dBLMs vs ADT observations
16L2 related dumps

Arek Gorzawski, S. Redaelli

D. Amorim, X. Buffat
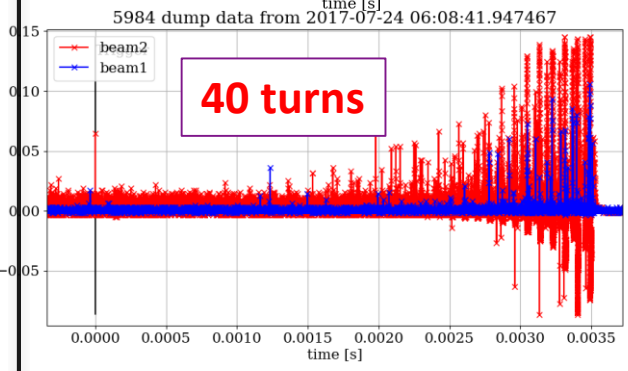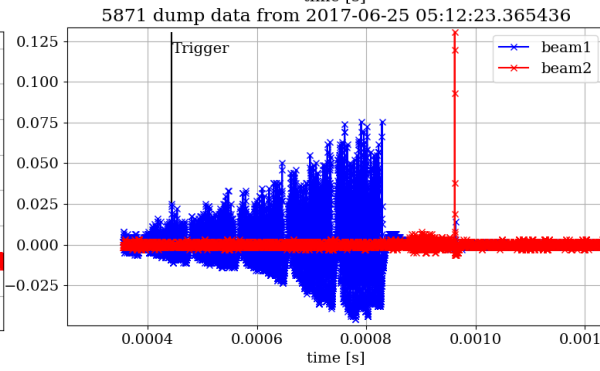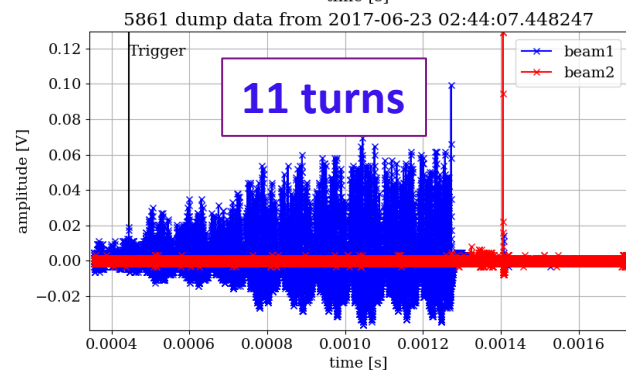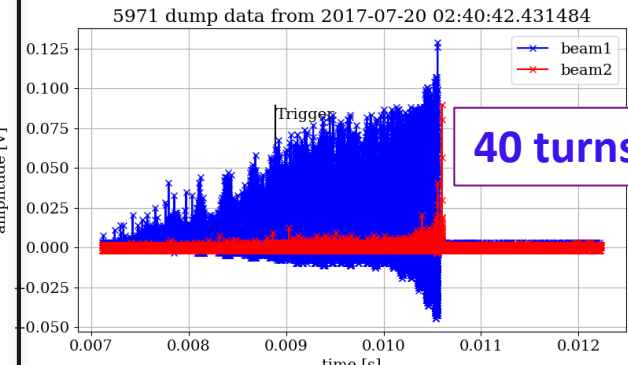
14/08/2017

Recorded dumps

TCP ROSY box

Cristal ROSY box!

6 turns

10 turns

40 turns

11 turns

5 turns

40 turns

dBLMs in IR7 during 16L2
related losses
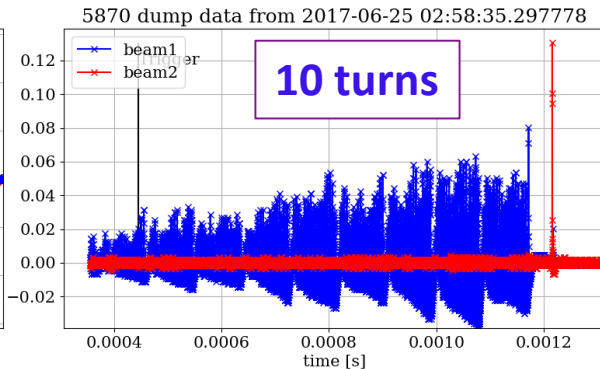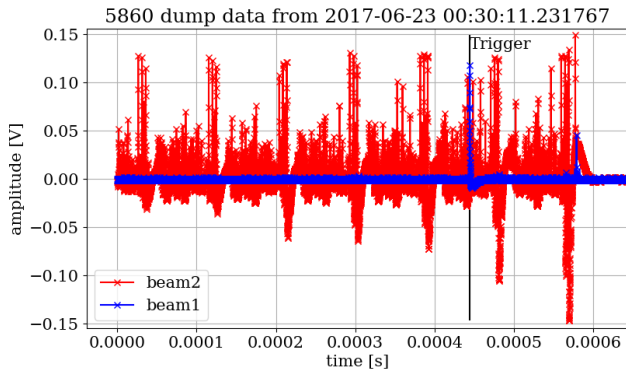
Summary (LBOC)

