

$$D_S^{*+} \rightarrow D_S^+ e^+ e^-$$

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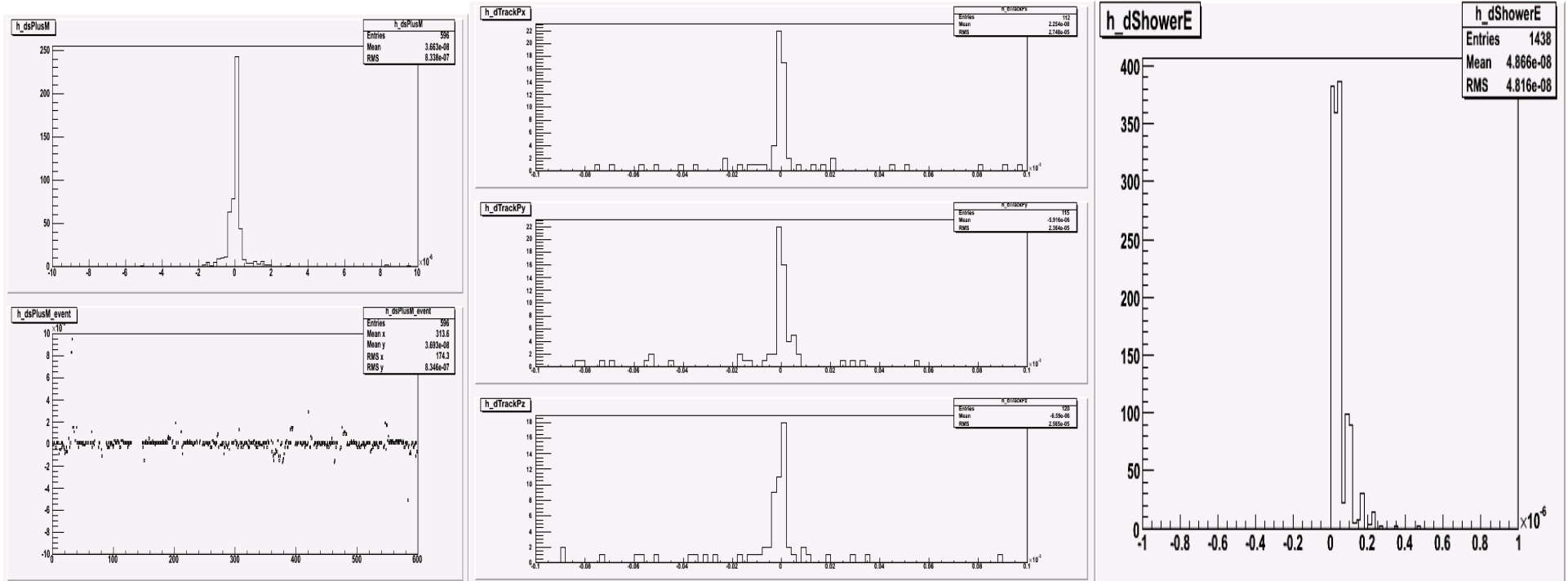
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Re-Pass2 and Re-DSkim Data

- Dan Riley staged out runs 230474 to 230617 of dataset 47.
- We generated an IDXA file containing the run and event numbers we are interested in, i.e. events with any Ds tag in them. Using this IDXA file we skimmed those events into a local PDS file in raw format.
- Pass2 and D-Tag should be run as per the [Original conditions](#).
 - Code release 20071023_P2 and constants PASS2-C_6 is used for pass2 processing.
 - Pass2 release was compiled under Solaris2.8.
 - D skim (version2 with 20060224_FULL_A_3) is available in [EventStore](#) dtag grade
- Pass2 has been run on this with electron fitting included.
- Known difference between Linux and Solaris pass2:
<https://www.lepp.cornell.edu/~wsun/private/linux/index.html>
- Following discussion only w.r.t run number = 230474. It has 612 Ds-tagged events in the eventstore data.

