

# LHC status and plans

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# Status

- Machine commissioned with 300 bunches
  - Last fill done using 48bpi BCMS
- 24 hours of pre-scrubbing show heat load higher in S12 as expected following the venting
- Still few items left in the commissioning
  - Crossing angle levelling to be finalised
  - SIS interlocks to be refined (also BPM collimators)
  - VdM cycle (VdM run ~ in one month)
  - Injection of long trains
  - Scrubbing

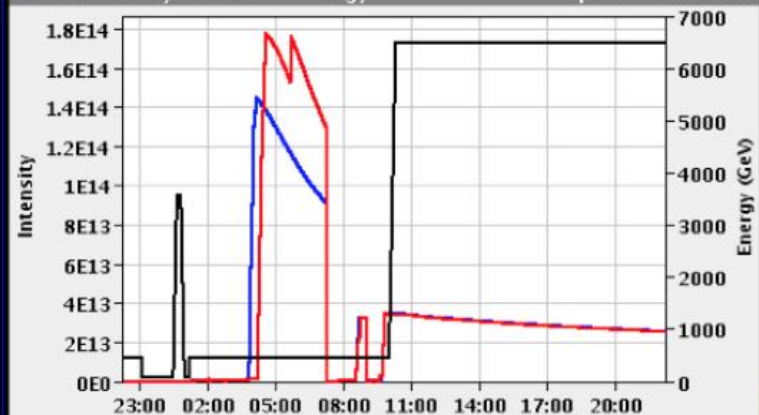
# PROTON PHYSICS: STABLE BEAMS

Energy: 6499 GeV I(B1): 2.54e+13 I(B2): 2.52e+13

Inst. Lumi [(ub.s)<sup>-1</sup>] IP1: 942.37 IP2: 0.44 IP5: 972.44 IP8: 42.24

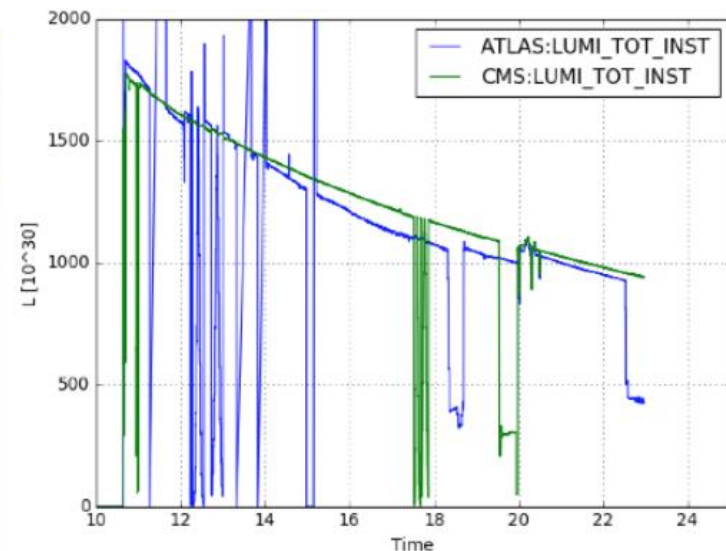
FBCT Intensity and Beam Energy

Updated: 22:12:23



Instantaneous Luminosity

Updated: 22:12:23



Comments (30-May-2017 22:06:36)

No beam from injectors: PSB septum problem

If the problem is fixed, we will dump this fill around 2:30 and go for a long fill to bridge the SPS access tomorrow

BIS status and SMP flags

	B1	B2
Link Status of Beam Permits	true	true
Global Beam Permit	true	true
Setup Beam	false	false
Beam Presence	true	true
Moveable Devices Allowed In	true	true
Stable Beams	true	true