- Difficult time for ROSY Boxes...

  - Non operational status, many changes in configuration resulted in the long dead times...

- **Difference in loss patterns between Beam1 and Beam2**

- **Work in progress:**

  - Get turn by turn **bunch by bunch** data to compare with ObsBox measurements!
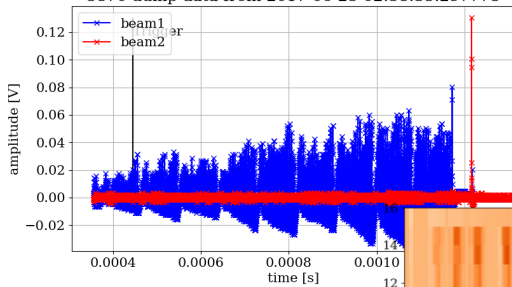
Miscellanea on ROSY

- Synchronization issues do not apply for histogram mode, only for RAW waveforms!
  - Used VdM/ scraping fills to synchronize the turn clock with diamond signal…
  - Still Beam2 from Xtal box needs detailed analysis!
- Various legacy settings did not record RAMP related losses
  - Restart after beam screen flushing
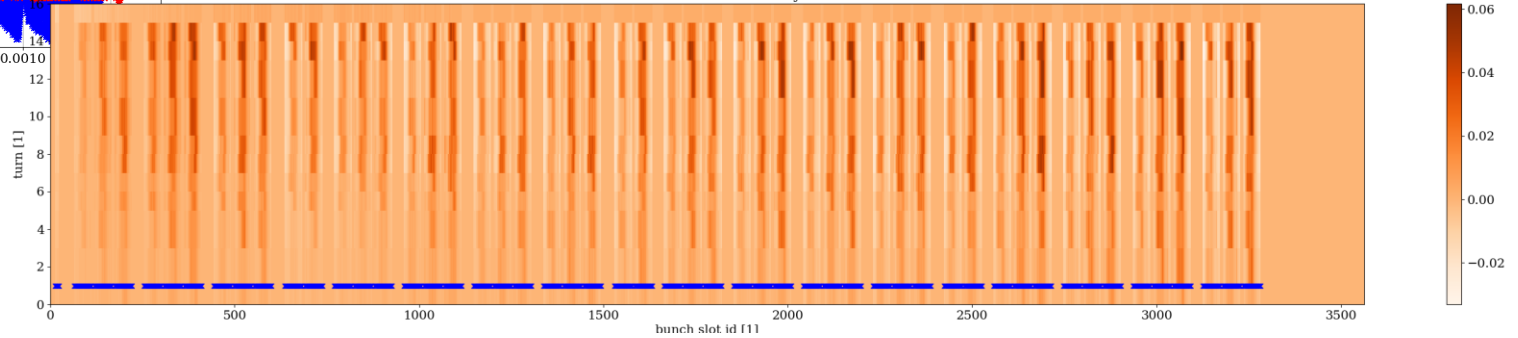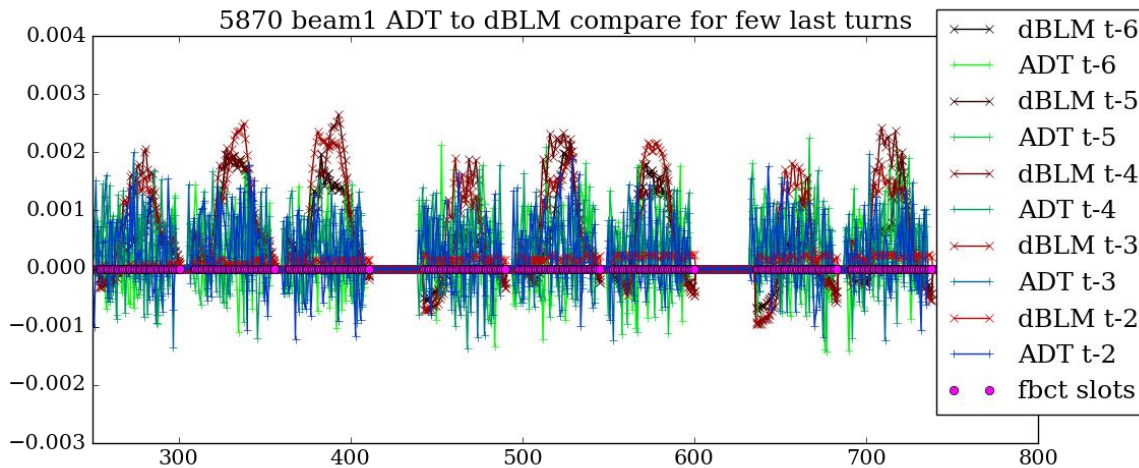
Bunch by Bunch, turn by turn (1)

