LHC injection dry run

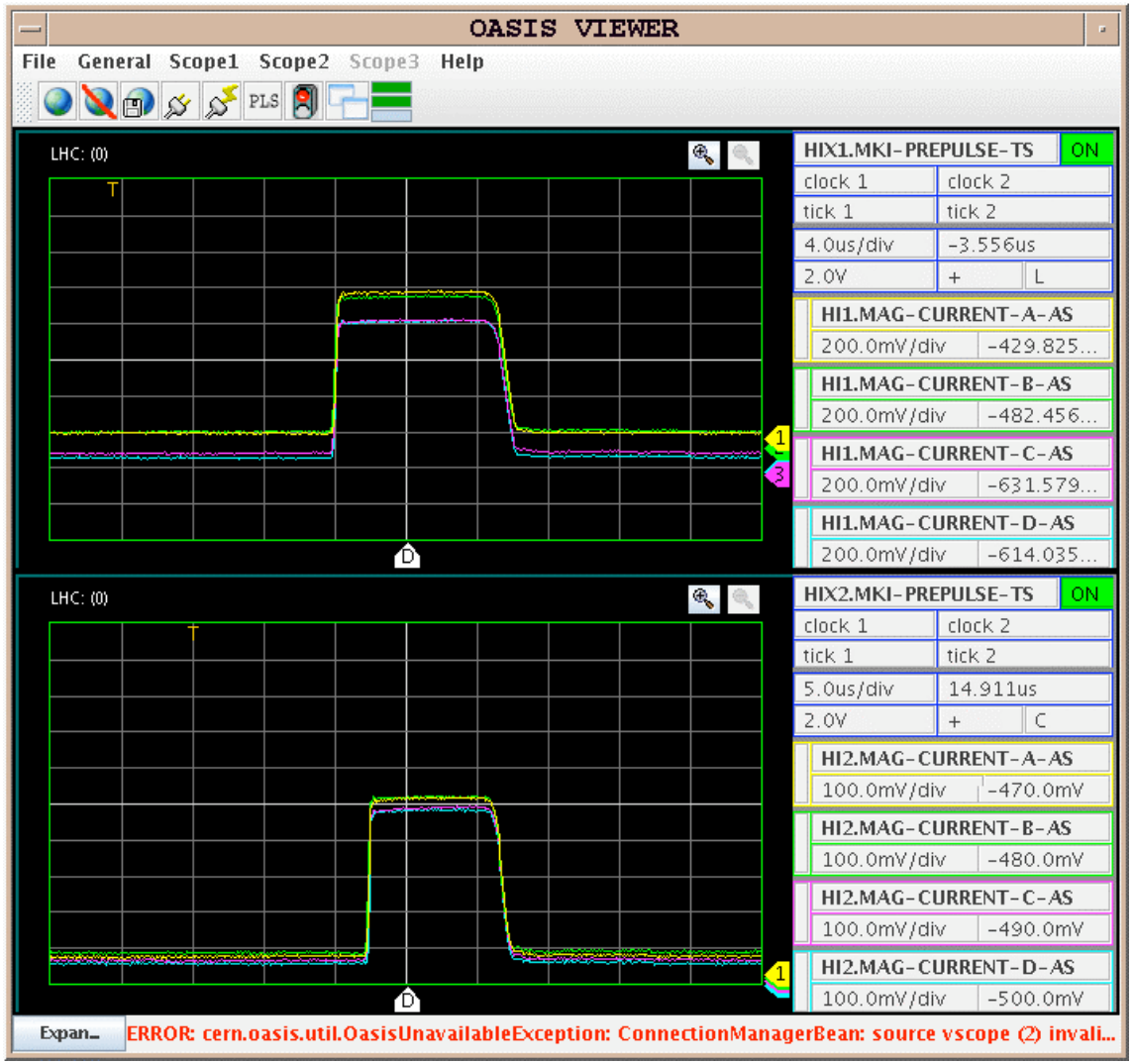
Dry injection - December

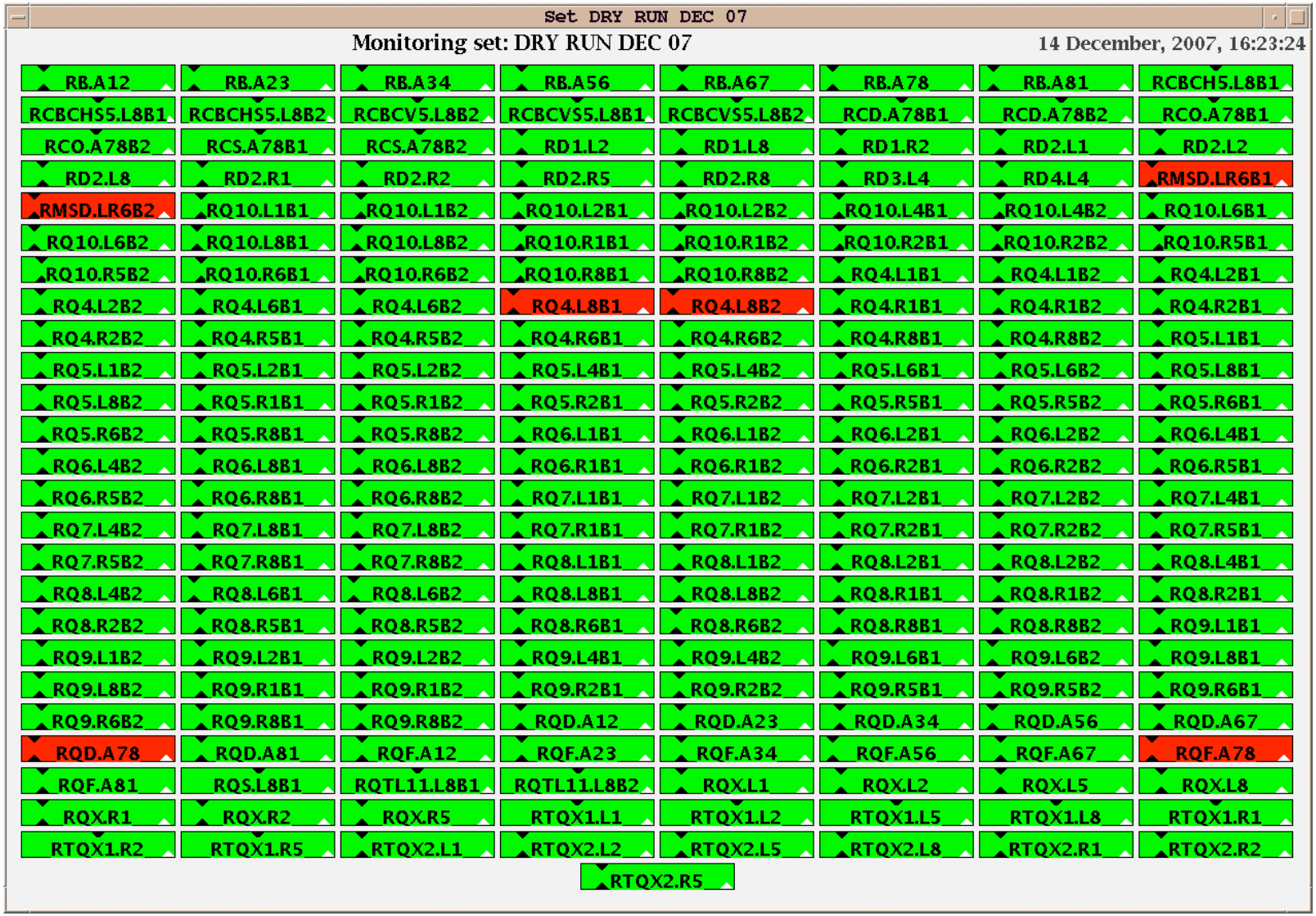
Drive Injection sequence

Optics	As usual
Settings	Power converters, RF, Kickers, Collimators, Bumps, injection point steering
FIDEL	450 GeV – decay, transfer functions
Timing	BST, GMT, timing tables, events, telegrams, injection request, application, sequencer
Kickers	Timing, control, analog acquisition
RF	Pre-pulse
Standard facilities	Mode, FD, logging, alarms
Collimators	FSM, settings, monitoring
Screens	Control, acquisition
BPMs, BLMs, WS, SRMs	Event triggered acquisition,

