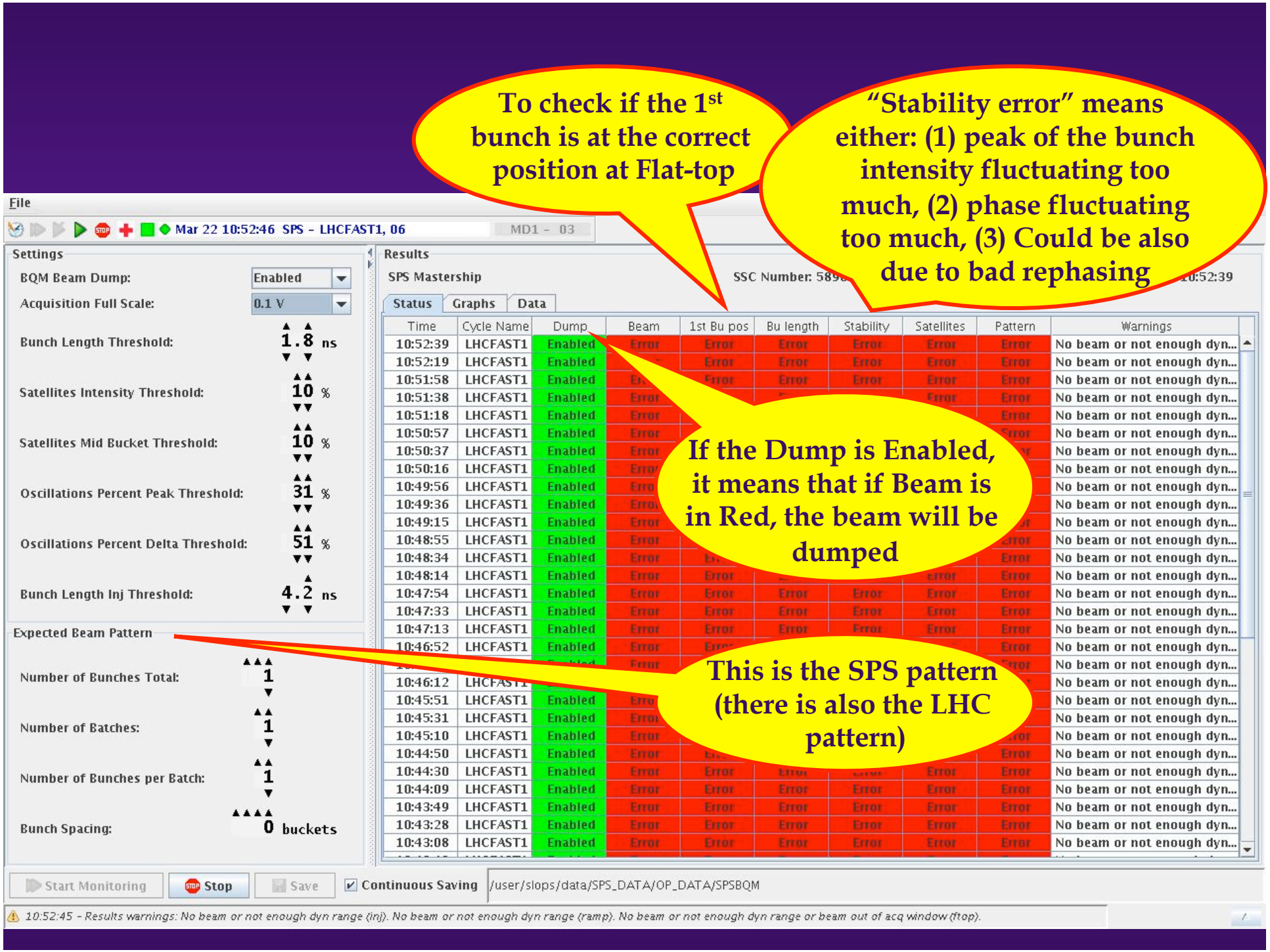
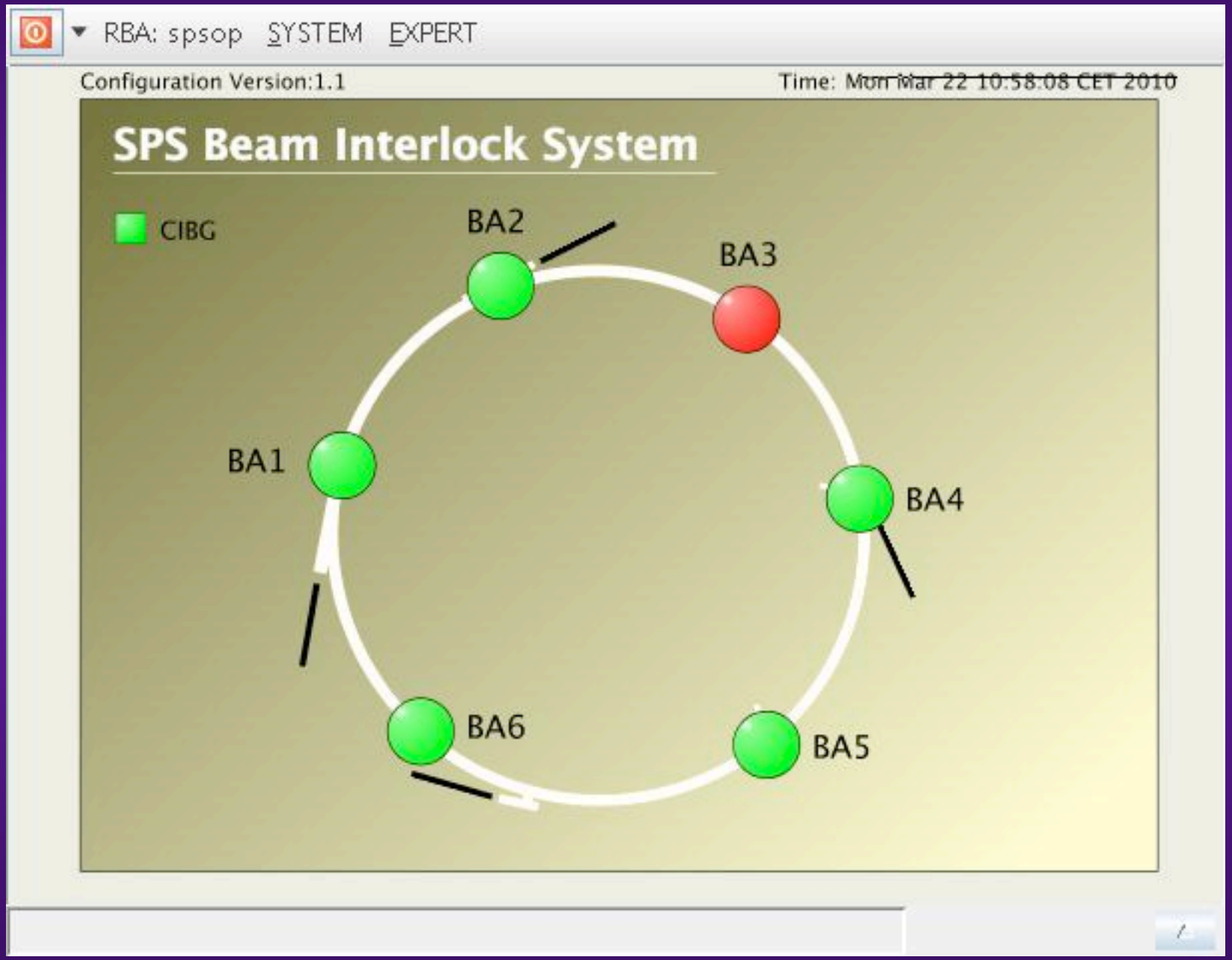
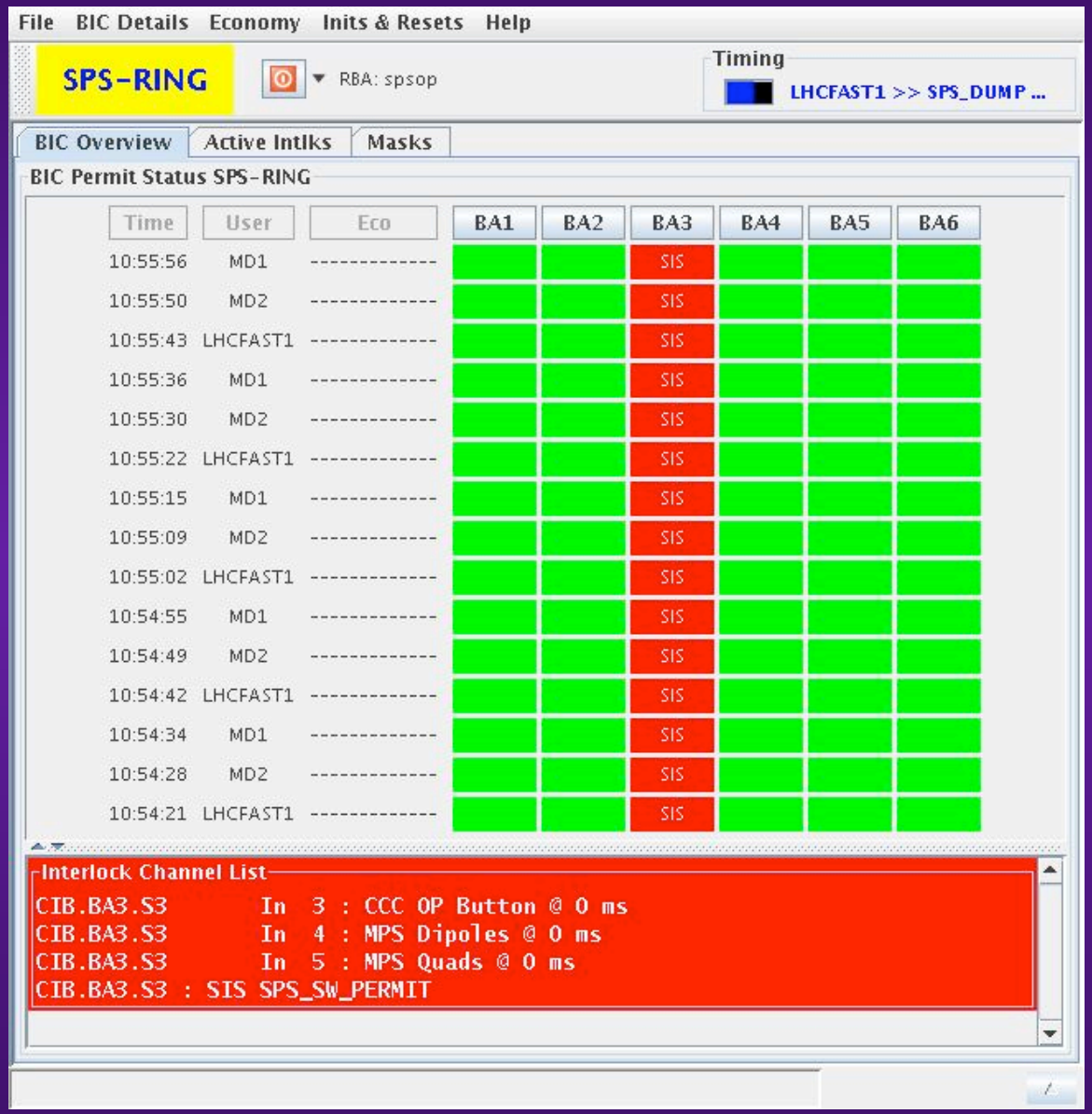
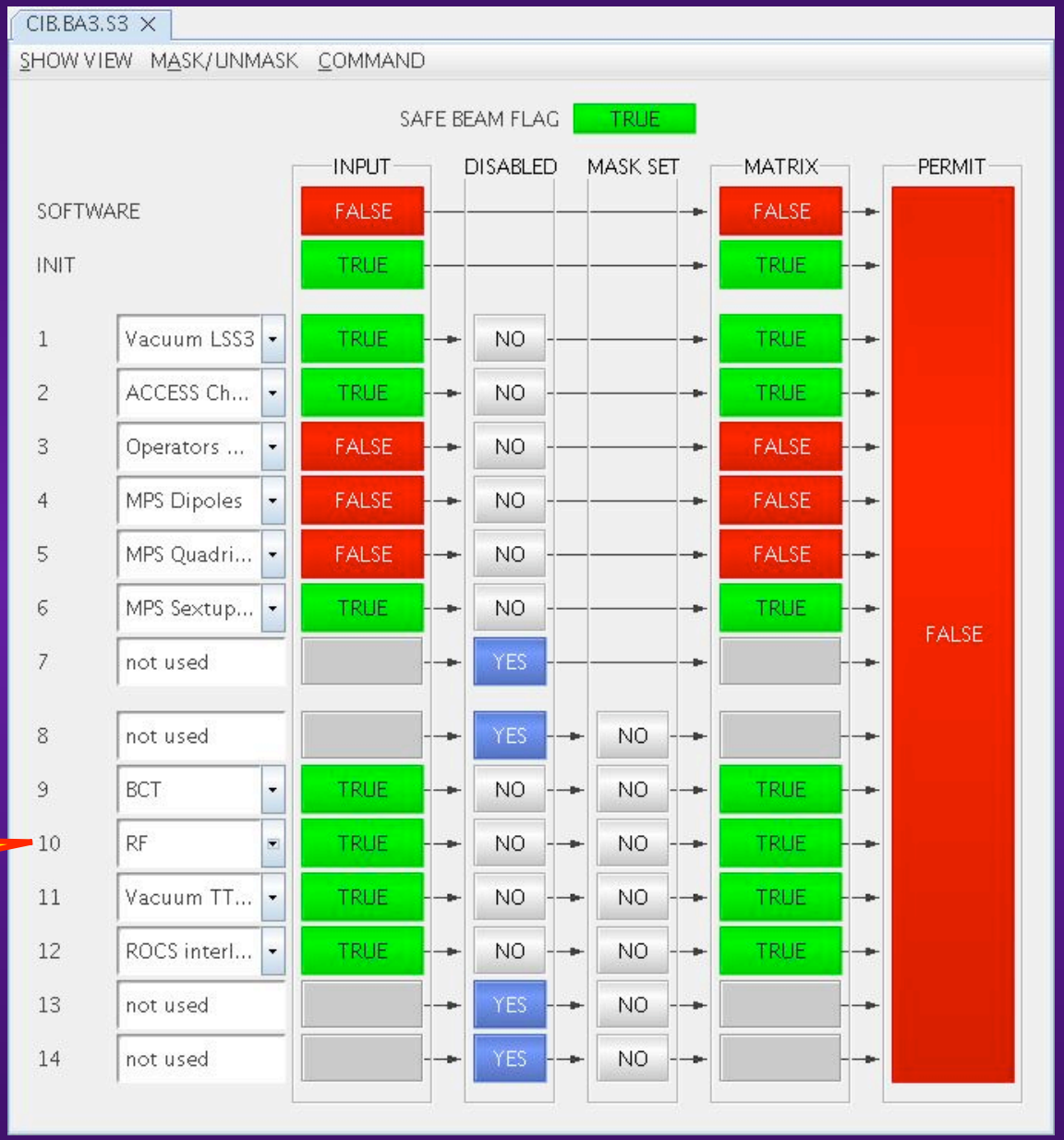
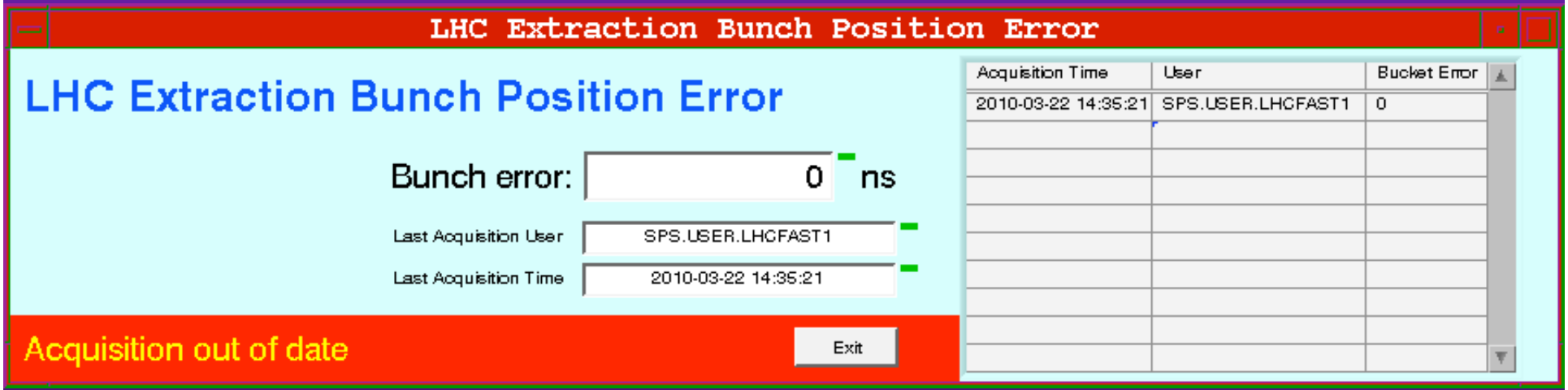

To check if the 1st bunch is at the correct position at Flat-top
"Stability error" means either: (1) peak of the bunch intensity fluctuating too much, (2) phase fluctuating too much, (3) Could be also due to bad rephasing
If the Dump is Enabled, it means that if Beam is in Red, the beam will be dumped
This is the SPS pattern (there is also the LHC pattern)
File
Mar 22 10:52:46 SPS - LHCFAST1, 06
MD1 - 03
Settings
BQM Beam Dump: Enabled
Acquisition Full Scale: 0.1 V
Bunch Length Threshold: 1.8 ns
Satellites Intensity Threshold: 10 %
Satellites Mid Bucket Threshold: 10 %
Oscillations Percent Peak Threshold: 31 %
Oscillations Percent Delta Threshold: 51 %
Bunch Length Inj Threshold: 4.2 ns
