-- *Sun Feb 17 00:56:48 comment by...Andy H.* -- See here

Sat Feb 16 23:32:31

```
Even after silicon Power supply was set as expert told us, the svx trigger inhibit l
didn't diappear. Resume. No data coming in, for the inhibit. ended the run.
```

- Keyoung :: (run 139277)

Sat Feb 16 23:36:44

```
Cold start with the same run confuguration.( L3 output node 4,5 unused).
```

- Keyoung :: (run 139278)

Sat Feb 16 23:55:59

Run Number	Data Type	Physics Table	Begin Time	End Time	Live Time	L1 Accepts	L2 Accepts	L3 Accepts	Live Lumi, nb-1
139277 x2200D	BEAM	PHYSICS_0_04 [7,263]	15:40:32	23:16:30	06:33:55	65,267,413	4,412,426	780,069	190.238
139278 x2200E	BEAM	PHYSICS_0_04 [7,263]	23:24:46		00:18:10	2,337,471	158,161	31,749	7.222
Totals				23:55:02	06:52:06	67,604,884	4,570,587	811,818	197.460

- End of Shift Report

- Sat Feb 16 23:56:34 the shift is ending with ~ 6.4E30 luminosity. - muge

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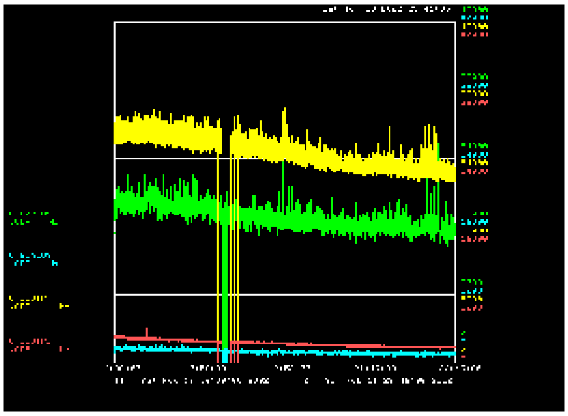
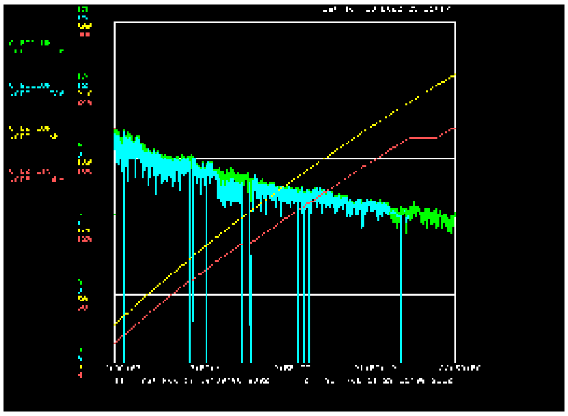
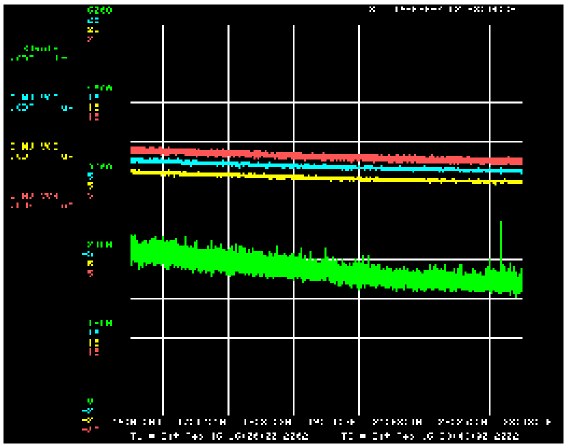
- Sat Feb 16 23:59:49

- muge

-- *Sun Feb 17 00:00:47 comment by...muge* -- end of shift plots..

- Sun Feb 17 00:14:33 Shift Summary:

```
Run 139277 went quite smooth until at 22:50 SVX trip
occured.

We terminated the run, disabled SVX Trigger Inhibit and started new run 139278. Towa
change time, we have SVT problem and working on it, making contact with experts.
```

```
Summary of Run139277:
        Delivered luminosity    224nb-1
        Acquired luminosity     194nb-1
        Efficiency               87%
```

- Kuni

Sat Feb 23 23:37:31 GMT-0600 (CST) 2002

Elog Help