AFS: 25ns\_315b\_303\_228\_240\_48bpi\_11inj

PM Status B1

ENABLED

PM Status B2

ENABLED

First fill of 2017 with BCMS beams

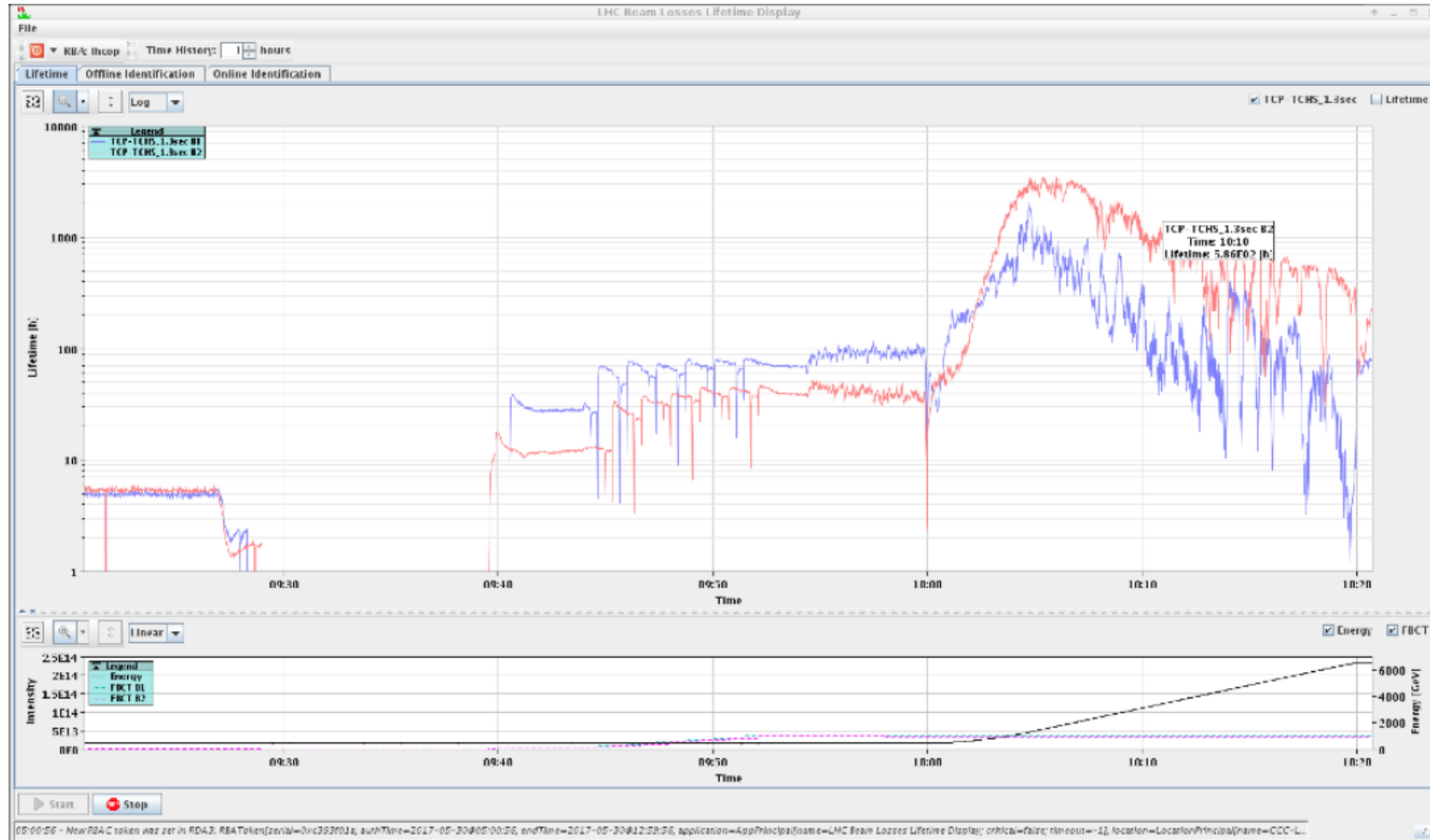
315b (48bpi) 303 colliding in IP1 and IP5.

Ib= 1.1E10

Initial lumi ~1.8E33

Not too bad!

