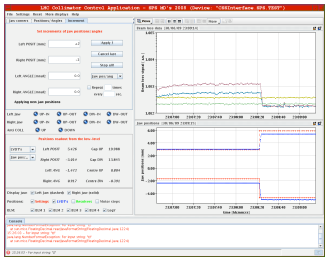
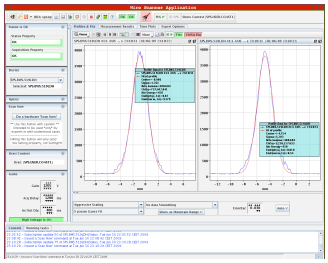
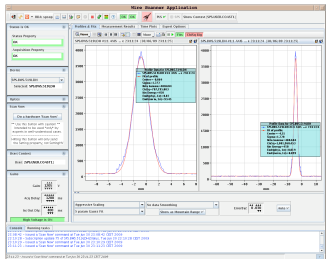
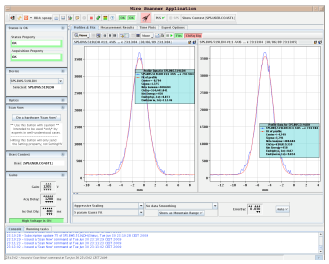
eLogbook Tue 30-June-2009 Night

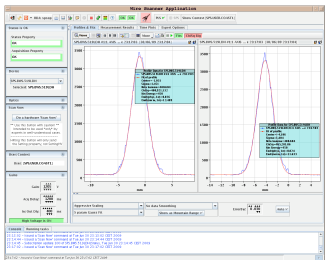
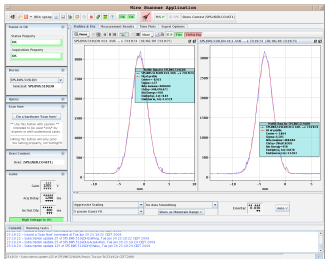
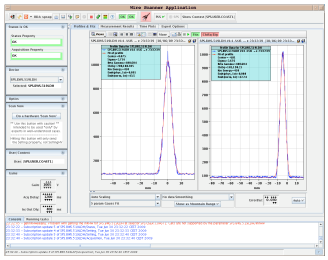
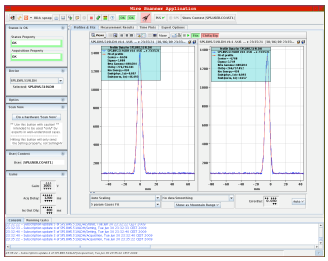
SPS *emittance*

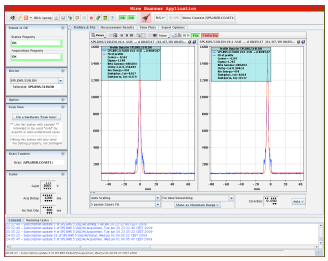
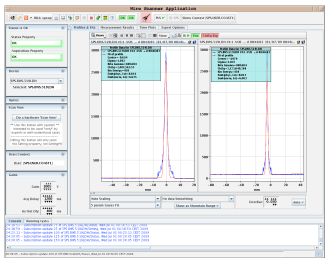
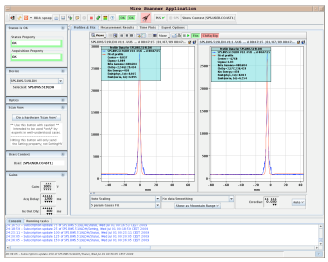
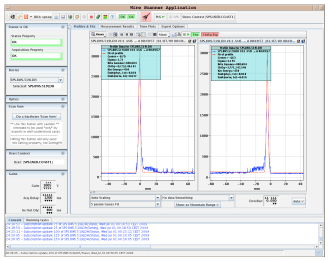
is logged.

