

---

Subject: eta\_c reconstruction efficiency

Posted by [Gianluigi Boca](#) on Sat, 19 Nov 2011 22:22:39 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hello,

I verified that the loss in efficiency in the Eta\_c channel certainly depends HEAVILY on the selection criterion I used in the FINAL association (ie, after the track parameters are found by the STT + Mvd Pattern Recognition) of the Mvd hits to the tracks found by the pattern recognition.

The stricter criterion, used in the July11 version, gives the best efficiency.

I restored this stricter selection to the PndSttMvdTracking.cxx version presently in the trunk.

Therefore now Dima et al. can start reanalysing the data and see what happens.

From my side I'd like to continue to investigate :

- 1) whether this is the only cause of the drop in efficiency;
- 2) understanding if it is the Kalman that is very sensitive to the presence of one or two spurious hits or if it is the vertexing algorithm or some thing else.

Cheers ! Gianluigi

---