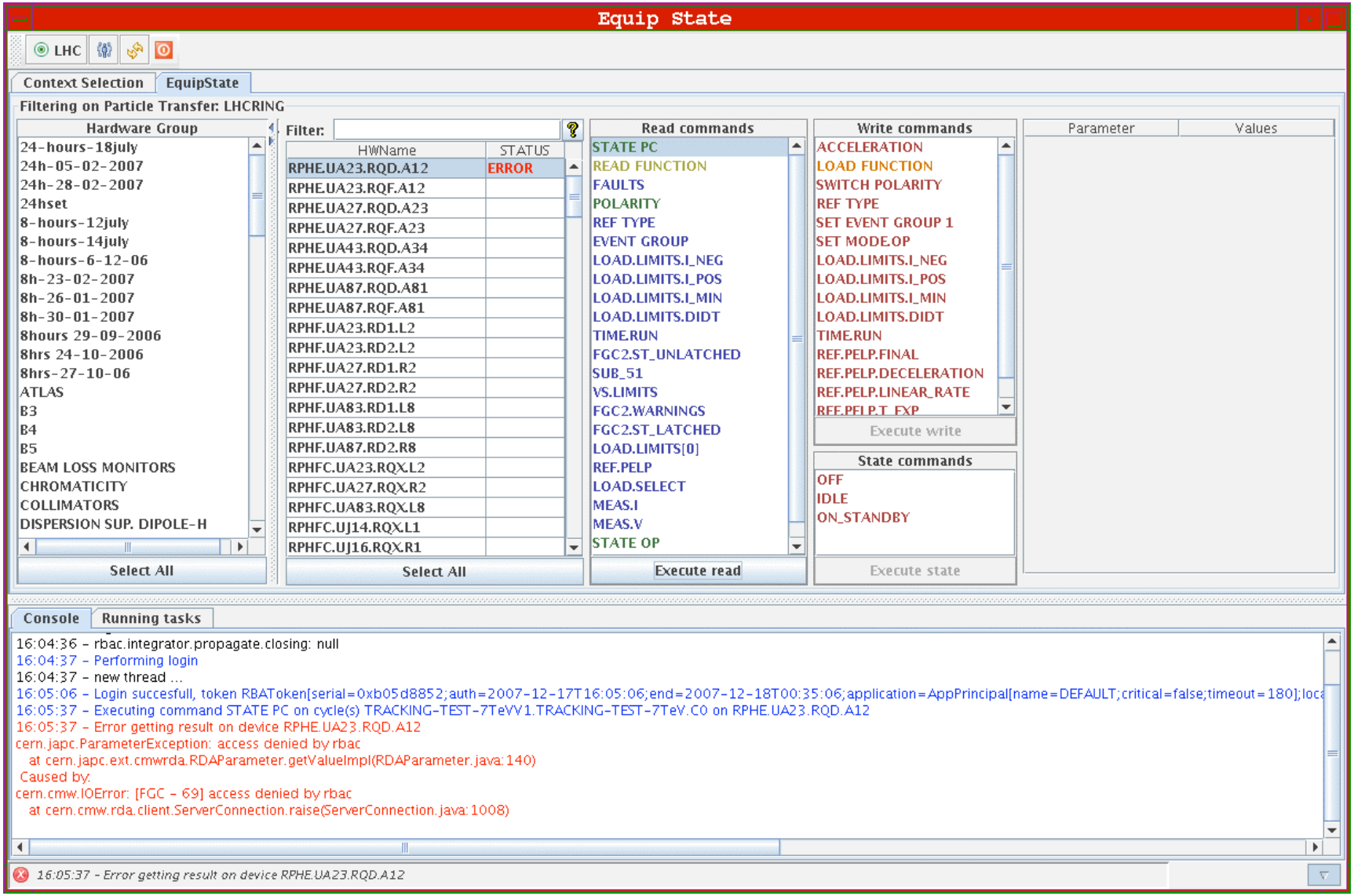
Timing

Kickers

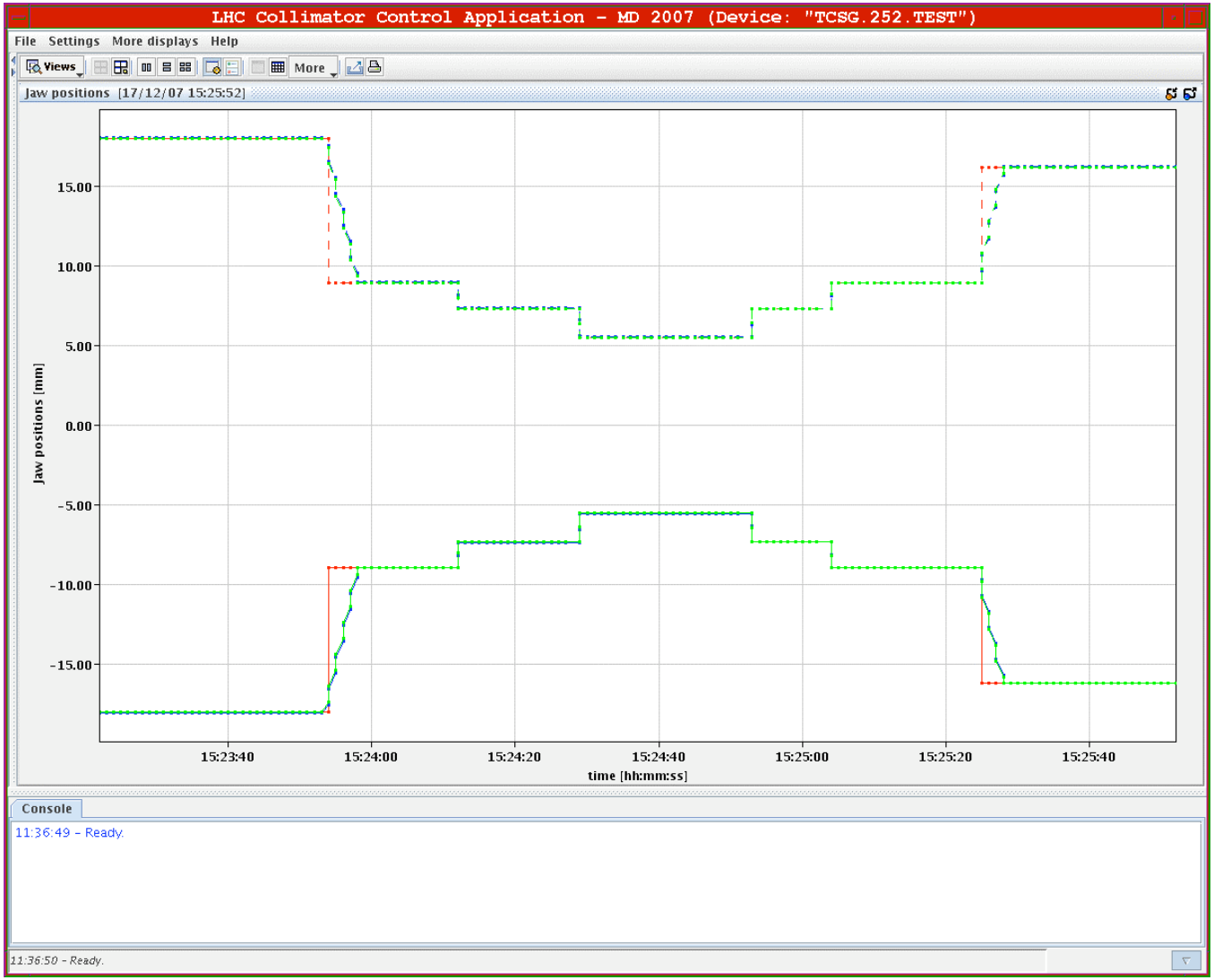

OASIS VIEWER
File General Scope1 Scope2 Scope3 Help
PLS
LHC: (0)
HIX1.MKI-PREPULSE-TS
ON
clock 1
clock 2
tick 1
tick 2
4.0us/div
-3.556us
2.0V
+
L
HI1.MAG-CURRENT-A-AS
200.0mV/div
-429.825...
HI1.MAG-CURRENT-B-AS
200.0mV/div
-482.456...
HI1.MAG-CURRENT-C-AS
200.0mV/div
-631.579...
HI1.MAG-CURRENT-D-AS
200.0mV/div
-614.035...
LHC: (0)
HIX2.MKI-PREPULSE-TS
ON
clock 1
clock 2
tick 1
tick 2
5.0us/div
14.911us
2.0V
+
C
HI2.MAG-CURRENT-A-AS
100.0mV/div
-470.0mV
HI2.MAG-CURRENT-B-AS
100.0mV/div
-480.0mV
HI2.MAG-CURRENT-C-AS
100.0mV/div
-490.0mV
HI2.MAG-CURRENT-D-AS
100.0mV/div
-500.0mV
Expan...
ERROR: cern.oasis.util.OasisUnavailableException: ConnectionManagerBean: source vscope (2) invali...