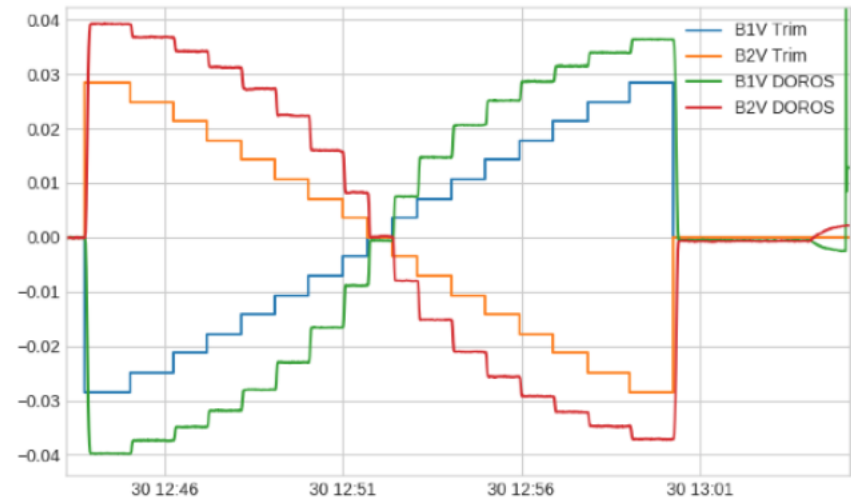
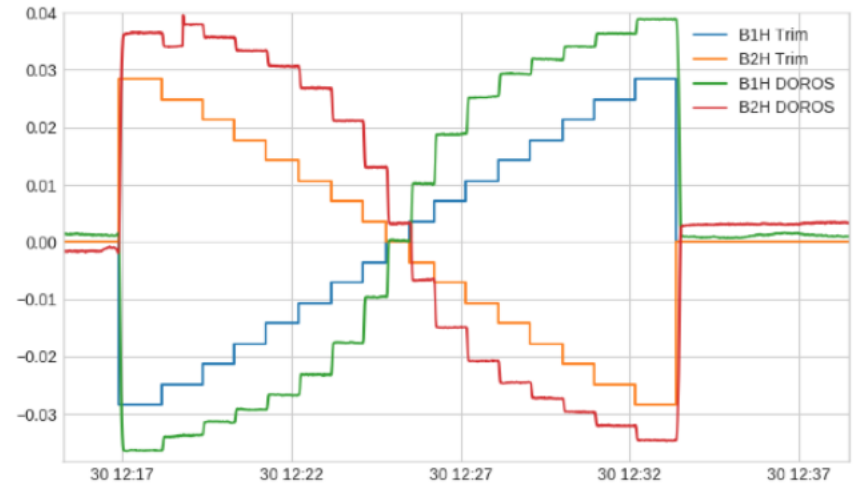
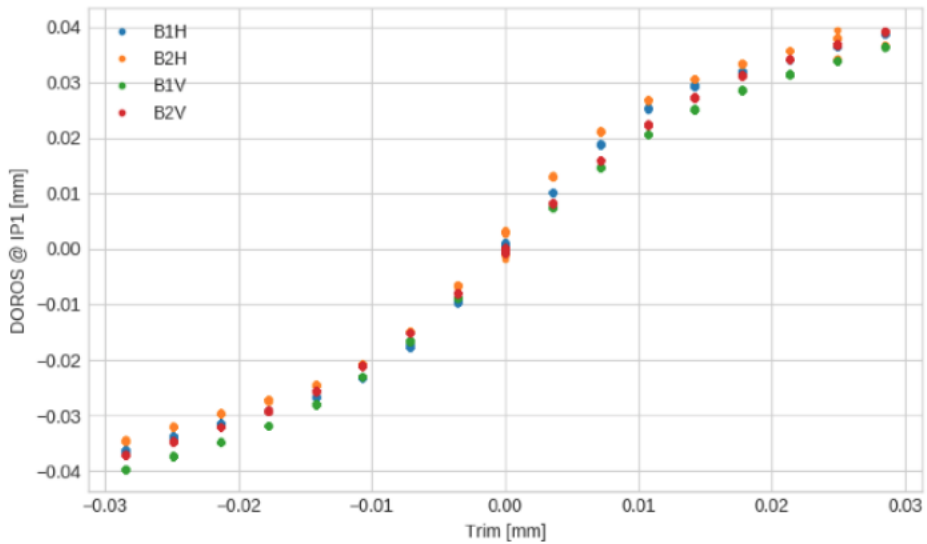
# Losses during the ramp (B1)



# BI pending issues

- WS not operational (possibly solved today)
- DOROS BPM “linearity” both at the IPs and on the collimators to be understood/cured
- BPM glitches to be understood
- BRAN IP5 acquisition stuck twice in the last week
- FBCT stuck again few days ago
- BSRT need to change the gain control in FESA and do a proper calibration
- Blindable BLM test (this week)
- BLM HV drop in IR3 (problem seen during off momentum loss maps)

# DOROS BPM non linearity IP1



Plots by ATLAS

# Plan

- Continue the intensity ramp-up
- Third 300b fill
- Move on to 600b then 900b
- Scrubbing run from Tuesday morning
- Physics, intensity ramp-up