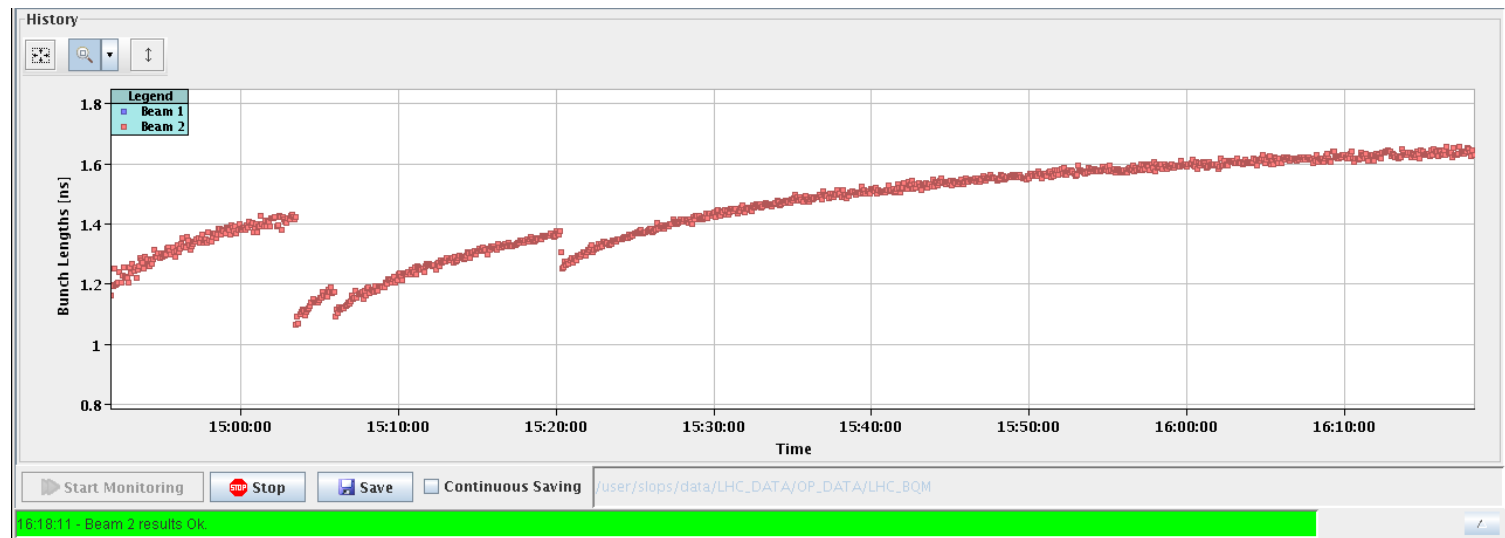


p-Pb feasibility test, Part 1, 31/10/2011

- ❑ Several hours setup (timing, many details...)
- ❑ Stored 4 Pb bunches (first of year) in presence of 304 p bunches at injection
 - Lifetime no worse for p bunches
 - Emittance blow-up, does not appear to be worse than for Pb alone - Reine
- ❑ Dumped and re-injected 4 fresh Pb
 - Still OK
- ❑ Ramped 2 Pb and 2 p bunches, good lifetime
- ❑ Re-phased RF (cogging) to move bunch 1 encounter point 9 km back to ALICE, no losses
 - Confirmation with video from ALICE
 - Presentation by Philippe

Bunch-lengthening from IBS



MACHINE DEVELOPMENT: INJECTION PROBE BEAM

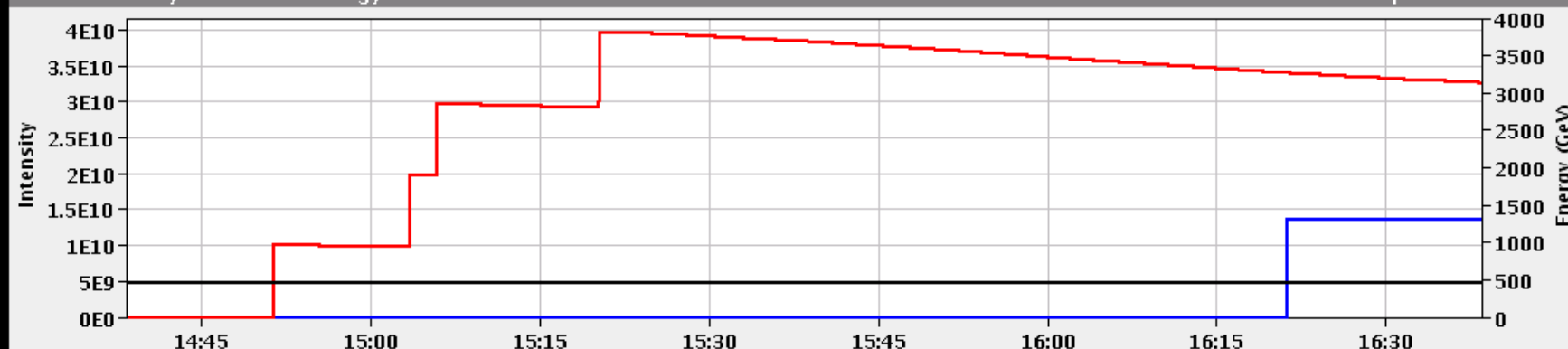
BCT TI2: 0.00e+00 **I(B1):** 1.30e+10 **BCT TI8:** 0.00e+00 **I(B2):** 3.78e+10