Set DRY RUN DEC 07
Monitoring set: DRY RUN DEC 07
14 December, 2007, 16:23:24
RB.A12 RB.A23 RB.A34 RB.A56 RB.A67 RB.A78 RB.A81 RCBCH5.L8B1
RCBCHS5.L8B1 RCBCHS5.L8B2 RCBCV5.L8B2 RCBCVS5.L8B1 RCBCVS5.L8B2 RCD.A78B1 RCD.A78B2 RCO.A78B1
RCO.A78B2 RCS.A78B1 RCS.A78B2 RD1.L2 RD1.L8 RD1.R2 RD2.L1 RD2.L2
RD2.L8 RD2.R1 RD2.R2 RD2.R5 RD2.R8 RD3.L4 RD4.L4 RMSD.LR6B1
RMSD.LR6B2 RQ10.L1B1 RQ10.L1B2 RQ10.L2B1 RQ10.L2B2 RQ10.L4B1 RQ10.L4B2 RQ10.L6B1
RQ10.L6B2 RQ10.L8B1 RQ10.L8B2 RQ10.R1B1 RQ10.R1B2 RQ10.R2B1 RQ10.R2B2 RQ10.R5B1
RQ10.R5B2 RQ10.R6B1 RQ10.R6B2 RQ10.R8B1 RQ10.R8B2 RQ4.L1B1 RQ4.L1B2 RQ4.L2B1
RQ4.L2B2 RQ4.L6B1 RQ4.L6B2 RQ4.L8B1 RQ4.L8B2 RQ4.R1B1 RQ4.R1B2 RQ4.R2B1
RQ4.R2B2 RQ4.R5B1 RQ4.R5B2 RQ4.R6B1 RQ4.R6B2 RQ4.R8B1 RQ4.R8B2 RQ5.L1B1
RQ5.L1B2 RQ5.L2B1 RQ5.L2B2 RQ5.L4B1 RQ5.L4B2 RQ5.L6B1 RQ5.L6B2 RQ5.L8B1
RQ5.L8B2 RQ5.R1B1 RQ5.R1B2 RQ5.R2B1 RQ5.R2B2 RQ5.R5B1 RQ5.R5B2 RQ5.R6B1
RQ5.R6B2 RQ5.R8B1 RQ5.R8B2 RQ6.L1B1 RQ6.L1B2 RQ6.L2B1 RQ6.L2B2 RQ6.L4B1
RQ6.L4B2 RQ6.L8B1 RQ6.L8B2 RQ6.R1B1 RQ6.R1B2 RQ6.R2B1 RQ6.R2B2 RQ6.R5B1
RQ6.R5B2 RQ6.R8B1 RQ6.R8B2 RQ7.L1B1 RQ7.L1B2 RQ7.L2B1 RQ7.L2B2 RQ7.L4B1
RQ7.L4B2 RQ7.L8B1 RQ7.L8B2 RQ7.R1B1 RQ7.R1B2 RQ7.R2B1 RQ7.R2B2 RQ7.R5B1
RQ7.R5B2 RQ7.R8B1 RQ7.R8B2 RQ8.L1B1 RQ8.L1B2 RQ8.L2B1 RQ8.L2B2 RQ8.L4B1
RQ8.L4B2 RQ8.L6B1 RQ8.L6B2 RQ8.L8B1 RQ8.L8B2 RQ8.R1B1 RQ8.R1B2 RQ8.R2B1
RQ8.R2B2 RQ8.R5B1 RQ8.R5B2 RQ8.R6B1 RQ8.R6B2 RQ8.R8B1 RQ8.R8B2 RQ9.L1B1
RQ9.L1B2 RQ9.L2B1 RQ9.L2B2 RQ9.L4B1 RQ9.L4B2 RQ9.L6B1 RQ9.L6B2 RQ9.L8B1
RQ9.L8B2 RQ9.R1B1 RQ9.R1B2 RQ9.R2B1 RQ9.R2B2 RQ9.R5B1 RQ9.R5B2 RQ9.R6B1
RQ9.R6B2 RQ9.R8B1 RQ9.R8B2 RQD.A12 RQD.A23 RQD.A34 RQD.A56 RQD.A67
RQD.A78 RQD.A81 RQF.A12 RQF.A23 RQF.A34 RQF.A56 RQF.A67 RQF.A78
RQF.A81 RQS.L8B1 RQTL11.L8B1 RQTL11.L8B2 RQX.L1 RQX.L2 RQX.L5 RQX.L8
RQX.R1 RQX.R2 RQX.R5 RTQX1.L1 RTQX1.L2 RTQX1.L5 RTQX1.L8 RTQX1.R1
RTQX1.R2 RTQX1.R5 RTQX2.L1 RTQX2.L2 RTQX2.L5 RTQX2.L8 RTQX2.R1 RTQX2.R2
RTQX2.R5