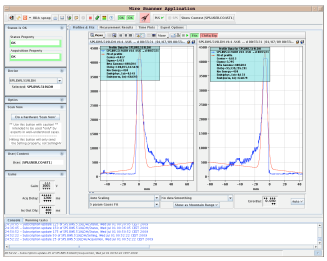
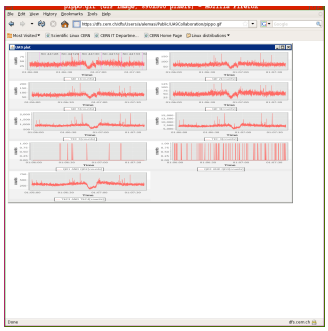
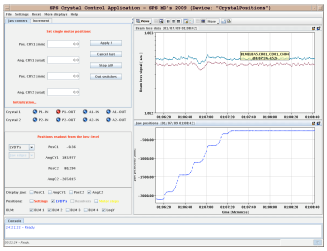
FILTER: Piquets Expert INFO Clear

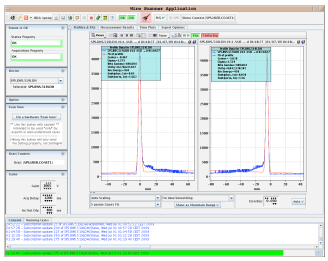
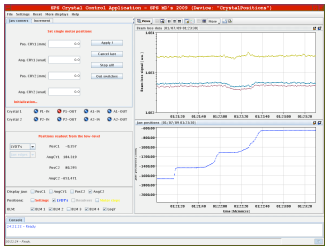
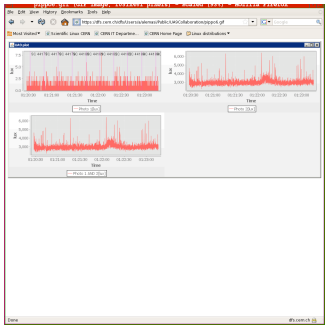
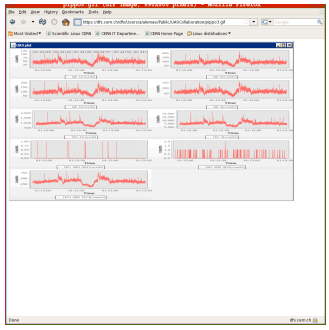
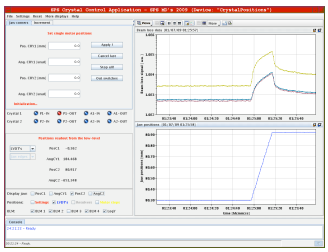
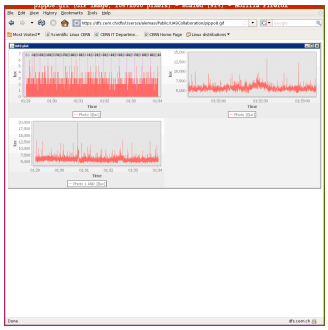
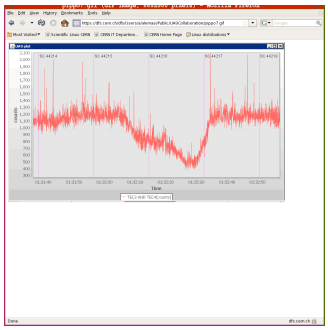
NEW: For the mobile devices, try the eLogbook mobile beta v0.2

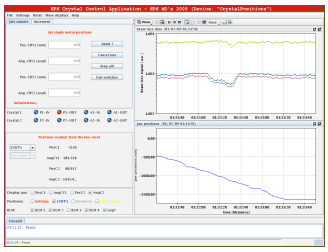
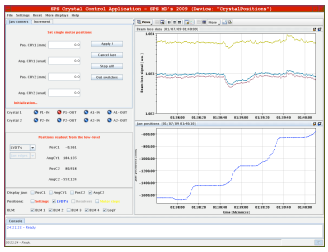
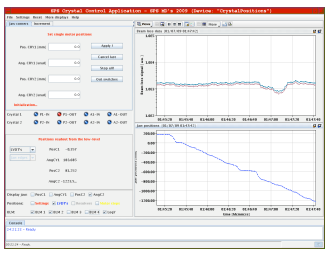
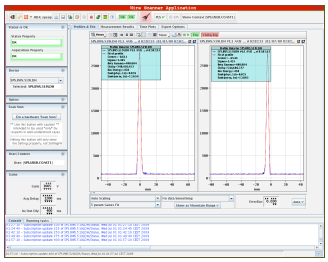
#	Time	SU	Comment
1	23:00	SU	Oscar, Fabio, Stephane Created by spsop from cwo-ccc-a7lc
2	23:01	SU	Lost BLMs of LHC type in SS5. Created by spsop from cwo-ccc-a1lc
3	23:03	SU	We tried to Wreboot server BOBR-M We rebooted the server CFV-BA5-BLMLHC Created by spsop from cwo-ccc-a7lc
4	23:07	SU	Open collimator by about 3 sigmas (1 sigma = 0.7 mm)  20090630230921.png  20090630231117.png  20090630231146.png Created by spsop from cwo-ccc-a1lc
5	23:12	SU	Blow-up the emittance.  20090630231321.png Created by spsop from cwo-ccc-a1lc
			Dumper setup: fRev: 43308 Number of turns: 10000 Window length: 1 Exc. Frequency: 37680 Tune: 0.82 Sweep Start: 35000 Sweep Stop: 36000 Output Voltage: 0.03 Offset Voltage: 0