dBLMs in IR7 during 16L2
related losses

Bunch by Bunch, turn by turn (2)

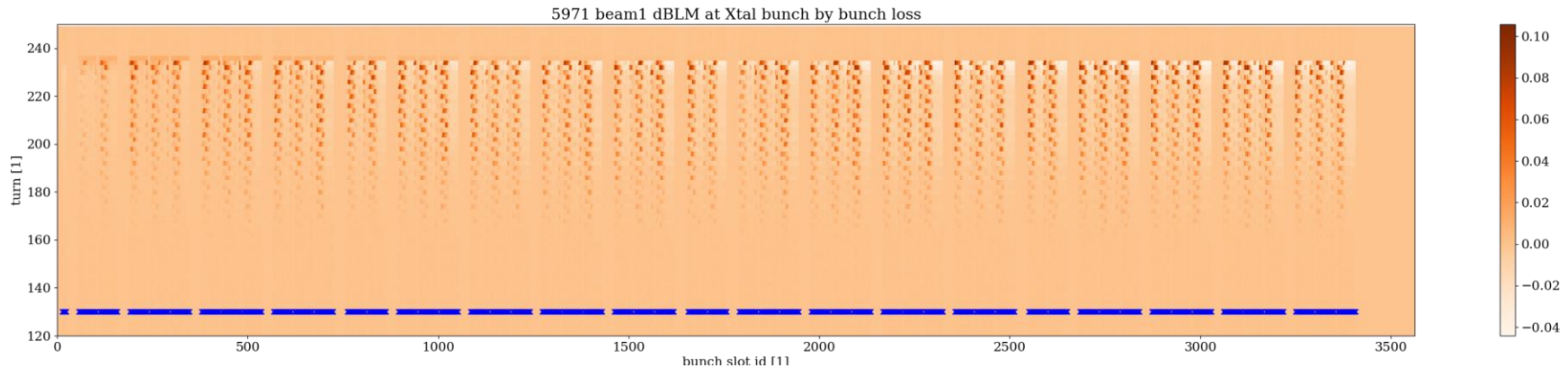*16L2 dumps table*
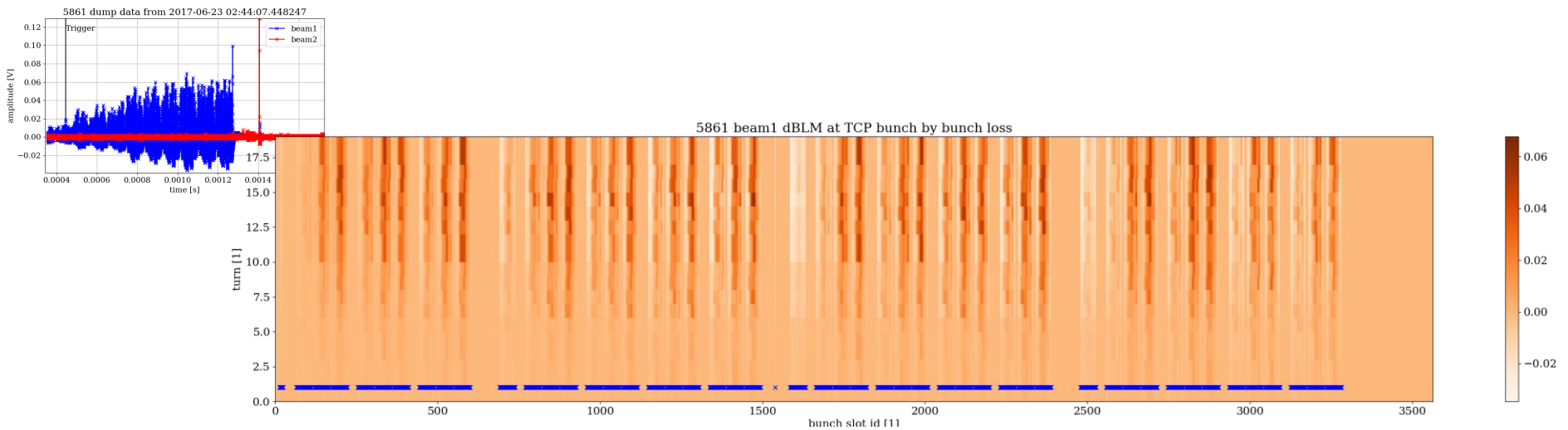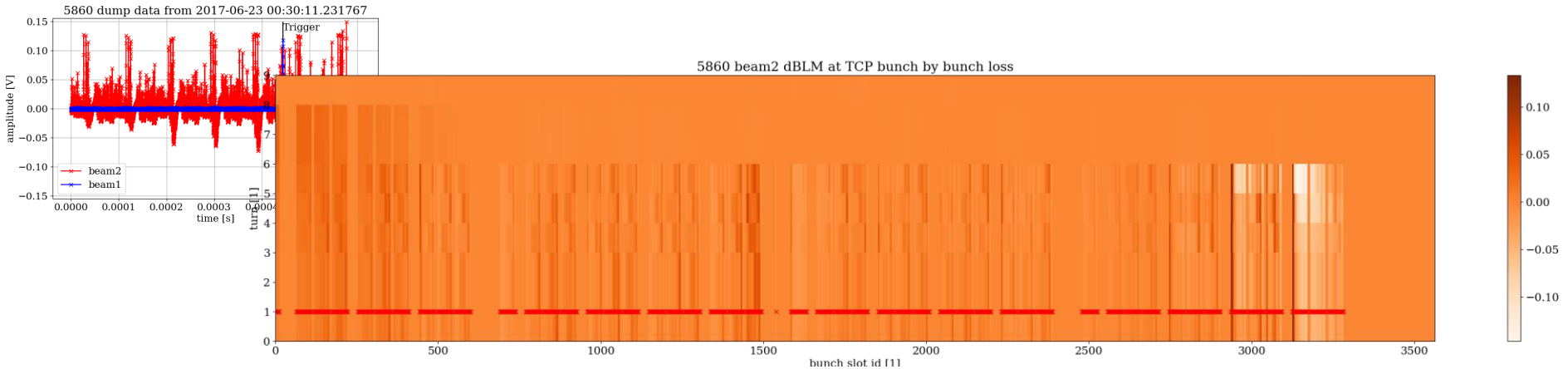
"All the beam (drift baseline + oscillation)"