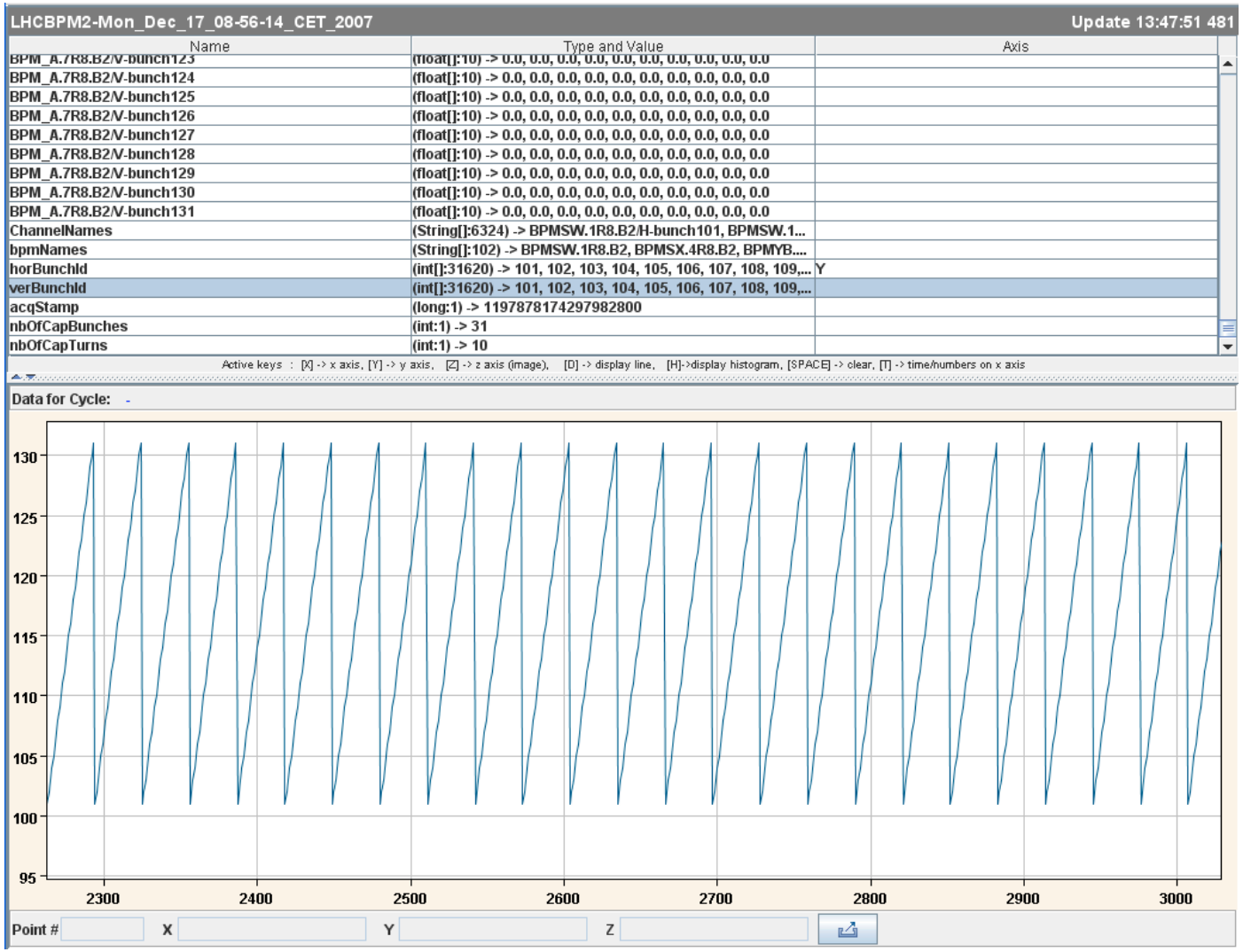
RBAC

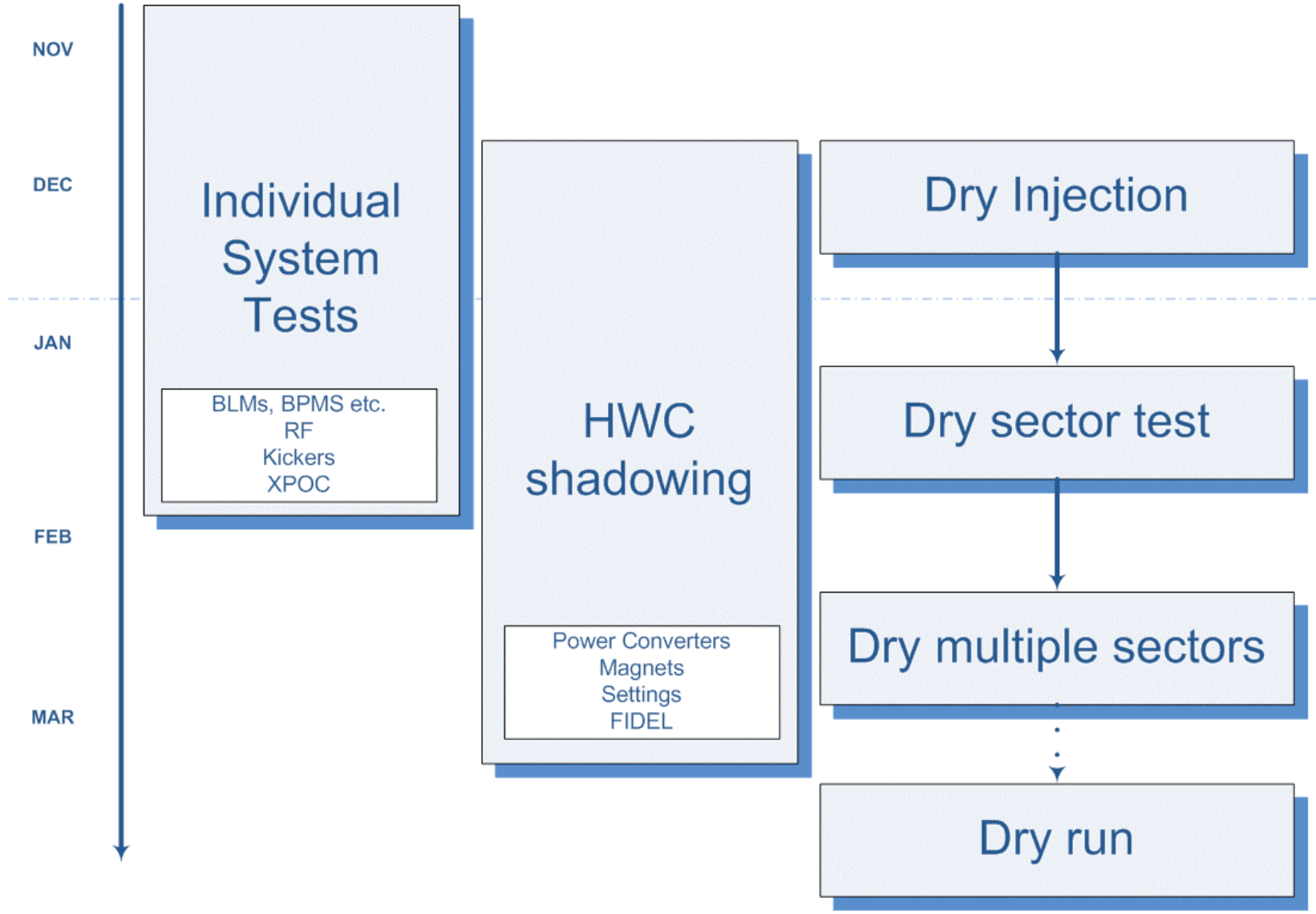

Equip State
LHC
Context Selection
EquipState
Filtering on Particle Transfer: LHCRING
Hardware Group
24-hours-18july
24h-05-02-2007
24h-28-02-2007
24hset
8-hours-12july
8-hours-14july
8-hours-6-12-06
8h-23-02-2007
8h-26-01-2007
8h-30-01-2007
8hours 29-09-2006
8hrs 24-10-2006
8hrs-27-10-06
ATLAS
B3
B4
B5
BEAM LOSS MONITORS
CHROMATICITY
COLLIMATORS
DISPERSION SUP. DIPOLE-H
Select All
Filter:
HWName
STATUS
RPHE.UA23.RQD.A12
ERROR
RPHE.UA23.RQF.A12
RPHE.UA27.RQD.A23
RPHE.UA27.RQF.A23
RPHE.UA43.RQD.A34
RPHE.UA43.RQF.A34
RPHE.UA87.RQD.A81
RPHE.UA87.RQF.A81
RPHF.UA23.RD1.L2
RPHF.UA23.RD2.L2
RPHF.UA27.RD1.R2
RPHF.UA27.RD2.R2
RPHF.UA83.RD1.L8
RPHF.UA83.RD2.L8
RPHF.UA87.RD2.R8
RPHFC.UA23.RQX.L2
RPHFC.UA27.RQX.R2
RPHFC.UA83.RQX.L8
RPHFC.UJ14.RQX.L1
RPHFC.UJ16.RQX.R1
Select All
Read commands
STATE PC
READ FUNCTION
FAULTS
POLARITY
REF TYPE
EVENT GROUP
LOAD.LIMITS.I_NEG
LOAD.LIMITS.I_POS
LOAD.LIMITS.I_MIN
LOAD.LIMITS.DIDT
TIME.RUN
FGC2.ST_UNLATCHED
SUB_51
VS.LIMITS
FGC2.WARNINGS
FGC2.ST_LATCHED
LOAD.LIMITS[0]
REF.PELP
LOAD.SELECT
MEAS.I
MEAS.V
STATE OP
Execute read
Write commands
ACCELERATION
LOAD FUNCTION
SWITCH POLARITY
REF TYPE
SET EVENT GROUP 1
SET MODE.OP
LOAD.LIMITS.I_NEG
