Status of Backward Tagging System (BTS)

02.09.2003

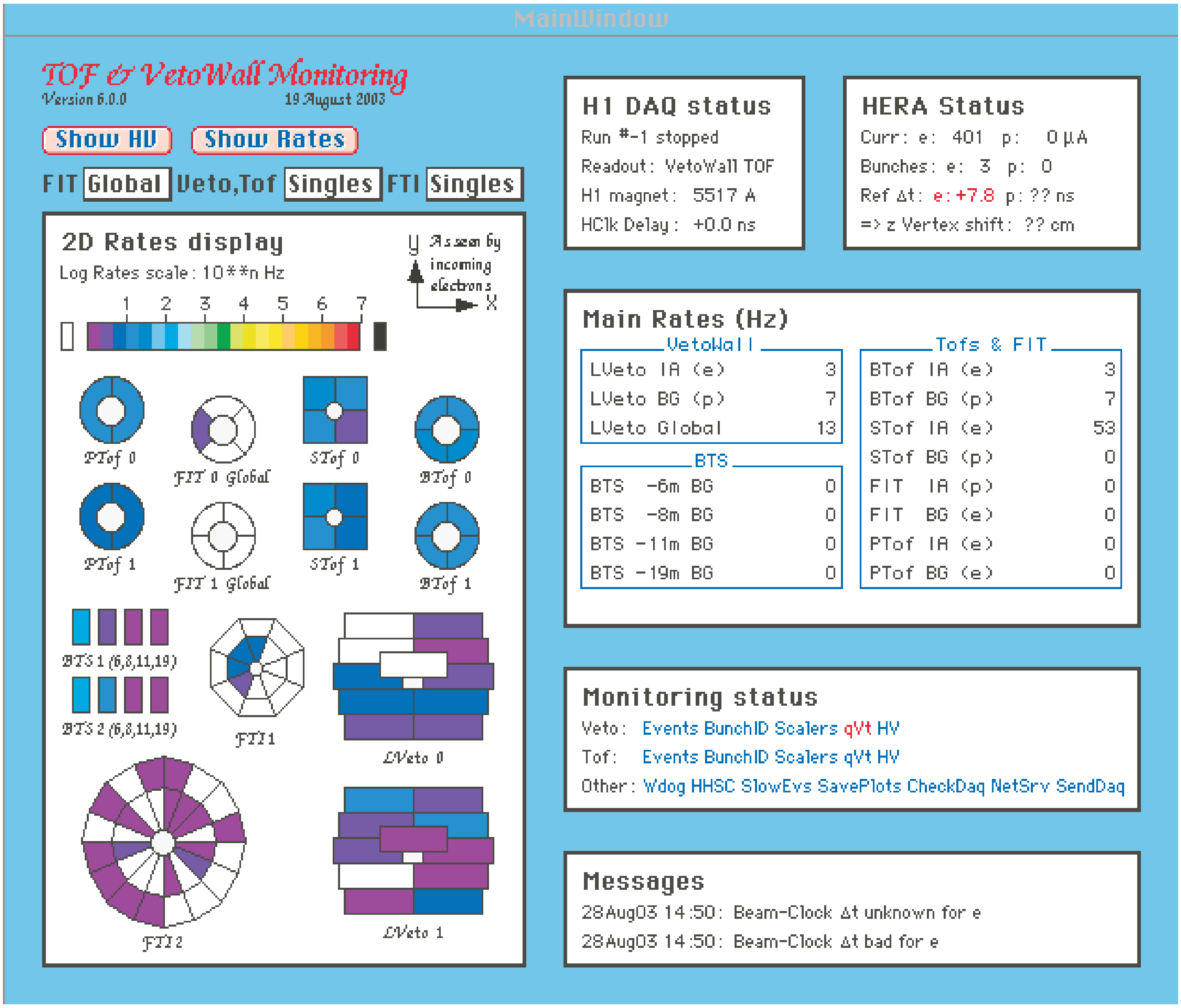
- 4 pairs of scintillator counters:

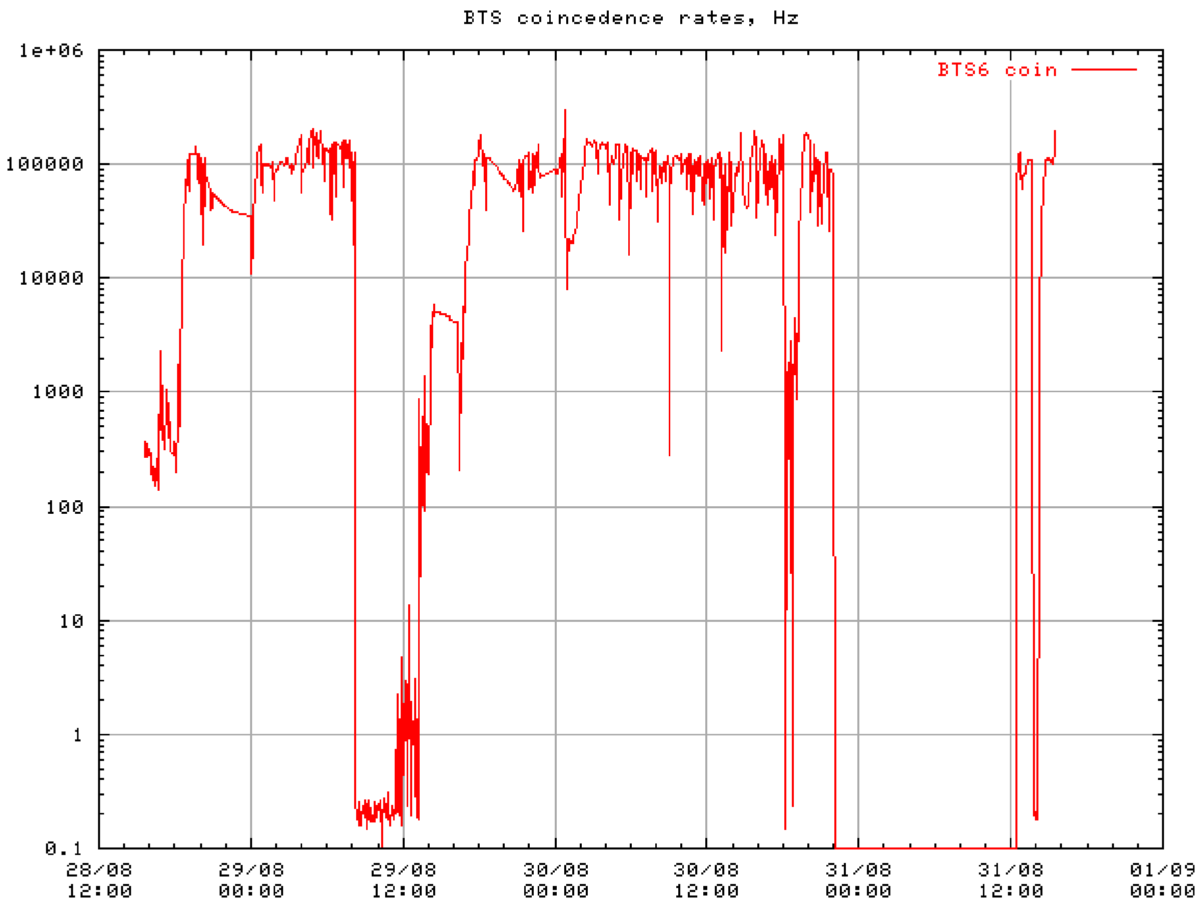
$12 \times 30\ cm^2$	at $-6m$
$12 \times 25\ cm^2$	at $-8m$
$7.5 \times 7.5\ cm^2$	at $-11m$
$24 \times 40\ cm^2$	at $-19m$