5871 dump data from 2017-06-25 05:12:23.365436

5871 beam1 dBLM at TCP bunch by bunch loss
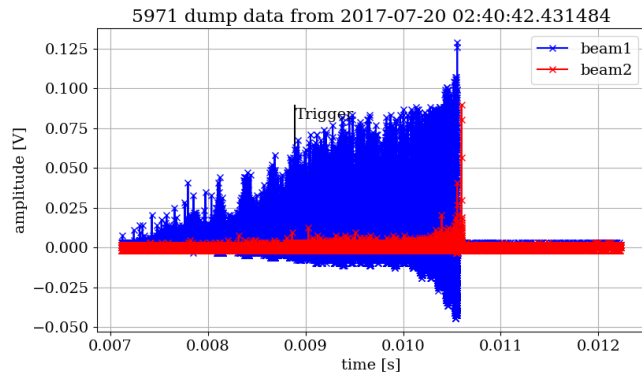
16L2 dumps table

"All the beam (drift baseline + oscillation)"

Bunch by Bunch, turn by turn (3)

5971 dump data from 2017-07-20 02:40:42.431484

5971 beam1 dBLM at Xtal bunch by bunch loss
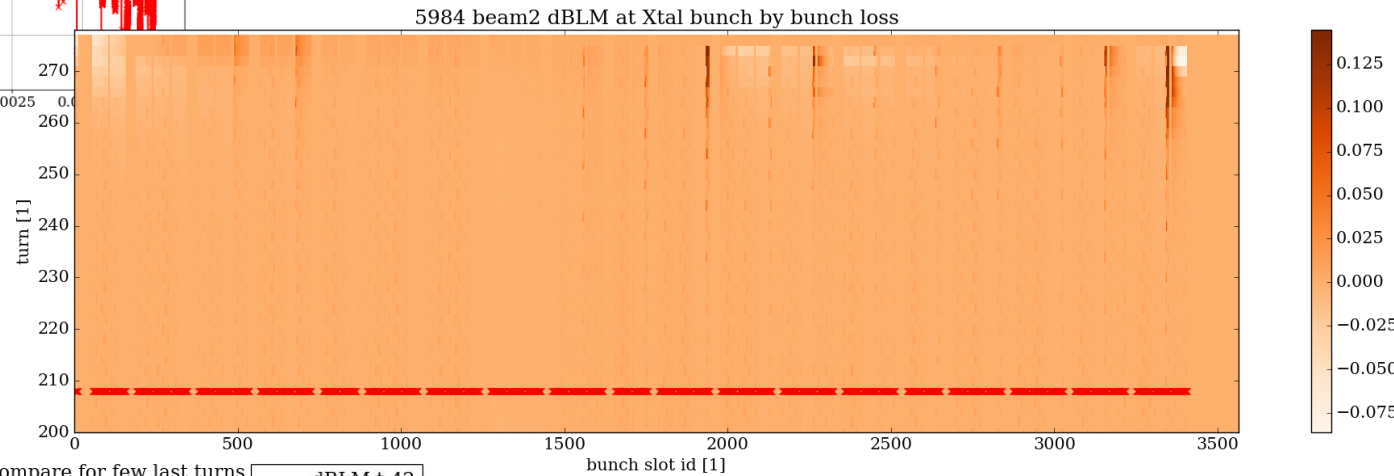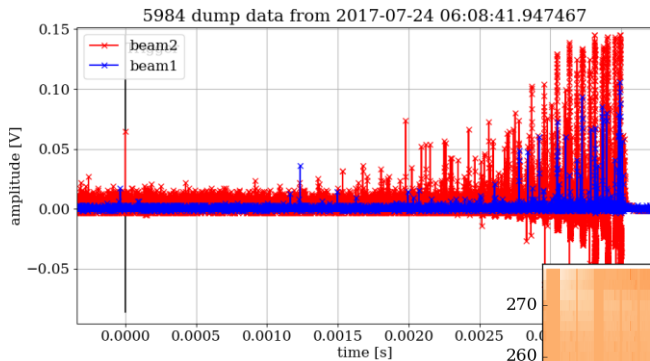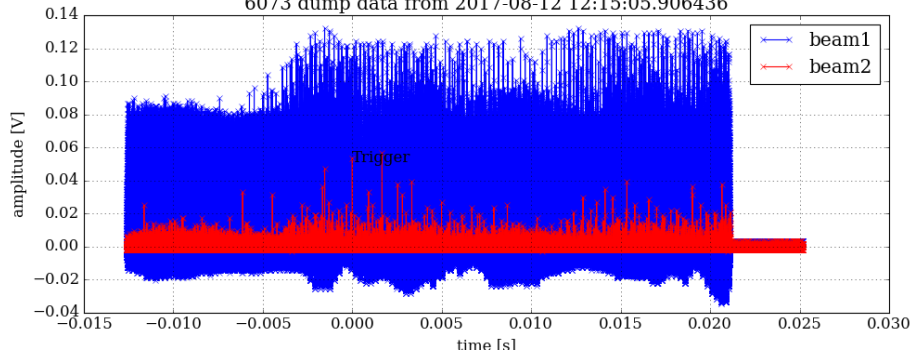
Bunch by Bunch, turn by turn (4)
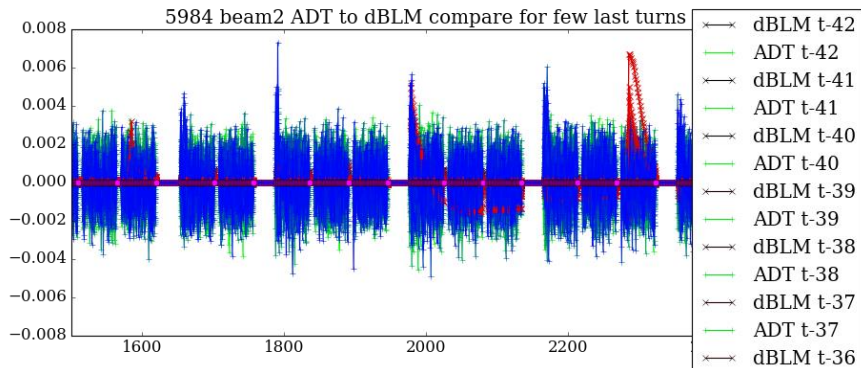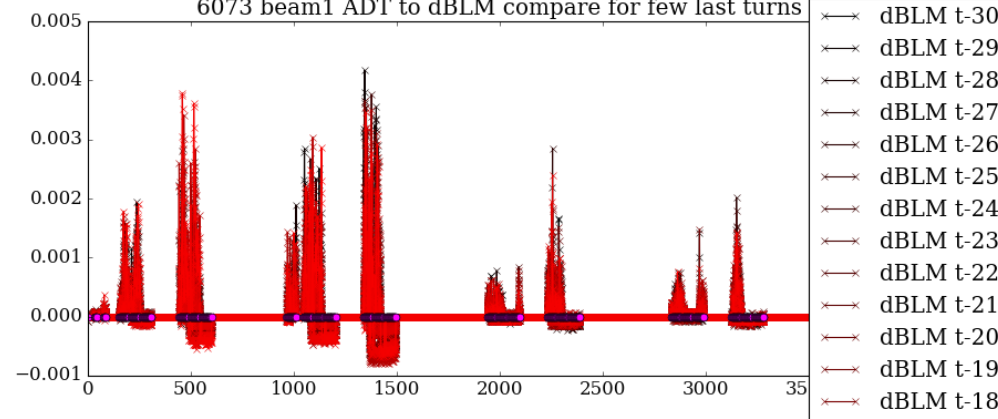