Pass2 on Linux with Wrong Version for D-Tagging

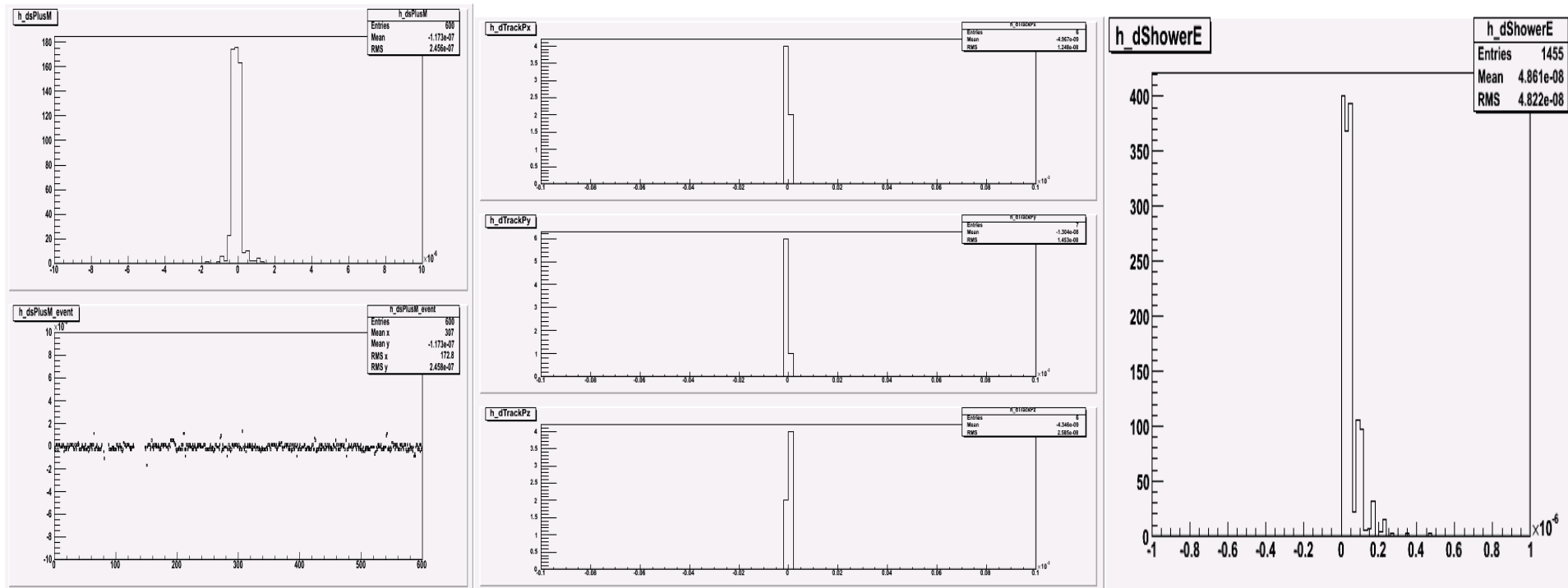
- Pass2 with **20071023_P2**, on **Linux**, constants PASS2-C_6
 - DTag with **20080228_FULL** on **Linux** node.
 - Analysis with 20080228 FULL on Linux node.
- Missed tags = 5
 - Event 2571, 2966, 8754 – 3tags.
 - Tracks differ.
 - New tags = 13
 - Event 1700 – 1 new tag, 1912 – 8 tags, 2011 – 1 tag, 6573 – 2 tags
 - All these events have identical tracks and showers to the original!
 - Beam energy in original = 2.08277 GeV and beam energy in reconstructed = 2.08278 GeV



Pass2 on Solaris with Wrong Version for D-Tagging

- Pass2 with **20071023_P2**, on **Solaris** node, constants PASS2-C_6
- DTag with **20080228_FULL** on **Linux** node.
- Analysis with 20080228_FULL on Linux node.