TED TI2 position: **BEAM** **TDI P2 gaps/mm** up: 10.84 down: 8.57

TED TI8 position: **BEAM** **TDI P8 gaps/mm** up: 9.62 down: 8.92

FBCT Intensity and Beam Energy

Updated: 16:38:25



Comments 31-10-2011 15:39:35 :

2011 Proton physics program finished!
Ions circulating in B2
Injection protons in B1

BIS status and SMP flags

B1 B2

Link Status of Beam Permits	false	false
Global Beam Permit	true	true
Setup Beam	true	true
Beam Presence	true	true
Moveable Devices Allowed In	false	false
Stable Beams	false	false

AFS: 100ns_588b_1small_0_0_0_72bpi9inj_pPb

PM Status B1 ENABLED PM Status B2 ENABLED

MACHINE DEVELOPMENT: FLAT TOP

Energy:

3500 GeV

I(B1):

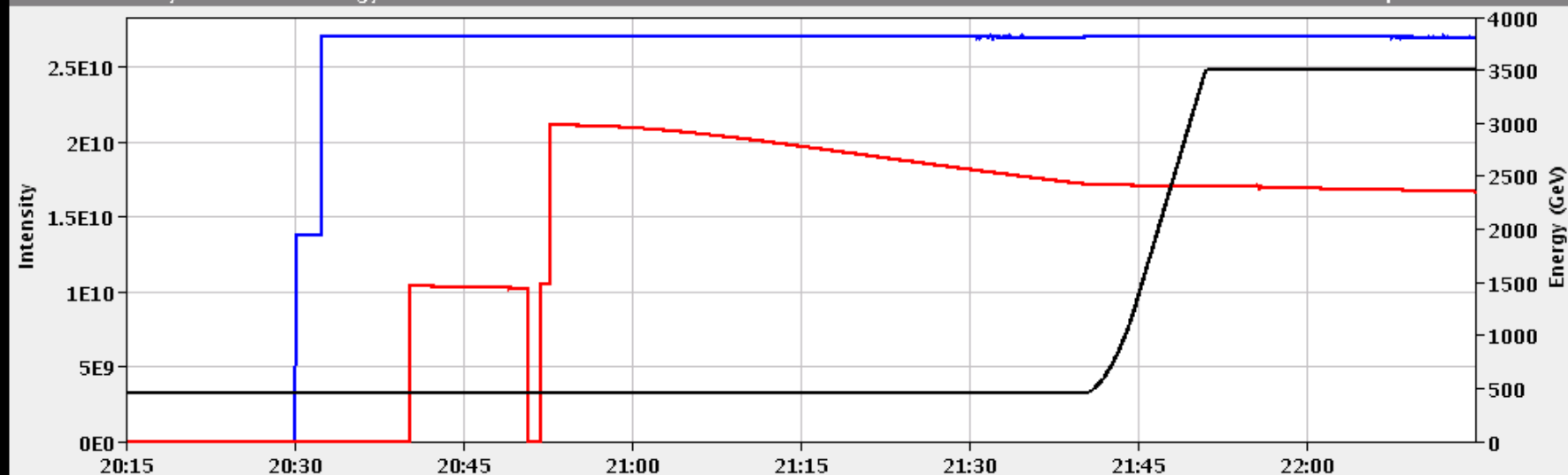
2.54e+10

I(B2):

1.87e+10

FBCT Intensity and Beam Energy

Updated: 22:14:56



Comments 31-10-2011 21:55:27 :

2011 Proton physics program finished!
Proton and lead ion beams together for
the first time at 3.5 Z TeV.
2 bunches each, will try rephasing RF.

BIS status and SMP flags

B1

B2

Link Status of Beam Permits

false

false

Global Beam Permit

true

true

Setup Beam

true

true

Beam Presence

true

true

Moveable Devices Allowed In

false

false

Stable Beams

false

false

AFS: pPb_2b_1_1_1_1bpi2inj

PM Status B1

ENABLED

PM Status B2

ENABLED

p-Pb feasibility test, Part 2

- ❑ MD part: ramp some Pb bunches in presence of many proton bunches
 - New date proposed: daytime 16 Nov
- ❑ Physics part: collide a few (under discussion) Pb with a few p bunches as “Stable Beams”
 - Finalise details tomorrow
 - n Meeting CCC Glass Box 11:00
 - Could follow MD part, or be in daytime 17 Nov
 - n (after Pb-Pb physics overnight)

First p and Pb at 3.5 Z TeV



Contributors *not* in photo: J. Wenninger, S. Redaelli, M. Sapinski, M. Lamont, M. Schaumann, OP crews, several others ...