LOAD.LIMITS.I_POS
LOAD.LIMITS.I_MIN
LOAD.LIMITS.DIDT
TIME.RUN
REF.PELP.FINAL
REF.PELP.DECELERATION
REF.PELP.LINEAR_RATE
Execute write
State commands
OFF
IDLE
ON_STANDBY
Execute state
Parameter
Values
Console
Running tasks
16:04:36 - rbac.integrator.propagate.closing: null
16:04:37 - Performing login
16:04:37 - new thread ...
16:05:06 - Login succesfull, token RBAToken[serial=0xb05d8852;auth=2007-12-17T16:05:06;end=2007-12-18T00:35:06;application=AppPrincipal[name=DEFAULT;critical=false;timeout=180];loca
16:05:37 - Executing command STATE PC on cycle(s) TRACKING-TEST-7TeVV1.TRACKING-TEST-7TeV.C0 on RPHE.UA23.RQD.A12
16:05:37 - Error getting result on device RPHE.UA23.RQD.A12
cern.japc.ParameterException: access denied by rbac
at cern.japc.ext.cmwrda.RDAParameter.getValueImpl(RDAParameter.java:140)
Caused by:
cern.cmw.IOError: [FGC - 69] access denied by rbac
at cern.cmw.rda.client.ServerConnection.raise(ServerConnection.java:1008)
16:05:37 - Error getting result on device RPHE.UA23.RQD.A12

Collimators



BPMs


LHCBPM2-Mon_Dec_17_08-56-14_CET_2007
Update 13:47:51 481
Name
Type and Value
Axis