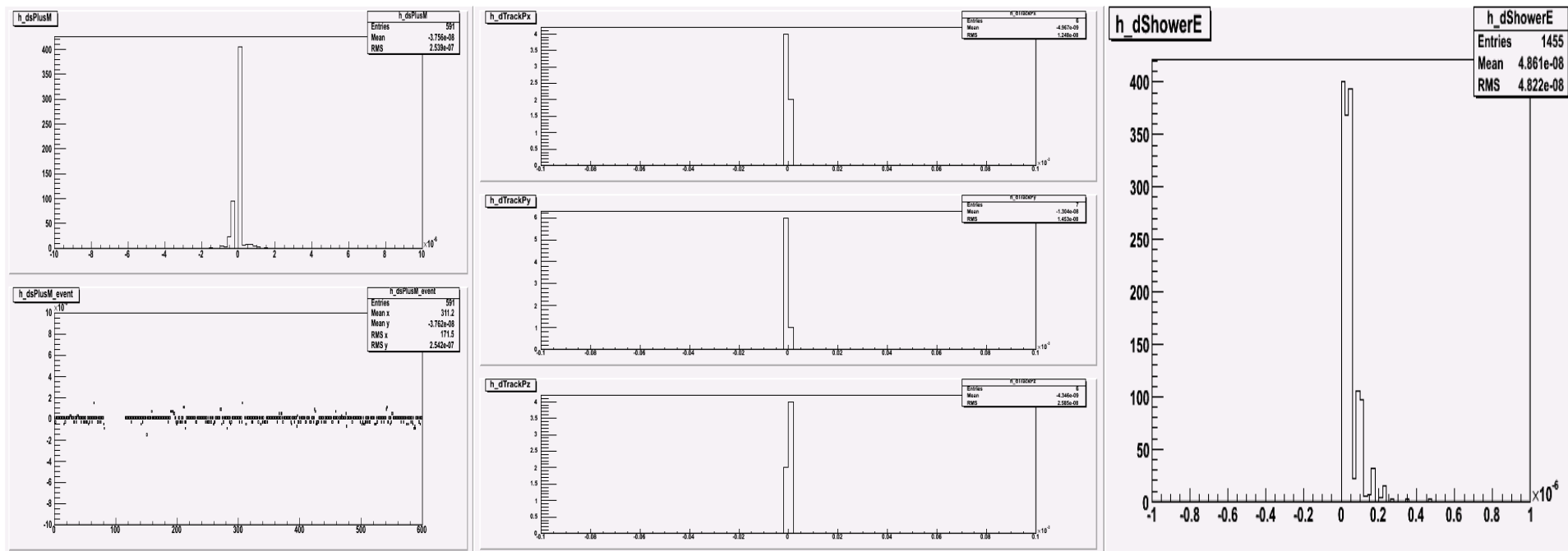
- Missed tags = 1
- New tags = 12
 - Event 1700 – 1 new tag, 1912 – 8 tags, 2011 – 1 tag, 6573 – 2 tags
 - All these events have identical tracks and showers to the original!
- Beam energy in original = 2.08277 GeV and beam energy in reconstructed = 2.08278 GeV



Pass2 on Solaris with D-Tagging on Linux

- Pass2 with **20071023_P2**, on **Solaris** node, constants **PASS2-C_6**
- DTag with **20060224_FULL_A_3** on **Linux** node.
- Analysis with **20080228_FULL** on Linux node.

- Missed tags = 0
- New tags = 10
 - Event 1912 – 8 new tags
 - Event 6573 – 2 new tags
 - Both these events have identical tracks and showers to the original!
- Beam energy in original = 2.08277 GeV and beam energy in reconstructed = 2.08278 GeV



Pass2 on Solaris with D-Tagging on Solaris

- Pass2 with **20071023_P2**, on **Solaris** node, constants PASS2-C_6
- DTag with **20060224_FULL_A_3** on **Solaris** node.
- Analysis with 20080228_FULL on Linux node.

- Missed tags = 0
- New tags = 10
 - Event 1912 – 8 new tags
 - Event 6573 – 2 new tags
 - Both these events have identical tracks and showers to the original!
- Beam energy in original = 2.08277 GeV and beam energy in reconstructed = 2.08278 GeV

