Update on UFO-induced dumps and quenches

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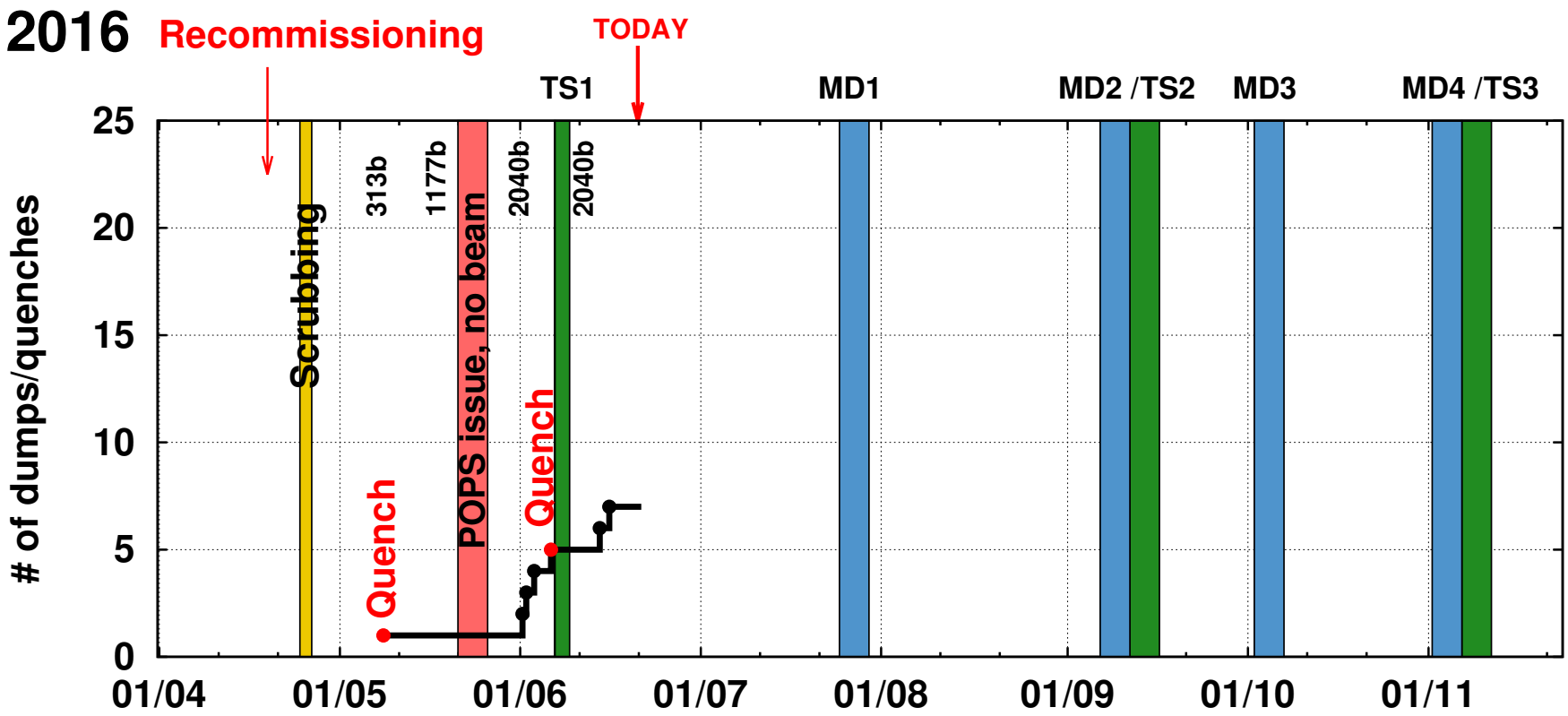
38th BLM Thresholds WG Meeting