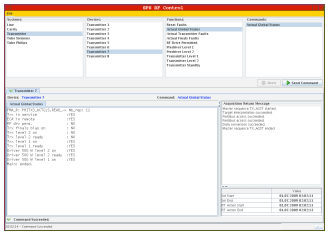
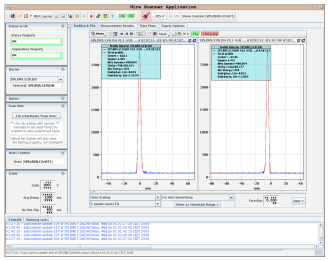
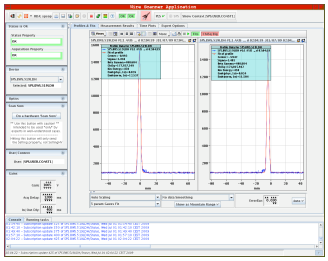
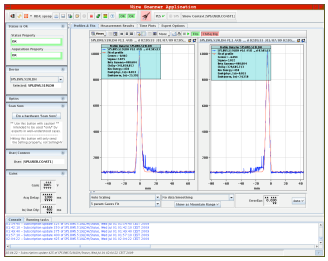
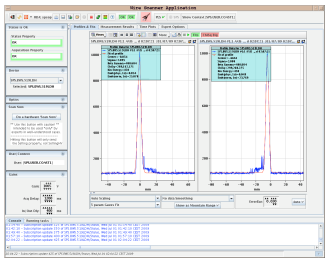
6	23:14	SU	 20090630231718.png Created by spsop from CWO-CCC-A2LF
7	23:19	SU	Output voltage: 0.3  20090630232024.png  20090630233318.png Created by spsop from CWO-CCC-A2LF
8	23:33	SU	We rebooted the server bws50s because the wire scan in 519 didn't work. Created by spsop from cwo-ccc-a7lc
9	23:35	SU	putting damper off  20090630233540.png Created by spsop from cwo-ccc-a6lc
10	23:36	SU	Beam lost. Created by spsop from cwo-ccc-a1lc
11	23:38	SU	octupoles setting: LOD-K -15 LOF-K 15 Created by spsop from CWO-CCC-A2LF
			New coast, wire scanner acquisition.

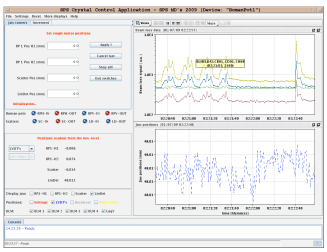
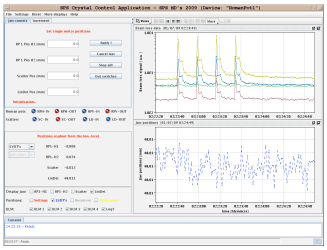
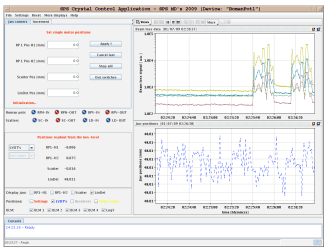
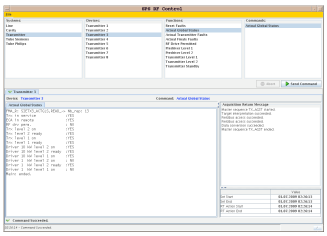
12	00:06	SU	 20090701000702.png Created by spsop from CWO-CCC-A2LF
13	00:16	SU	We rebooted the server BMU20s, BMU30s, BMU40s, BMU50s, BMU60s. Created by spsop from cwo-ccc-a7lc
14	00:46	SU	nwe coast. bws  20090701004647.png  20090701004732.png Created by spsop from CWO-CCC-A2LF
15	00:47	SU	new coast - orbit: /user/slops/data/SPS_DATA/OP_DATA/steering/sps/Ref-coast-2009-07-01-00-46  20090701004736.png Created by spsop from cwo-ccc-a1lc
16	00:48	SU	collimatore in  20090701005037.png Created by spsop from CWO-CCC-A2LF
17	00:53	SU	stefano dixit: TAL at 65,66,67,68 mm. Created by spsop from CWO-CCC-A2LF
			Collimator out. Scan with the crystal