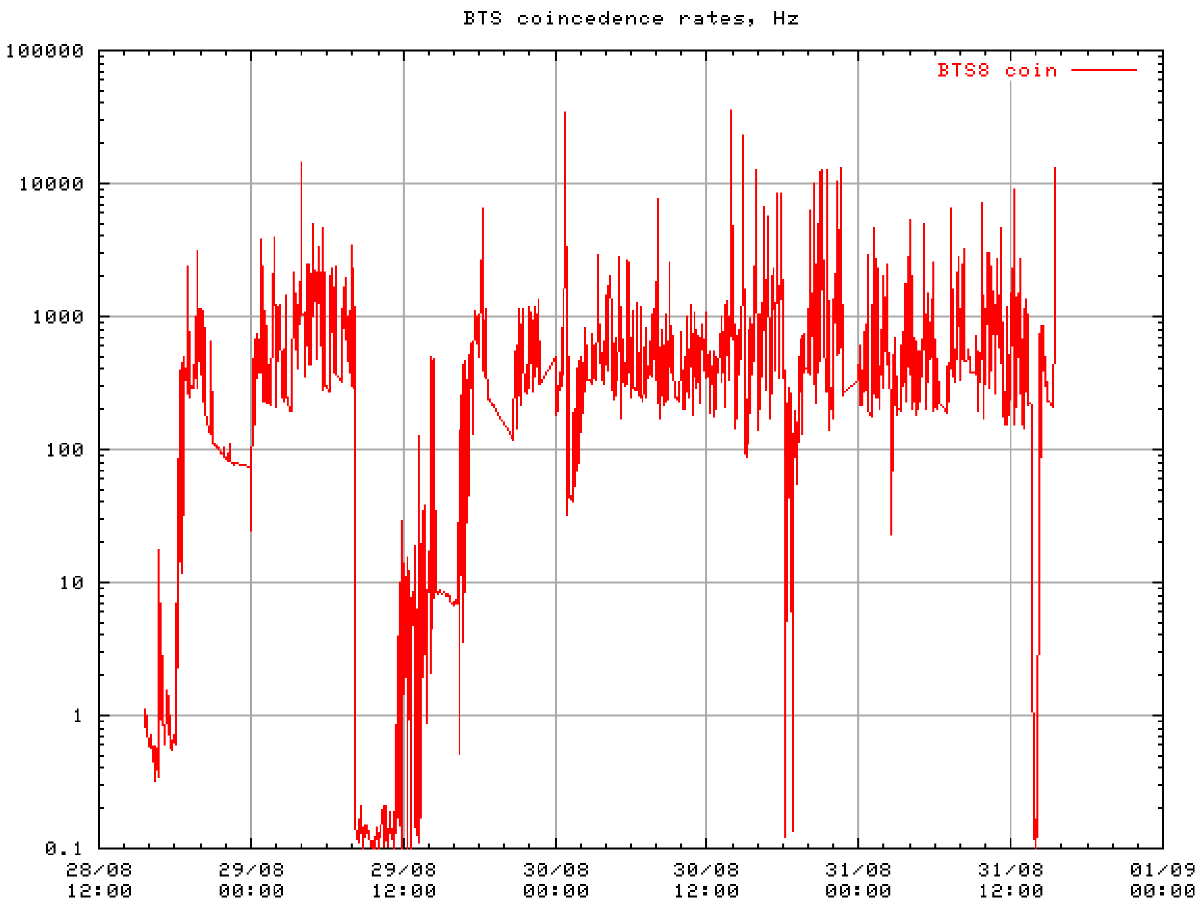
All detectors different from ones used before shutdown