June 21$^{\mathrm{st}}$, 2016

UFO-induced BLM dumps and quenches: so far in 2016

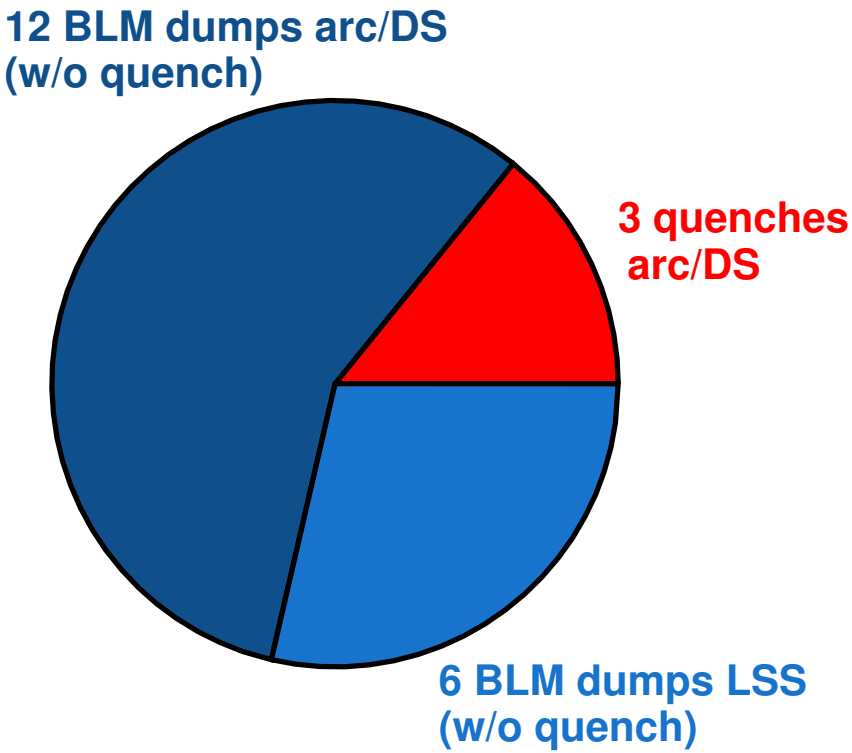


5 dumps, **2 quenches** (2015: **18 dumps**, **3 quenches**)

Up to 21/06/2016

UFO-induced BLM dumps and quenches: arc/DS vs LSS

2015 (21 events)



2016 - up to 21/06 (7 events)

LSS taking over ...

Contents

BLM (BCM) dumps in the LSS

Fill	Date (Time)	Beam	BLM dump at	Beam mode	Remark
4978	01/06 (13h09)	B1	Q5.R5/XRP.E6R5	ADJUST	
4979	02/06 (04h24)	B1	ALICE BCM	STABLE (11h)	ALICE trip
4983	03/06 (12h29)	B2	TCL.6L1	ADJUST	Multiple UFOs, dump in long RS
5018	14/06 (13h57)	B2	Q5/Q6.L1	ADJUST	Multiple UFOs (one big)
5021	16/06 (04h24)	B1	TCTPH.4L1	STABLE (8.5h)	