BPM_A.7R8.B2V-bunch123 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch124 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch125 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch126 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch127 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch128 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch129 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch130 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
BPM_A.7R8.B2V-bunch131 (float[]:10) -> 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0
ChannelNames (String[]:6324) -> BPMSW.1R8.B2H-bunch101, BPMSW.1...
bpmNames (String[]:102) -> BPMSW.1R8.B2, BPMSX.4R8.B2, BPMYB....
horBunchId (int[]:31620) -> 101, 102, 103, 104, 105, 106, 107, 108, 109,... Y
verBunchId (int[]:31620) -> 101, 102, 103, 104, 105, 106, 107, 108, 109,...
acqStamp (long:1) -> 1197878174297982800
nbOfCapBunches (int:1) -> 31
nbOfCapTurns (int:1) -> 10
Active keys : [X] -> x axis, [Y] -> y axis, [Z] -> z axis (image), [D] -> display line, [H]->display histogram, [SPACE] -> clear, [T] -> time/numbers on x axis
Data for Cycle: -
130
125
120
115
110
105
100
95
2300
2400
2500
2600
2700
2800
2900
3000
Point #
X
Y
Z


NOV
DEC
JAN
FEB
MAR
Individual System Tests
BLMs, BPMS etc.
RF
Kickers
XPOC
HWC shadowing
Power Converters
Magnets
Settings
FIDEL
Dry Injection
Dry sector test
Dry multiple sectors
Dry run