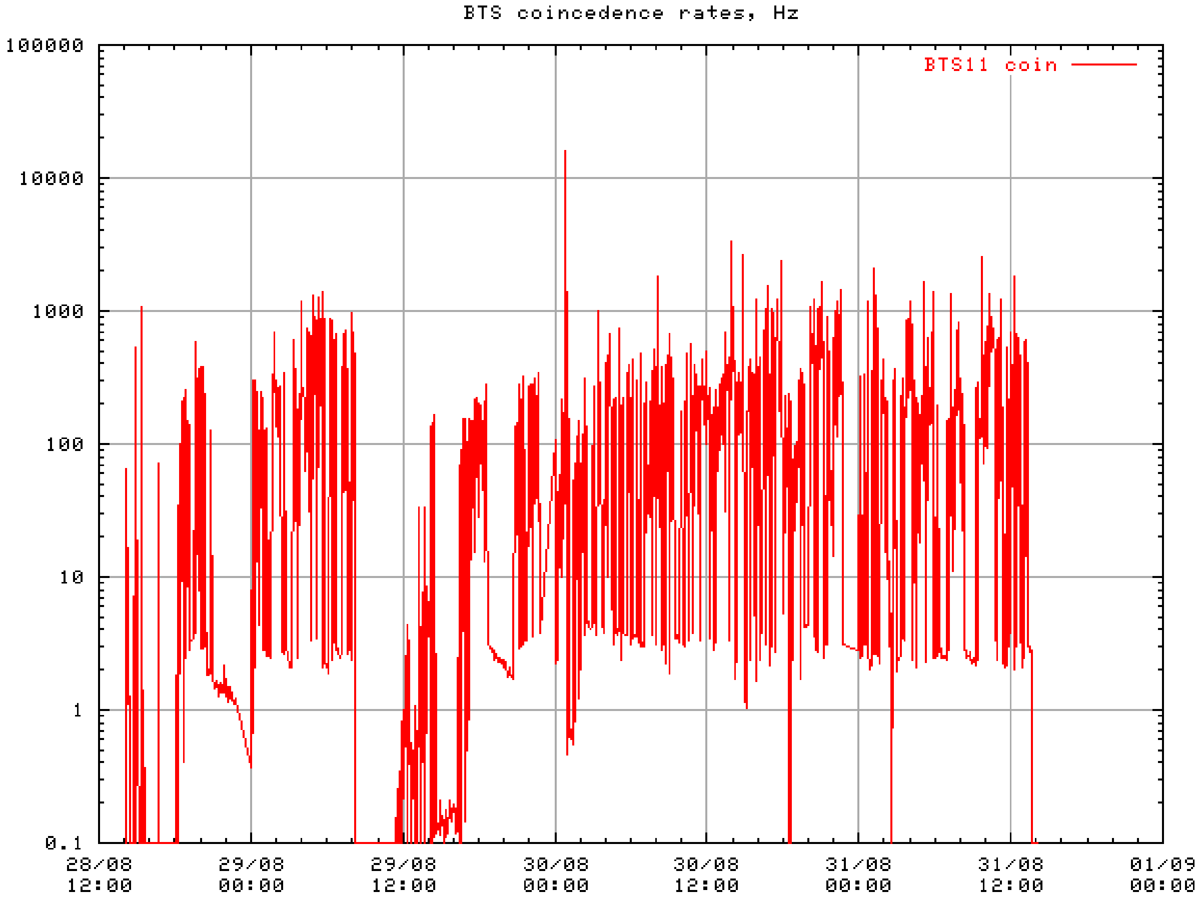
- installed during August 2003

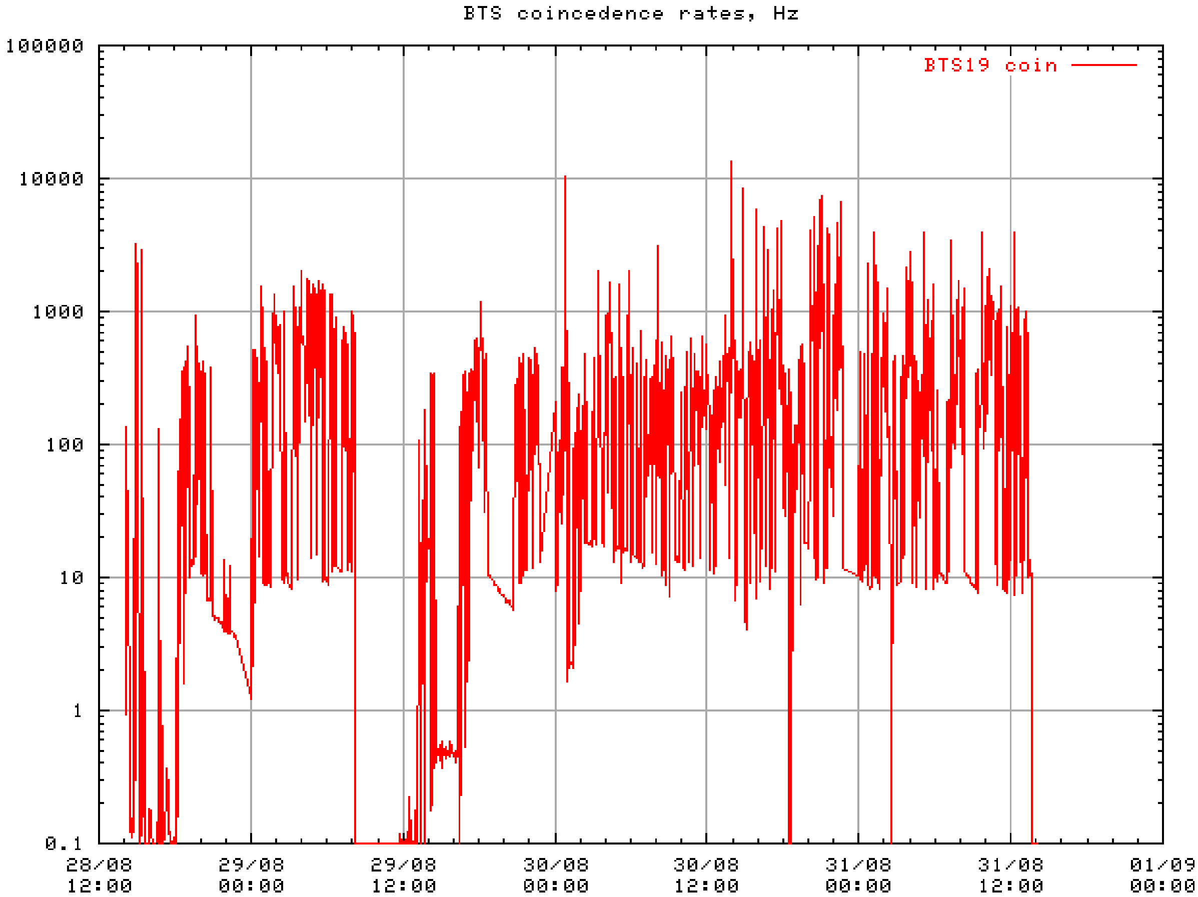
- Trigger elements:
  120 (BTS-6 || BTS-8)-IA
  121 BTS-11-BG
  122 BTS-19-BG
  123 (BTS-6 || BTS-8)-GL
  127 (BTS-6 || BTS-8)-BG
  Individual hit patterns ($4\times$ 3) are going to VETE bank
- Completely new readout and trigger electronic setup– use Beglarian's FPGA module, similar to the TOF and VETO systems
- Gates (IA,BG,GL) are roughly set using electron clock, need tuning with stable beams
- The TOF-Mac monitoring program is adjusted by M.Landon (HV and rate monitor, TDC and rate histograms, scaler rates)
- The rate history from the new VME scalers (also for other TOF/VETO detectors) can be watched from the http://masis.desy.de:8080