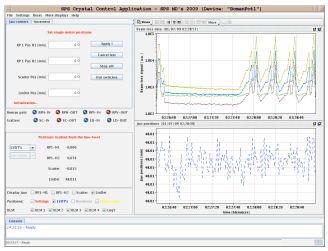
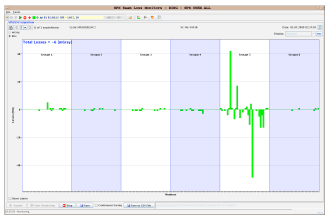
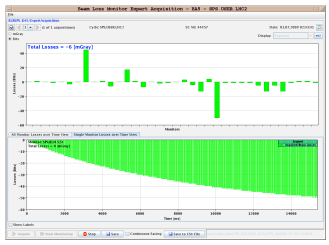
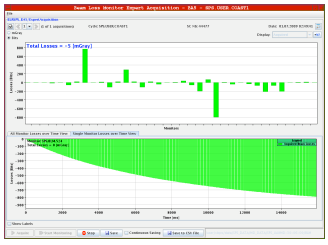
18	00:54	SU	 20090701005546.png Created by spsop from CWO-CCC-A2LF
19	00:57	SU	Crystal at up to 78 mm. Scan in amplitude start at 70 mm and then 1 mm step to go in. Start at 71.7 mm Created by spsop from CWO-CCC-A2LF
20	01:00	SU	Crystal at 79.628 mm, no large losses, different than before. Losses at cherenkov seen at 78 mm but nothing on blms. Opening the TAL then Losses on BLMs seens 80.295 mm. Moving TAL back by 1.5 mm. Starting angular scan from -2000 to 0 in step of 30 murad/s. Channeling and volume reflection seen at about -1300 murad Scintillators + quartz  20090701011217.png 20090701011233.png Created by spsop from CWO-CCC-A2LF
21	01:08	SU	Channeling again!  20090701010848.png Created by spsop from cwo-ccc-a1lc
			New angular scan: -1500 to -500 murad. Doing step by step by hand

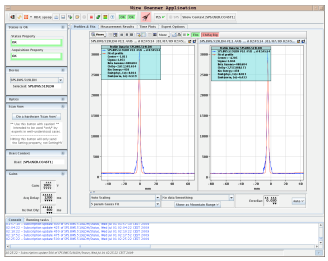
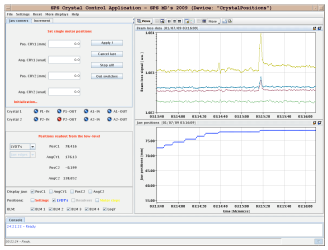
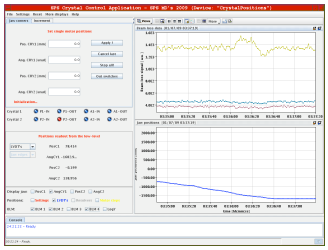
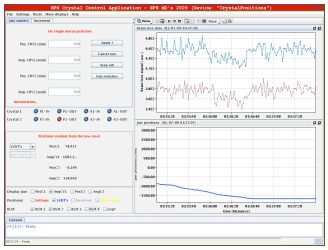
22	01:13	SU	 20090701011948.png Created by spsop from CWO-CCC-A2LF
23	01:23	SU	See losses during slow scan.  20090701012335.png  20090701013756.png  20090701013842.png Created by spsop from cwo-ccc-a1lc
24	01:24	SU	inserting the crystal by 0.700 mm, now at 80.9 mm Loss level went up. Done to increase sensitivity of the BLMs.  20090701012603.png Created by spsop from CWO-CCC-A2LF
25	01:25	SU	New angular scan with more sensitivity.  20090701013716.png  20090701013733.png Created by spsop from CWO-CCC-A2LF