16L2 dumps table

"single bunches, head of trains"

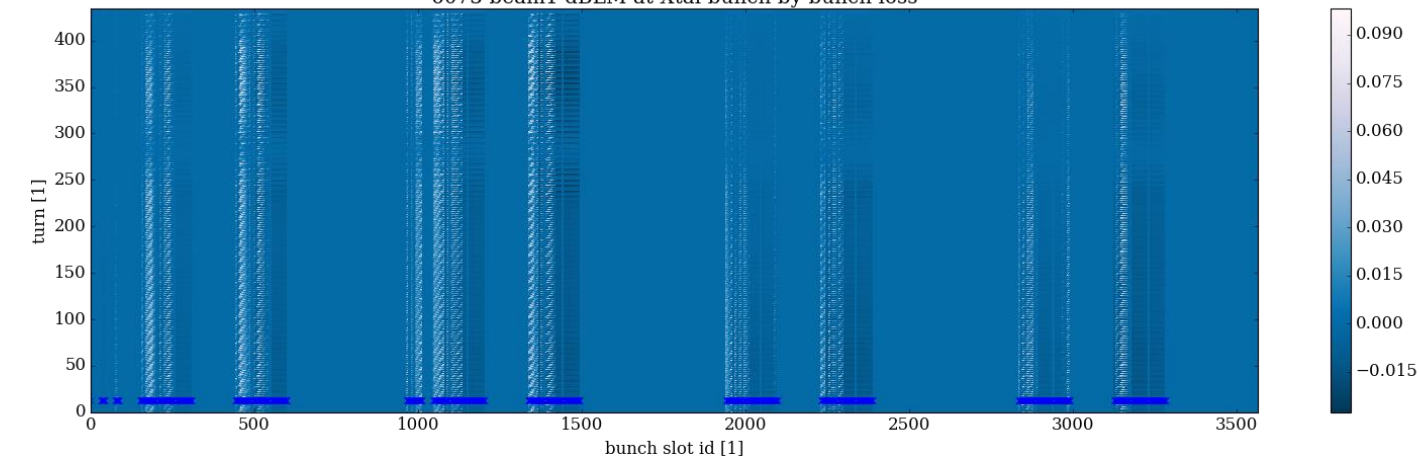# Saturday, 6073, quench + long losses

6073 dump data from 2017-08-12 12:15:05.906436

6073 beam1 ADT to dBLM compare for few last turns

6073 beam1 dBLM at Xtal bunch by bunch loss

Summary

- Not easy to match PM/ADT to dBLM

  - Not only the possible synchronization error, but shape and position of the losses

  Missed data in the RAMP

    system in commissioning

- Work in progress

  - With the recorded dumps

  - And new ones (6073, 6080 – Mon morning…)

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