



MKBH Erratic

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On behalf of the ABT team (Viliam,
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Francesco etc.....)

The Events

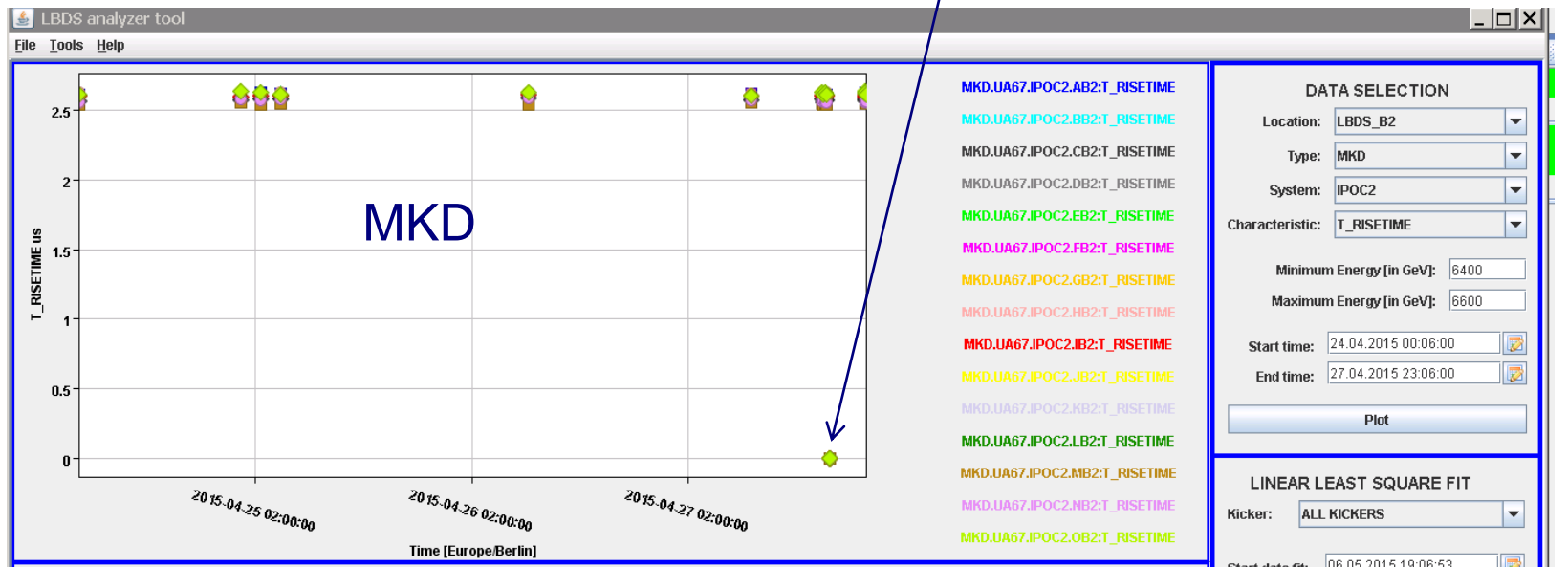
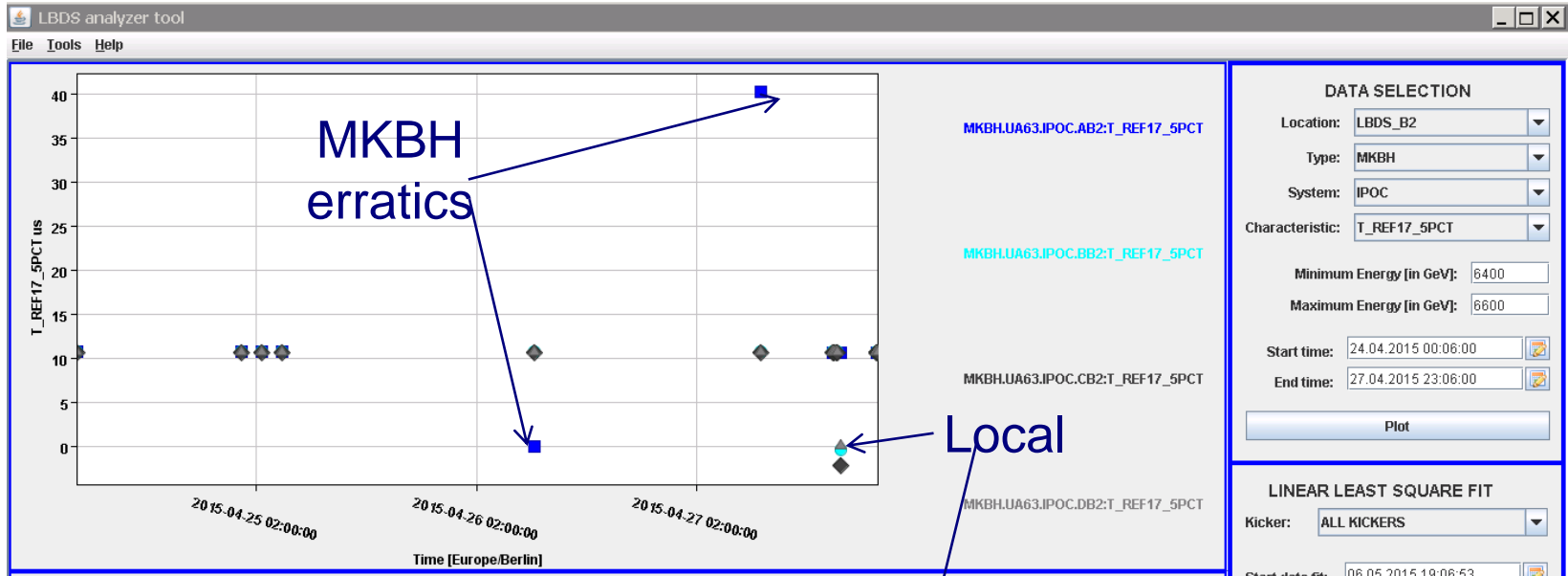
- 26/04/15 08:23:04.594
 - LBDS dilution kicker MKBH erratic trigger at 6.5 TeV
 - Caused synchronous beam dump, as it should
- 27/04/15 09:00:31.239
 - Second erratic on the same MKBH kicker magnet at 6.5 TeV
 - Also synchronous dump
- 27/04/15 11:39
 - LHC stopped for MKBH switch replacement
 - 18:10 access finished
- 28/04/15 01:41
 - System operational again