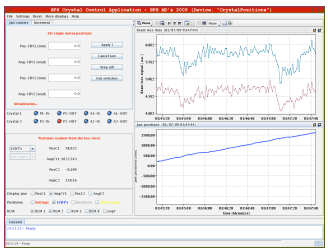
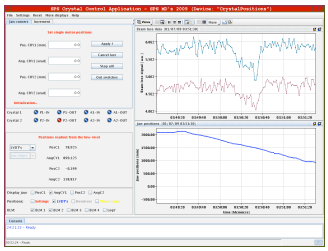
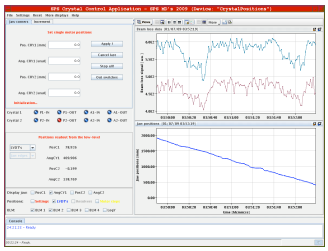
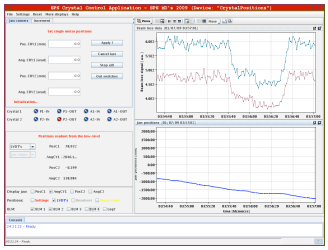
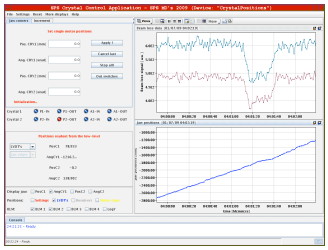
26	01:33	SU	Nice channeling profile.  20090701013356.png Created by spsop from cwo-ccc-a1lc
27	01:38	SU	Scan in the other direction.  20090701014016.png Created by spsop from cwo-ccc-a1lc
28	01:41	SU	Now crystal further in, 81.250 and repeat the scan. Before crsytal was at about 4.5 mm from the central orbit  20090701014748.png Created by spsop from CWO-CCC-A2LF
29	01:51	SU	We created an archive on CBCM Timing for LHC2, COASTPRE1, COAST1, COASTRE1. Created by spsop from cwo-ccc-a7lc
30	02:00	SU	bringing all out by 1 sigma to test the blow up with the dumper.  20090701020249.png

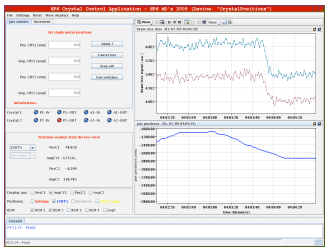
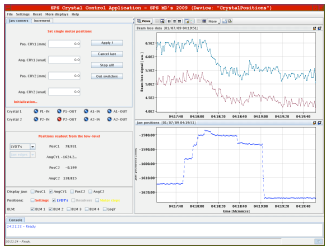
			Created by spsop from CWO-CCC-A2LF
31	02:02	SU	TRX 7 tripped  20090701020243.png Created by spsop from cwo-ccc-a6lc
32	02:03	SU	BWS before blow up  20090701020341.png  20090701020509.png Created by spsop from CWO-CCC-A2LF
33	02:05	SU	Setting damper: 0.1  20090701020615.png Created by spsop from cwo-ccc-a6lc
34	02:07	SU	Setting 0.02, same BWS as before  20090701020800.png Created by spsop from CWO-CCC-A2LF
			Dumper sweep start 37000 stop 38000 output voltage 0.02 V number of turns 500,000