Expected Beam Pattern
Number of Bunches Total: 1
Number of Batches: 1
Number of Bunches per Batch: 1
Bunch Spacing: 0 buckets
Results
SPS Mastership
SSC Number: 589
10:52:39
Status
Graphs
Data
Time | Cycle Name | Dump | Beam | 1st Bu pos | Bu length | Stability | Satellites | Pattern | Warnings
10:52:39 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:52:19 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:51:58 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:51:38 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:51:18 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:50:57 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:50:37 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:50:16 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:49:56 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:49:36 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:49:15 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:48:55 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:48:34 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:48:14 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:47:54 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:47:33 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:47:13 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:46:52 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:46:12 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:45:51 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:45:31 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:45:10 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:44:50 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:44:30 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:44:09 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:43:49 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:43:28 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
10:43:08 | LHCFAST1 | Enabled | Error | Error | Error | Error | Error | Error | No beam or not enough dyn...
Start Monitoring
Stop
Save
Continuous Saving
/user/slops/data/SPS_DATA/OP_DATA/SPSBQM
10:52:45 - Results warnings: No beam or not enough dyn range (inj). No beam or not enough dyn range (ramp). No beam or not enough dyn range or beam out of acq window (ftop).


RBA: spsop SYSTEM EXPERT
Configuration Version:1.1
Time: Mon Mar 22 10:58:08 CET 2010
SPS Beam Interlock System
CIBG
BA2
BA3
BA1
BA4
BA6
BA5


File
BIC Details
Economy
Inits & Resets
Help
SPS-RING
RBA: spsop
Timing
LHCFAST1 >> SPS_DUMP ...
BIC Overview
Active Intlks
Masks
BIC Permit Status SPS-RING
Time
User
Eco
BA1
BA2
BA3
BA4
BA5
BA6
10:55:56 MD1 ---------- SIS
10:55:50 MD2 ---------- SIS
10:55:43 LHCFAST1 ---------- SIS
10:55:36 MD1 ---------- SIS
10:55:30 MD2 ---------- SIS
10:55:22 LHCFAST1 ---------- SIS
10:55:15 MD1 ---------- SIS
10:55:09 MD2 ---------- SIS
10:55:02 LHCFAST1 ---------- SIS
10:54:55 MD1 ---------- SIS
10:54:49 MD2 ---------- SIS
10:54:42 LHCFAST1 ---------- SIS
10:54:34 MD1 ---------- SIS
10:54:28 MD2 ---------- SIS
10:54:21 LHCFAST1 ---------- SIS
Interlock Channel List
CIB.BA3.S3 In 3 : CCC OP Button @ 0 ms
CIB.BA3.S3 In 4 : MPS Dipoles @ 0 ms
CIB.BA3.S3 In 5 : MPS Quads @ 0 ms
CIB.BA3.S3 : SIS SPS_SW_PERMIT




**The canal 10 is devoted to the BQM**

# Tool linked to the (SPS) BQM = Beam Quality Monitor

- **SPS Control / SPS Beam Measurements / LHC Extraction Bunch Position Error**
  - Due to the resolution of the acquisition card it should be at + or -1 ns
  - This tool is used to see if there is a re-phasing problem, which could explain that the BQM dumped the beam