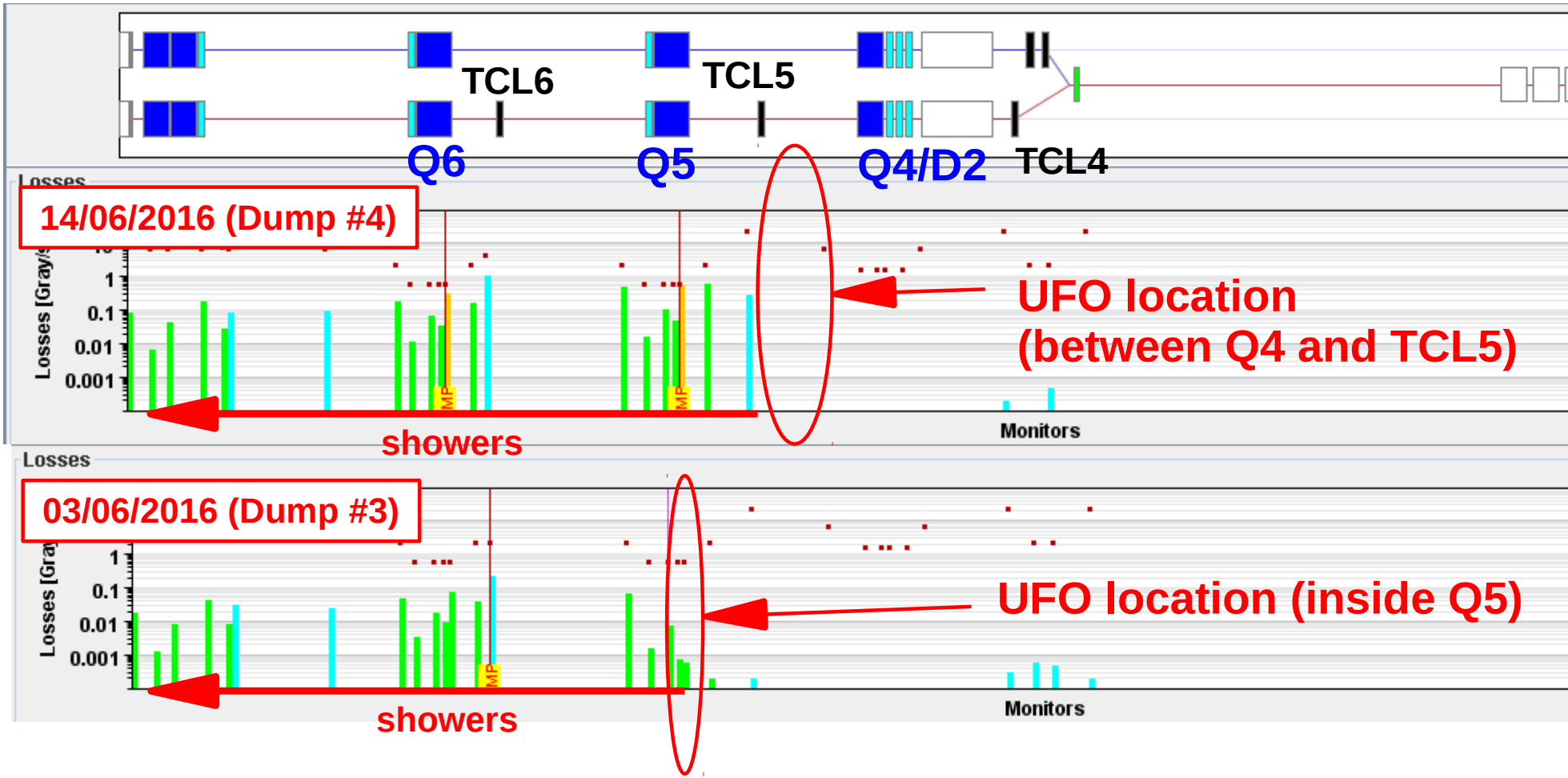
Dumps #1 - #3 already discussed in BLMTWG Meeting #37