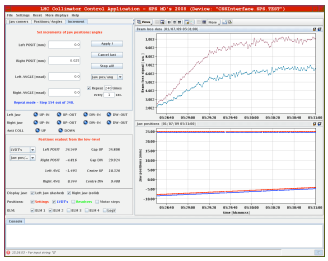
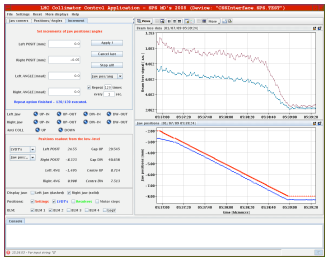
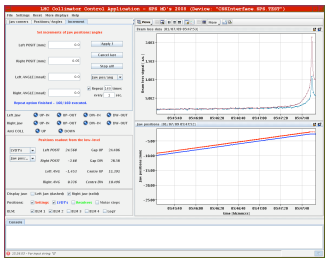
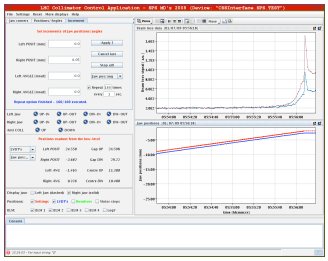
35	02:22	SU	 20090701022305.png Created by spsop from cwo-ccc-a1lc
36	02:24	SU	same as befor but number of turns 600,000  20090701022458.png Created by spsop from cwo-ccc-a1lc
37	02:25	SU	800,000 turns  20090701022646.png Created by spsop from cwo-ccc-a1lc
38	02:26	SU	Trx3 tripped  20090701022641.png Created by spsop from cwo-ccc-a6lc
			779,543 turns = 18 sec

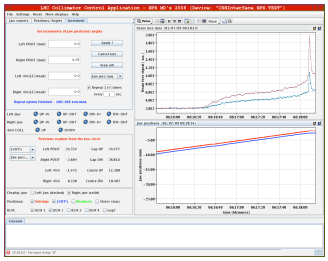
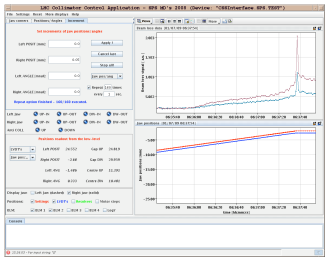
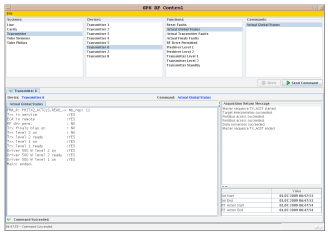
39	02:28	SU	 20090701022906.png Created by spsop from cwo-ccc-a1lc
40	02:38	SU	BLM on BA5 give false measurements.  BLRSPS_RING.png  BLRSPS_BA5.png  BLRSPS_BA5_Expert.png  BLRSPS_BA5_COAST1.png  BLRSPS_BA5_Expert_COAST1.png  BLRSPS_RING_COAST1.png Created by spsop from cwo-ccc-a7lc
41	02:40	SU	orbit for new coast /user/slops/data/SPS_DATA/OP_DATA/steering/sps/ORBIT_SPSRING_01-07-09_02-41-55_LHC2_CY44452_T0.data.gz  20090701024119.png Created by spsop from cwo-ccc-a2lc
			new coast. Aligning collimator, same coordinates as before: 2.8 mm left, -1.6 mm right, 3.5 sigma half gap

42	02:44	SU	 20090701024535.png Created by spsop from cwo-ccc-a2lc
43	02:48	SU	Aligning the TAL. Starting from 61 mm, 63 mm, 64 mm, 65 mm, 66 mm, 67 mm, 68 mm (losses). Leaving at 68 mm, opening the collimator. Created by spsop from cwo-ccc-a2lc
44	03:06	SU	putting crystal 1 in. slowly... moving 10 by 10 mm Created by spsop from cwo-ccc-a2lc
45	03:16	SU	Crystal alignment 78.4mm.  20090701031617.png Created by spsop from cwo-ccc-a1lc
46	03:21	SU	TAL moved to 66.5mm Created by spsop from cwo-ccc-a1lc
47	03:27	SU	No evidence of channeling with the BLM after the first angular scan with crystal 1. Clues of channeling were recorded by detectors on the TAL for two different angles. We try a second angular scan Created by spsop from cwo-ccc-a1lc
48	03:33	SU	Angular scan to negative angles: we see a signal at the BLM  20090701033726.png  20090701033745.png Created by spsop from cwo-ccc-a1lc
49	03:39	SU	crystal moved to 78.9 mm Created by spsop from cwo-ccc-a1lc
50	03:41	SU	new angular scan. Channelling before at about -1500 murad (always crystal 1). Created by spsop from cwo-ccc-a2lc