MainWindow
TOF & VetoWall Monitoring
Version 6.0.0
19 August 2003
Show HV
Show Rates
FIT Global Veto,Tof Singles FTI Singles
2D Rates display
Log Rates scale : 10**n Hz
1 2 3 4 5 6 7
Y As seen by incoming electrons
X
PTof 0
FIT 0 Global
STof 0
BTof 0
PTof 1
FIT 1 Global
STof 1
BTof 1
BTS 1 (6,8,11,19)
BTS 2 (6,8,11,19)
FTI 1
LVeto 0
FTI 2
LVeto 1
H1 DAQ status
Run #-1 stopped
Readout : VetoWall TOF
H1 magnet : 5517 A
HClk Delay : +0.0 ns
HERA Status
Curr : e: 401 p: 0 µA
Bunches : e: 3 p: 0
Ref Δt : e: +7.8 p: ?? ns
=> z Vertex shift : ?? cm
Main Rates (Hz)
VetoWall
LVeto IA (e) 3
LVeto BG (p) 7
LVeto Global 13
BTS
BTS -6m BG 0
BTS -8m BG 0
BTS -11m BG 0
BTS -19m BG 0
Tofs & FIT
BTof IA (e) 3
BTof BG (p) 7
STof IA (e) 53
STof BG (p) 0
FIT IA (p) 0
FIT BG (e) 0
PTof IA (e) 0
PTof BG (e) 0
Monitoring status
Veto : Events BunchID Scalers qVt HV
Tof : Events BunchID Scalers qVt HV
Other : Wdog HHSC SlowEvs SavePlots CheckDaq NetSrv SendDaq
Messages
28Aug03 14:50 : Beam-Clock Δt unknown for e
28Aug03 14:50 : Beam-Clock Δt bad for e


BTS coincedence rates, Hz
BTS6 coin
1e+06
100000
10000
1000
100
10
1
0.1
28/08 12:00
29/08 00:00
29/08 12:00
30/08 00:00
30/08 12:00
31/08 00:00
31/08 12:00
01/09 00:00


BTS coincedence rates, Hz
BTS8 coin
100000
10000
1000
100
10
1
0.1
28/08 12:00
29/08 00:00
29/08 12:00
30/08 00:00
30/08 12:00
31/08 00:00
31/08 12:00
01/09 00:00


BTS coincedence rates, Hz
BTS11 coin
100000
10000
1000
100
10
1
0.1
28/08 12:00
29/08 00:00
29/08 12:00
30/08 00:00
30/08 12:00
31/08 00:00
31/08 12:00
01/09 00:00


BTS coincedence rates, Hz
BTS19 coin
100000
10000
1000
100
10
1
0.1
28/08 12:00
29/08 00:00
29/08 12:00
30/08 00:00
30/08 12:00
31/08 00:00
31/08 12:00
01/09 00:00

To do:

- Tune gates with stable beams
- Replace BTS-11 with a new counter ?
- Watch rates ! (How much is synch. radiation now ?)