Dump 2016 #4: 14/06/2016 (13h57), B2 6.5 TeV

UFO must have been between Q4.L1 and TCL5.L1

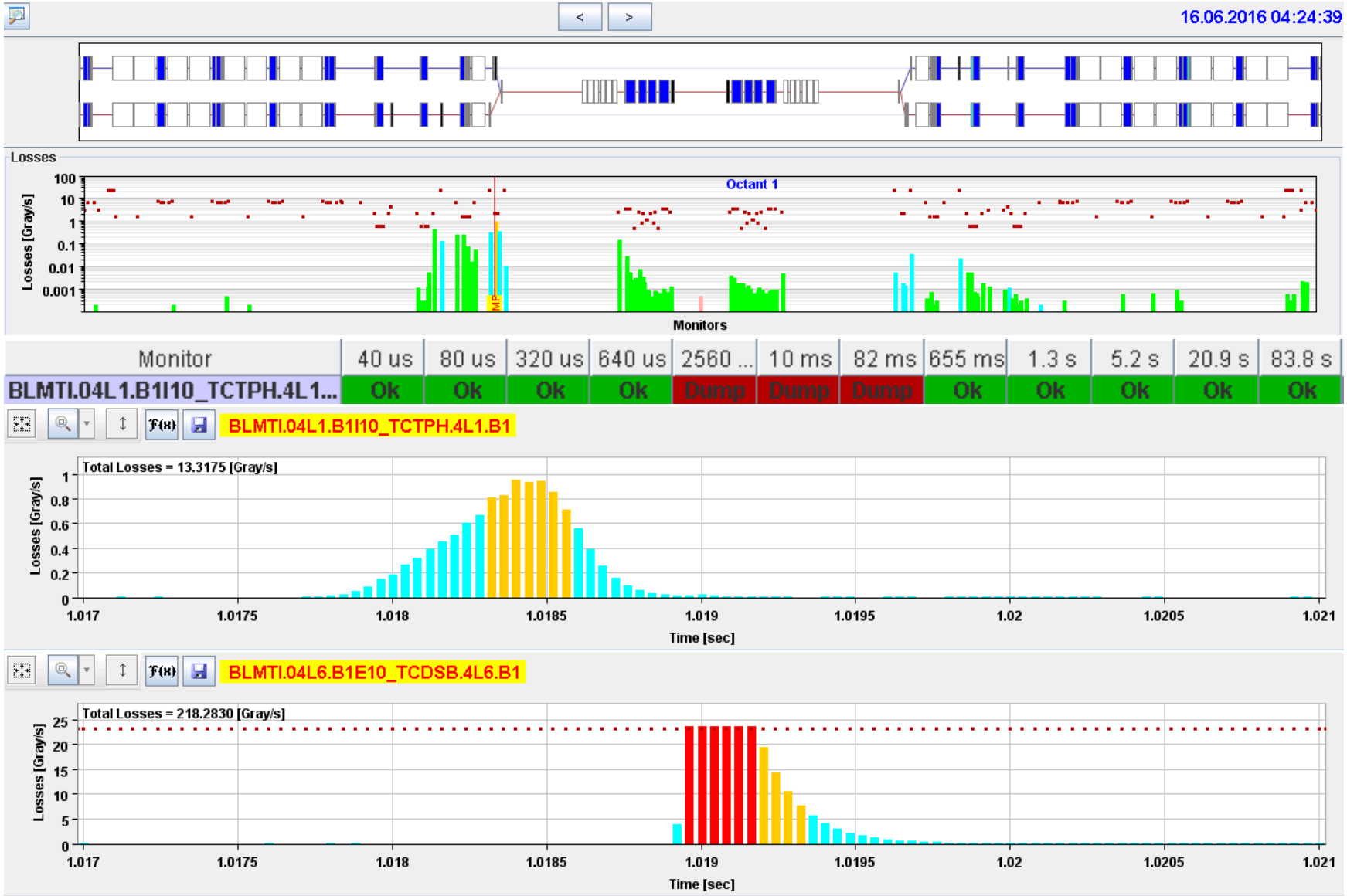
Dump 2016 #4: 14/06/2016 (13h57), B2 6.5 TeV

Same region, but not exactly the same location as Dump 2016 #3:



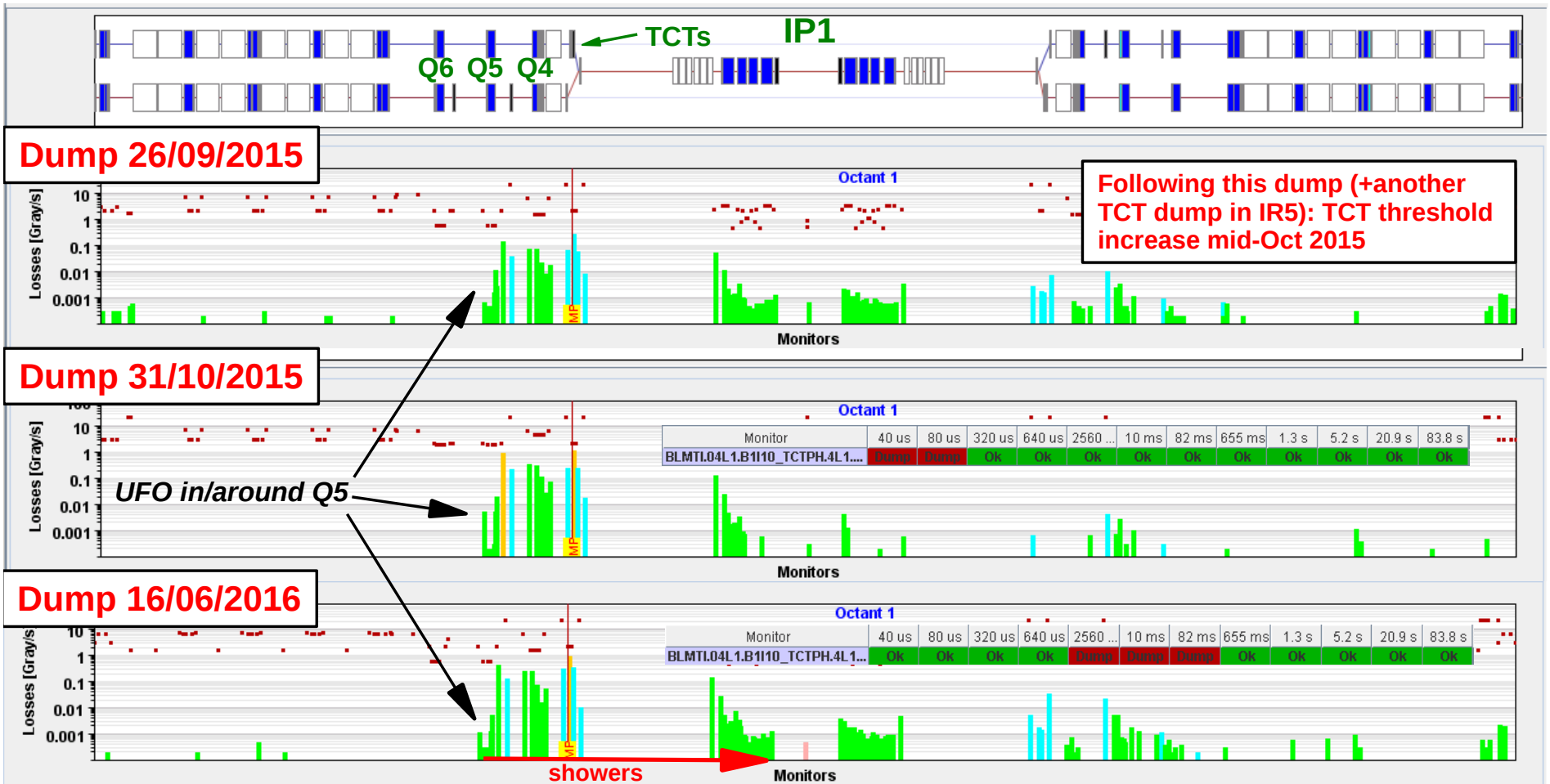
Dump 2016 #5: 16/06/2016 (04h24), B1 6.5 TeV

UFO must have been between around Q5.L1



Dump 2016 #5: 16/06/2016 (04h24), B1 6.5 TeV

Location familiar from 2015 ...



Contents

BLM dumps and quenches in the Arcs/DSs

Fill	Date (Time)	Beam	Quench of	Beam mode	Remark
4896	09/05 (01h55)	B2	MB.A27R6	STABLE (0.5h)	36% of thr
4990	06/06 (08h34)	B2	MB.B29L8	STABLE (11h)	45% of thr

Quenches already discussed in BLMTWG Meeting #37

How many fills would have been prematurely dumped with 2015 arc/DS thresholds?

1 (36.6% of thr)

Other notable events above 25% of present thresholds?

3 UFOs between 25% and 33% of thr $\rightarrow$ would not have dumped in 2015

Contents

Summary & conclusions

- Up to now, we had **5 dumps (LSS)** and **2 quenches (arcs)**
- Time to review LSS thresholds at magnets, collimators and Roman Pots
  - See next two talks
- For the moment, no reason to deviate from current arc/DS threshold strategy
  - UFO rates remain small
  - Gain with 2016 threshold so far not much appreciable as large UFO events in the arcs/DSs are scarce