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5 01:41 SUP Kickers > Kickers End
Access is over for the BT piquet, W.Senaj made the aknowledge of the fault.
We now put the machine to injection while the EIS are precycling and try a dry dump.
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MKB in XPOC

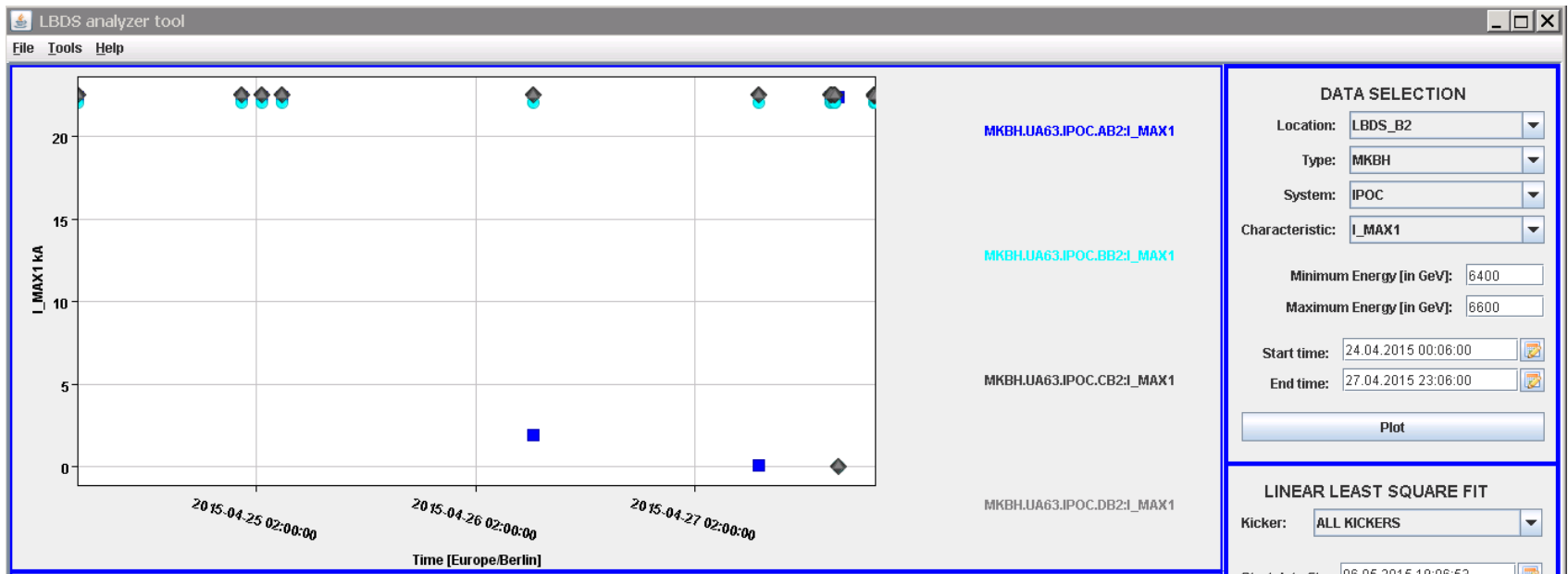


Pulse delays at 6.5 TeV these days



Small amplitude

- Dump actually triggered by BETS surveillance of MKB.
- Slow reaction time of order of 1 ms, resulting in small amplitude of MKB where erratic took place
 - So limited impact when in anti-phase with another MKB



Switch Exchange

■ Procedure

- If two MKB erratics < 4 weeks: exchange the switch
 - For extraction kicker MKD this is after one single erratic, as for the MKD this is an asynchronous dump
- Controls tests
- HV tests
- Energy scan (check XPOC, IPOC limits, energy tracking etc.)
- Run at 7.1 TeV for 4 hours in local
 - If this would not have been successful, then complete generator would have been changed.

■ Diagnostics of the switch

- Noticed in the tunnel that switch was rather dirty: dust etc. Like noticed for the MKD switches
- Back in the laboratory switch HV tested, initially very high spark rate, conditioned away to normal rate
- Will be dismantled in the coming week