51	03:47	SU	Third angular scan: two events recorded by the BLMs at different angle  20090701034751.png Created by spsop from cwo-ccc-a1lc
52	03:50	SU	4th angular scanning: again two events are recorded  20090701035135.png  20090701035225.png Created by spsop from cwo-ccc-a1lc
53	03:56	SU	4th angular scanning: another peak is observed  20090701035708.png Created by spsop from cwo-ccc-a1lc
54	04:02	SU	5th angular scan, event at 1800urad  20090701040225.png Created by spsop from cwo-ccc-a1lc
			6th scan

55	04:04	SU	 20090701040446.png Created by spsop from cwo-ccc-a1lc
56	04:07	SU	stopping 04:08 in amorphous position to measure lifetime Created by spsop from cwo-ccc-a2lc
57	04:17	SU	putting the crystal in channelling and remesuring the lifetime  20090701041957.png Created by spsop from cwo-ccc-a2lc
58	04:29	SU	stopping 4:29 the lifetime measurement Created by spsop from cwo-ccc-a2lc
59	04:38	SU	Leaving the crystal in channelling and moving the tal out. Moving by 100 mum at each step. Try to see the reduction of losses at the tal. Created by spsop from cwo-ccc-a2lc
60	04:42	SU	Position of the TAL moved from 66.5 mm to 59.8 mm Losses increased at the crystal. Might be particles not lost at the tal comes back after one turn. Position of the crystal 1 -1624 murad. Putting the TAL in again -> 66 mm on the TAL and losses at the crystal down again. Back at starting position Created by spsop from cwo-ccc-a2lc
61	04:45	SU	We rebooted the server cfv-ba5-blmlhc Created by spsop from cwo-ccc-a7lc
62	04:51	SU	taking out the tal. Created by spsop from cwo-ccc-a2lc
63	05:23	SU	Tal in the previous position (66.5 mm) with a crystal 1 angle of -1817 urad (minimum of losses at crystal). Now the LHC collimator is moved in order to see if it intercepts the channeled particles (if we are in channeling mode). Created by spsop from cwo-ccc-a2lc
			scan with collimator (not tal) from outer position -8 mm ->-2 mm steps of 25 um/sec (240 steps) channeling shoulder seems to be at about 7.5 mm (= to a displacement of the channeled beam of ~5.5 mm from the beam envelope) fairly good agreement with 150urad of channeling angle

64	05:30	SU	 20090701053108.png Created by spsop from cwo-ccc-a1lc
65	05:39	SU	repeated the collimator scan - moving outward from -2 to -8 mm. 50um steps shoulder is still evident at the predicted 7.5 mm (evidence of channeled beam at -1817urad)  20090701053932.png Created by spsop from cwo-ccc-a1lc
66	05:46	SU	collimator scan in amorphous position (-2013 urad)- different structure of the beam generated the crystal  20090701054800.png Created by spsop from cwo-ccc-a1lc
67	05:55	SU	collimator scan in VR position - very similar to amorphous region.  20090701055626.png Created by spsop from cwo-ccc-a1lc
68	06:01	SU	Switch CNGS vent in access mode.

			Created by spsop from cwo-ccc-a7lc
69	06:17	SU	collimation scan in a different channeling position (+1392) which is again a minimum in the inelastic interactions at the crystal. Again we see a channeling shoulder at about the same displacement from the beam envelope. SECONDARY CHANNELING PEAK!  20090701061822.png Created by spsop from cwo-ccc-a1lc
70	06:37	SU	collimator scan in a third channeling region (-5039 urad) the displacent is similar to the previous ones, but the intensity is much lower. (linaer position is kept at 78.9 as in previous measurements)  20090701063802.png Created by spsop from cwo-ccc-a1lc
71	06:47	SU	TRX6 tripped  20090701064805.png Created by spsop from cwo-ccc-a6lc

FAULTS						
#	Group	Fault	Element	Description	Begin	End	Duration
NO FAULT							